

ADDENDUM NO. 1

TO THE DRAWINGS AND PROJECT MANUAL
FOR

THE CONSTRUCTION OF THE

**PARTIAL ROOF REPLACEMENTS
FOR ANDERSON COUNTY SCHOOLS:**

BRICEVILLE ELEMENTARY SCHOOL
103 SLATE STONE ROAD
BRICEVILLE, TN 37710

AND

**ANDERSON COUNTY SCHOOLS
OPERATION AND MAINTENANCE**
1010 CLINCH AVENUE
CLINTON, TN 37716

August 20, 2021

ARCHITECTS WEEKS AMBROSE MCDONALD, INC.



The drawings and specifications dated August 1, 2021 are hereby amended as described in the following list of changes thereto:

A. SPECIFICATIONS

1. Page 00 01 10.2: Insert "07 42 93 Soffit Panels 07 42 93.1 - 5".
2. Page 00 11 16.1: Change Bid date to Friday, August 27, 2021. Time & place remain the same.
3. Section 00 41 13 – Bid Form - Stipulated Sum: Delete this section in its entirety and replace with the attached revised "Section 00 41 13 – Bid Form - Stipulated Sum".
4. Page 01 23 00.1: Insert new Section "01 23 00.1"
5. Page 05 31 23.1 - 3: Insert new Section "05 31 23.1-3 Steel Decking".
6. Page 07 42 93.1 - 5: Insert new Section "07 42 93.1 - 5 Soffit Panels".
7. Section 07 72 00 - Roof Accessories: Delete this section in its entirety and replace with the attached revised "Section 07 72 00 - Roof Accessories".

B. DRAWINGS

1. Sheet R2.1 – Norris Elementary School Roof Details:

In A13 Roofing Notes for Roof Areas B & C insert the following notes:

- "13. Contractor's Option No. 1: Contractor may provide a combination of a base layer(s) of polyisocyanurate insulation and a high density polyisocyanurate cover board to obtain the three inch insulation thickness.
14. Contractor's Option No. 2: Contractor may provide a 60 MIL non-reinforced, self-adhered membrane with a 20-year weather tightness warranty in lieu of the typical field-applied adhesive system specified."

Insert M5/R2.1 as shown on attached Revision Drawing RR-1. This detail applies only to the east gable end of Roof Area B and is part of the base Bid work.

C. CLARIFICATIONS

1. New soffit panels specified in Section 07 42 93 and shown in detail E5/R2.1 are Alternate No. 1.

END OF ADDENDUM #1

TO: Ms. Katherine Ajmeri
Deputy Purchasing Agent
Anderson County
100 N. Main Street, Suite 214
Clinton, Tennessee 37716

AND

Mr. Clay McKamey
Director of Maintenance
Anderson County Board of Education
1010 Clinch Avenue
Clinton, Tennessee 37716

PROJECT: PARTIAL ROOF REPLACEMENTS FOR ANDERSON COUNTY SCHOOLS**Anderson County High School**

130 Maverick Circle
Clinton, TN 37716

And

Norris Elementary School

42 East Circle Road
Norris, TN 37828

BID NO.: 2207

The undersigned as Bidder acknowledges by his signature that he has visited and examined the sites of the proposed construction and has received and examined the Project Manual, the Drawings, and other documents and has included their provisions in his Bid. The Bidder further acknowledges that he has received the following Addenda:

Addendum No. _____, Dated _____ Addendum No. _____, Dated _____

In submitting this Bid, the Bidder agrees:

1. To hold open his Bid for **30** calendar days from the date shown above.
2. To enter into and execute a Contract, if awarded, on the basis of this Bid, and to furnish the required Bonds.
3. To abide by Public Chapter 587 of 2007, as codified in Tennessee Code Annotated Section 49-5-413 as stipulated, which requires all contractors to facilitate a criminal history records check conducted by the Tennessee Bureau of Investigation and the Federal Bureau of Investigation for each employee prior to permitting the employee to have contact with students or enter school grounds when students are present.
4. To accomplish work in accord with the Contract Documents.
5. To achieve substantial completion of Base Bid, **90** calendar days from and including the date stipulated within the Notice to Proceed.
6. To maintain existing roof in watertight condition at no additional cost to Owner during the period of Contract Award Time.
7. To accept the conditions for liquidated damages in the amount of **\$200.00** per calendar day.
8. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to Tennessee Code Annotated §12-12-106.

