

MINUTES OF AGC-DOT JOINT BRIDGE SUBCOMMITTEE MEETING
(Approved: October 9, 2019)

The AGC-DOT Joint Bridge Subcommittee met on June 12th, 2019. Those in attendance were:

Brian Hanks	State Structures Engineer (Co-Chairman)
Victor Barbour	Carolinas AGC – Highway Division Director (Co-Chairman)
Lamar Sylvester	State Construction Engineer
John Pilipchuk	State Geotechnical Engineer
Wiley Jones	Assistant State Construction Engineer
Gichuru Muchane	Assistant State Structures Engineer
Lee Bradley	Blythe Construction, Inc.
Chris Britton	Buckeye Bridge, LLC
Patrick Buckley	Crowder Construction Company
Ben Wilson	Dane Construction, Inc.
Chas Hummel	Flatiron Construction Corporation
Tom Meador	Lane Construction Company
Chris Powers	Lee Construction Company
Erick Frazier	S. T. Wooten Corporation
Brian Weathersby	Sloan Construction
Larry Cagle	Thompson-Arthur Div., APAC-Atlantic, Inc.
Damien Hollifield	Young & McQueen Grading Company
Cameron Cochran	Construction Unit – Regional Bridge Construction Engineer
Aaron Earwood	Construction Unit – Regional Bridge Construction Engineer
Tom Santee	Geotechnical Unit – Regional Operations Engineer
Cabell Garbee	Material & Tests Unit – Manufactured Products Engineer
Trey Carroll	Structures Management Unit – Project Engineer
Nicholas Pierce	Structures Management Unit – Team Leader

During the review of the February 13th, 2019 meeting minutes, the following items were discussed:

1. *BUILD Grant Bridge Replacements*

Mr. Hanks shared that the Department is finalizing the BUILD grant agreement with FHWA/USDOT and noted the projects using matching state funds are beginning to be let. He added the Department is in the process of applying for another grant targeting low water bridges in Division 11.

2. *Anchor Bolt Layout*

Mr. Earwood stated the proposed anchor bolt layout is ready for trial. He requested Contractors provide him with existing projects for which SMU will prepare the anchor bolt layout tables for trial.

3. *Sloped Bottom of Wing Details*

Mr. Earwood noted that in previous subcommittee meetings Contractors stated that wings with sloped bottoms were not preferred. However, a recent Design-Build project utilized wings with sloped bottoms which may cause confusion from a policy position. Contractor

consensus continued to be that wings with sloped bottoms should be avoided whenever possible. Structures Management and Geotechnical Units reiterated that they will work to develop details addressing integral end bents with long wingwalls.

4. Staged Construction

Mr. Earwood inquired if Contractors had any thoughts or suggestions regarding the current staged construction policy. Group discussion noted that girder spacing for bulb tees should be reviewed.

5. Disposal of Concrete Residuals

Mr. Earwood noted that there has been no change in what is considered concrete residuals and how it should be properly disposed. Mr. Sylvester added that the Department's permit for disposal of concrete residuals was in the renewal process and would cover residuals from various construction activities.

The minutes of the February 13th, 2019 meeting were approved.

The following items of new business were discussed:

1. Funding Update

Mr. Hanks and Mr. Sylvester discussed lettings for the remainder of the fiscal year and shared anticipated funding sources and amounts for the upcoming fiscal year but noted that the budget still needed legislative approval. Mr. Hanks noted that he anticipates funding for the bridge program will remain consistent. Mr. Sylvester shared that the Department has delayed some new construction projects because it is awaiting reimbursement for monies spent in response to recent hurricanes and he noted the recent decline in project lettings should resume soon after the new fiscal year begins.

Action Item:

None

2. FIB Girders and Integral End Bents

Mr. Barbour noted that 6 feet is the maximum girder height allowed under the current integral end bent policy. He inquired if the policy will be revised because Florida I-Beam (FIB) girders are beginning to be used more frequently and those standard girder shapes can exceed 6 feet. Mr. Hanks stated that Structures Management Unit will review the integral end bent policy with regards to FIB girder heights.

