

OHIO DEPARTMENT OF TRANSPORTATION QUARTERLY RESEARCH REPORT



For Quarter Ending: September 30, 2007

Date Submitted: November 1, 2007

Project Title: Monitoring and Modeling of Pavement Response and Performance

Research Agency: Ohio University

Principal Investigator(s): Shad Sargand, J. Ludwig Figueroa

State Job No.: 134287(0)

Agreement No.: 21182

Federal Contract No.: TPF-5(121)

Project Start Date: May 1, 2006

Contract Funds Approved: \$1,379,372.06

Project Completion Date: May 1, 2011 (or 2012)

Spent and Encumbered To Date: \$667,711.52

48.3% Funds Expended

30% Work Done

30% Time Expired

List the Technical Liaisons and other individuals who should receive copies of this report: Roger Green, Aric Morse

SUMMARY OF PROGRESS FOR QUARTER

- Installed TDR sensors on US23 and assisted CWRU w/ their own TDR installation at same site.
- Installed dynamic sensors on the five new PCC sections of DEL23.
- Collected data from sensors on new sections during construction and curing period.
- Made concrete samples and tested cylinders and beams.

- Collected Profile data from test sections.
- Finalized installation of all sensors.
- Collected data from controlled truck loading.
- Collected TDR Data from DEL23 site.
- Collected FWD data from NY I 490 and conducted an extensive site survey.
- Coordinated FWD testing on WAY30 with ODOT.

PROPOSED WORK FOR NEW QUARTER:

- Continue collecting environmental data from DEL23, WAY30, and NY I86, including weather (all sites) and LVDT and vibrating wire data (as made available with solar power, and not on I86 westbound)
- Continue testing of asphaltic materials from NY I86 to obtain their engineering properties
- Continue testing concrete and asphalt samples from DEL23 site.
- FWD and further controlled vehicle testing on NY I86 in November after construction ends.

IMPLEMENTATION (if any):

None

PROBLEMS & RECOMMENDED SOLUTIONS (if applicable):

On NY I86, one lane westbound has been closed for construction. We will not have access to the road or the data being collected until the end of summer. We can still collect weather station data. The controlled vehicle testing was conducted on the eastbound section only, and the trucks had to move with traffic, rather than at slower speeds because the eastbound section could not be closed down for the test.

It has also been noted that the first page of the contract gives the project duration as 6 years, but incorrectly lists the completion date as May 1, 2011, after only five years. This appears to be a typographical error and should be corrected to May 1, 2012.

EQUIPMENT PURCHASED (if any):

Purchased the remainder of sensors for DEL23

CONTACTS & MEETINGS (if any):

None