



Jones Gillam Renz Architects

Address

730 N 9th St.
Salina, KS 67401

1881 Main St., Suite 301
Kansas City, MO 64108

Contact

jgr@jgrarchitects.com
(785) 827-0386

Web

jgrarchitects.com

NOTICE TO ALL CONTRACTORS AND SUB-CONTRACTORS

4-29-2025

101 N. Santa Fe Ave Remodel & Additions – JGR Proj 24-3421

ADDENDUM NO. 1

YOU ARE INSTRUCTED TO READ AND TO NOTE THE FOLLOWING DESCRIBED CHANGES, CORRECTIONS, CLARIFICATIONS, OMISSIONS, DELETIONS, ADDITIONS, APPROVALS, AND STATEMENTS PERTINENT TO THE CONTRACT AND CONSTRUCTION DOCUMENTS. THIS ADDENDUM IS A PART OF THE CONTRACT AND CONSTRUCTION DOCUMENTS AND SHALL GOVERN IN THE PERFORMANCE OF THE WORK.

ARCHITECTURAL – Specifications

1. Table of Contents – Section 05731 Ornamental Glass Railing has been added.
2. Section 01019 Special Provisions
 - a. Section 5.f.2 – Door Hardware Allowance has been changed to \$75,000
3. Section 057313 Ornamental Glass Railings
 - a. Section 2.02, E.1 – Corrected to read “Fully tempered and laminated”
 - b. Section 2.03, E – Corrected to read “1/2” or 9/16” tempered and laminated glass”
4. Section 08410 Aluminum Entrances, Storefront & Windows
 - a. Section 2.08, B – Corrected to read Dark Bronze (no baked kynar finish).
5. Section 08710 Door Hardware
 - a. Section 1.02 Allowances has been added.

ARCHITECTURAL – Drawings

1. Sheet A3.2
 - a. Detail B – label corrected to “West Elevation”
 - b. Detail B – new windows shall be non-rated double hung windows.
2. Sheet A9.4
 - a. Details G & H – glass type has been revised to 1/2” or 9/16” tempered and laminated glass.
3. Sheet A10.2
 - a. Door Schedule
 - i. Door R7, Frame type 4 has been added
 - ii. Doors R7 & R13 frame type has been corrected to Aluminum.
 - iii. Note 4 has been added to Doors 106, 108, 132, 207 and 212
 - iv. Note 5 has been added to Doors 201, 202, R17
 - v. Note 6 has been added to Door R18
 - vi. General Notes – Note F has been added
 - vii. Specific Notes
 1. Apartment notes (1) have been modified
 2. Notes 4, 5 & 6 have been added

ELECTRICAL – Drawings

1. Sheet E1.7
 - a. Added j-box and 120V power above ceiling at doors 106, 108, and 132 for security/access control.
2. Sheet E1.9
 - a. Added j-box and 120V power above ceiling at doors 207 and 212 for security/access control.
3. Sheet E1.10
 - a. Added j-box and 120V power above ceiling at door R18 for security alarm/access control.
4. Sheet E1.12
 - a. Added j-box and conduit rough-in at doors 106, 108, and 132 for security/access control card reader.
5. Sheet E1.14
 - a. Added j-box and conduit rough-in at doors 207 and 212 for security/access control card

- b. reader.
 - c. Added electromagnetic door holder along with associated fire alarm system area smoke detector and addressable relay for door release at doors 201 and 202.
- 6. Sheet E1.15
 - a. Added rough-in conduit to jamb of door R18 for door security/alarm system cabling.
 - b. Added electromagnetic door holder along with associated fire alarm system area smoke detector and addressable relay for door release at door R17.
- 7. Sheet E6.2
 - a. Updated panel schedules for panelboards 'P1' and 'P2' to include new circuits for door security/access control.

Receipt of this Addendum shall be noted on the Bid Form.

END OF ADDENDUM NO. 1

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SECTION 01019

SPECIAL PROVISIONS

1. GENERAL

Should conflict occur between these Special Provisions and the General Conditions, the requirements of the Special Provisions shall take precedence.

2. TIME OF CONSTRUCTION – PENALTY CLAUSE

- a. Time of Construction – Construction commencement date shall be as specified in the AIA Document A133 – Standard Form of Agreement between Owner and Construction Manager as Constructor. The Contractor may commence bidding and project preparation upon the receipt of the Final Bid set of drawings and specifications and once the Architect has given the Contractor written notice to proceed to the satisfaction of the Owner. The time for completion shall be as specified in the AIA Document A133 – Standard Form of Agreement between Owner and Construction Manager as Constructor. This deadline may be extended for the period of any reasonable delay which is due exclusively to causes beyond the control and without the fault of the Contractor, including acts of God, fires, floods, and direction by the Architect. It is impractical to perform any operation of construction and acts of omissions of the Owner with respect to matters for which Owner is solely responsible; provided, however, that no such extension of time for completion shall be granted the Contractor, unless within ten (10) days after the happening of any event relied upon by the Contractor for such extension of time, the Contractor shall have made a request, therefore, in writing to the Architect. Extended time will be submitted with pay request for Owner's approval.
- b. Penalty Clause - The time of completion of the construction of the project is of the essence of this Contract. Should the Contractor neglect, refuse, or fail to complete the project (100%) within the time herein agreed upon, after giving effect to extensions of time, if any, herein provided; the Owner shall have the right to deduct from and retain out of such money, which may then be due or which may become due and payable to the Contractor, the sum of TWO HUNDRED DOLLARS (\$200.00) per day for each and every day that such construction is delayed in its completion beyond the specified time. If the amount due and to become due from the Contractor to the Owner is insufficient to pay in full any such penalties, the Contractor shall pay to the Owner the amount necessary to effect such payment in full; provided, however, that the Owner shall promptly notify the Contractor in writing of the manner in which the amount retained, deducted or claimed. No award is given to the Contractor for early completion.
- c. Joint Responsibility - The General Contractor and/or Subcontractors causing the delay in completion of the project shall be responsible for payment of the penalty. In no case shall the total penalty for all contracts exceed the sum of daily penalty multiplied by the number of days of delay in completion.

3. WORK SEQUENCE, SCHEDULE FOR COMPLETION AND LIQUIDATED DAMAGES

- a. Schedule requirements for each area will be negotiated between the owner and the contractor. Reference the AIA Document A133 – Standard Form of Agreement between Owner and Construction Manager as Constructor.

Work	Available Start	Substantial Completion	Liquidated Damages
Addition and Renovation	TBD	TBD	\$200/Calendar Day

- b. Schedule requirements for final completion – 14 days following substantial completion with liquidated damages equivalent to those identified for substantial completion.

4. ALTERNATES - Refer to Alternate Schedule, Section 01030

- a. Alternates specified are not a part of Base Bid, but are Alternates to same, their acceptance being at option of Owner.

5. CASH ALLOWANCES

- a. Costs included in Allowances: Cost of Product to Contractor or Subcontractor, less applicable trade discounts, delivery to site, except those taxes saved by use of Owner's tax exemption.
- b. Costs Not Included in the Allowance: Fees for overhead and profit, product handling at the site, including unloading, uncrating, and storage; protection of Products from elements and from damage and labor for installation and finishing.

- c. Architect Responsibilities:
 1. Consult with Contractor in consideration and selection of Products, suppliers and installers.
 2. Select Products in consultation with Owner and transmit decision to Contractor.
 3. Prepare Proposal Requests and Change Orders.
 - d. Contractor Responsibilities:
 1. Assist Architect/Engineer in selection of Products, suppliers and installers.
 2. Obtain proposals from suppliers and installers and offer recommendations.
 3. On notification of selection by Architect, execute purchase agreement with designated supplier and installer.
 4. Arrange for and process shop drawings, product data, and samples. Arrange for delivery.
 5. Promptly inspect Products upon delivery for completeness, damage, and defects. Submit claims for transportation damage.
 6. Product handling at the site, including unloading, uncrating and storage, protection of Products from elements and from damage and labor for installation and finishing.
 7. The Contractor shall include in his Bid all fees for all cash allowances.
 - e. Funds will be drawn from Cash Allowances only by written authorization from Owner.
 - f. Cash Allowances:
 1. Inspection and Testing Allowance – The contractor shall include in his bid, an allowance of **\$20,000.00** for direct cost of testing by the approved testing companies. The contractor shall bear all costs associated with coordination, administration scheduling, and supervision of testing companies, and include those costs in his bid.
 2. Section 08710 Door Hardware, **Amount \$75,000** (or as specified by owner.)
 3. Section 10431 Signage, **Amount \$15,000.00** (or as specified by owner.)
 4. New supports, platforms, structural needs and modification to accommodate new roof-top mechanical equipment – **Amount \$25,000.00** (or as specified by owner.)
 5. Contingency Allowance – In addition to the specification sections listed above, contractor is encouraged to include a contingency allowance equal to **1%** (or as specified by owner) of the general bid and contract amount to be included in the contractor's base bid. This allowance shall be used at the sole discretion of the Architect and/or Owner specifically for hidden conditions discovered in the field or on site, the addition of labor, parts, and/or materials required for timely completion in conjunction with the general scope of work.
6. **ENUMERATION OF DRAWINGS AND SPECIFICATIONS**
- a. Correlation. Accompanying these Specifications are the Drawings, which jointly with these Specifications, are intended to explain each other and describe and coordinate the work to be performed under the Contract.
 - b. Verification of Documents. Before submitting his bid, each Bidder shall check his set(s) of Drawings and Specifications and advise the Architect if any sheets are missing.
 - c. Specifications Explanations. For convenience of reference, the Specifications are separated into Titled Divisions and Sections. Such separation shall not, however, operate to make the Architect an arbiter to establish limits between the Contractor and Subcontractor or Sub-Subcontractor.
 - d. Drawings. Refer to LIST OF DRAWINGS.
 - e. Specifications. Refer to TABLE OF CONTENTS.
7. **WARRANTIES**
Before being eligible for final payment, Contractor shall deliver to Owner, through Architect, all special warranties specified for materials, equipment, and installation.
8. **OPERATING INSTRUCTIONS**
Before being eligible for final payment, Contractor shall deliver to Owner, through Architect, three (3) copies of manufacturer's operating and maintenance instructions, and one (1) CD/DVD containing complete set or manufacturers operating instructions, a complete set of shop drawings on each piece of equipment. Electronic files shall be in PDF format with files organized into single documents for Architectural, Mechanical, and Electrical divisions.
9. **AS-BUILT DRAWINGS**
Before being eligible for final payment, the Electrical and Mechanical Contractors shall prepare and deliver to Owner, through Architect, One (1) CD/DVD containing AS-BUILT DRAWINGS in PDF format. These drawings shall consist of marked-up prints, and shall show the correct location of every item of equipment, piping, conduit, panel boards, ductwork, switches, valves, etc. If marked-up prints are used, and scanned, they shall be new white prints without miscellaneous markings. All markings shall be clearly legible and identified.

10. **CERTIFICATE OF COMPLIANCE**
Upon completion of project, Contractor is to furnish written Certification to the Architect that he has complied with every paragraph of the Specifications and Drawings.
11. **CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS**
Upon completion of project, Contractor shall submit to Owner a signed Contractor's Affidavit of Release of Liens prior to final payment.
12. **CONTRACTOR'S MONTHLY APPLICATION FOR PAYMENT FORM**
Contractor's monthly Application for Payment shall be submitted as per General Conditions. AIA Document G702, Application and Certificate for Payment is approved and acceptable.
13. **FILING AND RECORDING OF BONDS**
In addition to furnishing the number of combination Performance Bond and Labor and Materials Payment Bond, and Statutory Bond, if required, the Contractor shall file copies of such bonds with Clerk of the District Court and furnish Architect with receipt furnished by Clerk of the District Court, covering charges for filing and recording of said bonds.
14. **STATUTORY BONDS**
In addition to furnishing the combination Performance and Labor and Materials Payment Bond specified in General Conditions, the Contractor shall furnish Statutory Bond in an amount not less than 100% of the Agreement in such numbers and form stated in Sample Copy bound in the Specifications. Statutory Bond shall be filed and recorded with Clerk of the District Court, as specified in Paragraph - FILING AND RECORDING OF BONDS.
15. **DOCUMENTS FURNISHED CONTRACTORS**
The General Contractor will be furnished, free of charge, the following working drawings and specifications, including modifications for construction of the project - 20 sets. The General Contractor will be responsible for distribution of these sets to the Subcontractors and suppliers. The Contractor shall pay the actual cost of reproduction and postage for all additional sets requested by him.
16. **TESTING AND INSPECTIONS**
 - a. The General Contractor shall be responsible for coordination and scheduling of all inspections and testing as required by the Contract documents. The Contractor shall include a testing and inspection allowance in his bid as described in paragraph 5.f.3 of this section. The Contractor shall pay all costs associated with testing and all direct costs from the testing/inspection company and shall be deducted from the testing and inspection allowance. Re-testing/inspection costs associated with incorrect or defective work shall be paid by the Contractor and such costs are not to be deducted from the allowance.
 - b. All sampling and testing procedures shall be performed by the inspection company responsible for inspection and testing.
17. **SALES TAX EXEMPTIONS**
 - a. Materials and equipment incorporated into this project are not exempt from the payment of sales tax under the laws of the State of Kansas and such sales tax shall be included in the Bid of the Bidder.

