



MORE THAN ARCHITECTS

ADDENDUM

NO. 4

TO THE DRAWINGS AND THE PROJECT MANUAL

PROJECT NAME: Humble ISD Creekwood and Riverwood Middle School Additions and Renovations

CLIENT NAME: Humble ISD

LOCATION: Humble, Texas

PROJECT NUMBER: 1821-13-01, 1821-13-02

PROPOSAL DATE: Thursday, May 8th, 2025, 2:00 PM

ADDENDUM DATE: Monday, May 5th, 2025

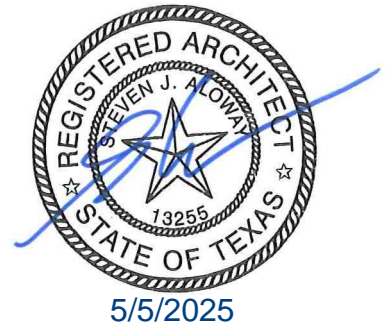
For additional information regarding this project, contact Ross Morgan at 800.687.1229.



THIS ADDENDUM INCLUDES:

Civil Items	0 Pages
Landscape Items	0 Pages
Structural Items	0 Pages
Architectural Items	1 Page
Foodservice Items	0 Pages
Plumbing Items	0 Pages
Mechanical Items	0 Pages
Electrical Items	0 Pages
Technology Items	0 Pages

AND ALL ATTACHED REVISED DRAWING REFERENCES IN THE ADDENDUM



ARCHITECTURAL ITEMS FOR ADDENDUM NO. 4

NOTICE TO PROPOSERS:

- A. This Addendum shall be considered part of the contract documents for the above-mentioned project as though it had been issued at the same time and incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original contract documents, this Addendum shall govern and take precedence.
- B. Proposers are hereby notified that they shall make any necessary adjustments in their estimate on account of this Addendum. It will be construed that each Proposer's proposal is submitted with full knowledge of all modifications and supplemental data specified therein. Acknowledge receipt of this addendum in the space provided on the proposal form. Failure to do so may subject Proposer to disqualification.

REFERENCE IS MADE TO THE DRAWINGS AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

AD No 4, Arch. Item 1: To the Project Manual, "09 5100 – ACOUSTICAL CEILINGS."

- Replace this section with the attached in it's entirety.

DRAWINGS:

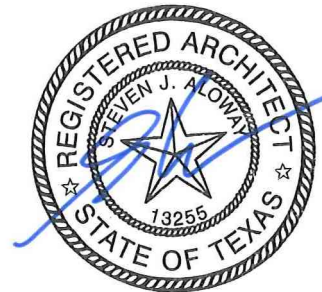
No Drawing Revisions in this Addendum.

QUESTIONS RECEIVED:

- 1) Addendum 02 is showing black floor mastic and black vapor barrier mastic in multiple areas of the school. However, the scope of work regarding the abatement is not clear. Please clarify what abatement scope should be included in our pricing.
Response: Refer to Attachment "CMS Ext. Vapor Barrier (NESHAP) 3603 W. Lake Houston Pkwy. Specs.pdf" from Addendum 3 for clarification on abatement scope.

END OF ARCHITECTURAL ADDENDUM

**SECTION 09 5100
ACOUSTICAL CEILINGS**



5/5/2025

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Suspended metal grid ceiling system.
- B. Decorative Grid System Trim
- C. Acoustical units.

1.02 RELATED REQUIREMENTS

- A. Section 05 3100 - Steel Decking: Placement of special anchors or inserts for suspension system.
- B. Section 07 2100 - Thermal Insulation: Acoustical insulation.
- C. Section 08 3100 - Access Doors and Panels: Access panels.

1.03 REFERENCE STANDARDS

- A. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2013.
- B. ASTM E580/E580M - Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions; 2017.
- C. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2014.
- D. Cisca (AC) - Acoustical Ceilings: Use and Practice; 1999.
- E. UL (FRD) - Fire Resistance Directory; Current Edition.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- B. Do not install acoustical units until after interior wet work is dry.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate grid layout and related dimensioning, junctions with other ceiling finishes, and mechanical and electrical items installed in the ceiling.
- C. Product Data: Provide data on suspension system components and acoustical units.
- D. Samples: Submit two samples 6 by 6 inch in size illustrating material and finish of acoustical units.
- E. Samples: Submit two samples each, 12 inches long, of suspension system main runner, cross runner, and perimeter molding.
- F. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
- G. Manufacturer's certificate that products meet or exceed specified requirements.
- H. Material Safety Data Sheets under provisions of Section 01 7800 - Closeout Submittals for the following items:
 - 1. All mastics, glues, and adhesives
 - 2. Acoustical ceiling tile
- I. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 6000 - Product Requirements, for additional provisions.

