



Intelligent Compaction

ICPF Technical Working Group Meeting

Web Meeting

Monday, April 5, 2010

11:00 a.m. – 12:00 p.m. C.D.T.

Attendees:

Project Team: George Chang – PI (Transtec Group)

WisDOT: Robert Arndorfer, Mark Steidl, Frank Alfaro, Jeff Michalski, and etc.

AECOM: Greg Graf and etc.

Mathy: Matt Eslinger, Erv Dukatz, and etc.

Purpose – Planning for WisDOT IC Demo – May 10 to 13, 2010

- Overview of this study
- Review Schedule/Activities
- Coordinate Work/Responsibilities
- Review Experimental Plan

Next meeting ?

Meeting Summary and Action Items

Test Site and Schedule

- The test site is confirmed to be on a HMA overlay project on rubblized PCC located in Mosinee, WI at the junction of IH 39 and 153. One Sakai double-drum IC roller will be used, while Bomag will not provide any rollers at this point.
- Between May 10 and 13, the IC demo field work would cover: IC mapping of the rubblized PCC base, compaction of 25-mm base course and 19-mm intermediate course. The IC roller may be used by Mathy for compaction of the 9.5-mm surface course during the following week if the IC roller is available.
- Monday to Tuesday early AM: (*travel lane*) Milling of existing HMA overlay, rubblization (or crack-&-seal!?) underlying concrete, (~ 1 hour window), paving of the 25-mm HMA base course (till 8PM), and (night shift) paving of the 19-mm intermediate course. Note that the 1-hour window may be tight for the IC mapping and FWD tests.
- Tuesday night to Wednesday night: (*driving lane*) Repeat the operations of Monday on the driving lane.
- Thursday (9 AM to Noon): Open House at the Mathy's local field office.

Mathy Constructions

- HMA mix design and any lab test data (Matt Eslinger provided mix designs for all three courses)
- The address for IC roller shipment and delivery is: **1116 Happy Hollow Rd., Mosinee WI 54455**. The contact is: Matt Eslinger, cell phone no.: 715-299-0245.
- Provide one personnel to operate the Sakai IC roller.
- Mobilize of the IC roller if necessary: including moving the Sakai IC roller between mapping and compaction operations, to/from storage site, and to the parking area of the Open House location.
- Provide one nuclear density gauges and an operator.
- Provide fuel for the IC roller.

- Conduct corings of finished pavement as instructed by the research team.
- Conduct LWD tests.
- FHWA Asphalt Mobile Labs: conduct various asphalt tests such as: simple performance tests, E*, flow number, etc.

WisDOT/FHWA-WI

- WisDOT will provide a FWD and an operator for testing on 1000-ft test strips of rubblized PCC prior to the HMA overlay for both days of operations. Once the FWD testing windows are determined by the research team, Bob Arndorfer will coordinate to the FWD tests and provide the research team raw FWD data.
- Wesley A. Shemwell of FHWA-WI will assist the Open House by inviting WisDOT district engineers, cities/counties, Universities, local asphalt paving associations, and others. The Open House (Thursday, May 13, 2010: 9AM to Noon) will be held at the Mathy Construction's local office that can accommodate 40 to 50 attendees. The Open House will consist of 2-hour indoor presentation & 1-hour IC roller demonstration on the parking of Mathy's field office. A brief presentation on another WisDOT HMA IC research may be provided by Harold von Quintus of ARA.

IC Research team

- George will modify the experiment plan and daily activities to fit to the above test schedule.
- George will provide Bob A. detailed requirements for the FWD tests.
- The IC research team will work with WisDOT and/or local GPS dealers to provide a GPS rover.
- All research team members (George Chang, Qinwu Xu, Lee Gallivan, Bob Horan, and Larry Michael) will be on site from May 10 to May 13.
- The research team may provide PSPA (Portable Seismic Pavement Analyzer) measurements along side nuclear density measurements.
- The research team would also explore possibility of using Kesler's LWD-a (a version of Zorn LWD for asphalt testing).

Sakai

- Provide a doubled-drum IC roller and a Trimble GPS base station.
- Arrange the IC roller shipment to be delivered to the above shipment address provided by Mathy Constructions.
- Todd Mansell will be on site on May 10 for training the roller operator and (tentatively) will make a presentation during the Open House on May 13.

Next Meeting

A brief conference call may be conducted a week before the demo on May 3, 2010.