11 October 2012

Addendum No.1

Re: Realign Mickley Avenue and Replace Bridge No. 165 over Norfolk Southern Railroad
Bessemer City, NC
TIP & FA NUMBERS: TIP#B-4575 FA#BRZ-1202(1)

Bid Opening: October 24, 2012

To whom it may concern:

Reference is made to the proposal and plans recently furnished to you on the above project.

Revision has been made to the following items:

- Item bid proposal
- Revision to bid bond
- Train frequency/speed
- Vehicle restrictions
- Subsurface information
- Bridge approach fill
- Safety fence
- Temporary 6" waterline

Please refer to the changes in the following pages for your bid purpose. Questions and answers are provided for your information. In addition, we have also included a prebid conference sign-in sheet.

Sincerely yours,

STV/Ralph Whitehead Associates, Inc.

Zhugang "Amos" Liu, PE
Project Manager

- Bidders shall replace the itemized proposal with the following:

ITEMIZED PROPOSAL

10/24/2012 Work Order No. WBS# 33779.5.1 TIP# B-4575 FA#BRZ-1202(1)

Realign Mickley Avenue and Replace Bridge No. 165 over Norfolk Southern Railroad

County Gaston

LINE NO.	SEC. NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	800	Mobilization	1	LS		
2	801	Construction Surveying	1	LS		
3	200	Clearing and Grubbing	1.4	AC		
4	200	Supplementary Clearing & Grubbing	1	AC		
5	225	Unclassified Excavation	6,000	CY		
6	230	Borrow Excavation	22,500	CY		
7	250	Removal of Existing Asphalt Pavement	210	SY		
8	500	Fine Grading (1,980 SY)	1	LS		
9	545	Incidental Stone Base	90	TN		
10	SP	Foundation Conditioning Material, Minor Structures	80	TN		
11	SP	Foundation Conditioning Fabric	240	SY		
12	SP	15" Drainage Pipe	448	LF		
13	SP	15" R.C. Pipe Culverts, Class IV	24	LF		
14	SP	18" R.C. Pipe Culverts, Class IV	60	LF		
15	SP	18" R.C. Pipe Culverts, Class V	168	LF		
16	SP	15" Pipe End Section	3	EA		
17	SP	18" Pipe End Section	3	EA		
18	840	Frame with Grate & Hood, STD 840.03, Type F	1	EA		
19	840	Frame with Grate & Hood, STD 840.03, Type G	1	EA		
20	840	Masonry Drainage Structures	7	EA		
21	840	Masonry Drainage Structures	6	LF		
22	840	Frame with Two Grates, Std. 840.22	4	EA		
23	840	Frame with Two Grates, Std. 840.29	1	EA		
24	SP	15" Drainage Pipe Elbows	4	EA		
25	610	Asphalt Concrete Base Course, Type B25.0B	640	TN		
26	610	Asphalt Concrete Surface Course, Type S9.5B	430	TN		
27	SP	Asphalt Binder for Plant Mix	55	TN		
28	846	2'-6" Concrete Curb and Gutter	50	LF		
29	846	Shoulder Berm Gutter	275	LF		
30	854	Precast Concrete Barrier	21	LF		
31	862	Steel Beam Guardrail	750	LF		
32	862	Steel Beam Guardrail, Shop Curved	150	LF		
33	862	Guardrail Anchor Units, Type B-77	4	EA		
34	SP	Guardrail Anchor Units, Type 350	6	EA		
35	862	Guardrail Anchor Units, Type III	2	EA		