2. Extra Acoustical Units: Quantity equal to 5 percent of total installed.

1.06 QUALITY ASSURANCE

- A. Fire-Resistive Assemblies: Complete assembly listed and classified by UL for the fire resistance indicated.
- B. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- C. Acoustical Unit Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- D. Installer Qualifications: An entity experienced in the installation of acoustical ceiling systems similar to requirements for this Project, and acceptable to, or licensed by, acoustical ceiling systems manufacturer.
- E. Comply with the following standards:
 - 1. Cisca (AC) "Acoustical Ceilings: Use and Practice."
 - 2. Cisca (AC) "Guidelines for Seismic Restraint Direct Hung Suspended Ceiling Assemblies."

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Comply with pertinent provisions of Section 01 6000 – Product Requirements.
- B. Deliver acoustical ceiling system components in manufacturer's original unopened packages or containers, with labels intact.
- C. Store all components to provide suitable protection against deleterious effects from exposure to moisture, direct sunlight, or other causes.
- D. Handle all components to preclude damage. Take special precaution to prevent damage to acoustical ceiling unit edges and corners.
- E. Comply with manufacturer's Material Safety Data Sheets (MSDS) for delivery, storage, and handling of components.

1.08 FIELD CONDITIONS

- A. Maintain uniform temperature of 60 - 85 degrees F, and maximum relative humidity of 70 percent prior to, during, and after acoustical unit installation.
- B. Prior to installation, the following conditions must exist:
 - 1. All windows and exterior doors in place and roof watertight.
 - 2. Work of all wet trades completed and thoroughly dried to installation of any system components.
 - 3. Mechanical and Electrical trades shall have completed their work above ceiling line prior to acoustical ceiling systems installation. Coordinate with Mechanical and Electrical trades prior to start of installation.

1.09 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. The manufacturer shall provide a minimum 15-year acoustical ceiling and suspension system warranty. Warranty shall warrant against ceiling tile sagging, warping and suspension grid rusting.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acoustic Tiles/Panels:
 - 1. Armstrong World Industries, Inc: www.armstrongceilings.com.
 - 2. CertainTeed Corporation: www.certainteed.com.
 - 3. Rockfon, LLC: www.rockfon.com/#sle.

4. USG: www.usg.com.
 5. Substitutions: See Section 01 6000 - Product Requirements.
- B. Suspension Systems:
1. Same as for acoustical units.
 2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ACOUSTICAL UNITS

- A. Acoustical Tile Type L1 - Standard Panel: Painted mineral fiber, ASTM E 1264 Type III, Form 2, Sag Resistant Panels with the following characteristics:
1. Size: 24 by 24 inches.
 2. Thickness: 3/4 inches.
 3. Composition: Water felted.
 4. Light Reflectance: Not less than 0.82 percent, determined in accordance with ASTM E1264.
 5. NRC Range: Not less than 0.70, determined in accordance with ASTM E1264.
 6. Ceiling Attenuation Class (CAC): Not less than 35, determined in accordance with ASTM E1264.
 7. Edge: Square.
 8. Surface Color: White.
 9. Surface Pattern: CE (perforated, small holes and lightly textured)..
 10. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical tiles treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold and mildew.
 11. Products:
 - a. Basis of Design: School Zone Fine Fissured 1713 as manufactured by Armstrong World Industries
 - b. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph 2.01.
 - c. Substitutions: See Section 01 6000 - Product Requirements.
- B. Acoustical Tile Type L2 - Impact Resistant Panel: Painted mineral fiber, ASTM E 1264 Type III, Form 2, Sag Resistant Panels with the following characteristics:
1. Size: 24 by 24 inches.
 2. Thickness: 3/4 inches.
 3. Composition: Water felted.
 4. Light Reflectance: Not less than 0.87 percent, determined in accordance with ASTM E1264.
 5. NRC Range: Not less than 0.50, determined in accordance with ASTM E1264.
 6. Ceiling Attenuation Class (CAC): Not less than 33, determined in accordance with ASTM E1264.
 7. Edge: Square.
 8. Surface Color: White.
 9. Surface Pattern: CE (perforated, small holes and coarse textured).
 10. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical tiles treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold and mildew.
 11. Provide Impact Retention Clip System as per manufacturers specifications.
 12. Products:
 - a. Basis of Design: Armatuff 861 as manufactured by Armstrong World Industries
 - b. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph 2.01.
 - c. Substitutions: See Section 01 6000 - Product Requirements.

