

MINUTES OF DOT-AGC BRIDGE DESIGN SUBCOMMITTEE MEETING

(Approved: 8/14/13)

The DOT-AGC Joint Bridge Design Subcommittee met on June 12th, 2013. Those in attendance were:

Greg Perfetti	State Structures Engineer (Co-Chairman)
Berry Jenkins	NC Government Relations, Highway Division Director; Carolinas AGC (Co-Chairman)
Mike Robinson	State Bridge Construction Engineer
Allen Raynor	Assistant State Structures Engineer
Chris Peoples	State Materials Engineer
Randall Gattis	Sanford Contractors, Inc.
Chris Britton	Buckeye Construction Company
Larry Cagle	Thompson-Arthur Div., APAC-Atlantic, Inc.
Lee Bradley	Blythe Construction Company
Bill Heston	Balfour Beatty Infrastructure
Greg Cook	Mountain Creek Contractors
Dan Nickel	Carolina Bridge Company
Erick Frazier	S.T. Wooten Corporation
Brian Hanks	Structures Management Project Engineer
Paul Lambert	Structures Management Project Engineer
Scott Hidden	Support Services Supervisor – Geotechnical Eng. Unit
Andrew Nottingham	Assistant State Hydraulics Engineer – Operations Support
Paul Garrett	State Bridge Program Manager
Don Lee	State Roadside Environmental Engineer
Ken Pace	State Environmental Operation Engineer
Lamar Sylvester	State Roadway Construction Engineer
Pam Williams	Project Executive – Transportation Program Management
Gichuru Muchane	Structures Management Engineer

The following items were discussed during the review of the February 13th, 2013 minutes:

1. Railroad Requirements

Mr. Robinson reported that the Railroads and the private engineering firm (PEF) hired to review railroad plans have not made progress in addressing Contractors' concerns regarding allowable loads that can be safely lifted with the equipment that is already approved. He encouraged Contractors to continue collecting as much information as possible when problems and concerns arise and minimize the work necessary within the Railroad right-of-way.

The minutes of the February 13th, 2013 meeting were approved.

The following items of new business were discussed:

1. Permanent Sheet Piles

Contractors stated that for permanent applications the Standard Specifications require steel sheet piles meet the requirements of ASTM A690. They noted that A690 steel is typically used in marine or corrosive environments. Contractors stated that availability of A690 steel is unpredictable because it is rolled to order and mills require a 500 ton minimum order to roll the sheets. Contractors stated the use of marine steel for scour protection was unwarranted since plain A572 steel piles are used adjacent to the marine steel sheet piles, and they inquired if the Department would consider alternates to the A690 steel.

Corrosion potential and protection of steel sheet piles and steel H-piles was discussed. After some discussion Mr. Robinson and Mr. Peoples stated that they would review the requirement for A690 steel for permanent sheet piles and report back to the committee.

2. *Disposal of Concrete Grooving/Grinding Slurry*

Mr. Nickel discussed concerns regarding the lack of options for disposing of the waste products from concrete grooving or grinding. The waste product is collected in the form of slurry which has relatively high alkalinity (high pH). Landfills do not accept the material due to the high pH. As a result, Contractors are compelled to haul the slurry to a wastewater treatment plant, which is costly. They inquired if it was acceptable to treat the slurry to neutralize the pH and then treat it as concrete waste.

Mr. Lee and Mr. Pace stated that slurry disposal is problematic as the material has a high pH and is considered an industrial waste by NCDENR. They noted that the Department of Environment and Natural Resources (DENR) is discussing some options for handling concrete waste. They stated that they hoped to provide an update of those discussions at the August Meeting.

3. *Express Design Build—Year 3*

Mr. Garrett provided a brief update on the funding and number of contracts that will be let in the third year of the State Bridge Preservation Program. He noted that there will be approximately 6 projects in four Divisions depending on the funding levels provided in the State budget. He anticipated that funding for the third year of the bridge program will be approximately \$180 million.

4. *Cap on Fuel Adjustment(Design Build and Ready Mix)*

Mr. Nickel stated that fuel price adjustments appear to be capped at the bid quantities on design-build projects. He inquired what qualifies for the fuel price adjustment. Contractors also wanted to know why the special provision for Fuel Price Adjustment is included in express design-build projects if the pay item prices are capped at the bid quantities.

Mr. Robinson stated that the special provision for fuel price adjustment lists pay items that qualify for adjustment. He added that it was unclear why the Contracts office required Contractors to list pay items that do not qualify for fuel price adjustments. After some discussion Mr. Robinson and Mr. Garrett suggested inviting the State Contract Officer to the next meeting to clarify the Department's policy on fuel price adjustments.

5. *National Pollutant Discharge Elimination System (NPDES)*

Mr. Frazier inquired whether the Contractor or the State is responsible for monitoring projects after work is completed but prior to establishing 80% vegetation coverage and final acceptance. He stated that Contractors would prefer the Resident's Engineers' office monitor the project until final acceptance to ease the burden on Contractors, especially in situations where the project site is not close to the Contractor's office. Contractors also noted that the National Pollutant Discharge Elimination System (NPDES) requirements were not addressed in the special provision for Permanent Vegetation Establishment.

Mr. Sylvester responded with a comprehensive discussion and clarification of the erosion control requirements. He noted the requirement for establishing 80% coverage of permanent vegetation within the project limits is a contractual work performance criterion.

During the discussion Contractors inquired about the most cost effective ways of complying with the special provision for Permanent Vegetation Establishment and the NPDES requirements. Some of the suggestions included use of sod, particularly on small projects. Contractors also suggested the Department consider a separate pay item for monitoring the project site prior to acceptance. Mr. Sylvester was receptive to considering the separate pay item on future contracts.

6. *Native Fill Material in Multiple Box Culverts*

Mr. Heston discussed inconsistencies in the plan notes for bed material in culverts with low flow channel sills. He added that often a note requiring "native" soil material, subject to approval by the Engineer is included. However, the definition of "native" soil is omitted. During the discussion he noted that payment for the material is not addressed in the notes and there is no estimated quantity of material.

Mr. Nottingham responded by stating that often the regulatory agency permits require native materials be placed in the culvert to reduce impacts to the stream. He explained that the intent is to place native stream bed material in the culvert and in some cases use rip-rap to supplement. Mr. Nottingham and Mr. Hanks stated that the Hydraulics and Structures Management Unit will coordinate the notes to ensure consistency in the plans and address payment for the bed material.

7. *Crane Safety*

Mr. Jenkins discussed an article on crane safety that was published in several construction industry publications. The article states that crane operators may have three more years to pass crane operator certification exams while the U.S. Occupational Safety and Health Administration (OSHA) reviews its regulations on cranes and derricks. The delay and review are attributed to controversy over a requirement for exams to test operators by type and capacity of crane by November 2014. Contractors inquired if the Department's position on crane safety has changed as a result of the delay in enforcing the previously publish rules.

Mr. Robinson responded by noting that, in general, North Carolina's crane safety OSHA program follows the U.S. OSHA program, except for situations involving critical lifts. As such the Department's special provision for Crane Safety will remain the same.

8. *Other*

- i. Mr. Hanks informed the Contractors that an alternate to the standard 2-bar metal rail has been installed on a trial project. He stated that the trial was intended to evaluate the feasibility of using alternate rails on the standard parapet. He anticipated that acceptable alternate rails will be listed on the Approved Products List and a note will be placed on the plans to allow Contractors' the option of using the alternate rails.

9. *Next Meeting*

The next meeting is scheduled for Wednesday, August 14, 2013 in the Structures Management Conference Room.