

MINUTES OF AGC-DOT JOINT BRIDGE SUBCOMMITTEE MEETING

(Approved: August 11, 2021)

The AGC-DOT Joint Bridge Subcommittee met in person with a virtual component on June 9th, 2021. 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
Todd Whittington	State Materials Engineer
Wiley Jones	Assistant State Construction Engineer
David Hering	Assistant State Geotechnical Engineer
Gichuru Muchane	Assistant State Structures Engineer
Philip Creasman	Buckeye Bridge, LLC
Kerry Kennedy	Conti Enterprises, Inc.
Nathan Hedrick	Dane Construction, Inc
Jake Linn	Dellinger, Inc.
Chas Hummel	Flatiron Construction Corporation
David Yates	Fred Smith Company
Tom Meador	Lane Construction Company
Mark Newman	NHM Constructors, LLC
Erick Frazier	S. T. Wooten Corporation
Randall Gattis	Sanford Contractors, Inc.
Brian Weathersby	Sloan Construction Company
Seth Rowney	Thalle Construction Company
Larry Cagle	Thompson-Arthur Div., APAC-Atlantic, Inc.
Damien Hollifield	Young & McQueen Grading Company
Darren Colby	Zachry Construction Corporation
Aaron Earwood	Construction Unit – Regional Bridge Construction Engineer
Scott Hidden	Geotechnical Unit – Support Services Supervisor
Tom Santee	Geotechnical Unit – Eastern Regional Operations Engineer
Cabell Garbee	Materials & Tests Unit – Manufactured Products Engineer
James Bolden	Structures Management Unit – Project Engineer
Trey Carroll	Structures Management Unit – Project Engineer
Nicholas Pierce	Structures Management Unit – Team Leader
Beth Quinn	Structures Management Unit – Team Leader
Tim Sherrill	Structures Management Unit – Staff Engineer

During the review of the April 14th, 2021 meeting minutes, the following items were discussed:

1. *SMU Asset Management Manual*

Mr. Carroll stated that the first chapters of the Asset Management Manual are under internal review and will be shared with the subcommittee at a later date.

2. Foundation Summary Tables

Mr. Hanks asked about the implementation of the Foundation Summary Tables. Mr. Hidden shared that the Foundation Summary Tables will be implemented with the October 2021 letting. Projects with previously completed Foundation Recommendations will only be updated for bridges with concrete piles due to the new pile provision.

The minutes of the April 14th, 2021, meeting were approved.

The following items of new business were discussed:

3. SHPO Approval – Waste/Borrow Pits for Small Bridge Projects

Mr. Barbour discussed concerns with review timelines for waste/borrow pits for small projects, specifically related to project schedules. It was noted the review period for SHPO is 30 days. Contractors added that the primary concern is with Division projects with a start date shortly after the let date and projects with moratoriums. Mr. Barbour inquired if the review process could be streamlined and suggested that the Division Environmental Officers (DEOs) could provide potential waste/borrow sites beforehand and information on areas to avoid. Mr. Earwood stated that Divisions can be reminded to consider moratoriums and waste/borrow site approval when setting contract times.

Action Item:

Mr. Carroll to discuss with Mr. Kevin Fischer about contract times with the Division Bridge Program Mangers.

4. Asbestos Inspections

Mr. Gattis shared concerns regarding the requirements for asbestos assessment; specifically having to obtain permits and notifying Health Hazards Control Unit even when asbestos is not present. He inquired if the Department is considering addressing asbestos assessment before projects are let, as was expected when the program began. It was noted that asbestos has only been found in a few bridges. Mr. Earwood noted that the procedure for asbestos assessment was adapted from building inspections, and he added that NCDOT data could be used to propose relief for bridge contractors. Mr. Hanks stated that the intent is to have the Department determine asbestos issues prior to letting. Mr. Creasman commented that a few counties (Buncombe, Forsyth and Mecklenburg) handle the processing internally and the process is streamlined.

