February 20, 2015

MEMO TO: Carl Barclay, Jonathan Bivens, Stuart Bourne, Larry Brickey, John Bridge, Chris Byers, Judith Corley-Lay, Shannon Douglas, Danny Eudy, Ron Hancock, Bruce Hazle, Brandon Hill, Berry Jenkins, Ben Lanier, Don Lee, Glenn Mumford, Ian Scott, Lamar Sylvester, Michael Taylor, Kevin Thomas, Brian Webb, Roger Worthington

FROM: R. A. Garris, PE
Contract Officer

SUBJECT: DOT-AGC Roadway Subcommittee Meeting Minutes

The subject committee met on February 19, 2015 at 9:30 a.m. in the Riverwood Conference Room at the Century Center with the following in attendance:

Carl Barclay
Ron Hancock
Henry Lanier
Kevin Thomas
Terry Canales
Brandon Hill
Ian Scott
Randy Garris
Berry Jenkins
Lamar Sylvester
Shannon Douglas
Jessica Kuse
Michael Taylor

Agenda and Discussion Items:

Resource Conservation and Environmentally Sustainable Practices

SP1 G118 has been revised and will be showing up in the May letting. This provision has been in contracts in the past but has received little attention for reporting to DENR. Jessica handed out the revised provision along with a sample form. The capturing of what has been diverted from landfills is on a project by project basis and should be those items that are not listed in pay items. There were questions on what should and should not be included and Jessica said they will create frequently asked questions with the form as to what to include in the report. Berry mentioned that this may be a good form to include in the monthly reports.

Value Engineering Proposal – Spec Revision

Per Jessica, when a value engineering proposal is approved, the Value Engineering Unit is not seeing revised plans. The revised SP01 G116 is asking for a hard copy and an electronic copy to be submitted to the State Value Management Engineer no later than ten (10) business days after acceptance of a VEP unless otherwise permitted. Again, this is something that has been in the provisions but has not been done.
Understanding Environmental Areas on a Project

Ian Scott
The permits nor the permit drawings, are clear on what to do for leaving wetlands. There is a lot of subjectivity and multiple agencies to appease. This puts the contractor in a bad situation. It is very hard to pull everyone together from the different agencies for a consultation and the areas of authority cross among them. In addition, key employees of the agencies do not show up to assist in the discussion. The contractors are looking for a more coordinated effort to streamline the review and acceptance process to prevent having to remobilize multiple times to these sites.

The question was asked if DENR has any BMPs on leaving wetlands and the response was no, it really depends on the field personnel for each agency. The agencies also do not look at past performance and cases where the areas settled naturally. The discussion turned to using the Division Environmental Officers to assist in the coordination of the agencies. Lamar Sylvester will also talk to the Area Construction staff for assistance.

Increase Allowable Coal (Fly) Ash use on Projects

Ron Hancock
In 2010, the use of coal combustion products was suspended due to it being hazardous in accordance with a NPRM with EPA. When the final rule was released, it was found that the material was not hazardous.

Special Provision SP02 R70 allows the use of coal combustion projects from the Department’s list of potential suppliers. Per the SP that will be seen in the May contracts, the CCP allowance is less than 80,000 tons total per project, or less than 8,000 tons per acre. This is in accordance to law. The law however was passed prior to the EPA final rule coming out which may lead to changes in the statute to higher levels. Part of the negotiation in allowing the use of CCPs on projects was that it needed to be an option, not a requirement, and it needs to be cost effective.

There were questions about the 4’ cover over the CCP and how that may limit its use in areas. Ron said that the will go back and look at it.

A question was also asked what the trigger was to use CCPs on a project and the answer was the provision is included in contracts where borrow pay items are in the contract.

There was also a question on the use of blending the CCP and soil (i.e. 50:50), and the response was that it is good idea and is allowed under the SP.

Class IV Subgrade Stabilization in Lieu of Chemical Stabilization

Ron Hancock
A draft provision was handed out on the use of geotextile and Class IV subgrade stabilization in lieu of chemical stabilization. This provision would give the contractor some flexibility on the project as needed. The cost would be at the prices established in the contract related to chemical stabilization type that is being replaced with no additional expenses. Comments on the draft language should be submitted to Ron Hancock or Lamar Sylvester by March 6, 2015.

