## IOWA DEPARTMENT OF TRANSPORTATION

To Office Iowa Highway Research Board Date April 19, 2006

Attention Regular and Alternate Members Ref. No. 080.31

From Mark Dunn

Office Research and Technology Bureau

Subject Board Meeting on April 28, 2006

The April meeting of the Iowa Highway Research Board will be held on **FRIDAY**, **April 28, 2006** at <u>9:00 A.M.</u> in the **East/West Materials Conference Room**, at the Iowa Department of Transportation, central complex in Ames, Iowa.

NOTE: Meetings for May-September 2006 will be at Iowa State University's Scheman Building

## **AGENDA**

- 1. Minutes from the February 24, 2006 meeting
- 2. Implementation Review, Ed Engle (10 minutes)
- 3. Innovative Projects Presentations (10 minutes presentation/5 minutes discussion each)

Quantitative Mapping of Waterways Characteristics at Bridge Sites, Marian Muste, Tatsuaki Nakato, and Pete Haug, The University of Iowa. Budget: \$85,891

Feasibility Investigation of Segmentally Precast Bridge Piers for Accelerated Construction, Jon M. Rouse and F. Wayne Klaiber, Iowa State University. Budget: \$89,623

Field and Laboratory Investigation of Bank Erosion in Iowa Streams During Freeze-Thawing, Thanos Papanicolaou, Robert Ettema, The University of Iowa. Budget: \$53,859

Evaluation of Lignin Derived from Agricultural Co-Products as an Antioxidant in Asphalt, R. Christopher Williams, Iowa State University. Budget: \$50,000

*Use of Ultra-High Performance Concrete in Geotechnical and Substructure Applications*, Muhannad T. Suleiman, Sri Sritharan, and Vernon R. Schaefer, Iowa State University.

Budget: \$99,262

*Improved Method for Determining Wind Loads on Highway Sign and Traffic-Signal Structures*, George Constantinescu, and Asghar Bhatti, The University of Iowa. Budget: \$73,806

- 4. PROPOSAL: Clear Zone A Synthesis of Practice and Benefits of Meeting the Ten-Foot Clear Zone Goal on Urban Streets, Tom Maze Iowa State University (10 minutes presentation/5 minutes discussion) Budget: \$54,814
- 5. PROPOSAL: Implementing a StreamStats Web Site for Iowa and Developing Flood Estimations Equations for Small and Large Drainage Basins, David Eash, USGS (10 minutes presentation/5 minutes discussion) Budget: \$256,822

- 6. PROPOSAL: Laboratory, Field Testing and Evaluation of Precast Bridge Element, Terry Wipf, Iowa State University/CTRE (10 minutes presentation/5 minutes discussion) Budget: \$341,089
- 7. PROPOSAL PHASE II: Field Instrumentation and Testing of High-Mast Lighting Towers in the State of Iowa, Bruce Brakke, Iowa Department of Transportation (10 minutes presentation/5 minutes discussion) Budget: \$28,355
- 8. FINAL REPORT: TR-515, "Bridge Scour Protection", Thanos Papanicolaou, The University of Iowa (10 minutes presentation/5 minutes discussion)
- 9. FINAL REPORT: TR-484, "Materials and Mix Optimization Procedures for PCC Pavements", Scott Schlorholtz, Iowa State University (10 minutes presentation/5 minutes discussion)
- 10. FINAL REPORT: TR-495, "Field Evaluation of Compaction Monitoring Quality", David White, Iowa State University (10 minutes presentation/5 minutes discussion)
- 11. 2006 Project Ranking and Selection (20 Minutes)
- 12. Finalize location of 2006 IHRB traveling meeting (5 minutes)
- 13. New business
- 14. Adjourn

Also included in the packet for your information (no Board action necessary):

• Construction Report TR-520: Evaluation of Dowel Bar Retro fits for Local Road Pavements

The date of the next meeting is FRIDAY, JUNE 2, 2006 (due to Memorial Day) at 9:00 A.M. The location is to be determined.

MJD