BASE BID

The Bidder agrees to construct the Work of the Base Bid for this project for the lump sum price of (show amount in both words and figures) **(All allowances described in section 01 21 00 are to be included in the base bid price):**

_____ Dollars \$ _____

Name of EPDM Roof System Manufacturer: _____

The Contractor affirms by submission of a Bid that the Company is certified (at time of bid opening) as an authorized Contractor for installation of a fully warrantied roof system with the manufacturers named on the Bid Form.

BASE BID BREAKDOWN (ITEMIZATION PRICING OF BASE BID)

NORRIS ELEMENTARY SCHOOL _____

ANDERSON COUNTY HIGH SCHOOL _____

SCHEDULED ALLOWANCE _____ \$10,000.00

EQUALS BASE BID _____

ALTERNATE BID NO. 1: The Bidder agrees to construct the Work of Alternate Bid No. 1 for this Project for the lump sum price of (Show amount in both words and figures.)

_____ Dollars \$ _____

UNIT PRICES

A. Treated Wood Nailer Replacement

For Pressure Treated: 2 X 4 \$ _____ per linear foot.

For Pressure Treated: 2 X 6 \$ _____ per linear foot.

For Pressure Treated: 2 X 8 \$ _____ per linear foot.

For Pressure Treated: 2 X 10 \$ _____ per linear foot.

B. Equipment Curb Replacement

Damaged or Non-Conforming Curb Replacement: \$ _____ per linear foot.

C. Exterior Grade Plywood Sheathing

1/2" Thick Ext. Grade Plywood (4'x8' Panel): \$ _____ per square foot.

3/4" Thick Ext. Grade Plywood (4'x8' Panel): \$ _____ per square foot.

D. Metal Roof Deck Repair

Damaged Metal Roof Deck Repair: \$ _____ per square foot.

E. Metal Tectum Deck Repair

Damaged Tectum Roof Deck Repair: \$ _____ per square foot. Note: Thickness to match existing.

F. Insulation Board Filler

1/2" thick HD polyisocyanurate roof insulation board: \$ _____ per square foot.

The Bidder acknowledges by his signature that he agrees to requirements contained in the Invitation to Bid and the Instructions to Bidders and, that should he fail to execute a Contract with the Owner, should the Owner award said Contract to him, that the Owner may rightfully collect the sum of the Bid Bond.

The required Bid Security is attached to this Bid.

Vendor Name _____

Vendor Address _____

City _____ State _____ Zip _____

Contact Person _____

Contact Person's Email Address _____

Contact Person's Telephone Number _____

Authorizing Signature _____ Title _____

(Sign in Blue Ink)

Authorized (Printed Name) _____

Reference Owner furnished attachments, immediately following Section 00 60 00 to be submitted with the bid proposal.

END OF SECTION 00 41 13

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 DEFINITION

- A. An Alternate is an amount proposed by Bidders and stated on the Bid Form for certain construction activities defined in the Bidding Requirements that may be added to or deducted from Base Bid amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents.

1.2 PROCEDURES

- A. Coordination: Coordinate related Work and modify or adjust adjacent Work as necessary to ensure that Work affected by each accepted Alternate is complete and fully integrated into the project.
- B. Notification: Immediately following the award of the Contract, prepare and distribute to each party involved, notification of the status of each Alternate. Indicate whether Alternates have been accepted or rejected.
- C. Schedule: A "Schedule of Alternates" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials and methods necessary to achieve the Work described under each Alternate.
 - 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 mentioned as part of the Alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Alternate #1: Provide all Work required and necessary for the steel soffit panels.

References: Architectural Drawing R2.1, specifically detail E5/R2.1 and Specification Section 07 42 93..

END OF SECTION 01 23 00

SECTION 05 31 23 - STEEL DECKING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Steel roof deck.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 06 Section "Miscellaneous Carpentry" for roof blocking.
 - 2. Division 07 Section "EPDM Membrane Roofing" for roofing insulation.
 - 3. Division 09 Section "Painting" for touch up and repair painting of deck.

