

Hammond Community Center Addition

Addendum 01

H/S Project: 24037 Addendum: 01 Date: 4.16.2025

This Addendum forms a part of the Contract Documents and modifies the original specifications and drawings issued for bidding to the extent noted hereinafter. All other provisions of the Bid Documents shall remain unchanged.

Careful note of this Addendum will be taken by all parties of interest so that proper allowances are made in all computations, estimates and contracts and so that all trades affected are fully advised in the performance of the work that will be required of them. Acknowledge receipt of this Addendum on the Bid Form.

Modifications to the Specifications

Section 07 41 13.16 – Standing Seam Metal Roof Panels

1.01 Delete Specification Section 07 41 13.16 – Standing Seam Metal Roof Panels in its entirety. In lieu thereof, insert revised Specification Section 07 41 13.16 – Standing Seam Metal Roof Panels, dated 04-16-2025, included herein as part of this Addendum.

Section 07 42 13.13 - Formed Metal Wall Panels

1.02 Delete Specification Section 07 42 13.13 – Formed Metal Wall Panels in its entirety. In lieu thereof, insert revised Specification Section 07 42 13.13 – Formed Metal Wall Panels, dated 04-16-2025, included herein as part of this Addendum.

Section 13 49 19 - Metal Building Systems

1.03 Delete Specification Section 13 49 19 – Metal Building Systems in its entirety. In lieu thereof, insert revised Specification Section 13 49 19 – Metal Building Systems, dated 04-16-2025, included herein as part of this Addendum.

Modifications to the Drawings

Sheet G100

1.04 Refer to Index of Drawings, add the following: "G111 Life Safety Plan"

Sheet G111

1.05 Add the following sheet, "G111" to the drawing set.

Sheet A201

1.06 Delete Sheet A201 in its entirety. In lieu thereof, substitute revised Sheet A201, enclosed herein as part of this addendum. Note the added 1-hour rated wall labeled 2H1 on the East side of the Storage room as well as the removal of the PTACS on the East side of the storage room.

Sheet A701

1.07 Delete Sheet A701 in its entirety. In lieu thereof, substitute revised Sheet A701, enclosed herein as part of this addendum. Note the added 1-hour rated wall at detail 16 Wall Section.

Sheet A901

- **1.08** At General Notes, add general note: "5. The height / roof slope of the new addition shall match the height / roof slope of the existing building directly adjacent to it; contractor to verify in field exact dimensions."
- **1.09** At Detail 16 Roof Detail, add 1-hour rated wall assembly.

Prior Approvals

The following manufacturers, equipment, materials, or products have been Prior Approved for use on this project. Approvals are based upon the opinion, knowledge, information and belief of the Architect at the time of issuance of this Addendum and reliance upon the data submitted. Approvals are therefore interim in nature and subject to reconsideration as additional data, materials, workmanship, and coordination with other work are observed and reviewed. All items allowed by this Addendum are subject to the full provisions of the original contract documents including all modifications thereto and shall be warranted as substitutions conforming with the contract documents as provided for in the General Conditions. In proposing items allowed by this Addendum, bidder assumes all risk, costs, and responsibility for item's final acceptance, performance, and integration into the work.

Architectural

- **1.10** Section 13 34 19 Metal Building Systems
 - Manufacturers
 - Delta Consolidated, LLC
 - Ideal Steel

Electrical

- **1.11** Lighting Fixture Schedule
 - Manufacturers
 - Day-Brite F1
 - Chloride F2, F3

END OF ADDENDUM.

SECTION 07 41 13.16 - STANDING-SEAM METAL ROOF 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 standing-seam metal roof panels.
- B. Related Sections:
 - 1. Section 07 42 93 "Soffit Panels" for metal panels used in horizontal soffit applications.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at 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 roof accessories and roof-mounted equipment.
 - 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 structural loading limitations of deck purlins and rafters during and after roofing.
 - 6. Review flashings, special details, drainage, penetrations, equipment curbs, and condition of other construction that affect metal panels.
 - 7. Review governing regulations and requirements for insurance, certificates, and tests and inspections if applicable.
 - 8. Review temporary protection requirements for metal panel systems during and after installation.
 - 9. Review procedures for repair of metal panels damaged after installation.
 - 10. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.4 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. 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 the flashing, trim, and anchorage systems, at a scale of not less than 1-1/2 inches per 12 inches.
- 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.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Test Reports: For each product, for tests performed by a qualified testing agency.
- C. Field quality-control reports.
- D. Sample Warranties: For special warranties.

1.6 CLOSEOUT SUBMITTALS

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

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
- B. UL-Certified, Portable Roll-Forming Equipment: UL-certified, portable roll-forming equipment capable of producing metal panels warranted by manufacturer to be the same as factory-formed products. Maintain UL certification of portable roll-forming equipment for duration of work.

1.8 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. Wear gloves when handling to prevent fingerprints and soiling of surface.

1.9 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.

1.10 COORDINATION

- A. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment provided.
- B. 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.

1.11 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 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Finish Warranty Period: 20 years from date of Substantial Completion.
- C. Special Weathertightness Warranty: Owner's standard form in which manufacturer agrees to repair or replace standing-seam metal roof panel assemblies that fail to remain weathertight, including leaks, within specified warranty period.
 - 1. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Energy Performance: Provide roof panels according to one of the following when tested according to CRRC-1:
 - 1. Three-year, aged solar reflectance of not less than 0.55 and emissivity of not less than 0.75.
 - Three-year, aged Solar Reflectance Index of not less than 64 when calculated according to ASTM E 1980.
- B. Structural Performance: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E 1592:
 - 1. Wind Loads: As indicated on Drawings.
 - 2. Other Design Loads: As indicated on Drawings.
 - 3. Deflection Limits: For wind loads, no greater than 1/240 of the span.
 - 4.
- C. Air Infiltration: Air leakage of not more than 0.06 cfm/sq. ft. when tested according to ASTM E 1680 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 6.24 lbf/sq. ft..
- D. Water Penetration under Static Pressure: No water penetration when tested according to ASTM E 1646 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 6.24 lbf/sq. ft..
- E. Hydrostatic-Head Resistance: No water penetration when tested according to ASTM E 2140.
- F. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.
 - 1. Uplift Rating: UL 135.
- G. FM Global Listing: Provide metal roof panels and component materials that comply with requirements in FM Global 4471 as part of a panel roofing system and that are listed in FM Global's "Approval Guide" for Class 1 or noncombustible construction, as applicable. Identify materials with FM Global markings.
 - 1. Fire/Windstorm Classification: Class 1A-105 for roof panel.
 - 2. Hail Resistance: MH.
- H. 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; 180 deg F, material surfaces.

2.2 STANDING-SEAM METAL ROOF PANELS

- A. General: Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates, and accessories required for weathertight installation.
 - Steel Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E 1514.
- B. Trapezoidal leg, Seamed-Joint, Standing-Seam Metal Roof Panels: Formed with trapezoidal ribs at panel edges and intermediate stiffening ribs symmetrically spaced between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels, engaging opposite edge of adjacent panels, and mechanically seaming panels together.
 - Basis-of-Design Product: Subject to compliance with requirements, provide product MBCI Double-Lok to Match Existing roof, lock panel system or comparable product by one of the following:
 - a. MBCI
 - b. Berridge Manufacturing Company.
 - c. CENTRIA Architectural Systems.
 - d. Fabral.
 - e. McElroy Metal, Inc.
 - f. Prior Approved Equal
 - Metallic-Coated Steel Sheet: Zinc-coated (galvanized) steel sheet complying with ASTM A 653/A 653M, G90 coating designation, or aluminum-zinc alloy-coated steel sheet complying with ASTM A 792/A 792M, Class AZ50 coating designation; structural quality. Prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
 - a. Nominal Thickness: 24GA.
 - b. Exterior Finish: Two-coat fluoropolymer.
 - c. Color: As selected by Architect from manufacturer's full range.
 - 3. Clips: One-piece fixed to accommodate thermal movement.
 - a. Material: 0.064-inch- nominal thickness, zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet.
 - 4. Joint Type: Single folded.
 - 5. Panel Coverage: Match Existing
 - 6. Panel Height: Match Existing

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 or ASTM A 792/A 792M, Class AZ50 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 ridges, fabricated of same metal as metal panels.
 - 2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
 - Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- thick, flexible closure strips; cut or premolded to match metal panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.
- 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, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent metal panels.
- D. Gutters: Formed from same material as roof panels, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- long sections, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Furnish gutter supports spaced a maximum of 36 inches o.c., fabricated from same metal as gutters. Provide wire ball strainers of compatible metal at outlets. Finish gutters to match metal roof panels roof fascia and rake trim.
- E. Downspouts: Formed from same material as roof panels. Fabricate in 10-foot- long sections, complete with formed elbows and offsets, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Finish downspouts to match gutters.
- F. Roof Curbs: Fabricated from same material as roof panels, 0.048-inch nominal thickness; with bottom of skirt profiled to match roof panel profiles and with welded top box and integral full-length cricket. Fabricate curb subframing of 0.060-inch- nominal thickness, angle-, C-, or Z-shaped steel sheet. Fabricate curb and subframing to withstand indicated loads of size and height indicated. Finish roof curbs to match metal roof panels.
 - 1. Insulate roof curb with 1-inch- thick, rigid insulation.
- G. Panel Fasteners: Self-tapping screws designed to withstand design loads.
- H. 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.
 - 3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C 1311.

