

MINUTES OF DOT-AGC BRIDGE DESIGN SUBCOMMITTEE MEETING

The DOT-AGC Joint Bridge Design Subcommittee met on April 15th, 2009. Those in attendance were:

Greg Perfetti	State Bridge Design Engineer (Co-Chairman)
Mike Robinson	State Bridge Construction Engineer
George White	Blythe Construction, Inc.
Randall Gattis	Sanford Contractors, Inc.
Chris Britton	Taylor & Murphy Construction Co.
Mark Johnnie	Balfour Beatty
Lee Bradley	Dellinger, Inc.
Larry Cagle	Thompson-Arthur APAC
Erik Frazier	S.T. Wooten Corp.
Allen Raynor	Asst. State Bridge Design Engineer
Brian Hanks	Structure Design Project Engineer
David Stark	Structure Design Engineer
Scott Hidden	Support Services Supervisor – Geotech. Eng. Unit
Gichuru Muchane	Structure Design Engineer

During the review of the February 11th, 2009 meeting minutes, the following items were discussed:

1. *Corrections to the Minutes*

Revise the last paragraph of Item 2 – *Erosion Control* to note that Contractors offered to collect and submit erosion control remobilization cost data to the Construction Unit.

Revise Item 5 (i) – *Other (Committee Members)* to note that Mr. Heston was attending the AGC Committee in place of Mr. Johnnie.

2. *Erosion Control*

Mr. Robinson reported that the Department was preparing a new policy that would require removal of sediment basins prior to project completion. As such, the erosion control remobilization cost data is no longer necessary.

3. *Submittals for Evazote Joint Seals*

Mr. Perfetti noted that the recommendations of the research on elastomeric concrete will be discussed at an upcoming meeting, and an update on the special provision for elastomeric concrete will be provided at the next AGC-DOT Committee meeting.

4. *Approved Products Lists*

Mr. Gattis noted that it was not practical for Contractors to search through the approved products list to familiarize themselves with the approved products and their applications. He suggested an email alert be sent to Contractors each time a new product is placed on the list and a link to the product manufacturer's web site be provided in the approved products list.

The minutes of the February 11th, 2009 meeting were approved.

The following items of new business were discussed:

1. *Precast Box Culverts*

Mr. White inquired if the Department has approved use of two-piece (split/clamshell) precast box culverts. He noted that cost of the two-piece precast box culverts were lower than the cost of the single-piece precast box culverts.

The discussion noted that the Department has constructed a trial split precast box culvert. Typically contract plans detail cast-in-place culverts and precast box culverts are permitted at the Contractor's option. It was noted that the *Optional Precast Reinforced Concrete Box Culvert* special provision does not explicitly exclude use of split precast box culverts.

Mr. Perfetti stated that Structure Design will look into this or include any special criteria for their use.

2. *Standard Temporary Detour Bridges*

Mr. White suggested the Department pre-engineer and standardize temporary detour bridges. He noted that it is difficult to comply with the barrier rail requirements on these types of structures. He also encouraged use of staged construction in lieu of temporary bridges because temporary bridge costs are rising rapidly.

The discussion noted that there are too many variables to standardize temporary detour bridges and that staged construction is an option that is considered.

3. *Approach Slab Sub-base*

Mr. Hanks stated that Structure Design will be reviewing the request to eliminate the approach slab sub-base. He noted that in general it appears that it could be eliminated with no apparent consequences to the performance of the approach slab.

During the discussion Contractors were asked if they thought a moisture barrier needed to be detailed between the approach fill material (sand) and the approach slab to prevent the sand from drawing water away from the plastic approach slab concrete. The Contractors did not think a moisture barrier was necessary.

4. *Standard Cored Slab Bridges*

Mr. Hanks provided a brief update on Structure Design's efforts towards standard cored slab bridges, noting that cored slab span lengths and the corresponding design of the cored slab units will be standardized. He added that a second phase of this effort will evaluate standardizing substructures for cored slab bridges.

5. *Other*

i. *Concrete Mix Design Submittals*

Mr. Robinson stated that there has been some discussion on the necessity for submittals of concrete mix designs. He noted that mix designs for cast-in-place concrete are submitted for review and approval, but mix designs for prestressed members are not. He also noted that the Concrete Producer makes the submittals, not the Contractor.

Mr. Robinson stated that contracts are between the Department and the prime Contractor, and therefore the Standard Specifications should be amended to include verbiage that ensures the Contractor is responsible for the concrete that is utilized on projects.

ii. *Rock for Construction Entrances*

Mr. Johnnie stated that there has been some confusion on how rock for construction entrances, e.g. to a work bridge, is paid for. It is not clear whether the rock material is incidental to the work bridge or if it is a pay item in the roadway plans. He requested clarification and consistency in how this material is paid for.

Mr. Robinson stated that he would look into this issue and address it at the next meeting.

iii. *Pile Restrikes*

Contractors inquired about the purpose of the *Redriving Piles* section of the *Piles* special provision. They stated that this section was not clear on payment for pile redriving.

Mr. Hidden clarified by stating that the special provision allows the Contractor the option to stop pile driving, wait, and restrike or redrive piles to achieve the required driving resistance, in which case no additional payment is made.

He also noted that the special provision also provides the Department with the mechanism to request the Contractor to stop pile driving, wait and redrive, in which case payment will be made in accordance with the special provision. He added that the Department would seldom request this.

iv. *Unclassified Excavation*

Contractors inquired about the criteria used for payment of unclassified excavation since the excavated material was not always measured. They noted that a lump sum payment was preferred.

Mr. Robinson stated that the Department's inspectors should measure the excavated material for payment.

v. *Pile Panel Walls*

Mr. Britton stated that, in the past, the Department performed a very good job of designing pile-panel retaining walls. He added, now that Contractors are required to design retaining walls, the plans contain limited information, which makes it difficult to prepare the bid. He inquired if the Department could resort back to designing pile panel walls.

Mr. Hidden explained that the Contractor is in the best position to design retaining walls because the design requires site specific information. In addition, he noted that the changes to special provisions for walls incorporated a consistent method of payment for all wall types.

6. *Next Meeting*

The next meeting is scheduled for Wednesday, June 10th, 2009 in Structure Design Conference Room C.