END OF SECTION 01019

SECTION 05 73 13

ORNAMENTAL GLASS RAILING

PART 1 -- GENERAL

Section 1.01 SCOPE OF WORK

- A. Fabricate and install pre-engineered, component-based, ornamental glass panel railing system in accordance with the requirements set forth in this section.
- B. Railing system shall be ICON as manufactured by LIVERS BRONZE CO.

Section 1.02 ADDITIONAL WORK INCLUDED IN THIS SECTION

- A. Reinforcing for wall rail brackets at dry wall partitions – supplied and installed by General Contractor.
- B. Field measuring for weld plates, sleeves and insert locations by railing installer.
- C. Field measuring by railing installer.
- D. Anchors or inserts for terrazzo or precast concrete by subcontractor.

The following items are not to be included in the metal rail contractor's work:

- Temporary shoring or bracing, Demolition and removal of existing work
- Clean up of existing construction prior to installation of railings, Cleaning out of stair wells
- Cutting; preparation of pockets; setting of plates, inserts, hardware or any other built ins
- Temporary lights and electricity, Temporary safety rails after erection,
- Field painting, Final cleaning and protection of wood, aluminum, stainless steel, bronze and glass

Section 1.03 RELATED WORK SPECIFIED IN OTHER SECTIONS

- A. Section 03 30 00: Cast-in-Place Concrete
- B. Section 03 40 00: Precast Concrete
- C. Section 03 62 00: Non-Shrink Grouting
- D. Section 03 63 00: Epoxy Grouting
- E. Section 04 20 00: Unit Masonry
- F. Section 04 40 00: Stone Assemblies
- G. Section 05 12 00: Structural Steel Framing
- H. Section 05 51 00; Metal Stairs
- I. Section 05 52 00; Metal Railings
- J. Section 05 71 00; Decorative Metal Stairs
- K. Section 08 80 00: Glazing
- L. Section 09 20 00: Plaster and Gypsum Board Assemblies
- M. Section 09 30 00: Tiling
- N. Section 09 65 00: Resilient Flooring
- O. Section 09 68 00: Carpeting
- P. Section 09 90 00: Painting and Coating

Section 1.04 STRUCTURAL REQUIREMENTS

- A. Railing assembly shall withstand a minimum concentrated load of 200 pounds applied vertically downward or horizontally in any direction, but not simultaneously, at any point on the top rail. Codes may vary in method of application and magnitude of load. Governing code should be checked for specific requirements.

Section 1.05 QUALITY ASSURANCE

- A. Fabricator Qualifications: Furnish references listing projects of similar size and scope. If special or unusual capabilities are required they should be set forth here.
- B. Installer Qualifications
State as required in 1.05.A or state specific qualifications required.

C. Regulatory Requirements

1. Components and installation are to be in accordance with state and local code authorities
 2. Components and installation are to follow current ADA and ICC/ANSI A117.1 guidelines.
- Determine code regulations that govern this work. Specify requirements and drawings that are necessary to meet governing codes. Specify code and year of code.

Section 1.06 SUBMITTALS

- A. Submit product data under provisions of General Conditions. Including description of materials, components, fabrication, finishes.
- B. Submit manufacturer's shop drawings, including plans, elevations, sections, and details, indicating materials, components, sizes, dimensions, tolerances, hardware, fasteners, finishes, options, accessories, and installation. Show details of attaching railing system to supports.
- C. Submit manufacturer's samples of standard materials, finishes, colors, and textures.
- D. Test Reports: Submit test reports indicating compliance with ASTM E985.
- E. Manufacturers Quality Assurance: Submit manufacturer's certification that materials comply with specified requirements and are suitable for the intended application. Submit certification that the manufacturer has not less than 5 years' experience producing the product specified in this section. The manufacturer or an approved installer will do the installation of this product.
- F. Maintenance Instructions: Submit manufacturer's maintenance and cleaning instructions.
- G. Warranty: Submit manufacturer's standard warranty.
- H. Certificates:
 - a. Furnish manufacturer's certification that materials meet specification requirements.
- I. Substitutions:
 1. Submit the following with the substitution request.
 - a. Detailed specifications of construction and fabrication

Section 1.07 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in good condition and properly protected against damage to finished surfaces.
- B. Storage on site:
 1. Store material in a location and in a manner to avoid damage. Stacking shall be done in a way, which will prevent bending.
 2. Store material in a clean, dry location away from uncured concrete and masonry. Cover with waterproof paper, tarpaulin, or polyethylene sheeting in a manner that will permit circulation of air inside the covering.
 3. Keep handling on site to a minimum. Exercise particular care to avoid damage to finishes of material.

PART 2 -- PRODUCTS

Section 2.01 ACCEPTABLE MANUFACTURER

- A. Railing system shall be ICON as manufactured by LIVERS BRONZE CO. Phone: 816-300-2828. Fax: 816-300-0864. Web site: www.liversbronze.com. E-mail: livers@liversbronze.com
- B. Other Railing Systems, Manufacturers, Installers shall submit information for approval prior to bidding.

Section 2.02 MATERIALS AND FINISHES

- A. Stainless Steel: Type 304
 1. Finish: Brushed, Ornamental Grade.
- E. Glass:
 1. Fully tempered and laminated ASTM C 1048 Kind FT quality q3 conforming to the safety requirements of ANSI Z97.1.

Section 2.03 RAILING SYSTEM

- A. Material shall conform to 2.02. and be finished in accordance with 2.02.
- B. Railing system shall Livers Bronze Co. ICON Railing system.
- C. Rails: Fabricate rails from stainless steel
- D. Posts: Fabricate posts from stainless steel
Posts to be side or top mounted to ½" embedded steel plate (by steel trade) or steel stringer. Posts to be spaced at 48" o.c. maximum.
- E. Glass infill shall be 1/2" or 9/16" tempered and laminated glass, conform to the safety requirements of ANSI Z97.1 and IBC 2018.
- F. Fittings: Shall be aluminum and stainless steel.

Section 2.04 FASTENERS

- A. All mechanical fasteners used in the assembly of stainless steel railings shall be manufactured from stainless steel.
- B. Exposed mechanical fasteners for use with bronze materials shall be manufactured from yellow brass.
- C. Cement: Hydraulic, ASTM C 595, factory prepared with accelerator.

Section 2.05 HANDRAIL BRACKETS

- A. Stainless steel – fabricators standard bracket for product specified.

Section 2.06 FABRICATION

- A. All metal fabrication to be performed by a single source fabricator.

PART 3 -- EXECUTION

Section 3.01 PREPARATION

- A. Supply items to be cast in concrete. These items are to be shown on shop drawings if provided by the fabricator.

Section 3.02 METAL INTERACTION

- A. When bronze and aluminum components come into contact with dissimilar metals, surfaces shall be kept from direct contact by painting the dissimilar metal with [a heavy coat of a proper primer] [asphalt paint].
- B. When aluminum components come into contact with cement or lime mortar, exposed aluminum surfaces shall be painted with [heavy bodied bituminous paint] [water-white methacrylate lacquer] [zinc chromate].

Section 3.03 INSTALLATION

- A. Install in accordance with shop drawings [and manufacturer's instructions] at locations indicated on the drawings.
- B. Erect work [square and level,] [horizontal or parallel to rake of steps or ramp,] rigid, [and] free from distortion or defects detrimental to appearance or performance.
- C. Expansion joints shall be provided as needed to allow for thermal expansion or contraction.

Section 3.04 CLEANING

- A. As installation is completed, wash thoroughly using clean water and soap; rinse with clean water.
- B. Do not use acid solution, steel wool or other harsh abrasives.

Section 3.05 REPAIR OF DEFECTIVE WORK

- A. Remove stained or otherwise defective work and replace with material that meets specification requirements.

- B. Repair damaged finish as directed by Architect
 - C. Replace defective or damaged components as directed by Architect.
- END OF SECTION

SECTION 08410

ALUMINUM ENTRANCES, STOREFRONT, & WINDOWS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Aluminum doors and frames.
- B. Vision glass and glass
- C. Door hardware
- D. **IECC 2009 energy requirements apply**
- E. Integral air and vapor barrier.
- F. Perimeter sealant.

1.02 SYSTEM DESCRIPTION

- A. Aluminum entrances, storefront system and curtain wall system includes tubular aluminum sections with supplementary internal support framing, shop fabricated, factory prefinished, vision glass, related flashings, anchorage and attachment devices.

1.03 PERFORMANCE REQUIREMENTS

- A. Design and size components to withstand dead and live loads caused by positive and negative wind pressure acting normal to plane of wall as calculated in accordance with codes.
- B. Limit mullion deflection to flexure limit of glass; with full recovery of glazing materials.
- C. System to accommodate, without damage to components or deterioration of seals, movement within system, movement between system and peripheral construction, dynamic loading and release of loads, deflection of structural support framing.
- D. Limit air leakage through assembly to 0.06 cfm/min/sq. ft. of wall area, measured at a reference differential pressure across assembly of psf as measured in accordance with AAMA 501.
- E. Water Leakage: None, when measured in accordance with AAMA 501 with a test pressure difference of 2.86 lbs/sq. ft.
- F. Maintain continuous air and vapor barrier throughout assembly, primarily in line with inside pane of glass and heel bead of glazing compound.
- G. System to provide for expansion and contraction within system components caused by a cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental affect to system components.
- H. Drain water entering joints, condensation occurring in glazing channels, or migrating moisture occurring within system, to the exterior by a weep drainage network.

1.04 SUBMITTALS

- A. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related Work and expansion and contraction joint location and details.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site.
- B. Protect pre-finished aluminum surfaces. Do not use adhesive papers or sprayed coatings which bond when exposed to sunlight or weather.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Do not install sealants when ambient temperature is less than 40 degrees F during and 48 hours after installation.
- B. Exterior aluminum entrances and storefront systems to follow the **2009 International Energy Conservation Code (IECC)**.
 - **Fixed windows (and sidelights) shall have a U-value not less than 0.50 and an SHGC of not less than 0.40**
 - **Entrance doors shall have a U-value of not less than 0.85 and SHGC of not less than 0.40.**

1.07 FIELD MEASUREMENTS

- A. Verify that field measurements are as indicated on shop drawings.

1.08 WARRANTY

- A. Provide three year warranty.
- B. Warranty: Include coverage for complete system for failure to meet specified requirements.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Storefront System
 - 1. Manko – **2450 series, Door series 150i Thermal Door**. All windows to have sub-sill, head and jamb receptors.
 - 2. Other acceptable manufacturers offering equivalent Products.
 - a. Kawneer.
 - b. Amarlite.
 - c. EFCO.
 - 3. Substitutions: Under provisions of the General Requirements.

2.02 MATERIALS

- A. Extruded Aluminum: ANSI/ASTM B221; 6063 alloy, T5 temper. Color: **Dark Bronze**.
- B. Steel Sections: ANSI/ASTM A36; shaped to suit mullion sections.
- C. Fasteners: Galvanized steel.

2.03 COMPONENTS

- A. Storefront Frame: 4 1/2 x 2 inch nominal dimension; glazing stops; drainage holes; internal weep drainage system. **Subsill with end dams are required.**
- C. Doors: 2 inches thick, 5-inch wide top rail, 5-inch wide vertical stiles, 10-inch wide bottom rail; square glazing stops.
- D. Flashings: Aluminum, finish to match mullion sections where exposed.

2.04 GLASS AND GLAZING MATERIALS

- A. Glass and and Glazing Materials: As specified in Section 08800 of types described below:
 - 1. Glass at Exterior and several Interior Lights (reference drawings): 1-inch insulated type (outer pane of ¼ inch tinted at exterior, inner pane of ¼ inch clear). Tempered where required. Tinted, Low-E coating, third surface.
 - 2. **Reference Section 1.04 ENERGY REQUIREMENTS in this specification for the required U-value and SHGC minimums.**
 - 3. Glass at some Interior Lights (reference drawings): ¼ inch clear. Tempered where required.

2.05 SEALANT MATERIALS

- A. Sealant and Backing Materials: As specified in Section 07900.

2.06 HARDWARE

- A. Weather Stripping, Sill Sweep Strips, Thresholds, Hinges, Tubular Pull Handles, Panic Device, Closer: Manufacturers' standard type to suit application, and finish, all provided by storefront manufacturer / supplier.

2.07 FABRICATION

- A. Fabricate components with minimum clearances and shim spacing around perimeter of assembly, yet enabling installation and dynamic movement of perimeter seal.
- B. Accurately fit and secure joints and corners. Make joints flush, hairline, and weatherproof.
- C. Prepare components to receive anchor devices. Fabricate anchors.
- D. Arrange fasteners and attachments to conceal from view.
- E. Prepare components with internal reinforcement for door hardware and door operator hinge hardware.
- F. Reinforce framing members for imposed loads.

2.08 FINISHES

- A. Finish coatings to conform to AAMA
- B. **Exposed Aluminum Surfaces: Dark Bronze.**

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify site opening conditions.
- B. Verify dimensions, tolerances, and method of attachment with other work.
- C. Verify wall openings and adjoining air and vapor seal materials are ready to receive work of this Section.