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. On-Site Fabrication: Subject to compliance with requirements of this Section, metal panels may be fabricated on-site using UL-certified, portable roll-forming equipment if panels are of same profile and warranted by manufacturer to be equal to factory-formed panels. Fabricate according to equipment manufacturer's written instructions and to comply with details shown.
- C. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.
- D. 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.
- E. 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 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 unacceptable. 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 2605. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- 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.
 - 1. Examine primary and secondary roof framing to verify that rafters, purlins, angles, channels, and other structural panel support members and anchorages have been installed within alignment tolerances required by metal roof panel manufacturer.
 - Examine solid roof sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal roof panel manufacturer.
 - a. Verify that air- or water-resistive 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.
- 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.
- B. Flashings: Install flashings to cover underlayment to comply with requirements specified in Section 07 62 00 "Sheet Metal Flashing and Trim."

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. Flash and seal metal panels at perimeter of all openings. Fasten with self-tapping screws. Do not begin installation until air- or water-resistive barriers and flashings that will be concealed by metal panels are installed.
- 3. Install screw fasteners in predrilled holes.
- Locate and space fastenings in uniform vertical and horizontal alignment.
- 5. Install flashing and trim as metal panel work proceeds.
- 6. Provide panel runs in continuous lengths from ridge to eave.
- 7. Align bottoms of metal panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.
- 8. Provide weathertight escutcheons for pipe- and conduit-penetrating 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. Anchor Clips: Anchor metal roof panels and other components of the Work securely in place, using manufacturer's approved fasteners according to manufacturers' written instructions.
- D. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.
- E. Standing-Seam Metal Roof Panel Installation: Fasten metal roof panels to supports with concealed clips at each standing-seam joint at location, spacing, and with fasteners recommended in writing by manufacturer.
 - 1. Install clips to supports with self-tapping fasteners.
 - 2. Install pressure plates at locations indicated in manufacturer's written installation instructions.
 - 3. Snap Joint: Nest standing seams and fasten together by interlocking and completely engaging factory-applied sealant.
 - 4. Seamed Joint: Crimp standing seams with manufacturer-approved, motorized seamer tool so clip, metal roof panel, and factory-applied sealant are completely engaged.
 - 5. Watertight Installation:
 - a. Apply a continuous ribbon of sealant or tape to seal joints of metal panels, using sealant or tape as recommend in writing by manufacturer as needed to make panels watertight.
 - b. Provide sealant or tape between panels and protruding equipment, vents, and accessories.
 - c. At panel splices, nest panels with minimum 6-inch end lap, sealed with sealant and fastened together by interlocking clamping plates.
- F. Clipless Metal Panel Installation: Fasten metal panels to supports with screw fasteners at each lapped joint at location and spacing recommended by manufacturer.
- G. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.
 - 1. Install components required for a complete metal panel system including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items. Provide types indicated by metal roof panel manufacturers; or, if not indicated, types recommended by metal roof panel manufacturer.

- H. 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 will be permanently watertight and weather resistant.
 - 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 achieve waterproof and weather-resistant
 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 sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).
- I. Gutters: Join sections with riveted and soldered or lapped and sealed joints. Attach gutters to eave with gutter hangers spaced not more than 36 inches o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.
- J. Downspouts: Join sections with telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch away from walls; locate fasteners at top and bottom and at approximately 60 inches o.c. in between.
 - 1. Provide elbows at base of downspouts to direct water away from building.
 - 2. Connect downspouts to underground drainage system indicated.
- K. Roof Curbs: Install flashing around bases where they meet metal roof panels.
- L. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to metal roof panels as recommended by manufacturer.

3.4 ERECTION TOLERANCES

A. Installation Tolerances: Shim and align metal panel units within installed tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

3.5 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect metal roof panel installation, including accessories. Report results in writing.
- B. Remove and replace applications of metal roof panels where tests and inspections indicate that they do not comply with specified requirements.
- C. Additional tests and inspections, at Contractor's expense, are performed to determine compliance of replaced or additional work with specified requirements.
- D. Prepare test and inspection reports.

3.6 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. 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 41 13.16

Section 07 42 13.13 - FORMED METAL WALL PANELS

PART 1 -

1.1 SECTION INCLUDES

A. Flush-profile, concealed fastener metal wall panels, with related metal trim and accessories.

1.2 RELATED REQUIREMENTS

- A. Division 05 Section "Structural Steel Framing" for steel framing supporting metal panels.
- B. Division 05 Section "Cold-Formed Metal Framing" for cold-formed metal framing supporting metal panels.
- C. Division 07 Section "Thermal Insulation" for thermal insulation installed behind metal panels.
- D. Division 07 Section "Air Barriers" for air barriers within wall assembly and adjacent to wall assembly.
- E. Division 07 Section "Metal Soffit" for soffit and wall liner panels installed with metal panels.
- F. Division 07 Section "Sheet Metal Flashing and Trim" for sheet metal flashing items in addition to items specified in this Section.
- G. Division 13 Section "Metal Building Systems" for steel framing supporting metal panels.

1.3 REFERENCES

- A. American Architectural Manufacturer's Association (AAMA): www.aamanet.org:
 - AAMA 621 Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) & Zinc-Aluminum Coated Steel Substrates.
 - 2. AAMA 809.2 Voluntary Specification Non-Drying Sealants.
- B. American Society of Civil Engineers (ASCE): www.asce.org/codes-standards:
 - 1. ASCE 7 Minimum Design Loads for Buildings and Other Structures.
- C. ASTM International (ASTM): www.astm.org:
 - 1. ASTM A755 Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.
 - 2. ASTM A792/A792M Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
 - 3. ASTM C920 Specification for Elastomeric Joint Sealants.
 - 4. ASTM D2244 Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
 - 5. ASTM D4214 Test Methods for Evaluating Degree of Chalking of Exterior Paint Films.

- 6. ASTM E1592 Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.
- D. International Accreditation Service (IAS):
 - IAS AC472 Accreditation Criteria for Inspection Programs for Manufacturers of Metal Building Systems, Part B.

1.4 QUALITY ASSURANCE

- A. Manufacturer/Source: Provide metal panel assemblies and accessories from a single manufacturer accredited under IAS AC472, Part B.
- B. Manufacturer Qualifications: Approved manufacturer listed in this Section with minimum five years experience in manufacture of similar products in successful use in similar applications.
 - 1. Approval of Comparable Products: Submit the following in accordance with project substitution requirements, within time allowed for substitution review:
 - a. Product data, including certified independent test data indicating compliance with requirements.
 - b. Samples of each component.
 - c. Sample shop drawings from similar project.
 - d. Project References: Minimum of five installations not less than three years old, with Owner and Architect contact information.
 - e. Sample warranty.
 - f. Certificate of accreditation under IAS AC472 Part B.
 - Substitutions following award of contract are not allowed except as stipulated in Division 01 General Requirements.
 - 3. Approved manufacturers must meet separate requirements of Submittals Article.
- C. Installer Qualifications: Experienced Installer [certified by metal panel manufacturer] with minimum of five years experience with successfully completed projects of a similar nature and scope.
 - 1. Installer's Field Supervisor: Experienced mechanic [certified by metal panel manufacturer] supervising work on site whenever work is underway.
- D. Steel Construction Publications: Comply with published recommendations in the following, unless more stringent requirements are indicated.
 - 1. American Institute of Steel Construction (AISC): "Steel Construction Manual."
 - 2. American Iron and Steel Institute (AISI): "Cold Formed Steel Design Manual."

1.5 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Prior to erection of framing, conduct preinstallation meeting at site attended by Owner, Architect, metal panel installer, metal panel manufacturer's technical representative, inspection agency and related trade contractors.
 - 1. Coordinate building framing in relation to metal panel system.
 - 2. Coordinate openings and penetrations of metal panel system.

 Coordinate work of Division 07 Sections "Roof Specialties" and "Roof Accessories" and openings and penetrations and manufacturer's accessories with installation of metal panels.

1.6 ACTION SUBMITTALS

- A. Product Data: Manufacturer's data sheets for specified products. Include data indicating compliance with performance requirements.
- B. Shop Drawings: Show layouts of metal panels. Include details of each condition of installation, panel profiles, and attachment to building. Provide details at a minimum scale 1-1/2-inch per foot of edge conditions, joints, fastener and sealant placement, flashings, openings, penetrations, and special details. Make distinctions between factory and field assembled work.
 - Indicate points of supporting structure that must coordinate with metal panel system installation.
 - 2. Include structural data indicating compliance with performance requirements and requirements of local authorities having jurisdiction.
- C. Samples for Initial Selection: For each exposed product specified including sealants. Provide representative color charts of manufacturer's full range of colors.
- D. Samples for Verification: Provide 12-inch- long section of each metal panel profile. Provide color chip verifying color selection.

1.7 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: Indicating compliance of products with requirements.
- B. Qualification Information: For Installer firm and Installer's field supervisor.
- C. IAS Accreditation Certificate: Indicating that manufacturer is accredited under provisions of IAS AC472 Part B.
- D. Manufacturer's warranty: Unexecuted sample copy of manufacturer's warranty.

