

**ASCE – INDOT
STRUCTURAL/GEOTECHNICAL SUBCOMMITTEE**

MEETING NO. 36 MINUTES

February 14, 2006

The meeting was called to order at 1:35 p.m. by Steve Weintraut. Those in attendance were:

Somanath Hiremath	INDOT, Division of Production Management
Mir Zaheer	INDOT, Division of Production Management
Nayyar Siddiki	INDOT, Division of Production Management
Athar Khan	INDOT, Division of Production Management
Steve Morris	INDOT, Division of Production Management
Dae Hyeon Kim	INDOT, Research Division
Keith Hoernschmeyer	Federal Highway Administration
Tom Struewing	ATC Associates, Inc.
Scott Ludlow	Earth Exploration, 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:

Mark Miller	INDOT, Division of Production Management
Dennis Kuchler	INDOT, Contracts and Construction Division
Greg Pankow	INDOT, Greenfield District
Elizabeth Dwyre	Parsons Brinckerhoff Quade & Douglas, Inc.
John Wright	INDOT, Design Division
Paul Berebitsky	Indiana Constructors, Inc.
Salim Ilmudeen	Patriot Engineering

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

1. Nayyar Siddiki reported that Purdue has finished their research project concerning filter fabric for underdrains. He explained that their recommendations were more complex than INDOT's current design criteria. Steve Morris pointed out that INDOT will have to have a meeting with Purdue to discuss the research and determine what has the possibility to be implemented. The current standard practices do not conform with results of the research recommendations. The topic will now have to be resolved by the pavement design office at INDOT.
2. Scott Ludlow reported on the progress of the performance-based cut wall specification. The retaining wall committee has reviewed approximately 60% of the specification. Scott mentioned that the retaining wall committee felt that information for designers to use the specification should be included in Chapter 68 of the Design Manual instead of in the specification. The specification is supposed to include information for the contractor only. The retaining wall committee also raised the possibility of adding a contractor-supplied quality control plan requirement to the specification. Steve Weintraut questioned if Chapter 68 of the Design Manual was an active project for implementation. Tom Struewing felt that the Geotechnical Engineer should become involved early in any project that the designer feels that a cut wall is required. Steve Weintraut recommended that a technical advisory be distributed to the design community to get them up to speed once the specification

- comes out. Scott also mentioned that the retaining wall committee requested the lateral movement limitation requirement be set at 0.2% of the wall height with an allowance of an otherwise noted recommendation. The group decided they are done with tweaking the performance-based cut wall specification and it is now up to the retaining wall committee to finalize the specification. An update on status of the specification will be given at each of this group's meetings until the specification is officially approved and distributed.
3. Athar Khan suggested that a training session be held for the design community concerning geotechnical issues. He felt that one such issue would include cut walls. He also stated that there seems to be several reoccurring issues that need to be portrayed to the design community. Nayyar Siddiki mentioned that there are a lot of issues that cause change orders and the Geotechnical Engineer needs to include recommendations for certain pay items in the Geotechnical Report. Steve Weintraut suggested that INDOT Division of Production Management contact Greg Pankow to discuss these issues. Athar Khan will come up with a list of reoccurring issues that need to be shared with the design community for the next meeting.
 4. The topic of negative skin friction was then discussed by the group. Steve Weintraut pointed out that Scott Ludlow and Tom Struewing did a good job at the County Bridge Conference discussing the topic of piles. Scott Ludlow stated that he has looked into how other states have been handling the affects of negative skin friction. He mentioned that there was a wide variety of techniques used to account for negative skin friction. Scott then gave a brief summary of his presentation on driven piles from the County Bridge Conference. The group then discussed issues with driving pile and how to account for negative skin friction. Scott felt with further research and effort, a technique could be settled on that is closer to actual conditions than current design practices. Salim Ilmudeen and Scott Ludlow will provide a "state of the practice" on pile driving and accounting for negative skin friction at the next meeting.
 5. Anne Rearick was unable to attend the meeting and discuss information pertaining to the specific values of geotechnical resistance factors. This topic will be held over for the next meeting. Mir Zaheer noted that INDOT Division of Production Management has completed LRFD designs on both shallow and deep foundations. A presentation will be held in mid-April for the geotechnical community covering the LRFD designs. Mir also noted that Purdue is working on resistance factors for Indiana. Dae Hyeon Kim mentioned that the soils test (method reliability) will determine the resistance factor. As previously mentioned, this topic will be placed on the next agenda for further discussion.
 6. Tom Struewing questioned if the group had discussed spread footing on MSE fill. Keith Hoernschmeyer stated that a demonstration project is scheduled to be constructed this summer. Steve Weintraut felt that many projects using this technology have already been built elsewhere.
 7. Athar Khan asked how designers are selecting shell pile thicknesses. Steve Weintraut said designers are using the selection table from Chapter 66 of the Design Manual to specify the appropriate shell thickness.
 8. Mir Zaheer is now a permanent member of this group.

The next meeting for the INDOT Geotechnical Subcommittee is scheduled for Thursday, June 8, 2006, at 1:30 p.m., 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 3:45 p.m.

Prepared by,

BUTLER, FAIRMAN and SEUFERT, INC.

c: Attendees