36	862	Steel BM Guardrail Terminal Sections	2	EA		
37	862	Additional Guardrail Posts	5	EA		
38	876	Rip Rap, Class I	10	TN		
39	876	Rip Rap, Class B	15	TN		
40	876	Filter Fabric for Drainage	300	SY		
41	1605	Temporary Silt Fence	1,685	LF		
42	1610	Stone for Erosion Control, Class A	70	TN		
43	SP	Permanent Soil Reinforcement	80	SY		
44	SP	Temporary Rock Silt Check Type "A" NCDOT Std. 1633.01	4	EA		
45	SP	Temporary Rock Silt Check Type "B" NCDOT 1633.02	24	EA		
46	SP	Rock Inlet Sediment Trap Type "C" NCDOT Std. 1632.03	7	EA		
47	1631	Matting for Erosion Control	100	SY		
48	SP	Safety Fence	300	LF		
49	1660	Seeding & Mulching	2	AC		
50	1205	Thermoplastic Pavement Marking Lines (4", 120 MILS)	2,162	LF		
51	1205	Thermoplasic Pavement Marking Lines (4", 90 MILS)	2,128	LF		
52	1205	Cold Applied Plastic Pavement Marking Lines, Type 1 (4")	346	LF		
53	1205	Cold Applied Plastic Pavement Marking Lines, Type 1 (4")	346	LF		
54	1110	Work Zone Signs (Barricade Mounted)	57	SF		
55	1110	Stationary Work Zone Signs (Stationary)	198	SF		
56	1145	Barricades (Type III)	80	LF		
57	SP	12" DIP Water Line, Pressure Class 350	1,235	LF		
58	SP	6" DIP Water Line, Pressure Class 350	58	LF		
59	SP	Temporary 6" Water Line	1	LS		
60	SP	6" Sleeve	2	EA		
61	SP	20" Steel Encasement Pipe (0.250" Thick)	150	LF		
62	SP	Ductile Iron Restrained Joint Fittings	1,150	LBS		
63	SP	Abandon Existing Water Lines and Appurtenances	1	LS		
64	SP	Concrete Blocking	40	CY		
65	1515	6" Gate Valve	1	EA		
66	1515	12" Gate Valve	3	EA		
67	1515	12" X 16" Tapping Valve	1	EA		
68	1515	1" Air Release Valve	1	EA		
69	1515	2" Blow Off	1	EA		
70	1515	6" Line Stop	1	EA		
71	1530	Reconnect Water Meter	1	EA		
72	402	Removal of Existing Structure at Station -L- 9+64.28	1	LS		
73	412	Unclassified Structure Excavation	1	LS		
74	420	Reinforced Concrete Deck Slab	4808.5	SF		
75	420	Grooving Bridge Floors	3577	SF		
76	420	Class A Concrete (Bridge)	68.9	CY		
77	422	Bridge Approach Slabs, Station -L- 8+76.61	1	LS		

78	422	Bridge Approach Slabs, Station -L- 10+48.95	1	LS		
79	425	Reinforcing Steel (Bridge)	12818	LB		
80	440	Approximately 245,300 Pounds Structural Steel	1	LS		
81	SP	HP 14 X 73 Steel Piles	784.7	LF		
82	SP	Steel Pile Points	18	EA		
83	SP	Predrilling for Piles	610	LF		
84	454	Method A Waterproofing	16.2	SY		
85	460	Three Bar Metal Rail	140.8	LF		
86	460	Concrete Barrier Rail	148.3	LF		
87	SP	Chain Link Fence for Railroad Protection	1	LS		
88	462	4" Concrete Slope Protection	327.4	SY		
89	SP	Bridge Approach Fill – Sub Regional Tier, Station 9+64.28	1	LS		

Total Bid for Project **$**

CONTRACTOR _____

ADDRESS _____

_____

Federal ID No. _____

Contr. License No. _____

Telephone No. _____

Vendor No. _____

CORPORATE SEAL

Authorized Agent _____ **Title** _____

Signature _____ **Date** _____

Witness _____ **Title** _____

Signature **Date**

PROJECT MANUAL

- Bidders shall delete numbered item #11 on Page 4, Instructions to Bidders:

  ~~**11.** A bid bond or deposit is not required when submitting a bid for this project.~~

  Bidders shall replace the previous line with the following:

  11. Each bid that equals or exceeds $300,000 shall be accompanied by a corporate bid bond or a bid deposit of a certified or cashier's check in the amount of at least 5% of the total amount bid for the contract. When a bid is secured by a bid deposit (certified check or cashier's check), the execution of a bid bond will not be required. When the bid security is in the form of a bid bond, that bid bond shall be executed by a corporate surety licensed in North Carolina to execute such bonds. When the bid security is in the form of a cashier's check, or a certified check; that check shall be written on a bank or trust company insured by the Federal Deposit Insurance Corporation, made payable to the order of the City of Bessemer City.

- Bidders shall add the following to the Project Special Provisions -- Roadway:

  TRAIN FREQUENCY/SPEEDS

  It is anticipated that there are approximately 36 freight trains and 2 passenger trains each day through this area. The posted speed is 50 mph for the freight trains and 79 mph for the passenger trains. It is the contractor's responsibility to verify for the freight train count, posted speed and time table with Norfolk Southern Railroad.

  VEHICLE RESTRICTIONS

  The Contractor shall be aware of existing vehicle restrictions on local streets accessing the project site.

  The Contractor shall notify the following regarding construction vehicle access on the aforementioned restricted roadways a minimum of two (2) weeks prior to construction in order to lift the restriction. The City of Bessemer City will be responsible for notifying the local authorities of the vehicle restriction lift.