1.8 CLOSEOUT SUBMITTALS

- A. Maintenance data.
- B. Manufacturer's Warranty: Executed copy of manufacturer's warranty.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Protect products of metal panel system during shipping, handling, and storage to prevent staining, denting, deterioration of components or other damage. Protect panels and trim bundles during shipping.
 - 1. Deliver, unload, store, and erect metal panels and accessory items without misshaping panels or exposing panels to surface damage from weather or construction operations.

- 2. Store in accordance with Manufacturer's written instruction. Provide wood collars for stacking and handling in the field.
- 3. Shield foam insulated metal panels from direct sunlight until installation.

1.10 WARRANTY

- A. Special Manufacturer's Warranty: On manufacturer's standard form, in which manufacturer agrees to repair or replace metal panel assemblies that fail in materials and workmanship within one year from date of Substantial Completion.
- B. Special Panel Finish Warranty: On Manufacturer's standard form, in which Manufacturer agrees to repair or replace metal panels that evidence deterioration of factory-applied finish within the warranty period, as follows:
 - 1. Fluoropolymer Two-Coat System:
 - a. Basis of Design System: MBCI, AVP.
 - b. Color fading in excess of 5 Hunter units per ASTM D 2244.
 - c. Chalking in excess of No. 8 rating per ASTM D 4214.
 - d. Failure of adhesion, peeling, checking, or cracking.
 - e. Warranty Period: 40 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis of Design Manufacturer: **MBCI Metal Roof and Wall Systems, Division of NCI Group, Inc.**; Houston TX. Tel: (877)713-6224; Email: info@mbci.com; Web: www.mbci.com.
 - Provide basis of design product, or comparable product approved by Architect prior to bid.

2.2 PERFORMANCE REQUIREMENTS

- A. General: Provide metal panel system meeting performance requirements as determined by application of specified tests by a qualified testing facility on manufacturer's standard assemblies.
- B. Structural Performance: Provide metal panel assemblies capable of withstanding the effects of indicated loads and stresses within limits and under conditions indicated, as determined by ASTM E1592:
 - 1. Wind Loads: Determine loads based on uniform pressure, importance factor, exposure category, and basic wind speed indicated on drawings.
 - a. Wind Negative Pressure: Certify capacity of metal panels by actual testing of proposed assembly.
 - 2. Deflection Limits: Withstand inward and outward wind-load design pressures in accordance with applicable building code with maximum deflection of 1/120 of the span with no evidence of failure.

- 3. Seismic Performance: Comply with ASCE 7 Sections 9, "Earthquake Loads."
- C. Thermal Movements: Allow for thermal movements from variations in both ambient and internal temperatures. Accommodate movement of support structure caused by thermal expansion and contraction. Allow for deflection and design for thermal stresses caused by temperature differences from one side of the panel to the other.

2.3 FORMED METAL WALL PANELS

- A. Flush-Profile, Exposed Fastener Metal Wall Panels: Structural metal panels consisting of formed metal sheet with vertical panel edges and flat pan, with nested lapped edges, and attached to supports using exposed fasteners.
 - 1. Basis of Design: MBCI, AVP. To Match Existing
 - a. Berridge Manufacturing Company.
 - b. CENTRIA Architectural Systems.
 - c. Fabral
 - d. Prior Approved Equal
 - e.
 - f.
 - Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A792/A792M, structural quality, Grade 50, Coating Class AZ50 prepainted by the coil-coating process per ASTM A755/A755M.
 - a. Nominal Thickness: 24 gage coated thickness, with smooth surface.
 - 1) Exterior Finish: Fluoropolymer two-coat system.
 - 2) Color: Match Architect's custom color.
 - Panel Width: Match Existing
 Panel Thickness: Match Existing

2.4 MISCELLANEOUS MATERIALS

- A. General: Provide complete metal panel assemblies incorporating trim, copings, fasciae, gutters and downspouts, and miscellaneous flashings. Provide required fasteners, closure strips, and sealants as indicated in manufacturer's written instructions.
- B. Flashing and Trim: Match material, thickness, and finish of metal panels.
- C. Panel Fasteners: Self-tapping screws and other acceptable fasteners recommended by metal panel manufacturer. supply corrosion-resistant fasteners with heads matching color of metal panels by means of factory-applied coating, with weathertight resilient washers.
- D. Panel Sealants:
 - VOC Content of Interior Sealants: Sealants used inside the weatherproofing system shall comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
 - a. Architectural Sealants: 250 g/L.

2.5 FABRICATION

- A. General: Provide factory fabricated and finished metal panels, trim, and accessories meeting performance requirements, indicated profiles, and structural requirements.
- B. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's written instructions, approved shop drawings, and project drawings.

2.6 FINISHES

- A. Finishes, General: Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- B. Fluoropolymer Two-Coat System: 0.2 0.3 mil primer with 0.7 0.8 mil 70 percent PVDF fluoropolymer color coat, AAMA 621.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine metal panel system substrate with Installer present. Inspect for erection tolerances and other conditions that would adversely affect installation of metal panels.
 - Inspect framing that will support insulated metal panels to determine if support
 components are installed as indicated on approved shop drawings and are within
 tolerances acceptable to metal panel manufacturer and installer. Confirm presence of
 acceptable framing members at recommended spacing to match installation
 requirements of metal panels.
- B. Correct out-of-tolerance work and other deficient conditions prior to proceeding with insulated metal panel installation.

3.2 METAL PANEL INSTALLATION

- A. Exposed-Fastener Formed Metal Panels: Install metal panel system in accordance with manufacturer's written instructions, approved shop drawings, project drawings, and referenced publications. Install metal panels in orientation, sizes, and locations indicated. Anchor panels and other components securely in place. Provide for thermal and structural movement.
- B. Fasten metal panels to supports with fasteners at each location indicated on approved shop drawings, at spacing and with fasteners recommended by manufacturer. Fasten panel to support structure through leading panel flange. Snap-fit back flange of subsequent panel into secured flange of previous panel. Where indicated, fasten panels together through flush-fitted panel sides.
 - 1. Cut panels in field where required using manufacturer's recommended methods.
 - 2. Dissimilar Materials: Where elements of metal panel system will come into contact with dissimilar materials, treat faces and edges in contact with dissimilar materials as recommended by metal panel manufacturer.

C. Attach panel flashing trim pieces to supports using recommended fasteners.

3.3 ACCESSORY INSTALLATION

- A. General: Install metal panel accessories with positive anchorage to building and weather tight mounting; provide for thermal expansion. Coordinate installation with flashings and other components.
 - 1. Install components required for a complete metal panel assembly, including trim, copings, flashings, sealants, closure strips, and similar items.
 - 2. Comply with details of assemblies utilized to establish compliance with performance requirements and manufacturer's written installation instructions.
 - 3. Set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently weather resistant.

3.4 CLEANING AND PROTECTION

- A. Clean finished surfaces as recommended by metal panel manufacturer.
- Replace damaged panels and accessories that cannot be repaired to the satisfaction of the Architect.

END OF SECTION

SECTION 13 34 19 - METAL BUILDING SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Structural-steel framing.
 - 2. Metal roof panels.
 - 3. Metal wall panels.
 - 4. Metal soffit panels.
 - 5. Thermal insulation.
 - Accessories.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of metal building system component.
- B. Shop Drawings: Indicate components by others. Include full building plan, elevations, sections, details and attachments to other work.
- C. Samples: For units with factory-applied finishes.
- D. Delegated-Design Submittal: For metal building systems.
 - 1. Include analysis data indicating compliance with performance requirements and design data signed and sealed by the qualified professional engineer responsible for their preparation.

1.4 INFORMATIONAL SUBMITTALS

- A. Welding certificates.
- B. Letter of Design Certification: Signed and sealed by a qualified professional engineer. Include the following:
 - 1. Name and location of Project.
 - 2. Order number.
 - 3. Name of manufacturer.
 - 4. Name of Contractor.
 - 5. Building dimensions including width, length, height, and roof slope.
 - 6. Indicate compliance with AISC standards for hot-rolled steel and AISI standards for cold-rolled steel, including edition dates of each standard.
 - 7. Governing building code and year of edition.

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- 8. Design Loads: Include dead load, roof live load, collateral loads, roof snow load, deflection, wind loads/speeds and exposure, seismic design category or effective peak velocity-related acceleration/peak acceleration, and auxiliary loads (cranes).
- 9. Load Combinations: Indicate that loads were applied acting simultaneously with concentrated loads, according to governing building code.
- 10. Building-Use Category: Indicate category of building use and its effect on load importance factors.
- C. Material test reports.
- D. Source quality-control reports.
- E. Field quality-control reports.
- F. Sample warranties.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer.
 - Engineering Responsibility: Preparation of comprehensive engineering analysis and Shop Drawings by a professional engineer who is legally qualified to practice in jurisdiction where Project is located.
- B. Erector Qualifications: An experienced erector who specializes in erecting and installing work similar in material, design, and extent to that indicated for this Project and who is acceptable to manufacturer.
- C. Welding Qualifications: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code Steel."
 - 2. AWS D1.3, "Structural Welding Code Sheet Steel."