Action Item:

SMU and Construction Unit will internally review history of asbestos program and investigate revising process to determine asbestos prior to contract award.

5. Proving Bearing on Piles

Mr. Gattis asked if there is a requirement to restrike every pile that did not originally meet specified bearing resistance. Mr. Santee recommended that drive criteria should be followed and stated that if the piles are close to tip elevation, the worst pile or a select few piles can be selected, in some cases, for a restrike. Contractors noted that the specifications are not clear and that some CEIs are requiring the Contractors to prove each pile meets resistance. Mr. Earwood noted that Geotechnical and Construction Units could develop guidance or training for Resident Engineer offices.

Action Item:

Geotechnical and Construction Units to discuss providing guidance on pile restrikes and potentially include as a Structures Bulletin topic.

6. MSE Walls and End Bent Wings

Mr. Hanks stated that SMU is considering guidance for eliminating long end bent wingwalls at MSE walls by turning the wings forward. Mr. Hanks asked for Contractor feedback for when this should be done and when this is more economical. Mr. Frazier commented that in a cut section turned back wings can result in additional excavation. Mr. Hanks noted that during a Spring Tour a bridge with turned back wings was found to have a large gap between the superstructure and the corner of the MSE wall. Mr. Hanks stated that there is not a consistent practice with turning the wings forward. Mr. Weathersby stated that extending the MSE wall and turning the wings forward can create a difficult vertical coping section to build. Mr. Frazier stated that turning the wings forward can be an issue with construction schedules and phasing because it requires that the bottom portion of the MSE wall be built, then the end bent and then the MSE wall to finished grade. Mr. Hidden noted that there can be steep slopes and drainage issues between dual bridges with shorter MSE walls and that taller walls allow for directing the water away from the fill face and into a median drain. Mr. Earwood suggested to investigate the wingwall length with potential issues to turn back wings and to consider girder size in policy development since use of deeper beams results in taller backwalls and longer wings.

Action Item:

SMU to investigate details of MSE wall and wingwall to present at the next meeting.

7. Paving Contractor Impacting/Damaging New Bridges

Mr. Hanks stated that there have been several cases where new bridges have been impacted by raised truck beds during paving operations resulting in damage to bridge girders. Mr. Hanks asked for ideas for preventing such impacts. Mr. Gattis suggested that truck manufacturers install a mechanism to limit the speed of trucks when the truck bed is raised. Mr. Creasman suggested to add signs before bridges to alert drivers, similar to overhead power line signs. Mr. Frazier recommended that trucks be installed with a warning signal when beds are raised. Mr. Hanks asked contractors to communicate this issue to paving contractors and noted that he would discuss with Mr. Tharrington.

Action Item:

Contractors to communicate issue with paving contractors.

8. Other

- i. Mr. Garbee announced that Mr. Zach Leonard has been hired to assist Mr. Bobby Watkins with RFID tracking timber and other products, as well as to assist maintenance staff. Mr. Garbee also shared that CSX railroad sent revisions to bridge standards in March that limits critical weld repair on new girders to no more than three times.

Action Item:

None

- ii. A general discussion was held about material availability. Contractors noted cement shortages and lead time for elastomeric concrete is about 3 months. Pipe availability is also impacted. It was asked if the type of cement could be changed. Mr. Garbee responded that Contractors are welcome to submit new mix designs. Mr. Cagle suggested adjusting contract times to account for lead times for materials. Mr. Creasman also raised the issue with projects requiring temporary detour bridges and allowing for adequate time for design and construction. Mr. Barbour stated that short project time frames without float at the beginning can be challenging. Mr. Barbour asked when the Contract Guidelines were last reviewed. Mr. Earwood recommended that these should be reviewed.

Action Item:

SMU and Construction Units to discuss Contract Guidelines internally and with Bridge Program Managers.

The next meeting is scheduled for August 11th, 2021.