



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

NICHOLAS J. TENNYSON
SECRETARY

October 17, 2016

MEMO TO: Jeff Allen, Jonathan Bivens, Stuart Bourne, Larry Brickey, Chris Byers, Shannon Douglas, Matt Farley, Ron Hancock, Bruce Hazle, Brandon Hill, Ryan Ilg, Berry Jenkins, Ben Lanier, Don Lee, Clark Morrison, Glenn Mumford, Michael O'Sheilds, Mark Perkins, Ian Scott, Jim Sebert, Lamar Sylvester, Kevin Thomas, Brian Webb

FROM: R. A. Garriss, PE
Contract Officer

SUBJECT: DOT-AGC Roadway Subcommittee Meeting 10/20/16 Agenda

The next meeting will be held at the Riverwood Conference Room in the NCDOT Century Center Building B at 9:30 a.m. The following is a list of items scheduled for discussion:

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| 1. Proposed Utility Revisions to 2018 Spec Book | Carl Barclay |
| 2. Power Service for Signals and Lighting | Jonathan Bivens |
| 3. Signing, Lighting and Speed Limit Policies | Steve Kite |
| 4. Interstate Work Zone Provisions | Steve Kite |
| 5. Construction Surveying for drainage and utilities | Jonathan Bivens |
| 6. Weather Time (extension of time to projects) | Shannon Douglas |
| 7. Quarry Fines in Embankments | Chris Peoples / John Pilipchuk |



STATE OF NORTH CAROLINA
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GOVERNOR

NICHOLAS J. TENNYSON
SECRETARY

October 24, 2016

MEMO TO: Jeff Allen, Jonathan Bivens, Stuart Bourne, Larry Brickey, Chris Byers, Shannon Douglas, Matt Farley, Ron Hancock, Bruce Hazle, Brandon Hill, Ryan Ilg, Berry Jenkins, Steve Kite, Ben Lanier, Don Lee, Clark Morrison, Glenn Mumford, Mark Perkins, Michael O'Sheilds, Ian Scott, Jim Sebert, Lamar Sylvester, Kevin Thomas, Brian Webb

FROM: R. A. Garriss, PE
Contract Officer

SUBJECT: DOT-AGC Roadway Subcommittee Meeting Minutes

The subject committee met on October 20, 2016 at 9:30 a.m. in the Riverwood Conference Room at the Century Center.

Agenda and Discussion Items:

Proposed Utility Revisions to the 2018 Spec Book

Carl Barclay

Mr. Barclay provided a handout that outlined all the planned revisions to the Standard Specifications for Roads and Structures that is scheduled to come out in January 2018. The revisions include ductile iron pipe fittings for water and sewer, water service lines, sewer service lines, fire hydrant legs and 6" valve or 6" tapping valve. Mr. Barclay noted that the fittings pay items that are proposed to be added for water and sewer will be implemented via a special provision starting in the January 2017 let.

A workgroup was established to go over trenchless installations. Soil borings will be provided to assist bidders and when there is only one feasible option that method will be shown with a reasonable length/profile and location of bore pits. If there are two feasible options, both will be included in the plans and the contractor will bid on one "alternate". There will no longer be "in soil" and "not in soil" pay items. The contractor also has the option of using Pipe Ramming in lieu of Bore and Jack if appropriate for field conditions. The payment however will still be paid under Bore and Jack. Mr. Barclay noted that they are looking for a boring contractor as well as equipment manufacturers and engineers to help the technical group.

Mr. Barclay stated that he was looking into when shoring is paid vs when it is incidental. The example he gave was what to do when a building is nearby that needs to be protected. Mr. Barclay suggested to industry that if shoring was needed for anything other than a boring item, it should be a pay item. Industry was fine with this clarification.

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LOCATION:
CENTURY CENTER COMPLEX
ENTRANCE B-2
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

Mr. Barclay mentioned that there are still some areas under consideration such as abandoned utility pipe and as built.

Industry asked about the PE seal for trenchless before construction. Mr. Wilkins stated that they are looking to be consistent across the state as it refers to the requirement of the seal and are in the process of developing an engineering manual. Mr. Wilkins stated that if bore and jack is used under pavement, an engineering seal will be needed.

Power Service for Signals and Lighting

Jonathan Bivens

Mr. Bivens stated that even before the hurricane, they were having problems getting power to their projects which in turn is holding them up. There is a need to improve the process that we currently have with Duke Energy instead of it being a “fire drill” on every project.

