



## **ADDENDUM #1**

### **ALF SORENSENEN NATATORIUM RENOVATION BID #13/14-015 – PWP# WA-2014-098 BIDS DUE NO LATER THAN: 1:45 PM ON MARCH 5, 2014 PUBLIC BID OPENING: 2:00 PM ON MARCH 5, 2014**

This addendum is to notify all potential proposers of clarifications made to the Bid documents as stated below.

#### **GENERAL**

##### **Self Listing**

Firms functioning as the prime bidder (those submitting bids directly to the City) are reminded that they MUST list themselves on the listing of sub-contractors required as part of their bid submittal (Page 8 of the bid document). Bidders that fail to list themselves on Page 8 will be found non-responsive to the bid document and their bid will not be evaluated.

##### **Bid Item Schedule**

A revised Bid Item Schedule is included as an attachment to this addendum and replaces the Bid Item Schedule provided in the original Bid Book on Page 4. Specific changes within this document include the addition of a line item specific to the replacement of doors (New Bid Item 2).

The added work to replace and modify the doors at six openings is identified as “alternates” in added Section 012300. The amount bid for the work to replace and modify the doors will be listed in Item 2 of the revised Bid Item Schedule. There are no alternate bid items for this project.

##### **Mandatory Pre-Bid Meeting Sign-In Sheet**

A Mandatory pre-bid meeting was held February 21, 2014 at 9:00am at the Alf Sorensen site. *Attached is a list of all recognized attendees from that meeting.* No bids will be accepted from General Contractor's not in attendance at the pre-bid meeting.

##### **Pre-bidding Viewing Session**

An attendance-optional Bid Coordination Meeting is scheduled for February 28, 2014 from 8:00 am through 12:00PM. The intent of this meeting is to allow General/Sub Contractor review, investigation, and coordination of existing building and site conditions. Each Contractor, sub-contractor, supplier and other persons attending the viewing session at Alf Sorensen Community Center for this project on Friday, February 28, 2014, must enter his name, company name, phone number and email address in the attendance log upon entering the building.

##### **Protecting the Pool Plaster for Stains Due to Iron**

Bits of iron from steel cutting, grinding, etc. and anything made of iron will stain the pool plaster if the iron materials are allowed to sit on the plaster. The Contractor will take necessary precautions to prevent staining of the pool plaster due to iron particles or objects made of iron resting on the pool plaster.

### **Concrete Deck Limits**

An acceptable weight limit for the concrete deck surrounding pool cannot be verified. Regardless, lifts should stay a minimum of 6 feet away from the edge of pool at all times. *Attached is a sketch from the original construction of that deck with notation added by the Structural Engineer providing criteria for lift distance from pool for pool depths in excess of 6 feet.* Similarly, any temporary construction and/or the use of lifts for this project are the Contractor's means and methods.

### **Electrical Capacity**

There are several existing branch circuits from the Lighting Control and Panel P1 into the natatorium space that were used to serve the existing lighting in that area. The Electrical Contractor should verify available excess capacity, size, quantity and routing of existing conduits from Panel P1 at this Friday's Bid Coordination Meeting. Potential use for those existing conduit runs includes the added exhaust fans as well as the new lighting system. Electrical Drawings show only which branch circuits to be utilized and what type of conduits are acceptable for use. Means and methods for providing power from this panel to all equipment per the performance required by this Contract is the Contractor's sole responsibility.

### **Project Manual Changes:**

1. Section 00 00 10 – Project Manual Index:
  - a) Section 01 23 00 – Alternates: Index this section under Division 01 “General Requirements”.
  - b) Section 08 11 13 – Hollow Metal Doors and Frames: Index this section under Division 08 “Openings”.
  - c) Section 08 17 43 – Aluminum Framed FRP Flush Doors: Index this section under Division 08 “Openings”.
2. Section 01 23 00 – Alternates: *Add this section in its entirety per the attached.*
3. Section 08 11 13 – Hollow Metal Doors and Frames: *Add this section in its entirety per the attached.*
4. Section 08 17 43 – Aluminum Framed FRP Flush Doors: *Add this section in its entirety per the attached.*

### **Drawings Changes / Comments:**

#### **Architectural Drawings**

1. Sheet A101 – Existing Floor Plan: *Replace this sheet in its entirety per the attached.*
  - a) Add Drawing 2 “Gymnasium 143 Doors”, including reference to Door 143A and 143B.
  - b) Add reference to Door 110B, 110C, 114 and 115.
2. Sheet A801 – Storefront Elevations and Details: *Replace this sheet in its entirety per the attached.*
  - a) Add Door 110B, 110C, 114, 115, 143A and 143B to “Door Schedule”. These doors are to be included in Bid Pricing as Alternate #1.
  - b) Add 7/A801 reference to frame elevation “C” and “D” of “Storefront and Door Elevations”.
  - c) Add Door Type “F” to “Storefront and Door Elevations”.

- d) Delete Hardware Group H1 from this sheet. This information is relocated to Sheet A802.
3. Sheet A802 – Door Details: *Replace this sheet in its entirety per the attached.*
- a) Add Door Schedule and Hardware Notes in their entirety.
  - b) Add Door Hardware Group H1, H2, and H3. Group H1 has been modified to require continuous hinges at all FRP doors.
  - c) Detail 7 – Aluminum Tube Frame at (e) Concrete Wall: Add this detail in its entirety.

### **Mechanical Drawings**

1. Sheet M1.1 – Air Conditioning – Demo Floor Plan: *Replace this sheet in its entirety per the enclosed.*
- a) Add location of existing sprinkler line to help clarify the extent of the existing system within this project’s construction limits.
2. Sheet M3.1 – Air Conditioning Sections: *Replace this sheet in its entirety per the enclosed.*
- a) Detail 2 - Add notations toward right side of detail at end of notation leaders. Notes shall read “(E) Duct to remain”, “(E) Duct Soffit”, and “Lower Roof” from top to bottom respectively.
3. Sheet M6.1 – Air Conditioning – Details: *Replace this sheet in its entirety per the enclosed.*
- a) Detail 5 – Add note for control contractor to coordinate with electrical contractor. The electrical contractor is to provide the enclosure for the exhaust fan controls and switching.

### **Electrical Drawings**

1. Sheet E0.2 – Schedules and Compliance Docs:
- a) Light Fixture Schedule: Fixture Type L3 - revise the Lux Dynamics model number as follows: LED GYM 4 UNV 0-10VDIM LADC IND ANG 22 DEGREES
2. Sheet E3.1 – Lighting Plan:
- a) Add the following clarification note to outlet P1-[40,N]G in Pool Equipment Storage 116:  
  
“ Future audio location. Extend all speaker wiring to this location from speaker locations indicated on Sheet A601 – see Arch.”
  - b) Sheet Note 10: Revise as follows:  
  
“ Electrical Contractor shall provide 120V wiring, connections and switches with pilot lights and relays associated with the new supply and exhaust fans. See Detail B/E0.2 for control diagram. Provide (1) 3-gang box and switch plate and (1) 4-gang box and switch plate. Label switches as per mechanical drawings. See Mechanical Drawings for additional information and work to be performed. Electrical Contractor shall coordinate with controls contractor to provide an enclosure large enough for switches, relays and current sensors.”

Please note and adjust your bid according to the revisions, additions, deletions, clarifications or modifications as presented on this Addendum #1, which are made a part of this bid. NOTE: To avoid disqualification, this Addendum 1 (and any other addenda) must be signed by an authorized representative of the bidding firm in the space provided and must be submitted with your firm's sealed proposal (not later than 1:45 pm on March 5, 2014). Failure to return this addendum, duly signed, may be cause for rejection of the bid. ALL ADDENDA SHOULD BE SIGNED AND PLACED IN SEQUENTIAL ORDER AND ATTACHED TO THE FRONT OF THE BID PACKAGE, COMPLETE WITH ALL REQUIRED DOCUMENTS.

\_\_\_\_\_  
CONTRACTOR BUSINESS NAME

\_\_\_\_\_  
Dan Marran, C.P.M., CPPO  
Contracts and Risk Manager

X \_\_\_\_\_  
Authorized Signature

February 26, 2014

\_\_\_\_\_  
Printed Name of Person Signing

**CITY OF SPARKS**  
**BID ITEM SCHEDULE (REVISED by Addendum #1)**

**BID TITLE: Alf Sorensen Natatorium Renovation**

**BID #** 13/14 – 015; PWP#: WA-2014-098

**PRICES** must be valid for 90 calendar days after the bid opening.

**COMPLETION** of this project is expected Pursuant to Contract Documents.

**BIDDER** acknowledges receipt of \_\_\_\_\_ addenda.

An authorized representative of the Contractor shall sign this form in space provided. An unsigned bid may be disqualified.

Bidder Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Item No.	Quantity	Units	Description	Unit Price (in numerals)	Total Price (in numerals)
1	1	LS	Provide all Labor, Materials, Equipment, Services, and related Accessories to perform a complete natatorium renovation as Shown in the Drawings and Specifications, complete-in-place, per lump sum.	\$ _____ /LS	\$ _____
2	1	LS	Provide all Labor, Materials, Equipment, Services, and related Accessories to perform a complete replacement of the 6 door sets in the openings shown in Addendum 1, complete-in-place per lump sum.	\$ _____ /LS	\$ _____
3	FA	FA	Force Account – Work as Authorized by the City Project Coordinator / Engineer (CONTINGENT ITEM).	\$27,000	<u>\$27,000.00</u>

**Total Base Bid Price** \$ \_\_\_\_\_

(Written Amount) \_\_\_\_\_

# ATTENDANCE LIST

Project Name: Alf Sorensen Natatorium Renovation

Date: FRI Feb 21, 2014

Name Company	Telephone No. Fax No.	e-mail address
Ross Soderstrom, PE City of Sparks	353-2212 353-1635	r.soderstrom@cityofsparks.us
ROGER GRAVELLE AAME	329-900	rgravelle@aame.com
AARON BISSELL INTERMOUNTAIN ELECTRIC	850-3600 850-3605	abisselle@melect.com
JOEGANSER RELIANT ELECTRIC	342-2900 342-2905	joeganser@sbcglobal.net
Bob Heeb Fleet Mcting & App	353-0744 353-3240	bob.fleet@heeb.com
MARK TAYLOR M/T ROSE NTC	329-8384 329-8508	MTAYLOR@M/TROSENTAC.COM
PAT SULLIVAN SULLIVAN STRUCTURES LLC	849 8220 849 4209	ESTIMATING@SULLIVANSTRUCTURESLLC.COM
Chris Key Legacy Painting	870-4523 ext 201 870-4528	ckey@nlegacy.com

Stewart-Gin 843-8339 Gillcon@pyram.net



# ATTENDANCE LIST

Project Name: Alf Natariviana Renovation

Date: Fri Feb 21, 2014

Name Company	Telephone No. Fax No.	e-mail address
Ross Spierstram, PE City of Sparks	353-2212 353-1635	rspeerstram@cityofsparks.us
Rich Merlie Walker River Const.	775-335-9289 775-313-0860	rich@wrc-inc.net r4psy@wrc-inc.net
TOM KEEFHAVER HERTZ EQUIPMENT RENTAL	775-745-4269 775-359-6376	JKEEFHAVE@HERTZ.COM
ROY SPELMAN WEST NEVADA ELECTRIC	775-624-1350 775-624-1355	ROY@WNXELECTRIC@ATT.NET
Reyman Brothers Const golsen@reymanBro. Const	775-356-0150 Clyde Cordova	golsen@reymanBrothers.Const
Jim McCaul K7 CONST.	826-8872 826-8872	Jim.McCaul@K7C.COM
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Mark DeWeese TruSee Meadows Construction	747-2322 747-3172	mdeweese@truoseemeadowsconstruction.com
Kyle Wulz H&L	691-5618	H&L Custom Builders@charter.net

# ATTENDANCE LIST

Project Name: Alf Svendsen Natatorium Renovation

Date: FRI FEB 21, 2014

Name Company	Telephone No. Fax No.	e-mail address
<u>Bob Soderstrom, PE</u> <u>City of Sparks</u>	<u>353-2212</u> <u>353-1635</u>	<u>rsoderstrom@cityofsparks.us</u>
<u>Tom Heibert</u> <u>BCS Controls</u>	<u>826-8998</u> <u>826-3524</u>	<u>tom@bcsmv.com</u>
<u>DAW Jostyn</u> <u>BSI</u>	<u>323-7242</u> <u>323-6242</u>	<u>DAW@BSINCUS.COM</u>
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<u>JAKE KALOX</u> <u>RPM</u>	<u>830-5424</u>	<u>JAKE@RPM-ELECTRICAL.COM</u>
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<u>JUSTIN NELSON</u> <u>MORGAN CONST. INC.</u>	<u>772-9370</u>	<u>JUSTIN.MORGANCONST@HOTMAIL.COM</u>
<u>Stuart Grace</u> <u>Paramount Ptg &amp; Walling</u>	<u>742-0305</u>	<u>PARAMOUNTPTGN@ymail.com</u>



# ATTENDANCE LIST

Project Name: Alf Janssen Natatorium Renovation

Date: Fri Feb. 21, 2014

Name Company	Telephone No. Fax No.	e-mail address
MARK DONAHUE J's CONSTRUCTION	530-587-0230 530-587-0241	markdonahue@jmwtrucker.com
DAVE ANDERSON CAPITAL DEVELOPMENT	775-379-2806 775-240-5760	DANDW@ATT.NET
BOB NAPIER PIONEER ELECTRIC	775-358-9259 775-358-1269	BOBN@PIONEERELECTRIC.LTD.COM
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Peter Coyne Alpine Roofing	358-7663	Peter@alpineroofing.net
PAUL OKREE H&K ARCHITECTS	870-4384	PAUL@H&KARCHITECTS.COM

# ATTENDANCE LIST

Project Name: A/H Svendsen Natarium Corporation

Date: Fri Feb. 21, 2014

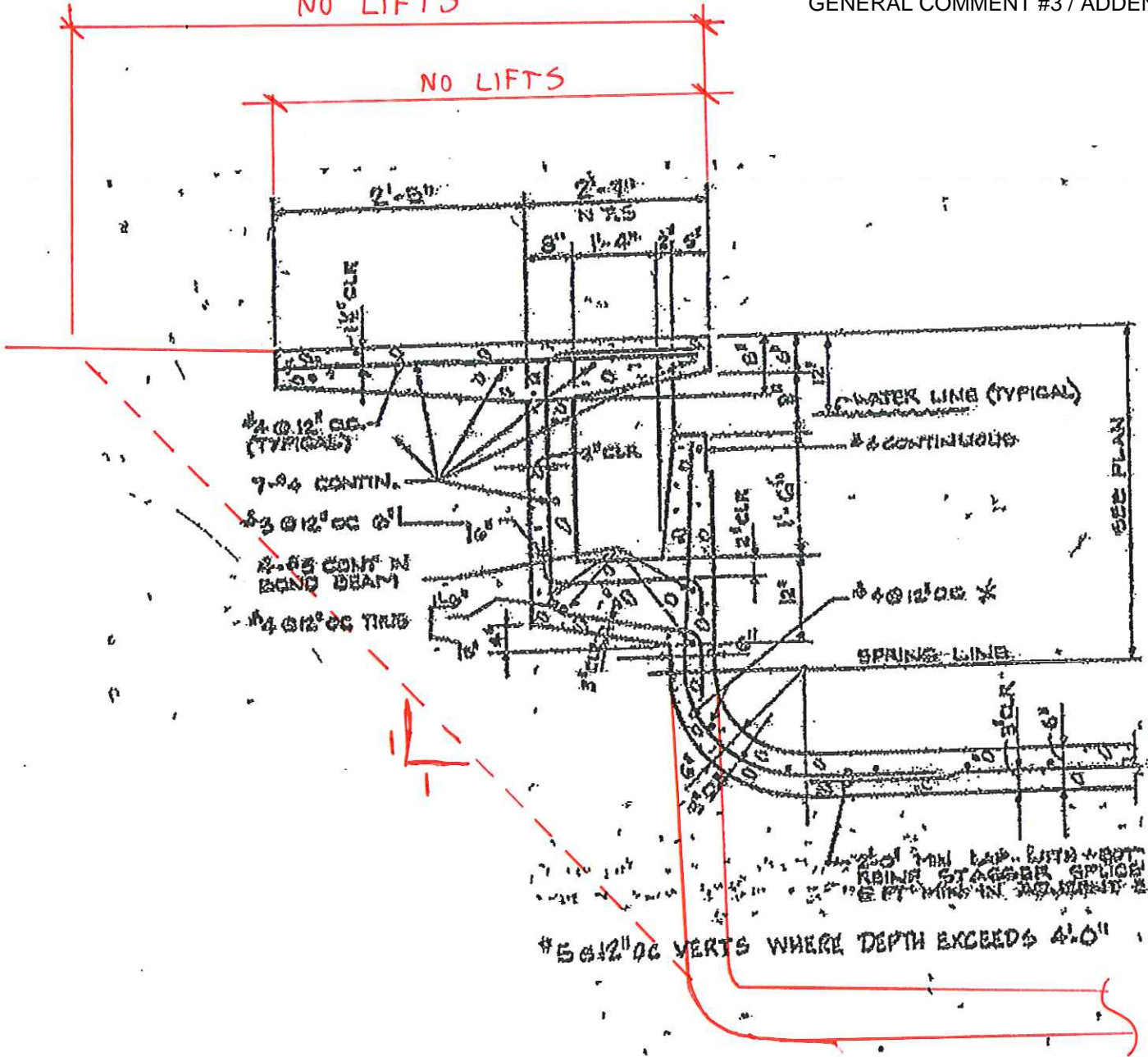
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SVU A. SARASEN RL BROWN CONSTRUCTION	775-544 8230	SSARASEN@RLBSCI.COM




NO LIFTS

GENERAL COMMENT #3 / ADDENDUM #1

NO LIFTS



	<b>MILTON E. JOHNSON</b> ARCHITECT 2017 EMBARCADERO WAY PALO ALTO, CALIFORNIA	<b>DAVID J. HAMMOND</b> STRUCTURAL ENGINEER
	ALA.	



SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
  - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
  - 2. Indicate prices for each alternate on bid form; if no change in price is required, indicate no change.
  - 3. Indicate on the bid form the amount to be added or deducted from the base bid, should the alternate be accepted, indicating whether it is an "ADD" or a "DEDUCT" price.
  - 4. Voluntary alternates will not be considered in evaluation of bids.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.

- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Alternate No. 1: Remove existing door and/or frame assembly at Door 110B, 110C, 114, 115, 143A and 143B as identified on Sheet A101. Replace door assemblies at these locations as described on Sheet A801, A802 and Specification Section 08 11 13 and 08 17 43.
1. Add all labor and material necessary for complete removal of door assemblies as identified on drawings, and for installation of new door assemblies in those locations. Itemize all pricing for this scope of work and clearly identify as "Bid Alternate #1" on Bid Form.

END OF SECTION 01 23 00



SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES

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 hollow-metal work.
- B. Related Requirements:
  - 1. Division 07 Section "Joint Sealants" for frame perimeter sealants.
  - 2. Division 08 Section "Aluminum-Framed Entrances and Storefronts" for exterior fenestration systems and entrances.
  - 3. Division 08 Section "Aluminum-Framed FRP Flush Doors" for pre-hung doors in aluminum frames.

1.3 DEFINITIONS

- A. Minimum Thickness: Minimum thickness of base metal without coatings according to NAAMM-HMMA 803 or SDI A250.8.

1.4 COORDINATION

- A. Coordinate anchorage installation for hollow-metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver hollow-metal work palletized, packaged, or crated to provide protection during transit and Project-site storage. Do not use nonvented plastic.
  - 1. Provide additional protection to prevent damage to factory-finished units.
- B. Store hollow-metal work vertically under cover at Project site with head up. Place on minimum 4-inch- high wood blocking. Provide minimum 1/4-inch space between each stacked door to permit air circulation.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Ceco Door Products; an Assa Abloy Group company.
  - 2. Curries Company; an Assa Abloy Group company.
  - 3. Door Components, Inc.
  - 4. MPI Group, LLC (The).
  - 5. North American Door Corp.
  - 6. Steelcraft; an Ingersoll-Rand company.
- B. Source Limitations: Obtain hollow-metal work from single source from single manufacturer.