1.2 SUBMITTALS

- A. Product data for each type of deck, accessory, and product specified.
- B. Shop drawings showing layout and types of deck panels, anchorage details, reinforcing channels, pans, deck openings, special jointing, accessories, and attachments to other construction.
- C. Welder certificates signed by Contractor certifying that welders comply with requirements specified under the "Quality Assurance" Article.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed steel deck similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
- B. Welding Standards: Comply with applicable provisions of AWS D1.1 "Structural Welding Code--Steel" and AWS D1.3 "Structural Welding Code--Sheet Steel."
 - 1. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.
- C. Fire-Test-Response Characteristics: Where indicated, provide steel deck panels identical to those tested as part of an assembly for fire resistance per ASTM E 119 by a testing and inspection agency performing testing and follow-up services, that is acceptable to authorities having jurisdiction.
 - 1. Fire-Resistance Ratings: As indicated by design designations listed in UL "Fire Resistance Directory," or by Warnock Hersey or another testing and inspecting agency.
 - 2. Labeling: Identify steel deck with appropriate markings of applicable testing and inspecting agency.
- D. FM Listing: Provide steel roof deck evaluated by Factory Mutual and listed in Factory Mutual "Approval Guide" for Class 1 fire rating and Class 1-60 windstorm ratings. Installations must conform to requirements of FM Data Sheet 1-28.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect steel deck from corrosion, deformation, and other damage during delivery, storage, and handling.
- B. Stack steel deck on platforms or pallets and slope to provide drainage. Protect with a waterproof covering and ventilate to avoid condensation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
 - 1. United Steel Deck, Inc.
 - 2. Vulcraft Div. of Nucor Corp.
 - 3. EPIC

2.2 ROOF DECK

- A. Steel Roof Deck: Fabricate panels without top-flange stiffening grooves conforming to SDI Publication No. 28 "Specifications and Commentary for Steel Roof Deck" and the following:
 - 1. Prime-Painted Steel Sheet: ASTM A 611, Grade C, shop primed as follows:
 - a. Shop Primer: Grey or white baked-on, lead- and chromate-free rust-inhibitive primer, conforming to the performance requirements of Fed. Spec. TT-P-664.
 - 2. Deck Profile: Type - Wide Ribbed Roof Deck.
 - 3. Profile Depth: 1-1/2 inch.
 - 4. Design Uncoated-Steel Thickness: 22 gauge and 20 gauge as indicated on drawings.
 - 5. Span Condition: Triple span or more.
 - 6. Side Joints: Overlapped.

2.3 ACCESSORIES

- A. General: Provide accessory materials for steel deck that comply with requirements indicated and recommendations of the steel deck manufacturer.
- B. Mechanical Fasteners: Manufacturers standard, corrosion-resistant, low-velocity, powder-actuated or pneumatically driven carbon steel fasteners; or self-drilling, self-threading screws.
- C. Side Lap Fasteners: Manufacturer's standard, corrosion-resistant, hexagonal washer head; self-drilling, carbon steel screws, No. 10 (4.8 mm) minimum diameter.
- D. Rib Closure Strips: Manufacturer's standard vulcanized, closed-cell, synthetic rubber.
- E. Miscellaneous Roof Deck Accessories: Steel sheet, 0.0359-inch- (0.91-mm-) thick minimum ridge and valley plates, finish strips, and reinforcing channels, of same material as roof deck.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine supporting framing and field conditions for compliance with requirements for installation tolerances and other conditions affecting performance of steel deck.

3.2 PREPARATION

- A. Locate decking bundles to prevent overloading of supporting members.
- B. Install temporary shoring before placing deck panels when required to meet deflection limitations.

3.3 INSTALLATION, GENERAL

- A. Install deck panels and accessories according to applicable specifications and commentary of SDI Publication No. 28, manufacturer's recommendations, FM Data Sheet 1-28.
- B. Install temporary shoring before placing deck panels when required to meet deflection limitations.

- C. Place deck panels on supporting framing and adjust to final position with ends accurately aligned and bearing on supporting framing before being permanently fastened. Do not stretch or contract side lap interlocks.
- D. Place deck panels flat and square and fasten to supporting framing without warp or deflection.
- E. Cut and neatly fit deck panels and accessories around openings and other work projecting through or adjacent to the decking.
- F. Provide additional reinforcement and closure pieces at openings as required for strength, continuity of decking, and support of other work.
- G. Comply with AWS requirements and procedures for manual shielded metal arc welding, appearance and quality of welds, and methods used in correcting welding work.
- H. With Architect's specific approval, in writing, mechanical fasteners may be used in lieu of welding to fasten deck. Locate mechanical fasteners and install according to deck manufacturer's instructions.

