

**SENIOR CENTER
15 LOUIS LANE
COLCHESTER, CT 06415
BID #2022-013**

S/P+A PROJECT #20.003

DATE: October 6, 2022

The following changes to the Drawings and Project Specifications shall become a part of the Drawings and Project Specifications; superseding previously issued Drawings and Project Specifications to the extent modified by Addendum #2.

General Information:

- The deadline for RFIs was Tuesday, October 4, 2022, 2:00pm.
- See attached RFI log. (2)
- See attached Substitution Requests. (9)
- Fire alarm plenum cable in concealed spaces is acceptable if it is approved by the authority having jurisdiction (AHJ).

Changes to the Addenda:

- ADDENDUM #1:
 - New Specifications, SECTION 083313, COILING COUNTER DOORS:
 - Page 2, Article 2.2.A.1.a., revise “**Model #ESC20**” to read “**Model #ESC10**”.
 - Page 3, Article 2.2.H., revise to read as follows:

“Sill Configuration: No sill.”
 - Page 4, Article 2.7, delete in its entirety.
 - Changes to the Drawings:
 - DRAWING A110, MAIN LEVEL FLOOR PLAN, Main Level Floor Plan 1, Door 129A, revise Window Type “SF08” to read “CW01”.
 - DRAWING, A910, DOOR SCHEDULE, ELEVATIONS & DETAILS, Coiling Kitchen Door 4, Head/Sill, Sill Note, revise to read as follows:

“Sill is integral part of kitchen work surface – Refer to Foodservice Drawings”

Changes to the Specifications:

- DRAWING LIST, Page 3, Mechanical Drawings, revise “M501” to read “M502”

- SECTION 087100, DOOR HARDWARE, Page 16, Article 3.7, HW-1, add the following:
“ACCESS CONTROL”
- SECTION 090000, SCHEDULE OF FINISHES, Base, RB-1 and RB-2, Local Rep, add the following:
“Roanne Marquardt 203.868.7811”
- SECTION 114000, FOODSERVICE SPECIFICATIONS, Page 38, Part 8.00:
 - Item #21C Gas Manifold, revise “Item #21C” to read “Item #21D”.
 - Item #21D Wall Flashing, revise “Item #21D” to read “Item #21E”.
- SECTION 262713, ELECTRICITY METERING:
 - Page 1:
 - Articles 1.4.D.1., .2., and .3., delete in their entirety.
 - Article 1.4.D.4., delete “, design user’s guides for software and hardware,” in its entirety.
 - Page 2, Article 1.9, delete in its entirety.
- SECTION 312000, EARTH MOVING, Page 4, Article 2.1.C., delete chart in its entirety.

New Drawings:

- DRAWING M502, MECHANICAL DETAILS has been added and is attached as part of this addendum.*

Changes to the Drawings:

- DRAWING G001, List of Drawings, Volume 2, Mechanical Drawings, add the following:
“M502 MECHANICAL DETAILS”
- DRAWING A600, WINDOW ELEVATIONS, Curtain Wall Windows 3, Detail Tags, add ‘SIM’.
- DRAWING A803, CASEWORK DETAILS, Typ. 30” Hight Upper Cabinet 1, revise “P-lam all sides” to read “Wood all sides”.
- DRAWING M101, ATTIC LEVEL MECHANICAL PLAN has been deleted in its entirety. A new M101 has been added and is attached as part of this addendum.*
- DRAWING E201, FLOOR PLAN – POWER has been deleted in its entirety. A new E201 has been added and is attached as part of this addendum.*

- DRAWING T001, SYMBOLS, NOTES, ABBREVIATIONS & DETAILS – TECHNOLOGY, Security Legend, CR Symbol, revise description to read as follows:

“Access control proximity reader with keypad (**GOKEYLESS – SKU #0-205676** or approved equal) in single gang 2½-inch deep outlet box, ¾-inch conduit, mounted 46 inches AFF unless otherwise noted. Run (6) #18 wires from the reader up to the door latch power supply and another (6) for future.”
- DRAWING T101, FLOOR PLAN – TECHNOLOGY has been deleted in its entirety. A new T101 has been added and is attached as part of this addendum.*
- DRAWING FS000, FOODSERVICE EQUIPMENT SCHEDULE, Foodservice Equipment Schedule 1, Model Number:
 - Item #12, revise “STG3R-3S” to read “T-72-HC”.
 - Item #13, revise “STG2F-2S” to read “T-49F-HC”.
- DRAWING FS100, FOODSERVICE EQUIPMENT PLAN & SCHEDULE, Foodservice Equipment Schedule, Model Number:
 - Item #12, revise “STG3R-3S” to read “T-72-HC”.
 - Item #13, revise “STG2F-2S” to read “T-49F-HC”.

The bid date remains Thursday, October 13, 2022 at 2:00pm by this addendum.

The addendum consists of fourteen (14) pages of 8½” x 11” text and four (4) 30” x 42” drawings*.

End of Addendum #2



Project: **Colchester Senior Center**
Bid # **2022-013**
S/P+A Project #: **20.003**

RFI Deadline: **10/04/22**
Bids Due: **10/13/22**

RFI #	QUESTION	DATE RECEIVED	RESPONSE	ADDENDUM # ISSUED
001	What is the Senior Center site address?	09/16/22	15 Louis Lane	1
002	What is the start and completion date?	09/16/22	365 days following Notice to Proceed as indicated in the Bid Form. Notice to Proceed expected to be issued 3-4 weeks following bid opening.	1
003	There is a note for the Contractor to pay for all utilities, is this accurate?	09/16/22	The Town of Colchester will pay all utility connection fees. Refer to Addendum #1.	1
004	Will the town waive the permit fees?	09/16/22	Yes, except for the State of CT Building Permit Education fee.	1
005	Spec section 074113.16 Standing Seam calls for a 1.5" panel, but does not give the panel coverage (width). Drawings scale to a 24" panel. However, that would be a custom width. Please confirm this is what the architect/owner wants. Available widths are 12", 16" or 20". Please advise.	09/20/22	The intent is to provide the widest, standard panel width. For the Basis-of-Design (ATAS 1-1/2-inch Field-Lok) this would be the 20.75-inch panel. Note that other manufacturer's standard widths may vary.	1
006	Please provide detailed ductwork information around the DOAS unit.	09/20/22	Refer to Addendum #2 for revised Drawings.	2
007	Is there any possibility that the bid date would be extended?	09/20/22	Bid date has been extended. Refer to Addendum #1.	1
008	Regarding the window treatments, the specs call for shades with a front fascia, but detail 2/A550 shows a recessed shade box. Details 7/A550 and 1/A552 also show a shade box below the ceiling. Please clarify if all shades are to receive front fascia only, or if some will be requiring shade pocket (recessed or surface mounted).	09/21/22	Window treatments are to have a front & back fascia (also referred to as a headbox). This headbox is to be installed exposed and recessed as indicated in the Drawings. Refer to Addendum #1.	1
009	Can the bid be extended 1 week?	09/21/22	Refer to RFI #007.	1
010	Are lockers included in this project? If so, please provide specs.	09/21/22	No.	1
011	The specs have cabinetry in Division 6 but the drawings call them casework. Please advise.	09/21/22	Casework is an overall description for cabinetry and millwork. Refer to both Sections 064023 & 064113.	1
012	Are there Liquidated Damages on this project?	09/21/22	Per the DECD, liquidated damages are not required.	1
013	At the prebid meeting we were told that the duration is 12 months but the RFP says 18 months. Please advise.	09/21/22	The construction duration is 365 days for Substantial Completion, as noted on the Bid Form.	1
014	Who is the obligee for the bid bond and their address?	09/21/22	The obligee is the Town of Colchester at 127 Norwich Avenue.	1
015	Spec section 283111-2.1.A (Digital, Addressable Fire Alarm System) does not identify Siemens/Cerberus as a fire alarm manufacturer. However, Siemens/Cerberus is a comparable product to all of these brands listed and capable of all the specified requirements. With multiple providers of the Siemens/Cerberus brand in Connecticut, the customer will always have a choice in a fire alarm maintenance contractor. Will Siemens/Cerberus be an acceptable substitution Fire Alarm provider?	09/23/22	Refer to SR #001.	2
016	Are the bench cushions by the owner or GC?	09/24/22	Bench cushions are not in the GCs scope of work.	2
017	Please see the suspension grid in spec section 095113-4, 2.5, C, #2. They call for Heavy duty structural classification on the grid. This is not typical with this application. Please let us know if Intermediate would be acceptable.	09/26/22	Heavy-duty main beams are required however intermediate-duty cross tees are acceptable.	2
018	Will a refrigeration Press fitting like RLS or Zoom lock be considered? On top of less chance for contamination and a speedier installation time. A better warranty if applied then traditional methods?	09/27/22	A refrigeration press fitting like RLS and Zoom is acceptable.	2
019	Under seismic and vibration can the Manufacturer Novia be added to acceptable manufacturers?	09/27/22	Novia is already listed as an acceptable manufacturer for the fire protection & plumbing trades and therefore is acceptable for HVAC in this case.	2
020	No manufacture is listed under Products for HVAC identification, possibly the same with plumbing. Is it open ended if spec is met? I prefer Brimar.	09/27/22	Brimar, Seton, and Kolbi are acceptable manufacturers.	2
021	Can condensate piping be installed with PVC?	09/27/22	Solid core Schedule 40 PVC is acceptable.	2
022	To meet the CHRO goals, we need to know how much the state funding is. Please provide the amount.	09/28/22	The amount of state funding is \$2.5M as indicated in the Prebid Meeting Minutes issued in Addendum #1.	2
023	Drawing FS600 shows stainless steel on the walls. This is usually done by the KEC. It is not on the kitchen equipment list. Please clarify if the KEC or GC is to provide and install the wall panels.	09/29/22	Refer to Item #21E on the Foodservice Equipment Schedules on Drawings FS000 & FS100. Also refer to Addendum #2 for additional clarifications. The GC owns the entire bid package, including hiring the KEC as a subcontractor and procuring/installing all equipment.	2
024	There are some discrepancies between 114000 and the equipment schedule: Item #6 - model 1448NK3 - how many shelves needed? Does this need casters? The drawing doesn't appear to show NK3 shelves.	09/30/22	Provide a 4-tier shelving unit with four (4) posts and casters.	2
025	There are some discrepancies between 114000 and the equipment schedule: Item #12: 114000 specifies model T-72-HC, but the schedule states model STG3R-3S. Which mode should we use?	09/30/22	Provide True Mfg. - General Foodservice T-72-HC.	2
026	There are some discrepancies between 114000 and the equipment schedule: Item #13: 114000 specifies model T-49F-HC, but the schedule states model STG2F-2S. Which mode should we use?	09/30/22	Provide True Mfg. - General Foodservice T-49F-HC.	2