- C. Acoustical Tile Type L4 - Foodservice Panel: Painted mineral fiber, ASTM E 1264 Type IX Form 2, Sag Resistant Panels with the following characteristics:
1. Size: 24 by 24 inches.
 2. Thickness: 5/8 inches.
 3. Composition: Water felted.
 4. Light Reflectance: Not less than 0.89 percent, determined in accordance with ASTM E1264.
 5. Ceiling Attenuation Class (CAC): Not less than 33, determined in accordance with ASTM E1264.
 6. Edge: Square.
 7. Surface Color: White.
 8. Surface Pattern: G (smooth texture).
 9. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical tiles treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold and mildew.
 10. Products:
 - a. Basis of Design: Kitchen Zone 673 as manufactured by Armstrong World Industries
 - b. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph 2.01.
 - 1) Vinyl faced, gypsum core products are acceptable.
 - c. Substitutions: See Section 01 6000 - Product Requirements.
- D. Acoustical Tile Type L5 - Acoustical "Reflective" Panel: Painted mineral fiber, ASTM E 1264 Type III, Form 2, Sag Resistant Panels with the following characteristics:
1. Size: 24 by 24 inches.
 2. Thickness: 5/8 inches.
 3. Composition: Water felted.
 4. Light Reflectance: Not less than 0.85 percent, determined in accordance with ASTM E1264.
 5. NRC Range: Not less than 0.55, determined in accordance with ASTM E1264.
 6. Ceiling Attenuation Class (CAC): Not less than 33, determined in accordance with ASTM E1264.
 7. Edge: Square.
 8. Surface Color: White.
 9. Surface Pattern: CE (perforated, small holes and lightly textured)..
 10. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical tiles treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold and mildew.
 11. Products:
 - a. Basis of Design: Fine Fissured 1728 as manufactured by Armstrong World Industries
 - b. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph 2.01.
 - c. Substitutions: See Section 01 6000 - Product Requirements.
- E. Glass Fiber Acoustical Panels Type L6 – Acoustical "Absorptive" Panel: painted faced glass fiber, ASTM E 1264 Type XII, Form 2, Sag Resistant Panels with the following characteristics:
1. Size: 24 by 48 inches.
 2. Thickness: 7/8 inches.
 3. Light Reflectance: Not less than 0.88 percent, determined in accordance with ASTM E1264.
 4. NRC Range: Not less than 0.90, determined as specified in ASTM E 1264.
 5. Articulation Class (AC): Not less than 190, determined in accordance with ASTM E1264.
 6. Edge: Kerfed.

7. Surface Color: White.
 8. Surface Pattern: E (fine texture).
 9. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical tiles treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold and mildew.
 10. Products:
 - a. Basis of Design: Optima Concealed 8538PB as manufactured by Armstrong World Industries
 - b. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph 2.01.
 - c. Substitutions: See Section 01 6000 - Product Requirements.
- F. Acoustical Tile Type L7 – Acoustical "Absorptive" Ceiling-General Use Panel: Painted mineral fiber, ASTM E 1264 Type IV, Form 2, Sag Resistant Panels with the following characteristics:
1. Size: 24 by 24 inches.
 2. Thickness: 1 inches.
 3. Composition: Water felted.
 4. Light Reflectance: Not less than 0.86 percent, determined in accordance with ASTM E1264.
 5. NRC Range: Not less than 0.85, determined in accordance with ASTM E1264.
 6. Articulation Class (AC): Not less than 170, determined in accordance with ASTM E1264.
 7. Ceiling Attenuation Class (CAC): Not less than 35, determined in accordance with ASTM E1264.
 8. Edge: Square.
 9. Surface Color: White.
 10. Surface Pattern: E (lightly textured).
 11. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical tiles treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold and mildew.
 12. Products:
 - a. Basis of Design: Calla 2820 as manufactured by Armstrong World Industries
 - b. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph 2.01.
 - c. Substitutions: See Section 01 6000 - Product Requirements.