3.02 INSTALLATION

- A. Install wall system in accordance with manufacturer's instructions and AAMA - Metal Curtain Wall, Window, Store Front and Entrance - Guide Specifications Manual.
- B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
- C. Provide alignment attachments and shims to permanently fasten system to building structure.
- D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.
- E. Provide thermal isolation where components penetrate or disrupt building insulation.
- F. Install sill flashings and manufacturer's standard subsill, head and jamb systems.
- G. Coordinate attachment and seal of perimeter air and vapor barrier materials.
- H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- I. Set thresholds in bed of mastic and secure.
- J. Install hardware using templates provided.
- K. Install glass in accordance with Section 08800, to glazing method required to achieve performance criteria.
- L. Install perimeter sealant to method required to achieve performance criteria, backing materials, and installation criteria in accordance with Section 07900.

3.03 TOLERANCES

- A. Maximum Variation from Plumb: 0.06 inches every 3 ft non-cumulative or 1/16 inches per 10 feet, whichever is less.
- B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

3.04 ADJUSTING

- A. Adjust operating hardware and sash for smooth operation.

3.05 CLEANING

- A. Remove protective material from prefinished aluminum surfaces.
- B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.
- C. Remove excess sealant by method acceptable to sealant manufacturer.

3.06 PROTECTION OF FINISHED WORK

- A. Protect finished Work from damage.

END OF SECTION 08410

SECTION 08710

DOOR HARDWARE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Hardware for wood, hollow steel, metal insulated and aluminum doors.
- B. Thresholds.
- C. Weatherstripping, seals and door gaskets.

1.02 ALLOWANCES

- A. Cash Allowance: This contractor shall install and furnish all Finish Hardware not specified in other sections, such as millwork. This contractor shall allow the sum of **\$75,000.00** for the purchase and delivery of hardware only.
- B. Allowance includes purchase and delivery of hardware only. Installation is included in the Contractor's Bid price, not the allowance. Any differential in the allowance listed and the original invoices from suppliers will be adjusted in the contract price.

1.03 REFERENCES

- A. ANSI A117.1 - Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People.

1.04 OPERATION AND MAINTENANCE DATA

- A. Maintenance Data: Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.

1.05 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum 3 years' documented experience.
- B. Hardware Supplier: Company specializing in supplying commercial door hardware with 3 years' documented experience approved by manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site.
- B. Package hardware items individually; label and identify each package with door opening code to match hardware schedule.
- C. Deliver keys to Owner by security shipment direct from hardware supplier.

1.07 WARRANTY

- A. Provide five-year warranty.

1.08 MAINTENANCE MATERIALS

- A. Provide special wrenches and tools applicable to each different or special hardware component.
- B. Provide maintenance tools and accessories supplied by hardware component manufacturer.

PART 2 PRODUCTS

2.01 KEYING

- A. Door Locks:
 - 1. Coordinate quantity, type, location and final keying needs with owner.

2.02 HNGES

- A. Butts and Hinges: BHMA A156.1.
- B. Template Hinge Dimensions: BHMA A156.7.
- C. Manufacturers:
 - 1. Baldwin Hardware Corporation (BH).
 - 2. Bommer Industries, Inc. (BI).
 - 3. Cal-Royal Products, Inc. (CRP).
 - 4. Hager Companies (HAG).
 - 5. Lawrence Brothers, Inc. (LB).
 - 6. McKinney Products Company; an ASSA ABLOY Group company (MCK).

7. PBB, Inc. (PBB).
 8. Stanley Commercial Hardware; Div. of The Stanley Works (STH).
- 2.03 LOCKS AND LATCHES, GENERAL
- A. Accessibility Requirements: Comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)." ANSI A117.1. FED-STD-795, "Uniform Federal Accessibility Standards."
 1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf (22 N).
 - B. Latches and Locks for Means of Egress Doors: Comply with NFPA 101. Latches shall not require more than 15 lbf (67 N) to release the latch. Locks shall not require use of a key, tool, or special knowledge for operation.
- 2.04 MECHANICAL LOCKS AND LATCHES
- A. Lock Functions: Function numbers and descriptions indicated in door hardware sets comply with the following:
 1. Bored Locks: BHMA A156.2.
 2. Mortise Locks: BHMA A156.13.
 3. Interconnected Locks: BHMA A156.12.
 - B. Bored Locks:
 1. Manufacturers:
 - a. Best Access Systems; Div. of The Stanley Works (BAS).
 - b. Corbin Russwin Architectural Hardware; an ASSA ABLOY Group company (CR).
 - c. SARGENT Manufacturing Company; an ASSA ABLOY Group company (SGT).
 - d. Schlage Commercial Lock Division; an Ingersoll-Rand Company (SCH).
 - e. Yale Commercial Locks and Hardware; an ASSA ABLOY Group company (YAL).
- 2.05 KEYING
- A. Keying System: Factory registered, complying with guidelines in BHMA A156.28, Appendix A. Incorporate decisions made in keying conference, and as follows:
 1. Master Key System: Cylinders are operated by a change key and a master key.
 - B. Keys: Nickel silver.
 1. Quantity: Reference above Section 201.A
- 2.06 CLOSERS
- A. Accessibility Requirements: Where handles, pulls, latches, locks, and other operating devices are indicated to comply with accessibility requirements, comply with [the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG).", ANSI A117.1., FED-STD-795, "Uniform Federal Accessibility Standards."
 1. Comply with the following maximum opening-force requirements:
 - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.
 - b. Sliding or Folding Doors: 5 lbf (22.2 N) applied parallel to door at latch.
 - c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 - B. Door Closers for Means of Egress Doors: Comply with NFPA 101. Door closers shall not require more than 30 lbf (133 N) to set door in motion and not more than 15 lbf (67 N) to open door to minimum required width.
 - C. Hold-Open Closers/Detectors: Coordinate and interface integral smoke detector and closer device with fire alarm system.
 - D. Flush Floor Plates: Provide finish cover plates for floor closers unless thresholds are indicated. Match door hardware finish, unless otherwise indicated.
 - E. Recessed Floor Plates: Provide recessed floor plates with insert of floor finish material for floor closers unless thresholds are indicated. Provide extended closer spindle to accommodate thickness of floor finish.
 - F. Power-Assist Closers: As specified in Division 8 Section "Automatic Door Operators" for access doors for people with disabilities or where listed in the door hardware sets.
 - G. Size of Units: Unless otherwise indicated, comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.
 - H. Surface Closers: Provide type of arm required for closer to be located on non-public side of door, unless otherwise indicated.
 1. Manufacturers:
 - a. Corbin Russwin Architectural Hardware; an ASSA ABLOY Group company (CR).

- b. LCN Closers; an Ingersoll-Rand Company (LCN).
 - c. Norton Door Controls; an ASSA ABLOY Group company (NDC).
 - d. SARGENT Manufacturing Company; an ASSA ABLOY Group company (SGT).
 - e. Yale Commercial Locks and Hardware; an ASSA ABLOY Group company (YAL).
 - I. Concealed Closers:
 - 1. Manufacturers:
 - a. LCN Closers; an Ingersoll-Rand Company (LCN).
 - b. Norton Door Controls; an ASSA ABLOY Group company (NDC).
 - c. SARGENT Manufacturing Company; an ASSA ABLOY Group company (SGT).
- 2.07 STOPS AND HOLDERS
- A. Stops and Bumpers:
 - 1. Provide floor stops for doors unless wall or other type stops are scheduled or indicated. Do not mount floor stops where they will impede traffic. Where floor or wall stops are not appropriate, provide overhead holders.
 - B. Silencers for Wood Door Frames: BHMA A156.16, Grade 1; neoprene or rubber, minimum 5/8 by 3/4 inch (16 by 19 mm); fabricated for drilled-in application to frame.
 - C. Silencers for Metal Door Frames: BHMA A156.16, Grade 1; neoprene or rubber, minimum diameter 1/2 inch (13 mm); fabricated for drilled-in application to frame.
 - D. Manufacturers:
 - 1. Baldwin Hardware Corporation (BH).
 - 2. Cal-Royal Products, Inc. (CRP).
 - 3. Glynn-Johnson; an Ingersoll-Rand Company (GJ).
 - 4. Hager Companies (HAG).
 - 5. Hiawatha, Inc. (HIA).
 - 6. IVES Hardware; an Ingersoll-Rand Company (IVS).
 - 7. Rockwood Manufacturing Company (RM).
 - 8. SARGENT Manufacturing Company; an ASSA ABLOY Group company (SGT).
 - 9. Stanley Commercial Hardware; Div. of The Stanley Works (STH).
- 2.08 DOOR GASKETING
- A. General: Provide continuous weather-strip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated or scheduled. Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.
 - 1. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
 - 2. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
 - 3. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.
 - B. Air Leakage: Not to exceed 0.50 cfm per foot (0.000774 cu. m/s per m) of crack length for gasketing other than for smoke control, as tested according to ASTM E 283.
 - C. Smoke-Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke-control ratings indicated, based on testing according to UL 1784.
 - 1. Provide smoke-labeled gasketing on 20-minute-rated doors and on smoke-labeled doors.
 - D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated, based on testing according to ASTM E 1408.
 - E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
 - F. Gasketing Materials: ASTM D 2000 and AAMA 701/702.
 - G. Manufacturers:
 - 1. Hager Companies (HAG).
 - 2. National Guard Products (NGP).
 - 3. Pemko Manufacturing Co. (PEM).
 - 4. Zero International (ZRO).
- 2.09 THRESHOLDS
- A. Accessibility Requirements: Where thresholds are indicated to comply with accessibility requirements, comply with [the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG).", ANSI A117.1., FED-STD-795, "Uniform Federal Accessibility Standards."]
 - B. Thresholds for Means of Egress Doors: Comply with NFPA 101. Maximum 1/2 inch (13 mm) high.
 - C. Manufacturers:

1. Hager Companies (HAG).
2. National Guard Products (NGP).
3. Pemko Manufacturing Co. (PEM).
4. Zero International (ZRO).

2.10 FABRICATION

- A. Base Metals: Produce door hardware units of base metal, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18. Do not furnish manufacturer's standard materials or forming methods if different from specified standard.
- B. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to commercially recognized industry standards for application intended, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated.
 1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.
 2. Steel Machine or Wood Screws: For the following fire-rated applications:
 - a. Mortise hinges to doors.
 - b. Strike plates to frames.
 - c. Closers to doors and frames.
 3. Steel Through Bolts: For the following fire-rated applications unless door blocking is provided:
 - a. Surface hinges to doors.
 - b. Closers to doors and frames.
 - c. Surface-mounted exit devices.
 4. Spacers or Hex Bolts: For through bolting of hollow-metal doors.
 5. Fasteners for Wood Doors: Comply with requirements in DHI WDHS.2, "Recommended Fasteners for Wood Doors."

2.11 FINISHES

- A. Standard: BHMA A156.18, as indicated in door hardware sets.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. 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 the 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.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that doors and frames are ready to receive work and dimensions are as indicated on shop drawings.
- B. Verify that electric power is available to power operated devices and of the correct characteristics.
- C. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- D. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions.
- B. Use templates provided by hardware item manufacturer.
- C. Mounting heights for hardware from finished floor to center line of hardware item:
 1. Locksets: 40"
 2. Push/Pulls: 45"
 3. Dead Locks: 54"
 4. Exit Devices: 42"

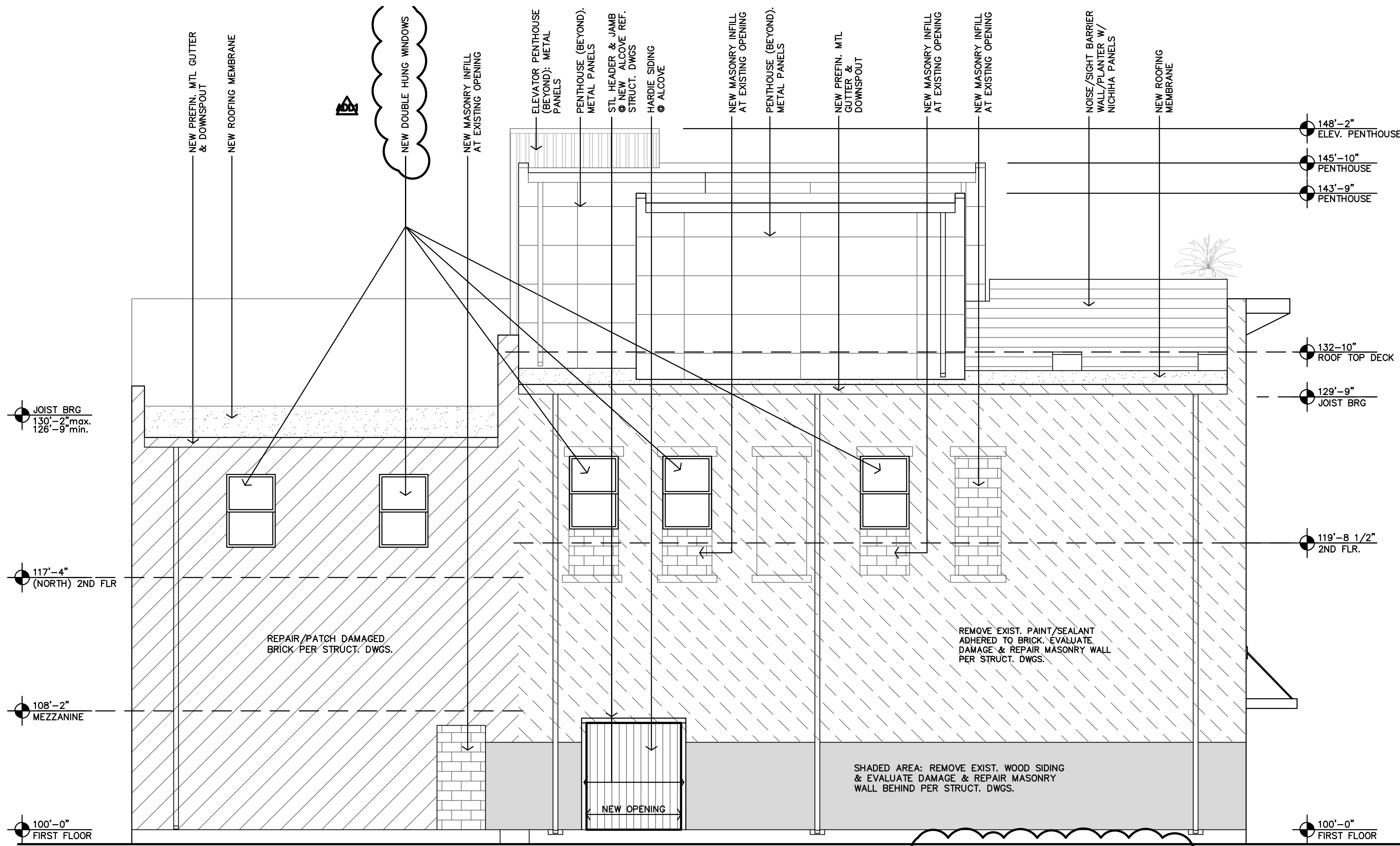
- D. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
 - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
 - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