Project: **Colchester Senior Center**
Bid # **2022-013**
S/P+A Project #: **20.003**

RFI Deadline: **10/04/22**
Bids Due: **10/13/22**

RFI #	QUESTION	DATE RECEIVED	RESPONSE	ADDENDUM # ISSUED
027	Coiling counter door - is there a stainless steel shelf needed for this pass-thru?	09/30/22	Yes. Item #26 ST/ST table should be provided with a pass-thru shelf as an integral part so there are no seams for food and dirt to get trapped.	2
028	In the Project Manual under Earthwork there is a chart listed on section 312000-4 Under: Part 2 - Products 2.1 Materials C. Subbase Course. It states From 818 Articles M.02.06, Grading A and M.0206.04 Soundness. It then has a chart, but the chart does not match what they reference from 818 Articles. Can you confirm what spec they would like for this material?	10/01/22	Disregard table in 2.1.C.	2
029	Please confirm if there is a Builders Risk insurance requirement for the referenced project and, if so, who will be purchasing.	10/03/22	Yes, Contractor to carry.	2
030	AISC certification is required per the specifications, would it be possible for you to waive this requirement for this project?	10/03/22	Certification <u>cannot</u> be waived.	2
031	Are there any spec information for the cameras indoor/exterior?	10/04/22	Camera model numbers are listed on the Technology Legend on Drawing T001.	2
032	Is there no Access Control system?	10/04/22	Standalone access control is provided in Addendum #2.	2
033	Storefront Door Spec 084113 PP.2.4.A.1 calls for doors to be 2 1/4" thick. Please confirm, as finish hardware must be figured for appropriate door thickness.	10/04/22	Correct, as it is an insulated door.	2
034	Door Schedule Plan A910: An "Accessible Threshold" is checked as required for every opening on the door schedule, however a threshold is not indicated at every Hardware Set. Please clarify.	10/04/22	Accessible Threshold in the Door Schedule indicates that the flooring material/transition at the door opening shall be an accessible transition. True thresholds are only required as indicated in the door hardware sets.	2
035	Door Schedule Plan A910: No Fire Labels are called for. Please confirm.	10/04/22	Confirmed, no fire rated doors are required.	2
036	Finish Hardware 087100, PP.2.26 calls for BHMA 626 Brushed Chrome or 630 Stainless Steel Finishes. Are Door Closers Acceptable with BHMA 689 Sprayed Aluminum Finish? 626 Finish on Closers are roughly double the cost of 689.	10/04/22	BHMA 689 is an acceptable finish for door closers.	2
037	Will the Town Hall parking lot be available for subcontractor parking throughout the construction project?	10/04/22	Limited parking, approximately six (6) spaces, is available along the back driveway of Town Hall, adjacent to the Senior Center property. Vehicles cannot impede on the required driving or fire access entrances.	2
038	Drawing C001 shows (9) test pits done, TP-1 through TP-9. The Geotechnical Report; Appendix 2 - Test Boring Logs only shows reports for TP-1 through TP-6 (B-1 through B-6). Please provide logs for TP-7 and TP-8 as they are the only borings that are within the building footprint as well as TP-9 which is outside the building footprint.	10/04/22	Test pits identified on C001 were for visual observation by Civil Engineer. Only six (6) borings were taken and are identified by Location in Figure 2 of the Geotechnical Report.	2
039	Drawing A600 Detail 3 shows a Curtain Wall but when you go to the details for that curtain wall (details 5 and 7 on A650) it is called out as Storefront. Please advise which is correct, Curtain Wall or Storefront.	10/04/22	The window elevation in question (identified on Drawing A110 as SF08) shall be curtain wall. Detail tags 5 & 7 at this elevation shall be noted as 'SIM'. All other windows designated with SF tags shall be storefront.	2
040	Can ABB and Honeywell be included to the list of manufacturers who are suitable for this project's building automation system?	10/04/22	ABB and Honeywell are acceptable manufacturers however a substitution request will be required per Section 012500 to prove they meet the specified requirements.	2
041	Per note on South elevation on drawing A300, exterior columns are to be wrapped with an insulated prefinished aluminum panel (.125"). Please provide a specification for this.	10/04/22	Pre-finished aluminum enclosure is brake-formed, not an insulated panel. Refer to Section 076200 for additional information.	2
042	Details 4,5,6/A553 and 5,9/A552 state that the soffits will be western red cedar tongue and groove. Please confirm exactly where these details apply to. Are they only being installed on the rakes and porches? Is Hardie Soffit to be installed on the eaves?	10/04/22	Refer to Drawing A210, Construction Note 7. All other soffits are to be fiber cement.	2
043	SF-04 on A600 shows grid lines on the glass. However, there are no details shown to indicate what these are supposed to be. Please advise.	10/04/22	Similar to dividers (false muntins) on clad wood windows. Refer to Section 085200.	2
044	Please clarify whether or not the glass for wood doors is to be factory glazed or field glazed.	10/04/22	Factory glazed.	2
045	1/A803 (Typical upper cabinet section) calls out for P-lam interiors while all other cabinets are painted wood inside and out. Is the P-lam labeling correct @ the upper cabinets?	10/04/22	No plastic laminate, cabinet interior to be painted wood.	2

CSI Form 1.5C

SUBSTITUTION REQUEST (During the Bid Period)

Project: Colchester Senior Center Substitution Request Number:
Colchester, Ct. From: Bryan Shanahan - W&M Fire Protection
To: Chris Nardi - cnardi@silverpetrucelli.com Date: 9/23/2022
A/E Project Number:
Re: Fire Alarm Manufacturer Substitution Request Contract For:

Specification Title: DIGITAL, ADDRESSABLE FIRE ALARM SYSTEM Description: Fire Alarm Manufacturer
Section: 283111 Page: Article/Paragraph: Part 2, 2.1, A. Basis of Design Product

Proposed Substitution: Cerberus Pro 252-Point Addressable Control Panel and Associated Field Components
Manufacturer: Siemens Address: 8 Fernwood Road, Florham Park, NJ 07932 Phone: 973-593-2600
Trade Name: Model No.: FV922

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.
Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

- The Undersigned certifies:
Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
Same warranty will be furnished for proposed substitution as for specified product.
Same maintenance service and source of replacement parts, as applicable, is available.
Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
Proposed substitution does not affect dimensions and functional clearances.
Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Bryan Shanahan - Bryan.Shanahan@wmfps.us
Signed by: Bryan Shanahan
Firm: W&M Fire Protection Services
Address: 8 West Street, Plantsville, Ct 06479
Telephone: 860-621-3040

- A/E's REVIEW AND ACTION
Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
Substitution rejected - Use specified materials.
Substitution Request received too late - Use specified materials.

Signed by: STEVE CROTEAU - SP+A Date: 10/04/2022

Supporting Data Attached: Drawings Product Data Samples Tests Reports

Cerberus PRO

252-Point and 504-Point Addressable (FIRE-Only) Control Panel Models FC922 and FC924

ARCHITECT AND ENGINEER SPECIFICATIONS

Addressable fire alarm control panel (FACP) intended for mid-size building applications

Comprised of the following system components:

- Operating units
- Periphery boards
- Power supplies
- System enclosures

System features:

- Supports 252-to-504 addressable devices:
 - One (1) to four (4) 'Class B'; one (1) to two (2) 'Class A' for Model FC922
 - One (1) to eight (8) 'Class B'; one (1) to four (4) 'Class A' for Model FC924
- Includes one (1) 'Class A' or two (2) 'Class B' notification appliance circuits (NACs)
- Resettable and non-resettable 24VDC, [nominal] auxiliary power
- Connectivity to a leased-line / city-tie module
- Releasing module supports activation of releasing valves in pre-action / deluge systems / agent release
- Off-normal warning message prior to reset
- Fast and easy set-up with auto-configuration feature
- Cerberus® DMS Danger Management Station can monitor and control up to 32 Models FC922 and FC924 FACP's
- Digital alarm communication transmitter (DACT)

®UL 864 9th Edition Listed, ®ULC Listed;
FM, CSFM & NYC Fire Department Approved

Product Overview

The Cerberus PRO 252-point (Model FC922) / 504-point (Model FC924) addressable FACP is designed to meet the fire-protection needs of mid-size buildings.

This advanced FACP offers features typically required in mid-size buildings in a package that is easy to install and competitively priced. Additionally, Models FC922 and FC924 are networkable, allowing the systems to fulfill the growing fire-protection needs of the building. The programming software for the 252 / 504-point fire systems is held in flash electrically erasable programmable read-only memory (EEPROM).

The following Cerberus PRO system components are used in the 252-point / 504-point FACP:

- Operating units
- Periphery boards
- Power supplies
- System enclosures

Other options are available to meet specific needs. Models FC922 and FC924 are FM (#3010); CSFM (#7165-0067:0259) and FDNY (#6104) Approved.



