



Intelligent Compaction

ICPF Technical Working Group Meeting

Web Meeting

Thursday, Aug 26, 2009

3:00 p.m. – 4:00 p.m. E.D.T.

Attendees:

Project Team: George Chang – PI (Transtec Group), Bob Horan – Facilitator (Asphalt Institute), Larry Michael – Co-PI (LLM Asphalt Consultant), Qinwu Xu (Transtec Group)

FHWA: Victor (Lee) Gallivan, COTR

INDOT: Michael Prather

Paving Contractors (Milestone): Brad Cruea, Ken Walschlager, and Don ????.

Bomag: Dave Dennison

Sakai: Todd Mansell

Purpose – Planning for INDOT IC Demo – Sept. 21 to 24, 2009

- Review Schedule/Activities
- Coordinate Work/Responsibilities
- Review Experimental Plan

Summary and Action Items

Schedule/Activities

- Milling and paving are still on schedule – weather-dependent – from Sept. 21 to 24, 2009. The IC rollers may be used for paving operation from Sept. 21 to 23, and for the Open House on Sept. 24.
- Undersealing will be completed prior to the paving with 20 tons of materials.
- Milling will be performed ahead of the paving (with ~ 60-ft ? of transition area).
- Paving may include the intermediate HMA layer (2.5", 19-mm) and/or surface HMA layer (1.5"?, 9.5-mm).
- The 19-mm intermediate mix uses fine gradation and should not be a concern for in-situ density measurement.
- The paving production rate will be about 200 ton/hr and ~ 1500 ton/day.
- The paving operation normally starts with lane close at 7AM, and paving at 7:30AM.
- Two double-drum IC rollers, Sakai and Bomag, will be used for this demo. One IC roller will be used at the break-down position while the other will be used at the intermediate position. The IC rollers may be swapped for operations on different days. GPS and control panels will be removed at the end of each daily paving operation.
- The contractor, Milestone, will do all QC tests.
- The research team will be flexible to accommodate the paving operation. See the following "Experimental Plan" section for further details.

Work/Responsibilities

Paving contractor - Milestone

- Provide two roller operators to operate two IC rollers. (Training will be conducted on Sept. 21 AM)
- Mobilize of IC rollers if necessary.
- Provide two density gauge and an operator.
- Provide a survey-grade GPS rover and an operator.
- Supply fuel for IC rollers (~ 300 gal.)
- Provide the research team the street address and contact person for IC delivery (likely before Friday Sept. 18. Note that the Sakai roller will be at the GA IC demo during week of Sept. 14 and may be shipped to the IN site slightly later that week).
- Provide two density gauges (PQI?) and an operator.
- Conduct asphalt corings prior to the next lift of paving, or after the paving for the surface course. It is expected to core no more than half a dozen locations per day.
- (missed discussion items) Provide mix design and/or lab test information to the research team.

INDOT

- Provide a FWD and an operator (note that there may be restriction for overtime).
- Coordinate an Open House on Thursday, Sept. 24, 2009: 10AM to 3PM. It would consist of a 2-hr indoor presentation (at the Superpave Center or INDOT research lab, which reside in the same building) & 2-hr field demonstration. Normally, it is expected about 50 attendees. For the indoor presentation, INDOT would provide a LCD projector and a screen. Lunch breaks may be considered. The outdoor demonstration may be conducted at a parking area near the indoor presentation location.
- Send invitations to INDOT, cities, counties, universities, APAI, and etc. Research team will provide a sample invitation and help promotion to neighboring States.

Research Team

- George will contact Milestone GPS person and plan for surveying the jobsite prior to the demo. The purpose is produce plan files for IC roller systems based on several key GPS measurements along the test site (e.g. shoulder).
- George will post all contact information for this project and update the project webpage as needed.
- George will send Mike a sample invitation for the Open House.
- Bob will coordinate GPS vendors to provide technical support and contact Sakai to provide a Trimble GPS base station (done).
- The research team will explore an additional in-situ test (such as Zorn 2000A LWD or PSPA) for asphalt.
- (Sakai) Based on the mix and layer information, Todd will provide suggestions on roller patterns.
- (Bomag) Dave will contact Milestone GPS personnel for further information. (Note that Sakai will provide a Trimble GPS base station – the same one used for the MD SHA IC demo).

Experimental Plan

The current experimental plan was discussed. All agreed that the plan should be flexible to accommodate the initial training and GPS verification, paving schedule, mapping and availability of the FWD tests.

The research team will revise the experimental plan accordingly.

Next Meeting

- We may have another brief meeting (likely just a conference) a week before the paving.
- All parties will keep in touch via emails and the project website (<http://www.intelligentcompaction.com/index.php?q=node/162>)