2.03 SUSPENSION SYSTEM(S)

- A. Metal Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with stabilizer bars, clips, splices, perimeter moldings, and hold down clips as required.
- B. Exposed Steel Suspension System: Formed steel, commercial quality cold rolled; heavy-duty.
 1. Profile: Tee; 15/16 inch wide face, main tee 1-1/2 inch, cross tee 1-1/2 inch.
 2. Construction: Double web.
 3. Finish: White painted.
 4. Products:
 - a. Basis of Design for Non-Fire Rated Assemblies – Ceiling Types I, II, V, VI, VII and IX: "Prelude XL Galvanized Capped" as manufactured by Armstrong World Industries
 - b. Basis of Design for Non-Fire Rated Assemblies – Ceiling Types III, IV: "Prelude XL Aluminum Capped" as manufactured by Armstrong World Industries
 - c. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph 2.01. Ceiling Tile and Grid shall be as approved by the manufacturer.
 - d. Substitutions: See Section 01 6000 - Product Requirements.

2.04 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application and ceiling system flatness requirement specified.
 - 1. Angle Hangers: ASTM A 446 steel with G90 coating.
 - 2. Flat Hangers: Zinc-coated steel.
 - 3. Hanger Rods: Zinc-coated steel.
- 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. Decorative Grid System Trim
 - 1. Physical properties.
 - a. Extruded aluminum alloy 6063 trim channel, 10' straight or curved profiles.
 - b. Concealed connections to grid with T-bar connection clip, including all necessary trim for corners inside and outside and all accessories.
 - c. Size: 8" wide face with 3/4" horizontal legs, straight or curved sections with special bosses formed for attachment to Axiom T-bar connection clip or hanging clip.
 - d. Color: Match color of grid.
 - e. Finish: Factory-applied baked polyester paint.
 - 2. Products:
 - a. Basis of Design: Axiom, Classic Trim as manufactured by Armstrong World Industries.
 - b. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph 2.01.
 - c. Substitutions: See Section 01 6000 - Product Requirements.
- D. Acoustical Sealant For Perimeter Moldings: Non-hardening, non-skinning, for use in conjunction with suspended ceiling system.
- E. Touch-up Paint: Type and color to match acoustical and grid units.
- F. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

PART 3 EXECUTION

3.01 EXAMINATION

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

3.02 INSTALLATION - SUSPENSION SYSTEM

- A. Install suspension system in accordance with UL design requirements ASTM C 636/C 636M, ASTM E 580/E 580M, 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. Lay out system to a balanced grid design with edge units no less than 50 percent of acoustical unit size.
- D. Main runners directly suspended by minimum 12 gage galvanized steel wire; hanger wire wrapped tightly a minimum three full turns.
 - 1. Runner Spacing: 4'-0".
 - 2. Hanger Spacing: 4'-0".
- E. Main runners interconnected by cross-tees to form modules as shown on reflected ceiling plans. Suitable cross-tee lengths adjacent to recessed light fixtures on each side not supported by a main runner.

1. Cross-Tee Spacing: 4'-0".
- F. Install after major above-ceiling work is complete. Coordinate the location of hangers with other work.
- G. Provide hanger clips during steel deck erection. Provide additional hangers and inserts as required.
- H. 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.
- I. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- J. Do not eccentrically load system or induce rotation of runners.
- K. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
 1. Use longest practical lengths.
 2. Overlap and rivet corners.
- L. Add extra ceiling wire at each corner of light fixtures and grilles.
- M. Fire rated main runner/cross runner fire expansion relief cutout shall be evaluated for load performance where field application requires the expansion relief to be designed more than 3" from the closest support point.
- N. Form expansion joints as detailed. Form to accommodate plus or minus 1 inch movement. Maintain visual closure.

3.03 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. Install acoustical ceiling units from a three-carton mix to obtain uniform distribution of surface variations.
- D. Fit border trim neatly against abutting surfaces.
- E. Install units after above-ceiling work is complete.
- F. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
- G. Cutting Acoustical Units:
 1. Cut to fit irregular grid and perimeter edge trim.
 2. Make field cut edges of same profile as factory edges.
- H. Sound walls: Set acoustical ceiling boards in four continuous beads of 1/4" diameter sealant, one at top of each edge of the gypsum drywall and two on top of the top metal runner track.
- I. Install hold-down clips on each panel to retain panels tight to grid system at rated assemblies; comply with fire rating requirements.

3.04 ADJUSTMENTS

- A. Make adjustments in ceiling system as necessary to ensure compliance with this specification.
- B. Remove and replace damaged or soiled acoustical ceiling units.

3.05 CLEANING

- A. Remove debris which may have been caused during installation of this work.

- B. In addition to other stipulated requirements for cleaning, completely remove fingerprints and traces of soil from the surfaces of grid and acoustical materials, using only those cleaning materials recommended for the purpose by the manufacturer of the material being cleaned.

END OF SECTION