### 2.2 EXTERIOR HOLLOW-METAL DOORS

- A. Construct exterior doors and frames to comply with the standards indicated for materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances, and as specified.
- B. Hollow-Metal Doors: NAAMM-HMMA 860..
  - 1. Physical Performance: Level A according to SDI A250.4.
  - 2. Doors:
    - a. Type: As indicated in the Door and Frame Schedule.
    - b. Thickness: 1-3/4 inches
    - c. Face: Metallic-coated steel sheet, minimum thickness of 0.042 inch, with minimum G60A60 coating.
    - d. Edge Construction: Continuously welded with no visible seam.
    - e. Core: Steel stiffened with insulated core.
  - 3. Exposed Finish: Prime.

### 2.3 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.
- C. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow-metal frames of type indicated.
- D. Grout: ASTM C 476, except with a maximum slump of 4 inches, as measured according to ASTM C 143/C 143M.
- E. Bituminous Coating: Cold-applied asphalt mastic, compounded for 15-mil dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

## 2.4 FABRICATION

- A. Fabricate hollow-metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for metal thickness. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.
- B. Hollow-Metal Doors:
1. Steel-Stiffened Door Cores: Provide minimum thickness 0.026 inch, steel vertical stiffeners of same material as face sheets extending full-door height, with vertical webs spaced not more than 6 inches apart. Spot weld to face sheets no more than 5 inches o.c. Fill spaces between stiffeners with glass- or mineral-fiber insulation.
  2. Vertical Edges for Single-Acting Doors: Provide beveled or square edges at manufacturer's discretion.
  3. Top Edge Closures: Close top edges of doors with flush closures of same material as face sheets.
  4. Bottom Edge Closures: Close bottom edges of doors where required for attachment of weather stripping with end closures or channels of same material as face sheets.
  5. Exterior Doors: Provide weep-hole openings in bottoms of exterior doors to permit moisture to escape. Seal joints in top edges of doors against water penetration.
- C. Fabricate concealed stiffeners and edge channels from either cold- or hot-rolled steel sheet.
- D. Hardware Preparation: Factory prepare hollow-metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to SDI A250.6, the Door Hardware Schedule, and templates.
1. Reinforce doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.
  2. Comply with applicable requirements in SDI A250.6 and BHMA A156.115 for preparation of hollow-metal work for hardware.
- E. Stops and Moldings: Provide stops and moldings around glazed lites and louvers where indicated. Form corners of stops and moldings with mitered hairline joints.
1. Single Glazed Lites: Provide fixed stops and moldings welded on secure side of hollow-metal work.
  2. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
  3. Provide loose stops and moldings on inside of hollow-metal work.
  4. Coordinate rabbet width between fixed and removable stops with glazing and installation types indicated.

## 2.5 STEEL FINISHES

- A. Prime Finish: Clean, pretreat, and apply manufacturer's standard primer.
1. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with SDI A250.10; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.
- B. Drill and tap doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.

### 3.3 INSTALLATION

- A. General: Install hollow-metal work plumb, rigid, properly aligned, and securely fastened in place. Comply with Drawings and manufacturer's written instructions.
- B. Hollow-Metal Doors: Fit hollow-metal doors accurately in frames, within clearances specified below. Shim as necessary.
  - 1. Non-Fire-Rated Steel Doors:
    - a. Between Door and Frame Jambs and Head: 1/8 inch plus or minus 1/32 inch.
    - b. Between Edges of Pairs of Doors: 1/8 inch to 1/4 inch plus or minus 1/32 inch.
    - c. At Bottom of Door: 5/8 inch plus or minus 1/32 inch.
    - d. Between Door Face and Stop: 1/16 inch to 1/8 inch plus or minus 1/32 inch (0.8 mm).

### 3.4 ADJUSTING AND CLEANING

- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow-metal work that is warped, bowed, or otherwise unacceptable.
- B. Remove grout and other bonding material from hollow-metal work immediately after installation.
- C. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.
- D. Metallic-Coated Surface Touchup: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

END OF SECTION 08 11 13

SECTION 08 17 43 – ALUMINUM FRAMED FRP FLUSH DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

- 1. Interior and exterior swing doors.
- 2. Heavy wall aluminum-framed storefront systems.

B. Related Sections:

- 1. Division 07 Section "Joint Sealants" for frame perimeter sealants.
- 2. Division 08 Section "Aluminum-Framed Entrances and Storefronts" for exterior fenestration systems and entrances.
- 3. Division 8 Section "Glazing" for glazing in storefront and door panels.

1.3 DEFINITIONS

- A. ADA/ABA Accessibility Guidelines: U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disability Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities."

1.4 PERFORMANCE REQUIREMENTS

- A. General Performance: Aluminum-framed systems shall withstand the effects of the following performance requirements without exceeding performance criteria or failure due to defective manufacture, fabrication, installation, or other defects in construction:

- 1. Movements of supporting structure indicated on Drawings including, but not limited to, story drift and deflection from uniformly distributed and concentrated live loads.
- 2. Dimensional tolerances of building frame and other adjacent construction.
- 3. Failure includes the following:
  - a. Deflection exceeding specified limits.
  - b. Thermal stresses transferring to building structure.
  - c. Framing members transferring stresses, including those caused by thermal and structural movements to glazing.
  - d. Noise or vibration created by wind and by thermal and structural movements.
  - e. Loosening or weakening of fasteners, attachments, and other components.
  - f. Sealant failure.
  - g. Failure of operating units.



- B. Structural Loads:
  - 1. Wind Loads: As indicated on Drawings.
  - 2. Seismic Loads: As indicated on Drawings.

#### 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for aluminum-framed systems.
- B. Shop Drawings: For aluminum-framed systems. Include plans, elevations, sections, details, and attachments to other work.
  - 1. Include details of provisions for system expansion and contraction and for drainage of moisture in the system to the exterior.
- C. Other Action Submittals:
  - 1. Entrance Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of entrance door hardware, as well as procedures and diagrams. Coordinate final entrance door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of entrance door hardware.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Product Options: Information on Drawings and in Specifications establishes requirements for systems' aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to verification by one or more methods including preconstruction testing, field testing, and in-service performance.
- C. Accessible Entrances: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.
- D. Source Limitations for Aluminum-Framed Systems: Obtain from single source from single manufacturer.

#### 1.7 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of structural supports for aluminum-framed systems by field measurements before fabrication and indicate measurements on Shop Drawings.

1.8 MAINTENANCE SERVICE

A. Entrance Door Hardware:

1. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of entrance door hardware.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Special-Lite, Inc., PO Box 6, Decatur, Michigan 49045. (800) 821-6531 or (269) 423-7068. [www.sepcial-lite.com](http://www.sepcial-lite.com)

2.2 MATERIALS

A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.

1. Sheet and Plate: **ASTM B 209.**
2. Extruded Bars, Rods, Profiles, and Tubes: **ASTM B 221.**
3. Extruded Structural Pipe and Tubes: ASTM B 429.
4. Structural Profiles: ASTM B 308/B 308M.

2.3 GLAZING SYSTEMS

A. Glazing: As specified in Section 088000 "Glazing."

B. Glazing Gaskets: Manufacturer's standard compression types; replaceable, molded or extruded, of profile and hardness required to maintain watertight seal.

C. Spacers and Setting Blocks: Manufacturer's standard elastomeric type.

2.4 FRP FLUSH DOORS

A. Model: SL-17 Flush Doors with SpecLite fiberglass reinforced polyester (FRP) face sheets.

B. Door Opening Size: As indicated on Drawings.

C. Construction:

1. Door Thickness: 1-3/4 inches.
2. Stiles and Rails: Aluminum Alloy 6063-T5, minimum of 2-5/16 inch depth.
3. Corners: Mitered.

4. Provide joinery of 3/8-inch diameter full-width tie rods through extruded splines top and bottom as standard tubular shaped stiles and rails reinforced to accept hardware as specified.
5. Securing Internal Door Extrusions: 3/16-inch angle blocks and locking hex nuts for joinery. Welds, glue, or other methods are not acceptable.
6. Furnish extruded stiles and rails with integral reglets to accept face sheets. Lock face sheets into place to permit flush appearance. Rail caps or other face sheet capture methods are not acceptable.
7. Extrude top and bottom rail legs for interlocking continuous weather bar.
8. Meeting Stiles: Pile brush weatherseals. Extrude meeting stile to include integral packet to accept pile brush weatherseals.
9. Bottom of Door: Install bottom weather bar with nylon brush weatherstripping into extruded interlocking edge of bottom rail.
10. Glue: Use of glue to bond sheet to core or extrusions is not acceptable.

D. Face Sheet:

1. Material: SpecLite3 FRP, 0.120-inch thickness, finish color throughout. Abuse-resistant engineered surface.
2. Texture: Pebble.
3. Color: Selected by Architect from manufacturer's full range.

E. Core:

1. Material: Poured-in-place polyurethane foam.
2. Density: Minimum of 5 pounds per cubic foot.
3. R-Value: Minimum of 9.

F. Cutouts:

1. Manufacture doors with cutouts for required vision lites and panels.
2. Factory install vision lites and panels.

G. Hardware:

1. Premachine doors in accordance with templates from specified hardware manufacturers and hardware schedule.
2. Factory install hardware to greatest extent possible.
3. Factory install fixed vane louvers where indicated on Door Schedule.

## 2.5 ALUMINUM DOOR FRAMING SYSTEM

A. Tubular Framing:

1. Size and Type: 2 x 6 inch slip-in frame.
2. Model: SL-260 FG by Special-Lite, Inc.
3. Materials: Aluminum Alloy 6063-T5, 1/8 inch minimum wall thickness.
4. Applied Door Stops: 0.625 inch high, with screws and weatherstripping. Door stop shall incorporate pressure gasketing for weathering seal. Counterpunch fastener holes in door stop to preserve full metal thickness under fastener head.
5. Frame Members: Box type with 4 enclosed sides. Open-back framing is not acceptable.
6. Caulk: Caulk joints before assembling frame members.
7. Joints: Secure joints with fasteners. Provide hairline butt-joint appearance.
8. Field Fabrication: Field Fabrication of framing using stick material is not acceptable.

9. Hardware: Premachine and reinforce frame members for hardware in accordance with manufacturer's standards and hardware schedule.
10. Finish: Anodized, Class I finish, 0.7 mils thick. Finish to be selected by Architect from manufacturer's full range.
11. Reinforcing: Reinforce door frames as required to support loads imposed by door operation and installing entrance hardware.

## 2.6 ALUMINUM FINISHES

- A. Anodized Finish:
  1. Dark Bronze, AA-M10C12C22A44.
    - a. Class: I.
    - b. Thickness: 0.7 mils.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. General:
  1. Comply with manufacturer's written instructions.
  2. Do not install damaged components.
  3. Fit joints to produce hairline joints free of burrs and distortion.
  4. Rigidly secure nonmovement joints.
  5. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration.
  6. Seal joints watertight unless otherwise indicated.
- B. Metal Protection:
  1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or applying sealant or tape, or by installing nonconductive spacers as recommended by manufacturer for this purpose.
  2. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- C. Install components to drain water passing joints, condensation occurring within framing members, and moisture migrating within the system to exterior.
- D. Install components plumb and true in alignment with established lines and grades, and without warp or rack.
- E. Install glazing as specified in Section 088000 "Glazing."

- F. Entrance Doors: Install doors to produce smooth operation and tight fit at contact points.
  - 1. Field-Installed Entrance Door Hardware: Install surface-mounted entrance door hardware according to entrance door hardware manufacturers' written instructions using concealed fasteners to greatest extent possible.

### 3.3 ERECTION TOLERANCES

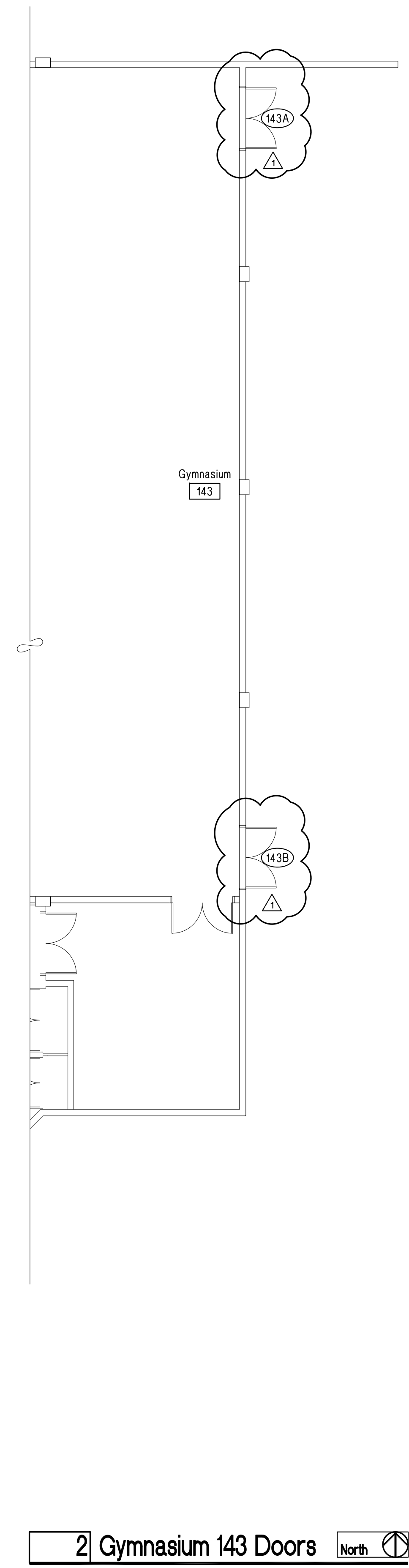
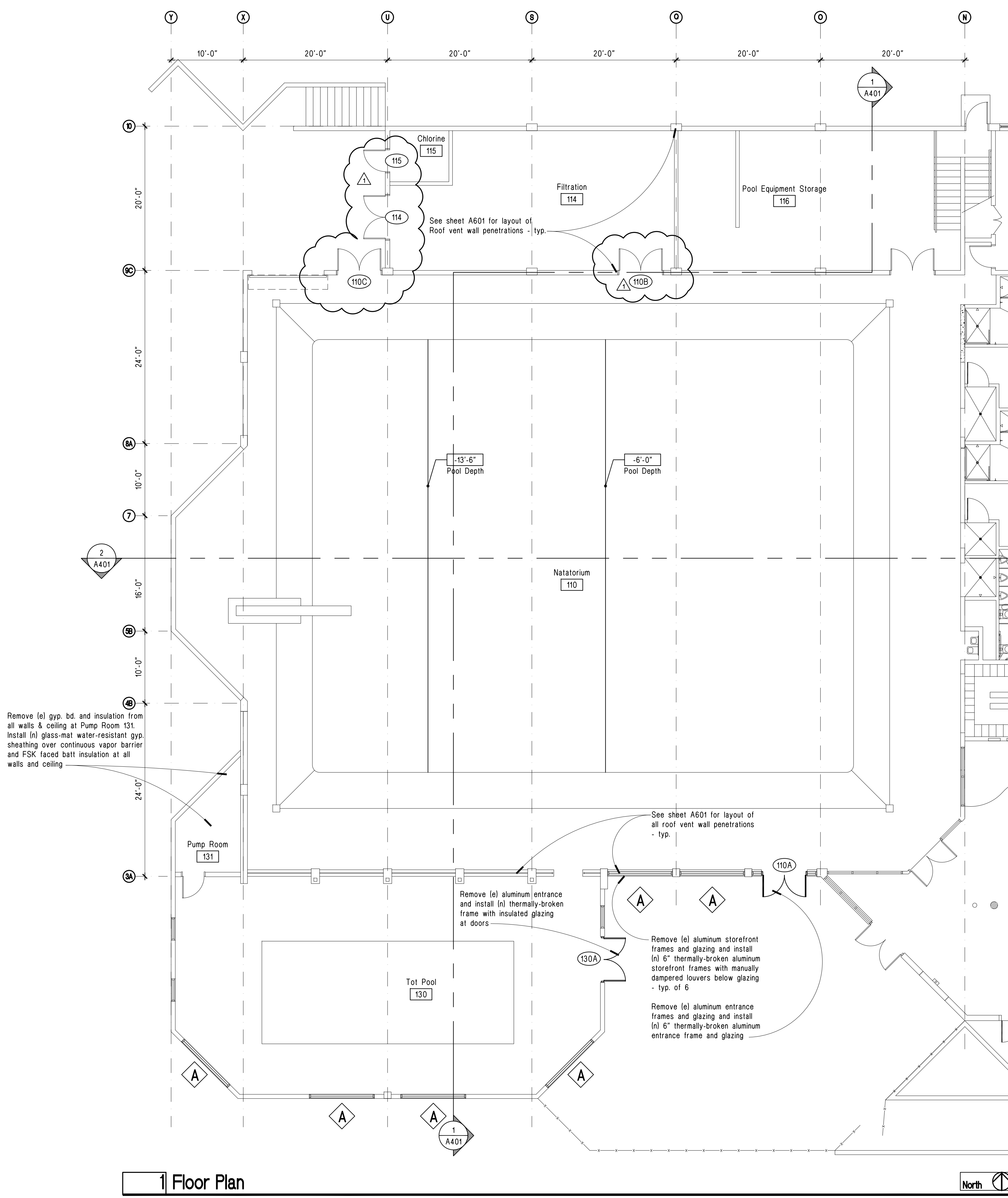
- A. Install aluminum-framed systems to comply with the following maximum erection tolerances:
  - 1. Location and Plane: Limit variation from true location and plane to 1/8 inch in 12 feet; 1/4 inch over total length.
  - 2. Alignment:
    - a. Where surfaces abut in line, limit offset from true alignment to 1/16 inch.
    - b. Where surfaces meet at corners, limit offset from true alignment to 1/32 inch.
- B. Diagonal Measurements: Limit difference between diagonal measurements to 1/8 inch.

### 3.4 ADJUSTING

- A. Adjust operating entrance door hardware to function smoothly as recommended by manufacturer.
  - 1. For entrance doors accessible to people with disabilities, adjust closers to provide a 3-second closer sweep period for doors to move from a 70-degree open position to 3 inches from the latch, measured to the leading door edge.

END OF SECTION 08 17 43



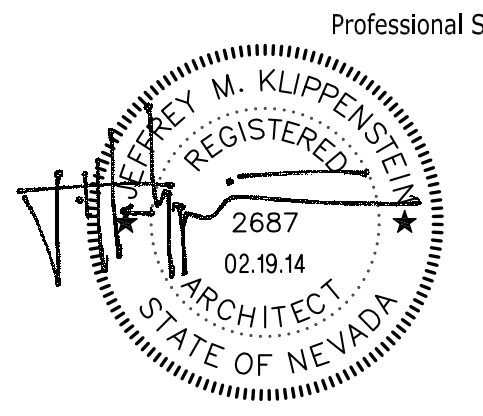


### Demolition Notes

- For the purpose of Architectural work, all items not shown to be removed or altered on this sheet shall remain in their existing condition. This pertains to all equipment and other consultant's work. See other disciplines for additional demolition and alterations to utilities. Notify the Architect of any components which vary from those shown on the drawings.
- In the event that demolition work creates a condition where existing spaces are open to the weather, the Contractor shall protect the building from the effects of exposure from exterior conditions. These conditions shall be weather-tight at the conclusion of his work each night. At the conclusion of his work in that area the Contractor is to replace all removed components to a weather-tight condition matching adjacent finishes.
- There will be selective demolition for Electrical and Mechanical components. This demolition is to facilitate the replacement and/or new installation of Electrical and Mechanical components. Although this demolition may not appear specifically on this sheet, the Contractor shall include in his bid all demolition work for the removal of required building materials necessary for the installation of these components.
- Protect adjacent surfaces to remain from damage. Contractor is to repair or replace all finishes that are damaged or removed due to the installation or removal of any materials, fixtures, accessories or construction noted on these drawings. Repaired or replaced finishes shall match adjacent existing surfaces.
- Refer to Ceiling Demolition Plan for extent of ceiling demolition including but not limited to layout dimensions for installation of saw-cut roof vent penetrations above ceilings and soffits.
- The Contractor shall remove (e) wall finishes as required. The location of this demolition is shown on the Demolition Plan. The Contractor shall be responsible for setting the exact limits of demolition required in order to perform his work. All finishes removed shall be patched, repaired, or replaced to match adjacent finishes.
- All dimensions are taken from Record Drawings. Dimensions must be field verified prior to the start of work.
- Revise mechanical and fire sprinkler systems as required. Contractor to field verify extent of work required.
- Existing fire sprinkler system shall be modified to accommodate new suspended ceiling. Intent is to lower the existing location of sprinkler heads to the new finish ceiling height and center all new sprinkler heads within the ceiling panels. Any damaged sprinkler system components intended to remain shall be replaced at no additional cost to the Owner.
- Hazardous Materials: It is not expected that hazardous materials will be encountered in the work.
- Definitions:  
Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.  
Remove and salvage: Detach items from existing construction and deliver them to the Owner.  
Remove and reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.  
Existing to remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

### Sheet Notes

- Refer to Mechanical and Electrical plans for equipment related to those disciplines. All required equipment not necessarily noted on this sheet.
- Openings, pockets, etc. shall not be placed in slabs, beams, columns, walls, etc., unless specifically detailed on the drawings.
- See Sheet A801 for storefront and entrance frame elevations.
- Repair and repaint the wall as required where alteration work is performed, U.N.O. Paint color to match (e) walls and areas adjacent.
- All touch up and new painting will be as follows:  
Bottom coat: Latex primer  
Intermediate coat and top coat: Acrylic Latex Enamel  
Sheen shall match existing adjacent surfaces. Contractor to coordinate paint manufacturer with Owner to match (e) maintenance paint stock.
- Pool Finish Protection: Iron particles from steel cutting, grinding, etc. and any other construction materials and products containing iron will stain the pool plaster. The Contractor shall protect the pool finish from damage. Any necessary pool repairs due to iron materials being allowed to contact pool finishes shall be the Contractor's sole responsibility and at no additional cost to the Owner.



