Post Bid Addendum
NO. 6

Date: April 9, 2021
To: All Prime Bidders of Record and Plan Holders
Project: East Tennessee State University – Lamb Hall Renovation

Johnson City, TN

This post bid addendum is hereby made a part of the contract documents and the Specifications of the above-named project. All other requirements of the original Specifications shall remain in effect in their respective order. Acknowledge receipt of this Addendum by inserting its number and date in the Proposal Form.

This Post Bid Addendum No 6 consists of _5_ typewritten pages, and _7_ attachments.

General

All Vreeland Engineering Inc. SE, SC, E, & T drawings included in the original documents and addenda shall have the project name in the title block read as follows:

   East Tennessee State University
   Lamb Hall Renovation
   Johnson City, Tennessee
   SBC No.: 166/005-09-2017CM

Sheets E1.3, E1.4, E2.2, E3.1, E3.2, E3.3, E3.4, E3.5, T1.0, & T1.2 revision block date for Revision #1 shall read:

   Rev. #1, Addendum #1, 2/23/2021

As follows for clarification are the typewritten pages and attachments for the issued Addenda:

Addendum No 1 consists of _5_ typewritten pages, and _134_ attachments.

Addendum No 2 consists of _6_ typewritten pages, and _64_ attachments.

Addendum No 3 consists of _2_ typewritten pages, and _35_ attachments.

Addendum No 4 consists of _4_ typewritten pages, and _46_ attachments.

Addendum No 5 consists of _2_ typewritten pages, and _13_ attachments.

Note, number of attachments has been revised. (original attachments, 95 included individual specification pages)
Corrections to Addendum No 1  
**Drawings - Addendum No 1**

Refer to Drawings, Addendum No 1, page 2. Drawing Sheet in written Addendum should read LS110, not LS1.10.

Refer to Drawings, Addendum No 1, page 2. Drawing Sheet in written Addendum should read LS111, not LS1.11.

Refer to Drawings, Addendum No 1, page 2. Drawing Sheet in written Addendum should read LS112, not LS1.12.

Refer to Drawings, Addendum No 1, page 2. Drawing Sheet in written Addendum should read LS113, not LS1.13.

Refer to Drawings, Addendum No 1, page 2. Drawing Sheet in written Addendum should read LS114, not LS1.14.

Refer to Drawings, Addendum No 1, page 3. Drawing Sheet in written Addendum should read LS116, not LS1.16.

Refer to Drawings, Addendum No 1, page 3. Drawing Sheet in written Addendum should read LS402, not LS4.02.

Refer to Drawings, Addendum No 1, page 3. Drawing Sheet in written Addendum should read A110, not A1.10.

Refer to Drawings, Addendum No 1, page 3. Drawing Sheet in written Addendum should read A111, not A1.11.

Refer to Drawings, Addendum No 1, page 3. Drawing Sheet in written Addendum should read A112, not A1.12.

Refer to Drawings, Addendum No 1, page 3. Drawing Sheet in written Addendum should read A113, not A1.13.

Refer to Drawings, Addendum No 1, page 3. Drawing Sheet in written Addendum should read A114, not A1.14.

Corrections to Addendum No 2  
**Specifications - Addendum No 2**

Refer to Specifications Existing Specification Section 02 82 33 Work with Other Hazardous Materials. Section number for this specification section shall be changed to **02 84 00** Work with Other Hazardous Materials. Header and footers for the specification section are correct.

Refer to Specifications. Specification section 04 73 13 Calcium Silicate Manufactured Stone. Replace footer, footer shall read 04 73 13 Calcium Silicate Manufactured Stone.
Refer to Specifications. Specification section 09 65 00 Resilient Floor Coverings. Replace footer, footer shall read 09 65 00 Resilient Floor Coverings.

**Drawings - Addendum No 2**

Refer to Drawings, Addendum No 2, page 4. Refer to Drawing Sheets LS110 through LS114. Replace existing Sheets LS110 through LS114. Drawing sheets have been modified to coordinate occupancy counts and load factor information in the Egress Plans with occupancy load information provided on sheet LS115.

Refer to Drawings, Addendum No 2, page 5. Refer to Sheet S2.4, See attached precast concrete plank loading diagram. Delete “Refer to Sheet S2.4”. The attached 8.5 x 11 precast concrete plank loading diagram shall be included in Section 03 40 00 Precast, Prestressed Hollow Core Plank.

Refer to Drawings, Addendum No 2. The following mechanical drawings have been modified by this Addendum; M112, M113 and M114.