Trench Borrow for Pipe Backfilling on Smaller Projects

Shannon Douglas
In Division 2, the proposal’s earth work summary broke out the amount of borrow that would be used for trench borrow. This put all the contractors bidding on the same page. Backfilling is a more expensive operation and many times there is an unknown of how much will be done on the job. Ron Hancock said that they would take a look at what Division 2 did for future project use.
Shoulder Berm Gutter Transitioning

Michael Taylor
On a current project that Michael has, it showed shoulder berm gutter at 36” tying into expressway gutter at 48” in a very short transition. The details on the plans show it is a straight line with no flares, but in reality that is not true. Where this has been seen is at the end of bridges and eyeballing is the only way to make the transition. A question was raised if there was a way to have a modified expressway gutter of 36” or do away with expressway gutter all together in these instances.

Lamar said that he will get up with Roadway on this topic.

Utilities – Adding Back Fittings

Michael Taylor
Michael posed the question as to why there are not fittings in the items for payment. Currently, bidding on waterlines is a guessing game with what is actually in the field. If fittings were included in the pay items, the state would get better prices and limit the use of supplemental agreements.

In the past fittings were paid for the by pound. There was discussion as to if this was the best way to pay should they go back into the contract as a pay item. Otherwise, there would be many pay items that match up to the different size fittings. Fittings now are incidental to the waterline installation.

Some discussion also included doing a supplemental for those fittings that are not shown on the plans. This was not a popular proposal, but seemed better than what is happening now on projects.

Roger Worthington said he will look more into it.

Status of Trinity Guardrail

Ron Hancock
Per Ron, the department is still waiting on the final report on the testing of the end units from FHWA. NCDOT is allowing inventory that contractors currently have to be installed in the field. Trinity has ceased shipping these units.

Status of Northern Long Eared Bat

Ron Hancock
The Northern Long Eared Bat is proposed to be on the list of endangered species on April 1st. Divisions 1-8 have a programmatic agreement with eastern Fish and Wildlife, and are looking to see where the bats are vs. halting projects. Divisions 9-14 are currently not working under a programmatic agreement with western Fish and Wildlife but have a meeting with them in the next few weeks to see if they can move in that direction. If the agreement is not accepted, each project will be studies for impacts, which may cause delays.

Other Topics of Discussion

Berry Jenkins
Berry mentioned that the General Assembly is trying to stabilize the gas tax by creating a floor. They are also adjusting the variable rate to increase revenue in the long run if it passes. They will also be looking at long term revenue such as increased fees for car sales.

Concern was brought up about projects that have full CEI and no NCDOT representative. The contractors felt that there needs to be a NCDOT person for the project that can make a final
decision that represents NCDOT. This person can be an Assistant Resident Engineer or a Lead Project Inspector.

The proposed Transportation Bond was brought up to the group. There is limited knowledge of the support that this bond referendum for transportation will receive via the public.

Next Meeting
The next meeting is scheduled for April 16, 2015 in the Riverwood Conference Room at Century Center B.
RESOURCE CONSERVATION AND ENVIRONMENTALLY SUSTAINABLE PRACTICES:

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(3), and NCGS 136-28.8, it is the objective of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, to find ways to recycle and reuse materials, to consider and minimize, where economically feasible, the environmental impacts associated with agency land use and acquisition, construction, maintenance and facility management for the benefit of the Citizens of North Carolina.

To achieve the mission of reducing environmental impacts across the state, the Department is committed to supporting the efforts to initiate, develop and use products and construction methods that incorporate the use of recycled, solid waste products and environmentally sustainable practices in accordance with Article 104-13 of the Standard Specifications.

Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills and any practice that minimizes the environmental impact on the project annually on the Project Construction Reuse and Recycling Reporting Form. The Project Construction Reuse and Recycling Reporting Form and a location tool for local recycling facilities are available at:

Submit the Project Construction Reuse and Recycling Reporting Form by July 1 annually to valuemanagementunit@ncdot.gov. For questions regarding the form or reporting, please contact the State Value Management Engineer at 919-707-4810.
Instructions:
The intent of this form is to provide a reporting mechanism for Contractors to provide information regarding resource conservation efforts made on NCDOT projects that divert construction waste from landfills. The information from this report will be compiled in the NCDOT Value Management Database for the purposes of reporting the statewide efforts of the NCDOT and its partners in pursuing resource conservation.

1. Include all recycling activities for source-separated or mixed material recycling centers.

2. This form may be submitted at any point during the project or as a cumulative total at the project completion.

3. To submit the form on-line, "click" on the SUBMIT button to the right.
   Or, if you saved it to your computer, attach it to an e-mail and send it to: valuemanagementunit@ncdot.gov

For questions regarding this form, contact the State Value Management Engineer at 919-707-4810.

