



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

November 14, 2013

Addendum No. 3

RE: Contract ID C203171

WBS # 32635.3.FR6

F. A. # BRNHF-0012(55)

Dare County (B-2500A)

Long Term Improvements (Phase II) To Pea Island On NC-12

November 19, 2013 Letting

To Whom It May Concern:

As a matter of information, Contractors are hereby notified that several examples of "Super Load Hauling Permits" have been posted on the web along with the other information for this project.

Reference is made to the plans and proposal form furnished to you on this project.

The following revisions have been made to the Structure plans:

Sheet Nos. S-56 and S-58 have been revised to eliminate the calcium nitrite requirement for components containing only stainless steel reinforcing. Please void Sheet Nos. S-56 and S-58 in your plans and staple the revised Sheet Nos. S-56 and S-58 thereto.

Sheet No. S-67 was revised to clarify anchor bolt requirements for cored slab units. Please void Sheet No. S-67 in your plans and staple the revised Sheet No. S-67 thereto.

On Sheet No. S-133 the last note was deleted and the next to the last note was revised. Please void Sheet No. S-133 in your plans and staple the revised Sheet No. S-133 thereto.

Sheet Nos. S-156, S-158, S-159, S-192 and S-193 were revised to clarify the requirements for the dowels in the top of the piles. Please void Sheet Nos. S-156, S-158, S-159, S-192 and S-193 in your plans and staple the revised Sheet Nos. S-156, S-158, S-159, S-192 and S-193 thereto.

Sheet Nos. S-197 and S-198 were revised to clarify requirements for the pile vents. Please void Sheet Nos. S-197 and S-198 in your plans and staple the revised Sheet Nos. S-197 and S-198 thereto.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND DEVELOPMENT UNIT
1591 MAIL SERVICE CENTER
RALEIGH NC 27699-1591

TELEPHONE: 919-707-6900
FAX: 919-250-4119

WEBSITE: www.NCDOT.GOV

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

The following revisions have been made to the proposal:

On Page No. 38 a note has been added to the project special provision entitled "Notes To Contractor". Please void Page No. 38 in your proposal and staple the revised Page No. 38 thereto.

New Page No. 45A has been added to include the project special provision entitled "Modified Concrete Flume With Concrete Outlet". Please staple New Page No. 45A after Page No. 45 in your proposal.

Page No. 78 has been revised to add the below noted new special provision to the Table of Contents. Please void Page No. 78 in our proposal and staple the revised Page No. 78 thereto.

On Page No. 126 the first paragraph of Section 2.0 of the project special provision entitled "Corrosion Protection Of Bridge" has been revised. Please void Page No. 126 in your proposal and staple the revised Page No. 126 thereto.

On Page No. 127 in the first paragraph has been revised to include the approximate total tons of existing Scour Protection Stone and the sixth paragraph was revised concerning pile removal. Please void Page No. 127 in your proposal and staple the revised Page No. 127 thereto.

New Page Nos. 131A and 131B have been added to include the project special provision entitled "Dowels In Prestressed Piles". Please staple New Page Nos. 131A and 131B after Page No. 131 in your proposal.

On the item sheets the following pay items have been deleted or added:

<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
5-0057000000-E-226	Undercut Excavation	2,652 CY	DELETED
5-0036000000-E-225	Undercut Excavation	NEW ITEM	2,652 CY
128-2570000000-E-SP	Modified Concrete Flume	NEW ITEM	1 EA
107-8762000000-E-430	3'-0" X 1'-9" Prestressed Concrete Cored Slabs	7,153.13 LF	DELETED
107-8763000000-E-430	3'-0" X 2'-0" Prestressed Concrete Cored Slabs	NEW ITEM	7,153.13 LF

The Contractor's bid must be based on these revised pay items. The contract will be prepared accordingly.

The Expedite File has been updated to reflect these revisions. Please download the Expedite Addendum File and follow the instructions for applying the addendum. Bid Express will not accept your bid unless the addendum has been applied.

