



ADDENDUM #1:

DATE: December 7, 2009

JOB: Elizabeth Cashwell Elem. School Classroom & Media Center Add.  
Architect Project No. 0903

OWNER: Cumberland County Board of Education

ARCHITECT: Gordon Johnson Architecture

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The following items or modifications to the original Plans and Specifications shall be included as part of the contract work. All General Conditions, Supplemental General Conditions, or Special Conditions shall remain as originally specified unless otherwise noted herein.

Respective Bidders shall include the provisions of this Addendum in their proposal and shall make a notation in the proposal that these provisions have been included.

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**GENERAL**

- 1) A Pre-bid meeting was held on November 23, 2009 at the CCS Operations Center at 810 Gillespie Street, where representatives of the Owner, the design team, and contractors interested in bidding the project were in attendance. They include the following attendees:

Gordon Johnson of Gordon Johnson Architecture  
Paul Adams of Adams & Britt Construction  
Art Hecke of Player, Inc.  
Don Webb of FASCO, Inc  
Robert Hart of Hywoods Construction  
David Coffman of Coffman Plumbing  
Buddy Henderson of Watson Electric  
Ryan Locklear of Gaylor Inc.  
William Smith of Smith Construction  
Kate Carter of Graka Builders  
Joey Penfield of Autry Grading

Charles Stein of Autry Grading  
Blane Hunt of Cumberland County Schools  
Wilson Lacy of Cumberland County Schools  
Stephen Drake of M&E Contracting

The Architect reviewed the bidding requirements which included contractors submitting the appropriate bid forms and compliance statements with their bids. A bid, payment, and performance bond will be required for this project. All of the site work shown on the drawings and as specified should be included in the base bid. All other information discussed in the meeting that required a change to the construction documents will be noted in this addendum.

- 2) The bid date should be changed from December 8, 2009 to December 15, 2009 at the same time and location.
- 3) There is no specific bid bond form to be filled out for this project. Contractor's may use any appropriate bid bond form including the AIA-310 for their bid bond.

### **SPECIFICATIONS**

- 1) Section 01020 – Allowances: The hardware allowance shall include all materials for storefront doors.
- 2) Section 04800 – Unit Masonry: There shall be no colored mortar required for this project. Contractors may use standard “orange” sand at their option.
- 3) Section 04800 – Unit Masonry: Delete all references to water proofing materials. See section 07141 for “Damp-proofing” material.
- 4) Section 07530 (footer noted as 07511) – Single-ply Membrane Roofing: Delete this section in it's entirety
- 5) Section 07610 – Sheet Metal Roofing: Delete this section in it's entirety

### **ARCHITECTURAL DRAWINGS**

- 1) Sheet A3: The metal studs at all soffits similar to that shown on the typical wall sections shall be 20 gauge.
- 2) Sheet A3: The roof drain and roof detail shown on 1/A3 is shown on detail 8/A2 (the flag reference is incorrect). The roof drain shall be cast iron and shall be provided by the roofing contractor. The roof drain leader in the wall cavity shall be cast iron. Drain lines in other areas may be schedule 40 PVC.
- 3) Sheet A3: Operable storefront windows shown in the typical wall section may be of the manufacturer's standard 2” thick aluminum material with finish to match other framing specified. Provide bug screens at all operable non-egress units.

### **CIVIL**

#### **Drawings:**

- 1) Sheet C2.0 – Demolition Plan: Delete note #3 from plan

- 2) Sheet C2.0 – Demolition Plan: Edit note # 2 to say – “Existing playground equipment shall be relocated by owner. Contractor shall coordinate with owner.”
- 3) Sheet C3.0 – Site Plan: Install concrete bumper in parking space in front of existing transformer pad.
- 4) Sheet C3.0 – Site Plan: Install concrete sidewalk around transformer pad. See attached addendum drawing AD1.0.
- 5) Sheet C4.0 – Grading and Erosion Control Plan: Dimensions of Sediment Trap 1: changed from 28’L x 56’W x 3’D to 29’L x 58’W x 3.5’D.
- 6) Sheet C4.0 – Grading and Erosion Control Plan: Depth of Sediment Trap 2: changed from 3’ to 3.5’.
- 7) Sheet C4.0 – Grading and Erosion Control Plan: Built Upon Area Calculations were added.