3.4 ROOF DECK INSTALLATION

- A. Fasten roof deck panels to steel supporting members by screwing as indicated on drawings.
- B. Side Lap and Perimeter Edge Fastening: As indicated on drawing.
- C. End Bearing: Install deck ends over supporting framing with a minimum end bearing of 1-1/2 inches (38 mm), with end joints as follows:
 - 1. End Joints: Lapped 2 inches (51 mm) minimum.
- D. Miscellaneous Roof Deck Accessories: Install ridge and valley plates, finish strips, cover plates, end closures, and reinforcing channels according to deck manufacturer's recommendations. Attach to substrate to provide a complete deck installation.

3.5 FIELD QUALITY CONTROL

- A. Testing Agency: A qualified independent testing agency may be employed and paid by Owner to perform field quality-control testing.
 - 1. Field placements will be subject to inspection.
 - 2. Testing agency will report test results promptly and in writing to Contractor and Architect.
 - 3. Remove and replace work that does not comply with specified requirements.
 - 4. Additional testing will be performed at Contractor's expense to determine compliance of corrected work with specified requirements.

3.6 REPAIRS AND PROTECTION

- A. Touch up Painting: Wire brush, clean, and paint scarred areas, welds, and rust spots on both surfaces of installed deck panels as required.
 - 1. Touch up painted surfaces with same type of shop paint used on adjacent surfaces.
 - 2. Where shop-painted surfaces are exposed in-service, apply touch up paint to blend into adjacent surfaces.
- B. Provide final protection and maintain conditions to ensure steel decking is without damage or deterioration at time of Substantial Completion.

END OF SECTION 05 31 23

SECTION 07 42 93 - SOFFIT PANELS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Metal soffit panels.

B. Related Sections:

1. Section 07 41 13.13 "Formed Metal Roof Panels" for lap-seam metal roof panels.

C. Preinstallation Conference: Conduct conference at **[Project site]** <Insert location>.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components

B. Shop Drawings:

1. Include fabrication and installation layouts of metal panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, and accessories; and special details.
2. Accessories: Include details of flashing, trim, and anchorage systems, at a scale of not less than 1-1/2 inches per 12 inches.

C. Samples for Initial Selection: For each type of metal panel indicated with factory-applied color finishes.

1. Include similar Samples of trim and accessories involving color selection.

D. Samples for Verification: For each type of exposed finish required, 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.

1.3 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Product Test Reports: For each product, tests performed by a qualified testing agency.

C. Sample Warranties: For special warranties..

1.4 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

1.5 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.

1.6 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.

1.7 COORDINATION

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

1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal panel systems that fail in materials or workmanship 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: Two years from date of Substantial Completion.
- B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Delta E units when tested according to ASTM D2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Finish Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E1592:
 - 1. Wind Loads: As indicated on Drawings.
 - 2. Deflection Limits: For wind loads, no greater than 1/180 of the span.
- B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change (Range): 120 deg F, ambient.

2.2 METAL SOFFIT PANELS

- A. Provide metal soffit panels designed to be installed by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners inside laps. Include accessories required for weathertight installation.
 - 1. Sealant: Factory applied within interlocking joint.
- B. Flush-Profile Metal Soffit Panels Solid panels formed with vertical panel edges and intermediate stiffening ribs symmetrically spaced or a flat pan between panel edges; with flush joint between panels.
 - 1. Metallic-Coated Steel Sheet: Zinc-coated (galvanized) steel sheet complying with ASTM A653/A653M, G90 coating designation, or aluminum-zinc alloy-coated steel sheet complying with ASTM A792/A792M, Class AZ50 coating designation; structural quality. Prepainted by the coil-coating process to comply with ASTM A755/A755M.
 - a. Nominal Thickness: 0.028 inch or 0.034 inch.
 - b. Exterior Finish: Two-coat fluoropolymer.
 - c. Color: As selected by Architect from manufacturer's full range.

2.3 MISCELLANEOUS MATERIALS

- A. Miscellaneous Metal Subframing and Furring: ASTM C645, cold-formed, metallic-coated steel sheet, ASTM A653/A653M, G90 coating designation or ASTM A792/A792M, Class AZ50 aluminum-zinc-alloy 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, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.
- 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. Finish flashing and trim with same finish system as adjacent metal panels.
- D. 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.
- E. Panel Sealants: Provide sealant types 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 C920; 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.
 - 3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C1311.