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<th>Date:</th>
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<td>Prepared by: (Contact Name)</td>
<td>Value Management</td>
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<tr>
<td>Phone:</td>
<td>919-707-4810</td>
</tr>
<tr>
<td>E-Mail Address:</td>
<td><a href="mailto:valuemanagementunit@ncdot.gov">valuemanagementunit@ncdot.gov</a></td>
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### Re-used/Recycled Materials That Have Been Diverted from Landfills

<table>
<thead>
<tr>
<th>Material</th>
<th>Brief Description of Reuse or Recycled Activity</th>
<th>Quantity</th>
<th>Unit</th>
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<tbody>
<tr>
<td>Example: Concrete</td>
<td>Taken to Recycling Center</td>
<td>40</td>
<td>Tons</td>
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<tr>
<td>Example: Brush &amp; Trees</td>
<td>Chipped &amp; mulched on-site for erosion control &amp; landscape</td>
<td>1</td>
<td>Acre</td>
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<tr>
<td>Steel</td>
<td>Recycled guardrail, sign supports, manholes, hydrants</td>
<td>1,500</td>
<td>Ton</td>
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<tr>
<td>Steel</td>
<td>Reused fencing</td>
<td>300</td>
<td>Lbs</td>
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<tr>
<td>Concrete</td>
<td>Reused pipe in other project</td>
<td>100</td>
<td>LF</td>
</tr>
<tr>
<td>Stone</td>
<td>Gathered and reused on site</td>
<td>500</td>
<td>Lbs</td>
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# NCDOT RESOURCE CONSERVATION PROGRAM

## PROJECT CONSTRUCTION REUSE AND RECYCLING REPORTING FORM

### Instructions:

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   Or, if you saved it to your computer, attach it to an e-mail and send it to: valuemanagementuni@ncdot.gov

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<td>County:</td>
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<td>1</td>
<td>Acre</td>
</tr>
<tr>
<td>Asphalt</td>
<td>Used Recycled Asphalt Pavement (RAP)</td>
<td>500</td>
<td>Ton</td>
</tr>
<tr>
<td>Steel</td>
<td>Recycled removed guardrail</td>
<td>400</td>
<td>Lbs</td>
</tr>
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VALUE ENGINEERING PROPOSAL:

Revise the 2012 Standard Specifications as follows:

Page 1-36, Subarticle 104-12(B) Evaluation of Proposals, lines 42-44, replace the fourth sentence of the second paragraph with the following:

Pending execution of a formal supplemental agreement implementing an approved VEP and transferal of final plans (hard copy and electronic) sealed by an engineer licensed in the State of North Carolina incorporating an approved VEP to the Resident Engineer and the State Value Management Engineer, the Contractor shall remain obligated to perform the work in accordance with the terms of the existing contract.

Page 1-37, Subarticle 104-12(D) Preliminary Review, lines 9-12, replace the first sentence of the first paragraph with the following:

Should the Contractor desire a preliminary review of a possible VEP, before expending considerable time and expense in full development, a copy of the Preliminary VEP shall be submitted to the Resident Engineer and the State Value Management Engineer at ValueManagementUnit@ncdot.gov.

Page 1-37, Subarticle 104-12(E) Final Proposal, lines 22-32, replace the first sentence of the first paragraph with the following:

A copy of the Final VEP shall be submitted by the Contractor to the Resident Engineer and the State Value Management Engineer at ValueManagementUnit@ncdot.gov.

Page 1-38, Subarticle 104-12(F) Modifications, lines 2-8, replace the first paragraph with the following:

To facilitate the preparation of revisions to contract drawings, the Contractor may purchase reproducible copies of drawings for his use through the Department’s Value Management Unit. The preparation of new design drawings by or for the Contractor shall be coordinated with the appropriate Design Branch through the State Value Management Engineer. The Contractor shall provide, at no charge to the Department, one set of reproducible drawings of the approved design needed to implement the VEP. Drawings (hard copy and electronic) which are sealed by an engineer licensed in the State of North Carolina shall be submitted to the State Value Management Engineer no later than ten (10) business days after acceptance of a VEP unless otherwise permitted.

Page 1-38, Subarticle 104-12(F) Modifications, line 17, add the following at the end of the third paragraph:

Supplemental agreements executed for design-bid-build contracts shall reflect any realized savings in the corresponding line items. Supplemental agreements executed for design-build
contracts shall add one line item deducting the full savings from the total contract price and one line item crediting the Contractor with 50% of the total VEP savings.