1.7 WARRANTY

- A. Special Warranty on Metal Panel Finishes: Manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Finish Warranty Period: 25 years from date of Substantial Completion.
- B. Special Weathertightness Warranty for Standing-Seam Metal Roof Panels: Manufacturer agrees to repair or replace standing-seam metal roof panel assemblies that leak or otherwise fail to remain weathertight within specified warranty period.
 - 1. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. A&S Building Systems, Inc.; a division of NCI.
 - 2. ACI Building Systems, Inc.
 - 3. All American Systems; a division of NCI Building Systems, Inc.
 - 4. Alliance Steel, Inc.
 - 5. American Buildings Company; a Nucor Company.
 - 6. Behlen Mfg. Co.
 - 7. Butler Manufacturing Company; a division of BlueScope Buildings North America, Inc.
 - 8. CBC Steel Buildings; a Nucor Company.
 - 9. Ceco Building Systems; an NCI company.
 - 10. Chief Buildings; Chief Industries, Inc.
 - 11. Dean Steel Buildings, Inc.
 - 12. Garco Building Systems; a division of NCI.
 - 13. Gulf States Manufacturers; Nucor Company.
 - 14. Heritage Building Systems; a division of NCI Building Systems, Inc.
 - 15. Inland Buildings; a Schulte Building Systems Company.
 - 16. Kirby Building Systems; a Nucor Company.
 - 17. Mesco Building Solutions; a division of NCI Building Systems, Inc.
 - 18. Metallic Building Company.
 - 19. Mid-West Steel Building Company; an NCI company.
 - 20. Nucor Building Systems.
 - 21. Oakland Metal Buildings, Inc.
 - 22. Pinnacle Structures, Inc.
 - 23. Star Building Systems; a division of NCI Building Systems, Inc.
 - 24. Steel Systems; a division of NCI Building Systems, Inc.
 - 25. Tyler Building Systems, L.P.
 - 26. United Structures of America. Inc.
 - 27. Varco-Pruden Buildings; a division of BlueScope Buildings North America, Inc.
 - 28. Vulcan Steel Structures, Inc.
 - 29. Prior approved equal.

2.2 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 40 00 "Quality Requirements," to design metal building system.
- B. Structural Performance: Metal building systems shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to procedures in MBMA's "Metal Building Systems Manual."
 - 1. Design Loads: As indicated on Drawings.
 - Deflection and Drift Limits: Design metal building system assemblies to withstand serviceability design loads without exceeding deflections and drift limits recommended in AISC Steel Design Guide No. 3 "Serviceability Design Considerations for Steel Buildings."

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- 3. Deflection and Drift Limits: No greater than the following:
 - a. Purlins and Rafters: Vertical deflection as indicated on drawings.
 - b. Girts: Horizontal deflection as indicated on drawings.
 - c. Metal Roof Panels: Vertical deflection of 1/240 of the span.
 - d. Metal Wall Panels: Horizontal deflection as indicated on drawings.
 - e. Design secondary-framing system to accommodate deflection of primary framing and construction tolerances, and to maintain clearances at openings.
 - f. Lateral Drift: as indicated on drawings.
- C. Seismic Performance: Metal building system shall withstand the effects of earthquake motions determined according to the codes and criteria indicated on the drawings.
- D. 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: 120 deg F, ambient; 180 deg F, material surfaces.
- E. Fire-Resistance Ratings: Where assemblies are indicated to have a fire-resistance rating, provide metal panel assemblies identical to those of assemblies tested for fire resistance per ASTM E 119 or ASTM E 108 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Indicate design designations from UL's "Fire Resistance Directory," FM Global's "Approval Guide," or from the listings of another qualified testing agency.
- F. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.
 - Oversize Fire-Rated Door Assemblies: For units exceeding sizes of tested assemblies, provide certification by a qualified testing agency that doors comply with standard construction requirements for tested and labeled fire-rated door assemblies except for size.
- G. Structural Performance for Metal Roof[and Wall] Panels: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E 1592:
 - 1. Wind Loads: As indicated on Drawings.
- H. Air Infiltration for Metal Roof Panels: Air leakage of not more than 0.06 cfm/sq. ft. when tested according to ASTM E 1680 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 6.24 lbf/sq. ft..
- I. Air Infiltration for Metal Wall Panels: Air leakage of not more than 0.06 cfm/sq. ft. when tested according to ASTM E 283 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 6.24 lbf/sq. ft..
- J. Water Penetration for Metal Roof Panels: No water penetration when tested according to ASTM E 1646 at the following test-pressure difference:

- 1. Test-Pressure Difference: 6.24 lbf/sq. ft..
- K. Water Penetration for Metal Wall Panels: No water penetration when tested according to ASTM E 331 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 6.24 lbf/sq. ft..
- Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.
 - 1. Uplift Rating: UL 120.
- M. FM Global Listing: Provide metal roof panels and component materials that comply with requirements in FM Global 4471 as part of a panel roofing system and that are listed in FM Global's "Approval Guide" for Class 1 or noncombustible construction, as applicable. Identify materials with FM Global markings.
 - 1. Hail Resistance: SH.

2.3 STRUCTURAL-STEEL FRAMING

- A. Structural Steel: Comply with AISC 360, "Specification for Structural Steel Buildings."
- B. Bolted Connections: Comply with RCSC's "Specification for Structural Joints Using High-Strength Bolts."
- C. Cold-Formed Steel: Comply with AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" for design requirements and allowable stresses.
- D. Primary Framing: Manufacturer's standard primary-framing system, designed to withstand required loads and specified requirements. Primary framing includes transverse and lean-to frames; rafters and rake beams; sidewall, intermediate, end-wall, and corner columns; and wind bracing.
 - General: Provide frames with attachment plates, bearing plates, and splice members.
 Factory drill for field-bolted assembly. Provide frame span and spacing indicated. The Intent of metal building frame is to match existing building in height, slope, length and width when all finishes material applied.
 - a. Slight variations in span and spacing may be acceptable if necessary to comply with manufacturer's standard, as approved by Architect.
 - 2. Frame Configuration: As per drawings.
 - 3. Exterior Column: As per drawings.
 - 4. Rafter: As per drawings .
- E. End-Wall Framing: Manufacturer's standard primary end-wall framing fabricated for field-bolted assembly to comply with the following:

- F. Secondary Framing: Manufacturer's standard secondary framing, including purlins, girts, eave struts, flange bracing, base members, gable angles, clips, headers, jambs, and other miscellaneous structural members. Unless otherwise indicated, fabricate framing from either cold-formed, structural-steel sheet or roll-formed, metallic-coated steel sheet, prepainted with coil coating, to comply with the following:
- G. Anchor Rods: Headed anchor rods as indicated in Anchor Rod Plan for attachment of metal building to foundation.

2.4 METAL ROOF PANELS

- A. Standing-Seam, Vertical-Rib, Metal Roof Panels: Formed with interlocking ribs at panel edges and intermediate stiffening ribs symmetrically spaced between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels and engaging opposite edge of adjacent panels.
 - Material: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, [0.018-inch] [0.024-inch] [0.030-inch] nominal uncoated steel thickness. Prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
 - a. RExterior Finish: Two-coat fluoropolymer.
 - 2. Refer to Specification section 07 41 13.16 Standing Seam Metal Roof panel. For Metal roofing specifications.

2.5 METAL WALL PANELS

A. Concealed-Fastener, Flush-Profile, Metal Wall Panels: Refer to Section 07 42 13.13 - Formed Metal Wall panels for metal wall panel specifications.

2.6 METAL SOFFIT PANELS

- A. General: Provide factory-formed 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 and factory-applied sealant in side laps. Include accessories required for weathertight installation.
- B. Refer to Section 07 42 93 Soffit panels for soffit panel specifications.

2.7 THERMAL INSULATION

- A. Refer to section 07 21 00 Thermal Insulation for insulation specifications. and Refer to Section 07 21 30 Pre-Engineered Building Insulation for faced Metal Building Insulation: ASTM C 991, Type II, glass-fiber-blanket insulation; 0.5-lb/cu. ft. density; 2-inch- wide, continuous, vapor-tight edge tabs; with a flame-spread index of 25 or less.
- B. Retainer Strips: For securing insulation between supports, 0.025-inch nominal-thickness, formed, metallic-coated steel or PVC retainer clips colored to match insulation facing.

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C. Vapor-Retarder Facing: ASTM C 1136, with permeance not greater than 0.02 perm when tested according to ASTM E 96/E 96M, Desiccant Method.

2.8 ACCESSORIES

- A. General: Provide accessories as standard with metal building system manufacturer and as specified. Fabricate and finish accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes. Comply with indicated profiles and with dimensional and structural requirements.
 - 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.
- B. Roof Panel Accessories: Provide components required for a complete metal roof panel assembly including copings, fasciae, corner units, ridge closures, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels unless otherwise indicated.
- C. Wall Panel Accessories: Provide components required for a complete metal wall panel assembly including copings, fasciae, mullions, sills, corner units, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal wall panels unless otherwise indicated.
- D. Flashing and Trim: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.018-inch nominal uncoated steel thickness, prepainted with coil coating; finished to match adjacent metal panels.
- E. Roof Curbs: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.048-inch nominal uncoated steel thickness prepainted with coil coating; finished to match metal roof panels; with welded top box and bottom skirt, and integral full-length cricket; capable of withstanding loads of size and height indicated.
- F. Pipe Flashing: Premolded, EPDM pipe collar with flexible aluminum ring bonded to base.