Cerberus PRO Two-Height-Unit (2HU)
Enclosure with two (2) cutouts

Specifications

Operating Interface Unit

The Operating Interface Unit (Model FCM2018-U3 or Model FCM019-U3) functions as the operating interface and central microprocessor for Models FC922 and FC924.

Either operating interface unit provides multi-use capability for each end-user to efficiently 'Acknowledge' events; to quickly control the NACs of the FACP, and to permit a manual reset of the respective system. Detailed data about the nature and location of the events can also be displayed, via a backlit, 2" \times 4-3/4" (5.1 cm. \times 12.1 cm.) LCD screen and the four-way navigation push button at the top of the FACP.

Periphery Boards

The periphery boards (Models FCI2016-U1 and FCI2017-U1) serve as the main operating components for the 252 / 504-point FACP. Each module operates and monitors input-device identity; as well as controls the signaling-line circuits that communicate with smoke detectors and other field devices (i.e. – C-NET).

Cerberus® PRO

Fire Safety Products

9815

FACP for mid-size buildings

SIEMENS

Specifications – (continued)

Power Supplies

All functions are supported by the power supplies (Model FP2011-U1 or Model FP2012-U1), which therefore eliminate the need for external power supplies.

Further, the 170-Watt power supply (Model FP2011-U1) and 300-Watt power supply (Model FP2012-U1) provide primary, 24VDC nominal power for normal operation to Models FC922 and FC924. Both power supplies are filtered and regulated. Model FP2011-U1 is rated at 6.5 Amps, and the rating for Model FP2012-U1 is 11.5A.

The 170-Watt power supply incorporates a 4.0A, non-resettable slow-blow fuse on the primary input, and includes a built-in AC-line filter for surge and noise suppression. Model FP2011-U1 mounts in the FACP enclosure, and there are no serviceable Cerberus PRO parts to be maintained.

The 300-Watt power supply incorporates two (2) 6.3A replaceable, non-resettable slow-blow fuses on the primary input and includes a built-in AC line filter for surge and noise suppression. Model FP2012-U1 mounts in the FACP's enclosure, and there are no serviceable Cerberus PRO parts to be maintained.

System Enclosures

The Cerberus PRO fire-alarm enclosures and their accessories provide a complete set of hardware for mounting all Cerberus PRO main-system and remote terminal cards and modules.

The hardware allows this Cerberus PRO system to be configured for a variety of applications, as well as for future system upgrades. Included in the enclosure series are back box and door sets; removable mounting plates and clear lenses, as well as blank plates for use with the enclosure doors.

All enclosures come with ground straps for the inner and outer doors, shield termination lugs, grounding lugs, and tie wrap lances for securing wire. All Cerberus PRO height-unit enclosures can also mount system back-up batteries up to 33AH in capacity.

Models FC922 and FC924 utilize a two-height-unit enclosure. The following components comprise a complete two-height-unit enclosure:

- One (1) back box, (Model FHB2002-U1 / R1)
- One (1) or two (2) inner doors, (Models FHD2004-U1 or FHD2005-U1)
- One (1) outer door, (Model FHD2002-U3 / R3 or FHD2003-U3 / R3)
- One (1) or two (2) clear windows, (Model FHD2006-U1)

Note: One (1) window is installed for Model FHD2002-U3 / R3 outer door, and two (2) windows are required for Model FHD2003-U3 / R3.

The approximate size for each two-height-unit enclosure is: 27.5" (70cm.) high; 21.5" (54.6cm.) wide, and 5.75" (14.6cm.) deep. The weight, without any attached components, is approximately 6.3 Lbs. (2858 g).

Additionally, the two-height-unit enclosure supports the following optional components:

- Enclosure trim kit (for flush-mounting)
- Battery bracket (to comply with seismic certification)
- DIN rail kit (provides connection between internal-system wiring and field wiring)

Optional Accessories

Digital Alarm Communication Transmitter (DACT)

The DACT is used to provide communication between Models FC922 and FC924 and with either a central or remote monitoring station.

The Model FCA2015-U1 module mounts directly on the back enclosure and connects to the periphery boards. The DACT enables remote transmission of alarms and events via a public telephone line.

Releasing Module

The releasing module (Model XCI2001-U1) supports activation of releasing valves in pre-action / deluge systems (including double-interlock pre-action systems, or Sinorix® Engineered Fire Suppression systems). Activation can be event-controlled or performed by addressable manual pull stations. The releasing module is installed on the periphery board, and supports `Class B' releasing circuits.

When installed on Models FC922 / FC924, the releasing module contains an integral manual-disconnect switch for releasing circuits. This essential feature protects the releasing circuits from accidental discharge during maintenance.

Battery Disconnect Module

The Battery Disconnect Module (Model FCA2032-U1) is specifically designed to disconnect the backup battery on the Cerberus PRO 252 / 504-point addressable FACP when its voltage drops below 19VDC. Model FCA2032-U1's cut-off capability prevents the battery from operating beyond its normal power level for basic system operation.

Hardware Migration Kit

Model FHA2056-series kits are specifically designed for the seamless transition of an existing Siemens FS-250 (FireSeeker) control panel into a fully operational 252 or 504-point addressable Cerberus PRO fire-alarm FACP, [FC922 or FC924, respectively]. Each shipment of the Model FHA2056-series kits contains the following:

- One (1) outer door
- One (1) inner door
- One (1) hinge-assembly bracket
- One (1) back plate
- One (1) inner-door bracket

Note: The five (5) items that comprise one (1) Model FHA2056-series hardware-migration kit cannot be ordered individually.

Specifications – (continued)

Network Module

The C-WEB network module (Model FN2001-U1) is used to network up to 16 FACPs, or one (1) fire terminal, via the C-NET system bus. Model FN2001-U1 is plugged into the Operating Unit (or an Operating Unit with built-in LEDs).

Model FN2001-U1, which connects to a system input / output bus, has ground-fault monitoring, as well as an integrated degrade-mode feature. Redundant networking is done with one (1) network module per FACP [Simple-Loop Trouble]. There is electrical isolation between the system bus and FACP.

Remote Display Terminals

The Remote Display Terminals (Models FT2014-U3 / R3 and FT2015-U3 / R3) are remote annunciators that show the existing status of Models FC922 / FC924.

Light-emitting diodes (LEDs) will illuminate for any given *Alarm*, *Supervisory* and *Trouble* Cerberus PRO-system event. A LCD screen will give details of the event in alphanumeric form. The display screen can be scrolled, via the four-way navigation button, to reveal additional events.

Model FT2014-U3 / R3 is a display-only remote annunciator that has one (1) button used to silence the local sounder. Model FT2015-U3 / R3 has three (3) control buttons for 'acknowledging' events, 'silencing' audible circuits and 'resetting' the system. Additionally, there are three (3) user-programmable buttons available. Model FT2015-U3 / R3 has an integral key switch that enables the control buttons to operate.

The remote display terminals are remotely connected to Models FC922 and FC924, via the RS-485 interface. Models FC922 and FC924 require the Model FCA2016-U1 RS-485 module to provide communication to the remote display terminals. Model FCA2016-U1 supports Style 4 or Style 6 wiring. Up to eight (8) modules can be supported on a RS-485 bus.

The remote display terminals require 24VDC [nominal] power, and the necessary power can be provided from this Cerberus PRO FACP or from another @UL Listed, 24VDC power source.

Note: A Model FHD2012-U1 inner door can be optionally purchased in @UL markets. The inner door mounts with the optional Model FT201x-series Remote Display terminals. Having a Model FHD2012-U1 inner door installed can assist in preventing unauthorized access to the RDT.

S-series License Keys

The S1 license key (Model FCA2033-A1) allows for virtual monitoring and control between a 252 / 504-point addressable fire-only panel and a personal computer.

The S2 license key (Model FCA2034-A1) is a BACnet output, and is used for monitoring-only purposes by a 3rd-party system for life-safety objects.

The S3 license key (Model FCA2035-A1) is a combination license key that allows for virtual monitoring and control, as well as for distribution of BACnet (monitoring-only) communications. A four-digit personal identification number (PIN) must be used in order to prevent unauthorized access.

Tabular Annunciators

Tabular annunciators allow system events sent from Cerberus PRO addressable panels to be displayed remotely in real-time. The Model FT2008 series of tabular annunciators has 16 zones, and the Model FT2009 series uses 96 LEDs for 32 zones. Up to two (2) light-emitting diodes (LEDs) can be used per zone.

Tabular annunciators provide outputs for system and zone status, and are orderable in either **black** or **red**.

LED Annunciator Driver

The Model FT2007-U1 LED Annunciator Driver provides custom graphic annunciators on addressable Cerberus PRO FACPs. This optional system module provides 96 highly programmable outputs to drive LED indicators.

There are 16 inputs to accommodate user-system commands: *Silence*, *Unsilence*, *Reset*, *Acknowledge* and *Lamp Test*. Model FT2007-U1 is supervised via a RS-485 interface. A maximum eight (8) modules are allowed on each RS-485 communication bus.

NAC Expansion Module

The NAC expansion module (Model FCI2011-U1) provides either of the following additional NACs to a Cerberus PRO 252 / 504-point FACP:

- one (1) 'Class A', or
- two (2) 'Class B' NACs

Each NAC is rated at 3 Amps. Each NAC expansion module is monitored for open-line and short-circuit conditions.