  James A. Inman, City Manager
  131 W. Virginia Ave., Bessemer City, NC
  Phone: (704) 629-5542
  Email: james@bessmercity.com

  The Contractor shall be aware of the existing weight restrictions on the existing Mickley Ave. bridge. The contractor shall also be aware of existing site constraints prior to utilizing the aforementioned restricted roadways for construction activities including but not limited to; Hauling or Material Deliveries. The Contractor shall be responsible for informing all subcontractors of the prior mentioned restrictions.

SUBSURFACE INFORMATION

Boring logs and other records of subsurface investigations and tests will be made available in PDF format by request from Bidders. It is understood and agreed that such subsurface information, whether included in the Plans, specifications, or otherwise made available to the Bidder, was obtained and is intended for the OWNER'S design and estimating purposes only. Bidder expressly waives any right to rely on such information for any purpose. Such information has been made available for the convenience of all Bidders. It is further understood and agreed that each Bidder is solely responsible for all assumptions, deductions, or conclusions which it may make or obtain from his examinations of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner. Such subsurface information may not be construed as part of the Contract Documents.

At any time prior to submission of a Bid, a prospective Bidder may apply for and receive approval from the Owner to enter onto the Project Site for purposes of conducting its own geotechnical investigation.

BRIDGE APPROACH FILLS

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

Bridge Approach Fill – Sub Regional Tier, Station 9+64.28 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**
Bridge Approach Fill – Sub Regional Tier, Station 9+64.28	Lump Sum

SAFETY FENCE

Description

Safety Fence shall consist of furnishing materials, installing and maintaining polyethylene or polypropylene fence along the railroad tracks within the construction corridor to mark the limits of construction near the railroad tracks as required by NSRR. The fence shall be installed prior to any land disturbing activities.

Materials

Polyethylene or polypropylene fence shall be a highly visible pre-constructed safety fence approved by the Engineer. The fence material shall have an ultraviolet coating. Either wood posts or steel posts may be used. Wood posts shall be hardwood with a wedge or pencil tip at one end, and shall be at least 5 ft. in length with a minimum nominal 2" x 2" cross section. Steel posts shall be at least 5 ft. in length, and have a minimum weight of 0.85 lb/ft of length.

Construction Methods

No additional clearing and grubbing is anticipated for the installation of this fence. The fence shall be erected to conform to the general contour of the ground. Posts shall be set at a maximum spacing of 10 ft., maintained in a vertical position and hand set or set with a post driver. If hand set, all backfill material shall be thoroughly tamped. Wood posts may be sharpened to a dull point if power driven. Posts damaged by power driving shall be removed and replaced prior to final acceptance. The tops of all wood posts shall be cut at a 30-degree angle. The wood posts may, at the option of the Contractor, be cut at this angle either before or after the posts are erected. The fence geotextile shall be attached to the wood posts with one 2" galvanized wire staple across each cable or to the steel posts with wire or other acceptable means. Place construction stakes to establish the location of the safety fence in accordance with Article 105-9 or Article 801-1 of the Standard Specifications. No direct pay will be made for the staking of the safety fence. All stakeouts for safety fence shall be considered incidental to the work being paid for as "Construction Surveying", except that where there is no pay item for construction surveying, all safety fence stakeout will be performed by state forces. The Contractor shall be required to maintain the safety fence in a satisfactory condition for the duration of the project as determined by the Engineer.

Measurement and Payment

Safety Fence will be measured and paid as the actual number of linear feet of polyethylene or polypropylene fence installed in place and accepted. Such payment will be full compensation including

but not limited to furnishing and installing fence geotextile with necessary posts and post bracing, staples, tie wires, tools, equipment and incidentals necessary to complete this work.
Payment will be made under:

Pay Item	**Pay Unit**
Safety Fence	Linear Foot

- Bidders shall make the following highlighted changes to the Project Special Provisions -- Roadway:

TEMPORARY 6" WATER LINE

Description: Maintain temporary water service to customers in the project area as is provided by the existing 6" water line. Service may be maintained by utilizing the existing 6" water line that is currently attached to the bridge and maintain it until the new water line is in service or providing a temporary 6" water line with a supporting system that runs parallel to the bridge while maintaining it until the new water line is in service.

Materials and Construction Methods:

Refer to NCDOT Standard Specification 1510 for general construction requirements and water line testing and sterilization.

The temporary water line must be restrained if a temporary supporting system is used.

The Contractor shall submit shop drawings for the design and support of the temporary 6" Water Line regardless of the method chosen.

All submittals should be delivered to the City of Bessemer City's duly authorized Engineer:

T. Brian Query, P.E.
c/o STV/Ralph Whitehead Associates, Inc.
1000 W. Morehead St., Suite 200
Charlotte, North Carolina 28208
(704) 372-1885
(704) 372-3393 facsimile
brian.query@stvinc.com

See Section 105 of Standard Specifications for submittal and review – "the Contractor shall allow 40 calendar days for review and approval, or acceptance, of working drawings from the date they are received until they are returned by the Engineer. If revised drawings are required, appropriate additional time shall be allowed for review and approval, or acceptance, of the revised drawings."