Mr. Wilkins stated that conversations need to be held at a higher level. The discussions used to be able to be held at the division level with the Division Utility Coordinators, but now there is a lot of pushback and resistance from Duke at that level to get the work done. Mr. Wilkins stated that he has met with Duke on right of way entry and Duke is requiring paperwork before any crews will be sent to the job. The importance of the project and the need for power needs to get to a higher level so it does not hold up the opening of a project.

Signing, Lighting and Speed Limit Policies

Steve Kite

Mr. Kite stated that he needs to look at the specification again as it relates to presence lighting. The intent of this specification was not to use the presence lighting if the area is well lit. If there is already task lighting that is lighting up the work area, presence lighting is not needed.

Industry stated that there is limited room when the paving train comes through and sometimes the presence lighting gets in the way. There was also a concern that if the presence lighting specification was in the contract that they would be held to have it even if the task lighting sufficed.

Mr. Kite asked if any contractor was having an issue with using the mobile app to update the digital speed limit signs since these signs should not have a static speed, but should change when the active work area is closed. Mr. Kite also mentioned that they are trying to collect data for compliance with speed using these digital signs.

Industry mentioned that the only concern that they have with the digital speed limit signs is enforcement. Mr. Kite stated that other states have been successful with automated speed enforcement, but that would require a change in legislation.

Industry mentioned the law enforcement used on TIP projects would be a good on specific resurfacing projects where exposure is high.

Mr. Kite stated that he has gotten positive feedback on the sequential lighting. Industry agreed and said that the lighting has been catching driver’s attention to tapers and cross overs.

Interstate Work Zone Provisions

Steve Kite

Mr. Kite stated that they are working on an interstate work zone provision for consistency in bidding, implementation and paving processes across the state. Mr. Kite mentioned the 24 hour time limit to get uneven pavement brought up to the same station and elevation with the hopes that it would minimize signing.

Industry stated that the 24 hour limitation may have unintended outcomes such as a productivity. The example given was that paving may be cut off after Thursday with Friday being a makeup day if not more than 24 hours is given. So basically you will have a 4 day paving week. The other concern is that many will not pave on Friday due to ICTs and liquidated damages and will not take the chance of a \$10,000 charge per hour. Industry also asked if the 24 hours applies to OGAFC since they can do 5 miles in a day and the drop off is minor.

Mr. Kite stated that he will go back and look at the provision and may consider language that would allow uneven pavement up to the next day's paving operation and not to exceed 72 hours with portable signs for uneven pavement.

Construction surveying for Drainage and Utilities

Jonathan Bivens

Mr. Bivens expressed concern that surveying has gotten more complicated from the original intent and are not being compensated for the additional work they are doing. Many of the issues are with utilities and the surveyor has to do redesign work if utilities are hit. The Construction Unit is currently revising the surveying manual and understand what the concerns are.

Industry stated that they would like to use limited services contracts for utility companies to be monitored to verify utility locations.

A small committee was set up consisting of Mr. Ron Wilkins, Mr. Jonathan Bivens and Mr. Carl Barclay to look into the concerns.

Weather Time (extension of time to projects)

Shannon Douglas

Mr. Douglas stated that as the days are getting shorter and with the storms that have hit NC throughout the summer, that many projects are delayed. They are also getting pulled off of projects for on-call work related to the storm and may need more time added for the delay.

Mr. Sylvester said that NCDOT has been talking about the effect of the storm and mentioned that contractors should discuss the schedule impact to existing projects with the Division before agreeing to pursue on-call work.

Industry was also concerned that there is an "affected area" list and that it may not take into account the impact to other areas after the storm passed. An example is the Wilmington area that was not impacted the day of the storm, but now rising waters is making it hard to get to projects or do any work on them. Lamar stated that he will look into the concern and get back with industry.

Industry also mentioned that the on-call projects that were recently advertised were hard to bid as they did not know the magnitude of the work, the time frame needs or if multiple projects will be awarded.

Quarry Pond Fines for Embankment

Chris Peoples/John Philipchuck

Mr. Peoples passed out a draft special provision on Quarry Pond Fines in Embankments for the second time and asked for any input. Industry stated a concern in having Geotextile for Pavement Stabilization incidental to the project if the pay item is not included in the original contract. Mr. Philipchuck mentioned that these fines do not qualify for select material and the geotextile is needed for pavement stabilization. If quarry pond fines are used, the contractor needs to factor in the cost of the geotextile material.

All comments should be submitted to Mr. Peoples and Mr. Philipchuck by October 27th.