2.9 FABRICATION

- A. General: Design components and field connections required for erection to permit easy assembly.
 - 1. Mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams, and instruction manuals.
 - 2. Fabricate structural framing to produce clean, smooth cuts and bends. Punch holes of proper size, shape, and location. Members shall be free of cracks, tears, and ruptures.
- B. Tolerances: Comply with MBMA's "Metal Building Systems Manual" for fabrication and erection tolerances.
- C. Primary Framing: Shop fabricate framing components to indicated size and section, with baseplates, bearing plates, stiffeners, and other items required for erection welded into place. Cut, form, punch, drill, and weld framing for bolted field assembly.

- D. Secondary Framing: Shop fabricate framing components to indicated size and section by roll forming or break forming, with baseplates, bearing plates, stiffeners, and other plates required for erection welded into place. Cut, form, punch, drill, and weld secondary framing for bolted field connections to primary framing.
- E. Metal Panels: Fabricate and finish metal panels at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.
 - 1. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of metal panel.

2.10 SOURCE QUALITY CONTROL

- A. Special Inspection: Owner will engage a qualified special inspector to perform source quality control inspections and to submit reports.
 - 1. Accredited Manufacturers: Special inspections will not be required if fabrication is performed by an IAS AC472-accredited manufacturer approved by authorities having jurisdiction to perform such Work without special inspection.
- B. Product will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

PART 3 - EXECUTION

3.1 ERECTION OF STRUCTURAL FRAMING

- A. Erect metal building system according to manufacturer's written instructions and drawings.
- B. Do not field cut, drill, or alter structural members without written approval from metal building system manufacturer's professional engineer.
- C. Set structural framing accurately in locations and to elevations indicated, according to AISC specifications referenced in this Section. Maintain structural stability of frame during erection.
- D. Base and Bearing Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.
 - 1. Set plates for structural members on wedges, shims, or setting nuts as required.
 - Tighten anchor rods after supported members have been positioned and plumbed. Do
 not remove wedges or shims but, if protruding, cut off flush with edge of plate before
 packing with grout.
 - 3. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.

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- E. Align and adjust structural framing before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with framing. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
 - 1. Level and plumb individual members of structure.
 - 2. Make allowances for difference between temperature at time of erection and mean temperature when structure will be completed and in service.
 - 3. Verify that framing matches existing building in height, slope, length and width when all finishes material applied.
- F. Primary Framing and End Walls: Erect framing level, plumb, rigid, secure, and true to line. Level baseplates to a true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use grout to obtain uniform bearing and to maintain a level base-line elevation. Moist-cure grout for not less than seven days after placement.
 - Make field connections using high-strength bolts installed according to RCSC's
 "Specification for Structural Joints Using High-Strength Bolts" for bolt type and joint type
 specified.
 - a. Joint Type: Snug tightened or pretensioned as required by manufacturer.
- G. Secondary Framing: Erect framing level, plumb, rigid, secure, and true to line. Field bolt secondary framing to clips attached to primary framing.
 - 1. Provide rake or gable purlins with tight-fitting closure channels and fasciae.
 - 2. Locate and space wall girts to suit openings such as doors and windows.
 - 3. Provide supplemental framing at entire perimeter of openings, including doors, windows, ventilators, and other penetrations of roof and walls.
- H. Steel Joists: Install joists and accessories plumb, square, and true to line; securely fasten to supporting construction according to SJI's "Standard Specifications and Load Tables for Steel Joists and Joist Girders," joist manufacturer's written instructions, and requirements in this Section.
 - 1. Before installation, splice joists delivered to Project site in more than one piece.
 - Space, adjust, and align joists accurately in location before permanently fastening.
 - 3. Install temporary bracing and erection bridging, connections, and anchors to ensure that joists are stabilized during construction.
 - Joist Installation: Bolt joists to supporting steel framework using carbon-steel bolts unless otherwise indicated.
 - Joist Installation: Bolt joists to supporting steel framework using high-strength structural bolts unless otherwise indicated. Comply with RCSC's "Specification for Structural Joints Using High-Strength Bolts" for high-strength structural bolt installation and tightening requirements.
 - 6. Joist Installation: Weld joist seats to supporting steel framework.
 - 7. Install and connect bridging concurrently with joist erection, before construction loads are applied. Anchor ends of bridging lines at top and bottom chords if terminating at walls or beams.
- I. Bracing: Install bracing in roof and sidewalls where indicated on erection drawings.
 - 1. Tighten rod and cable bracing to avoid sag.
 - 2. Locate interior end-bay bracing only where indicated.

- J. Framing for Openings: Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to structural framing.
- K. Erection Tolerances: Maintain erection tolerances of structural framing within AISC 303.

3.2 METAL PANEL INSTALLATION, GENERAL

- A. General: Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.
 - 1. Field cut metal panels as required for doors, windows, and other openings. Cut openings as small as possible, neatly to size required, and without damage to adjacent metal panel finishes.
 - Field cutting of metal panels by torch is not permitted unless approved in writing by manufacturer.
 - 2. Install metal panels perpendicular to structural supports unless otherwise indicated.
 - 3. Flash and seal metal panels with weather closures at perimeter of openings and similar elements. Fasten with self-tapping screws.
 - 4. Locate and space fastenings in uniform vertical and horizontal alignment.
 - 5. Locate metal panel splices over structural supports with end laps in alignment.
 - 6. Lap metal flashing over metal panels to allow moisture to run over and off the material.
- B. Lap-Seam Metal Panels: Install screw fasteners using power tools with controlled torque adjusted to compress EPDM washers tightly without damage to washers, screw threads, or metal panels. Install screws in predrilled holes.
 - 1. Arrange and nest side-lap joints so prevailing winds blow over, not into, lapped joints. Lap ribbed or fluted sheets one full rib corrugation. Apply metal panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line.
- C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with corrosion-resistant coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by metal roof panel manufacturer.
- D. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of metal panel assemblies. Provide types of gaskets, fillers, and sealants indicated; or, if not indicated, provide types recommended by metal panel manufacturer.
 - 1. Seal metal panel end laps with double beads of tape or sealant the full width of panel. Seal side joints where recommended by metal panel manufacturer.
 - 2. Prepare joints and apply sealants to comply with requirements in Section 07 92 00 "Joint Sealants."

3.3 METAL ROOF PANEL INSTALLATION

A. General: Provide metal roof panels of full length from eave to ridge unless otherwise indicated or restricted by shipping limitations.

- 1. Install ridge caps as metal roof panel work proceeds.
- 2. Flash and seal metal roof panels with weather closures at eaves and rakes. Fasten with self-tapping screws.
- B. Standing-Seam Metal Roof Panels: Fasten metal roof panels to supports with concealed clips at each standing-seam joint, at location and spacing and with fasteners recommended by manufacturer.
 - 1. Install clips to supports with self-drilling or self-tapping fasteners.
 - 2. Install pressure plates at locations indicated in manufacturer's written installation instructions.
 - 3. Snap Joint: Nest standing seams and fasten together by interlocking and completely engaging factory-applied sealant.
 - 4. Seamed Joint: Crimp standing seams with manufacturer-approved motorized seamer tool so that clip, metal roof panel, and factory-applied sealant are completely engaged.
 - 5. Rigidly fasten eave end of metal roof panels and allow ridge end free movement for thermal expansion and contraction. Predrill panels for fasteners.
 - 6. Provide metal closures at peaks rake edges rake walls and each side of ridge and hip caps.
- C. Metal Fascia Panels: Align bottom of metal panels and fasten with blind rivets, bolts, or self-drilling or self-tapping screws. Flash and seal metal panels with weather closures where fasciae meet soffits, along lower panel edges, and at perimeter of all openings.

3.4 METAL WALL PANEL INSTALLATION

- A. General: Install metal wall panels in orientation, sizes, and locations indicated on Drawings. Install panels perpendicular to girts, extending full height of building, unless otherwise indicated. Anchor metal wall panels and other components of the Work securely in place, with provisions for thermal and structural movement.
 - 1. Unless otherwise indicated, begin metal panel installation at corners with center of rib lined up with line of framing.
 - 2. Shim or otherwise plumb substrates receiving metal wall panels.
 - 3. When two rows of metal panels are required, lap panels 4 inches minimum.
 - 4. When building height requires two rows of metal panels at gable ends, align lap of gable panels over metal wall panels at eave height.
 - 5. Rigidly fasten base end of metal wall panels and allow eave end free movement for thermal expansion and contraction. Predrill panels.
 - 6. Flash and seal metal wall panels with weather closures at eaves and rakes, and at perimeter of all openings. Fasten with self-tapping screws.
 - 7. Install screw fasteners in predrilled holes.
 - 8. Install flashing and trim as metal wall panel work proceeds.
 - Apply elastomeric sealant continuously between metal base channel (sill angle) and concrete, and elsewhere as indicated on Drawings; if not indicated, as necessary for waterproofing.
 - 10. Align bottom of metal wall panels and fasten with blind rivets, bolts, or self-drilling or self-tapping screws.
 - 11. Provide weatherproof escutcheons for pipe and conduit penetrating exterior walls.
- B. Metal Wall Panels: Install metal wall panels on exterior side of girts. Attach metal wall panels to supports with fasteners as recommended by manufacturer.

3.5 METAL SOFFIT PANEL INSTALLATION

- A. Provide metal soffit panels the full width of soffits. Install panels perpendicular to support framing.
- B. Flash and seal metal soffit panels with weather closures where panels meet walls and at perimeter of all openings.

