

ADDENDUM #1

**Transylvania County Community Services Building HVAC Upfit Project,
Brevard, North Carolina**

Addendum #1

Oct. 23, 2019

This addendum supersedes all other addenda and forms a part of the bid documents, modifies the original project manual and drawings dated Sept. 30, 2019.

**Item #1: HVAC Project Manual: Section “15010H – BASIC HVAC REQUIREMENTS”
Section 2.2 DUCTWORK first paragraph is to be revised as follows:**

A. Section 2.2 DUCTWORK first paragraph is to be revised as follows:

“Rectangular and round duct shown on the plans shall be galvanized steel and insulated with Fiberglass Duct Wrap with a minimum ‘R’ value of 5.0. Fabricated in accordance with SMACNA low pressure duct standards. Seal all joints with a rubberized joint sealer.” Although not anticipated based upon the plans, if ductwork is located in crawl space or other non-conditioned spaces, fiberglass Duct Wrap with a minimum ‘R’ value of 8.0 is required.

Item #2: The Owner has agreed to provide the Contractor an entire floor at a time resulting in essentially two phases (one phase for each floor) to this project. The Owner has requested that each phase (Phase 1- Upper Level and Phase 2-Main Level) should be vacated no longer than eight week per floor/phase.

Item #3: Repair all holes in exterior brick veneer resulting from abandon conduits, piping, ducts/louvers, etc. that are related to the work on this project. All new brick work to match existing as indicated on the drawings.

Item #4: The Building Permit fees will be waived on this project. The County will submit the application for the Building Permit.

Item #5: The duct smoke detectors for this project shall be provided by owner. The existing building utilizes an addressable Simplex fire alarm system and the owner will contract with Simplex to provide the necessary system duct smoke detectors. The selected HVAC contractor shall allow time to make the final wire terminations on their shutdown contacts. Simplex will not terminate wire on the HVAC equipment. Additionally, selected HVAC contractor shall allow time for testing with owner’s fire alarm contractor.

- Item #6:** The owner to be responsible for removing/re-installing the smoke detectors and the security cameras in the ceilings and is not to be included in the Contractor's Bid.
- Item #7:** Replace SECTION 000020 - FORM OF PROPOSAL with the new Form of Proposal that is attached to this Addendum.
- Item #8:** Replace SECTION 0123000 – ALTERNATES with the new Section 0123000 – Alternate that is attached to this Addendum.
- Item #9:** **Question:** Are mechanical fittings on refrigerant lines acceptable?
- Response:** Braze Free fittings on refrigeration lines are acceptable if the following conditions are met. Contractor must use an engineered product rated for use with R410A. Basis of design shall be ZoomLock or quality equivalent and Contractor shall submit shop drawings and installation instructions on any braze free connector system proposed.
- Item #10:** **Question:** Will the new refrigerant piping route to the basement/crawl and then out to the outdoor equipment on the ground? Will the new refrigerant piping route to the ceiling of the main level and then over and out to the equipment on the ground?
- Response:** All refrigerant piping will enter the building in the basement/crawl space from the Heat Pump units mounted on the ground. There is a mixture of dedicated chases/closets/mechanical rooms to get the piping above the first floor and up to the second floor. Some AHU's may require coordination with the existing building and General Contractor to create new refrigerant line chases. Such work to be coordinated with the Owner/Arch/Engineer.
- Item #11:** **Question:** What is the projected path/idea for the condensate drains from the HVAC indoor equipment?
- Response:** There are multiple locations per floor including existing mop sinks on either end of the building and existing restrooms that are being converted to mechanical rooms. Condensate should be routed to the nearest location and terminate with an indirect connection to the existing sanitary system.
- Item #12:** **Question:** With respect to Supplementary Conditions 9.8.3.1, this cost should not be incurred by contractor unless specifically as a result of failure by contractor?

Response: This cost would not be incurred by the contractor unless the additional inspections are a result of failure by contractor to sufficiently correct the deficient work.

Item #13: Question: Is round duct acceptable as opposed to square duct?

Response: Contractors may convert the rectangular trunk ducts to equivalent round ducts in accordance with Alternate #3.

Item #14: Question: What are the requirement for the drop ceiling?

Response: Section #095113 Acoustical Panel Ceiling is attached with this Addendum #1.

Item #15: Question: Who is responsible for the demolition of the ductwork and grilles? Presumably the chosen HVAC contractor will be responsible for the reclaiming of old refrigerant and disposal of old HVAC equipment. Will the electrical contractor be responsible for demolition of existing HVAC high voltage?

Response: These issues related to various scope of work should be coordinated with the General Contractor. It is noted that with respect to various scopes of work such as refrigerant capture and disposal, electrical demolition and related electrical work associated with high voltage, etc. such work should only be performed by those licensed to execute such work.