3.03.1 ADJUSTING

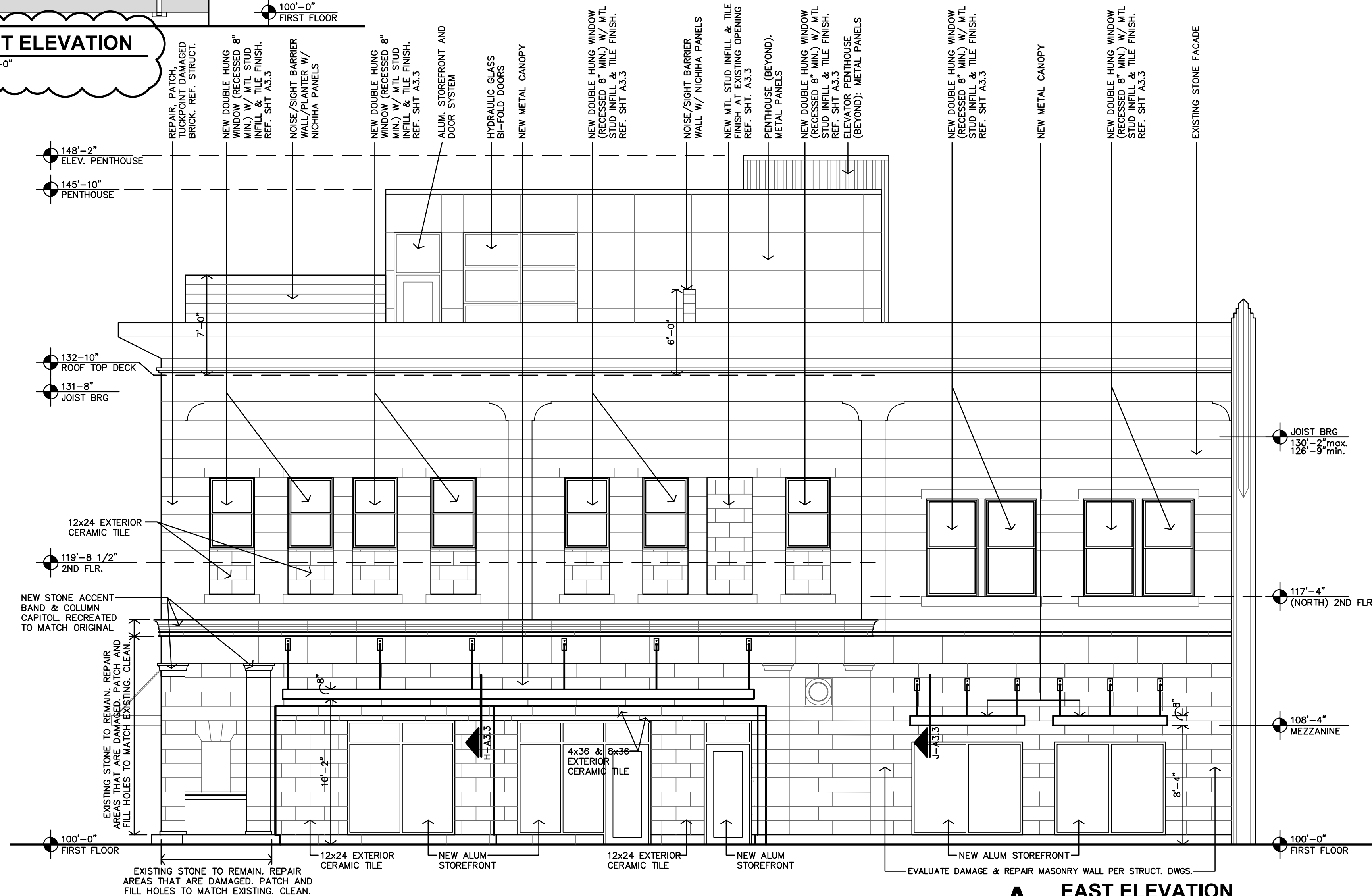
- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
 - 1. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 30 degrees.
 - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 - 3. Door Closers: Unless otherwise required by authorities having jurisdiction, adjust sweep period so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point **3 inches (75 mm)** from the latch, measured to the leading edge of the door. Requirements in paragraph below increase cost but are recommended as a good investment on substantial projects even though they may be difficult to monitor.

Occupancy Adjustment: Approximately three months after date of Substantial Completion, Installer's Architectural Hardware Consultant shall examine and readjust, including adjusting operating forces, each item of door hardware as necessary to ensure function of doors, door hardware, and electrified door hardware.

END OF SECTION 08710



B WEST ELEVATION
3/16"=1'-0"



A EAST ELEVATION
3/16"=1'-0"