Sincerely



R. A. Garris, PE
Contract Officer

RAG/jag

Attachments

cc: Mr. Ron Hancock, PE
Mr. Jerry Jennings, PE
Ms. D. M. Barbour, PE
Mr. J. V. Barbour, PE
Mr. G. R. Perfetti, PE
Mr. R.E. Davenport, PE
Mr. Brad Hibbs, PE (Attn: Mr. Jake Riggsbee, PE)
Ms. Marsha Sample
Project File (2)

Mr. Ray Arnold, PE
Ms. Natalie Roskam, PE
Ms. Penny Higgins
Ms. Jaci Kincaid
Mr. Ronnie Higgins
Mr. Larry Strickland
Ms. Lori Strickland

100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

EMPLOYMENT:

(11-15-11) (Rev. 1-17-12)

108, 102

SP1 G184

Revise the *2012 Standard Specifications* as follows:

Page 1-20, Subarticle 102-15(O), delete and replace with the following:

(O) Failure to restrict a former Department employee as prohibited by Article 108-5.

Page 1-65, Article 108-5 Character of Workmen, Methods, and Equipment, line 32, delete all of line 32, the first sentence of the second paragraph and the first word of the second sentence of the second paragraph.

STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:

(9-18-12)

SP1 G185

Revise the *2012 Standard Specifications* as follows:

Replace all references to “State Highway Administrator” with “Chief Engineer”.

NOTES TO CONTRACTOR:

- 1) All construction equipment and personnel shall avoid all marked sea turtle nests. During turtle nesting season (May 1 to November 15), use the minimum number and the lowest wattage lights that are necessary for construction. During turtle nesting season, portable construction lighting shall be amber-colored LED lights with a predominant wavelength of approximately 650 nanometers. During turtle nesting season, utilize directional shields on all portable construction lights, and avoid directly illuminating the turtle nesting beach at night. During turtle nesting season, all portable construction lights shall be mounted as low to the ground as possible and all lights shall be turned off when not needed.
- 2) In order to obtain fresh water for construction activities on this project the Contractor will be allowed to construct a well within the Department’s existing Right of Way and the location must be approved by the Engineer. The well shall be properly sealed in accordance with Section 205 of the *Standard Specifications* when its use is no longer required. No separate measurement or payment will be made for this work as it is considered incidental to the various items in the contract.
- 3) All construction equipment and personnel shall avoid all Piping Plover designated bird closure areas within the Seashore and Refuge.
- 4) The Contractor’s attention is directed to the fact that Pea Island National Wildlife Refuge staff shall be allowed access to and use of all existing Refuge facilities and storage buildings during construction.
- 5) All areas where Undercut is preformed shall be backfilled with Select Granular Material, Class III. Payment for the backfill will be at the contract unit price per cubic yard for “Select Granular Material Class III”.

MODIFIED CONCRETE FLUME WITH CONCRETE OUTLET:

(3-19-96)(Rev. 6-17-08)

825

SP8 R10

At locations shown in the plans, construct concrete flumes, concrete curb, and apron in accordance with the details in the plans. Use materials meeting the requirements of Section 825 of the *2012 Standard Specifications* except that the concrete must be Class B or of higher compressive strength.

Each concrete flume, concrete curb, and apron completed and accepted will be paid at the contract unit price per each for *Modified Concrete Flume*. Such price and payment will be full compensation for all materials, labor, equipment, tools, removing and disposing of the temporary slope drains, and any other incidentals necessary to complete the work satisfactorily.

The concrete curb and ditch outside the pay limits of the apron will be measured and paid in accordance with Section 846 and 850 of the *2012 Standard Specifications*.

Payment will be made under:

Pay Item

Modified Concrete Flume

Pay Unit

Each

Structures Special Provisions

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seal applies
to the structure
special provisions
above.

Geotechnical Special Provisions

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CORROSION PROTECTION OF BRIDGE**SPECIAL****1.0 GENERAL**

Corrosion protection for the bridge shall be in accordance with the plans, the applicable section of the Standard Specifications and this special provision.

