



Intelligent Compaction

ICPF Technical Working Group Meeting

Web Meeting and Teleconference

Thursday, July 11th 2008

10:00 a.m. – 11:00 a.m. C.S.T.

Attendees: Team Members of the KSDOT IC Field Demonstration
Moderators: George Chang (Transtec Group, TG, PI), Bob Horan (AI, Facilitator)
ICPF Team - David White (ISU, Co-PI), Qinwu Xu (TG)
Participants:
KSDOT - James Brennan, Hugh Bogle, Susan Barker, Rusty Drake
Contractor - Ross Olsen (Koss), Rich Borgen (grading contractor)
Roller Vendors - NA

Purpose

- Discuss Project Objectives
- Develop Work Plan
- Plan/Schedule Activities
- Coordinate Work/Responsibilities

Agenda

Time*	Topic	Topic Leader(s)
10:00 am	Introduction	Chang
10:05 am	Update from KSDOT/Contractor <ul style="list-style-type: none"> • Project Objectives/Goals • Dates/ Test Site and Meeting Locations • Contractor Support/Change Order/SP • KSDOT Personnel Support • Open House? PR Dept? 	Bogle
10:15 am	Logistics and Activities <ul style="list-style-type: none"> • Rollers and tech support • ISU Geotech mobile lab • Research Team / Travel Details 	Horan
10:20 pm	Experiment Plan <ul style="list-style-type: none"> • Required Info for Preparing Experiment Plan • Responsibilities of all parties 	White
10:55 pm	<ul style="list-style-type: none"> • Follow up Action Items • Date/Time for Next Web Meeting? 	Chang
11:00 am	Adjourn	

Summary

Test Site

- The test site will be at K52/US-69 in southeast of KS from Aug 18 to Aug 22, 2008. The length of the test section is about ½ mile with residual clay and shale at low to modest plasticity. The lift will be about 8". It consists of 10 to 11' of fill and the width is about 80'.
- Current KDOT density acceptance for the (cohesive) soil compaction is 90% of the Proctor optimum with +/- 5% moisture content.
- The QA requires an inspector to perform nuclear gauge test along with measure measurement, and visually inspect stability.

Special Provision

- The special provision / change order document is under reviewed by KDOT. It is estimated that the contractor will be requested by the research team to provide an operator and equipment to prepare test beds for 1 to 2 hours/day. Evening operation may be required. Further review of the special provision document will be conducted by KDOT and the contractor to finalize it.

Rollers, compaction, and in-situ tests

- The Bomag soil IC roller (smooth drum with pad foot shell - Evib or modulus outputs) and Sakai soil IC roller (pad foot drum with smooth drum shell – CCV or measurement index outputs) were selected to be used for this demo. Dynapac and Caterpillar soil rollers are considered as backup plans.
- ISU Geotech mobile lab will be used for this demo. GPS base station and rover will be set up by the mobile lab to match the local coordinate that the contractor currently uses.
- The research team would maintain constant communication with KDOT (Bogle) and the contractor during the demo. The research would need contractor's assistance to prepare test beds about 1 to 2 hours per day using blades, motor grader or water trucks depending on the in-situ soil moisture and weather condition. Daily briefing will be conducted at the KDOT onsite trailer lab.
- The research would stride to cover range of soil moisture from -5% to + 5% corresponding to the Proctor optimum density. Spot checking and testing will be conducted. KDOT personnel support is very welcome and they will be integrated into the research team to conduct in-situ testing.
- KDOT will provide a Dynatest FWD with 18" platen for additional in-situ testing from Tuesday to Friday (Aug 18 to 22).
- Detailed test bed selections and preparation as well as other day-to-day schedule will be included in the experiment plan.

Discuss the activities and logistics

- Horan will coordinate with roller vendors and KDOT (Rusty Drake) for the shipment of rollers.
- The ISU geotech trailer and IC rollers will park at the job site during the demo.
- All parties will have a web meeting one week before the demo to go over day-to-day schedule during the demo
- Research team (Chang, Horan, Gallivan, White and ISU geotech mobile lab staff) will arrive at the job site on Sunday, Aug. 17th – a brief meeting during the evening will be conducted if needed. The research team may stay in the same hotel in Fort Scott.
- Onsite KDOT staff will include Hugh Bogle, Rusty Drake, David Weirich, Mindy Holston, and Samson Mulwa. Onsite contractor will be Ross Olsen (prime contractor from Koss) and Rich Borgen (grading contractor).
- A project briefing will be conducted on Monday morning, Aug 18. Daily briefing will be held as needed.

- Tentatively, KDOT will coordinate an Open House on Thursday, Aug. 21 starting with a conference room (or trailer) presentation of results from previous days followed by a field tour and IC machine demo.

Assign action items

- See below

Action Items

George Chang (Transtec group)

- Finish/broadcast this minutes
- Update the project webpage to provide most updated information
- Schedule the next web meeting a week before the field test (i.e. Aug. 11 to 15)

David White (ISU)

- Prepare an experiment plan including detailed requirements for test beds and GPS, daily schedule, etc.

Bob Horan (AI)

- Coordinate with Bomag and Sakai for shipment of IC rollers and providing technical support during the demo
- Coordinate with KDOT (Rusty Drake) for roller shipment.

Ross Olsen (Koss)

- Work with KDOT to finalize the special provision
- Provide the research team an electronic plan drawing and CAD files of the project site

Hugh Bogle (KDOT)

- Review the special provision document with Koss and complete contract negotiations/paper work as a force item
- Provide the research team soil test data (e.g. Proctor test)

Rusty Drake (KDOT) mobile no. 913-927-8036. lab trailer no. 913-352-6834

- Provide Horan an address for roller shipment. It is tentatively to ship to the location of the KDOT trailer lab then a KDOT staff will lead the shipping trailer to the actual job site and unload.

James Brennan (KDOT – TPF state rep)

- Work with Hugh Bogle to finalize the special provision document
- Plan to provide equipment and required personnel for FWD testing (Kenneth Hallgren, Curtis Eichman, Greg Schieber) The FWD test dates are tentatively Tuesday to Friday (Aug. 19 to 22).

Susan Barker (KDOT)

- Plan for an open house including invitations to TPF States or local contractors, etc. The open house may include an (on-site) briefing and a site tour – or operation of the IC rollers. The time is tentatively in PM of Thursday, Aug. 21.
- Involve the PR department of KSDOT and local news media during the open house or on the first day or two of the demo