101 N. SANTA FE AVE.
REMODEL and ADDITIONS: PELE'S PLAYGROUND,
APARTMENTS and ROOF TOP BAR
SALINA, KANSAS

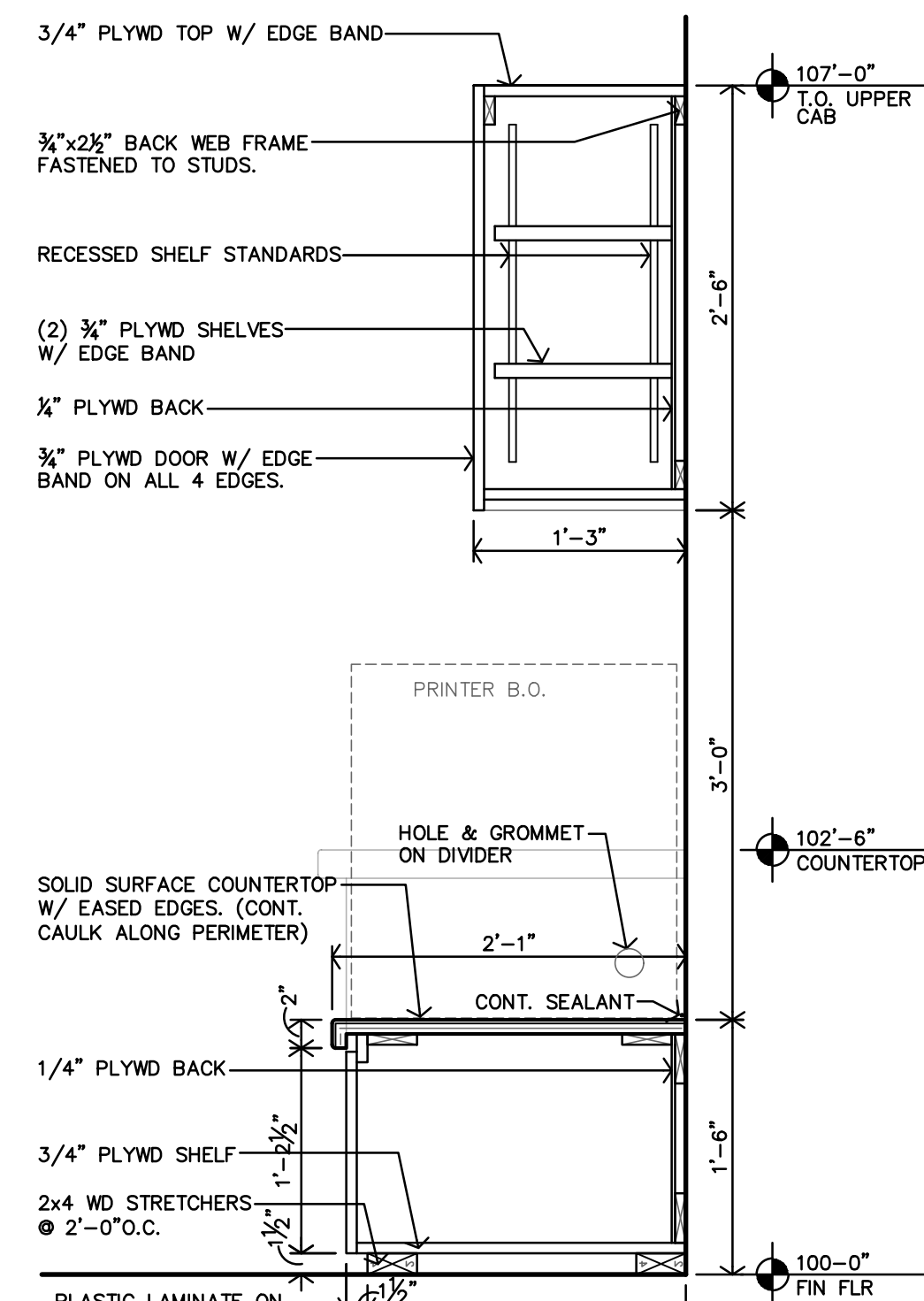
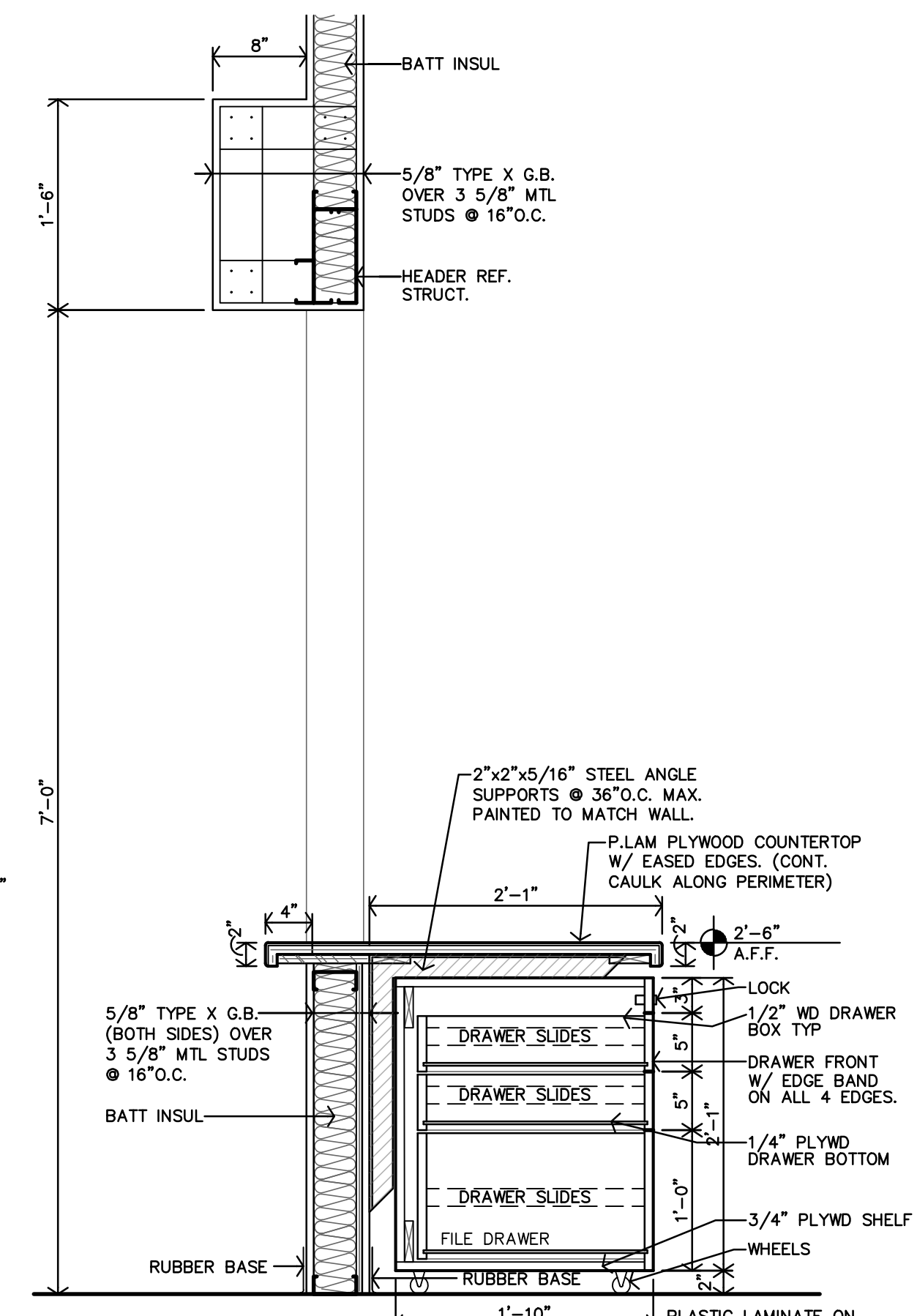
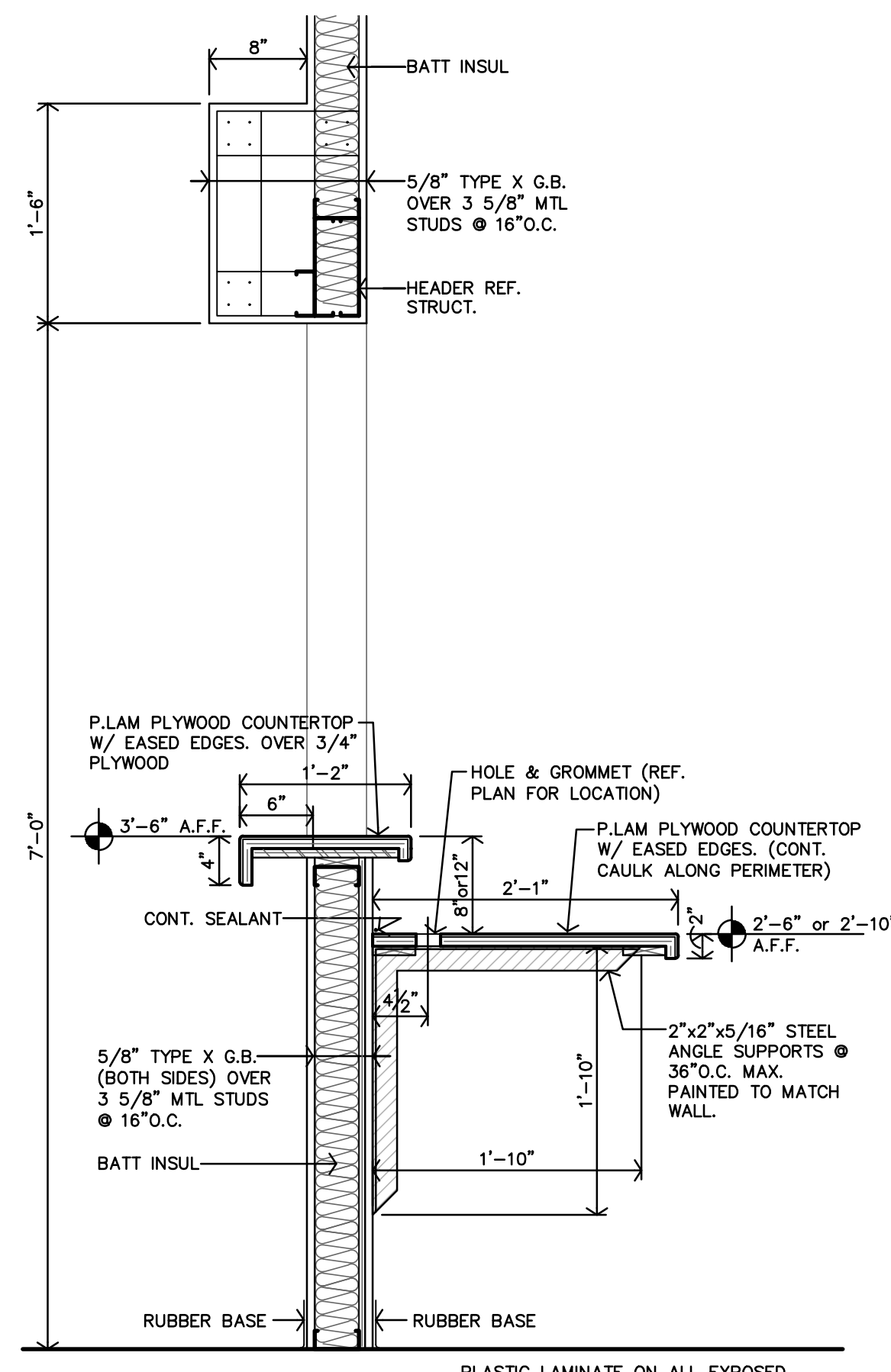
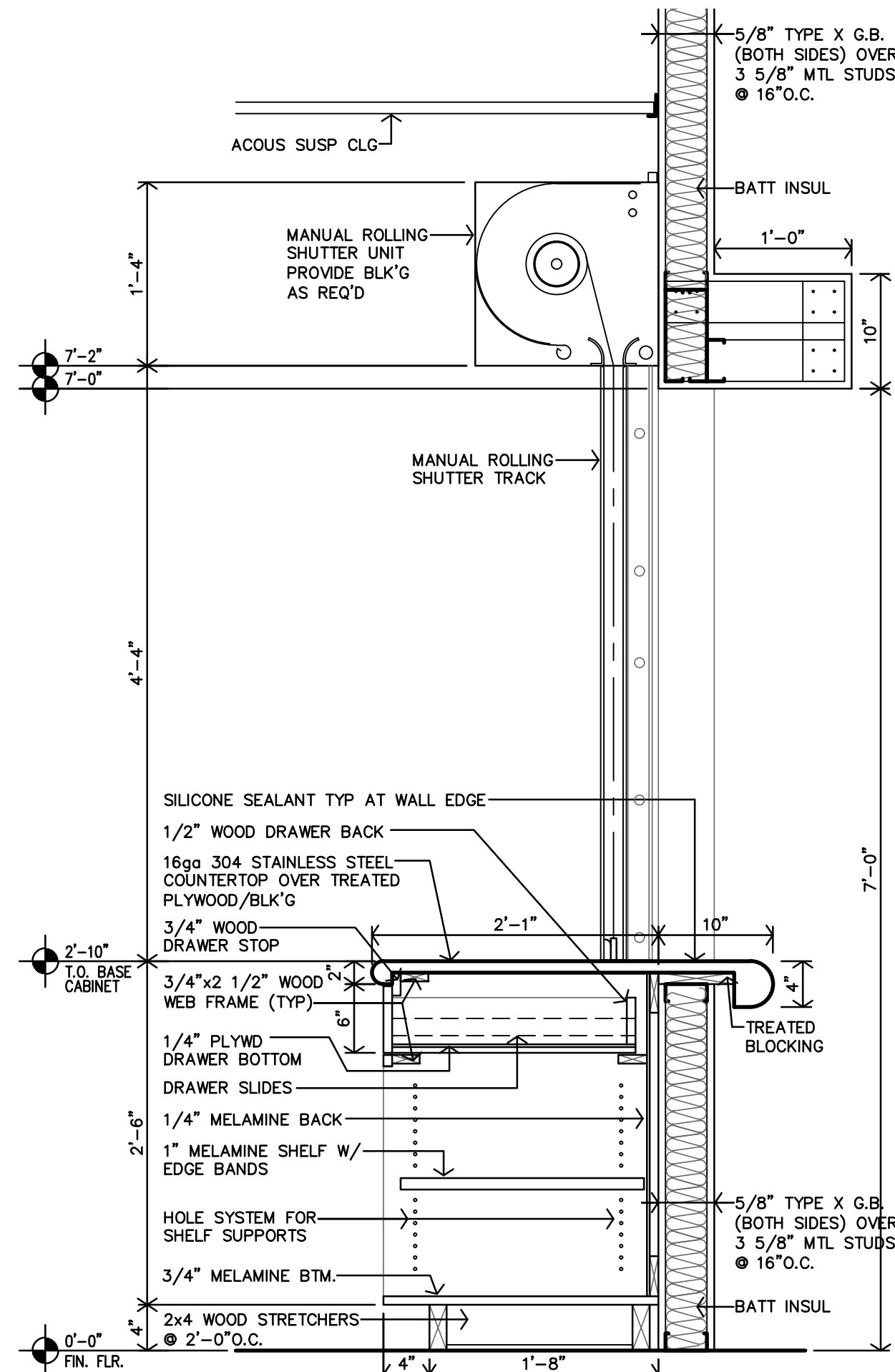
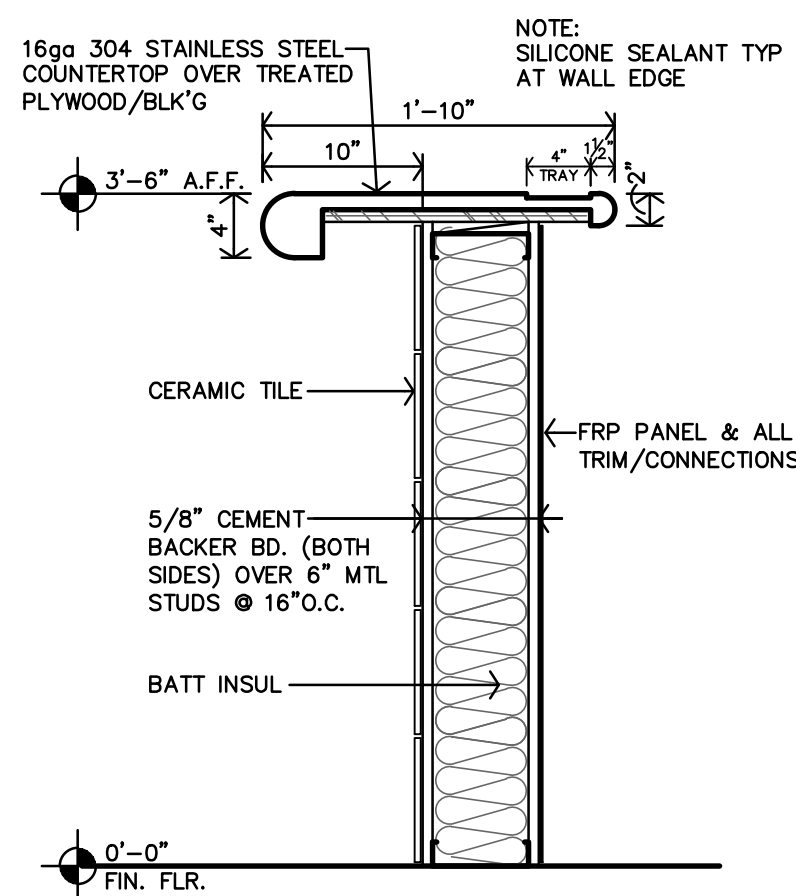
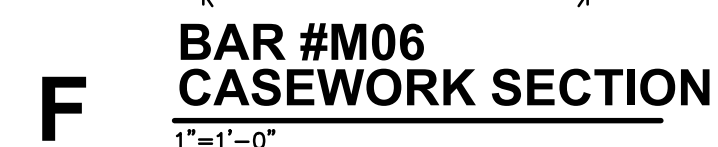
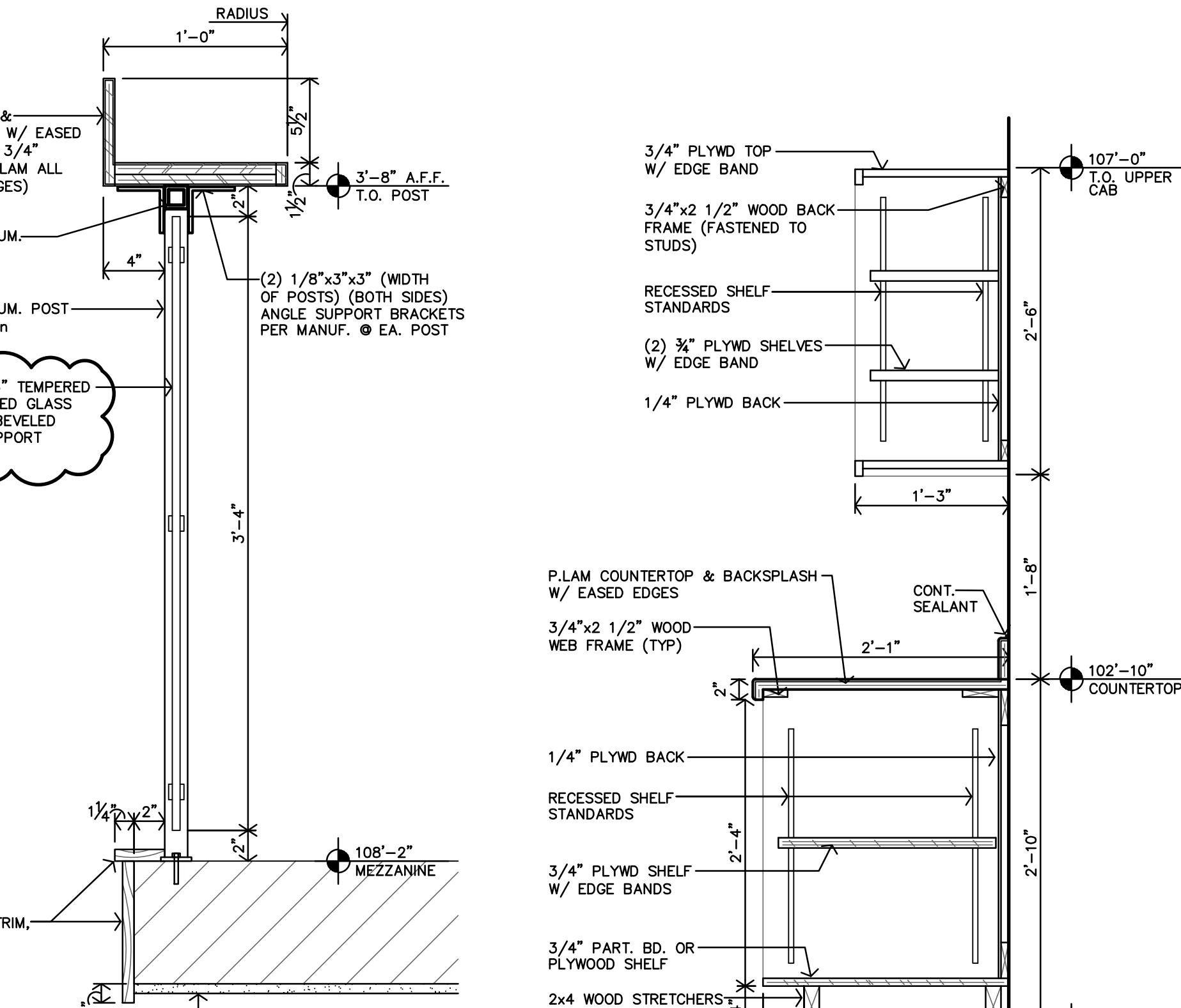
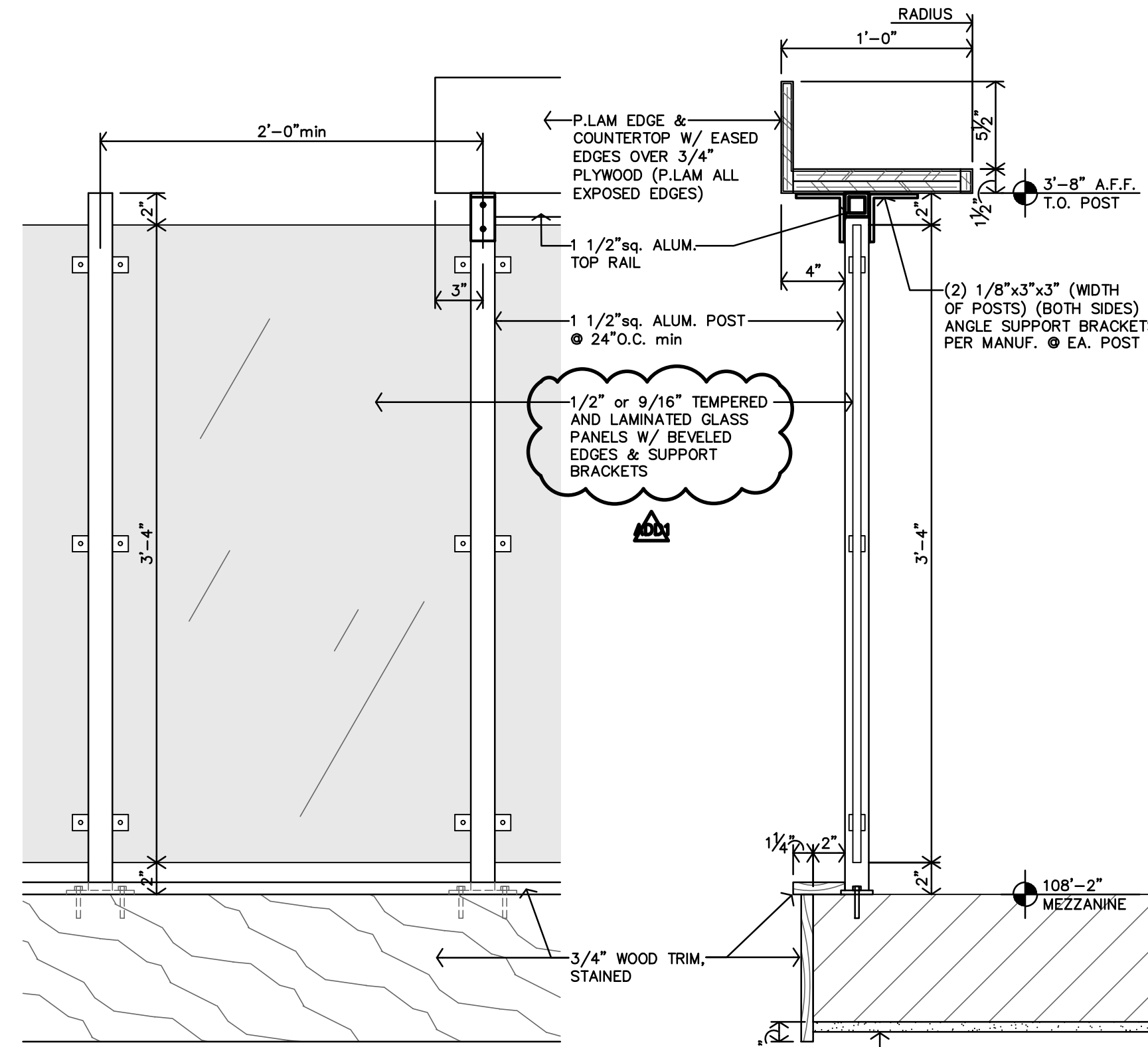
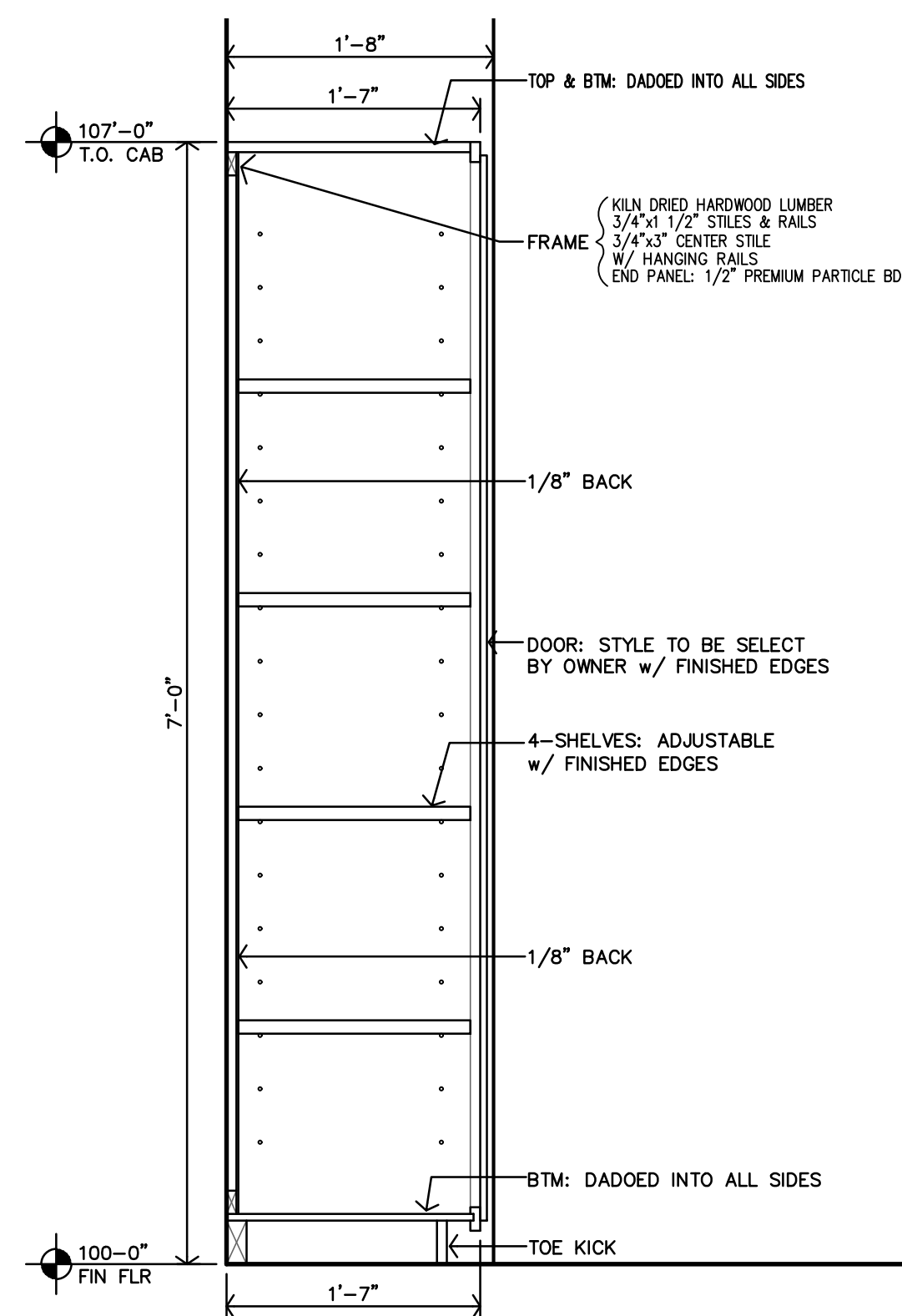