2.4 FABRICATION

- A. 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. Fabricate metal panel joints with factory-installed captive gaskets or separator strips that provide a weathertight seal and prevent metal-to-metal contact, and that minimize noise from movements.

- C. 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. Seams for Other Than Aluminum: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.
 3. Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate sealant and to comply with SMACNA standards.
 4. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.
 5. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.
 - a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal soffit panel manufacturer for application but not less than thickness of metal being secured.

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. Noticeable variations in same piece are not acceptable. 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. Steel Panels and Accessories:
1. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent polyvinylidene fluoride (PVDF) resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 2. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil.

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.
- 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 C754 and metal panel manufacturer's written recommendations.
1. Soffit Framing: Wire tie or clip furring channels to supports, as required to comply with requirements for assemblies indicated.

3.3 INSTALLATION

- A. 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.
- B. Fasteners:
 - 1. Steel Panels: Use stainless steel fasteners for surfaces exposed to the exterior; use galvanized-steel fasteners for surfaces exposed to the interior.
- C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.
- D. Lap-Seam Metal Panels: Fasten metal panels to supports with fasteners at each lapped joint at location and spacing recommended by manufacturer.
 - 1. Apply panels and associated items true to line for neat and weathertight enclosure.
 - 2. Provide metal-backed washers under heads of exposed fasteners bearing on weather side of metal panels.
 - 3. Locate and space exposed fasteners in uniform vertical and horizontal alignment. Use proper tools to obtain controlled uniform compression for positive seal without rupture of washer.
 - 4. Install screw fasteners with power tools having controlled torque adjusted to compress washer tightly without damage to washer, screw threads, or panels. Install screws in predrilled holes.
- E. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.
- F. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that are permanently watertight.
 - 1. Install exposed flashing and trim that is without buckling, and tool marks, and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to achieve waterproof performance.
 - 2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).

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 07 42 93

SECTION 07 72 00 - ROOF ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes roof accessories not provided with the roofing system in the following categories.
 - 1. Pipe Supports.
- B. Related Sections:
 - 1. Division 07 Roofing Sections for flashing and roofing accessories installed integral with roofing as part of roofing-system network.
- C. General Performance: Roof accessories shall withstand exposure to weather and resist thermally induced movement without failure, rattling, leaking, or fastener disengagement due to defective manufacture, fabrication, installation, or other defects in construction.

1.2 REFERENCES

- A. Pipe Hangers and Supports:
 - 1. MSS SP-58-2009
 - 2. MSS SP-58-2003

1.3 SUBMITTALS

- A. Product Data: For each type of roof accessory indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

1.4 COORDINATION

- A. Coordinate layout and installation of roof accessories with roofing membrane and base flashing and interfacing and adjoining construction to provide a leakproof, weathertight, secure, and noncorrosive installation.

PART 2 - PRODUCTS

2.1 PIPE SUPPORTS

- A. General: Contractor shall provide and/or replace pipe supports as determined by the Roof Consultant.
 - 1. Fixed-Height Cradle-Type Pipe Supports: Polycarbonate pipe stand accommodating up to 1-1/2-inch- (38-mm-) diameter pipe or conduit; with provision for pipe retainer and with manufacturer's support pad or deck plate as recommended for penetration-free installation over roof membrane type; as required for quantity of pipe runs and sizes.
 - a. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1) MIRO Industries.
 - 2) Pate Company (The).
 - 3) PHP Systems/Design.
 - 4) Thaler Metal Industries Ltd.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

