

MINUTES OF DOT-AGC BRIDGE DESIGN SUBCOMMITTEE MEETING

The DOT-AGC Joint Bridge Design Subcommittee met on May 15, 2000. Those in attendance were:

Tim Rountree	State Bridge Design Engineer (Co-Chairman)
Berry Jenkins	Manager of Highway Heavy Division, Carolinas Branch AGC (Co-Chairman)
Ron Shaw	Lee Construction Company of Carolinas
Larry Cagle	Thompson-Arthur Paving Co.
Ellis Powell	State Bridge Construction Engineer
John Ledbetter	State Soils & Foundations Engineer
Victor Barbour	State Contract Officer
Greg Perfetti	Assistant State Bridge Design Engineer
Rob Woodruff	Structure Design Project Engineer
Paul Lambert	Structure Design Project Engineer
Kyung Kim	Soils and Foundations Engineer
Rodger Rochelle	Structure Design Project Design Engineer (Secretary)

The following items of business were discussed:

1. The minutes of the March 20, 2000 meeting were accepted.
2. *Specialty Contractors*

The question was raised as to what constitutes a specialty contractor. Mr. Barbour explained that a specialty contractor is typically one that requires special equipment. Additionally, the item must be a significant portion of the contract to be considered specialty. In this way, grooving bridge decks would not be considered done by a specialty contractor even though it requires special equipment. Mr. Jenkins asked whether drilled pier contractors could be considered specialty contractors. Mr. Barbour agreed to identify drilled pier contractors as specialty contractors on future projects.

3. *Material for Reinforced Bridge Approach Fills*

Mr. Jenkins summarized the problem in that manufactured sands are not available from all quarries. Mr. Ledbetter stated that screenings were disallowed as reinforced bridge approach fill material as per the request of Area Construction Engineers. Mr. Kim stated that screenings may create a drainage problem if the gradation of the material includes too many fine particles. It was decided that screenings will continue to be disallowed in reinforced bridge approach fills; however, the Soils and Foundation Section will revise the project special provision to specifically allow #78M stone for this application. Mr. Cagle stated that this revision would be helpful and that it is beneficial to specify a material that is commonly available from a quarry.

4. *Payment for Plans and Proposals*

The issue of bona fide bidders being refunded the cost of plans and proposals was raised on behalf of Mr. Burns. Mr. Barbour stated that the nominal fee for plans covers the Departments reproduction costs and discourages arbitrary requests for plans. Mr. Barbour emphasized that there is no additional cost to the successful bidder for additional sets of plans. The Committee was in agreement that the fee structure is reasonable as it stands now.

5. *Vertical Plate Armor*

Mr. Woodruff stated that the Bridge Inspection Office for South Carolina reports no problems with their vertical plate armor detail provided that it is installed correctly and kept clean. Mr. Rountree relayed Mr. Lee's feeling that the extra money we are spending on our current armored joint detail is well worth it. The Department will continue to use the current detail.

6. *Other*

i. *Drilled Pier Requirements*

Mr. Shaw asked on behalf of Mr. Burns whether the requirements for boots and spacers for the cages of drilled piers have been revised recently. Mr. Ledbetter stated that no recent change has been implemented regarding these devices.

ii. *Temporary Barrier Rail*

Mr. Cagle reported recently seeing a water-filled temporary barrier rail and asked if this was a glimpse at the future. Committee members were unfamiliar with the rail and unaware of any push to use it. Mr. Jenkins suggested that the new rail may be a result of the new crash test requirements for barrier rail.

iii. *Shoring for Maintenance of Traffic*

Mr. Cagle asked for clarification on what the Soils and Foundations Section is responsible for reviewing on shoring submittals. It seems as if the shoring review is delayed within Soils and Foundations and that their personnel analyze every component of the design. It is particularly difficult convincing Soils and Foundations Engineers that shoring will be placed in the compacted fill of an existing roadway. The location of borings contributes to the problem. Mr. Lambert will confer with Mr. Ledbetter and provide a summary of the review process at the next meeting.

iii. *Beam Bolsters*

Mr. Rochelle stated that beam bolsters upper will now be used to support the bottom mat of steel when metal stay-in-place forms are used. This policy will be effective in September. Supports will be coated in accordance with the Standard Specifications.

iv. Rideability of Prestressed Concrete Girder Bridges

Mr. Perfetti asked about the time frame between shooting tenth points along prestressed girders and pouring the deck. Mr. Shaw stated that six weeks will suffice for a typical bridge. The Department is gathering data to determine if camber growth during this time frame contributes to poor rideability.