Details for Ordering

Model	Part Number	Description
FCI2016-U1	S54400-A55-A1	Periphery Board, 252-pt. FACPs
FCI2017-U1	S54400-A56-A1	Periphery Board, 504-pt. FACPs
FCM2018-U3	S54400-C40-A2	Operating Interface Unit
FCM2019-U3	S54400-C41-A2	Operating Interface Unit with LEDs
FHB2001-U1	S54400-B47-A1	1HU Back Box, Black
FHB2001-R1	S54400-B47-A2	1HU Back Box, Red
FHB2002-U1	S54400-B48-A1	2HU Back Box, Black
FHB2002-R1	S54400-B48-A2	2HU Back Box, Red
FHD2001-U3	S54400-B45-A1	1HU Outer Door, Black
FHD2001-R3	S54400-B40-A1	1HU Outer Door, Red
FHD2002-U3	S54400-B32-A1	2HU Outer Door w/ 2 Windows, Black
FHD2002-R3	S54400-C53-A1	2HU Outer Door w/ 1 Window, Red
FHD2003-U3	S54400-C42-A1	2HU Outer Door w/ 2 Windows, Black
FHD2003-R3	S54400-B46-A1	2HU outer door w/ 2 windows, Red
FHD2004-U1	S54400-B52-A1	Inner Door, Black
FHD2005-U1	S54400-B53-A1	Inner Door, Black (full plate)
FHD2006-U1	S54400-C46-A1	Clear-Lens Window
FP2011-U1	500-450222	170-Watt Power Supply
FP2012-U1	S54400-Z60-A1	300-Watt Power Supply

Details for Ordering — (continued) Optional Accessories

Model	Part Number	Description
FCA2015-U1	S54400-A63-A1	Digi. Alarm Comm. Transmitter [DACT]
FCA2016-U1	S54400-A39-A1	RS-485 Interface Module
FCA2018-U1	S54400-A65-A1	Remote Peripheral Module
FCA2032-U1	S54400-B145-A1	Battery Disconnect Module
FCA2033-U1	S54400-P154-A1	S ₁ License Key
FCA2034-U1	S54400-P155-A1	S ₂ License Key: BACnet monitoring
FCA2035-U1	S54400-P156-A1	S ₃ License Key: Rem. View w/ BACnet
FCT2011-U1	S54400-A54-A1	NAC Expansion Module
FCT2020-U1	S54400-A57-A1	Leased-Line / City-Tie Module
FCM2022-U3	S54400-C44-A2	Blank Option Module
FCM2023-U3	S54400-C45-A2	LED Option Module: [RED / GREEN bi-color LED; one (1) YELLOW LED]
FCM2034-U3	S54400-C138-A1	LED Option Module: [RED / YELLOW bi-color LED; one (1) YELLOW LED]
FHA2056-U1	S54400-B18-A1	Hardware Migration Kit, Black
FHA2056-R1	S54400-B19-A1	Hardware Migration Kit, Red
FHD2012-U1	S54400-C145-A1	Inner Door, Black (optional, [®] UL markets)
FN2001-U1	S54400-A60-A1	C-WEB Network Module
FN2006-U1	S54400-A61-A1	Single-Mode Fiber-Optic Module
FN2007-U1	S54400-A62-A1	Multi-Mode Fiber-Optic Module
FT2007-U1	S54400-A142-A1	LED Annunciator Driver
FT2008-U1	S54400-A143-A1	16-Zone Tabular Annunciator, Black
FT2008-R1	S54400-A144-A1	16-Zone Tabular Annunciator, Red
FT2009-U1	S54400-A145-A1	32-Zone Tabular Annunciator, Black
FT2009-R1	S54400-A146-A1	32-Zone Tabular Annunciator, Red
FT2014-U3	S54400-B80-A1	Remote Display Terminal, Black
FT2014-R3	S54400-B73-A1	Remote Display Terminal, Red
FT2015-U3	S54400-B88-A1	Display Terminal with key, Black
FT2015-R3	S54400-B16-A1	Display Terminal with key, Red
FTI2001-U1	S54400-A58-A1	Fire Terminal Board
XCI2001-U1	S54400-A69-A1	Releasing Module

Related Documentation

Product	Data Sheet Number
Cerberus PRO operating units	9801
Cerberus PRO periphery boards	9802
Cerberus PRO fire terminals	9803
Cerberus PRO DACT	9804
C-WEB / C-NET Network Module	9805
Cerberus PRO power supplies	9806
Cerberus PRO enclosures	9807
NAC expansion module	9808
Cerberus PRO releasing module	9809
Leased-Line / city-tie module	9810
Remote periphery module	9811
Remote display terminals	9812
Single / multi-mode fiber modules	9814
LED / Blank option modules	9816
Battery disconnect module	9819
S-series license keys	9820
Marine-specific equipment	9822
LED annunciator driver	9824
16 & 32-zone tabular annunciators	9825
Hardware Migration Kit	9826

SIEMENS Cerberus® PRO

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Electronics Packages

Model	Part Number	Description
FC922-US	S54400-C14-A1	252-Point Fire System with 170 Watt Power Supply and standard operator interfaces
		Includes: FP201 1-U1 (1 Qty.) FCI2016-U1 (1 Qty.) FCM2018-U3 (1 Qty.)
FC924-US	S54400-C15-A1	504-Point Fire System with 170 Watt Power Supply and standard operator interfaces
		Includes: FP201 1-U1 (1 Qty.) FCI2017-U1 (1 Qty.) FCM2018-U3 (1 Qty.)
FC922-UE	S54400-C16-A1	252-Point Fire System with 170 Watt Power Supply and standard operator interfaces (with 24-zone LEDs)
		Includes: FP201 1-U1 (1 Qty.) FCI2016-U1 (1 Qty.) FCM2019-U3 (1 Qty.)
FC924-UE	S54400-C17-A1	504-Point Fire System with 170 Watt Power Supply and standard operator interfaces (with 24-zone LEDs)
		Includes: FP201 1-U1 (1 Qty.) FCI2017-U1 (1 Qty.) FCM2019-U3 (1 Qty.)
FT924-US	S54400-C18-A1	Network Terminal w/ standard operator interface
		Includes: FTI2001-U1 (1 Qty.) FCM2018-U3 (1 Qty.)
FT924-UE	S54400-C19-A1	Network Terminal w/ standard operator interface (with 24-zone LEDs)
		Includes: FTI2001-U1 (1 Qty.) FCM2019-U3 (1 Qty.)
FC922-UT	S54400-C20-A1	252-Point Fire System with 300 Watt Power Supply and standard operator interfaces
		Includes: FP201 2-U1 (1 Qty.) FCI2016-U1 (1 Qty.) FCM2018-U3 (1 Qty.)
FC924-UT	S54400-C21-A1	504-Point Fire System with 300 Watt Power Supply and standard operator interfaces
		Includes: FP201 2-U1 (1 Qty.) FCI2017-U1 (1 Qty.) FCM2018-U3 (1 Qty.)
FC922-UF	S54400-C22-A1	252-Point Fire System with 300 Watt Power Supply and standard operator interfaces (with 24-zone LEDs)
		Includes: FP201 2-U1 (1 Qty.) FCI2016-U1 (1 Qty.) FCM2019-U3 (1 Qty.)
FC924-UF	S54400-C23-A1	504-Point Fire System with 300 Watt Power Supply and standard operator interfaces (with 24-zone LEDs)
		Includes: FP201 2-U1 (1 Qty.) FCI2017-U1 (1 Qty.) FCM2019-U3 (1 Qty.)

Temperature and Humidity Range

Models FC922 and FC924 are [®]UL 864 9th Edition Listed for indoor dry locations within a temperature range of 120 +/- 3°F (49 +/- 2°C) to 32 +/- 3°F (0 +/- 2°C) and a relative humidity of 93 +/- 2% at a temperature of 90 +/- 3°F (32 +/- 2°C).

Notification Appliances

'SL' Series – Horns | Strobes |
Horn- Strobes

Applications : Indoor, Wall-Only

Architect & Engineer Specifications

- Sophisticated series of notification appliances that meets fire-industry codes and regulations for commercial-building applications
- Compatible with the Siemens 50-point, 252-point and 504-point addressable fire alarm control panels (FACPs), and with:
 - Siemens Modular FACPs
 - Siemens PAD-series of NAC extenders
 - FireFinder® XLS / XLSV FACPs
 - Siemens dual-sync control (DSC) modules
- Innovative LED strobe technology provides an energy-efficient means for a significantly reduced current draw
 - Capability to have existing Xenon and new LED strobes in the same field-of-view
 - Fewer power supplies required, smaller wire gage, reduced wire runs
- Straightforward installation coupled with compact, modern design
 - No visible mounting screws
 - Manual (index finger) slide-setting adjustor
 - Four (4) field-selectable settings in one (1) device: 15cd | 30cd | 75cd | **110cd**
- Faceplates ship in four (4) distinctive types:
 - "FIRE" | "ALERT" | "AGENT" | (blank)
- Two (2) audible settings in each notification appliance
 - Temporal or steady horn output
 - High or Low setting
- UL (2034 | 1971 | 464) and ULC Listed (ULC-S525 | - S526)
 - ADA | NFPA | FCC | ANSI | OSHA compliant

Product Overview

Formed as the `SL'-series, Siemens is now offering horns, strobes, and horn-strobes with LED based strobes to its notification-appliances portfolio. With the `SL'-series, Siemens offers a full range of products with low and high candela settings that makes these sophisticated notification appliances ideal for new installs and retrofit applications.

Innovative light-emitting diode (LED) strobe technology provides an energy-efficient means for a significantly reduced current draw.

The strobe portion of these appliances meets the 20 millisecond light-pulse-duration requirements of the 2016 edition of NFPA 72. This feature allows existing Xenon and the new LED devices to be used in the same field-of-view.

In a single device, the `SL'-series can provide alarm-signaling tones for dual applications. **All strobe models in the series feature multi-Candela settings (15 | 30 | 75 | 110cd) on a single appliance.**

Additionally, there are two (2) modes of operation for the audible portion of these notification appliances:

- T3 (coded)
- Continuous

The `SL'-series of horns, strobes and horn-strobes devices are produced in a sleek, modern design. Its single-gang form factor provides high-quality energy efficiency in an aesthetically pleasing, low-profile design that is consistent to the look of the interior composition of the building application.

