MINUTES OF AGC-DOT JOINT BRIDGE SUBCOMMITTEE MEETING

(Approved: February 12, 2020)

The AGC-DOT Joint Bridge Subcommittee met on October 9th, 2019. Those in attendance were:

Brian Hanks State Structures Engineer (Co-Chairman)

Victor Barbour Carolinas AGC – Highway Division Director (Co-Chairman)

John Pilipchuk State Geotechnical Engineer

Gichuru Muchane Assistant State Structures Engineer Balfour Beatty Infrastructure, Inc.

Lee Bradley Blythe Construction, Inc. Chris Britton Buckeye Bridge, LLC

Patrick Buckley Crowder Construction Company

Adam Holcomb Dane Construction, Inc.

Chas Hummel Flatiron Construction Corporation

David Yates Fred Smith Company

Tom MeadorLane Construction CompanyMark NewmanNHM Constructors, LLCErick FrazierS. T. Wooten CorporationChris BrownSanford Contractors, Inc.

Brian Weathersby Sloan Construction

Jorge Gambini Thalle Construction Company

Larry Cagle Thompson-Arthur Div., APAC-Atlantic, Inc.
Damien Hollifield Young & McQueen Grading Company
Kevin Knuettel Zachry Construction Corporation

Cameron Cochran*

Aaron Earwood

Cabell Garbee

Construction Unit – Regional Bridge Construction Engineer

Construction Unit – Regional Bridge Construction Engineer

Material & Tests Unit – Manufactured Products Engineer

George Boules Material & Tests Unit – TEA

James BoldenStructures Management Unit – Project EngineerTrey CarrollStructures Management Unit – Project EngineerNicholas PierceStructures Management Unit – Team Leader

During the review of the June 12th, 2019 meeting minutes, the following items were discussed:

1. 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.

The minutes of the June 12th, 2019 meeting were approved.

^{*}Joined Via Phone

The following items of new business were discussed:

1. SIP Support Angle Dimensions

Mr. Brown noted that when prestressed concrete girder camber is less than predicted and the buildup becomes more than anticipated, often the support angles supplied for the SIP forms are too short. Short angles can result in project delays when new angles must be ordered. Mr. Brown inquired if the Department can require a minimum vertical leg dimension to alleviate this situation. Contractors added that SIP form suppliers provide angles that are sized for the theoretical camber and allow for little variance. Contractors agreed that specifying a minimum vertical leg length would address most of the problems and the cost of using larger angles outweighs the cost of delaying a project.

Action Item:

Construction and Structures Management will discuss internally and will review cost comparison between different size angles.

2. Use of Swiss Hammer for Wrecking Falsework

Mr. Brown stated that on a recent project the Resident Engineer did not allow wrecking falsework based on the concrete strength determined by Swiss Hammer. He inquired if the Department no longer recognizes the use of a Swiss Hammer for determining when wrecking falsework may proceed. Mr. Earwood and Mr. Cochran noted that the use of a Swiss Hammer is allowed for wrecking falsework but should not be used for concrete acceptance.

Action Item:

Construction will discuss the topic in an upcoming Structure Bulletin.

3. Prestressed Girder Release Strength

Mr. Hummel asked for clarification on the Department's guidance and policy on the release strength for prestressed concrete girders. He noted that some design engineers appear to follow the old guidance of 80% of the final strength which results in higher release strengths. Mr. Hanks noted that designers should only specify the minimum release strength required by design.

Action Item:

Structures Management will remind designers to only specify what is required by design.

4. Preservation & Repair Let List

Mr. Hanks shared the latest Preservation and Repair Let List and noted that it will be updated monthly. Mr. Cagle inquired if the Division Let List will also be updated and he added that he preferred it be removed if the list is not current. Mr. Hanks stated that he will contact the business unit responsible for updating the Division Let List.

Action Item:

None

5. AGC Updates

Mr. Barbour discussed the efforts of an AGC/ACEC coalition to encourage the legislature to provide funding for the Department to address the cash balance needs. He discussed several legislative bills that are being considered. Contractors shared concerns with the limited number of projects being let and noted that the Department should not publish projects to the 12-month let list if funding is uncertain. Mr. Barbour noted that due to budgetary concerns, the NCDOT/AGC Joint Winter Training Conferences are not likely to be held in 2020.

Action Item:

None

6. DTI Acceptance and Field Verification

Mr. Earwood shared a presentation discussing use of the Skidmore torque wrench for field testing DTI's. He noted that if Contractors have any questions about the Skidmore or if they have DTI's fail, they should contact him or Mr. Cochran. He also noted that intermediate diaphragms for prestressed concrete girders do not require use of a Skidmore.

Action Item:

None

7. Curb Length for 12' Approach Slabs

Mr. Earwood discussed guardrail performance concerns when the full height of the 4" curb is maintained to the end of 12 ft. approach slabs. Mr. Hanks noted that the Roadway Standard Drawings show the curb full height and guardrail in front of the curb up to the end of the 12 ft. approach slab.

Action Item:

Structures Management will review the curb detail with Mr. Joel Howerton.

8. Chamfering Corners of Deck Slabs and Barrier Rails with Heavy Skews

Mr. Cochran shared pictures of barrier rails on severe skews. He noted that the acute corners should have been chamfered because the corners were thin and unreinforced. He discussed concerns with performance and future maintenance.

Action Item:

Construction and Structures Management will continue to discuss the topic internally.

Next Meeting

The next meeting is scheduled for December 11th, 2019 in the Structures Management Conference Room C.

Post Meeting Note

Due to a limited agenda, the December 2019 meeting was cancelled. The next meeting is scheduled for February 12th, 2020 in the Structures Management Conference Room C.