2.0 PORTLAND CEMENT CONCRETE COMPOSITION AND DESIGN

Use calcium nitrite [Ca(NO₂)₂] corrosion inhibitor and substitute fly ash and silica fume for a portion of the Portland cement. Calcium nitrite shall be used in all precast members and all cast-in-place members containing mild reinforcing steel or epoxy coated reinforcing steel. Elimination of calcium nitrite is allowable if stainless steel is substituted entirely for epoxy coated or mild reinforcing steel.

Apply the following rates of pozzolans at the locations shown:

	Ca(NO ₂) ₂ (gal/yd ³)	Silica Fume	Fly Ash ²	Granulated Blast Furnace Slag (GGBFS) ²
Deck Slab	4.0	-	25% ¹	40% ¹
End Diaphragms	4.0	-	25% ¹	40% ¹
Bent Diaphragms	4.0	-	25% ¹	40% ¹
Parapets	4.0	-	25% ¹	40% ¹
All Prestressed Concrete Girders	4.0	-	25% ¹	40% ¹
All Bent Caps		-	25% ¹	40% ¹
All Pier Walls		5% ¹	25% ¹	40% ¹
All Footings		5% ¹	25% ¹	40% ¹

¹ The rate of substitution shall be 1.0 lb. of pozzolan per 1.0 lb. of cement.

² The contractor has the option of substituting fly ash Class F or GGBFS at the rates shown in the table above.

3.0 PAYMENT

No separate payment will be made for corrosion protection of the bridge. The cost of furnishing and incorporating the corrosion protection of the bridge is considered incidental to the various pay items.

REMOVAL OF EXISTING STRUCTURE**(SPECIAL)****1.0 GENERAL**

The contractor shall remove the existing structure on NC-12 over the new Pea Island Inlet in accordance with section 402 of the Standard Specifications and this special provision. The existing structure for removal contains:

- 5-Span Mabey Truss Bridge, 684' overall length
- 12 Concrete Pile Footing
- 34 H-Piles
- 48-24" Ø Pipe Piles

- Scour Protection Stone, 300-400lb (total approximate quantity = 3,320 Tons)
- Steel Sheet Piling

Traffic shall be maintained in accordance with the traffic control plans.

All components of the Mabey Truss superstructure including but not limited to truss panels, floor beams, stringers, floor panels, bearings and any incidental components and hardware will remain the property of the department. Superstructure components shall be inventoried, crated and delivered to the Bridge Maintenance Yard at 14183 NC Hwy 94N, Creswell, NC 27928. Delivery shall be coordinated with the Engineer.

All other bridge components shall become the property of the contractor.

The contractor shall submit a removal plan to the engineer for approval. This plan shall indicate the sequence of operations, resources, time frames, staging areas and stockpile locations.

The Mabey Truss Bridge shall be disassembled in such a manner so as not to damage the superstructure components. The concrete bent caps over the inlet shall be removed using non-shattering methods; other concrete bent caps may be removed using shattering methods. Steel piles shall be completely removed in accordance with all permits. The contractor shall take care not to allow and debris or materials to fall into the inlet.

Steel sheet piles that are installed and subsequently removed to accommodate construction of the proposed bridge will not be counted as part of the linear footage of Steel Sheet Piling Removal. This will be the case even for piles that are installed in place of existing steel sheet piles. Steel sheet piles shall be completely removed in accordance with all permits.

The contractor's attention is brought to the fact that sandbags were used to stabilize/support the roadway embankment for the existing NC-12 roadway. Sandbag removal is a Roadway quantity and pay item. See Roadway plans for details.

2.0 MEASUREMENT AND PAYMENT

Removal of Existing Structure Payment shall be paid for at the contract lump sum price bid.