3.6 THERMAL INSULATION INSTALLATION

- A. General: Install insulation concurrently with metal panel installation, in thickness indicated to cover entire surface, according to manufacturer's written instructions.
 - 1. Set vapor-retarder-faced units with vapor retarder toward warm side of construction unless otherwise indicated. Do not obstruct ventilation spaces except for firestopping.
 - 2. Tape joints and ruptures in vapor retarder, and seal each continuous area of insulation to the surrounding construction to ensure airtight installation.
 - 3. Install factory-laminated, vapor-retarder-faced blankets straight and true in one-piece lengths, with both sets of facing tabs sealed, to provide a complete vapor retarder.
 - 4. Install blankets straight and true in one-piece lengths. Install vapor retarder over insulation, with both sets of facing tabs sealed, to provide a complete vapor retarder.
- B. Blanket Roof Insulation: Comply with the following installation method:
 - 1. Refer to Section 07 21 30 Pre-Engineered Building Insulation
- C. Blanket Wall Insulation: Extend insulation and vapor retarder over and perpendicular to top flange of secondary framing. Hold in place by metal wall panels fastened to secondary framing.
 - 1. Retainer Strips: Install retainer strips at each longitudinal insulation joint, straight and taut, nesting with secondary framing to hold insulation in place.

3.7 DOOR AND FRAME INSTALLATION

- A. General: Install doors and frames plumb, rigid, properly aligned, and securely fastened in place according to manufacturers' written instructions. Coordinate installation with wall flashings and other components. Seal perimeter of each door frame with elastomeric sealant used for metal wall panels.
- B. Personnel Doors and Frames: Install doors and frames according to NAAMM-HMMA 840.
 - At fire-rated openings, install frames according to, and doors with clearances specified in, NFPA 80.
- C. Field Glazing: Comply with installation requirements in Section 08 80 00 "Glazing."
- D. Door Hardware:
 - Install surface-mounted items after finishes have been completed at heights indicated in DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."

METAL BUILDING SYSTEMS 13 34 19 - 12

- 2. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
- 3. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- Set thresholds for exterior doors in full bed of sealant complying with requirements for concealed mastics specified in Section 07 92 00 "Joint Sealants."

3.8 WINDOW INSTALLATION

- A. General: Install windows plumb, rigid, properly aligned, without warp or rack of frames or sash, and securely fasten in place according to manufacturer's written instructions. Coordinate installation with wall flashings and other components. Seal perimeter of each window frame with elastomeric sealant used for metal wall panels.
 - Separate dissimilar materials from sources of corrosion or electrolytic action at points of contact with other materials by complying with requirements specified in AAMA/WDMA/CSA 101/I.S.2/A440.
- B. Set sill members in bed of sealant or with gaskets, for weathertight construction.
- C. Install windows and components to drain condensation, water penetrating joints, and moisture migrating within windows to the exterior.
- D. Mount screens directly to frames with tapped screw clips.

3.9 ACCESSORY INSTALLATION

- A. General: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.
 - 1. Install components required for a complete metal roof panel assembly, including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
 - 2. Install components for a complete metal wall panel assembly, including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
 - 3. Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with corrosion-resistant coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by manufacturer.
- B. 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. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
 - Install exposed flashing and trim that is without excessive oil-canning, 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 result in
 waterproof and weather-resistant 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 or bayonet-type expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).
- C. Gutters: Join sections with riveted-and-soldered or lapped-and-sealed joints. Attach gutters to eave with gutter hangers spaced as required for gutter size, but not more than 36 inches o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.
- D. Downspouts: Join sections with 1-1/2-inch telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch away from walls; locate fasteners at top and bottom and at approximately 60 inches o.c. in between.
 - 1. Provide elbows at base of downspouts to direct water away from building.
 - 2. Tie downspouts to underground drainage system indicated.
- E. Roof Curbs: Install curbs at locations indicated on Drawings. Install flashing around bases where they meet metal roof panels.
- F. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to panel as recommended by manufacturer.

3.10 FIELD QUALITY CONTROL

- A. Special Inspections: Contractor will engage a qualified special inspector to perform field quality control special inspections and to submit reports.
- B. Product will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

END OF SECTION

ARCHITECT

Holly & Smith Architects, APAC

208 N. Cate Street Hammond, LA 70401 985.345.5210

STRUCTURAL ENGINEER

Forte & Tablada 9107 Interline Ave. Batin Rouge, LA 70809 225.927.9321

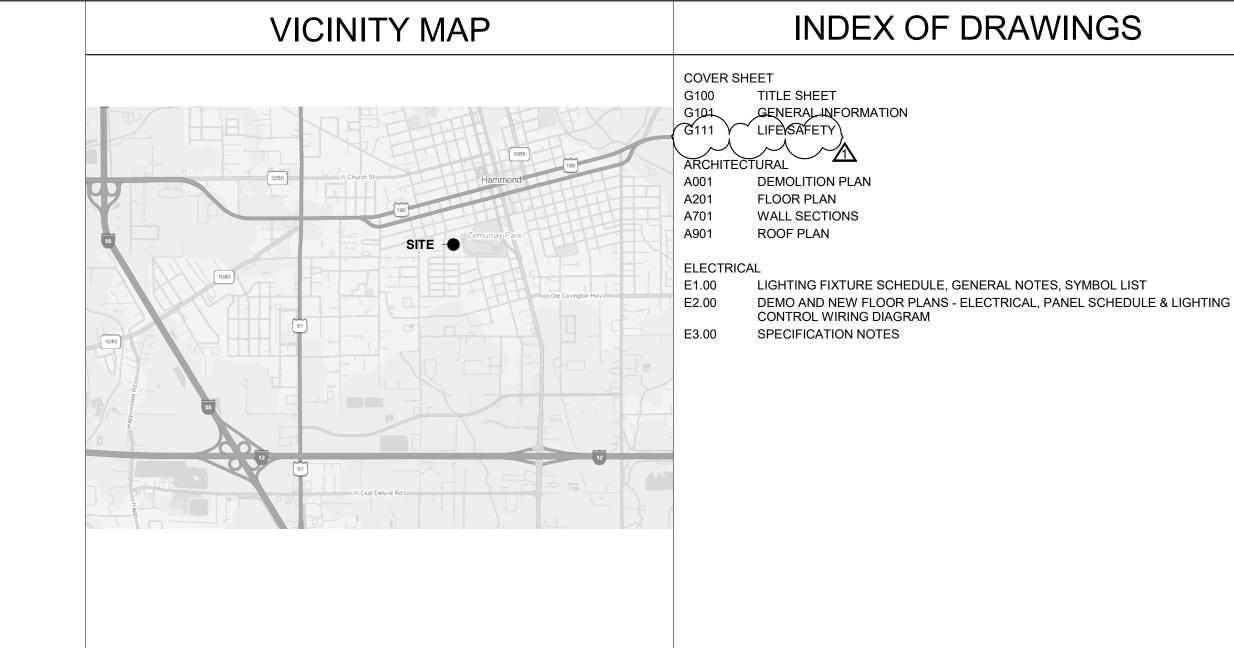
ELECTRICAL ENGINEER

Creative Engineering Group, LLC 201 Highland PArk Plaza Covington, LA 70433 985.249.5706

OWNER

City of Hammond 310 E. Charles St. Hammond, LA 70401





PROJECT INFORMATION

PROJECT DESCRIPTION: STORAGE ADDITION TO EXISTING COMMUNITY CENTER GYM. PROJECT ADDRESS: 601 W COLEMAN AVE, HAMMOND, LA 70403 RESIDENTAL (RS-3) **EXISTING ZONING:**

FEMA FLOOD ZONE:

HOLLY & SMITH ARCHITECTS

HAMMOND

T 985.345.5210

NEW ORLEANS T 504.585.1315

LAFAYETTE T 337.279.2010 www.hollyandsmith.com

NO. DESCRIPTION DATE

PROJECT NO.

02/28/2025

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CONSTRUCTION **DOCUMENTS**

TITLE SHEET

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OCCUPANT ROUTE

- EXIT WIDTH REQUIRED - EXIT WIDTH PROVIDED

STAIR WIDTH REQUIRED

STAIR WIDTH PROVIDED

EXIT LIGHT FIXTURE (ARROWS INDICATE

DIRECTIONAL INDICATORS IF PRESENT) FIRE EXTINGUISHER CABINET

OCCUPANCY LEGEND

ACCESSORY STORAGE, MECHANICAL (300 GROSS)

ASSEMBLY - (CONCENTRATED, CHAIRS ONLY, NOT FIXED = 7 NET

BUSINESS - (ASSEMBLY, UNCONCENTRATED, TABLES AND CHAIRS I.E. WAITING ROOMS = 15 NET, BUSINESS = 100 GROSS, EDUCATIONAL CLASSROOM = 20 NET)

MISCELLANEOUS NON-OCCUPIED SPACES

MERCANTILE - (GRADE FLOOR AREA = 30 GROSS)

EGRESS REQUIREMENTS DETECTION, ALARM, & COMMUNICATION

FIRE ALARM

SYSTEM REQUIREMENTS:

REQUIRED (IBC SECT. 907.2, NFPA SECT. 14.3.4.1.1)

MANUAL INITIATION NOT REQUIRED TO BE MODIFIED AS REQUIRED FOR NEW SPACE (IBC SECT. 907 EXCEPTION, NFPA

1) THE BUILDING IS EQUIPPED WITH A APPROVED AUTOMATIC 2) EMERGENCY VOICE\ALARM COMM. SYSTEM WILL ACTIVATE ON SPRINKLER FLOW

POSITIVE ALARM SEQUENCE SHALL BE PERMITTED (IBC SECT. 907, NFPA SECT. 14.3.4.3)

AUTOMATIC SPRINKLER SYSTEM

SYSTEM REQUIREMENTS:

SYSTEM REQ.