The `SL'-series is apt for indoor wall-mount applications. The Model `SLH'-series horn appliances work in either 12V or 24VDC, whereas the Series `SLSW' and `SLHSW' strobe and horn-strobe devices are specifically for 24V operation.



Model SLHR-N
Horn

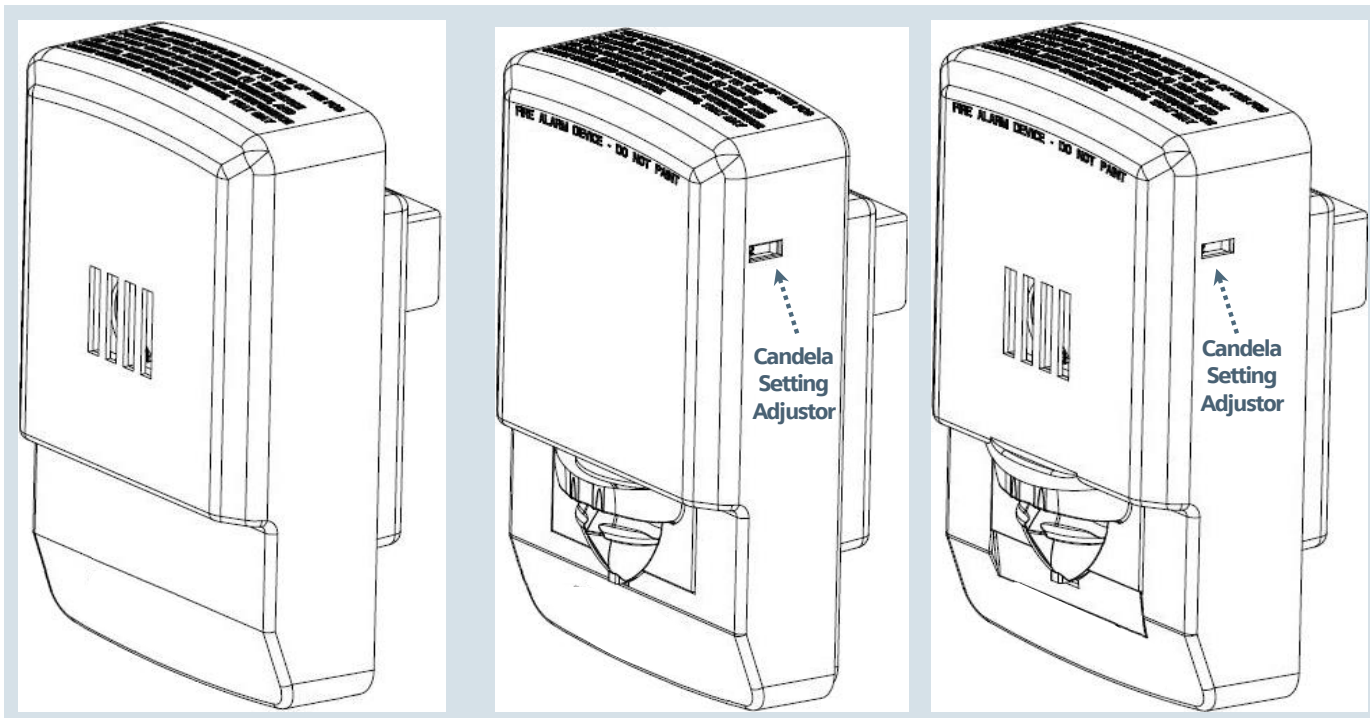


Model SLSWW-ALA
Strobe



Model SLHSWR-F
Horn-Strobe





**`SLHW' Series
Horn**

TRIMPLATE DIMENSIONS:
5.25 inches (13.34 cm.) {H};
4.58 inches (11.6 cm.) {W};
0.32 inches (0.81 cm.) {D}

**`SLSW' Series
Strobe**

MOUNTING OPTIONS INCLUDE:
- Model SLSBBR or SLSBBW to any single-gang backbox
- 4" (10.2 cm.) square backboxes with the Model SLESB-KIT-R or SLESB-KIT-W adapter kit

**`SLHSW' Series
Horn-Strobe**

Specifications

In terms of composition and functionality, Models `SLHW'-series, `SLSW'-series, and `SLHSW'-series provide added value to the installer for the types of applications for operation:

- Compact | sleek | low-profile design
- Comprehensive feature list
- Convenient mounting options
- Easy-to-adjust selection-slider switch for Candela settings
 - No tools required for setting changes
 - Multi-level settings: 15cd | 30cd | 75cd | 110cd
- High and Low audible outputs
- Reduced current draw, via cutting-edge LED technology

The LED portions of the Siemens `SL'-series of strobes and horn-strobes meet the 20 millisecond light-pulse-duration requirements of the 2016 edition of NFPA 72. By meeting this latest requirement, existing Xenon as well as the new LED-technology devices can now be in the same field-of-view.

The horn, strobe and horn-strobes in this Siemens `SL'-series of notification appliances have received UL / ULC Listed status by attaining compatible testing standards with all of the Siemens fire-alarm control panels (FACPs) and accessories that have been determined to be aligned with existing Siemens strobe-based appliances.

This would include the following existing model-types: `CH'|`HS'|`MTH' |`S-HQ'|`SA'|`SE'|`SEF'|`SET' |`ST' |`STH' |`ZR' and `ZH' Series notification appliances. The regulatory listing also includes the capability for installing the Siemens `SL'-series LED-based strobes in the same notification zone and field-of-view with any existing Siemens Notification Appliance Xenon-based strobes.

All types of these horns, strobes and horn-strobes are UL Listed (for indoor use under Standard 1971 and 464), as well as ULC-S525|ULC-S526 Listed. The Siemens `SL'-series sounder-strobes also have ADA | RoHS and ICES approval.

Technical Data

Wall-Mount | Horn-Strobes | Output Current Draw

Current Ratings (HIGH dB in Amps) 16.0 – 33.0VDC					
MODEL	Setting	15cd	30cd	75cd	110cd
'SLHSW'	Code 3	0.034	0.046	0.105	0.214
SERIES: [^]	Continuous	0.042	0.052	0.110	0.217

Wall-Mount | Horn-Strobes | Output Current Draw

Current Ratings (LOW dB in Amps) 16.0 – 33.0VDC					
MODEL	Setting	15cd	30cd	75cd	110cd
'SLHSW'	Code 3	0.032	0.042	0.102	0.213
SERIES: [^]	Continuous	0.036	0.044	0.104	0.216

Wall-Mount | Strobe-Only | Output Current Draw

Current Ratings (Code 3 in Amps) RMS Current @ 24VDC			
MODEL	Regulated Voltage Range	High	Low
'SLHW'	8.0 – 17.50 VDC	0.024	0.018
SERIES: [^]	16.0 – 33.0 VDC	0.030	0.022

Wall-Mount | Strobe-Only | Output Current Draw

Current Ratings (Code 3 in Amps) RMS Current @ 24VDC					
MODEL	Regulated Voltage Range	15cd	30cd	75cd	110cd
'SLSW'	16.0 – 33.0 VDC	0.030	0.040	0.102	0.201
SERIES: [^]					

Wall Mount | Horn | Output Ratings (UL)

UL Sound Output Ratings (dBA) Reverberant per UL464 @ 10 feet							
MODEL	Volume	SLHW @ 12VDC			SLHW -and- SLHSW @ 24VDC		
		8.0V	12.0V	17.5V	16.0V	24.0V	33.0V
'SLHW' – and – 'SLHSW' SERIES: [^]	Code 3 High dBA	75	80	83	76	79	81
	Code 3 Low dBA	73	77	80	75	77	77
	Continuous High dBA	80	84	87	80	83	86
	Continuous Low dBA	78	79	84	78	81	81

Wall Mount | Horn | Output Ratings (ULC)

ULC Sound Output Ratings (dBA) Anechoic per ULCS525-16 @ 3.05 meters							
MODEL	Volume	SLHW @ 12VDC			SLHW -and- SLHSW @ 24VDC		
		8.0V	12.0V	17.5V	16.0V	24.0V	33.0V
'SLHW' – and – 'SLHSW' SERIES: [^]	Code 3 High dBA	85	89	92	91	95	96
	Code 3 Low dBA	79	84	87	86	90	91
	Continuous High dBA	85	89	92	91	94	97
	Continuous Low dBA	79	84	87	86	90	92

[^]RMS current ratings are per UL maximum RMS method.
 UL max current rating is the maximum RMS current within the listed voltage range (16 - 33V for 24V units)
[^] For audible appliances, the max current is usually at the maximum listed voltage (16 - 33V for 24V units)
[^] For unfiltered FWR ratings, see installation instructions

GENERAL NOTES:

1. Strobes are designed to flash at 1-flash-per-second minimum over their " Regulated Voltage Range."
2. NFPA-72 specifies a flash rate of 1-to-2 flashes-per-second, and guidelines for the Americans with Disabilities Act (ADA) specify a flash rate of 1-to-3 flashes-per-second.
3. All Candela ratings represent minimum effective Strobe intensity based on UL 1971.