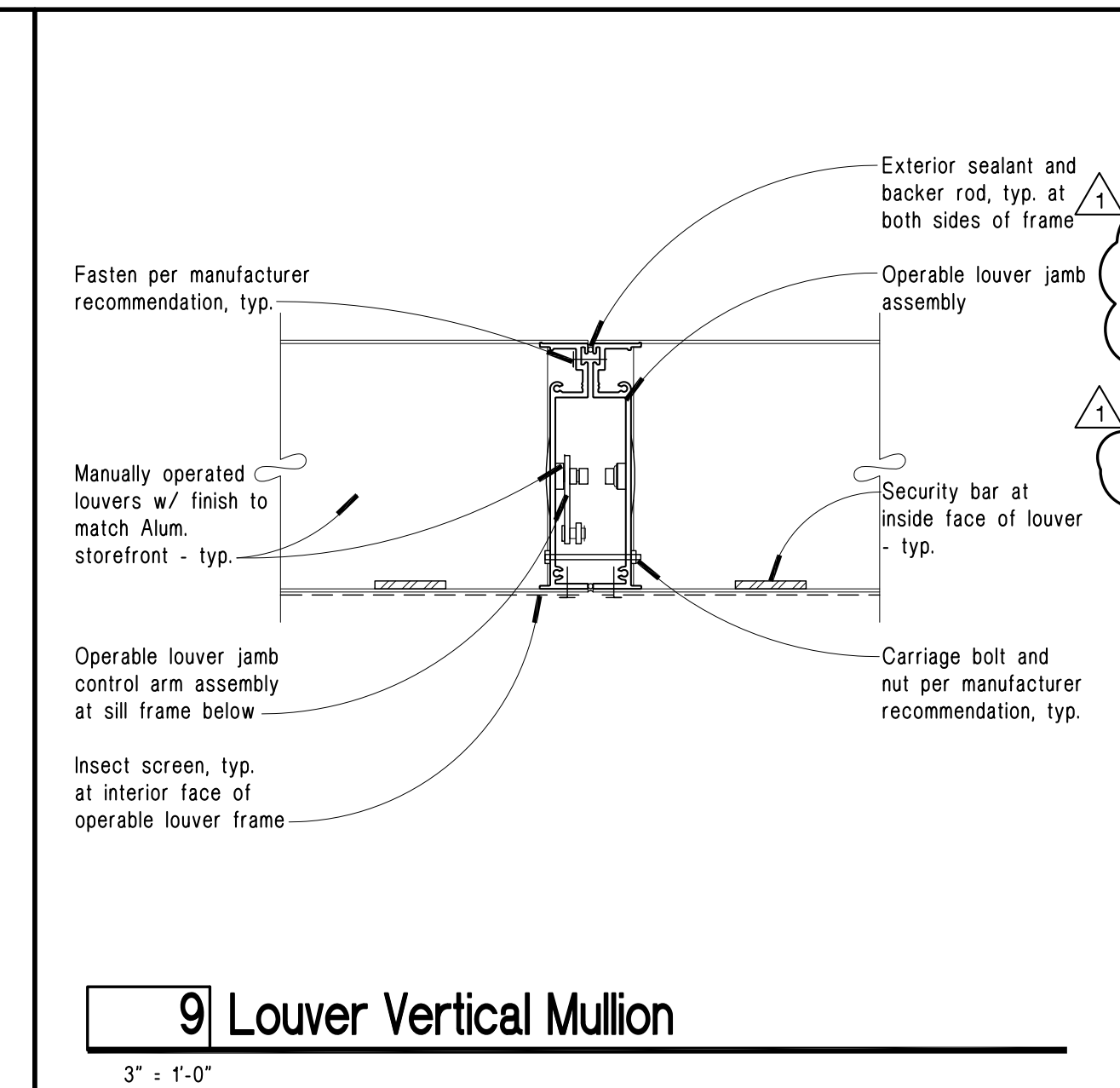
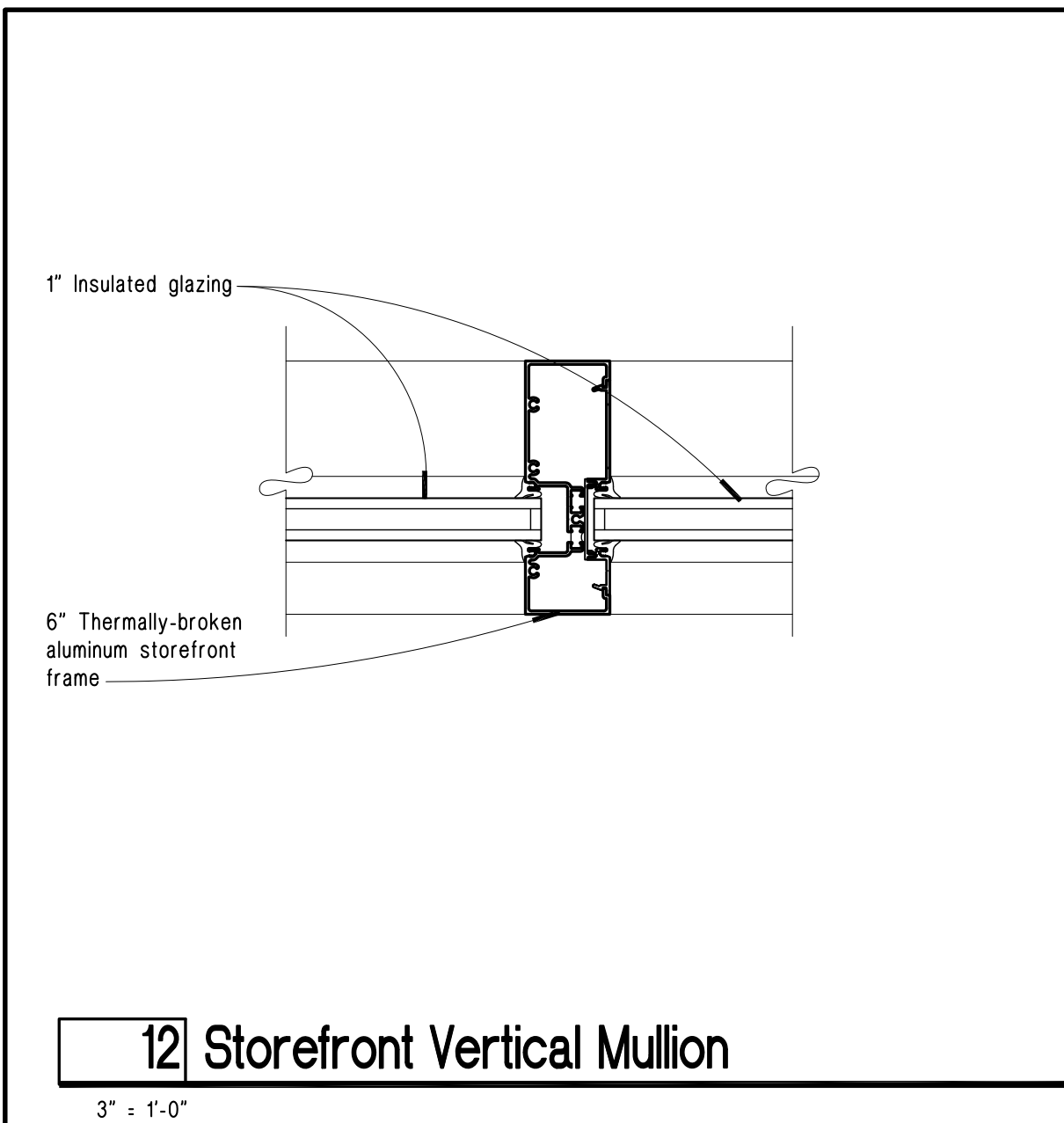
Date	Revision
02/19/14	Addendum #1

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**Alf Sorensen Natatorium  
 Renovation**  
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 Sparks, NV 89434