Open DiscussionDBE and MBE/WBE Provision Changes

Ms. Canales stated that the Code of Federal Regulations has required that as of January 2018, all good faith efforts shall be submitted within 5 days. In our central let NCDOT currently has a deadline of good faith submittals at 6 days because the 5th day would land on a Sunday. FHWA approved our 6th day submittal with a change in time from noon to 10:00 am to meet the intent of the regulation. All division let and municipal contracts will have a deadline of 5 days for the submittal with a time of 2:00 pm.

MBE/WBE Division Let Banking

Mr. Sylvester updated the committee on the division banking for MBE and WBE contractors. He stated that a process for the pilot is being drafted and one “bank” will cover both the central and division let contracts. Industry asked about the posting of the bank balances for them to see and Mr. Sylvester asked if anyone had concerns with seeing each other’s balances. There were no concerns. Mr. Sylvester stated that the division let banking for MBEs and WBEs will start in January and Mr. Benny Sloan will be overseeing the bank.

Rock and Broken Pavement Fills

Industry stated that they did not agree with need for fabric that is incidental to the provision and that they never had an issue with the voids. Per industry, if the fill is built correctly, the fabric should not be needed. Mr. Sylvester stated that he will look into it.

Next Meeting

The next meeting is scheduled for December 22, 2016 at 9:30 a.m. in the Riverwood Conference Room at Century Center B.

Planned Revisions for the 2018 "Spec Book" Division 15- Utilities

New Pay Items

1. Ductile Iron Water Pipe Fittings AND Ductile Iron Sewer Pipe Fittings- Paid by the pound, based on a "declared" weight published on our website. These two pay items will be implemented by SP starting with the Jan 2017 let.
2. Water service line less than 2 inches will be paid under Water Service Line. Water service line 2 inches or greater will be paid under _____ " Water Service Line. Both will be paid by linear foot.
3. Sewer Service Line by linear foot.
4. Fire Hydrant Leg by linear foot (separate from other 6" water line).
5. Fire hydrant valve ONLY if needed (there is no existing valve or is non-functioning). Will be paid under 6" Valve or 6" Tapping Valve (same as other valves).

Changes to Existing Pay Items

Trenchless Installations

1. When there is only one feasible option, that method will be shown with a reasonable length/profile and location of bore pits (based on pre-let information, utilizing Vermeer or other program, etc.). Include details relevant to that method.
2. Plans will include reasonable length/pay quantity, but allow for an increase with justification. (same as other minor pay items)
3. Plans will include pay item for encasement (no longer incidental for bore and jack).
4. Soil borings will be provided in project advertisement to assist bidders.
5. The pay items "in soil"/"not in soil" have been replaced with one of the following:

Bore and Jack of _____ "
Directional Drilling of _____ "
Tunneling of _____ "

6. The contractor has the option of using Pipe Ramming in lieu of Bore and Jack if appropriate for the field conditions. However, the installation will still be paid under Bore and Jack of _____ .

7. If there are two feasible options, both will be included in the plans and the contractor will bid on one "alternate".

Changes Still Under Consideration

1. Trenchless Installations- Planned revisions are mostly "contractual" in nature, we are still pursuing some technical revisions with input from boring contractors, engineers, equipment manufacturers, etc.

2. Trenchless Installations- Clarification regarding when shoring for Trenchless Installations is and is not incidental .

3. Abandon Utility Pipe- Adding verbiage regarding the abandonment of valve boxes (will be incidental to pipe abandonment).

Changes Put On Hold

1. As-Builts- Pending ASCE's, "Collection, Administration, & Exchange of Newly Installed Utility Infrastructure Data Standard", which has an expected publication date of late 2017.

DUCTILE IRON PIPE FITTINGS:

(01-X-17)

1510, 1515, 1520

SP15 R25

Revise the 2012 *Standard Specifications* as follows:

Page 15-7, Article 1510-4 MEASUREMENT AND PAYMENT, add the following paragraph after line 7:

The quantity of *Ductile Iron Water Pipe Fittings* will be measured and paid per pound based on the published weights for ductile iron fittings, exclusive of the weights of any accessories, as listed in the "DI Fittings Weight Chart" located at <https://connect.ncdot.gov/municipalities/Utilities/Pages/Estimates-Materials.aspx>. If the Contractor elects to use compact ductile iron water pipe fittings, measurement will be based on the weight of standard size ductile iron water pipe fittings. Any fitting not listed will be measured based on the published weights for ductile iron fittings listed in ANSI/AWWA C-110/A21.10. This is limited to pressure pipe 4 inches or larger.

Page 15-7, Article 1510-4 MEASUREMENT AND PAYMENT, add the following pay item:

Pay Item	Pay Unit
Ductile Iron Water Pipe Fittings	Pound

Page 15-9, Article 1515-4 MEASUREMENT AND PAYMENT, line 28, delete "fittings".