SECTION 000020 - FORM OF PROPOSAL

DATE Oct. 30, 2019

TO: Transylvania County
101 South Broad Street
Brevard, NC 28712

I have received the documents entitled **HVAC Replacement at Transylvania County Community Services Building**, located at the corner of E. Morgan and S. Gaston Street, Brevard, North Carolina dated TBD. I have received **Addenda** _____ and have included their provisions in my Proposal. I have examined both the documents and the site and submit the following proposal. This proposal includes all work as indicated in the Drawings and Specifications.

This Form of Proposal must include the follow documents:

1. List of Subcontractors
2. Affidavit.
3. Contractors Qualification Form
4. Minority Business Participation Forms
5. Bid Security
6. E-Verify Affidavit

In submitting this proposal, I agree:

1. To hold my bid open for 45 days.
2. To enter into and execute a Contract, if awarded on the basis of this proposal.
3. To accomplish the work in accord with the Contract Documents.
4. To provide all required documentation regarding sales tax information associated with this project to the Owner in accordance with Government requirements in order for the Owners to receive reimbursement.
5. To maintain the terms of the E-Verify Affidavit.

BASE BID: (Base bid excludes Alternates and Unit Prices below)

I will construct this project for the lump-sum price of:

_____ Dollars (\$ _____).
Written Amount Numerical Amount

ALTERNATES: (Refer to Bid Documents for description of Alternates and clearly mark "Add" or "Deduct" for each alternate amount.)

Alternate #1: I will provide this Alternate for the lump-sum price of:
Add or Deduct \$ _____

Alternate #2: I will provide this Alternate for the lump-sum price of:
Add or Deduct \$ _____

Alternate #3: I will provide this Alternate for the lump-sum price of:
Add or Deduct \$ _____

Alternate #4: I will provide this Alternate for the lump-sum price of:
Add or Deduct \$ _____

Alternate #5: I will provide this Alternate for the lump-sum price of:
Add or Deduct \$ _____

I Propose and agree to complete the work within _____ calendar days from date the contract has been awarded.

UNIT PRICES: Please indicate price for each Unit Price Below. Unit Prices are **not** included in base bid.

Unit Price #1 (_____) per fixture as described in the project manual.

COMPANY NAME: _____

DATE: _____ **SIGNED:** _____

LICENSE #: _____

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of the Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1:

1. Alternate: Provide and install the welded prefab aluminum stair as indicated on Sheet A2.

B. Alternate No. 2:

1. Alternate: Remove all plaster ceilings, ceiling channels/framing, support wires, etc. that will result in the existing plaster ceiling system being removed in Main Level Corridors #101, 111, 113, 136, 135, Upper Level Corridors 201 and 211.

C. Alternate No. 3:

1. Contractors may convert the rectangular trunk ducts to equivalent round duct. Contractors shall submit their layout showing converted duct sizes and routing and submit shop drawings for the round duct detailing construction, gauge, connection types, and sealing practices. Contractor is responsible for verifying and maintaining all clearance shown on the drawings.

D. Alternate No. 4:

1. Contractors may convert the runouts shown as rigid round duct serving a single supply register to pre-insulated flexible ductwork of total lengths not to exceed 30'-0". Contractor to submit shop drawings and routing/sizing submittals for all flex runouts for approval of manufacturer, insulation value, and manufacturer's instructions for proper installation. Basic minimum expectations for methods of installation are shown below:
 - The ducting should be supported at the manufacturer's recommended intervals, but the supports should be no greater than 4 feet apart and there should be no more than ½ inch sag per foot between the supports. A connection to rigid duct or equipment is considered a support joint.
 - Long horizontal duct runs with sharp bends should have additional supports before and after the bend.
 - Supports should be at least 1.5 inches wide.
 - Straps should not compress the inner core or constrict air flow. The supports should not excessively compress the vapor barrier and insulation material because compressing the insulation could lead to condensation at that point.
 - Factory-installed support systems that are part of the flex duct can be used if manufacturer's procedures are followed.

- Flexible ducts may rest on ceiling joists or truss supports, if the manufacturer's support spacing guidance is followed.
- A support should be installed between a metal connection and a bend and the duct should be allowed to extend straight for at least one duct diameter before making the bend.
- Vertically installed ducts shall be supported every 6 feet at a minimum.

E. Alternate No. 5:

1. In lieu of the Contractor being responsible for construction waste bins, the transportation of trash/construction waste to the land fill and the tipping fees; Transylvania County will provide two trash bins (one for metal and one for trash) Monday - Friday. Process will be negotiated within contract.