Existing Floor Plan  
 August 23, 2013  
 H+K Project No.: 1309  
**A101**



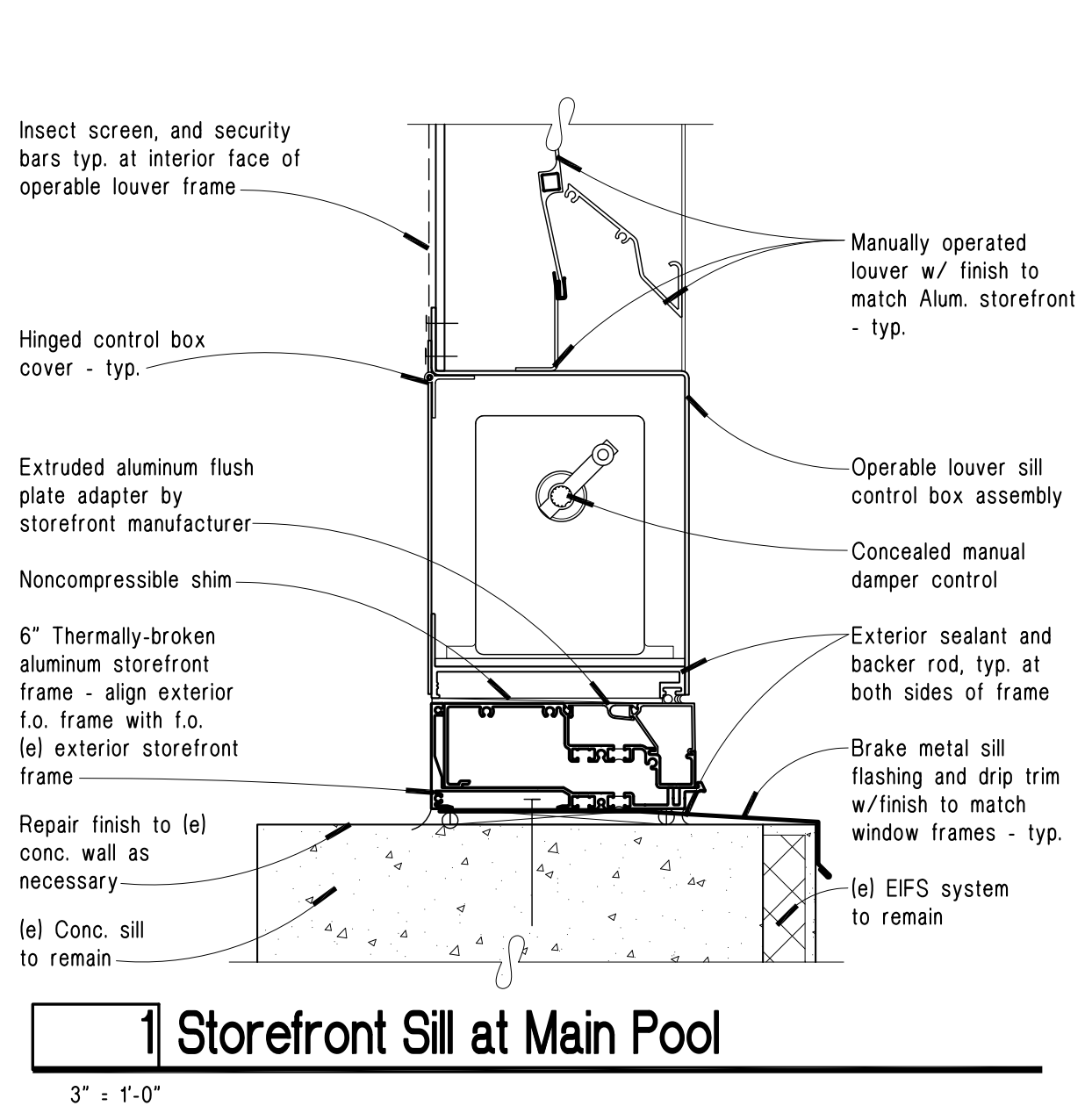
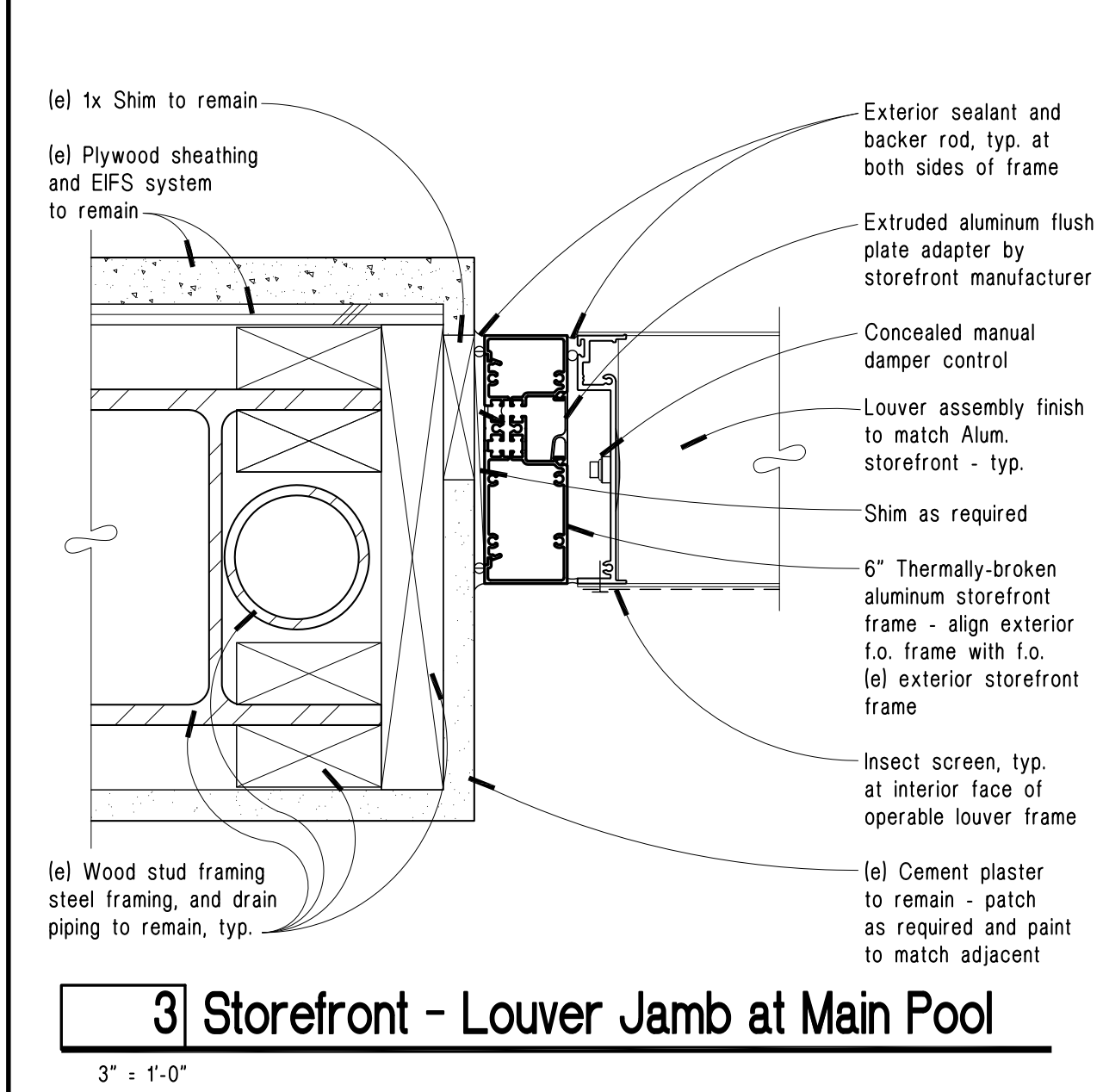
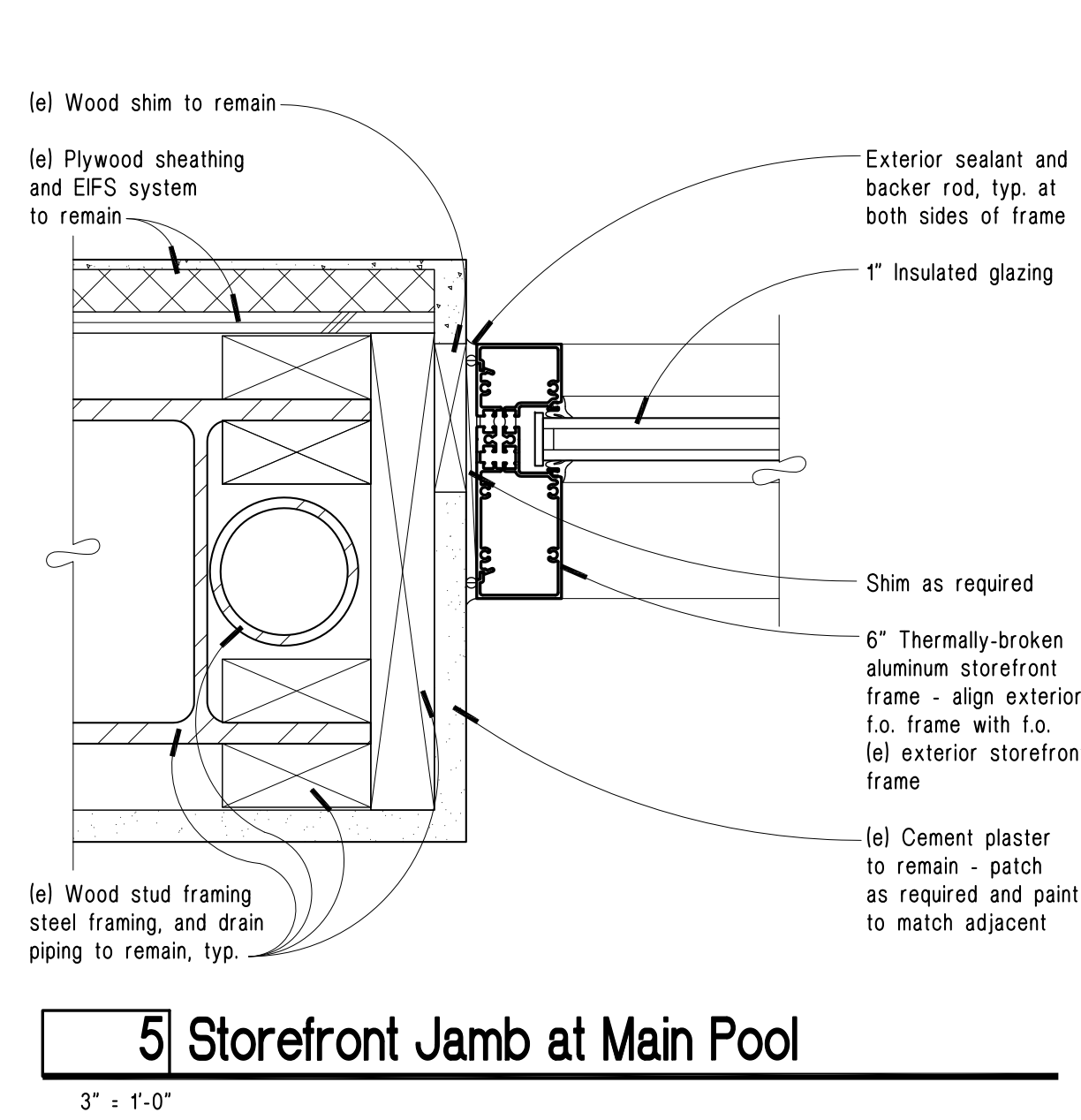
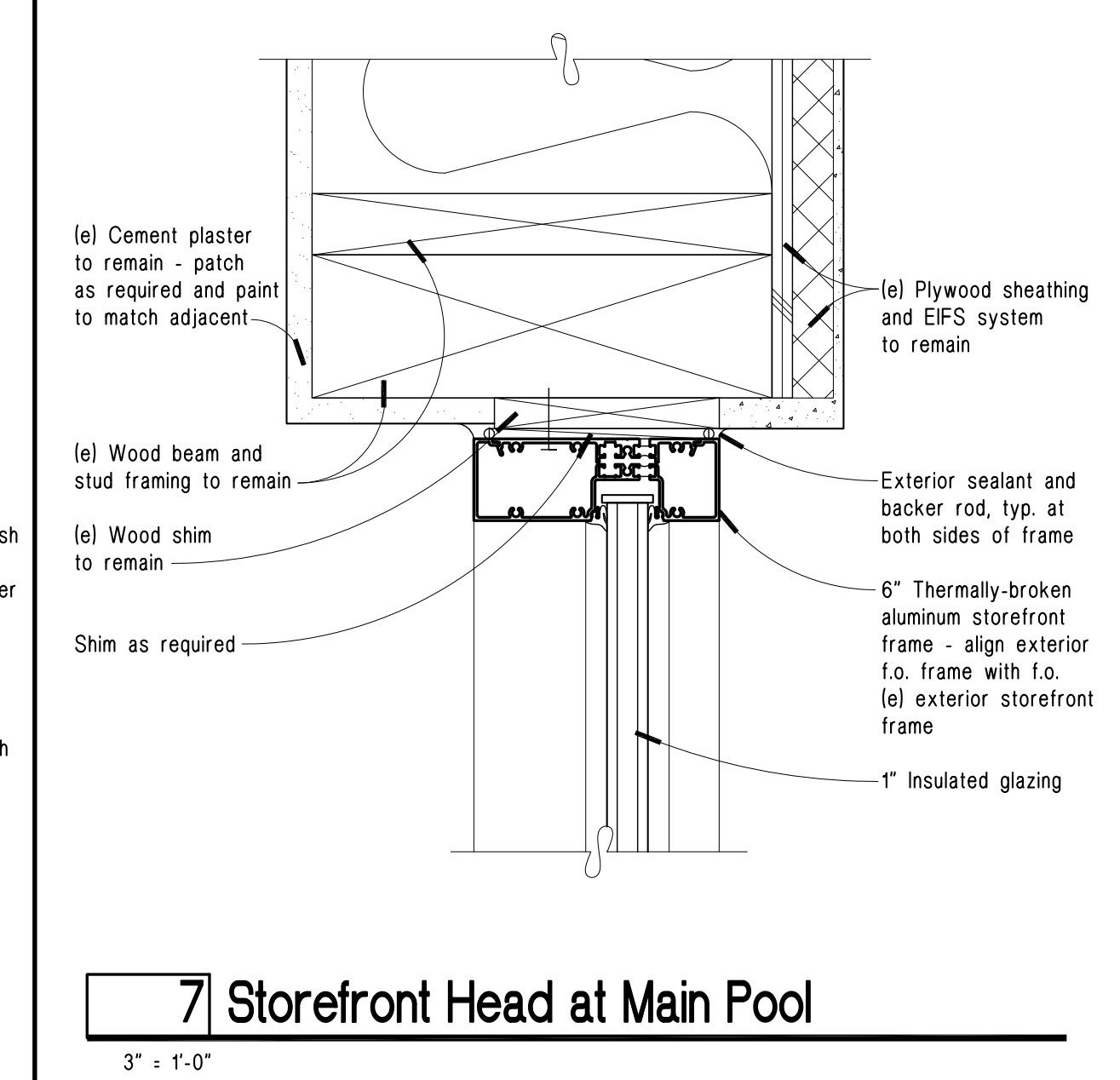
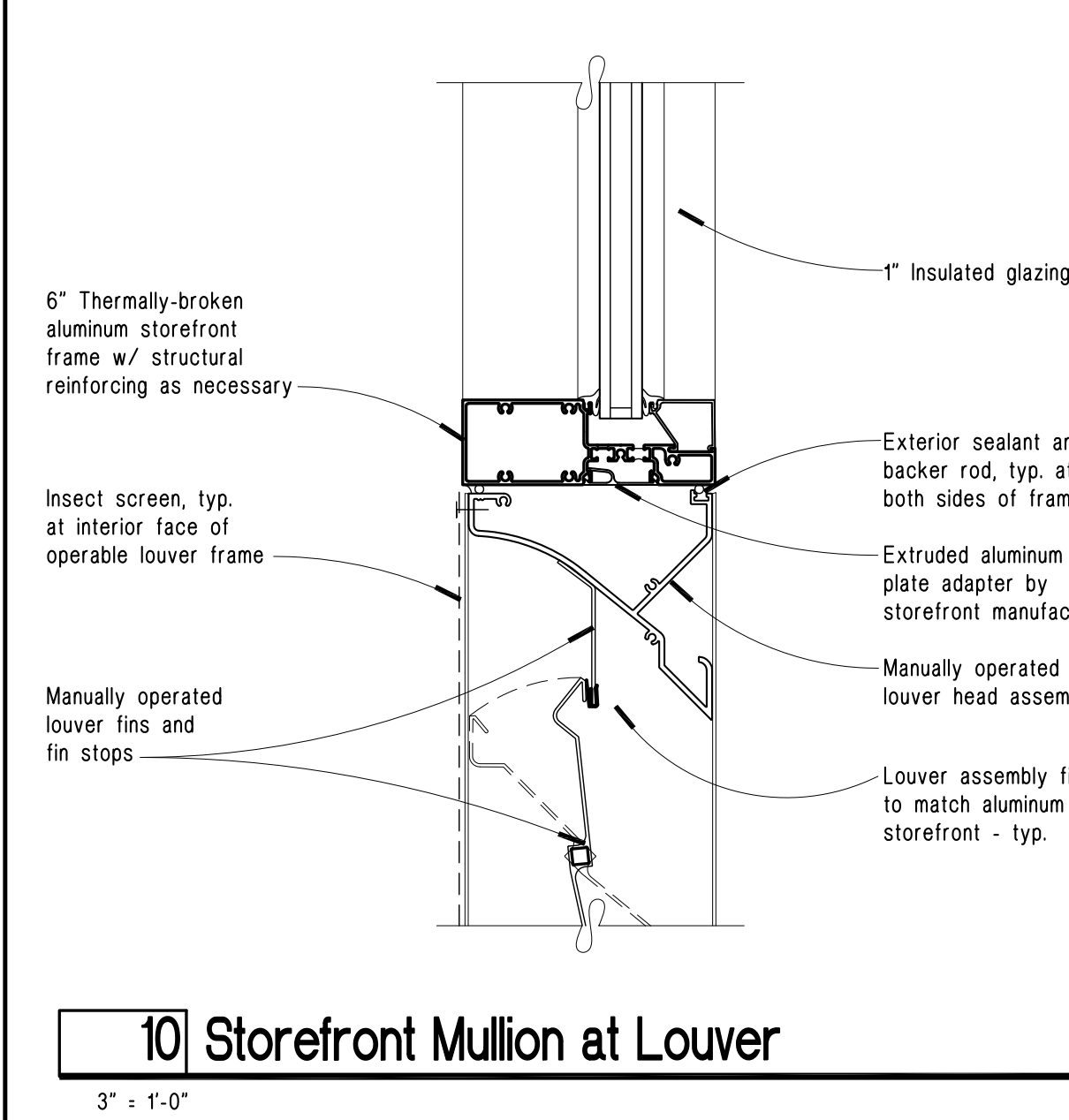
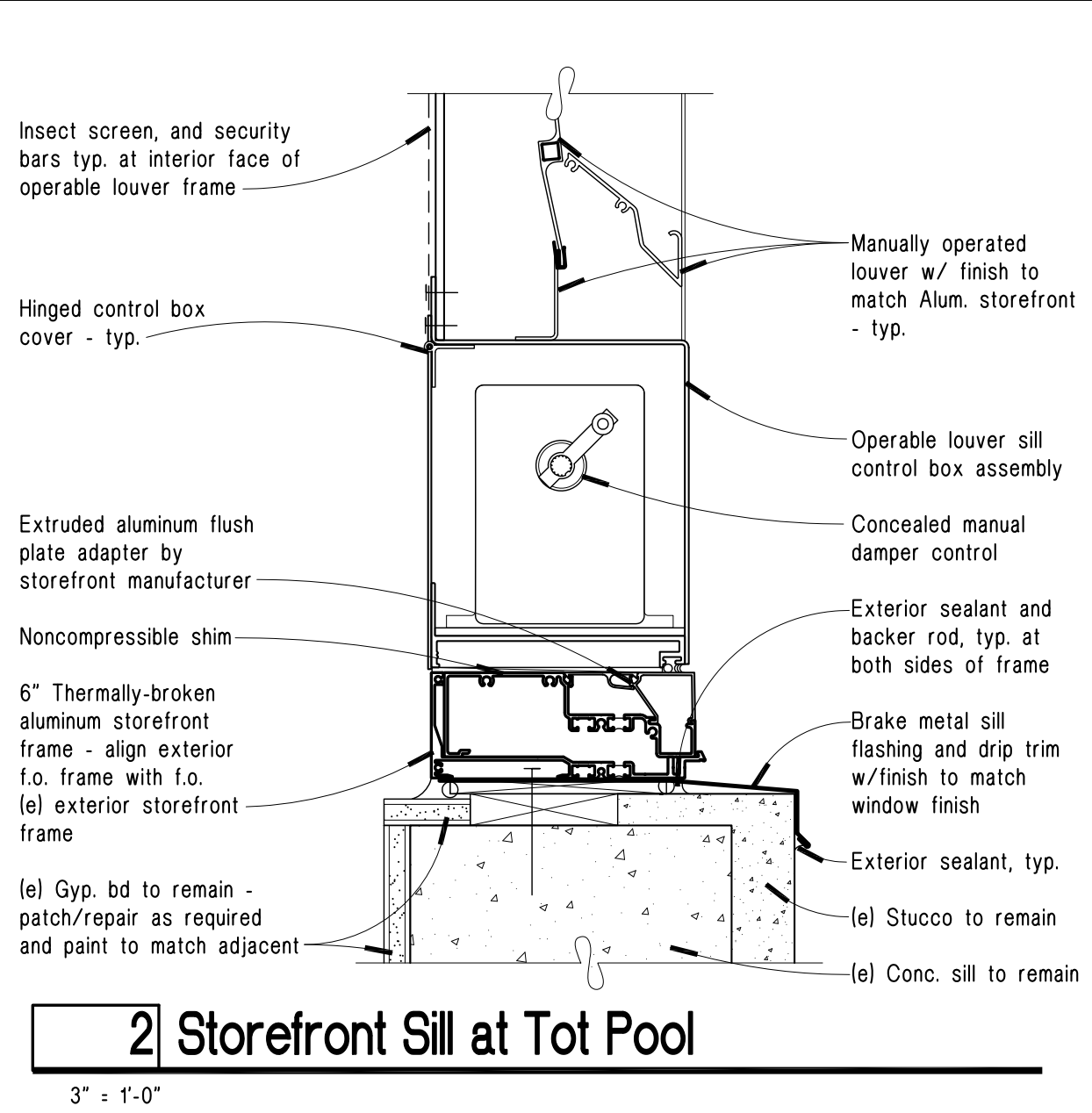
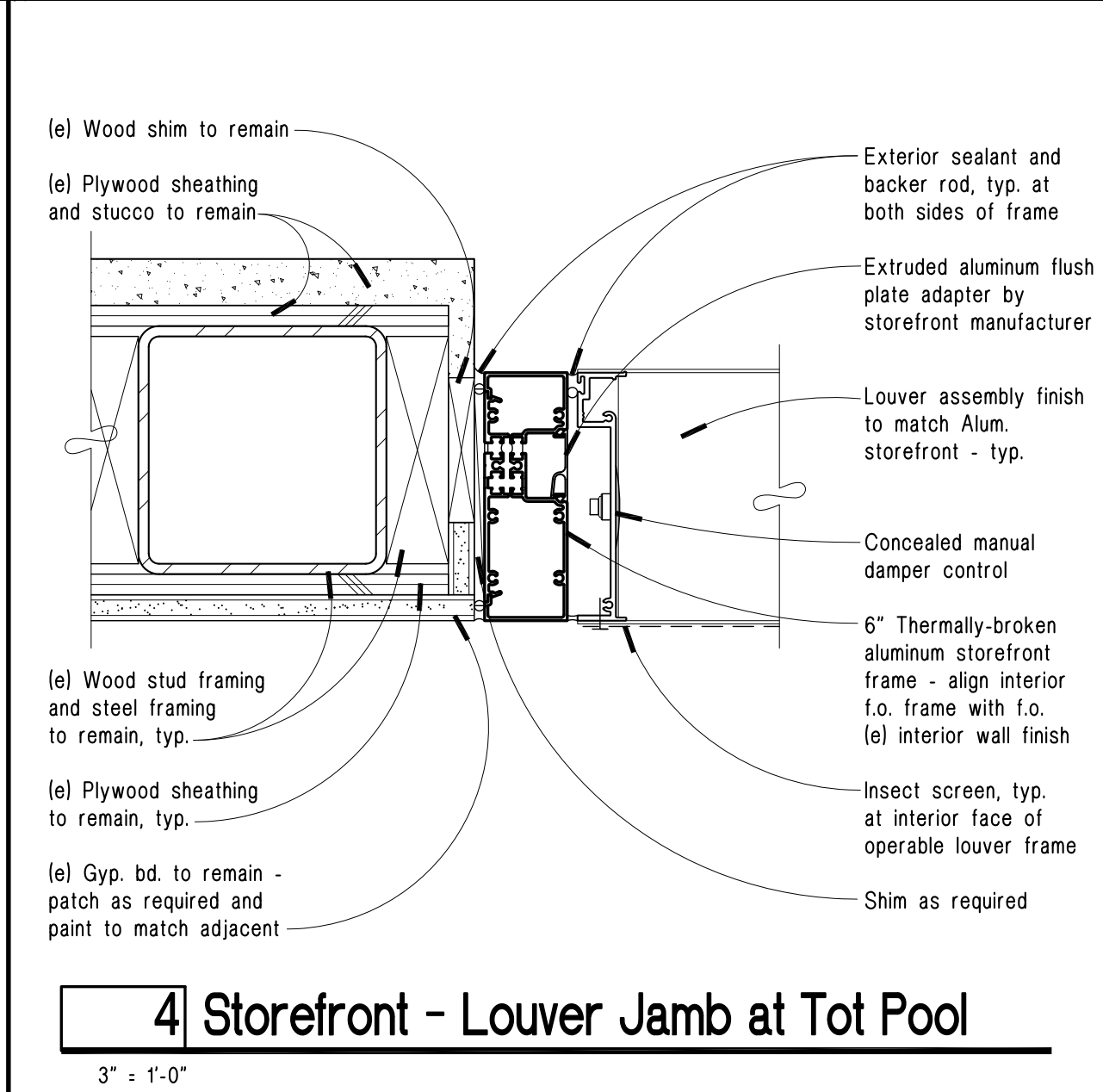
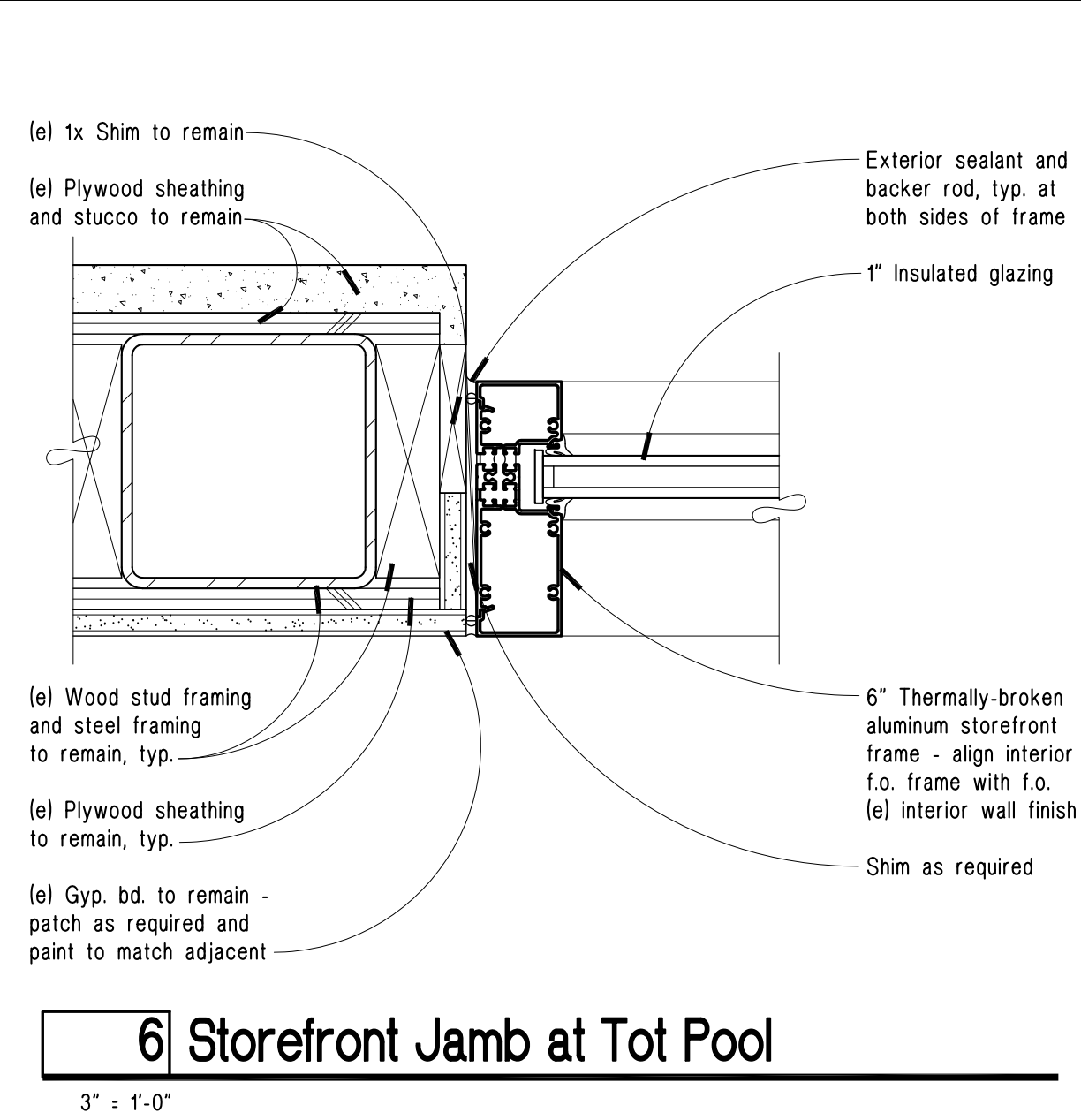
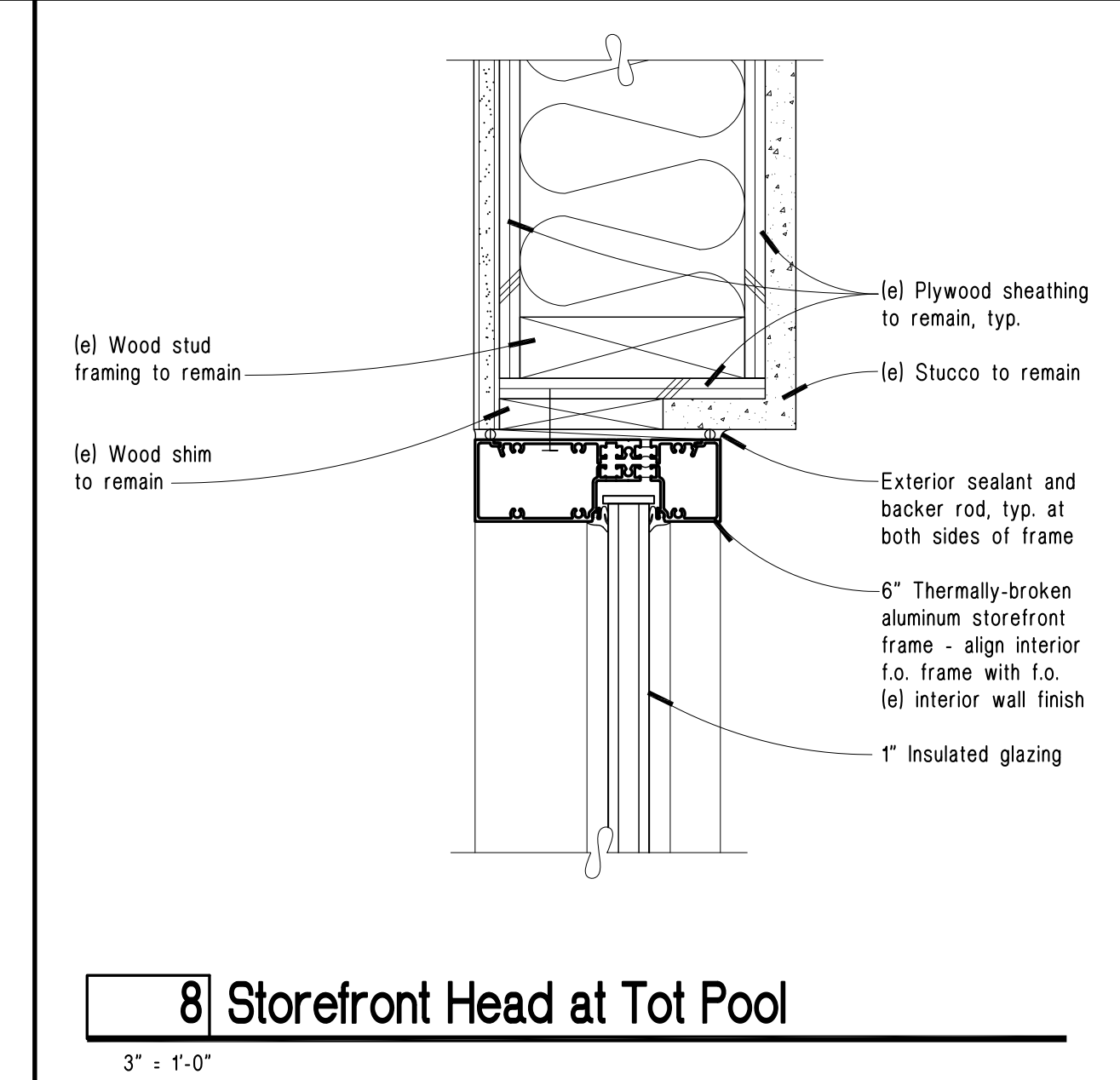
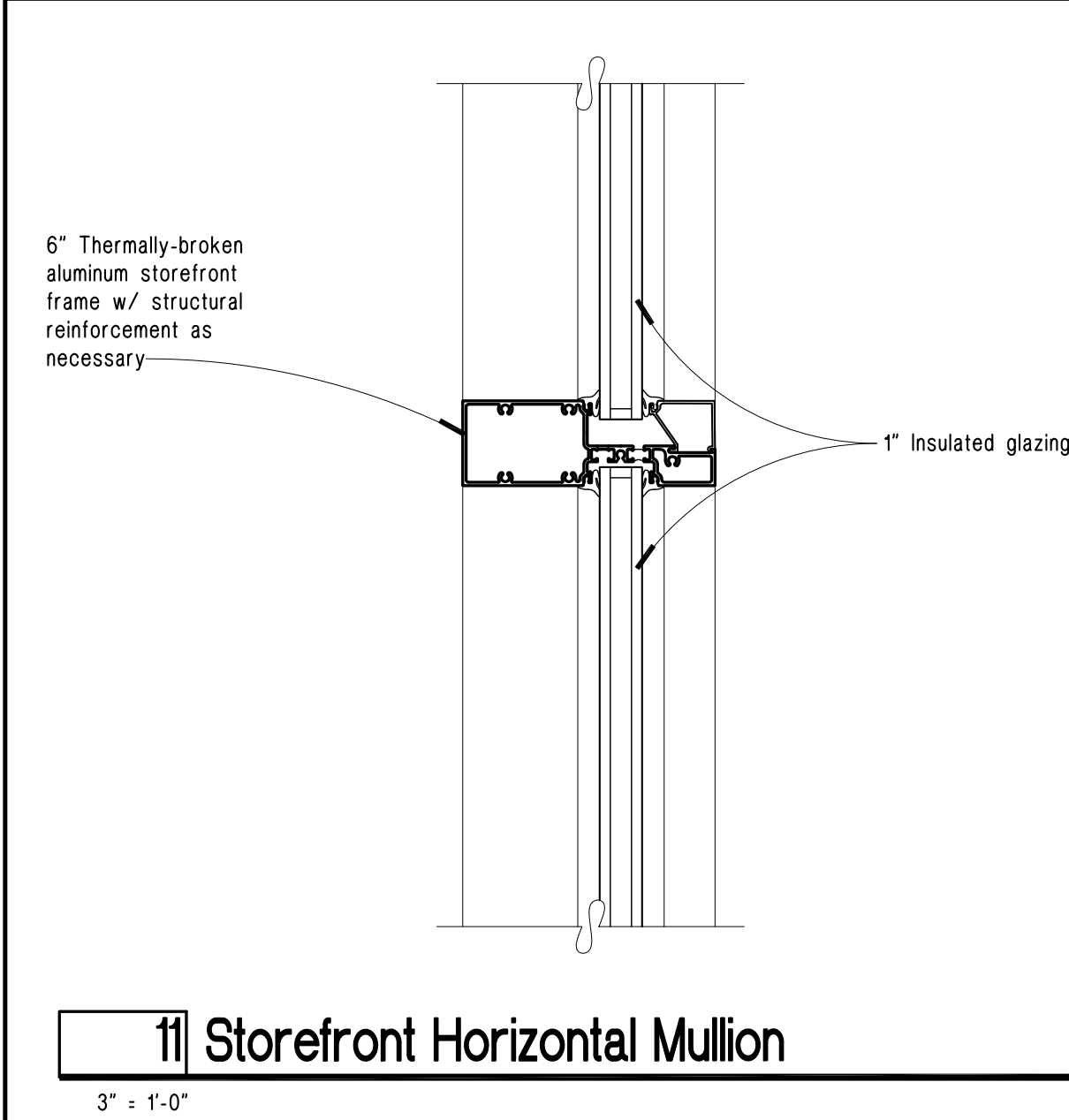