### **Specifications:**

#### Section 02665 – WATER SYSTEMS (Clarifications)

- 1) Sub-heading 2.3. Pipe and Tube Fittings: Added “F. All PVC pipe and fittings shall be manufactured to withstand 755 psi quick burst pressure tested in accordance with ASTM D-1599 and withstand 500 psi for a minimum of 1000 hour tested in accordance with ASTM D-1598.”
- 2) Sub-heading 2.3. Pipe and Tube Fittings: Added “G. Ductile Iron fittings to PVC pipe shall be adequately supported on a firm trench foundation. Fittings shall be for bell and spigot pipe or plain end pipe, or as applicable.”
- 3) Sub-heading 2.4.B.2: after rubber gaskets., added “The mechanical joints shall be stuffing box type and shall conform to ANSI A21.11 for 3” pipe or larger. Install in accordance with AWWA C-600.”
- 4) Sub-heading 2.4.B.3: after Restrained Joints:, deleted “TR Flex or Lok Tyte as manufactured by U.S. Pipe, Lok-Fast or Lok-Ring as manufactured by American Pipe, Super-Lok as manufactured by Clow, Bolt-Lok or Rigid-Lok as manufactured by Griffin or approved equal,” and added “Ductile Iron in accordance with ANSI A21.53 (AWWA C-153).”
- 5) Sub-heading 2.4. Joining Materials: Added “D. All ductile iron pipe and ductile iron-cast iron fittings shall be lined with standard thickness cement mortar lining and asphaltic seal coat in accordance with ANSI A21.4 (AWWA C-104).”
- 6) Sub-heading 2.4. Joining Materials: Added “E. Ductile Iron: When deemed necessary and requested by the Engineer, each joint of pipe and each fitting shall be inspected by an independent domestic testing laboratory, approved by the Engineer, and certification shall be supplied to the Engineer by them that all pipe and fittings meet project specifications. In addition, the Contractor shall furnish to the Engineer a 6” test section from each lot of water pipe as per AWWA Specification ASA 21.4 to be

used for additional test of the pipe lining by the Owner. Satisfactory results of this test must be obtained before acceptance of the pipe.”

- 7) Sub-heading 2.5.B. Valves: Added “F. All valves shall be tested for leakage and distortion in strict accordance with the latest revision of AWWA Specification C-500. All valves shall be manufactured in strict accordance with the latest specifications of the American Water Works Association (AWWA). Certification shall be furnished to the Engineer by the manufacturer that all valves meet project specifications.”
- 8) Sub-heading 2.5.C: after Valve Boxes:, deleted “Adjustable screw type class 35 gray Cast-iron box. Manufactured in accordance with ASTM A48. All castings must be domestically cast and so indicated by the manufacturers name and “USA” cast into all sections of the valve box. All castings must meet or exceed AASHTO H-20 load rating,” and added “C. Valve Boxes: Shall be “slip-type” made of close-grained, gray cast iron metal painted before being shipped with one coat of first quality protective asphaltum paint with a minimum thickness of 3/16”. Construction shall be in three pieces as follows: The lower of base pieces, which shall be beveled at the bottom to fit around the stuffing-box gland and rest on the valve bonnet or gear disc, as the case may be; the upper part which shall be flanged on the lower end, and of such size as to telescope over the lower part, the upper end being constructed in the form of a socket to receive the cap or cover; and the cover or cap shall have cast on the upper surface, in raised letters, the word “WATER”. Valve box shall have a “hole drilled in the upper part to accommodate 1/4” x 1-1/2” Galvanized Bolt for securing tracer wire. Valve box protector rings shall be installed to protect valve boxes located outside pavements. The concrete shall be a minimum of 2500 psi, reinforced with two #3 reinforcing bars, and have an outer diameter of 24 inches. The top of the protector ring shall be set approximately 1/2 inch above grade. All castings must meet or exceed AASHTO H-20 load rating. All valve boxes shall be equal in quality and workmanship to the above mention manufacturers or approved equal.”
- 9) Sub-heading 2.5.D.1: after pressure of, deleted “150 psi” and added “200 psi.”
- 10) Sub-heading 2.6.E: after rod coupling., added “Interior of the hydrant shoe shall be coated with a 4-mil thickness FDA approved epoxy coating. Paint shall conform to the requirements of Federal Spec. TT-V-51 or Military Spec. MIL-C450 or equal. The prime coat from the ground up shall conform to Federal Spec. TT-P-86 (Type IV), Federal Spec. TT-P-636 or equal.”
- 11) Sub-heading 2.6. Fire Hydrants: Added “G. All hydrants shall be able to deliver 1000 gallons per minute with a friction loss of not more than 5 pounds per square inch total head loss through the hydrant.”
- 12) Sub-heading 2.6. Fire Hydrants: Added “H. Hydrants shall be suitable for working pressure of 150 psi and test pressure of twice the working pressure.”

- 13) Sub-heading 2.6. Fire Hydrants: Added “I. All painting shall be done in strict accordance with the paint manufacturer’s recommendations and shall be satisfactory to the Engineer.”
- 14) Sub-heading 2.6. Fire Hydrants: Added “J. Schedule of colors and coating requirements are as follows: Acceptable dry mil thickness will be 4-6 for each coat. Bonnet of hydrant shall be Acrylic Enamel, Dark Green paint or approved equal. Fire hydrant barrel, caps, chain and other exterior surfaces shall be Quick Drying Acrylic Enamel Yellow Paint or approved equal.”
- 15) Sub-heading 3.7.C: after according to, deleted “AWWA C600” and added “ANSI/AWWA C-110/A21.10.”
- 16) Sub-heading 3.7.I: Deleted “Where conditions are, in the opinion of the Inspector, unsuitable for laying pipe because of weather or trench conditions, the contractor shall be required to cease work until permission is given by the Inspector for work to commence again providing such conditions have been corrected,” and added “Pipe, tubing and fittings shall be homogeneous throughout, and free of visible cracks, holes, foreign inclusions, blisters, dents, or other injurious defects. The pipe, tubing, and fittings shall be as uniform as commercially practicable in color, opacity, density, and other physical properties.”
- 17) Sub-heading 3.7. Piping Installation: Added “J. A minimum of 4 feet of cover is required without excessive displacement or misalignment for water mains.”
- 18) Sub-heading 3.7. Piping Installation: Added “K. Boring and Jacking: Installation shall be by dry boring and jacking of smooth wall steel pipe true to line and grade under roadways, where indicated on the plans, all in accordance with these specifications and recommendations of the pipe manufacturer. The Contractor shall notify the Owner’s Representative 7 days prior to any contemplated work and securing any required permits.

