



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

December 8, 2011

Addendum No. 1

RE: Contract ID C202565

WBS # 45328.3.1

Caldwell County (U-5204)

SR-1764 (New Farm Rd.) From SR-1764 (New Farm Rd.) To

SR-1751 (Grace Chapel Rd.)

December 20, 2011 Letting

To Whom It May Concern:

Reference is made to the Roadway plans furnished to you on this project.

New Sheet No. 2-M has been added to include a detail for "Bridge Approach Fills Sub-Regional Tier". Please staple new Sheet No. 2-M after Sheet No. 2-L in your plans.

Reference is made to the Structure plans furnished to you on this project.

The following revision has been made to the Structure Plans:

Sheet No. S1-14 has been revised to correct the reinforcing steel in the "Superstructure Bill of Material". Please void Sheet No. S1-14 in your plans and staple the revised Sheet No. S1-14 thereto.

Sheet No. S1-17 was inadvertently omitted from the original plans. Please staple the attached Sheet No. S1-17 after Sheet No. S1-16 in your plans.

On Sheet No. S1-22 the "Section Thru Slab detail" was revised. Please void Sheet No. S1-22 in your plans and staple the revised Sheet No. S1-22 thereto.

Sheet No. S2-14 has been revised to correct the reinforcing steel in the "Superstructure Bill of Material". Please void Sheet No. S2-14 in your plans and staple the revised Sheet No. S2-14 thereto.

On Sheet No. S2-22 the "Section Thru Slab detail" was revised. Please void Sheet No. S2-22 in your plans and staple the revised Sheet No. S2-22 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.ORG

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

The following revisions have been made to the Proposal:

Page Nos. 32-A thru 32-C have been added to include the project special provision entitled "Bridge Approach Fills". Please staple new Page Nos. 32-A thru 32-C after Page No. 32 in your proposal.

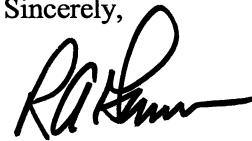
On Page No. 8 of the new item sheets the following pay item has been added:

<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
144-0030000000-N-SP	Bridge Approach Fill- Subregional Tier, Station (22+49.30-Y1-)	NEW ITEM	LUMP SUM
145-0030000000-N-SP	Bridge Approach Fill- Subregional Tier, Station (38+28.13-L-)	NEW ITEM	LUMP SUM

The Contractor's bid must include these new pay items. The contract will be prepared accordingly.

The Expedite File has been updated to reflect this revision. 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
Attachment

- cc: Mr. Jon Nance, PE
- Mr. Ron Hancock, PE
- Mr. M. A. Pettyjohn, PE
- Ms. D. M. Barbour, PE
- Mr. J. V. Barbour, PE
- Ms. Lori Strickland
- Mr. R.E. Davenport, PE
- Ms. Natalie Roskam, PE
- Mr. G. R. Perfetti, PE
- Mr. Ronnie Higgins
- Mr. Larry Strickland
- Project File (2)

BRIDGE APPROACH FILLS:

(10-19-10)

SP4 R01

Description

Construct bridge approach fills in accordance with the contract. Bridge approach fills include bridge approach fills for sub regional tier bridges and reinforced bridge approach fills. Geotextiles include engineering fabrics and geomembranes.

Materials

Refer to Division 10 of the *Standard Specifications*:

Item	Section
Portland Cement Concrete, Class B	1000
Select Material	1016
Subsurface Drainage Materials	1044
Engineering Fabrics	1056

Use Class III or V Select Material for reinforced approach fills and only Class V Select Material (standard size no. 78M stone) for bridge approach fills for sub regional tier bridges. Provide polyvinyl chloride (PVC) plastic drainage pipes, fittings and outlet pipes for subsurface drainage materials for all bridge approach fills. For bridge approach fills for sub regional tier bridges, use Type 1 Engineering Fabric for filter fabric to encase no. 78M stone. For reinforced bridge approach fills, use Type 5 Engineering Fabric for woven fabrics and Type 2 Engineering Fabric and no. 78M stone for drains.

Load, transport, unload and store geomembranes such that they are kept clean and free of damage. Geomembranes with defects, flaws, deterioration or damage will be rejected. Do not unwrap geomembranes until just before installation and do not leave geomembranes exposed for more than 7 days before covering geomembranes with woven fabrics.

