

MINUTES OF DOT-AGC BRIDGE DESIGN SUBCOMMITTEE MEETING

The DOT-AGC Joint Bridge Design Subcommittee met on February 11th, 2009. Those in attendance were:

Greg Perfetti	State Bridge Design Engineer (Co-Chairman)
Berry Jenkins	Manager of Highway Heavy Division, Carolinas Branch AGC (Co-Chairman)
Mike Robinson	State Bridge Construction Engineer
George White	Blythe Construction, Inc.
Randall Gattis	Sanford Contractors, Inc.
Chris Britton	Taylor & Murphy Construction Co.
Bill Heston	Balfour Beatty
Lee Bradley	Dellinger, Inc.
Larry Cagle	Thompson-Arthur APAC
Allen Raynor	Asst. State Bridge Design Engineer
Paul Lambert	Structure Design Project Engineer
Scott Hidden	Support Services Supervisor – Geotech. Eng. Unit
Chris Kreider	Regional Operations Engineer – Geotech. Eng. Unit
David Greene	Structural Members Engineer – Materials & Tests Unit
Steve Walton	Metals Engineer – Materials & Tests Unit
Ben DeWit	Field Operations Engineer – Roadside Environmental Unit
Gichuru Muchane	Structure Design Engineer

During the review of the October 15th, 2008 meeting minutes, the following items were discussed:

1. *Lettings*

Mr. Perfetti stated that due to the economic conditions lettings have been substantially reduced. However, he noted that North Carolina should benefit from the proposed "Stimulus Package" that will fund some "shovel ready" projects. He added that the stimulus money is intended to target a mix of projects, both geographically and in scope.

Mr. Jenkins noted that based on some discussions at recent meetings, the State was one of the most well prepared to react, and he commended the Department.

2. *Lists of Pile Splicers, Pile Points, and Rebar Splicers*

Mr. Greene demonstrated how to navigate to the *Approved Products List* on the Materials and Tests Unit's website. He noted that the most efficient method of searching for an approved product was by key word or product name.

Mr. Greene stated that pile splicers would soon be added to the approved products list. Mr. White shared some information on concrete pile splicers, and he recommended concrete pile splicers be included on the approved products list.

There was a lot of discussion on the number of approved product lists maintained by the Department. There were several questions on communication between the Approved Products List committee and the custodians of the various lists. Contractors recognized the need for different approval authorities, but suggested a single source for listing approved products. Contractors also suggested that products that have a specification should not be listed. Mr. Greene stated that he would discuss the possibility of consolidating the products lists with the Assistant State Materials Engineer.

Mr. Robinson stated that the Department is reviewing various prequalification requirements throughout the Department. Mr. Jenkins added that industry had requested a review of the prequalification cycles to streamline prequalification approvals and eliminate redundant or unnecessary prequalification requirements.

The minutes of the October 15th, 2008 meeting were approved.

The following items of new business were discussed:

1. Fasteners on Temporary Bridges

Mr. Robinson reported that the Department had recently reviewed the requirements for fasteners for temporary bridges. Current verbiage in the Standard Specifications requires:

- New domestic fasteners on temporary bridges.
- Assurance that the components of temporary bridges are inspected.
- Panel-type bridges should be assembled with a company representative on site.

Mr. Robinson stated that a special provision to strengthen these requirements is forthcoming. In addition, he noted that consistency in the requirements for Contractor designed and panel-type bridges will be explicit.

2. Erosion Control

Mr. DeWit discussed the increasing number of situations that require remobilization to address erosion control (EC) issues after the post-final review. He noted that, in general, areas with sandy soils have more erosion control problems because it is more difficult to establish a stand of vegetation in the poor soils. He also noted that remobilizing was a hardship on Contractors because of limited access to the end and side slopes of the bridge and approach roadway, respectively. Mr. DeWit stated that the Roadside Environmental Unit is exploring ways to mitigate EC cost-overruns. EC Intermediate Contract Times (ICTs) have not been well received, and other cost control approaches have been considered, including use of temporary matting, sodding, and removal of sediment basins from the top of the roadway after vegetation is established. He requested Contractor suggestions on ways to minimize remobilization.

The discussion noted that temporary sediment basins are required to be removed as a permit condition. However, the basins cannot be removed until sufficient vegetation is established, yet seeding is one of the last operations prior to the post-final review. It was also noted that permit requirements are sometimes negotiable and sediment basin removal may not be necessary in all locations.

Mr. Jenkins stated that he would collect cost data from the Contractors, which he would forward to Mr. Robinson.

3. Field welding Procedures

Mr. Walton distributed a booklet on the Department's welding procedures. The booklet consisted of an introduction, requirements for cleanliness, work quality, welding details, and pre-heating.

Mr. Walton noted that this information and the welding procedure forms are available on the Materials and Tests Unit's website. He added that Contractors still have the option to submit their own welding procedures for approval.

During the discussion Contractors noted the recent redesign of the Department's website has made it difficult to navigate and quickly find information and documents. Mr. Jenkins stated that he would bring up the issue at the AGC- DOT Joint Cooperative Committee.

4. *Slope Protection Curb*

Mr. Muchane stated that the Construction Unit had suggested Structure Design review the details of the slope protection curb for improved effectiveness in preventing erosion adjacent to the slope protection. He showed several curbs that Structure Design has developed and he requested feedback on their constructability.

The discussion noted that the curb selected by Construction was not preferred for constructability reasons. Contractors were in favor of providing options for the curb and they suggested:

- Keeping the existing curb details and providing a strip of rip-rap at the edge of the slope protection, or
- Detailing a construction joint with dowels between the slope protection and the curb, and detailing a taller triangular curb.

5. *Other*

i. New Committee Members

Mr. Jenkins welcomed Messrs. Larry Cagle and Bill Heston. Mr. Cagle will represent Thompson-Arthur, APAC on the AGC-DOT Committee, and Mr. Heston was attending the meeting in the place of Mr. Johnnie (Balfour Beatty).

ii. Project Documentation

Mr. Gattis asked about being required to write a narrative on progress schedule.

During the discussion it was determined that this requirement is outlined in a standard special provision titled *Progress Schedule*, which amends Article 108-2 of the Standard Specifications. It appears the intent of this provision is to prompt the Contractor to carefully consider and articulate his/her plan to meet the project schedule.

iii. Integral End Bents

Mr. Gattis inquired whether there was a waiting period prior to excavating the approach fill area for integral abutments. It was noted that the Standard Specifications have been modified and waiting periods are no longer a customary requirement. Site specific waiting periods, as necessary, will still be noted on the plans.

iv. Submittals for Evazote Joint Seals

Contractors inquired about submittals and approvals for elastomeric joint seals. Mr. Robinson responded by stating that based on the recommendations of a UNC- Charlotte research study, the Department will soon require use of prequalified materials, and installation and sampling procedures will be specified in a revised special provision.

6. *Next Meeting*

The next meeting is scheduled for Wednesday, April 15th, 2009 in Structure Design Conference Room C.