END OF SECTION 012300

SECTION 095113 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes acoustical panels and exposed suspension systems for ceilings.

1.2 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Coordination Drawings: Drawn to scale and coordinating penetrations and ceiling-mounted items. Show the following:
 - 1. Ceiling suspension assembly members.
 - 2. Method of attaching hangers to building structure.
 - 3. Ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings.
- C. Samples: For each acoustical panel, for each exposed suspension system member, and for each color and texture required.
- D. Product test reports.
- E. Research/evaluation reports.
- F. Maintenance data.

1.3 QUALITY ASSURANCE

- A. Acoustical Testing Agency Qualifications: An independent testing laboratory or an NVLAP-accredited laboratory.
- B. Seismic Standard: Comply with the following:
 - 1. ASTM E 580.
 - 2. CISCA's "Recommendations for Direct-Hung Acoustical Tile and Lay-in Panel Ceilings--Seismic Zones 0-2."
 - 3. CISCA's "Guidelines for Seismic Restraint of Direct-Hung Suspended Ceiling Assemblies--Seismic Zones 3 & 4."
 - 4. NC Building Code.

1.4 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Acoustical Ceiling Units: Full-size units equal to **2.0** percent of quantity installed, but not fewer than 10 units.
 - 2. Suspension System Components: Quantity of each exposed component equal to **2.0** percent of quantity installed, but not fewer than components.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:
 - 1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the products specified.
 - 2. Products: Subject to compliance with requirements, provide one of the products specified.

2.2 GENERAL

- A. Acoustical Panel Standard: Comply with ASTM E 1264.
- B. Metal Suspension System Standard: Comply with ASTM C 635.
- C. Attachment Devices: Size for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated.
 - 1. Anchors in Concrete: **Expansion** anchors fabricated from corrosion-resistant materials, with holes or loops for attaching hangers of type indicated and with capability to sustain, without failure, a load equal to **five** times that imposed by ceiling construction, as determined by testing per ASTM E 488 or ASTM E 1512 as applicable, conducted by a qualified testing and inspecting agency.
 - 2. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hangers of type indicated, and with capability to sustain, without failure, a load equal to **10** times that imposed by ceiling construction, as determined by testing per ASTM E 1190, conducted by a qualified testing and inspecting agency.
- D. Wire Hangers, Braces, and Ties: Zinc-coated carbon-steel wire; ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
 - 1. Size: Select wire diameter so its stress at three times hanger design load (ASTM C 635, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch- (2.69-mm-) diameter wire.

- E. Seismic struts and seismic clips.
- F. Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that fit acoustical panel edge details and suspension systems indicated; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension system runners.

2.3 ACOUSTICAL PANELS

- A. Products:
 - 1. Fissured panel as manufactured by **Armstrong Fissured #705** or approved equal substitution in accordance with procedures outlined in Product Requirements Section 016000.
- B. Classification: panels.
 - 1. Type and Form: Type III, mineral base with painted finish; Form **2, water felted with C D pattern.**
- C. Color: **White.**
- D. NRC: .55
- E. CAC: 35.
- F. AC: Not less than 170.
- G. Edge Detail: Angled Tegular.
- H. Thickness: **5/8 inch (15 mm).**
- I. Size: **24 by 24 inches (610 by 610 mm).**

2.4 METAL SUSPENSION SYSTEM

- A. Products:
 - 1. Prelude XL 15/16" Exposed Tee suspension system or approved equal substitution in accordance with procedures outlined in Product Requirements Section 016000.
- B. Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet, prepainted, hot-dip galvanized according to ASTM A 653/A 653M, not less than G30 (Z90) coating designation, with prefinished **15/16-inch- (24-mm-)** wide metal caps on flanges.
 - 1. Structural Classification: **Intermediate**-duty system.
 - 2. End Condition of Cross Runners: **Override (stepped)** type.
 - 3. Cap Material: **Steel or aluminum** cold-rolled sheet.
 - 4. Cap Finish: **White.**
 - 5. Color: White

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Install acoustical panel ceilings to comply with **ASTM C 636** and seismic requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
- B. *Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width tiles at borders.***
- C. Suspend ceiling hangers from building's structural members, plumb and free from contact with insulation or other objects within ceiling plenum. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers, use trapezes or equivalent devices.
 - 1. Do not support ceilings directly from ceiling finish, permanent metal forms or floor deck; anchor securely into roof structural system.
 - 2. Do not attach hangers to steel deck tabs **or to steel roof deck.**
- D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate with concealed fasteners at intervals not more than 16 inches (400 mm) o.c. and not more than 3 inches (75 mm) from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet (3.2 mm in 3.66 m). Miter corners accurately and connect securely.
- E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
- F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

END OF SECTION 09511