OCCUPIED LOCATION.

SECT. 14.3.4.2.1) IF THE FOLLOWING IS MET:

3) MANUAL ACTIVATION IS PROVIDED FROM A NORMALLY

EMERGENCY FORCES NOTIFICATION SHALL BE ACCOMPLISHED BY NFPA 101 9.6.4 (SYSTEM ALARM TRANSMITTED AUTOMATICALLY VIA REMOTE SUPERVISING STATION FIRE ALARM SYSTEM PER NFPA 72 (IBC SECT. 907, NFPA SECT.

NOT REQUIRED (NOT REQUIRED BY 2021 IEBC CHAPTER 8 FOR ALTERATION LEVEL 2; NOT REQUIRED BY 2015 NFPA 101 13.3.5)

CODE DATA

GENERAL NOTES

THESE PLANS ARE PROVIDED FOR THE CONVENIENCE OF

THE BUILDING OFFICIAL & FIRE MARSHAL. IT DOCUMENTS

INCLUDING THE EXIT FLOW & FIRE SEPARATION. THIS PLAN

IS TO BE FOLLOWED IN REGARDS TO LIFE SAFETY ISSUES

THE MAJOR LIFE SAFETY FEATURES OF THE PROJECT

REFER TO MECHANICAL DRAWINGS FOR LOCATIONS OF

ALL DUCT WORK THROUGH RATED ASSEMBLIES WILL

REFER TO PLUMBING DRAWINGS FOR FIRE SPRINKLER

SYSTEM COMPONENT LOCATIONS AND SPRINKLER HEAD

CONTRACTOR SHALL CONFIRM THAT ALL FIXTURES AND

COMPATIBLE WITH UL FIRE RATED CEILING DESIGNS WHEN INSTALLED IN ACCORDANCE WITH THE UL FIRE RESISTANCE

APPURTANANCES THAT PENETRATE A FIRE RATED

COMPATIBLE TO MAINTAIN THE FIRE RATING OF THE ASSEMBLY AT THE PENETRATION, CONTRACTOR SHALL

RATED ENCLOSURES SHALL BE MANUFACTURED BY FIRE

RATED PRODUCT SPECIALTIES, EZ BARRIER, TENMAT FIRE

PROTECTION SOLUTIONS, OR EQUAL. THIS SHALL APPLY TO

ALL LIGHTING FIXTURES, EXHAUST FANS, SPEAKERS, AND

OTHER MISCELLANEOUS FIXTURES THAT MAY PENETRATE

REFRIGERATOR ICEMAKER VALVE) THAT PENETRATE A FIRE RATED WALL ASSEMBLY ARE COMPATIBLE WITH UL FIRE

RATED WALL DESIGNS WHEN INSTALLED IN ACCORDANCE WITH THE UL FIRE RESISTANCE DIRECTORY. IF THESE ITEMS ARE DEEMED NOT COMPATIBLE TO MAINTAIN THE FIRE RATING OF THE ASSEMBLY AT THE PENETRATION. CONTRACTOR SHALL PROVIDE AND INSTALL ONE-HOUR FIRE RATED ENCLOSURES AT EACH PENETRATION LOCATION. ELECTRICAL OUTLET PROTECTION SHALL BE PUTTY PADS. RECESSED PLUMBING BOXES SHALL BE ONE-HOUR FIRE RATED ENCLOSURES MANUFACTURED BY FIRE

ALL RECESSED MOUNTED FIRE EXTINGUISHER CABINETS

SHALL BE FIRE RATED WHERE THEY PENETRATE A FIRE

FINISHED INTERIOR OF ROOMS SHALL BE INSTALLED AND TOOLED IN A NEAT, WORKMANLIKE, AND SMOOTH MANNER

TO PRODUCE A CLEAN, AESTHETIC JOINT. COMPLETED JOINTS THAT DO NOT MEET THIS REQUIREMENT SHALL BE

CONTRACTOR SHALL PROVIDE APPROPRIATELY SIZED

BE REQUIRED AT FIRE RATED ASSEMBLIES. UNLESS

24" x 24" ACCESS PANEL FOR BIDDING PURPOSES AT

EQUIPMENT REQUIRING ACCESS PER MECHANICAL.

PLUMBING, OR ELECTRICAL DRAWINGS.

ACCESS PANELS AT ALL PLUMBING ACCESS POINTS, HVAC DAMPERS, FIRE DAMPERS, ELECTRICAL ACCESS POINTS.

AND AT ALL OTHER EQUIPMENT REQUIRING ACCESS INSIDE WALLS OR CEILINGS. FIRE RATED ACCESS PANELS SHALL

OTHERWISE NOTED OR DIRECTED, ASSUME PROVISION OF

FIRE SEALANT THAT IS VISIBLE AND EXPOSED TO THE

REWORKED OR REMOVED AND REINSTALLED PER

CONTRACTOR SHALL CONFIRM THAT ALL ELECTRICAL

OUTLETS AND RECESSED PLUMBING BOXES (I.E.

RATED PRODUCT SPECIALTIES OR EQUAL.

FLOOR/CEILING OR ROOF/CEILING ASSEMBLY ARE

DIRECTORY. IF THESE ITEMS ARE DEEMED NOT

PROVIDE AND INSTALL ONE-HOUR FIRE RATED ENCLOSURES AT EACH PENETRATION LOCATION. FIRE

ALARM SYSTEM AND EXIT LIGHT LOCATIONS.

FIRE DAMPER REQUIREMENTS IN DUCTWORK. IN GENERAL,

REFER TO ELECTRICAL DRAWINGS FOR LOCATION OF FIRE

BY THE GENERAL CONTRACTOR.

REQUIRE A DAMPER.

LAYOUT.

THE ASSEMBLY.

RATED ASSEMBLY.

ARCHITECT'S DIRECTION.

PROJECT DESCRIPTION:

STORAGE ROOM ADDITION TO HAMMOND COMMUNITY CENTER BUILDING.

BUILDING SQUARE FOOTAGE:

EXISTING BUILDING: 15,705 SF NEW ADDITION: 816 SF

OCCUPANCY CLASSIFICATION:

EXISTING BUILDING PRIMARY: CLASS A-3, ASSEMBLY NEW ADDITION: CLASS S-2, STORAGE (LOW HAZARD)

CONSTRUCTION TYPE:

OCCUPANT SEPARATION BUILDING AREA & CON.

<u>INCIDENTAL USE AREAS: (IBC TABLE 509.1, NPFA 101:14.3.2.1, 101:8.7.1.2, TABLE 101:8.3.4.2, 101:12.3.2)</u>

BUILDING ELEMENT FIRE PROTECTION REQUIREMENTS:

MINIMUM CORRIDOR WIDTH ALLOWANCE:

36" WIDE MINIMUM WHERE REQUIRED OCCUPANT CAPACITY

(IBC) 2 MEANS OF EGRESS (SECTION 1006.2.1, TABLE 1006.2.1)

COMMON PATH OF TRAVEL = 75'-0" (100'-0")TO CHOICE OF 2

44" WIDE MINIMUM (IBC TABLE 1020.3)

MINIMUM NUMBER OF EXITS REQUIRED:

(NFPA) 2 MEANS OF EGRESS (SECTION 7.4.1.2)

MISCELLANEOUS EGRESS REQUIREMENTS:

MAX. TRAVEL DISTANCE TO EXIT = 250'

(IBC TABLE 1017.1, NFPA TABLE A.7.6)

(IBC SECT. 1006.2, NFPA TABLE A.7.6)

EXIT PATHS

LESS THAN 50 (IBC TABLE 1020.3)

1 HR. FIRE BARRIER OR AUT. FIRE-EXT. (OVER 10 SF) SYS.

BUILDING CLASSIFICATION: EXISTING PRIMARY OCCUPANCY: ASSEMBLY GROUP A-3 (IBC),

ASSEMBLY (NFPA) NEW ACCESORY OCCUPANCY: STORAGE S-2 (IBC) STORAGE

TYPE OF CONSTRUCTION: TYPE IIB (IBC), TYPE II (NFPA)

BUILDING AREA AND HEIGHT LIMITATIONS: ALLOWABLE AREA (IBC 506.2) = 9,500 SF

FIRE RESISTANT REQ. ALLOWABLE HEIGHT (IBC 504.3) = 75 fT

BUILDING AREA MODIFICATIONS: AREA INCREASES (IBC 506.2.2) ALLOWABLE INCREASED AREA (16,625 SF) $Aa = [At + (NS \times If)]$

Aa = 16,625 SF **EXISTING SQUARE FEET: 15,705 SF NEW SQUARE FEET: 16,521 SF**

 $Aa = [9,500 + (9,500 \times .75)]$

APPLICABLE CODES

BUILDING CODES:

[2015 LIFE SAFETY CODE (NFPA 101, EXCLUDING CHAPTER 5) 2021 INTERNATIONAL BUILDING CODE (IBC, EXCLUD. **CHAPTERS 1, 11, & 27)**

2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC, EXCLUD 2021 INTERNATIONAL MECHANICAL CODE (IMC) 2021 INTERNATIONAL FUEL GAS CODE 2021 NATIONAL ELECTRIC CODE (NFPA 70)

2015 INTERNATIONAL PLUMBING CODE 2019 NFPA 10 - FIRE EXTINGUISHERS 2019 NFPA 13, 13R, & 13D - AUTOMATIC SPRINKLER SYSTEMS 2019 NFPA 20 – STATIONARY FIRE PUMPS 2019 NFPA 72 - FIRE ALARM SYSTEMS

2019 NFPA 96 - HOOD AND EXHAUST SYSTEMS IN COMMERICAL **KITCHENS** 2019 ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS]

OTHER CODES: 12010 AMERICANS WITH DISABILITIES ACT ACCESSIBILITY

GUIDELINES (ADAAG) AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) **UL FIRE RESISTANCE DIRECTORY** 2007 ANSI/ASHRAE/IES STANDARD 90.1 - ENERGY CODE FOR

[NOTE: THE CURRENT EDITIONS OF CODES AND STANDARDS ENFORCED BY THE CURRENT STATUES OF THE STATE OF LOUISIANA IN LOUISIANA ADMINISTRATIVE CODE, TITLE 55-V.103 AND 303 SHALL BE REFERENCED ON THIS PROJECT.]

