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July 13, 2015

To: Potential Bidders

RE: Rochester Housing Authority,
Jonathan Child – Common Area Upgrades

9 pages including cover

ADDENDUM #3

See Attached

Acknowledgement:

I have received the above referenced Addendum # 3 and have used it in the calculation/preparation of this bid.

Contractor

THIS MUST BE SUBMITTED WITH YOUR BID SUBMISSION
FAILURE TO DO SO MAY RENDER YOUR BID INVALID.

**Rochester Housing Authority
Jonathan Child Common Areas Upgrade
HUNT 2285-032**

ADDENDUM No. 3

Date: July 13, 2015

The following Addendum (Addenda) shall be considered a part of the contract documents prepared by HUNT ENGINEERS, ARCHITECTS & LAND SURVEYORS, P.C. dated **May 12 and June 2, 2015.**

Drawings Issued by this Addendum:

None

Project Manual Sections Issued by this Addendum:

None

Architect's Supplemental Instructions Issued by this Addendum:

Cleaning Methods for Slate and Terrazzo Flooring

Revisions to Project Manual:

Item AD 3-1 Specification 09 51 00 Acoustical Ceilings revised - tile thickness 5/8"

Item AD 3-2 ASI - Floor Cleaning Methods for Stairwells - attached (no spec #)

Revisions to Project Drawings:

None

END OF ADDENDUM.

SECTION 09 51 00
ACOUSTICAL CEILINGS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Suspended metal grid ceiling system.
- B. Acoustical units.

1.2 RELATED REQUIREMENTS

- A. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 07 90 05 - Joint Sealers: Acoustical sealant.

1.3 REFERENCE STANDARDS

- A. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2008.
- B. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials; 2008a.
- C. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2014.
- D. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials; 2006.
- E. UL (FRD) - Fire Resistance Directory; Underwriters Laboratories Inc.; current edition.

1.4 SUBMITTALS

- A. See Section 01 33 00 - Submittal Procedures.
- B. Product Data: Provide data on acoustical units.
- C. Samples: Submit two samples 6 by 6 inch in size illustrating material and finish of acoustical units.
- D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
- E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 60 00 - Product Requirements, for additional provisions.
 - 2. Extra Acoustical Units: Quantity equal to 5 percent of total installed.

1.5 QUALITY ASSURANCE

- A. Fire-Resistive Assemblies: Complete assembly listed and classified by UL (FRD) for the fire resistance indicated.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum five years documented experience.
- C. Installer Qualifications: Company specializing in performing the work specified in this section with minimum five years documented experience.

- D. Conform to CISCA requirements.
- E. Surface Burning Characteristics: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
- F. Single Source Responsibility: To obtain combined warranty for the suspension system and the acoustical panel, color match or ceiling panel and suspension system compatibility, all acoustical panel and suspension system components shall be produced and supplied by one manufacturer. Materials supplied by more than one manufacturer are not acceptable.
- G. Requirements of regulatory agencies: Codes and regulations of authorities having jurisdiction.
- H. Source quality control:
 - 1. Test reports: Manufacturer will provide test certification for minimum requirements as tested in accordance with applicable industry standards and/or to meet performance standards specified by various agencies.
 - 2. Changes from system: System performance following any substitution of materials or change in assembly design must be certified by the manufacturer.
 - 3. All ceiling panel cartons must contain UL label for acoustical compliance.
 - 4. All suspension system cartons must contain UL label for load compliance per ASTM C635.
- I. Warranty
 - 1. Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace acoustical panels that fail within the warranty period. Failures include, but are not limited to:
 - a. Acoustical Panels: Sagging and warping as a result of defects in materials or factory workmanship.
 - b. Grid System: Rusting and manufacturer's defects
 - c. Acoustical Panels with BioBlock Plus or designated as inherently resistive to the growth of micro-organisms installed with Armstrong suspension systems: Visible sag and will resist the growth of mold/mildew and gram positive and gram negative odor and stain causing bacteria.
 - 2. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.6 DELIVERY AND STORAGE OF MATERIALS

- A. All materials shall be delivered in their original unopened packages and stored in an enclosed shelter providing protection from damage and exposure to the elements.
- B. Storage:
 - 1. Panels: Storage time of materials at the job site should be as short as possible and environmental conditions should be as near as possible to those specified for occupancy. Excess humidity during storage can cause expansion of material and possible warp, sag, or poor fit after installation. Chemical changes in the mat and/or coatings can be aggravated by excess humidity and cause discoloration during storage, even in unopened cartons. Cartons should be removed from pallets and stringers to prevent distortion of material. Long-term (6-12 months) storage under uncontrolled environmental conditions should be avoided.
 - 2. Suspension System: Store in manner that will prevent warping, scratches and damage of any kind.
- C. Handling: Handle in such manner to ensure against racking, distortion, or physical damage of any kind.

