### MINUTES OF DOT-AGC BRIDGE DESIGN SUBCOMMITTEE MEETING

(Approved: 6/12/13)

The DOT-AGC Joint Bridge Design Subcommittee met on February 13<sup>th</sup>, 2013. Those in attendance were:

Greg Perfetti State Structures Engineer (Co-Chairman)

Berry Jenkins NC Government Relations, Highway Division Director;

Carolinas AGC (Co-Chairman)

Ron Hancock State Construction Engineer

Mike Robinson State Bridge Construction Engineer
Allen Raynor Assistant State Structures Engineer

Randall Gattis Sanford Contractors, Inc.

Chris Britton Buckeye Construction Company

Larry Cagle Thompson-Arthur Div., APAC-Atlantic, Inc.

Ben Bishop Crowder Construction

Lee BradleyBlythe Construction CompanyBill HestonBalfour Beatty InfrastructureDan TutterowD.H. Griffin Construction

Ron Shaw Lee Construction of the Carolinas

Brian Hanks Structures Management Project Engineer
Paul Lambert Structures Management Project Engineer

Scott Hidden Support Services Supervisor – Geotechnical Eng. Unit Chris Kreider Regional Operations Engineer – Geotechnical Eng. Unit

Paul Garrett State Bridge Program Manager
Jeff Garland State Value Management Engineer
Gichuru Muchane Structures Management Engineer

The following items were discussed during the review of the December 12th, 2012 minutes:

### 1. Railroad Requirements

Mr. Raynor and Mr. Robinson reported that they met with a Railroad representative to discuss the Contractors' concerns regarding railroad requirements. The meeting established that some of the concerns are a result of differing expectations between the Railroad Company and the private engineering firm (PEF) hired to review railroad plans. They noted that most of these concerns can be resolved through better communication between the two parties and coordination with the Department.

Contractors suggested the PEF identify the allowable loads that can be lifted with the available equipment, so that any non-critical lifts under the allowable load would automatically be permitted. Contractors also inquired if there was a way to resolve issues that may come up on the project site through direct discussions with the Railroad.

Mr. Robinson responded by stating the need to resolve Railroad issues through the Department. As such, he requested Contractors collect as much information as possible regarding any situations involving the Railroad that arise in the field prior to contacting the Construction Unit. He also noted that most Railroad issues arise from when work is performed within the Railroad right-of-way.

The minutes of the December 12th, 2012 meeting were approved.

The following items of new business were discussed:

### 1. Special Provision for Resource Conservation

Mr. Garland distributed a new special provision titled *Resource Conservation, Reuse and Recycling* and a sample form for reporting recycled materials. He explained that in accordance with the North

Carolina General Statutes and Executive Order 156, the Department aims to reduce construction material waste through recycling and repurposing the materials. He noted that Article 104-13 of the Standard Specifications encourages Contractors to initiate, develop, and use products and construction methods that make use of recycled or repurposed materials. To facilitate these conservation efforts, the Department has published a map of all the recycling centers across the State.

Mr. Garland suggested Contractors use the online tool to seek recycling facilities in close proximity to their projects. In addition, he requested Contractors report quantities of recycled materials via the form, which will also be available online. He noted that data collected on recycled material will be used to report on the effectiveness of the Resource Conservation Program.

Mr. Jenkins encouraged broad participation from the Contractors, noting the program should be considered a cost avoidance / containment opportunity, which can enhance the public image of bridge industry.

### 2. Pile Re-Drives

Mr. Bishop discussed the quantity of pile re-drives in the contract plans. He noted that small projects typically have an estimate of 6 pile re-drives, whereas large projects may have re-drive estimates up to twenty-five percent (25%) of the piles. He stated that the plans tend to over-estimate the re-drives, when compared to the re-drives that are necessary in the field.

Mr. Kreider responded by stating that there are several different ways to estimate re-drives. He noted that the Geotechnical Unit typically estimates 50% re-drives when the piles tips do not bear on rock. He acknowledged that the plan estimates are generally high, but should begin to moderate as more feedback is received from the field. He added that the Geotechnical Unit is also evaluating conditions that will permit use of short splice lengths.

### 3. Electronic Submission of Bids

Mr. Nickel stated that overnight mail delivery companies, such as FedEx, do not guarantee next day delivery of bid documents by the 10:00 am deadline in many of the rural counties. He added that Contractors do not have adequate staff to deliver the bids in person and mailing the bid documents two or more days ahead of the deadline is often not possible. As such, he inquired if the Department would consider electronic submission of bids, with the hard copies to follow within a certain time frame after the deadline. Mr. Nickel noted that the contracts are typically for unbonded work.

The pros and cons of electronic submission of bids were discussed. Various concerns were expressed regarding timely delivery and security of the bids. The discussion also noted that the threshold for purchase order contracts (POC) has increased; therefore the Divisions could potentially let even more projects that do not have a bonding requirement. Contractors suggested requiring bid bonds to encourage more responsible bidders for the POCs.

Mr. Robinson stated that he will elevate the proposal for electronic bids and report back to the committee.

## 4. Update on Funding for Bridge Program

Mr. Garrett provided a brief update on the funding and number of contracts that will be let in the second year of the State Bridge Preservation Program. He noted that the contracts will be awarded between the months of February and May and will be packaged as express Design-Build contracts. He anticipated that funding for the third year of the bridge program will be approximately \$100 million. In addition, each Division will spend approximately \$2 million per year on low impact bridge projects.

### 5. Buy-America Provision

Mr. Robinson stated that North Carolina complies with the Buy-America policy. He noted that the Federal Highway Administration (FHWA) recently issued a memorandum which clarifies application

of Buy America requirements to manufactured products. As a result, the Department will review the Standard Specifications and may issue revisions to the specifications in the March letting. Mr. Robinson suggested Contractors maintain a project folder on the source of materials to facilitate and expedite any audits.

# 6. Slip Forming Concrete Barrier Rail

Mr. Gattis stated that slip form sub-contractors are difficult to schedule due to the large number of concurrent small projects. As such, Contractors are compelled to manually form and pour barrier rails. Since this activity is typically sub-contracted to Disadvantaged Business Enterprises (DBE), Contractors run the risk of not meeting the contract DBE goals. He inquired if Contractors can obtain any relief from the DBE goals. Mr. Gattis also inquired if the Vertical Concrete Barrier Rail may be formed with plumb faces in lieu of the slightly sloped faces shown in the plans.

Mr. Robinson responded by stating Contractors are welcome to follow the procedure for replacing DBE sub-contractors. Mr. Hanks added that Structures Management will investigate allowing Contractor's the option to form plumb faces on the Vertical Concrete Barrier Rail.

## 7. Bridge Aesthetics

Mr. Perfetti displayed several visualizations of aesthetic treatments that are being considered by the Department. These include alternate colors for anodized bridge rails, form-liners and concrete coatings. Mr. Perfetti solicited Contractor's feedback on the aesthetic treatments.

Contractors suggested keeping the treatments simple in order to contain costs and for ease of maintenance. They recommended off-the-shelf form-liners in lieu of custom form-liners. Also, they noted that rolled on textured coatings seem to perform better than sprayed on coatings.

### 8. Next Meeting

The next meeting is scheduled for Wednesday, April 17, 2013 in the Structures Management Conference Room.

#### Post meeting Note:

Due to a limited agenda, the April meeting was cancelled. The next meeting is scheduled for Wednesday, June 12, 2013.