



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

December 7, 2004

Addendum No. 1

RE: Contract ID: C201308
WBS # 33102.3.1
Macon County (B-3485)
Bridge over Cartoogechaye Creek
And Approaches on SR-1470.

December 21, 2004 Letting

To Whom It May Concern:

Reference is made to the proposal form furnished to you on the above-mentioned project.

The following revision has been made to the proposal form:

On Page No. 103, the project special provision entitled "Glass Fiber Reinforced Polymer (GFRP)" has been revised. Please void Page No. 103 in your proposal and staple the revised Page No. 103 thereto.

Sincerely,

A handwritten signature in black ink, appearing to read "R. A. Garris".

R. A. Garris, PE
Contract Officer

RAG/jag/pa
Attachments

cc: Mr. W. S. Varnedoe, PE
Mr. S. D. DeWitt, PE
Mr. E. C. Powell, PE
Mr. J. B. Setzer, PE
Ms. D. M. Barbour, PE
Mr. Art McMillan, PE
Mr. J. V. Barbour, PE
Mr. Mark Staley (2)
Mr. Ayden Flowers
Mr. R. E. Davenport, Jr., PE
Ms. Marsha Byrd
Ms. Taylor Mishoe
Project File (2)

GLASS FIBER REINFORCED POLYMER (GFRP)**(SPECIAL)****1.0 GENERAL**

Provide and place glass fiber reinforced polymer (GFRP) in accordance with Sections 1070 and 425 of the Standard Specifications except as noted herein.

Use Aslan 100 Glass Fiber Reinforced Polymer (GFRP) for the top and bottom mats of the bridge deck in both longitudinal and transverse reinforcing bars. Glass Fiber Reinforced Polymer (GFRP) is manufactured by the following contacts.

Doug Gremel
Hughes Brothers, Inc.
210 N. 13th Street
Seward, NE 68434
1-800-869-0359

Sam S.A. Steere III
Concrete Protection Products, Inc.
5618 Preston Fairways Drive
Dallas, Texas 75252
972-818-1993

Hughes Brothers, Inc, or Concrete Protection Products, Inc, will provide the GFRP material. Other suppliers are permitted if approved by the Engineer. Fabricate the reinforcing bars to the dimensions shown on the plans in accordance with the manufacturer's recommendations.

Provide GFRP to meet or exceed all pertinent mechanical properties for AASHTO M31 (ASTM A615) Grade 60 reinforcing steel except as noted below:

Tensile Strength:	80 ksi
Modulus of Elasticity:	5,900 ksi
Barcol Hardness:	60 per ASTM D2538
Fiber Content:	70% min. per ASTM D2584
Specific Gravity:	2.0 per ASTM D792

Adequately secure the GFRP reinforcement in formwork or to the girders to prevent the GFRP reinforcement from floating up in the concrete. Provide plastic or plastic-coated tie wires and bar supports. The use of uncoated metal tie wires or bar supports is not permitted.

2.0 BASIS OF PAYMENT

The quantity of GFRP reinforcing, determined as provided in Article 425-6 of the Standard Specifications, will be paid for at the contract unit price per pound for "Glass Fiber Reinforced Polymer (GFRP)". The quantity of GFRP reinforcing shown on the plans is an estimate based on the theoretical computed weight of the GFRP reinforcing necessary to complete the work, and will be used for pay purposes. No revision in this pay quantity nor any adjustment in the contract unit price for "Glass Fiber Reinforced Polymer (GFRP)" will be made except where revisions in the plans affect the quantity of GFRP reinforcing