DOWELS IN PRESTRESSED PILES**SPECIAL****1.0 GENERAL**

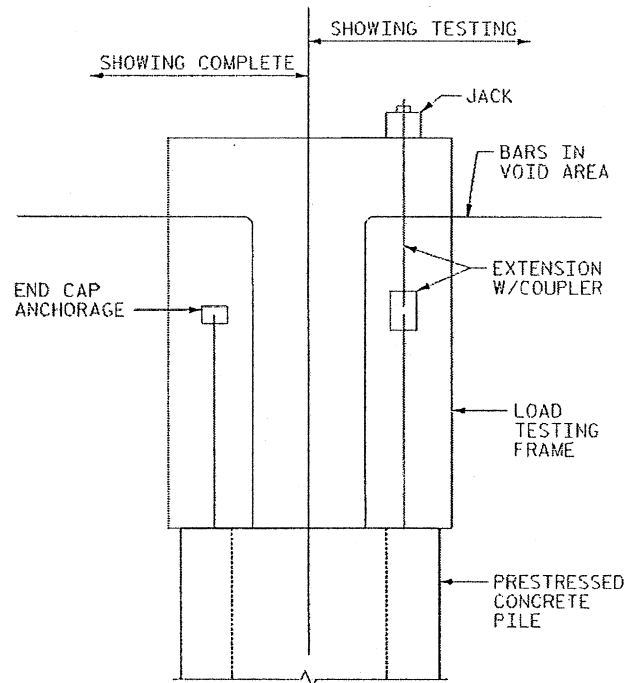
This provision applies to reinforcing dowels that are installed in the top of piles as detailed and noted on the plans. Dowels will be cast into piles or installed after driving. If the dowels are installed after driving, mechanical butt splices or adhesive anchoring systems may be used. Mechanical butt splices shall meet the requirements of section 1070-9 of the Standard Specifications. Adhesive anchoring systems shall meet the requirements of section 1081 of the Standard Specifications. Bars inserted into the formed hollow core of the top of pile that are encapsulated within spiral reinforcement are not subject to this provision.

2.0 INSTALLATION METHOD

- A) Install mechanical butt splices per section 425-5 of the Standard Specifications.
- B) Install adhesively anchor dowels into pile per section 420-13 of the Standard Specifications.
- C) Dowels cast into pile – this option may require specialized equipment and/or reinforcing bars modified from those shown on the plans. Before piles are cast, the contractor shall submit to the Engineer for approval his method for driving piles with the dowels cast in the top of pile. This submittal shall include all machinery, tools, materials and equipment necessary to drive the piles with dowels cast in the top of pile.

3.0 ADHESIVELY ANCHORED DOWEL TESTING REQUIREMENTS

Dowels installed after driving will be tested for level 2 field testing. Dowels will be tested on a per footing basis and shall be located on a single pile where possible. Prior to testing, hollow core reinforcing steel shall be installed and pile voids shall be poured with concrete up to the top of the pile. No other pile dowels are to be installed in the footing until test dowels have been installed, tested and approved. The contractor shall devise a method for testing dowels per the conditions noted above by either constructing a test frame above the hooked hollow core bars, by use of mechanical couplers or by use of any sound methodology to accomplish load testing of the dowel bars. The contractor may eliminate the hooks on the dowel bars to be tested if a mechanical end anchorage is installed in lieu of the hooks. The end anchorage shall be a manufactured device approved for use in the proposed configuration. The contractor may temporarily extend the dowels to a vertical height above the reinforcing steel projecting from the pile to facilitate testing. See sketch below for clarification of anticipated concept.



ANTICIPATED TESTING / END ANCHORAGE

The contractor shall submit to the engineer for approval plans, procedures and sequencing for installation of adhesively anchored dowel bars and testing of the dowel bars. The contractor shall also include in this submittal all machinery, tools, adhesives, rigging, end anchors (if applicable) and equipment necessary to install and test adhesively anchored dowels.

Mechanical couplers and embedment anchors shall be manufactured specifically for achieving development of reinforcing steel and be proportioned to develop 120% of the yield strength of the bar and be on the approved product list.

4.0 BASIS OF PAYMENT

No separate payment will be made for Dowels for Prestressed Piles. The cost of furnishing all materials and equipment necessary to perform the work stated herein shall be included in the pay item for Prestressed Concrete Piles.