Page 1-38, Subarticle 104-12(F) Modifications, lines 45-47, replace the eighth paragraph with the following:

Unless and until a supplemental agreement is executed and issued by the Department and final plans (hard copy and electronic) sealed by an engineer licensed in the State of North Carolina incorporating an approved VEP have been provided to the Resident Engineer and the State Value Management Engineer, the Contractor shall remain obligated to perform the work in accordance with the terms of the existing contract.
COAL COMBUSTION PRODUCTS IN EMBANKMENTS:

Description

This specification allows the Contractor an option, with the approval of the Engineer, to use coal combustion products (CCPs) in embankments as a substitute for conventional borrow material. The amount of CCPs allowed to be used for this project will be less than 80,000 tons total and less than 8,000 tons per acre.

Materials

Supply coal combustion products from the Department list of potential suppliers maintained by the Value Management Unit. Site specific approval of CCP material will be required prior to beginning construction.

The following CCPs are unacceptable:
(A) Frozen material,
(B) Ash from boilers fired with both coal and petroleum coke, and
(C) Material with a maximum dry unit weight of less than 65 pounds per cubic foot when tested in accordance with AASHTO T-99 Method A or C.

Collect and transport CCPs in a manner that will prevent nuisances and hazards to public health and safety. Moisture condition the CCPs as needed and transport in covered trucks to prevent dusting.

Preconstruction Requirements

When CCPs 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 CCPs and include the following details using the NCDOT Form #CCP-2015-V1 in accordance with NCGS § 130A-309.215(b)(1):

(A) Description, purpose and location of project.
(B) Estimated start and completion dates of project.
(C) Estimated volume of CCPs to be used on project with specific locations and construction details of the placement.
(D) Toxicity Characteristic Leaching Procedure analysis from a representative sample of each different CCP source to be used in the project for, at minimum, all of the following constituents: arsenic, barium, cadmium, lead, chromium, mercury, selenium, and silver.
(E) The names, address, and contact information for the generator of the CCPs.
(F) Physical location of the project at which the CCPs were generated.

Submit the form to the Engineer and the State Value Management Engineer at for review. The Engineer and the State Value Management Engineer will coordinate the requirements of NCGS § 130A-309.215(a)(1) and notify the
Class IV Subgrade Stabilization in Lieu of Chemical Stabilization

Description
In lieu of chemical stabilization provide Class IV Subgrade Stabilization by replacing 8” of subgrade soils with geotextile and Class IV select material. This substitution is allowed in full typical section width for sections of at least 1000 feet in length and that does not result in chemically stabilized sections of less than 1000 feet in length, unless otherwise approved by the Engineer. Notify the Engineer at least 30 days in advance of starting Class IV Subgrade Stabilization in lieu of Chemical Stabilization.

Materials
Refer to Division 10.

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<th>Item</th>
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<tr>
<td>Geotextile for Soil Stabilization, Type 4</td>
<td>1056</td>
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<tr>
<td>Select Material, Class IV</td>
<td>1016</td>
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Use Class IV Select Material for Class IV Subgrade Stabilization.

Construction Methods
Install geotextile for soil stabilization in accordance with Article 270-3. Place Class IV subgrade stabilization (standard size no. ABC) by end dumping ABC on geotextiles. Do not operate heavy equipment on geotextiles until geotextiles are covered with Class IV subgrade stabilization. Compact ABC to 97% of AASHTO T 180 as modified by the Department.

Maintain Class IV subgrade stabilization in an acceptable condition and minimize the use of heavy equipment on ABC in order to avoid damaging aggregate subgrades. Provide and maintain drainage ditches and drains as required to prevent entrapping water in aggregate subgrades.

Measurement and Payment
Class IV Subgrade Stabilization in Lieu of Chemical Stabilization will be paid at the prices established in the contract that relate to the chemical stabilization type that is being replaced (Lime or Cement). No direct payment will be made for additional excavation required to accommodate this alternate.

The total amount paid for this subgrade stabilization alternative will be limited to the contract amounts per square yard for replacement for portland cement or lime, tons of theoretical portland cement or lime replaced, mixing of cement or lime, and gallons of asphalt curing seal replaced.

A Supplement Agreement will be executed prior to starting the work to create a square yard price for the Class IV Subgrade Stabilization in Lieu of Chemical Stabilization and deleting the quantities associated with the work being replaced.