Door No.	DOOR							FRAME				DETAILS				Label	Hardw. Group	Comments
	Size	Pair	Mat'l	Type	Glass	Rating	Mat'l	Size	Elev	Glass	Rating	Head	Strike	Hinge	Sill			
110A	3'-0" x 7'-0"	X	AL	G	G2	-	AL	6"	B	G1	-	3/A802	4/A802	2/A802	1/A802	-	H1	
110B	3'-0" x 7'-0"	X	FRP	F	-	-	AL	6"	C	-	-	7/A802 sim.	-	7/A802	1/A802	-	H2	Bid Alternate #1
110C	3'-0" x 7'-0"	X	FRP	F	-	-	AL	6"	C	-	-	7/A802 sim.	4/A802	7/A802	1/A802	-	H1	Bid Alternate #1
114	3'-0" x 7'-0"	X	FRP	F	-	-	AL	6"	C	-	-	7/A802 sim.	-	7/A802	1/A802	-	H2	Bid Alternate #1
115	3'-0" x 7'-0"	X	FRP	F	-	-	AL	6"	D	-	-	7/A802 sim.	-	7/A802	1/A802	-	H3	Bid Alternate #1 - Fixed louver at bottom panel.
130A	3'-0" x 7'-0"	X	AL	G	G2	-	AL	6"	C	G1	-	6/A802	4/A802	5/A802	1/A802	-	H1	
143A	3'-0" x 7'-0"	X	HM	F	-	-	HM	existing	C	-	-	existing	4/A802	existing	1/A802	-	H1	Bid Alternate #1
143B	3'-0" x 7'-0"	X	HM	F	-	-	HM	existing	C	-	-	existing	4/A802	existing	1/A802	-	H1	Bid Alternate #1

**Glazing Legend**  
G1 1" Insulated & Tempered  
G2 5/8" Insulated & Tempered

**Material and Type Legend**  
AL Aluminum  
HM Galvanized Hollow Metal  
FRP Fiberglass Reinforced Panel

**Storefront and Door Elevations**



Professional Seal  
  
 1009 8/30/14m February 25, 2014 5:00 PM

Date Revision  
 02/19/14 Addendum #1  
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 Sparks, NV 89434

Storefront Elevations and Details  
 August 23, 2013  
 H+K Project No.: 1309  
**A801**

### Door Schedule and Hardware Notes

- Hardware supplier shall coordinate correct IC core/housing and keying with Owner prior to submittal.
- (x) These items may be provided by Storefront or FRP manufacturer upon Architect's prior approval.
- Hardware locations shall be in accordance with current edition of ANSI/SDI A250.8 for steel doors. Contractor shall coordinate all hardware provisions with door handing indicated on drawings. Throat widths shall be coordinated by Contractor.
- All frame sizes in Door Schedule indicate overall frame width. Throat widths shall be coordinated by Contractor.
- Contractor to coordinate door handing per floor plans. Frame detail references do not indicate handing or orientation. Actual installations may be opposite hand, mirrored, or both. Detail references indicated for one frame condition are considered the same for all similar conditions on that frame elevation.
- See frame elevations for additional details.

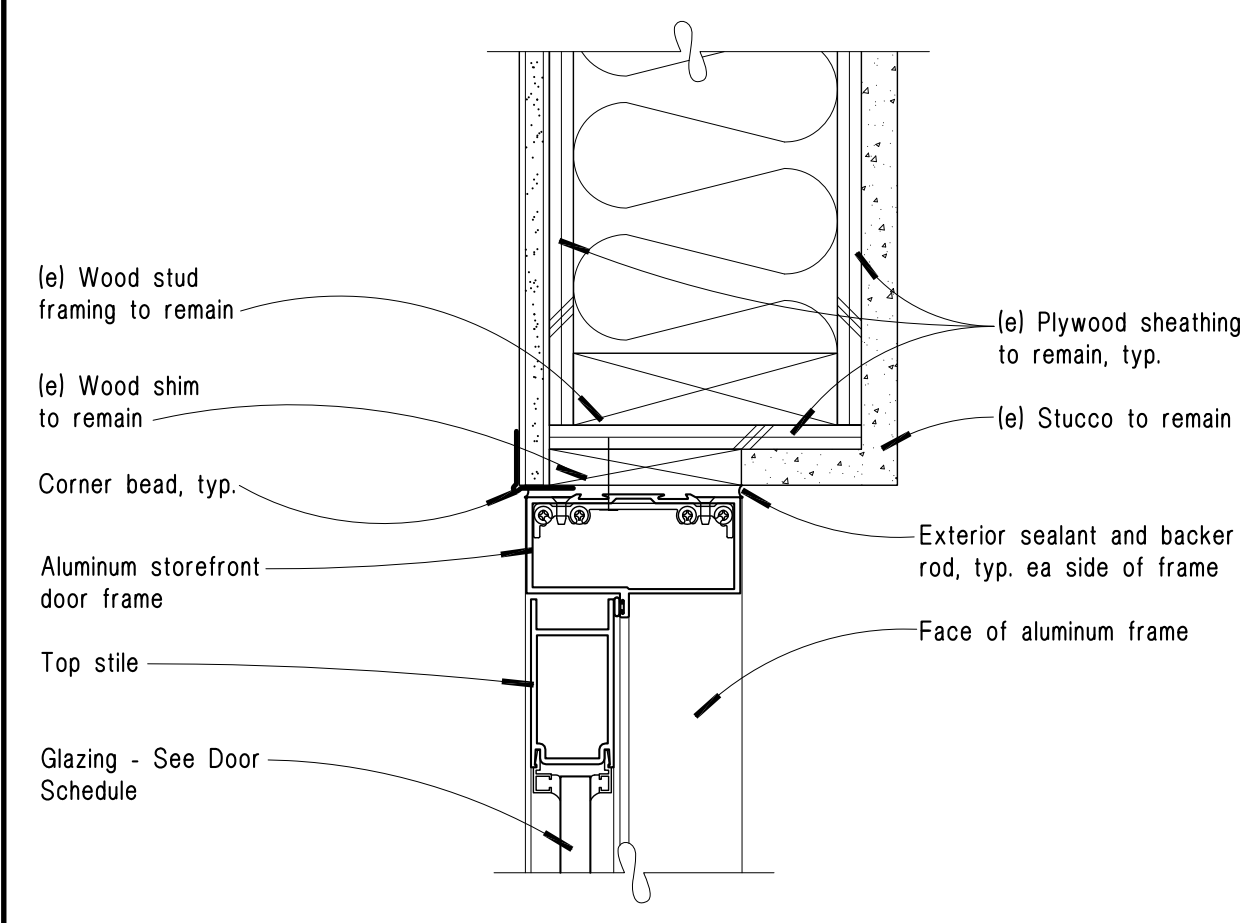
### Door Hardware Groups

HARDWARE GROUP H1				
Qty	Item	Description	Finish	Manufacturer
1	Exit Device	99NL	626	Von Duprin
1	Exit Device	99DT	626	Von Duprin
1	IC Housing	20-079	626	Schlage (verify)
1	IC Core	KeyMark	626	Medeco (verify)
2	Closers	4110 EDA	689	LCN
1	Removable Mullion	KR1654	SP28	Von Duprin (x)
6	Hinges	BB1199 4.5x4.5	652	Hager
2	Continuous Hinges	FM2011	652	Markar (x)
1 set	Weather Seal	162A (jamb)	-	NGP (x)
1 set	Weather Seal	700SA (head)	-	NGP (x)
2	Door Sweep	200NA	-	NGP (x)
1	Threshold	426	628	NGP (x)

NOTE: Use continuous hinges at all FRP doors prehung in aluminum frames.

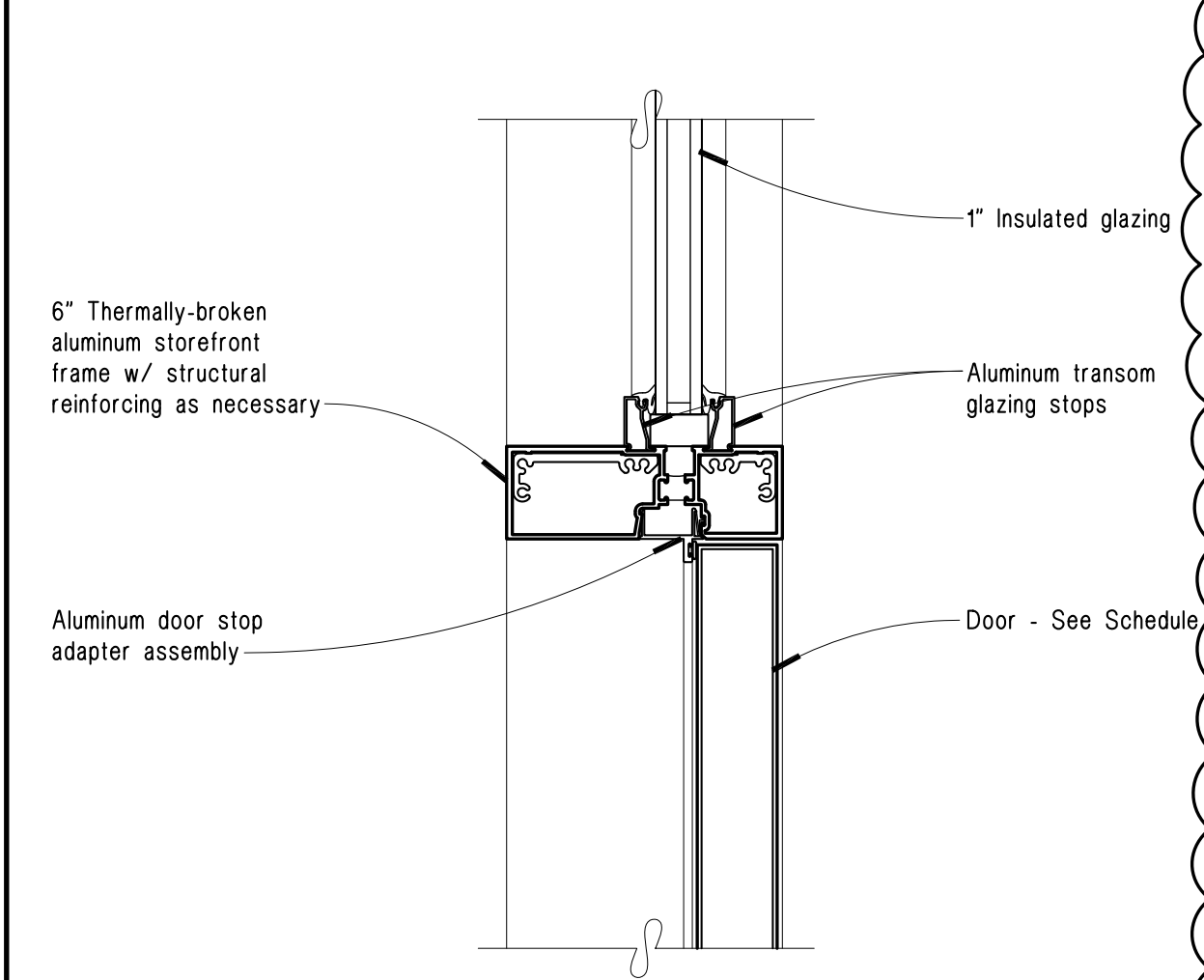
HARDWARE GROUP H2				
Qty	Item	Description	Finish	Manufacturer
1	Storeroom Lock	D70LD RHO	626	Schlage
1	Cylinder	Keymark	626	Medico (verify)
2	Closers	4110 EDA	689	LCN
1 set	Flush Bolts	FB6	630	Glynn-Johnson
2	Continuous Hinges	FM2011	652	Markar (x)
1 set	Weather Seal	162A (jamb)	-	NGP (x)
1 set	Weather Seal	700SA (head)	-	NGP (x)
2	Door Sweep	200NA	-	NGP (x)
1	Threshold	426	628	NGP (x)

HARDWARE GROUP H3				
Qty	Item	Description	Finish	Manufacturer
1	Storeroom Lock	D70LD RHO	626	Schlage
1	Cylinder	Keymark	626	Medico (verify)
1	Closers	4110 EDA	689	LCN
1	Continuous Hinges	FM2011	652	Markar (x)
1 set	Weather Seal	162A (jamb)	-	NGP (x)
1 set	Weather Seal	700SA (head)	-	NGP (x)
2	Door Sweep	200NA	-	NGP (x)
1	Threshold	426	628	NGP (x)