Use either polyvinyl chloride (PVC), high density polyethylene (HDPE) or linear low density polyethylene (LLDPE) geomembranes. For PVC geomembranes, provide grade PVC30 geomembranes meeting the requirements of ASTM D7176. For HDPE and LLDPE geomembranes, use geomembranes with a nominal thickness of 30 mils meeting the requirements of Geosynthetic Research Institute Standard Specifications GM13 or GM17, respectively.

Construction Methods

Excavate as necessary for bridge approach fills in accordance with the contract. Notify the Engineer when foundation excavation is complete. Do not place geomembranes or filter fabrics until obtaining approval of the excavation depth and foundation material.

Attach geomembranes or filter fabrics to back of end bent caps and wing walls with adhesives, tapes or other approved methods. Use wire staples as needed to hold filter fabrics in place until covered. Overlap adjacent fabrics a minimum of 18" such that overlaps are parallel to the roadway centerline. Glue or weld geomembrane seams to prevent leakage. Contact the Engineer when existing or future structures such as foundations, pavements, pipes, inlets or utilities will interfere with geotextiles.

For reinforced bridge approach fills, place woven fabrics within 2" of locations shown on the plans and in slight tension free of kinks, folds, wrinkles or creases. Place first layer of woven fabric directly on geomembranes with no void or material in between. Install woven fabrics with the machine direction (MD) parallel to the roadway centerline. The MD is the direction of the length or long dimension of the roll. Do not splice or overlap woven fabrics in the MD such that splices or overlaps are perpendicular to the roadway centerline. Install woven fabrics with the orientation, dimensions and number of layers shown on the plans. Wrap woven fabrics as shown on the plans or as directed by the Engineer.

For reinforced bridge approach fills, construct 1 ft by 1 ft drains consisting of 4" diameter perforated PVC pipes surrounded by no. 78M stone wrapped in type 2 fabric. For bridge approach fills for sub regional tier bridges, install 4" diameter perforated PVC drainage pipes as shown on the plans.

Firmly connect PVC pipes together as needed. Connect perforated pipes to outlet pipes near the back faces of wing walls. Provide drains with positive drainage towards outlets. Place pipe sleeves in or under wing walls for outlet pipes such that positive drainage is maintained. Use sleeves of sufficient strength to withstand wing wall loads.

Place select material in 8 to 10 inch thick lifts. Compact Class III Select Material in accordance with Subarticle 235-4(C) of the *Standard Specifications*. Do not displace or damage fabrics or drains when placing and compacting select material. End dumping directly on fabrics and drains is not permitted. Do not operate heavy equipment on woven fabrics or drains until they are covered with at least 8" of select material. Replace any damaged fabrics and drains to the satisfaction of the Engineer.

Use only hand operated compaction equipment for bridge approach fills for sub regional tier bridges and within 3 ft of end bent cap back or wing walls for reinforced bridge approach fills. At a distance greater than 3 ft for reinforced bridge approach fills, compact select material with at least 4 passes of an 8 – 10 ton vibratory roller. Smooth wheeled or rubber tired rollers are also acceptable for compacting select material. Do not use sheepsfoot, grid rollers or other types of compaction equipment with feet.

Use solvent cement for connecting outlet pipes and fittings such as wyes, tees and elbows. Provide connectors for outlet pipes and fittings that are watertight and suitable for gravity flow conditions. Cover open ends of outlet pipes with rodent screens as shown on the plans.

Connect drains to concrete pads or existing drainage structures at ends of outlet pipes as directed by the Engineer. Construct concrete pads and provide an Ordinary Surface Finish in accordance with Subarticle 825-6(B) of the *Standard Specifications*.

Measurement and Payment

Reinforced Bridge Approach Fill, Station _____ will be paid at the contract lump sum price. Such price and payment will be full compensation for all reinforced bridge approach fills at each bridge for excavating and furnishing, transporting and placing geotextiles, select material, drains, pipe sleeves and concrete pads, compacting select material, connecting pipes to existing drainage structures and providing any labor, tools, equipment and materials to complete the work.

Bridge Approach Fill – Sub Regional Tier, Station _____ will be paid at the contract lump sum price. Such price and payment will be full compensation for all bridge approach fills at each sub regional tier bridge for excavating and furnishing, transporting and placing filter fabrics, no. 78M stone, drainage pipes, pipe sleeves and concrete pads, compacting no. 78M stone, connecting pipes to existing drainage structures and providing any labor, tools, equipment and materials to complete the work.

Payment will be made under:

Pay Item	Pay Unit
Reinforced Bridge Approach Fill, Station _____	Lump Sum
Bridge Approach Fill – Sub Regional Tier, Station _____	Lump Sum