ADSC/WSDOT Joint Meeting

2 June, 2011, 8:30 A.M. - 11:30 A.M.

ADSC/WSDOT Meeting Minutes

Team Members

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1 Team co-chair

Guests

Attendee	Company	Phone	E-mail
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Meeting minutes were prepared by Mike Niemi, WSDOT Assistant State Construction Engineer, Bridge.

Topics – Update on polymer slurry testing, Shaft thermal integrity testing report, End of year shaft report through 2008, Specification change allowing concrete free fall, Changes to 3.03E, Soldier pile soil/cement mixing specifications, Request for equipment costs, Allowing for slip casing, new spec proposal, Minimum rebar cage cover inside perm casing, Pumpable lean mix def. in Specifications, Moving the drilled shaft special to the Standard Specs, Constructability Review – CRC Shafts

Introduction
Mark Gaines said that at the ADSC/WSDOT Joint Training it was suggested the AGC/WSDOT Structures Task Force have a representative attend the ADSCWSDOT Team meetings. Mark Gaines introduced Dave Stegeman from Kiewit as the attendee at this meeting. Mark requested ADSC recommend a member to attend the AGC Structures meetings.
Action Items: ADSC to recommend an attendee for AGC Structures Team meeting.

Mark Gaines discussed feedback on joint training. Some attendees had commented that much of the training had focused on synthetic slurry disposal. Mark mentioned that it was important to make sure the training was well-rounded.

There has been talk about adding a Department of Ecology (DOE) member to the ADSC/WSDOT task force. Mark Gaines said he has discussed this with DOE and they are interested in participating. Following some discussion, consensus was to ask for DOE participation on a case-by-case basis depending on the discussion topics and agenda items.

1. April meeting notes review
No comments on meeting notes. Alan Macnab requested the meeting notes be sent out sooner to allow more time for preparation ahead of the next meeting.

2. Update on polymer slurry testing
Mark Gaines provided an update. Plan is to test the KB polymer slurry on Tacoma HOV project. One of the concerns is that the schedule for this project has been slipping. In order to use the allocated research funding for these tests, work needs to be done before the end of June. Another option being explored is to construct test shafts at an off-site location rather than testing production shafts. WSDOT is still trying to identify an upcoming project that uses the CETCO slurry product.

3. Shaft thermal integrity testing report
Mark Gaines distributed the shaft thermal integrity testing report to the Team and asked if there were any comments. Alan Macnab provided some information on thermocouples in lieu of tubes. A discussion on the cost of the thermal integrity testing followed.

4. End of year shaft report through 2008
The 2008 data was provided to the Team. A couple of issues with the data were pointed out; Mark agreed to correct the information and re-send it to the Team. Alan Macnab asked when 2009 and 2010 data would be available.

Action Items: Mark Gaines to update and resend 2008 data, and provide 2009/2010 data within 6 months.

5. Action Items:

a) Specification change allowing concrete free fall

Mark Gaines provided an update. Specification will require 4000P freefall language for dry shafts and wet placement methods will be included. Jim Cuthbertson asked if "dry" was defined. Mark Gaines said it was not.

b) Changes to 3.03E

Mike Bauer added suggested language on cleaning bottom of shaft from Alan Macnab. The Team reviewed the new language and agreed that it was acceptable.

c) Soldier pile soil/cement mixing specifications

Discussion deferred to the next meeting when Mark Etheridge is in attendance.

d) Request for equipment costs

Mark Gaines said he wanted to work on this issue. Tom Armour suggested a meeting between ADSC and WSDOT to discuss. Mark Gaines said we should have a meeting with DBM and current projects soon. The whole group process will resume in the Fall.

e) Allowing for slip casing, new spec proposal

Mike Bauer discussed revised language. This includes a table from the Bridge Design Manual. Discussion followed. Mark Gaines suggested a simplified table specifying allowable reduced cover with slip casing. Mike Bauer suggested next action item might fix this.

f) Minimum rebar cage cover inside perm. casing

This revision addresses reduced concrete cover in slip casing zone. Table discussed in action item e will be removed. Alan Macnab suggested removing oscillator from slip casing. Additional language will be added to clarify.
Action Items: Mike Bauer to revise and send to the group for review.

g) Wet setting soil nail provision

Discussion on this item deferred to the next meeting.

h) Pumpable lean mix def. in Specifications

Discussed Seattle DOT (SDOT) and Sound Transit Specifications. No minimum strength included. Discussion followed around whether or not it's necessary to specify a minimum compressive strength. Consensus was SDOT Specification was preferred. Mark Gaines to discuss with Materials Lab.
Action Items: Mark Gaines to discuss pumpable lean mix specification with Materials Lab.

6. Moving the drilled shaft special to the Standard Specs

Mark Gaines had provided a draft copy of the Section 6-19, 9-26, and Special Provision changes to the Team for their consideration. Some of the ADSC Members had significant concerns with moving this forward. Mark pointed out that this doesn't change any content of the current drilled shaft special provisions; it just puts them in different

locations. Discussed that to make the 2012 book concerns need to be addressed by mid June. Consensus was to try and address big issue ADSC concerns to get in to the 2012 Standard Specs. Changes can continue up to the first amendment deadline. ADSC to provide concerns with suggested language to Mark Gaines as soon as possible.
Action Items: ADSC to provide specification concerns with suggested language to address to Mark Gaines as soon as possible. Mark will coordinate further efforts to resolve any outstanding concerns.

Added Item. "O" cell testing.
Tom Armour said free O cell is being offered by industry for testing to verify and prove design. Mark Gaines asked the geotechs to look for a possible project.
Action Items: Mark Frye to look for a project that could benefit from O cell testing.

7. Constructability Review – CRC Shafts
Frank Green provided a brief overview of the project. WSDOT is coming out with a shaft/driven pile test project. There are 3 test locations. Location A has a 6 foot diameter shaft 140 feet deep, 6 ~ 24 inch diameter impact reaction piles and 1 test pile 127 feet deep.

Location B is on Hayden Island. This location is to emulate shafts to be constructed in the River. Work includes a 10 foot diameter shaft 260 feet deep, a 6 foot diameter shaft 131 feet deep, Four 24 inch impact reaction piles and one test pile 131 feet deep. The rebar cage for the 10 foot diameter shaft is the only cage to emulate the cages on the project. Team's response was there would be a splice above the o cell. It was pointed out that land based cranes would be significantly different that marine equipment. Alan Macnab raised concern about CSL through the O cell.

Alan Macnab asked why piles were being driven so deep? A: Due to seismic hazard and liquefaction concerns test may be much deeper than design pile to develop data to refine design.

Al Rasband asked if this was a test of the feasibility of drilling 260 feet deep. Al Rasband said there are two load cell projects planned in the area. Discussion followed. Alan Macnab noted the depths required will limit the types of equipment that can be used.

Why is the casing required so deep? A: to emulate the river conditions with very deep sand.

Why temporary casing on north side? A: concern is loss of slurry in the gravels.

Al Rasband asked if the permanent casing is needed this deep for structural reasons? A: no, it is permanent because it is likely impractical to remove temp. casing of this depth.

Alan Macnab asked why cutoff is at elevation 15'? A: will be changed to 10'

What is the project schedule? A: advertise September 2011.

Action Items: ADSC will provide a consolidated response.

Next Meeting Dates: The team established the following future meeting dates: September 8th, October 13th, and December 1st.