**Corrections to Addendum No 3**

**Specifications - Addendum No 3**

Refer to Specifications. Specification section 09 51 13 Acoustical Panel Ceilings.

“Paragraph 2.2 Panels Type Act – Replace line A. with the following:

A. Acoustical Panels Type: Basis of Design: Armstrong Ceilings; Optima Tegular.

13. Delete line 13.”

Specification section 09 51 13 Acoustical Panel Ceilings was reissued in Addendum No 3 and incorporated the line items above.

**Drawings - Addendum No 3**

Refer to Drawing Sheets Asbestos Abatement Plan Sheets AS-1 through AS-16. Add to set. The Sixteen abatement drawing sheets issued in Addendum No 3 shall be included in Section 02 82 33 Removal and Disposal of Asbestos-Containing Materials.

**Corrections to Addendum No 4**

**Specifications - Addendum No 4**

Refer to Specifications. The following are clarifications regarding the replacement, addition, deletion or added notations regarding specification sections issued under Addendum No 4:

- 00 01 10 Table of Contents, section replaced.
- 00 01 15 List of Drawings, section replaced.
- 02 35 53 Laboratory Casework, paragraph 2.02 clarification, added notation.
- 04 01 21 Restoration and Cleaning, section added.
- 04 20 00 Unit Masonry, section replaced.
- 08 71 00 Door Hardware, Hardware set 3A added, added notation.
- 08 74 13 Electronic Stand-Alone Card Access Locking System, section deleted.
- 08 80 00 Glazing, paragraph 1.06 clarification, added notation.
Drawings - Addendum No 4

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M002, not M0.2.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M110, not M1.10.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M111, not M1.11.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M113, not M1.13.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M114, not M1.14.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M116, not M1.16.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M211, not M2.11.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M212, not M2.12.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read M214, not M2.14.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P111, not P1.11.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P112, not P1.12.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P113, not P1.13.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P114, not P1.14.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P119, not P1.19.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P120, not P1.20.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P121, not P1.21.

Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P122, not P1.22.

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Refer to Drawings, Addendum No 4, page 3. Drawing Sheet in written Addendum should read P213, not P2.13.

Refer to Drawings, Addendum No 4, page 4. Drawing Sheet in written Addendum should read P214, not P2.14.

Refer to Drawings, Addendum No 4, page 4. Drawing Sheet in written Addendum should read P218, not P2.18.

Refer to Drawings, Addendum No 4, page 4. Drawing Sheet in written Addendum should read P220, not P2.22.

Refer to Drawings, Addendum No 4, page 4. Drawing Sheet in written Addendum should read FP110, not FP1.10.

Refer to Drawings, Addendum No 4, page 4. Drawing Sheet in written Addendum should read FP11, not FP1.11.

**Corrections to Addendum No 5**
**Specifications - Addendum No 5**

Refer to Specifications. Refer to Specifications. Delete specification section 00 11 19 REQUEST FOR GMP. Change Contract Time to 565 Days. Delete words “Delete specification”. This item shall only modify the Contract Time.

Refer to Specifications. Specification section 26 05 37 Cable Tray. Footer revised to match header.

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**Specifications - Addendum No 6**

Refer to Specifications. Section 00 01 10 Table of Contents has. Replace existing section.
Refer to Specifications. Section 00 01 15 List of Drawings. Replace existing section.
Refer to Specifications. Section 01 81 14 HBPr. Delete the One Time Form.
Refer to Specifications. Delete section 04 73 25 Thin Adhered Calcium Silicate Building Stone.
Refer to Specifications. Section 0742 13 Formed Metal Wall Panels. Replace existing section.
Refer to Specifications. Delete section 12 77 50 Swing Away Table Seating.

**Drawings - Addendum No 6**

Refer to Drawings, Replace drawing G001 with revised. The Drawing Index has been coordinated and updated with Addendum No. 6.
Refer to Drawings, Replace drawing LS402 with revised. The Revision Block information has been corrected.
Refer to Drawings, Replace drawings A113 with revised. The drawing has been issued due to an errant PDF labeled A113 containing drawing LS113 in Addendum No 2.
Refer to Drawings, Replace drawing P222 with revised. The drawing has been issued due to an errant PDF labeled P222 containing drawing P220 in Addendum No 4.
# SECTION 00 01 10

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**END OF SECTION**
SECTION 07 42 13
FORMED METAL WALL PANELS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:
   1. Factory-formed, zinc-alloy, interlocking metal cassette wall panels with reveal joint.