- a) The casting pipe shall be spiral welded or smooth wall steel pipe in accordance with ASTM A53, Grade B having a minimum yield strength of 35,000 psi.
- b) The carrier pipe installed within the casing pipe shall be CL 50 Ductile Iron push-on joint 12” diameter of less and CL 50 Ductile Iron restrained joint for diameter greater than 12”.
- c) The casting pipe minimum size and minimum wall thickness shall be in accordance with the following chart unless indicated otherwise on the drawings:

Carrier Pipe Thickness	Casing Pipe (O.D)	NCDOT Wall
4”		8”and under
0.188		12 ¾”
	0.188	

8"	0.250	16"
	0.250	18"
	0.250	20"
12"	0.250	24"
16"	0.312	30"
24"	0.375	36"
30"	0.500	42"
36"	0.500	48"

- d) The contractor may substitute larger size casing pipe with the proper wall thickness. A manual steering head or other approved guidance system is recommended for casing pipe 30 inches and larger and/or bores exceeding 100 feet in length.
- e) Installation shall be by dry boring and jacking of a smooth wall steel pipe true to liune and grade roadways, where indicated on the plans, all in accordance with these specifications and recommendations of the pipe manufacturer. The Contractor shall notify NCDOT 7 days prior to any contemplated work for securing any required permits.
- f) The boring operations shall be conducted at all times in such a manner so as not to create a hazard to nor impede the flow of traffic.
- g) The Contractor will be responsible for any repair costs if any settlement or damage to the roadway resulting from the boring operation occurs within one year after completion of the work. The Contractor shall maintain proper insurance as required by the North Carolina Department of Transportation.

19) Sub-heading 3.7. Piping Installation: Added "L. All C-900 pipe shall be installed and embedded in strict accordance with ASTM D-2321."

20) Sub-heading 3.7. Piping Installation: Added "M. Where conditions are, in the opinion of the Regulatory Agency Inspector/Engineer, unsuitable for laying pipe because of weather or trench conditions, the contractor shall be required to cease work until permission is given by the Regulatory Agency Inspector/Engineer for work to commence again providing such conditions have been corrected."

21) Sub-heading 3.9.C: Deleted "Bronze Corporation Stops. Comply with manufacturer's installation instructions," and added "Valves shall be set and jointed to pipe in the manner heretofore specified for cleaning, laying and joining pipe. Stuffing boxes wall be tightened and the valve shall be fully opened and fully closed to insure that all parts are in working condition. A valve box or masonry pit shall be provided for every valve. The valve box shall be centered and plumb over the wrench

nut of the valve. It shall not transmit shock or stress to the valve and shall follow manufacturer's installation instructions."

- 22) Sub-heading 3.9.D: Deleted "When a tapping sleeve and valve are being used, the valve, sleeve and machine assembly shall be air tested to hold at 150 psi for a five-minute duration in presence of the inspector prior to drilling or tapping the main. All tap coupons shall be given to the inspector. The valve shall be in the closed position during the testing," and added "Earth fill shall be carefully tamped around each valve box to a distance of 4 feet on all sides or to undisturbed soil."
- 23) Sub-heading 3.9. Valve Installation: Added "E. All dead ends on new mains shall have 2" Blow-off assembly installed as indicated on the drawings."
- 24) Sub-heading 3.13.F: after shall be, deleted "dechlorinated using methods acceptable to the Public Works Department," and added "with fresh water from an approved water source until the chlorine solution is dispelled. During flushing period, each fire hydrant on the line shall be opened and closed several times."
- 25) Sub-heading 3.13. Valve Installation: Added "J. The contractor shall take all necessary measures to prevent downstream erosion caused by flusing lines. All erosion/damages shall be repaired at no additional expense to the owner."

## **PLUMBING, MECHANICAL, & ELECTRICAL**

### **MECHANICAL:**

- 1) Electric heat for the split system heat pump shall be in three stages.
- 2) Electric heat for the rooftop heat pump shall be in three stages.

### **ELECTRICAL:**

- 1) All labor and materials related to the fire alarm system shall be by Simplex.
- 2) The Contractor shall coordinate all labor and materials related to the electrical service with Mr. Jim Cline of PWC. Mr. Cline can be reached at 910 263-4750. This coordination shall be considered mandatory.
- 3) Reference Sheet E2 and Sheet PE1: Electrical service shall be as outline on Sheet PE1; delete reference to electrical service on Sheet E2.

End of Addendum #1