Technical Data

General Properties

MODEL 'SL'-series	
OPERATING TEMPERATURE:	<ul style="list-style-type: none"> 32°F (0°C) to 122°F (50°C) for indoor-applications' use only
RELATIVE HUMIDITY:	93%, maximum
OPERATING VOLTAGE RANGES:	<ul style="list-style-type: none"> 12 VDC / VFWR → 8 - 17.5 VDC / VFWR; 24 VDC / VFWR → 16 - 33 VDC/VFWR (12 VDC for Model SLHW only)
STROBE OUTPUT RATING:	<ul style="list-style-type: none"> UL 1971, ULC-S526 Field-selectable 15cd 30cd 75cd 110cd Candela outputs
STROBE FLASH RATE:	Strobes are designed to flash at one-flash-per-second
STROBE SYNCHRONIZATION:	<ul style="list-style-type: none"> all Siemens addressable panels Siemens PAD-series NAC extenders Siemens dual-sync (DSC) modules, which provide the unique Siemens proprietary synchronization protocol
TEMPORAL PATTERN:	<ul style="list-style-type: none"> Continuous Code 3 (1/2 second on, 1/2 second off; then 1/2 second on, 1/2 second off; followed by 1/2 second on, 1-1/2 second off and repeat) <p>NOTES: The Code 3 pattern is specified by ANSI and NFPA 72 for Standard Emergency Evacuation Signaling.</p>

Physical Properties

MODEL 'SL'-series									
MATERIAL:	<ul style="list-style-type: none"> White-or-red textured, ultraviolet (UV) stabilized, colored impregnated engineered plastic Exceeds 94V-0 UL flammability rating 								
WEIGHT:	0.35 Lbs. (0.16 Kg.)								
LENS TYPE:	LED strobe situated in a rugged Lexan lens								
DIMENSIONS:	<table border="1"> <thead> <tr> <th>Actual Appliance:</th> <th>Single-Gang Trim Plate:</th> </tr> </thead> <tbody> <tr> <td>4.53" (11.5 cm.) { H };</td> <td>5.25" (13.3 cm.) { H };</td> </tr> <tr> <td>2.76" (7.0 cm.) { W };</td> <td>4.58" (11.6 cm.) { W };</td> </tr> <tr> <td>1.27" (3.23 cm.) { D }</td> <td>0.32" (0.81 cm.) { D }</td> </tr> </tbody> </table>	Actual Appliance:	Single-Gang Trim Plate:	4.53" (11.5 cm.) { H };	5.25" (13.3 cm.) { H };	2.76" (7.0 cm.) { W };	4.58" (11.6 cm.) { W };	1.27" (3.23 cm.) { D }	0.32" (0.81 cm.) { D }
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2.76" (7.0 cm.) { W };	4.58" (11.6 cm.) { W };								
1.27" (3.23 cm.) { D }	0.32" (0.81 cm.) { D }								

Mounting and Wiring Properties

MODEL 'SL'-series	
INDOOR MOUNTING:	<ul style="list-style-type: none"> Wall-mount applications Single-gang (Model SLSBB) backboxes or to 4" (10.2 cm.) square with Model SLESB-KIT-R or SLESB-KIT-W adapter kit
WIRING TYPE:	#12 – #18, American Wire Gauge (AWG)

Details for Ordering

MODEL	PART NUMBER	APPLIANCE TYPE	UL	ULC	MOUNTING TYPE	STROBE TYPE	FACEPLATE COLOR	FACEPLATE LETTERING
SLHWR-N	S54329-F23-A1	Horn	✓	✓	WALL	- None -	RED	- None -
SLHWW-N	S54329-F23-A2		✓	✓	WALL	Clear	WHITE	- None -
SLHSWR-F	S54329-F22-A1	Horn-Strobe	✓	—	WALL	Clear	RED	FIRE
SLHSWW-F	S54329-F22-A2		✓	—	WALL	Clear	WHITE	FIRE
SLHSWR-FB	S54329-F24-A1	Horn-Strobe	—	✓	WALL	Clear	RED	- Pictogram -
SLHSWW-FB	S54329-F24-A2		—	✓	WALL	Clear	WHITE	- Pictogram -
SLHSWR-A	S54329-F31-A2	Horn-Strobe	✓	✓	WALL	Clear	RED	AGENT
SLHSWW-A	S54329-F34-A2		✓	✓	WALL	Clear	WHITE	AGENT
SLHSWR-N	S54329-F34-A1	Horn-Strobe	✓	—	WALL	Clear	RED	- None -
SLHSWW-N	S54329-F37-A1		✓	—	WALL	Clear	WHITE	- None -
SLHSWW-AL	S54329-F35-A1	Horn-Strobe	✓	✓	WALL	Clear	WHITE	ALERT
SLHSWR-AL	S54329-F32-A1		✓	✓	WALL	Clear	RED	ALERT
SLSWR-F	S54329-F25-A1	Strobe	✓	—	WALL	Clear	RED	FIRE
SLSWW-F	S54329-F25-A2		✓	—	WALL	Clear	WHITE	FIRE
SLSWW-FB	S54329-F26-A1	Strobe	—	✓	WALL	Clear	WHITE	- Pictogram -
SLSWR-FB	S54329-F26-A2		—	✓	WALL	Clear	RED	- Pictogram -
SLSWR-A	S54329-F27-A1	Strobe	✓	—	WALL	Clear	RED	AGENT
SLSWW-AL	S54329-F27-A2	Strobe	✓	✓	WALL	Clear	WHITE	ALERT
SLSWR-AL	S54329-F28-A1		✓	✓	WALL	Clear	RED	ALERT
SLSWW-ALA	S54329-F28-A2	Strobe	✓	✓	WALL	Amber	WHITE	ALERT
SLSWR-ALA	S54329-F29-A1		✓	✓	WALL	Amber	RED	ALERT
SLSWR-NA	S54329-F29-A2	Strobe	✓	✓	WALL	Amber	RED	- None -
SLSWW-NA	S54329-F30-A1		✓	✓	WALL	Amber	WHITE	- None -
SLSWW-N	S54329-F30-A2	Strobe	✓	—	WALL	Clear	WHITE	- None -
SLSWR-N	S54329-F31-A1		✓	—	WALL	Clear	RED	- None -
SLSBBR	S54329-F21-A1	Backbox	✓	✓	WALL	- None -	RED	- None -
SLSBBW	S54329-F21-A2		✓	✓	WALL	- None -	WHITE	- None -
SLESB-KIT-R	S54329-F64-A1	Optional Single-Gang Trim Plate	✓	✓	WALL	- None -	RED	- None -
SLESB-KIT-W	S54329-F64-A2		✓	✓	WALL	- None -	WHITE	- None -

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Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

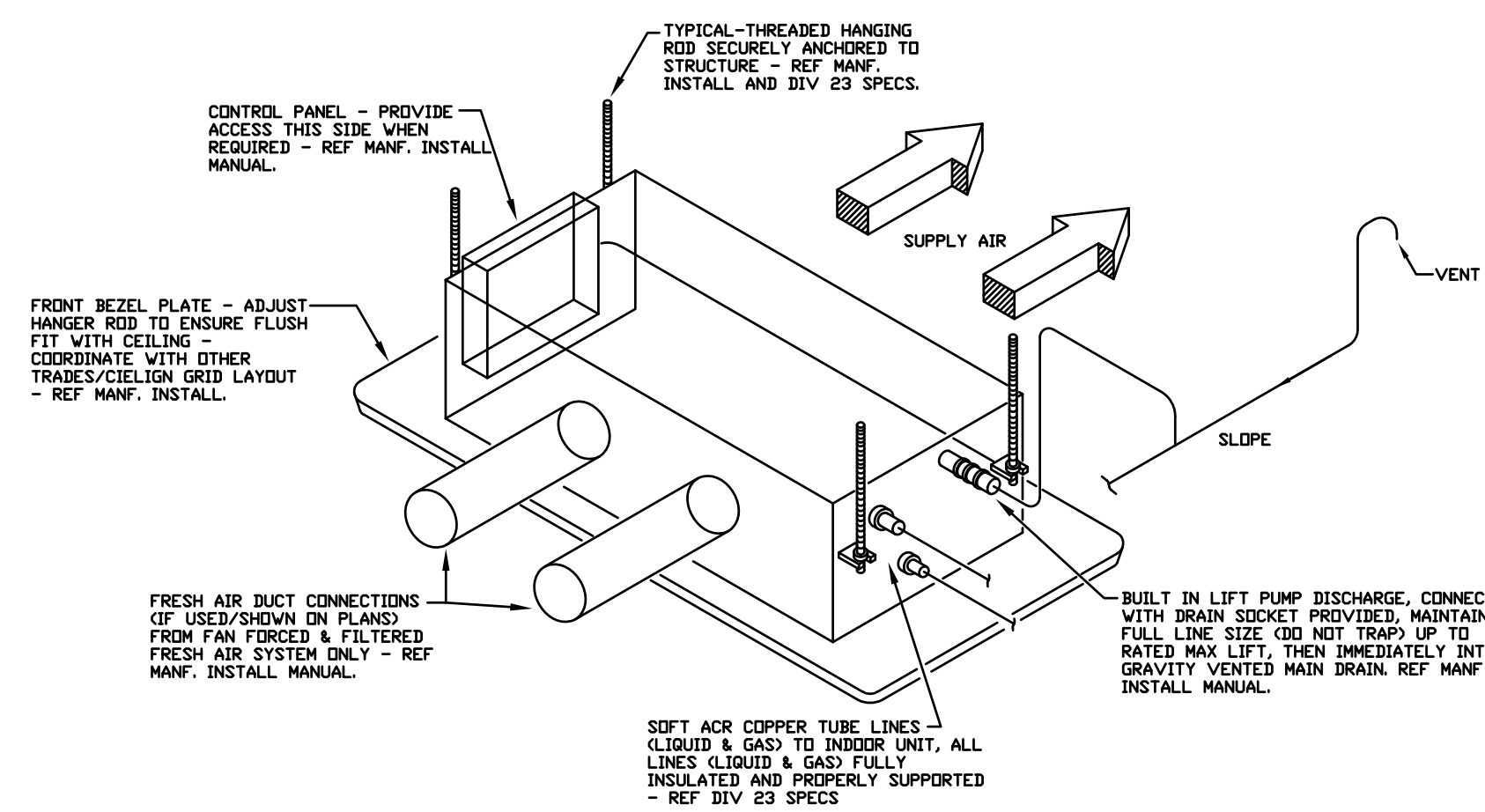
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October - 2019
(Rev. 3)