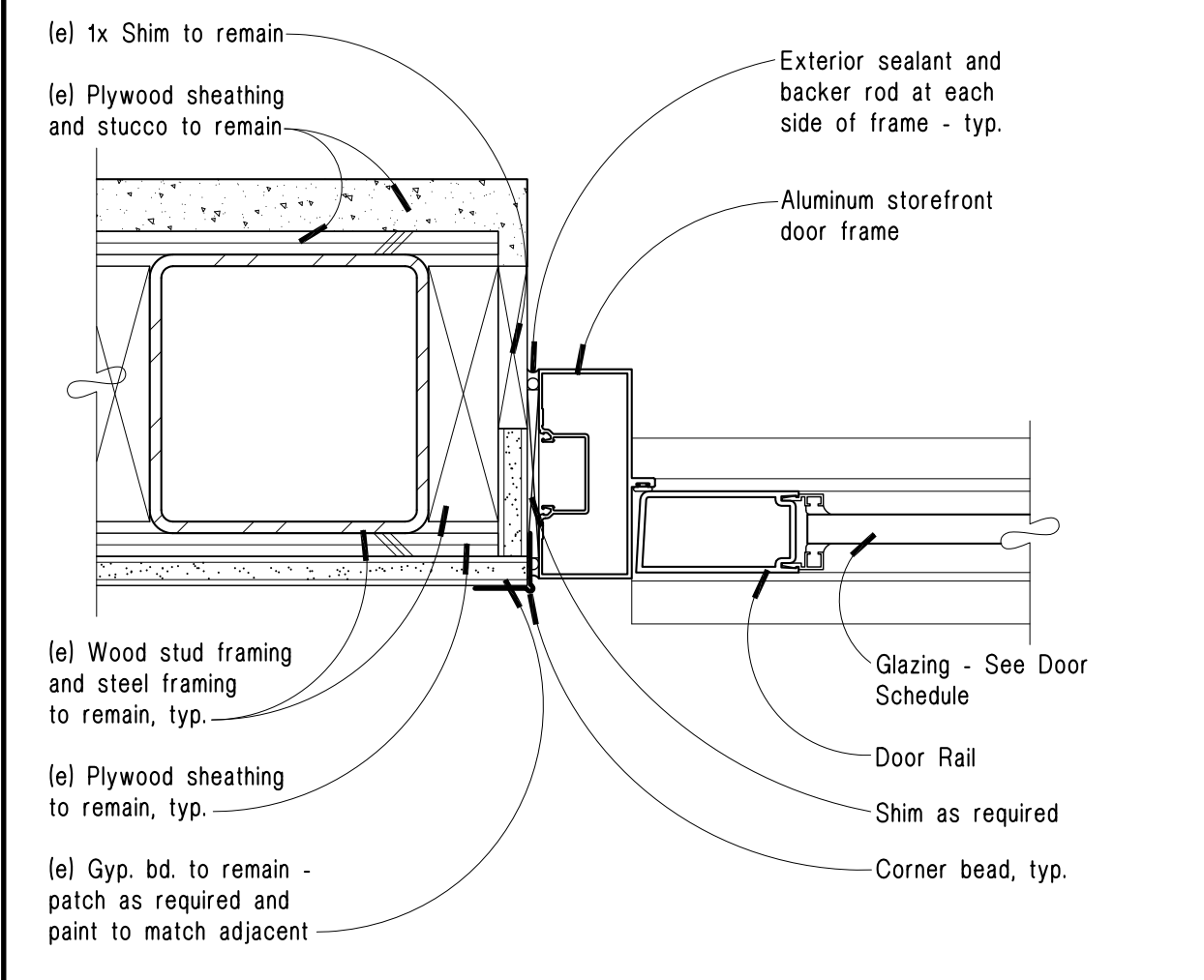
**6 Door Head at Tot Pool**

3" = 1'-0"



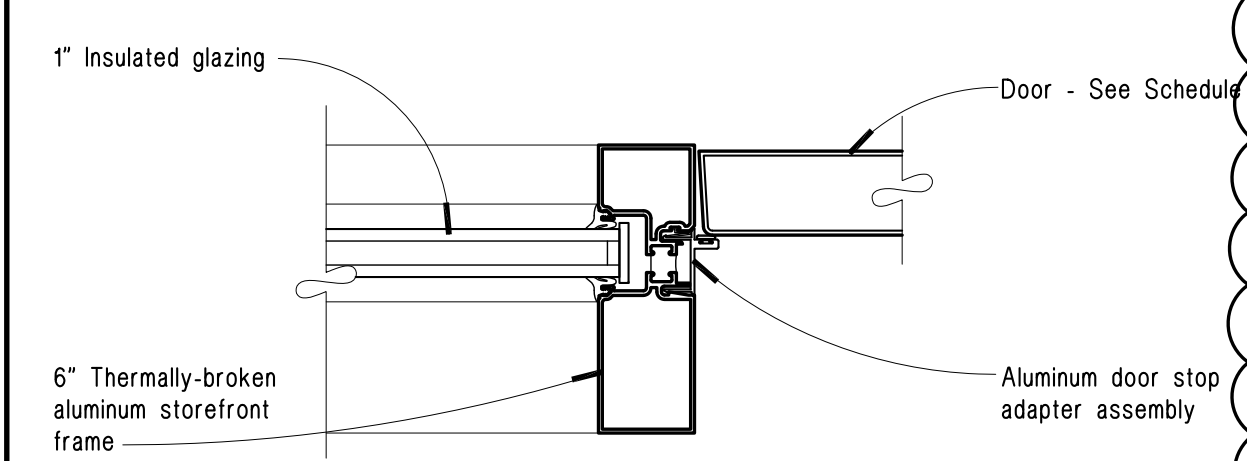
**3 Door Head at Transom**

3" = 1'-0"



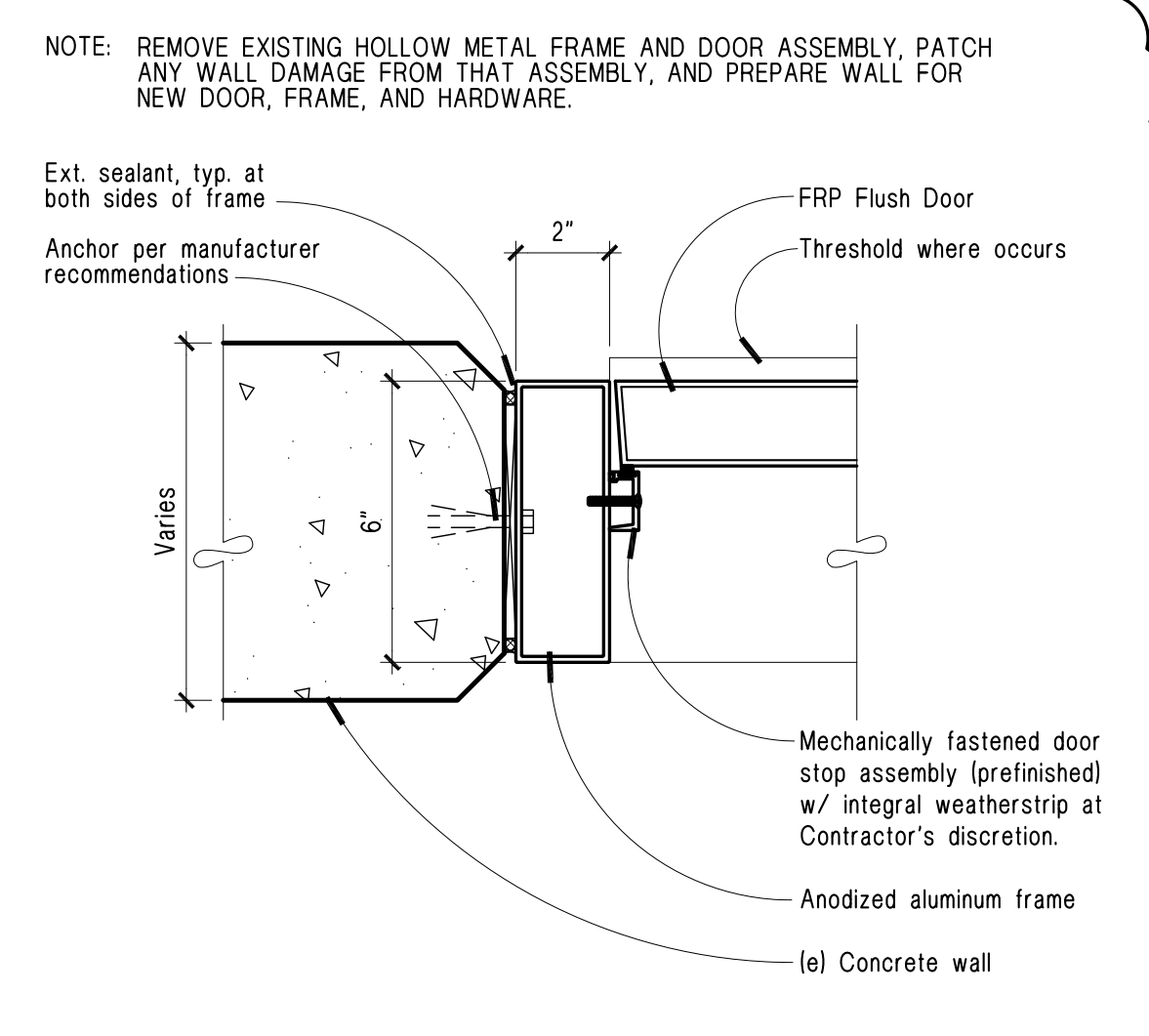
**5 Door Jamb at Tot Pool**

3" = 1'-0"



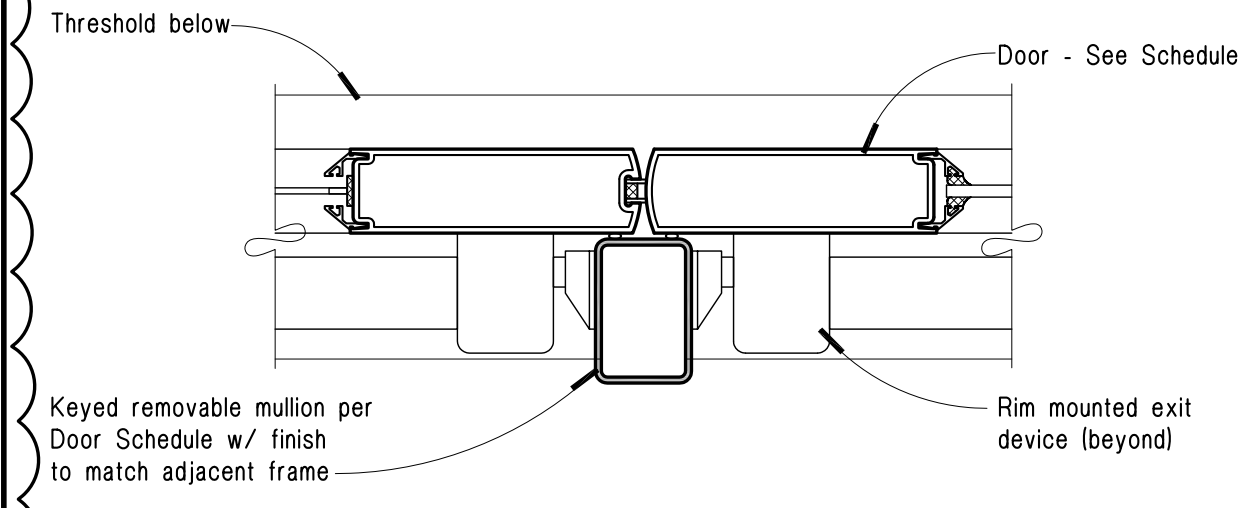
**2 Door Jamb at Sidelite**

3" = 1'-0"



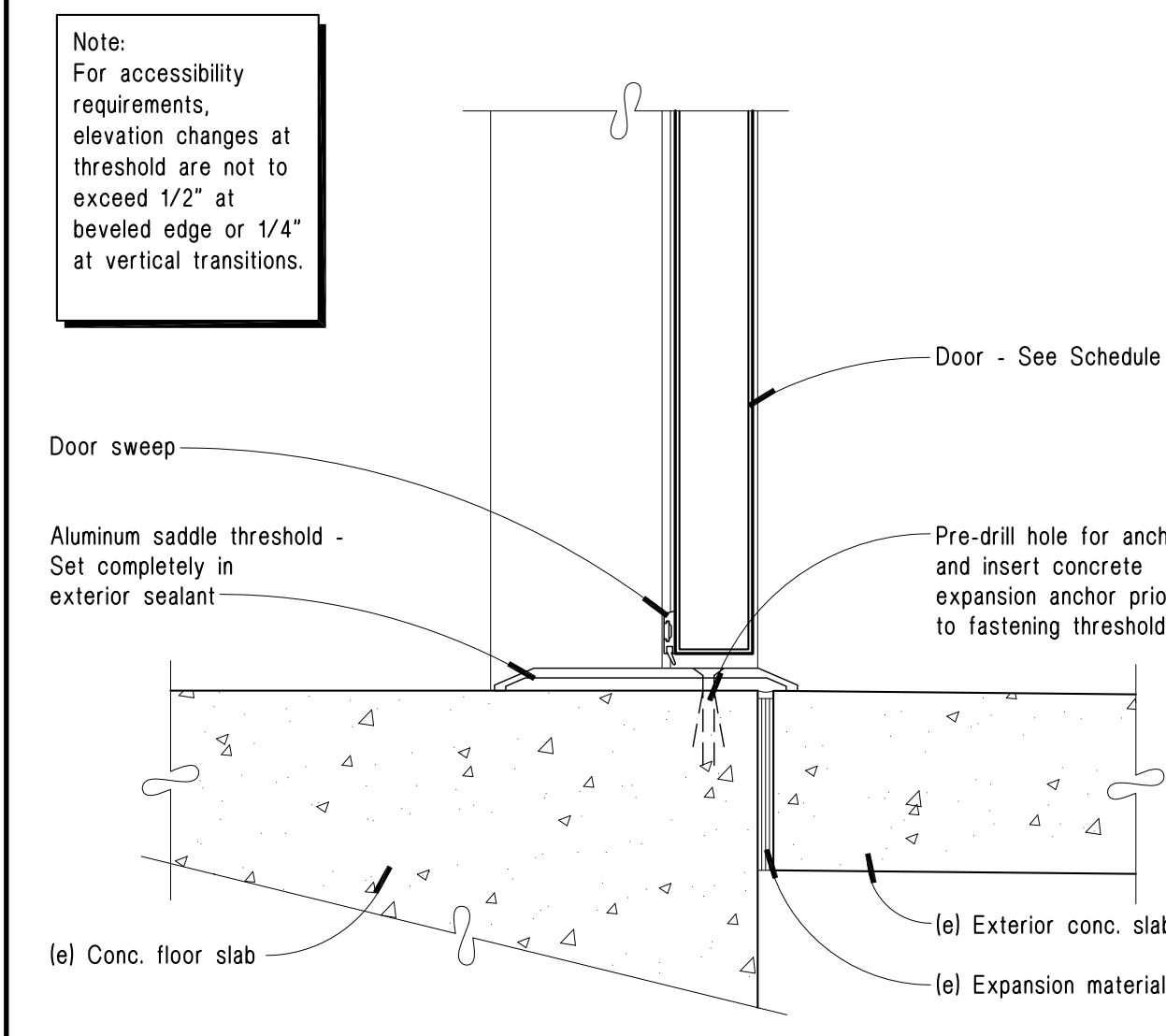
**7 Aluminum Tube Frame at (e) Concrete Wall**

3" = 1'-0"



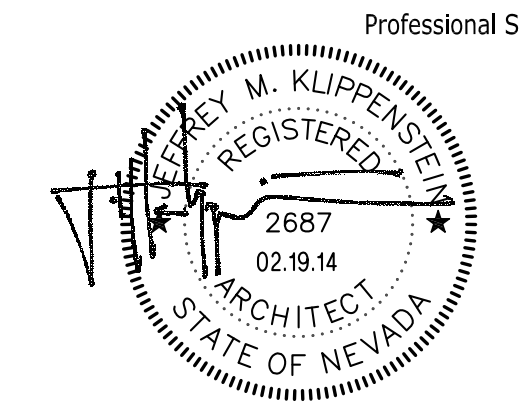
**4 Door Latch at Removable Mullion**

3" = 1'-0"



**1 Threshold**

3" = 1'-0"



Professional Seal	Date	Revision
	02/19/14	Addendum #1

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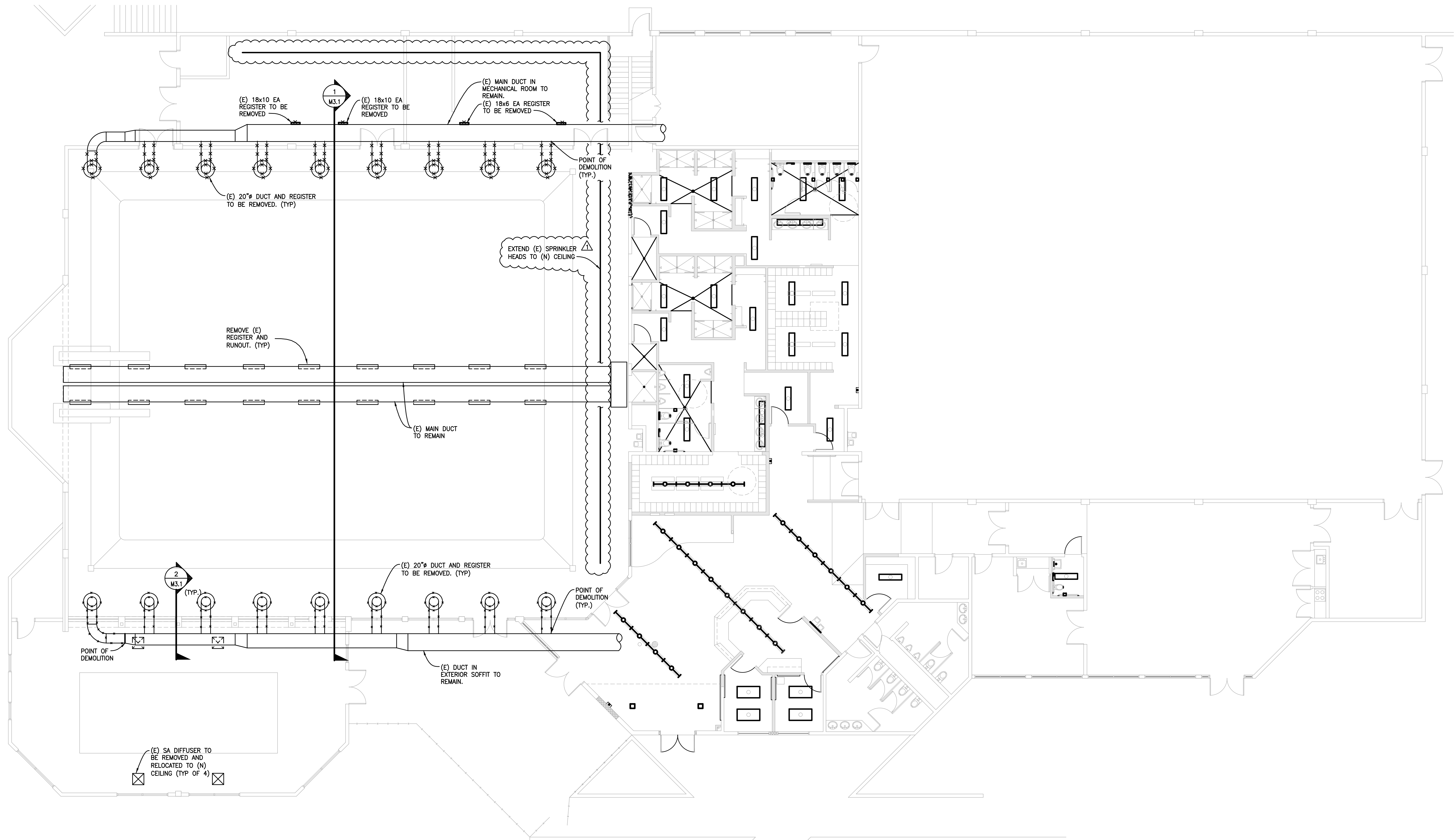
Door Details

August 23, 2013  
H+K Project No.: 1309

**A802**







**AIR CONDITIONING - DEMOLITION PLAN**

SCALE: 1/8"=1'-0"