Norfolk Southern will also review the temporary waterline design which may take minimum of 30 days.

Measurement and Basis of Payment: Measurement and payment will be made for the Temporary 6" Water Line on a lump sum basis. Such price shall include all materials, labor, and incidentals necessary for the construction of the Temporary 6" Water Line.

Payment will be made under:

Pay Item	**Pay Unit**
Temporary 6” Water Line	LS

Questions and Answers

- A Pre-Bid Conference was held on Tuesday, October 9, 2012, at 2:00 pm at City Hall Chamber of Bessemer City. Questions posed at the Pre-Bid Conference and responses (***in bold***) are as follows:

1. If date of availability slides, will the completion date slide?

   The date would not automatically change. The contractor would have to submit a claim under Section 104 of the Standard Specifications.

2. Who will coordinate railroad flagman services?

   The Contractor is responsible for coordinating with NS for flagman services.

3. How many trains travel through this area and what is the speed?

   Number of trains and speed are provided in the addendum.

4. What is the existing substructure made of?

   The existing substructure units are made of concrete.

5. Is bid bond required for this project?

   Yes, please refer to the addendum.

6. Is reinforced approach fill required for the bridge construction?

   Reinforced bridge approach fill is required at both ends of bridge. Special provisions are included for the reinforced approach fill and a lump sum pay item is added to the bid proposal.

7. Will geotechnical report be provided?

   See special provisions for the geotechnical reports. The reports will be available in PDF via request by bidders.

8. Can the engineer provide ideas of the temporary waterline support?

   The engineer provided two potential options. One option is to support the temporary waterline off the bridge. The second option is to utilize the existing concrete bents to support the temporary waterline. However, it is the contractor's sole responsibility to hire a registered engineer in North Carolina to design the temporary waterline and support based on his means and methods, and to obtain approvals from NCDOT, Norfolk Southern and the engineer of record.

9. Is temporary safety fence required?

   Yes, see addendum for temporary safety fence.

10. Instead of buying the bid document and plan set from Richa, can contractors download the files from the plan room web site?

Yes, but the contractors have to use the attached revised bid proposal form and addendum for submitting their bids.

Pre-Bid Conference Sign-In Sheet

SIGN-IN SHEET

Name	Company	Phone	Email
TERRY ALEXANDER	TRIANGLE GRADING	336-584-7745	TALEXANDER @ TRIANGLE GRADING PAVING.COM
PETE WEBER	DANE CONSTRUCTION, INC.	704-664-5042	PETE@DANECONSTRUCTION.COM
KENAN POROBIC	BLYTHE CONSTRUCTION INC	704-375-8474	kenan.porobic@blytheconstruction.com
EVAN DIXON	DELLINGER, INC	704-309-5583	EVAN@DELLINGER-INC.COM
Matt Hollis	Neill Grading	828-324-6774	matt@neillgrading.com
LANE McDOW	DEVERE	919-886-1234	lmcdow@devereco.us
RICHARD KIRKMAN	BLYTHE DEVELOPMENT CO.	704-363-9136	RKIRKMAN@BLYTHEDEVELOPMENT.C
TOM BARTON	SMITH ROWE	336-789-8221	tyb3@triad.rr.com
KEVIN BURNS	R.E. BURNS & SONS	7049248646	kevin@reburns.com
John Sautner	John E. Jenkins, Inc	704-864-5721	johns@jejenkins.com
DON JOHNSON	PIONEER UTILITIES	704-675-5491	pupi@carolina.rr.com
X Philip Beckt	Summit	704-608-0511	[redacted] Philip.beckt@summit-engi
X KevinC O'Dell	Summit	919-732-3883	kevin.odell@summit-engine
DanGrissom	NCDOT	704-480-9024	dgrissom@ncdot.gov
Gary Spangler	NCDOT	704-480-2082	gspangler@ncdot.gov
X Jackie McSwain	NCDOT	704-480-9027	jmcswain@ncdot.gov
ERIC CONNER	NCDOT	704-730-2192	ECONNER@NCDOT.GOV
Adam Freeman	STV	704-372-1885	joseph.freeman@stvinc.com
Amos Liu	STV	" "	amos.liu@stvinc.com
DAVIN MORRISON	STV	" "	davin.morrison@stvinc.com

The Bidder will acknowledge receipt of this addendum in the itemized proposal. Failure to do so may disqualify the bid.

cc: All Bidders
Distribution List
File