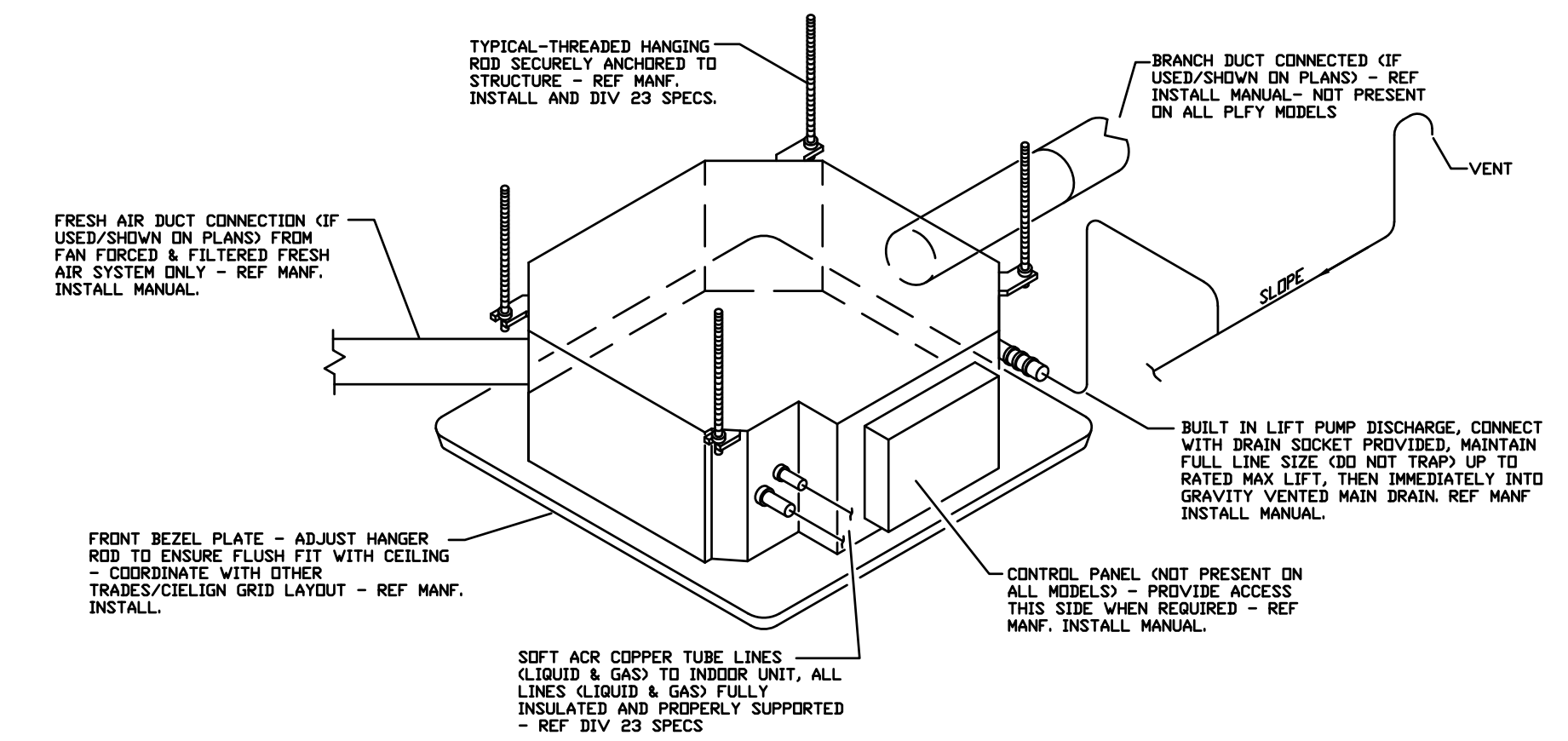
REFRIGERANT PIPE SIZING TABLE			
TAG	LIQUID LINE SIZE (in)	SUCTION LINE SIZE (in)	REMARKS
MODULE 1	1-1/8"	1-3/8"	
MODULE 2	1-1/8"	1-3/8"	
CU-1	1-1/8"	1-3/8"	
CU-AHU-1	3/4"	1-1/8"	
CU-AHU-2	3/4"	7/8"	
CUF-1	5/8"	3/4"	
CUF-2	5/8"	5/8"	
CUF-3	5/8"	3/4"	
CUF-4	5/8"	5/8"	1, 2

REMARKS:

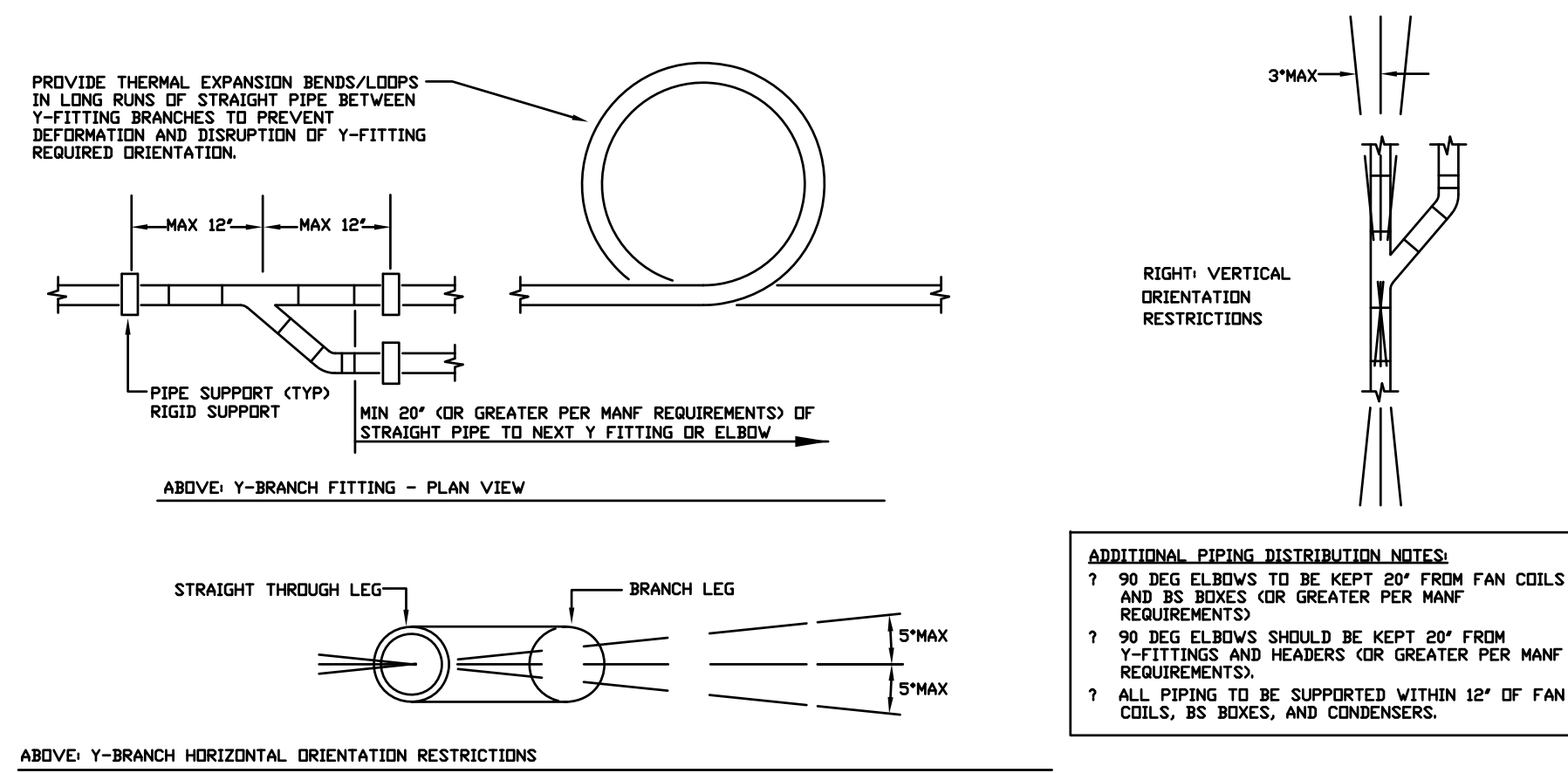
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF REFRIGERANT PIPE SIZING, WIRING, ROUTING AND MATERIAL REQUIREMENTS WITH THE MANUFACTURE PRIOR TO THE ORDERING, INSTALLATION, ETC. OF EQUIPMENT. EQUIPMENT MANUFACTURE WILL DETERMINE IF ADDITIONAL REFRIGERANT IS REQUIRED BASED ON THE SIZE AND LENGTH OF PIPING.
- REFER TO SPECIFICATION SECTION FOR REFRIGERANT PIPING REQUIREMENTS.