1  
M1.1

Professional Seal    Date    Revision  
 2/26/14    ADDENDUM #1

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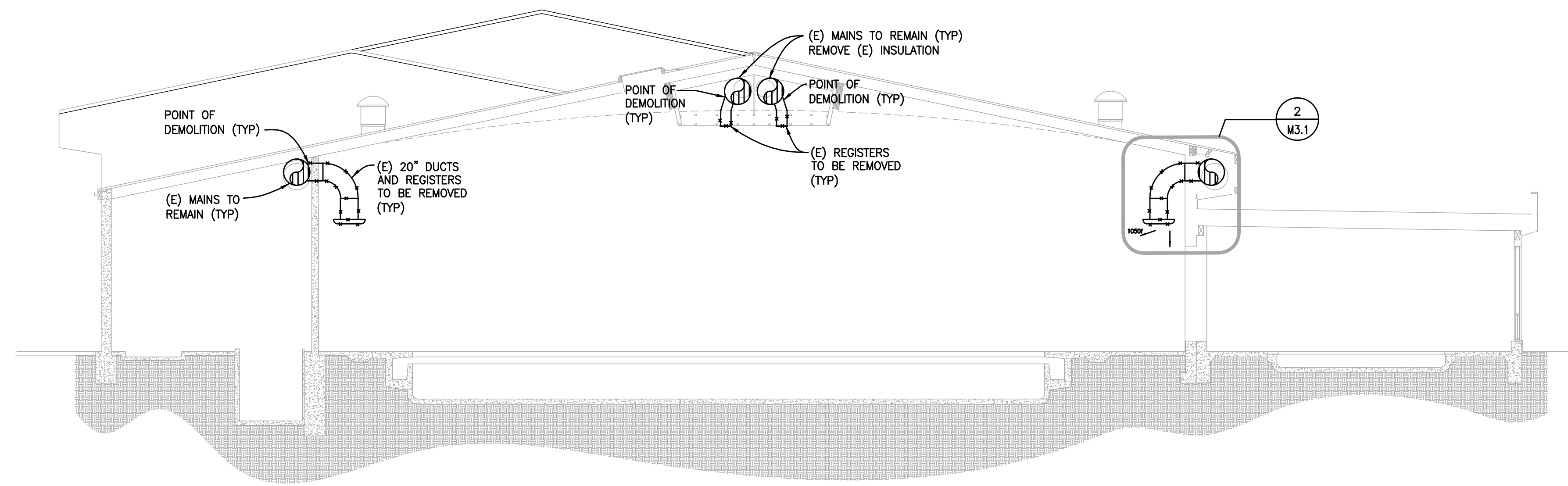
**Alf Sorensen Natatorium  
 Renovation**  
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AIR CONDITIONING -  
 DEMOLITION FLOOR  
 PLAN

AUG 23, 2013  
 H+K Project No.: 1309

**M1.1**

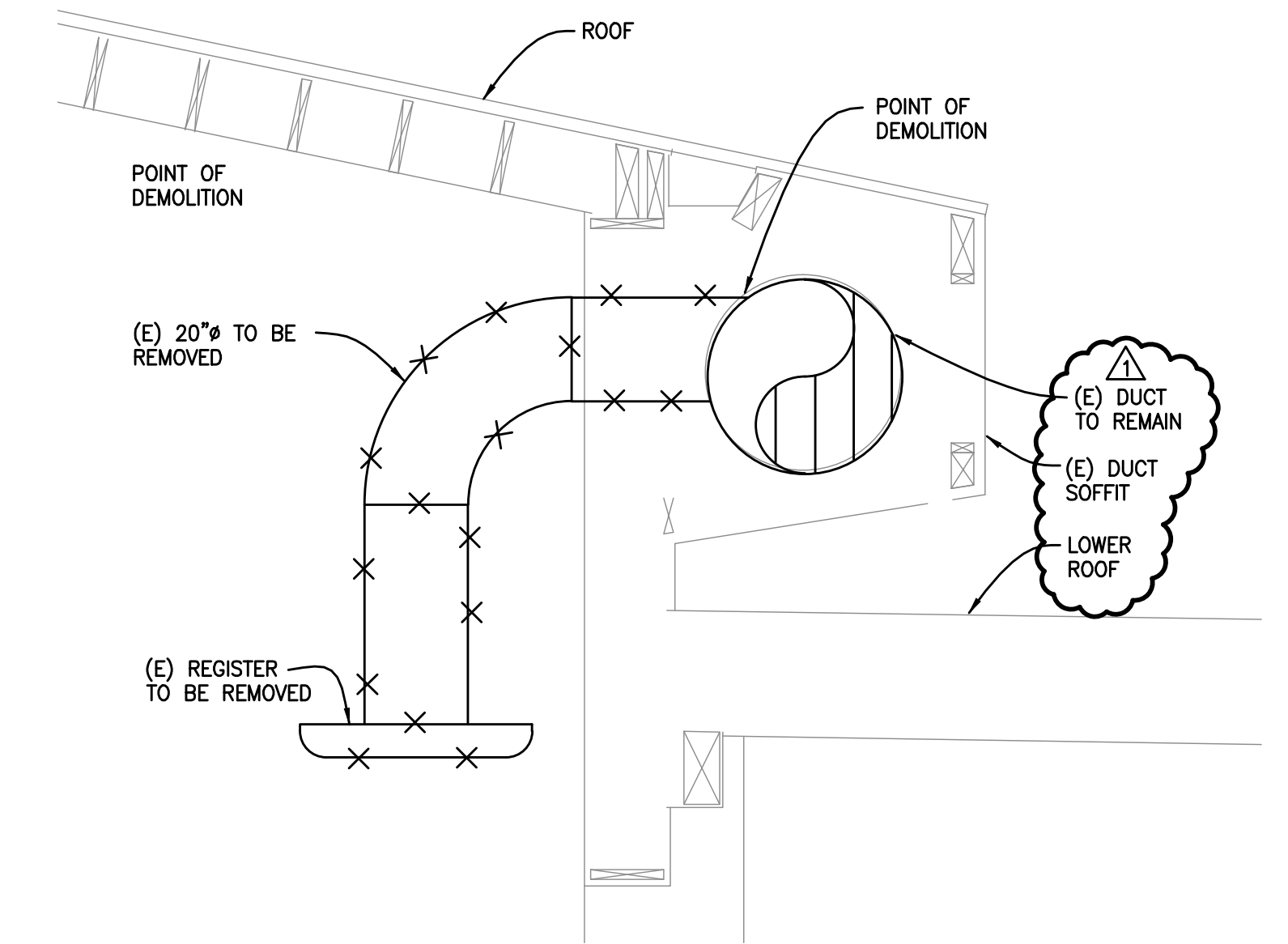




**SECTION - DEMOLITION**

SCALE: 1/8"=1'-0"

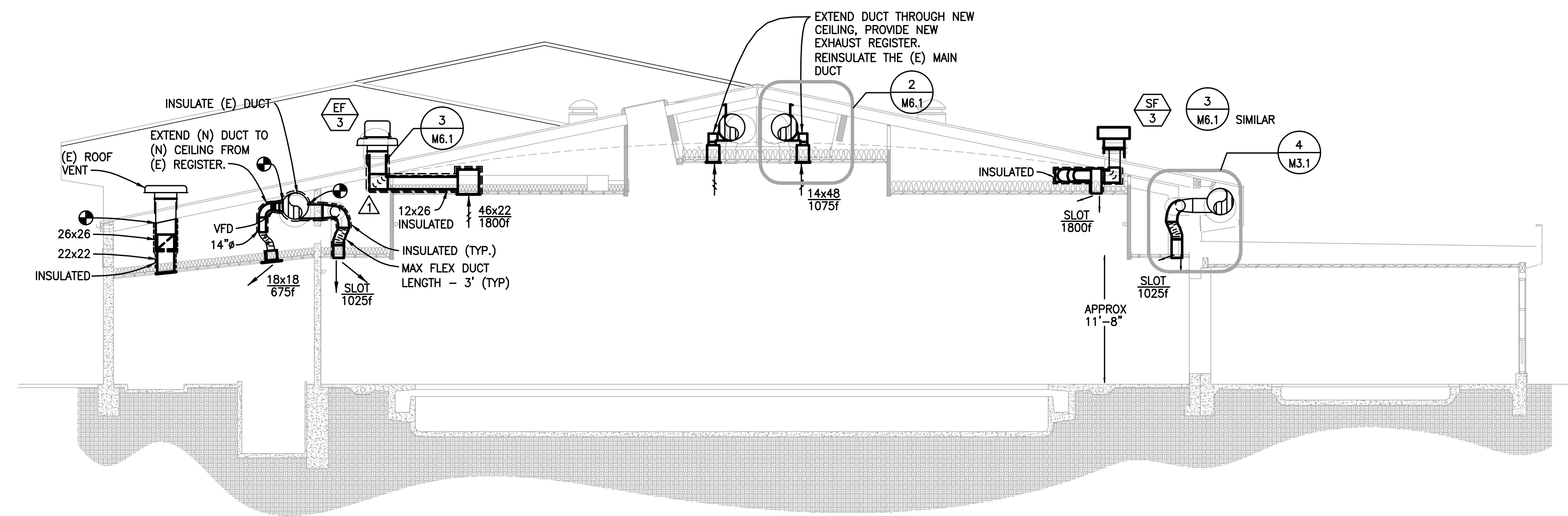
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M3.1



**PARTIAL SECTION**

SCALE: 1/2"=1'-0"

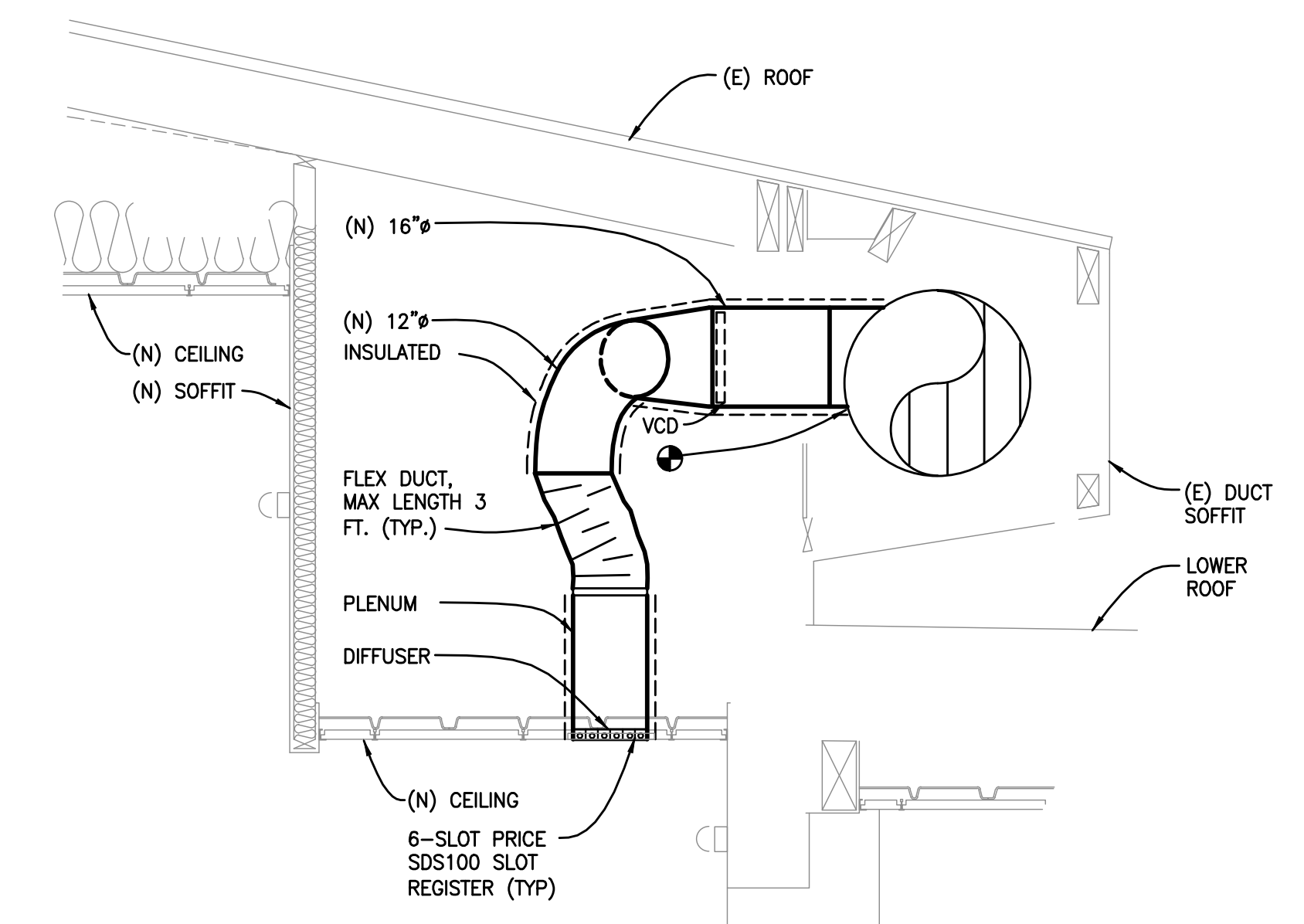
2  
M3.1



**SECTION**

SCALE: 1/8"=1'-0"

3  
M3.1



**PARTIAL SECTION**

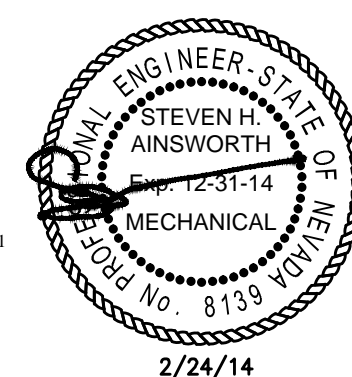
SCALE: 1/2"=1'-0"

4  
M3.1

Professional Seal  
Date 2/26/14  
Revision ADDENDUM #1



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2/24/14

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**Alf Sorensen Natatorium  
Renovation**

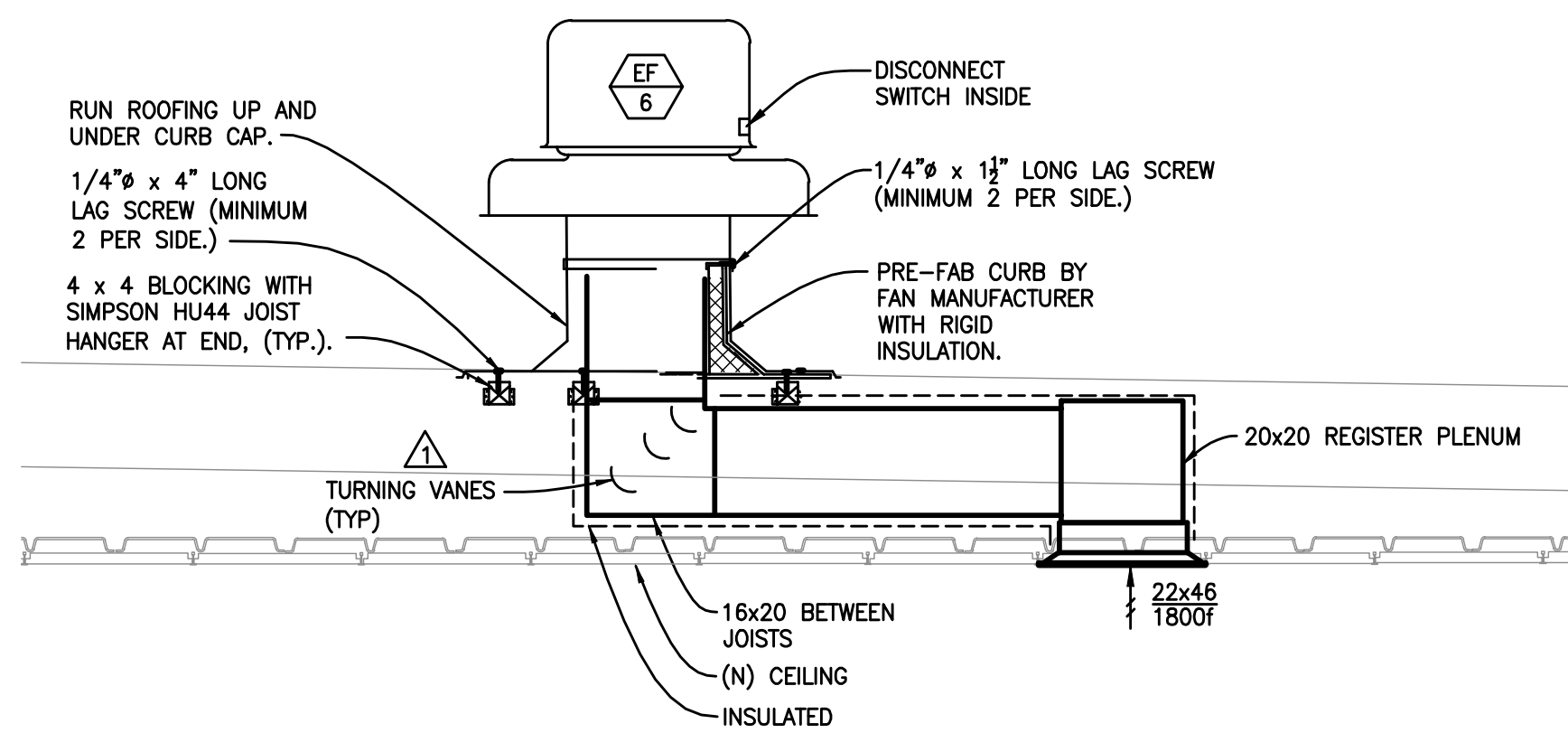
1400 Baring Blvd  
Sparks, NV 89434

AIR CONDITIONING -  
SECTIONS

AUG 23, 2013  
H+K Project No.: 1309

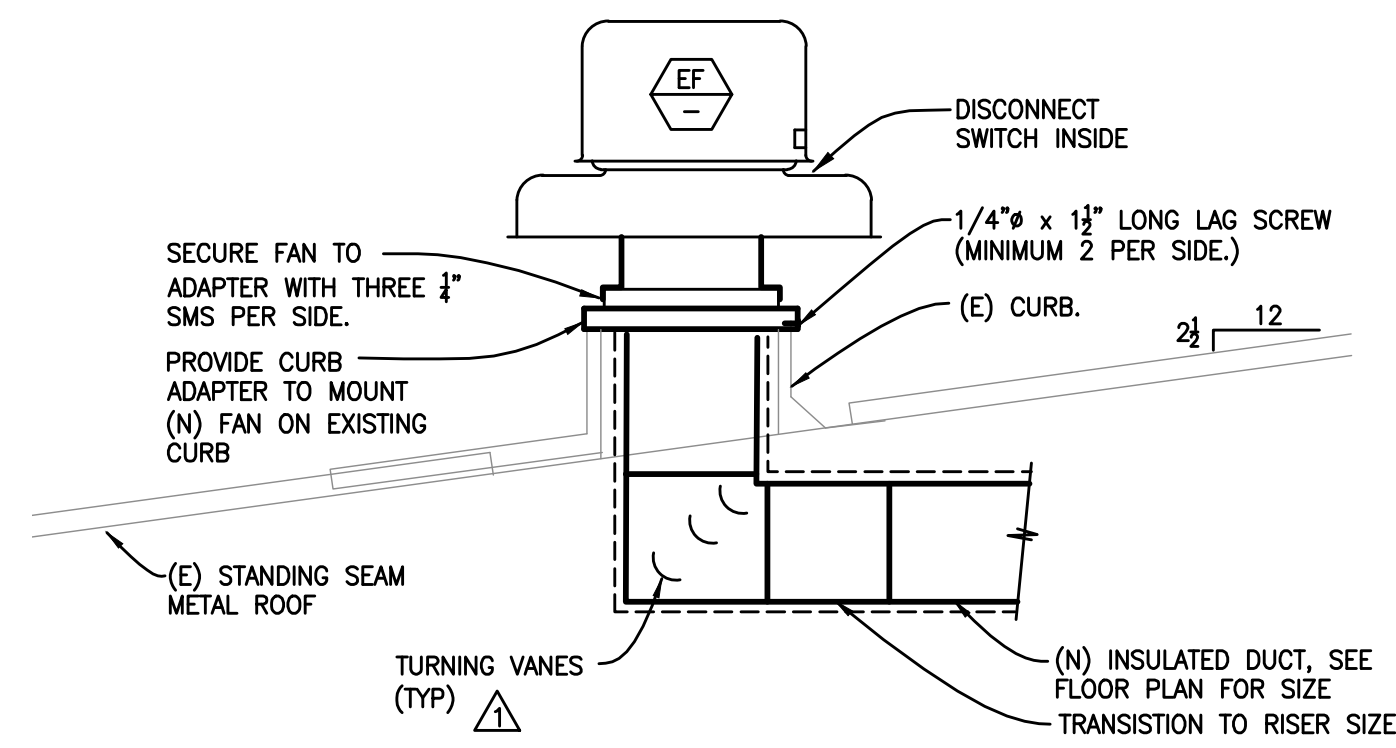
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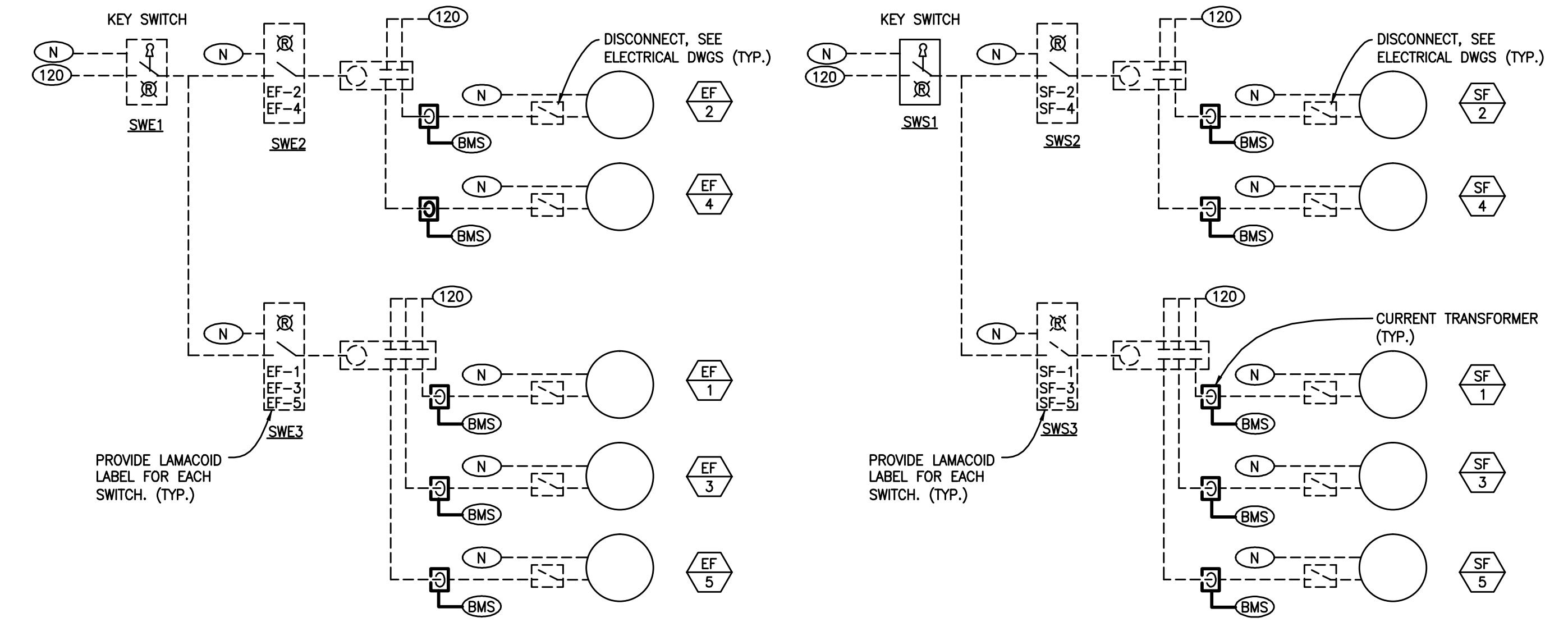
**THERAPY POOL - ROOF TOP EXHAUST FAN DETAIL**