Page 15-13, Article 1520-4 MEASUREMENT AND PAYMENT, add the following paragraph after line 2:

The quantity of *Ductile Iron Sewer Pipe Fittings* will be measured and paid per pound based on the published weights for ductile iron fittings, exclusive of the weights of any accessories, as listed in the "DI Fittings Weight Chart" located at <https://connect.ncdot.gov/municipalities/Utilities/Pages/Estimates-Materials.aspx>. If the Contractor elects to use compact ductile iron sewer pipe fittings, measurement will be based on the weight of standard size ductile iron sewer pipe fittings. Any fitting not listed will be measured based on the published weights for ductile iron fittings listed in ANSI/AWWA C-110/A21.10. This is limited to pressure pipe 4 inches or larger.

Page 15-13, Article 1510-4 MEASUREMENT AND PAYMENT, add the following pay item:

Pay Item	Pay Unit
Ductile Iron Sewer Pipe Fittings	Pound

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MANUFACTURED QUARRY FINES IN EMBANKMENTS:

(DRAFT 06-15-16)

235

SPx Rxx

Description

This specification addresses the use of manufactured quarry fines that are not classified as select materials. The specification allows the Contractor an option, with the approval of the Engineer, to use manufactured quarry fines (MQFs) in embankments as a substitute for conventional borrow material. Furnish and place geotextile for pavement stabilization in accordance with the Geotextile for Pavement Stabilization special provision and detail. Geotextile for pavement stabilization is required to prevent pavement cracking and provide separation between the subgrade and pavement section at embankment locations where manufactured quarry fines are utilized and as directed by the Engineer.

Materials

Manufactured Quarry Fines.

Site specific approval of MQFs material will be required prior to beginning construction as detailed in the preconstruction requirements of this provision.

The following MQFs are unacceptable:

- (A) Frozen material,
- (B) Material with a maximum dry unit weight of less than 90 pounds per cubic foot when tested in accordance with AASHTO T-99 Method A or C.
- (C) Material with greater than 80% by weight Passing the #200 sieve

Collect and transport MQFs in a manner that will prevent nuisances and hazards to public health and safety. Moisture condition the MQFs as needed and transport in covered trucks to prevent dusting. If MQFs are blended with natural earth material, follow Borrow Criteria in Section 1018 of the *Standard Specifications*.

Geotextiles.

Areas of embankment where MQFs are incorporated, Geotextile for Pavement Stabilization shall be used. If the Geotextile for Pavement Stabilization special provision is not included elsewhere in this contract, then it along with a detail will be incorporated as part of the contractors request to use. Notification of subgrade elevation, sampling and waiting period as required in the Construction Methods section of the Geotextile for Pavement Stabilization special provision are not required.

Preconstruction Requirements

When MQFs are to be used as a substitute for earth borrow material, request written approval from the Engineer at least ninety (90) days in advance of the intent to use MQFs and include the following details:

- (A) Description, purpose and location of project.

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- (B) Estimated start and completion dates of project.
- (C) Estimated volume of MQFs to be used on project with specific locations and construction details of the placement.
- (D) The names, address, and contact information for the generator of the MQFs.
- (E) Physical location of the site at which the MQFs were generated.

The Engineer will forward this information to the State Materials Engineer for review and material approval.

Construction Methods

Place MQFs in the core of the embankment section with at least 4 feet of earth cover to the outside limits of the embankments or subgrade.

Construct embankments by placing MQFs in level uniform lifts with no more than a lift of 10 inches and compacted to at least a density of 95 percent as determined by test methods in AASHTO T-99, Determination of Maximum Dry Density and Optimum Moisture Content, Method A or C depending upon particle size of the product. Provide a moisture content at the time of compaction of within 4 percent of optimum but not greater than one percent above optimum as determined by AASHTO T-99, Method A or C.

Areas of embankment where MQFs are incorporated, Geotextile for Pavement Stabilization shall be used. See Geotextile for Pavement Stabilization special provision for geotextile type and construction method.

Measurement and Payment

Borrow Excavation will be measured by truck volume and paid in cubic yards in accordance with Article 230-5 of the *2012 Standard Specifications*. As an alternate weigh tickets can be provided and payment made by converting weight to cubic yards based on the verifiable unit weight.

Where the pay item of *Geotextile for Pavement Stabilization* is included in the original contract the material will be measured and paid in square yards (see Geotextile for Pavement Stabilization special provision). Where the pay item of *Geotextile for Pavement Stabilization* is not included in the original contract then no payment will be made for this item and will be considered incidental to the use of MQFs in embankment.