B. Related Sections:
   1. Section 072726 “Fluid-Applied Membrane Air Barrier” for air barrier underlayment.

1.1 REFERENCES

A. ASTM B6, Standard Specifications for Zinc.

B. ASTM E330, Standard Test Method for Structural Performance of Exterior Wall panels


D. AAMA 509, Voluntary Test and Classification Method for Drained and Back Ventilated Rain Screen Wall Cladding Systems.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at the project site.
   1. Meet with Owner, Architect, Owner’s insurer if applicable, metal panel Installer, metal panel manufacturer’s representative, structural-support Installer, and installers whose work interfaces with or affects metal panels, including installers of doors, windows, and louvers.
   2. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
   3. Review methods and procedures related to metal panel installation, including manufacturer's written instructions.
   4. Examine support conditions for compliance with requirements, including alignment between and attachment to structural members.
   5. Review flashings, special siding details, wall penetrations, openings, and condition of other construction that affect metal panels.
   6. Review governing regulations and requirements for insurance, certificates, and tests and inspections if applicable.
7. Review temporary protection requirements for metal panel assembly during and after installation.
9. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.
   1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of panel and accessory.

B. Sustainable Design Submittals:
   1. Product Data: For recycled content, indicating postconsumer and preconsumer recycled content and cost.

C. Shop Drawings:
   1. Include fabrication and installation layouts of metal panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, expansion provisions, trim, flashings, closures, and accessories; and special details.
   2. Accessories: Include details of the flashing, trim, and anchorage systems, at a scale of not less than 1˝ = 1'-0".

D. Samples for Initial Selection: For each type of metal panel indicated with factory-applied finishes.
   1. Include Samples of trim and accessories involving color selection.

E. Samples for Verification: For each type of exposed finish, prepared on Samples of size indicated below:
   1. Metal Panels: 12 inches long by actual panel width. Include fasteners, closures, and other metal panel accessories.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer and manufacturer.

B. Field quality-control reports.

C. Sample Warranties: For special warranties from manufacturer and installer.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For metal panels to include in maintenance manuals.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced installer who has completed metal wall panel installation similar in material and design, and extent to that indicated for this Project and with a record of successful in-service performance.

B. Manufacturer Qualifications: Current ISO 9001 certification.
C. Source Limitations: Obtain each type of metal plate wall panel from single source and from single manufacturer.

D. Field Measurements: Prior to fabrication of panel systems, verify drawing dimensions by taking field measurements of structure or substrates to receive panel systems.

E. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
   1. Build mockup of typical metal panel assembly, including corner, soffits, supports, attachments, and accessories.
   2. Water-Spray Test: Conduct water-spray test of metal panel assembly mockup, testing for water penetration according to AAMA 501.2.
   3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
   4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, metal panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.

B. Unload, store, and erect metal panels in a manner to prevent bending, warping, twisting, and surface damage.

C. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness, with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage.

D. Retain strippable protective covering on metal panels during installation.

E. Copper Panels: Wear gloves when handling to prevent fingerprints and soiling of surface.

1.8 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal panels to be performed according to manufacturers' written instructions and warranty requirements.

1.9 COORDINATION

A. Coordinate metal panel installation with rain drainage work, flashing, trim, construction of soffits, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

1.10 WARRANTY

A. Special Material Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal panel systems that fail in materials within specified warranty period.
1. Failures include, but are not limited to, the following:
   a. Structural failures including rupturing, cracking, or puncturing.
   b. Deterioration of metals and other materials beyond normal weathering.
2. Warranty Period: 20 years from date of Substantial Completion.

B. Special Workmanship Warranty: Installer’s standard form in which the Installer agrees to repair or replace components of metal panel systems that fail in materials within specified warranty period.
   1. Failures include, but are not limited to, the following:
      a. Structural failures including rupturing, cracking, or puncturing.
      b. Deterioration of metals and other materials beyond normal weathering.
   2. Warranty Period: Three years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Recycled Content: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 18 percent.

B. Uniform Wind Load Capacity:
   1. Installed wall system to withstand negative wind pressures complying with the following criteria:
      b. Safety Factor: The tested failure load, as determined by physical testing according to the ASTM E330 method, is reduced by a factor 1.67 to determine the allowable wind load on the system.
      c. Wind Loads: As indicated on Drawings.
   2. Ultimate Panel System Capacity: Tested in accordance with ASTM E330. Calculate allowable load carrying capacity by reducing ultimate test load at failure by listed safety factor.