NO SCALE: 1 M6.1



**ROOF TOP EXHAUST FAN ON (E) CURB DETAIL**

NO SCALE: 3 M6.1



**CONTROL DIAGRAMS AND SEQUENCE**

NO SCALE: 5 M6.1

LEGEND	
---	WORK BY ELECTRICAL CONTRACTOR
---	WORK BY CONTROL CONTRACTOR

**(E) CONTROL SEQUENCE FOR REFERENCE ONLY**

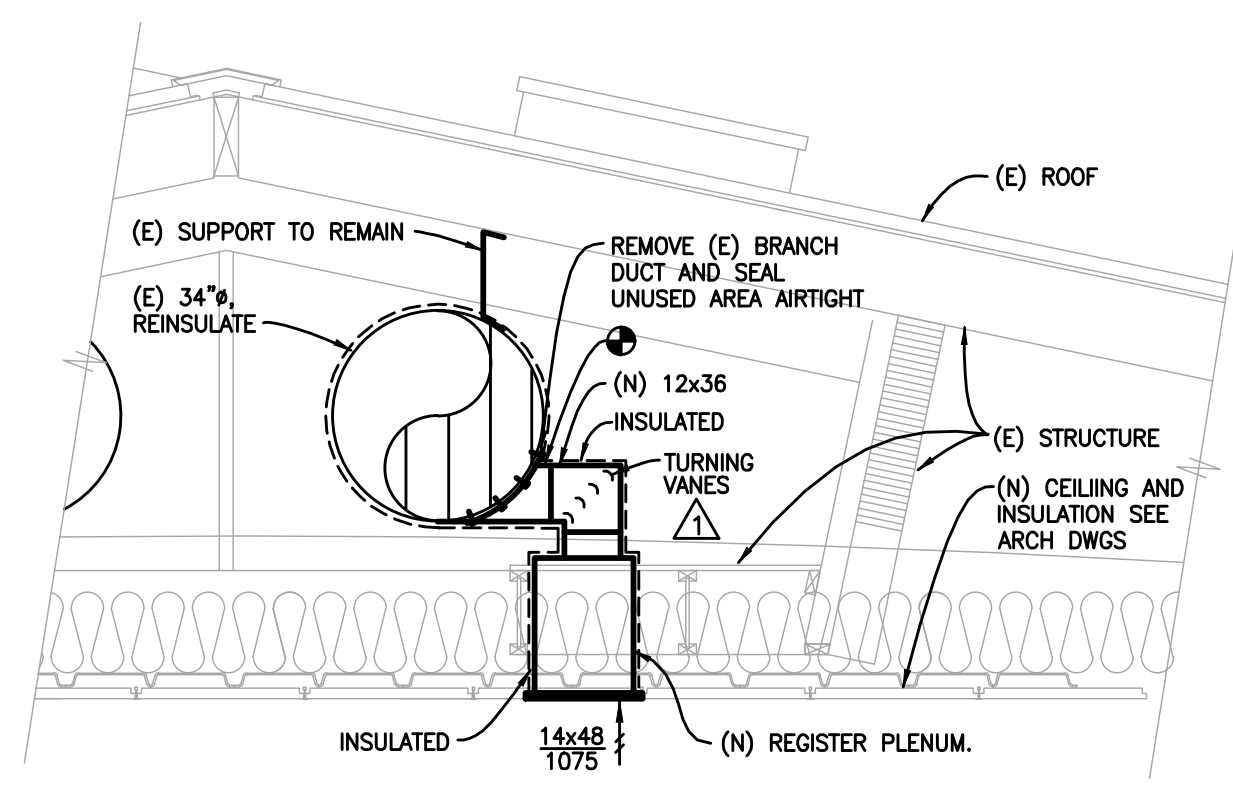
- OCCUPIED CYCLE:**
- SUPPLY AIR AND RETURN/EXHAUST AIR FAN START AT PROGRAMMED TIME OF OCCUPANCY.
  - ROOM TEMPERATURE SENSOR TRM AND SUPPLY AIR TEMPERATURE SENSOR TSA MODULATE ECONOMIZER CONTROL DAMPERS AND HEATING HOT WATER CONTROL VALVE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
  - ROOM HUMIDITY SENSOR HRM SHALL ALSO MODULATE THE ECONOMIZER TO OPEN THE OUTSIDE AIR DAMPERS AND CLOSE THE RETURN AIR DAMPERS WHENEVER HUMIDITY SET POINT IS EXCEEDED. WHENEVER HUMIDITY LEVELS EXCEED SET POINT AND THE SPACE TEMPERATURE SENSOR REQUIRES HEATING THE HEAT RECOVERY PUMP SHALL START AND RUN. THE HEATING HOT WATER CONTROL SHALL ALSO MODULATE IF ADDITIONAL HEATING IS REQUIRED TO MAINTAIN ROOM TEMPERATURE SETPOINT.
- UNOCCUPIED CYCLE:**
- SUPPLY AIR AND RETURN/EXHAUST AIR FAN SHALL STOP AT PROGRAMMED TIME.
  - ROOM TEMPERATURE SENSOR TRM SHALL CYCLE AIR HANDLER TO MAINTAIN NITE LOW LIMIT SET POINT. UNIT SHALL USE RETURN AIR TO BE HEATED DURING THIS MODE OF OPERATION.
- SAFETY CONTROL:**
- FREEZE THERMOSTAT FRZ PLACES AIR HANDLER IN "UNOCCUPIED CYCLE" MODE WHENEVER TEMPERATURE BELOW SET POINT.
- OPERATOR'S TERMINAL:**
- FAN COMMAND (ON/OFF)
  - FAN STATUS (ON/OFF)
  - SUPPLY AIR TEMPERATURE
  - RETURN AIR TEMPERATURE
  - MIXED AIR TEMPERATURE
  - CURRENT ROOM TEMPERATURE
  - CURRENT ROOM HUMIDITY (% RH)
  - CURRENT ROOM TEMPERATURE SET POINT
  - CURRENT ROOM HUMIDITY SET POINT (% RH)
  - CURRENT ECONOMIZER DAMPER POSITION (% OPEN)
  - CURRENT HEATING HOT WATER VALVE POSITION (% OPEN)
  - HEAT RECOVERY PUMP COMMAND (ON/OFF)
  - ALARM SUPPLY AIR TEMPERATURE
  - ALARM SPACE TEMPERATURE (LOW)
  - ALARM FREEZE THERMOSTAT ACTIVATED (ALARM/NORMAL)

**TEMPERATURE CONTROL NOTES:**

- ALL WIRE, CONDUIT, TRANSFORMERS, RELAYS, ETC... REQUIRED TO RENDER THE TEMPERATURE CONTROL SYSTEM COMPLETE SHALL BE THE RESPONSIBILITY OF THE TEMPERATURE CONTROL CONTRACTOR.
- UNLESS OTHERWISE NOTED MOUNT ALL RELAYS ETC... IN ITS RESPECTIVE TEMPERATURE CONTROL PANEL.
- LABEL ALL SWITCHES, CONTROLLERS, ETC... WITH PERMANENT ENGRAVED PLASTIC NAME PLATES.
- ALL ADDED BMS MONITORING AND CONTROL POINTS TO CONNECT TO (E) ALERTON BMS. CONTROL CONTRACTOR SHALL BE RESPONSIBLE TO MODIFY BMS GRAPHICAL DISPLAYS INDICATING STATUS POINTS. TO MATCH EXISTING CONTROL CONTRACTOR SHALL BE "BCS-BUILDING CONTROL SERVICES," NO OTHERS WILL BE CONSIDERED.

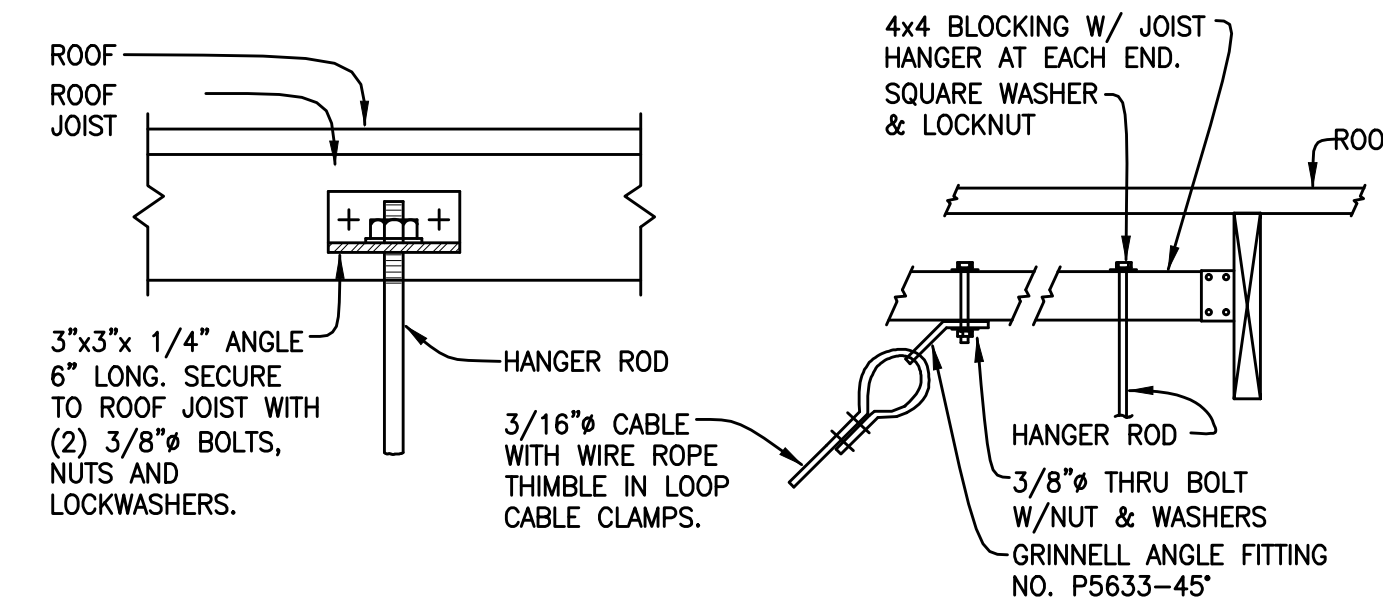
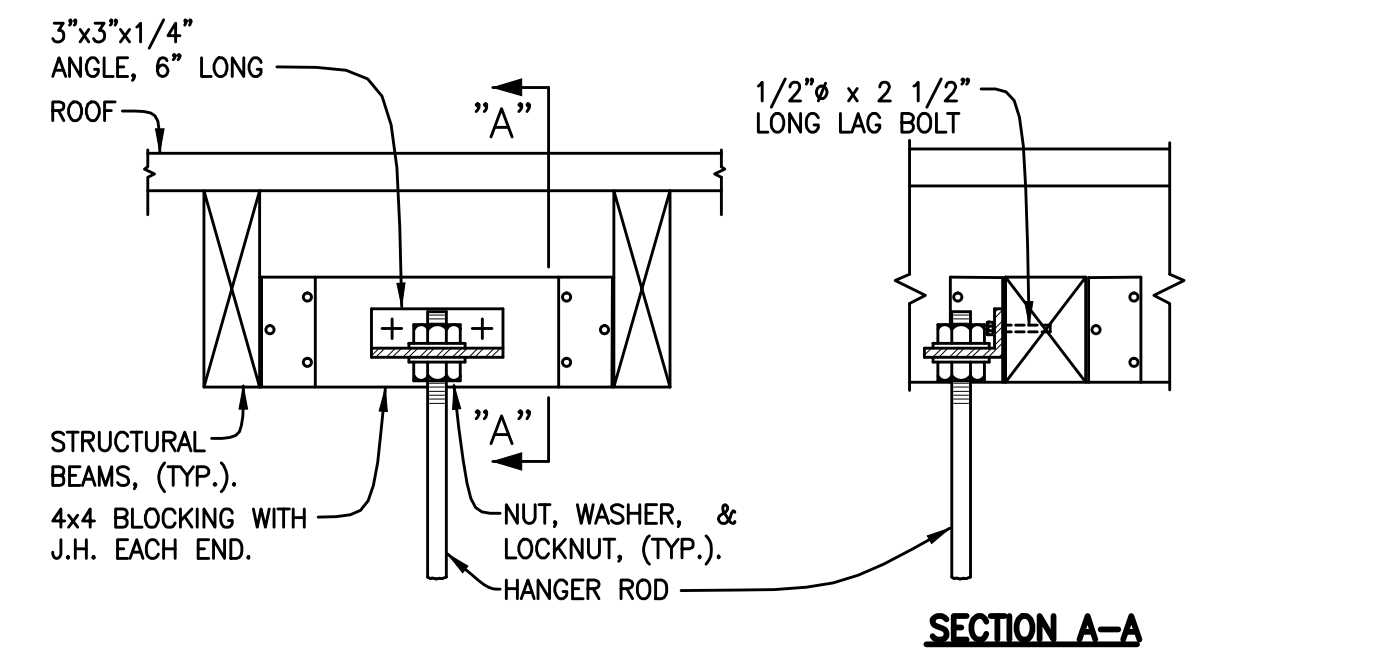
**(E) CONTROL DIAGRAM AND SEQUENCE**

NO SCALE: 6 M6.1



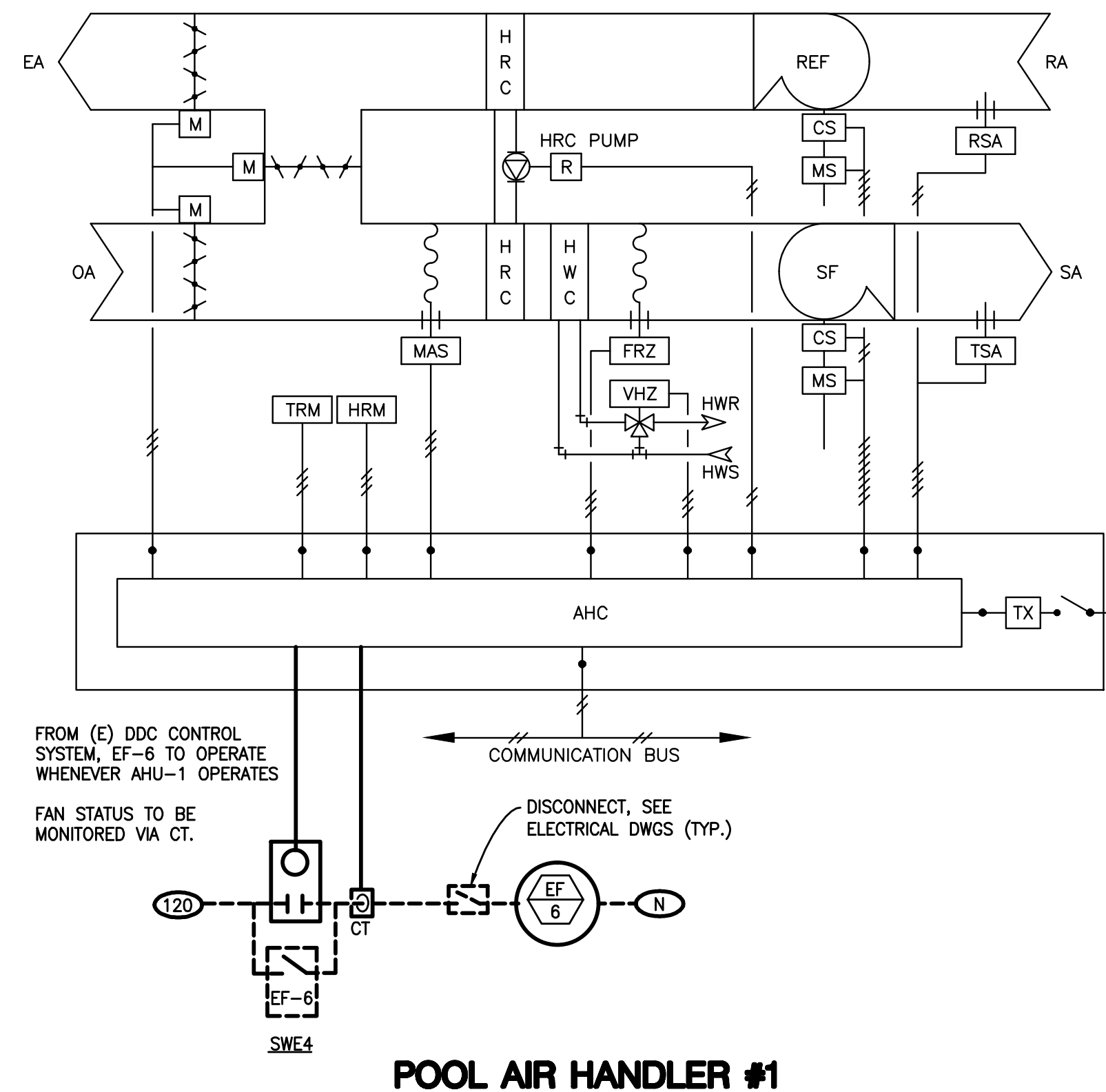
**EXHAUST REGISTER DETAIL**

NO SCALE: 2 M6.1



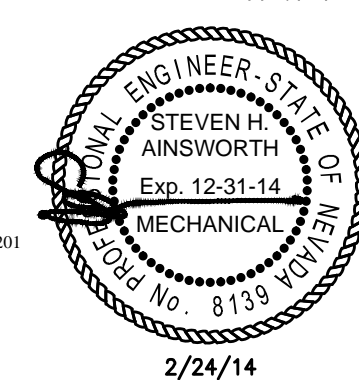
**HANGER ROD SUPPORT DETAILS**

NO SCALE: 4 M6.1



Professional Seal Date Revision  
2/24/14 ADDENDUM #1

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AIR CONDITIONING - DETAILS

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**M6.1**