- D. Damaged or deteriorated materials should be removed from the premises. Immediately before installation, to stabilize tile and panels, store them at a location where temperature and humidity conditions duplicate those ambient during installation and anticipated for occupancy.

1.7 FIELD CONDITIONS

- A. Maintain uniform temperature and humidity prior to, during, and after installation. Do not use ceiling panels in extreme or continuous high humidity, or areas exposed directly to weather or water. Ceiling panels are sized and designed for use within the standard occupancy range of temperature and humidity, 65-85 °F, no more than 70% RH (relative humidity). Humidity can greatly affect product dimensional stability and sag resistance. Sag can become noticeable during periods of high humidity lasting only a few hours.
- B. Allow time for dimensional changes in ceiling panels stored at temperature/humidity conditions well outside of those recommended for service. Locate materials on-site at least 24 hours before beginning installation to allow materials to reach temperature and moisture content equilibrium. With increases in temperature/humidity, these products expand (up to 1/64 in./ft. at 85 °F, 90% RH) and may not fit into a fixed grid. Conversely, with decreases, these products will be undersize, but expand to normal when standard ambient conditions return.
- C. Indicate formaldehyde VOC Classification, as tested by ASTM D5116 and according to standards established by the Collaborative for High-Performance Schools (CHPS), the State of Washington, the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), and the American National Standards Institute (ANSI) & The California Office of Environmental Health Hazard Assessment (COEHHA).
 - 1. "Formaldehyde-free"
 - a. The California Office of Environmental Health Hazard Assessment recognizes products with emissions of less than 3 parts per billion (ppb) as "formaldehyde-free".
 - 2. "Low Formaldehyde"
 - a. The Collaborative for High Performance Schools standard for VOC emissions limits the amount to 13.5ppb = 0.0135 ppm = 16.5µg/m³ as a Low Formaldehyde VOC Class panels.

1.8 SEQUENCING

- A. Install acoustic units after interior wet work is dry, including residual moisture from plaster, concrete, or terrazzo work.

PART 2 PRODUCTS

2.1 ACOUSTICAL UNITS

- A. Manufacturers:
 - 1. Armstrong World Industries, Inc : www.armstrong.com.
 - 2. USG: Product Olympia Micro ClimaPlus : www.usg.com
 - 3. Or Approved Equal.
- B. Acoustical Units - General: ASTM E1264, Class A.
 - 1. Units for Installation in Fire-Rated Suspension System: Listed and classified for the fire-resistive assembly as part of suspension system.
- C. Acoustical Tile Type anti-mold & mildew: Painted mineral fiber, ASTM E1264 Type III, with the following characteristics:
 - 1. VOC Content: As specified in Section 01 61 16.
 - 2. Antimicrobial treatment for inhibition of mold/mildew and odor/stain-causing bacteria.

3. Size: 24 by 48 inches.
4. Thickness: 5/8 inches.
5. Composition: Water felted.
6. NRC Range: .55 to .60, determined in accordance with ASTM E1264.
7. Edge: Square.
8. Surface Color: White.

2.2 SUSPENSION SYSTEM(S)

- A. Manufacturers:
 1. Same as for acoustical units.
- B. Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with stabilizer bars, clips, splices, and perimeter moldings as required.
- C. Exposed Steel Suspension System: Formed steel, commercial quality cold rolled; heavy-duty with hot-dipped galvanized coating.
 1. Profile: Tee; 15/16 inch wide face.
 2. Finish: White .

2.3 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application and ceiling system flatness requirement specified.
- B. Perimeter Moldings: Same material and finish as grid.
 1. At Exposed Grid: Provide L-shaped molding for mounting at same elevation as face of grid.
- C. Acoustical Sealant For Perimeter Moldings: Specified in Section 07 90 05.
- D. Touch-up Paint: Type and color to match acoustical and grid units.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that layout of hangers will not interfere with other work.