C. Water Penetration under Static Pressure: No water penetration when tested according to ASTM E 331 at the following test-pressure difference:

2.2 FLAT LOCK METAL WALL PANELS

A. General: Provide factory-formed metal panels designed to be field assembled by interlocking seams incorporating concealed anchor clips, allowing thermal movement. Include accessories required for weathertight installation.

B. Reveal-Joint, Concealed-Fastener Metal Wall Panels: Formed a flat pan between panel edges; with narrow reveal joint between panels.
   1. Basis-of-Design Product: Subject to compliance with requirements, per Artazn LLC Co.; Cassette Panel or a comparable product by one of the following:
      a. Rheinzink (Germany) USA.
      b. VM Zinc (France) USA.
   2. Architectural Grade Zinc Alloy 710 (EN988): SHG (Special High Grade) Zinc (99.995% pure) combined with controlled amounts of copper (0.10 percent to 0.25 percent) and titanium (0.06 percent to 0.10 percent).
2.3 MISCELLANEOUS MATERIALS

A. Miscellaneous Metal Subframing and Furring: ASTM C 645, cold-formed, metallic-coated steel sheet, ASTM A 653/A 653M, G90 coating designation unless otherwise indicated. Provide manufacturer's standard sections as required for support and alignment of metal panel system.

B. Panel Accessories: Provide components required for a complete, weathertight panel system including trim, copings, fasciae, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.
   1. Closures: Provide closures at eaves and rakes, fabricated of same metal as metal panels.
   2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.

C. Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, bases, drips, sills, jambs, corners, endwalls, framed openings, rakes, fasciae,

D. Parapet caps, soffits, reveals, and fillers. Finish flashing and trim with same finish system as adjacent metal panels.

E. Panel Fasteners: Self-tapping screws designed to withstand design loads. Provide exposed fasteners with heads matching color of metal panels by means of plastic caps or factory-applied coating. Provide EPDM or PVC sealing washers for exposed fasteners (corrugated panels only, no exposed fasteners for Cassette or Flat Lock Panels.

F. Panel Sealants: Provide sealant type recommended by manufacturer that are compatible with panel materials, are nonstaining, and do not damage panel finish.
   1. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch wide and 1/8 inch thick.
   2. Joint Sealant: ASTM C 920; elastomeric polyurethane or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal panels and remain weathertight; and as recommended in writing by metal panel manufacturer.

2.4 FABRICATION

A. General: Fabricate and finish metal panels and accessories at the factory, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.

B. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.
   1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
2. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.
3. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.

2.5 FINISHES

A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

C. Zinc Panels and Accessories:
   1. Install accessories with positive anchorage to building and weather tight mounting and provisions for thermal expansion and coordinate installation with flashing and other components.
   2. Install components required for a complete wall panel assembly including trim, copings, flashings and other accessory items.
   3. Install weather barrier behind wall panels and over substrate in accordance with requirements of Section 072500
   4. Do not apply sealants to joints, unless noted otherwise on Shop Drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal panel supports, and other conditions affecting performance of the Work.
   1. Examine wall framing to verify that girts, angles, channels, studs, and other structural panel support members and anchorage have been installed within alignment tolerances required by metal wall panel manufacturer.
   2. Examine wall sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal wall panel manufacturer.
      a. Verify that air- or water-resistant barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.

B. Examine roughing-in for components and systems penetrating metal panels to verify actual locations of penetrations relative to seam locations of metal panels before installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Miscellaneous Supports: Install subframing, furring, and other miscellaneous panel support members and anchorages according to ASTM C 754 and metal panel manufacturer's written recommendations.
3.3 METAL PANEL INSTALLATION

A. General: Install metal panels according to manufacturer’s written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.
1. Shim or otherwise plumb substrates receiving metal panels.
2. Attach wall panels using progressive interlocking method, engaging bottom of panel on top of previous panel working bottom up, and from left to right.
3. Install wall panels for orientation, sizes and locations as indicated in shop drawings.
4. Install wall panels with manufactured supplied clips for proper anchorage and with provisions for thermal and structural movement.
5. Do not begin installation until air- or water-resistive barriers and flashings that will be concealed by metal panels are installed.
6. Install flashing and trim as metal panel work proceeds.

3.4 CLEANING AND PROTECTION

A. Remove temporary protective coverings and strippable films, if any, as metal panels are installed, unless otherwise indicated in manufacturer’s written installation instructions. On completion of metal panel installation, clean finished surfaces as recommended by metal panel manufacturer. Maintain in a clean condition during construction.

B. After metal panel installation, clear weep holes and drainage channels of obstructions, dirt, and sealant.

C. Replace metal panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION