

**ASCE – INDOT
STRUCTURAL/GEOTECHNICAL SUBCOMMITTEE**

MEETING NO. 38 MINUTES

April 26, 2007

The meeting was called to order at 1:30 p.m. by Steve Weintraut. Those in attendance were:

Mir Zaheer	INDOT, Planning and Production Division
Nayyar Siddiki	INDOT, Planning and Production Division
Athar Khan	INDOT, Planning and Production Division
Steve Morris	INDOT, Planning and Production Division
John Wright	INDOT, Planning and Production Division
Anne Rearick	INDOT, Planning and Production Division
Dae Hyeon Kim	INDOT, Planning and Production Division
Somanath Hiremath	INDOT, Planning and Production Division
Tony Uremovich	INDOT, Structural Services
Jim Reilman	INDOT, Fort Wayne District
Keith Hoernschmeyer	Federal Highway Administration
Derek Merida	Milestone
Mark Thompson	Milestone
Fred Sullivan	Gohmann Asphalt
Charlie Kahl	ICA
Tom Struewing	ATC Associates, Inc.
Scott Ludlow	Earth Exploration, Inc.
Elizabeth Dwyre	Parsons Brinckerhoff Quade & Douglas, Inc.
Bill Dubois	Patriot Engineering
Steve Weintraut	Butler, Fairman and Seufert, Inc.
Jon Sera	Butler, Fairman and Seufert, Inc.

In addition to the attendees, these minutes will be sent to the following:

Paul Berebitsky	Indiana Constructors, Inc.
Tom Harris	INDOT, Highway Management Division
Mark Miller	INDOT, Highway Management Division
Dennis Kuchler	INDOT, Highway Management Division
Greg Pankow	INDOT, Greenfield District
Salim Ilmudeen	Patriot Engineering
Mike Wiggers	Earth Exploration, Inc.

A meeting agenda had previously been distributed and the following items were discussed:

1. Minutes from prior meetings of this committee will be sent to Tony Uremovich to be posted on INDOT's website.
2. Scott Ludlow reported on the progress of the performance-based cut-wall specification. Tony Uremovich stated that INDOT is trying to get contractors prequalified for cut-wall construction. This would allow prequalification to be removed from the specification. Steve Weintraut summarized the performance-based cut-wall specification for new attendees to the group. Athar Khan requested a timetable to finish the implementation of the specification. Tony estimated it would take a couple of months to get prequalification in place. Tony will keep track of the progress. Scott Ludlow didn't expect there would be any more changes to the

specification other than the removal of the prequalification. Derek Merida of Milestone recommended that subcontractors become prequalified to reduce the burden on the general contractor during the bidding process. The group agreed and the prequalification requirements will be sent to ICA for review. Steve Morris mentioned that Construction had reviewed the specification as part of the wall committee's review.

3. Scott Ludlow reported that no progress had been made on the "state of the practice" memo on pile driving and accounting for negative skin friction. Bill Dubois mentioned that Salim Ilmudeen had done some research on the topic and passed out a few handouts for him. Liza Dwyre questioned if the group should be promoting change as the design community is following current standard practices. Scott felt that someone needed to take the first step, as the overestimation of downdrag should be addressed. Mir questioned how much downdrag is a real problem. Scott felt that current practice is conservative to the point of compounding the "factor of safety" by adding downdrag twice. Mir Zaheer drew a diagram to show how downdrag is added twice. Steve Morris didn't believe that the group would be able to completely solve this issue, but might be able to provide a policy for INDOT to follow. Scott Ludlow will work on finishing the white-paper document "state of the practice" before the group would continue with this debate. He expects to have the document complete by late fall, possibly November 1, 2007. Liza Dwyre will work on the production of a formal letter that Anne Rearick will forward to other state transportation agencies questioning their current practices on pile driving and accounting for negative skin friction.
4. Continuing on with the topic of pile driving, Fred Sullivan stated that the cost of pile in ground is skyrocketing. He believes that this is due to higher pile loadings and the cost of larger cranes. Mir Zaheer noted that old pile driving hammers are not as efficient as they were once thought to be. Athar questioned at what point pile loadings max out current contractor capabilities. Derek Merida felt that around 300 tons contractors have to start renting larger equipment. Athar felt that designers should try to stay under 300 tons for ultimate bearing.
5. The group next discussed current pile-tip specifications. INDOT has received letters from pile-tip manufacturers. INDOT specifications currently follow ASTM A148 90-60 and ASTM A27 65-35. There are currently two pile-tip suppliers, but only one meets current INDOT specifications. The question before the group was to change the specification to allow both suppliers? Athar Khan suggested that pile tips be addressed during the review of specifications section 701. Fred Sullivan felt that field inspection personnel should not require the contractor to keep driving piles after refusal. Keith Hoernshcmeyer stated that the pile-driving inspectors course is now under the tech academy with INDOT's reorganization. Anne Rearick stated that July 1st is the planned start date for the Tech Academy. Athar stated that pile refusal is to be reduced to 120 blows per foot from 180 blows per foot.
6. The SPT hammer energy measurement topic will be discussed at the next meeting by Nayyar Siddiki due to time constraints with this meeting. Nayar also mentioned that the DCP is an alternative method for compaction testing on chemically-treated soils.

7. Steve Weintraut suggested that a committee be formed to review current practices with pipe jacking. Geotechnical consultants (Liza Dwyre and Tom Struewing), contractors (Dan Liotti), and INDOT Utilities (Joe Gunderson) were recommended for the committee.
8. Athar Khan reported to the group that INDOT is working on having Geotechnical Reports available on-line. Athar is currently providing a template to the computer technicians assigned to the project.
9. Keith Hoernschmeyer will look into current practices of calculating scour depths based on soils information and report on that topic at the next meeting.

The next meeting for the INDOT Geotechnical Subcommittee is scheduled for 1:30 p.m. Thursday, July 26, 2007, at INDOT's Division of Production Management.

Individuals are invited to comment on items presented in these minutes and/or submit additional topics for discussion at the next meeting. Please fax comments to Steve Weintraut at 317-713-4616.

This meeting was adjourned at 4:00 p.m.

Prepared by,

BUTLER, FAIRMAN and SEUFERT, INC.

c: Attendees

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