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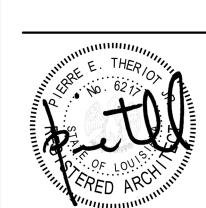
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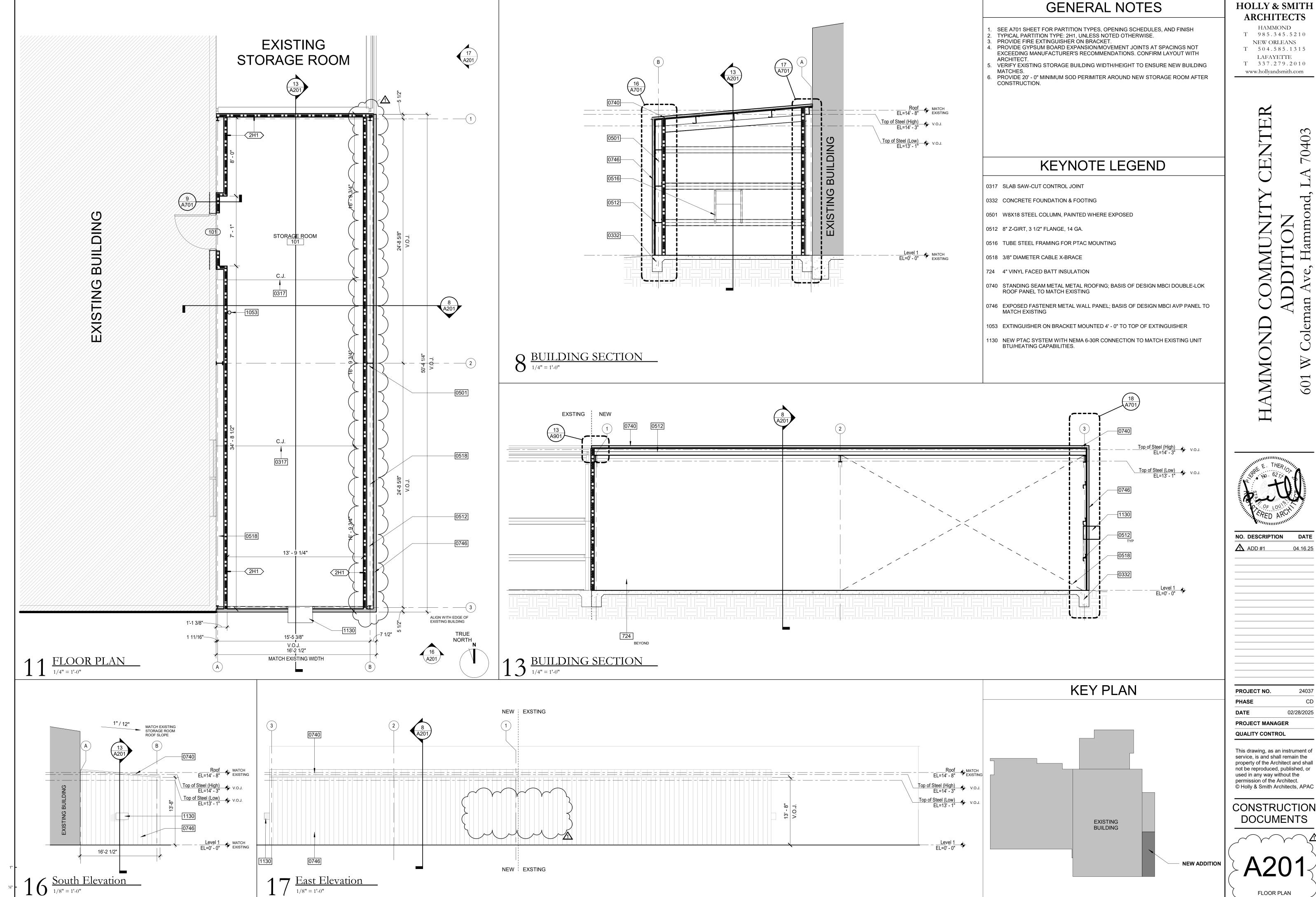
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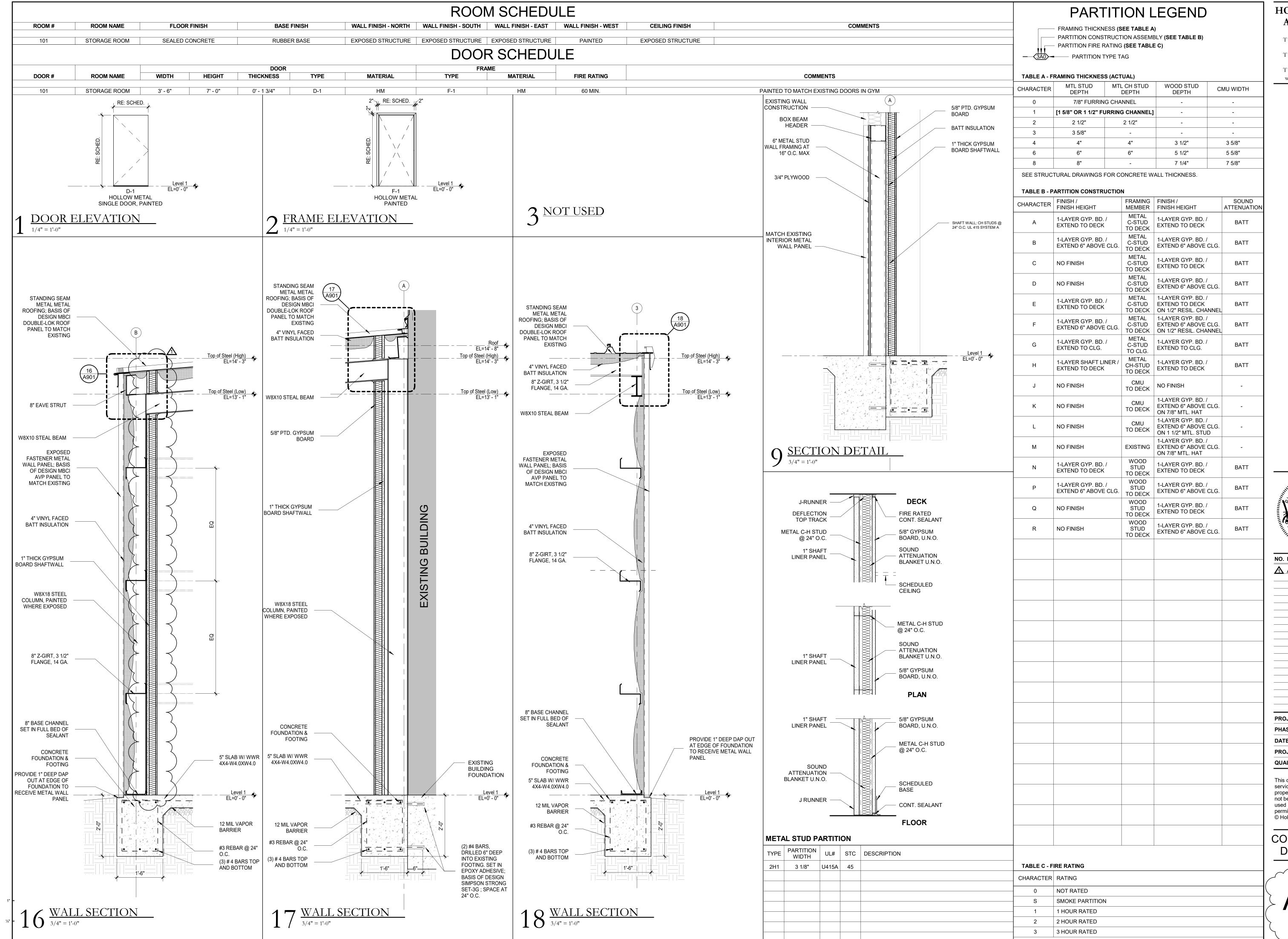
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MMOND COMMUNITY CENTER ADDITION

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ADD #1 04.16.25

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DATE 02/28/2025

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