REVISION:	
DATE:	3-20-2025
JOB:	24-3421
SHEET NO.:	

A3.2

JonesGillamRenz
1881 Main Street, Suite 301
Salina, KS 67401
785.827.0386
jgr@gillamrentz.com

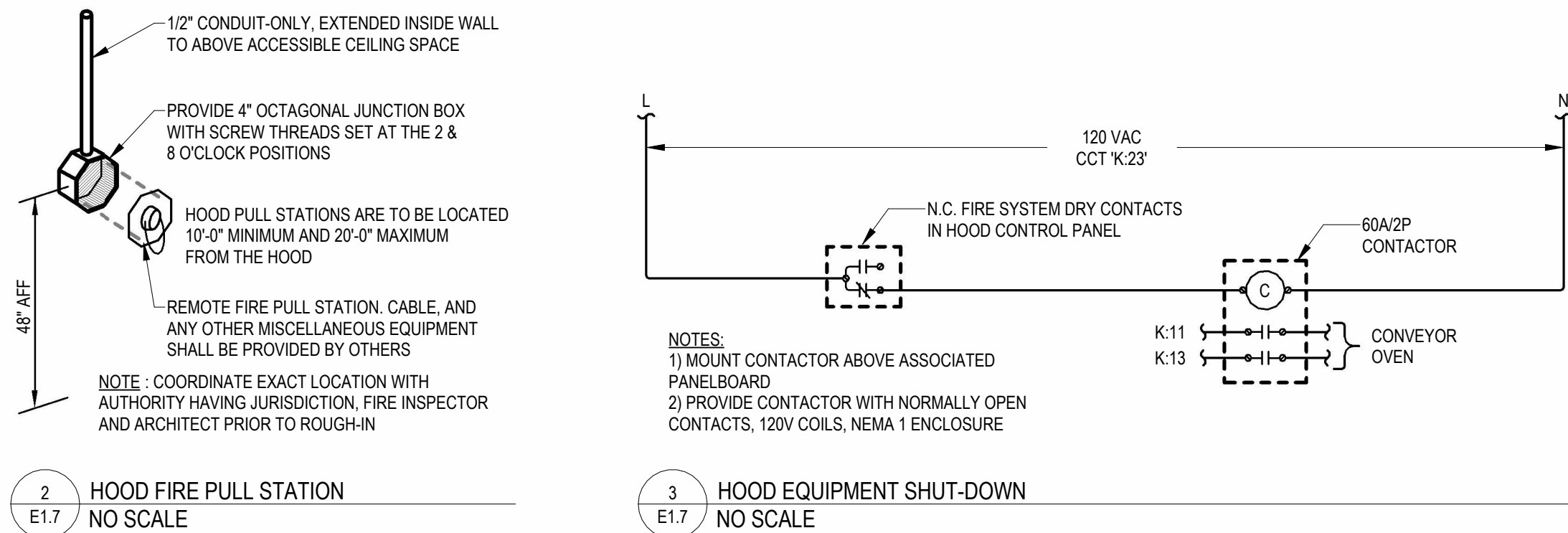




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1	4-21-2025	Addendum #1

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:



- NOTES BY SYMBOL**
- 1 PROVIDE 20A/1P SNAP SWITCH AND CONNECT WATER HEATER. INSTALL SWITCH ADJACENT TO WATER HEATER.
 - 2 ROUTE 120V CIRCUIT FOR HOT WATER RECIRCULATION PUMP THROUGH ADJACENT AQUASTAT. PROVIDE 20A/1P SNAP SWITCH ADJACENT TO PUMP AND MAKE FINAL FLEXIBLE CONNECTION. COORDINATE WITH PLUMBING CONTRACTOR.
 - 3 PROVIDE 60A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE. HUBBELL #HBL7832D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
 - 4 PROVIDE 30A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE. HUBBELL #HBL7832D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
 - 5 COORDINATE EXACT MOUNTING LOCATION OF DRINKING FOUNTAIN RECEPTACLE WITH PLUMBING CONTRACTOR. WIRE FROM LOAD SIDE OF ADJACENT GFI RECEPTACLE TO PROVIDE GFI PROTECTION FOR DRINKING FOUNTAIN RECEPTACLE.
 - 6 KITCHEN EQUIPMENT TAG. REFERENCE FOOD SERVICE DRAWINGS FOR MORE INFORMATION.
 - 7 ROUTE CIRCUIT THROUGH CONTACTOR FOR SHUT-DOWN BY HOOD CONTROL PANEL. SEE DETAIL 3.E1.7.
 - 8 NATURAL GAS SOLENOID VALVE FOR EQUIPMENT UNDER HOOD. CONNECT TO HOOD CONTROL PANEL.
 - 9 HOOD CONTROL PANEL FURNISHED WITH HOOD. PROVIDE ALL FIELD WIRING CONNECTIONS TO HOOD LIGHTS, GAS SOLENOID, FIRE SUPPRESSION SYSTEM CABINET, HOOD FAN AND LIGHT SWITCHES, HOOD TEMP SENSOR, EXHAUST FAN CONTROL, MAKE-UP AIR UNIT CONTROL, AND EQUIPMENT SHUT-DOWN CONTACTORS. VERIFY REQUIREMENTS WITH HOOD INSTALLER. SEE SHEET M5.2 FOR MORE INFORMATION.
 - 10 PROVIDE ROUGH-IN FOR HOOD FIRE SUPPRESSION PULL STATION, SEE DETAIL 2.E1.7.
 - 11 TELECOMMUNICATIONS GROUND BAR SHALL BE 13-1/4"W x 2"H x 1/4" THICK ELECTRO-TIN PLATED COPPER BUS BAR, COMPLETE WITH INSULATED STAND-OFFS AND STAINLESS STEEL BRACKETS, ERICO #TGBA14L06PT OR EQUAL. MOUNT AT 18" AFF. PROVIDE #6 GROUND TO GROUND BUS OF PANEL "P1". ALL CONNECTIONS TO GROUND BAR SHALL BE MADE USING COMPRESSION TYPE LUGS.
 - 12 JUNCTION BOX ABOVE CEILING WITH UNSWITCHED 120V POWER FOR DOOR SECURITY ACCESS CONTROL. COORDINATE EXACT REQUIREMENTS WITH OWNER AND SECURITY SYSTEM INSTALLER.



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REVISIONS:		
NO	DATE	REVISION
1	4-21-2025	Addendum #1

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:



- NOTES BY SYMBOL
- 1

SWITCHED RECEPTACLE BELOW COUNTER FOR GARBAGE DISPOSAL. COORDINATE EXACT LOCATION OF SWITCH WITH ARCHITECT.
- 2

PROVIDE 120V CONNECTION TO MICROWAVE ABOVE RANGE. COORDINATE EXACT ELECTRICAL ROUGH-IN REQUIREMENTS WITH EQUIPMENT PROVIDED. IF EQUIPMENT IS CORD AND PLUG, PROVIDE RECEPTACLE INSIDE CABINET ABOVE RANGE.
- 3

PROVIDE 30A/2P SNAP SWITCH AND CONNECT WATER HEATER. INSTALL SWITCH ADJACENT TO WATER HEATER.
- 4

PROVIDE 30A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE, HUBBELL #HBL7832D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
- 5

PROVIDE 50A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE, HUBBELL #HBL7852D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
- 6

PROVIDE 60A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE, HUBBELL #HBL7862D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
- 7

PROVIDE RECEPTACLE ABOVE CEILING FOR CORD AND PLUG CONNECTION OF DRYER BOOSTER FAN. ENSURE RECEPTACLE IS ACCESSIBLE THROUGH CEILING ACCESS PANEL. COORDINATE WITH G.C. AND OTHER TRADES.
- 8

INDOOR UNIT POWERED FROM OUTDOOR UNIT. PROVIDE 20A-3P MOTOR RATED SNAP SWITCH AND ROUTE (3)#12, #12G, 1/2" C. BETWEEN INDOOR AND OUTDOOR UNIT ON ROOF.
- 9

JUNCTION BOX ABOVE CEILING WITH UNSWITCHED 120V POWER FOR DOOR SECURITY ACCESS CONTROL. COORDINATE EXACT REQUIREMENTS WITH OWNER AND SECURITY SYSTEM INSTALLER.

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- NOTES BY SYMBOL
- 1

PROVIDE NON-FUSED DISCONNECT SWITCH, SIZED AS INDICATED ON PLANS, IN NEMA 3R ENCLOSURE AND MAKE FINAL CONNECTION TO EQUIPMENT IN LFMC RACEWAY. MOUNT TO UNISTRUT FRAME SUPPORTED FROM EQUIPMENT SUPPORT RAILS.
- 2

PROVIDE 20A/1P SNAP SWITCH AND CONNECT WATER HEATER. INSTALL SWITCH ADJACENT TO WATER HEATER.
- 3

ROUTE 120V CIRCUIT FOR HOT WATER RECIRCULATION PUMP THROUGH ADJACENT AQUASTAT. PROVIDE 20A/1P SNAP SWITCH ADJACENT TO PUMP AND MAKE FINAL FLEXIBLE CONNECTION. COORDINATE WITH PLUMBING CONTRACTOR.
- 4

30A DISCONNECT SWITCH, LOCKABLE IN "OFF" POSITION, WITH SOLID NEUTRAL AND (1) 20A DUAL-ELEMENT, TIME DELAY FUSE IN NEMA 1 ENCLOSURE FOR ELEVATOR CAB LIGHTS & EXHAUST. MOUNT AT 6'-0" AFF TO TOP AND LABEL WITH CORRESPONDING ELEVATOR CAR NUMBER AND CIRCUIT NUMBER. COORDINATE EXACT MOUNTING LOCATION AND REQUIREMENTS WITH ELEVATOR EQUIPMENT INSTALLER. PROVIDE FINAL ELECTRICAL CONNECTION TO ELEVATOR CONTROLLER.
- 5

ELEVATOR POWER MODULE SWITCH: 60A/208V/3P SWITCH COMPLETE WITH 60A DUAL ELEMENT, TIME DELAY CLASS 'J' FUSES, 120V CONTROL TRANSFORMER, FIRE ALARM SAFETY INTERFACE RELAY, KEY TEST SWITCH, GREEN PILOT LIGHT, AUXILIARY CONTACTS FOR ELEVATOR RECALL, AND FIRE ALARM VOLTAGE MONITORING RELAY. EATON BUSSMAN #PS-6-T20-R1-K-G-B-F1 OR EQUAL. COORDINATE EXACT MOUNTING LOCATION AND REQUIREMENTS WITH ELEVATOR EQUIPMENT INSTALLER, AND PROVIDE FINAL ELECTRICAL CONNECTION TO ELEVATOR CONTROLLER.
- 6

PROVIDE POWER CONNECTION TO LIGHTING INVERTER.
- 7

INSTALL RECEPTACLE ON WALL OF ELEVATOR HOIST WAY. VERIFY EXACT LOCATION WITH ELEVATOR EQUIPMENT INSTALLER.
- 8

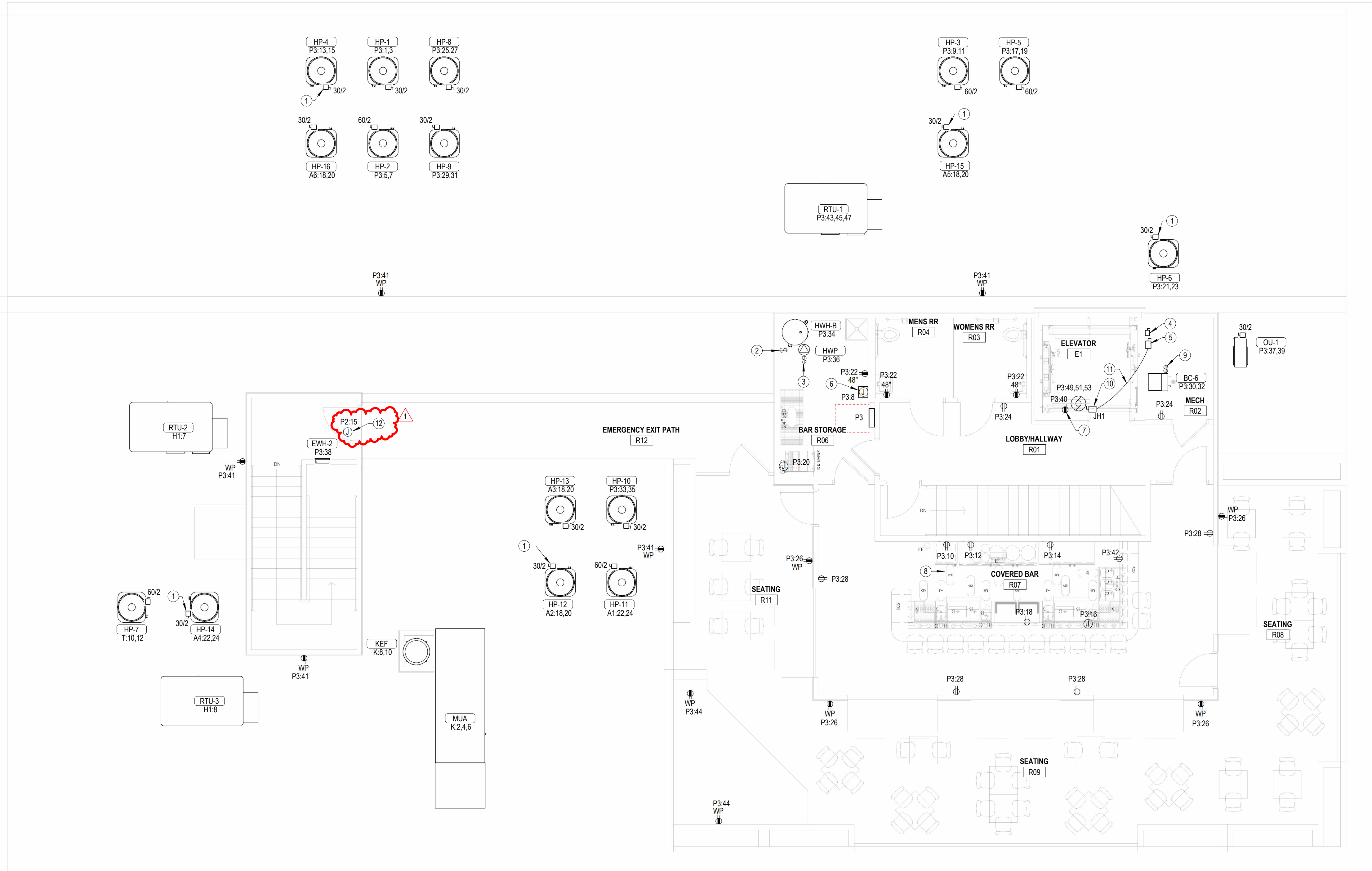
KITCHEN EQUIPMENT TAG. REFERENCE FOOD SERVICE DRAWINGS FOR MORE INFORMATION.
- 9

PROVIDE 50A/2P, SINGLE THROW, MANUAL MOTOR CONTROLLER SNAP SWITCH IN NEMA 1 ENCLOSURE. HUBBELL #HBL7852D OR EQUAL. MAKE FINAL FLEXIBLE CONNECTION TO BLOWER COIL/ELECTRIC HEAT.
- 10

60A/3P NON-FUSED DISCONNECT SWITCH (JH1) IN NEMA 1 ENCLOSURE. PROVIDE WITH SPST AUXILIARY CONTACTS RATED FOR MIN. 2A AT 24VDC. MAKE FINAL CONNECTION TO ELEVATOR FUSE BOX. COORDINATE MOUNTING LOCATION AT TOP OF HOISTWAY AND REQUIREMENTS WITH ELEVATOR EQUIPMENT INSTALLER.
- 11

3-PHASE POWER FEEDER AND (2) #18 STRANDED CU CONDUCTORS FROM ELEVATOR POWER MODULE SWITCH TO JH1 DISCONNECT SWITCH.
- 12

JUNCTION BOX ABOVE CEILING WITH UNSWITCHED 120V POWER FOR DOOR SECURITY ACCESS CONTROL. COORDINATE EXACT REQUIREMENTS WITH OWNER AND SECURITY SYSTEM INSTALLER.