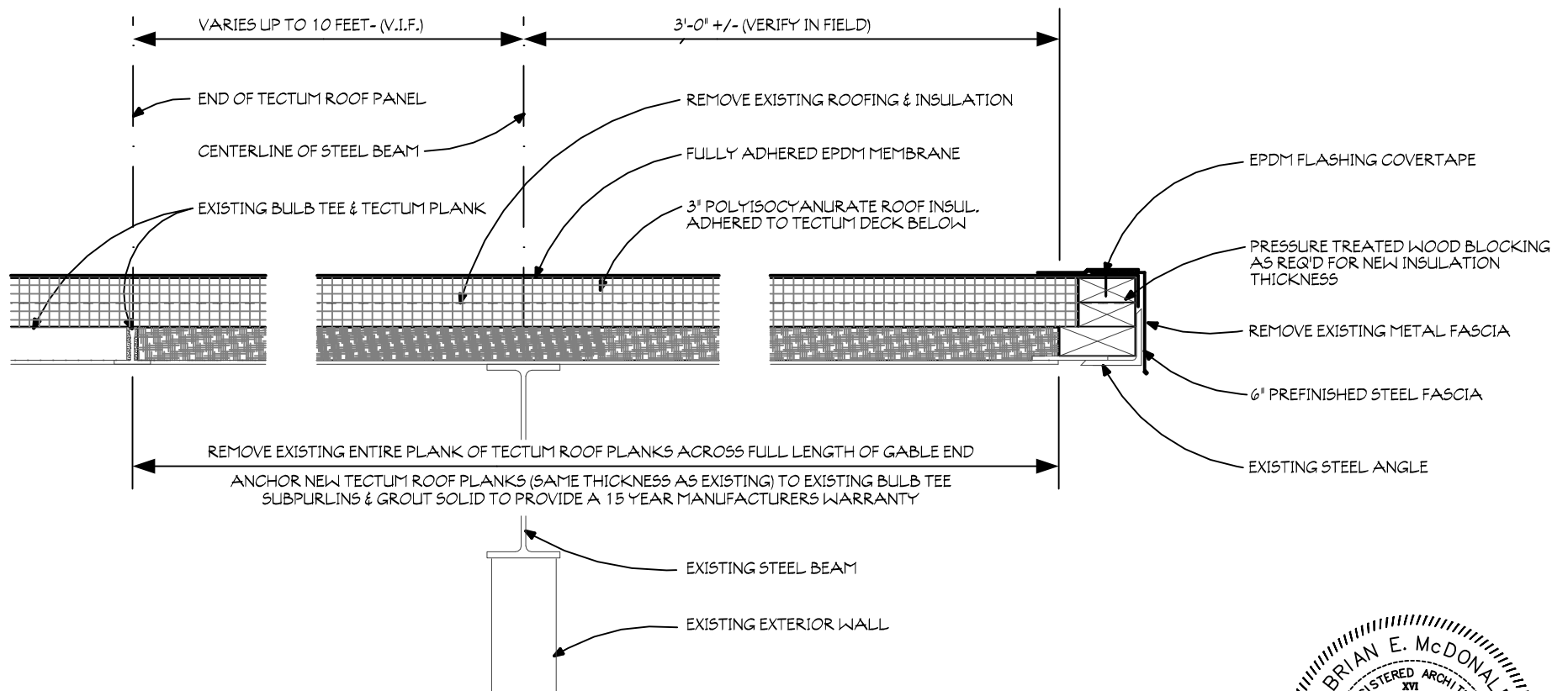
3.2 INSTALLATION

- A. General: Install roof accessories according to manufacturer's written instructions.
 - 1. Install roof accessories level, plumb, true to line and elevation, and without warping, jogs in alignment, excessive oil canning, buckling, or tool marks.
 - 2. Anchor roof accessories securely in place so they are capable of resisting indicated loads.
 - 3. Use fasteners, separators, sealants, and other miscellaneous items as required to complete installation of roof accessories and fit them to substrates.
 - 4. Install roof accessories to resist exposure to weather without failing, rattling, leaking, or loosening of fasteners and seals.

3.3 REPAIR AND CLEANING

- A. Replace roof accessories that have been damaged or that cannot be successfully repaired by finish touchup or similar minor repair procedures.

END OF SECTION 07 72 00



M5

OVERHANG AT TECTUM PLANK REPLACEMENT

3" = 1'-0"

R1.2

(LOCATION: EAST GALE END OF ROOF AREA B)



**ROOF DESIGN
WORKS, INC.**

**ROOF REPLACEMENTS FOR
ANDERSON COUNTY HIGH SCHOOL
NORRIS ELEMENTARY SCHOOL**



**ARCHITECTS
WEEKS
AMBROSE
McDONALD
INC**

DATE	08-20-21
PROJECT NO.	21002
REFERENCE	R21-IES
DRAWN	BEM
CHECKED	VW
REVISION	

RR-1