Action Item:

Structures Management Unit will review integral end bent criteria with regards to girder height and will update as needed.

3. Temporary Panel Bridges

Mr. Earwood noted that Materials and Tests Unit is updating the temporary bridge policy to provide greater consistency among vendors and to address various items including critical connections and used material tracking. Mr. Earwood reminded Contractors that routine inspections of temporary bridges are required, and inspection report forms are available on the Structures Management Unit's webpage. Mr. Cochran noted that when launching a

temporary bridge consisting of multiple spans the stability and strength of the interior bents should be investigated. He shared an example of a temporary interior bent consisting of a footing on piles that began to tilt as the temporary bridge was being launched across it.

Action Item:

Materials and Tests Unit will continue updating the temporary bridge policy accordingly.

4. Link Slabs

Mr. Earwood noted that Structures Management Unit is currently revising its link slab policy and that Contractors should be seeing more plans detailing link slabs. Mr. Hanks noted that, for long girders, link slabs will not replace the continuous for live load diaphragms. The discussion noted that plan notes should clearly define what is and what is not acceptable within the link slab area.

Action Item:

Structures Management Unit will continue revising the link slab policy.

5. Barrier Rail Slip Forming

Mr. Earwood discussed the requirement for Contractors to have systems in place to capture and contain excess grout and concrete from slip-forming barrier rails. He noted that concrete should never be dropped into streams or onto traffic due to environmental concerns and safety to the traveling public. He advised that containment systems should be in place before the barrier rail subcontractor arrives to avoid possible delays. He added that the June 2019 Structure Bulletin provides additional information on the topic.

Action Item:

None

6. Adhesive Anchors – ACI Certification

Mr. Earwood stated that the Standard Specifications do not permit the use of adhesive anchors in overhead installations under sustained tension, but noted there may be occurrences when Contractors can request an exception. He shared that the Department will review Contractor's requests for overhead applications on a case-by-case basis and emphasized that the allowance for an overhead installation will be considered only as a last resort. He noted that installers must be ACI certified and that the ACI certification process can take several months and therefore encouraged Contractors to begin seeking certifications for their employees. The Construction Unit will begin training NCDOT inspectors how to inspect installations. Mr. Garbee noted that ACI Carolinas Chapter is a resource for installer certification.

Action Item:

None

7. Crane Operator Certification

Mr. Cochran shared that OSHA regulations now require all crane operators to be certified for all crane operations. He noted that previously only critical lifts required certified crane operators and that the Crane Safety Special Provision should be revised accordingly.

Action Item:

Structures Management Unit will revise the Crane Safety Special Provision to reflect changes to OSHA regulations.

8. Rip Rap Detail

Mr. Earwood discussed the standard rip rap detail and shared his concerns with undermining the end bent cap because the earth berm is detailed below the bottom of cap. He suggested revising the detail to show the earth berm at the same elevation as the bottom of cap but noted this would create challenges for 2'-6" caps by reducing the clearance between the superstructure and rip rap. He requested that Contractors provide suggestions for improving the rip rap detail and addressing 2'-6" end bent caps.

Action Item:

Construction Unit will review rip rap details and propose revisions.

9. M&T Unit – Metal Products Section

Mr. Garbee shared an informational flier for the Metal Products Section. He noted that the flier detailed the group's responsibilities and provided contact information.

Action Item:

None

10. OSHA Silica Requirements

Mr. Sylvester reminded Contractors that OSHA requires employers to have plans and processes for protecting workers from exposure to silica dust. He noted a recent inspection of a bridge rehabilitation project found a possible violation for not providing proper protective systems to prevent silica dust exposure during the use of pneumatic concrete hammers and chisels.

Action Item:

None

Next Meeting

The next meeting is scheduled for August 14th, 2019 in the Structures Management Conference Room C.

Post Meeting Note:

Due to a limited agenda, the August 2019 meeting was cancelled. The next meeting is scheduled for October 9th, 2019 in the Structures Management Conference Room C.