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DATE: 3/20/2025

JOB: 24-3421

SHEET NO.:

- NOTES BY SYMBOL
- 1

SMOKE DETECTOR AND HEAT DETECTOR AT TOP OF ELEVATOR HOIST WAY FOR RECALL AND SHUT-DOWN. SEE DETAIL 2, SHEET E1.15.
- 2

ADDRESSABLE FIRE ALARM RELAYS FOR ELEVATOR RECALL, FIREMAN'S HAT, AND POWER SHUNT-TRIP, AND ADDRESSABLE MONITORING MODULE FOR MONITORING OF SHUNT TRIP VOLTAGE. SEE DETAIL 2, SHEET E1.15.
- 3

SMOKE AND HEAT DETECTORS FOR ELEVATOR RECALL AND SHUT-DOWN. SEE DETAIL 2, SHEET E1.15.
- 4

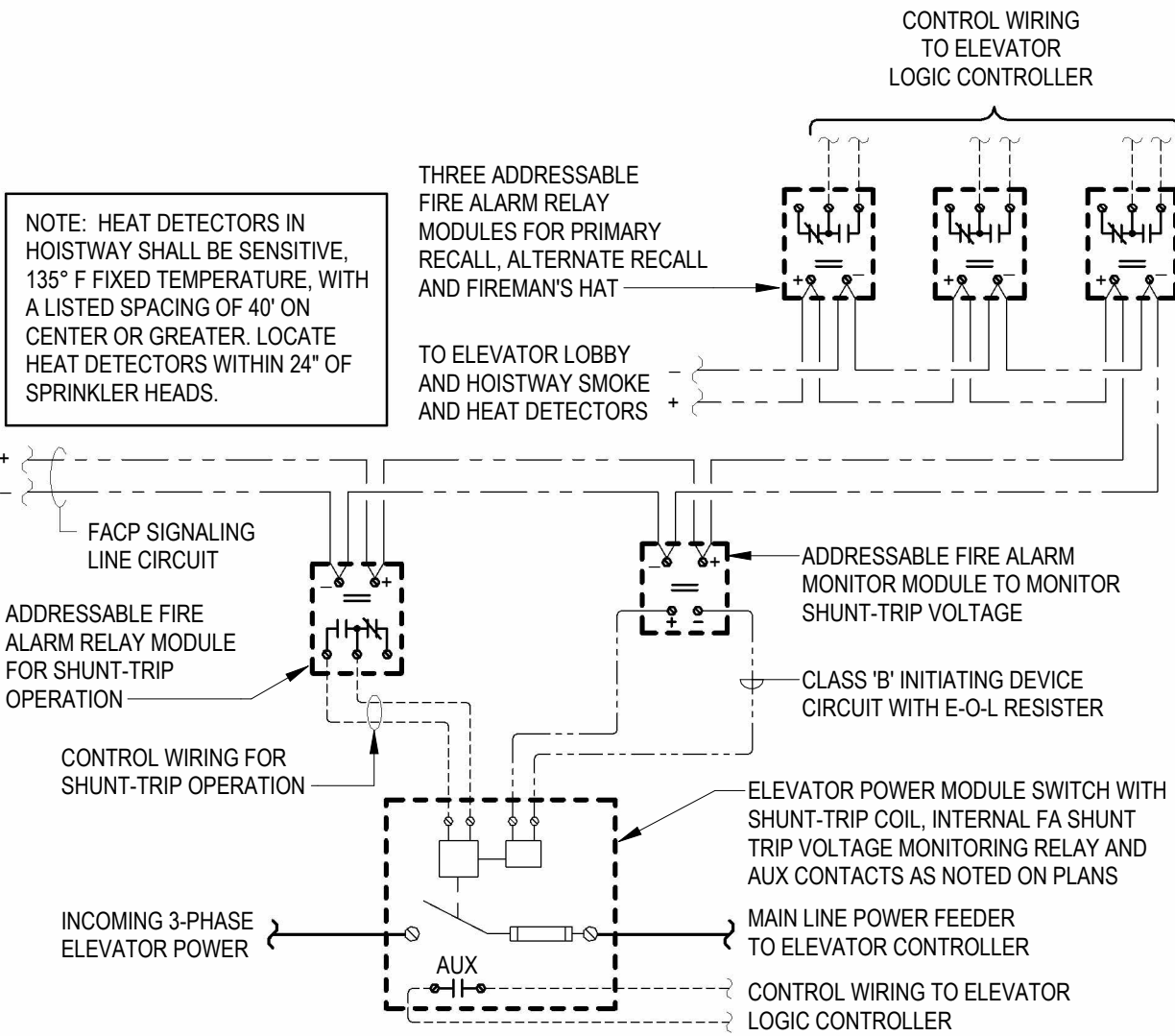
SUPPLY AND RETURN AIR DUCT SMOKE DETECTORS FOR HVAC EQUIPMENT FURNISHED AND WIRED TO FACP BY FIRE ALARM CONTRACTOR, INSTALLED IN DUCT BY MECHANICAL CONTRACTOR. PROVIDE ADDRESSABLE FIRE ALARM RELAY WITHIN 5' OF EQUIPMENT FOR SHUT-DOWN OF HVAC UNIT UPON DETECTION OF SMOKE.
- 5

PROVIDE 4-PAIR, CAT5e UTP, NEC TYPE 'CMP' CABLE (SUPERIOR ESSEX #51-24148 OR EQUAL) IN 3/4" CONDUIT FROM TOP OF ELEVATOR CONTROLLER TO TELECOM TERMINAL BOARD IN JANITOR 127 FOR EMERGENCY ELEVATOR CAB TELEPHONE.
- 6

ELEVATOR LOBBY SMOKE DETECTOR FOR ELEVATOR RECALL. SEE DETAIL 2, SHEET E1.15.
- 7

PROVIDE 1/2" CONDUIT TO DOOR JAMB, STUBBED OUT TO ABOVE CEILING FOR DOOR ACCESS CONTROL / SECURITY ALARM. COORDINATE EXACT REQUIREMENTS WITH OWNER AND SECURITY SYSTEM INSTALLER.
- 8

SMOKE DETECTOR AND ADDRESSABLE RELAY FOR CONTROL OF ELECTROMAGNETIC DOOR HOLDER. DOORS SHALL RELEASE UPON DETECTION OF SMOKE.



ELEVATOR RECALL AND SHUT-DOWN SEQUENCE OF OPERATION:

1. UPON SENSING SMOKE FROM ONE OR MORE ELEVATOR LOBBY OR HOISTWAY, THE SMOKE DETECTOR SHALL SIGNAL THE FIRE ALARM CONTROL PANEL, WHICH WILL FORWARD THE SIGNAL TO THE ELEVATOR LOGIC CONTROLLER VIA ADDRESSABLE RELAY MODULES TO RECALL ELEVATOR CAB TO THE PRIMARY RECALL FLOOR. IF PRIMARY RECALL FLOOR'S LOBBY SMOKE DETECTOR SENSES SMOKE AT THAT FLOOR, THE ELEVATOR CONTROLLER WILL SEND THE ELEVATOR CAB TO THE NEXT FLOOR CLEAR OF SMOKE. ONCE THE ELEVATOR CAB HAS REACHED THE DESIGNATED FLOOR, THE ELEVATOR CAB DOORS WILL OPEN AND THE CONTROLLER WILL LOCK THE ELEVATOR CAB AT THAT FLOOR, DISABLING THE ELEVATOR CAB CONTROLS, UNLESS A FIREMAN'S KEY IS USED TO OVERRIDE AUTOMATIC CONTROLS.
2. ALL SMOKE DETECTORS ASSOCIATED WITH ELEVATOR RECALL (LOBBY AND HOISTWAY) SHALL TRANSMIT A SEPARATE AND DISTINCT VISIBLE ANNUNCIATION AT THE FIRE ALARM CONTROL PANEL.
3. UPON SENSING A HEAT ALARM CONDITION IN THE ELEVATOR HOISTWAY, THE HEAT DETECTOR SHALL SIGNAL THE FIRE ALARM CONTROL PANEL, WHICH WILL FORWARD THE SIGNAL TO THE ADDRESSABLE RELAY MODULE TO ACTIVATE THE SHUNT-TRIP SWITCH POWERING THE ELEVATOR SO AS TO DISCONNECT POWER TO THAT CIRCUIT. THIS IS TO BE A NON-AUTO RESET SWITCH. WHEN THE SPRINKLER HEAD HAS REACHED ITS CRITICAL TEMPERATURE OF 165° F., THE HEAD WILL BEGIN DISCHARGE OF WATER.

2

ELEVATOR RECALL AND SHUT-DOWN WIRING DIAGRAM

E1.15

NO SCALE

1

ROOF SPECIAL SYSTEMS PLAN

E1.15

3/16" = 1'-0"



amRenz
Main Street, Suite 3
Kansas City, MO 6410
igr@igrarchitects.com

SALINA,

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E6.2

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Voltage: 208 V, 3 Ø, 4 W
Bus Rating: 600 A
Neutral: 100%
Mains Type: MCB
Mains Rating: 600 A
Mains FN/Note: -
SCCR: 10 kA

Breaker Function Schedule	
#	For any number, see panel schedule footer note
A	Arc-Fault Interrupter (AFCI) Protection
EM	Provide identification per NEC 700.12(I)(2)(4)
G	Ground-Fault Circuit Interrupter (GFCI) Protection (5 mA)
GA	Combination Arc-Fault Interrupter (AFCI) and Ground-Fault Circuit Interrupter, 5mA, (GFCI) Protection
GE	Ground-Fault Protection for Equipment (30 mA)
OF	Adjustable Ground-Fault Protection for Equipment
H	Breaker hasp to prevent unintentional opening
HR	"HACR" rated breaker.
L	Lockable open according to NEC 110.25
S	Switch-rated per NEC 240.83(D)

Installed Location:
Voltage: 208Y/120 3PH 4W
Mounting: Surface
Enclosure: NEMA 1

SCCR/AIC: 10.0 kA
Mains FN/Note: -

Designation: P3

SCCR/AIC: 10.0 kA
Mains FN/Note: -

Designation: T

SCCR/AIC:
Mains FN/Note: -

DRY-TYPE TRANSFORMER SCHEDULE							
TAG	KVA SIZE	PRIMARY VOLTAGE	SECONDARY VOLTAGE	PHASE	GROUNDING ELECTRODE CONDUCTOR SIZE	EQUIPMENT SERVED	REMARKS
TXH	225	240 V	208Y/120 3PH 4W	3	#2/0	Panel H1*	1
GENERAL: - MAXIMUM LENGTH OF SECONDARY CONDUCTORS SHALL NOT EXCEED 25'-0" PER NEC 240.21(C)(6). - BOND GROUNDING ELECTRODE TO NEAREST AVAILABLE GROUNDING ELECTRODE PER NEC 250.30(A)(7).							
REMARKS: PROVIDE 3-1/2" HIGH CONCRETE HOUSEKEEPING PAD.							

Installed Location:
Voltage: 208Y/120 3PH 4W
Mounting: Surface
Enclosure: NEMA 1

SCCR/AIC: 10.0 kA
Mains FN/Note: -

Designation: P1

SCCR/AIC: 10.0 kA
Mains FN/Note: -

Designation: M

SCCR/AIC: 10.0 kA
Mains FN/Note: -

Designation: P2

SCCR/AIC: 10.0 kA
Mains FN/Note: -

Ckt	Description	Circuitry	Trip (A)	FN	A	B	C	FN	Trip (A)	Circuitry	Description	Ckt
P2.1	Lighting - N. 2nd Floor Common Area	1/2"C,1#12,1#12N,1#12G	20		43...18...				20	1/2"C,1#12,1#12N,1#12G	Fitness Equipment - Gym 223	P2.2
P2.3	Lighting - S. 2nd Floor Common Area	1/2"C,1#12,1#12N,1#12G	20			81...54...			20	1/2"C,1#12,1#12N,1#12G	Fitness Equipment - Gym 223	P2.4
P2.5	Lighting - Gym 223	1/2"C,1#12,1#12N,1#12G	20				16...18...		20	1/2"C,1#12,1#12N,1#12G	Fitness Equipment - Gym 223	P2.6
P2.7	RCPT - 201, 202, 204 TLTS/Jan	1/2"C,1#12,1#12N,1#12G	20		54...18...				20	1/2"C,1#12,1#12N,1#12G	TV - Gym 223	P2.8
P2.9	RCPT - Halls 203, 208	1/2"C,1#12,1#12N,1#12G	20			90...18...			20	1/2"C,1#12,1#12N,1#12G	TV - Gym 223	P2.10
P2.11	RCPT - Hall 212	1/2"C,1#12,1#12N,1#12G	20				72...18...		20	1/2"C,1#12,1#12N,1#12G	TV - Gym 223	P2.12
P2.13	Electric Water Heating	1/2"C,1#12,1#12N,1#12G	20		15...72...				20	1/2"C,1#12,1#12N,1#12G	RCPT - Gym 223	P2.14
P2.15	Door Security Access Control	1/2"C,1#12,1#12N,1#12G	20	H		30...18...			20	1/2"C,1#12,1#12N,1#12G	Electric Water Cooler - Gym 223	P2.16
P2.17	Splice	--	20				0 VA 40...		50	3/4"C,2#6,1#10G	Blower Coil BC-9	P2.18
P2.19	Space	--	--		-- 40...						Electric Heat	P2.20
P2.21	Space	--	--		-- 22...				25	1/2"C,2#10,1#10G	Blower Coil - BC-10"	P2.22
P2.23	Space	--	--			-- 22...					Electric Heat	P2.24
P2.25	Space	--	--		-- --	--				--	Space	P2.26
P2.27	Space	--	--		-- --	--				--	Space	P2.28
P2.29	Space	--	--		-- --	--				--	Space	P2.30
Connected Load:					7568 VA	5125 VA	7465 VA					
Connected Amps:					66 A	43 A	65 A					