3.2 INSTALLATION - SUSPENSION SYSTEM

- A. Install suspension system in accordance with ASTM C 636/C 636M and manufacturer's instructions, and as supplemented in this section.
- B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
- C. Locate system to the existing layout being demolished - all ceiling mounted equipment to be re-installed in new system in same location.
- D. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- E. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.

- F. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- G. Do not eccentrically load system or induce rotation of runners.
- H. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
 - 1. Install in bed of acoustical sealant.
 - 2. Use longest practical lengths.
 - 3. Overlap and rivet corners.
- I. Form expansion joints as detailed. Form to accommodate plus or minus 1 inch movement. Maintain visual closure.
- J. Where installing sheet metal trim between two overlapping ceiling planes, provide a StrongBack Support (SB-12) as an attachment point for the lower ceiling plane. Span entire length of connection.

3.3 INSTALLATION - ACOUSTICAL UNITS

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
- C. Fit border trim neatly against abutting surfaces.
- D. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
- E. Cutting Acoustical Units:
 - 1. Cut to fit irregular grid and perimeter edge trim.

3.4 TOLERANCES

- A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.
- B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

END OF SECTION

Follow these Cleaning methods for Slate Flooring:

For Regular Cleaning:

- First make sure to sweep, dust, or dry mop the surface to remove any loose dirt.
- Mix a few drops of mild dish detergent in a couple of cups of warm water.
- Use a soft rag (or mop) soaked in the soap solution to rub off dirt and grime.
- Dry with a towel and let the surface air dry completely overnight.

For Deeper Cleaning:

- Follow the steps above for regular cleaning, but once the surface is dry, apply a thin layer of teak oil to the slate with a soft cloth. Teak oil is reasonably priced and available at most large hardware stores. Slate oil also works, but it's much more expensive and harder to find.

For Stain Removal:

- Mix equal parts water and hydrogen peroxide in a spray bottle and spray onto any stains. Let it sit for five or ten minutes, then scrub with a soft scrub pad (not steel wool) or a soft-bristled brush. (Be careful if you have a slate floor with colored grout, as this bleach solution could damage the color of that grout.)
- For tougher stains, mix together peroxide and baking soda into a bubbly paste. After the bubbles die down, apply the paste to the stain and let it set. Then wipe the slate clean with a damp, warm towel.

It's best to clean your slate with water and mild detergent at least every two or three months, even if it doesn't appear dirty, to help avoid grimy buildup and staining. And since slate is porous (very prone to absorbing moisture and stains), it is recommended that you seal it with a stone-and-tile sealer, a product that is available from big hardware stores or tile vendors.

With regular maintenance, your slate can remain beautiful, warm, and welcoming for years to come.

Follow These Cleaning Methods for Terrazzo

Follow the recommendations of The National Terrazzo and Mosaic Association, Inc., *Terrazzo: Specifications, Details, Technical Data*

General Recommendations:

1. Clean as often as needed to keep grime and sand removed. Remember that soil acts as an abrasive and damages the floor.
2. Use only **neutral liquid cleaners** (meaning those which are neither acid nor alkaline). For best results, use a commercial cleaner made especially for terrazzo. All-purpose household cleaners, soaps, detergents and wax removers usually contain one or more alkalis, and so should not be used on terrazzo. For general cleaning, use one cup of neutral cleaner with each three gallons of water — or follow manufacturer's directions.
3. Wet mop the solution onto the floor, and allow to remain several minutes. Then mop up the dirt-filled solution, changing rinse water often. This helps to remove all soil and also does away with unsightly "moplines." Keep the floor wet at all times during the cleaning operation. Otherwise, dissolved soil dries back onto the floor. When the floor is dry, buff with an electric polishing machine, if you have one. Buffing helps restore the natural sheen on your floor.
4. To remove stubborn soil, periodically use an electric scrubbing machine with a stronger solution of the neutral cleaner.
5. Daily sweeping or dusting will mean easier weekly care and more attractive floors. Do not use an oiled mop or oily sweeping compound. Oils in any form can penetrate the surface and permanently discolor terrazzo floors.
6. Wipe up spilled materials quickly so staining has no chance to occur.