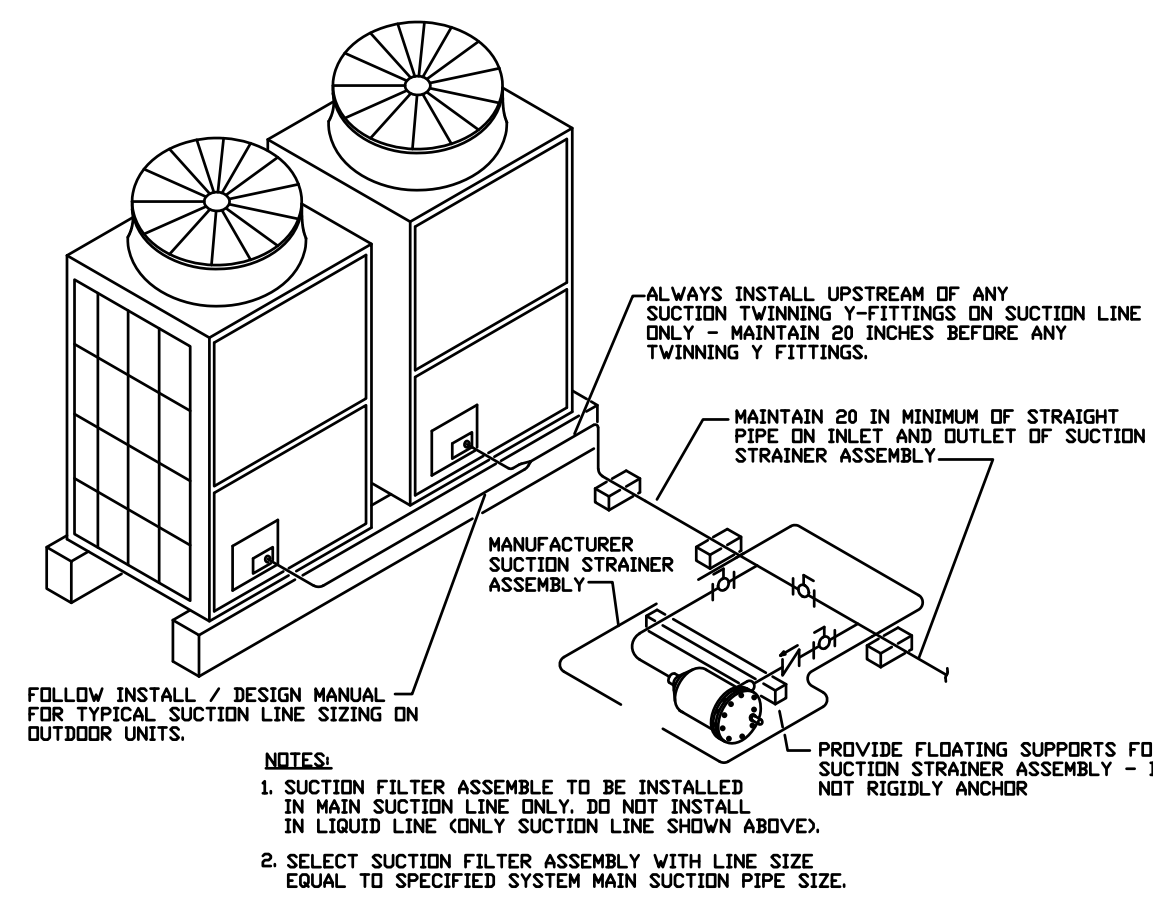
VRF CASSETTE (ONE-WAY) INDOOR UNIT DETAIL
NOT TO SCALE



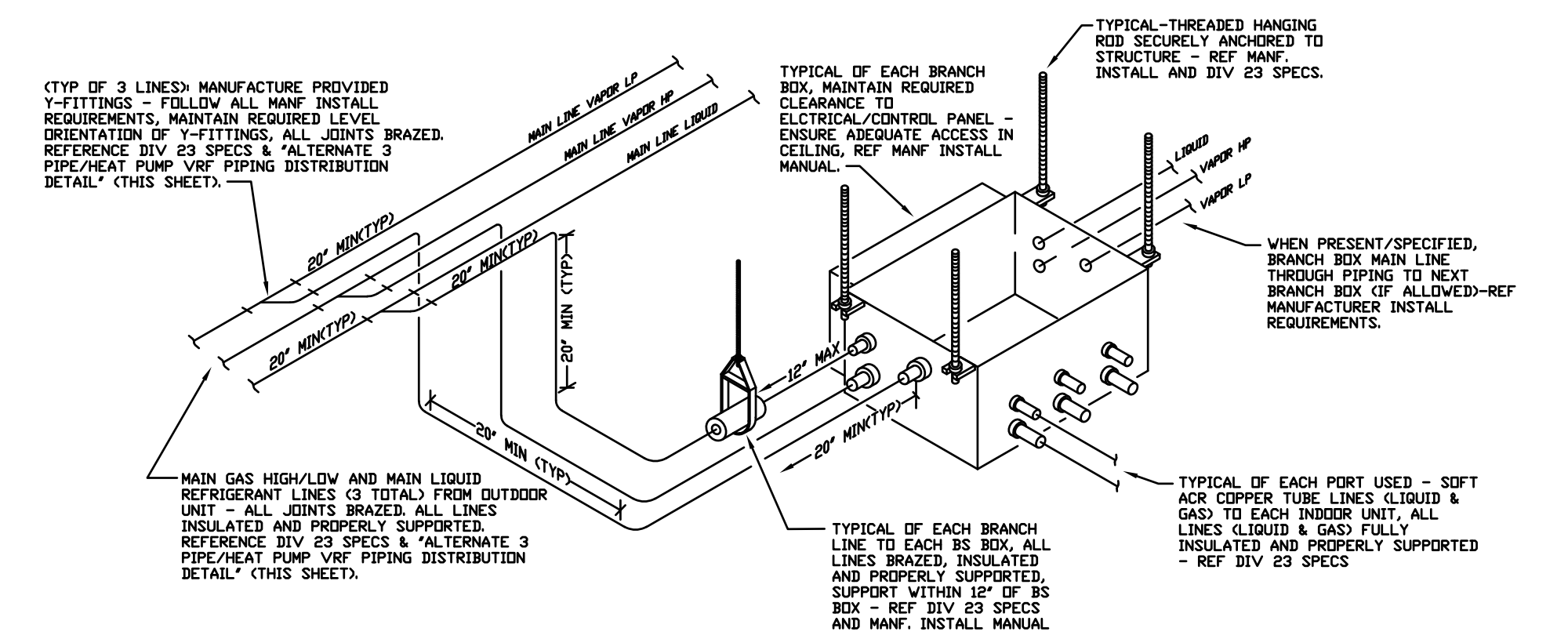
VRF CASSETTE INDOOR UNIT DETAIL
NOT TO SCALE



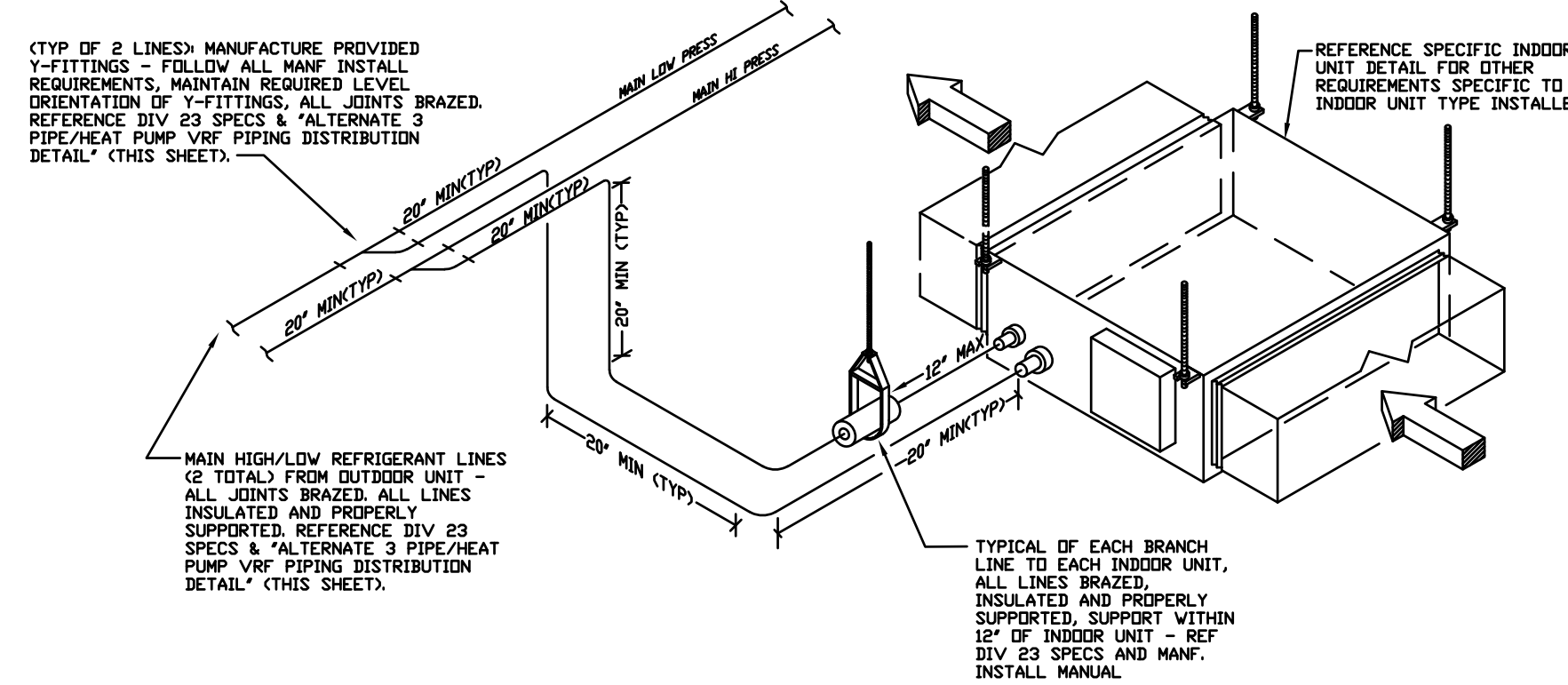
ALTERNATE 3-PIPE/HEAT PUMP VRF PIPING DISTRIBUTION REQUIREMENTS
NOT TO SCALE



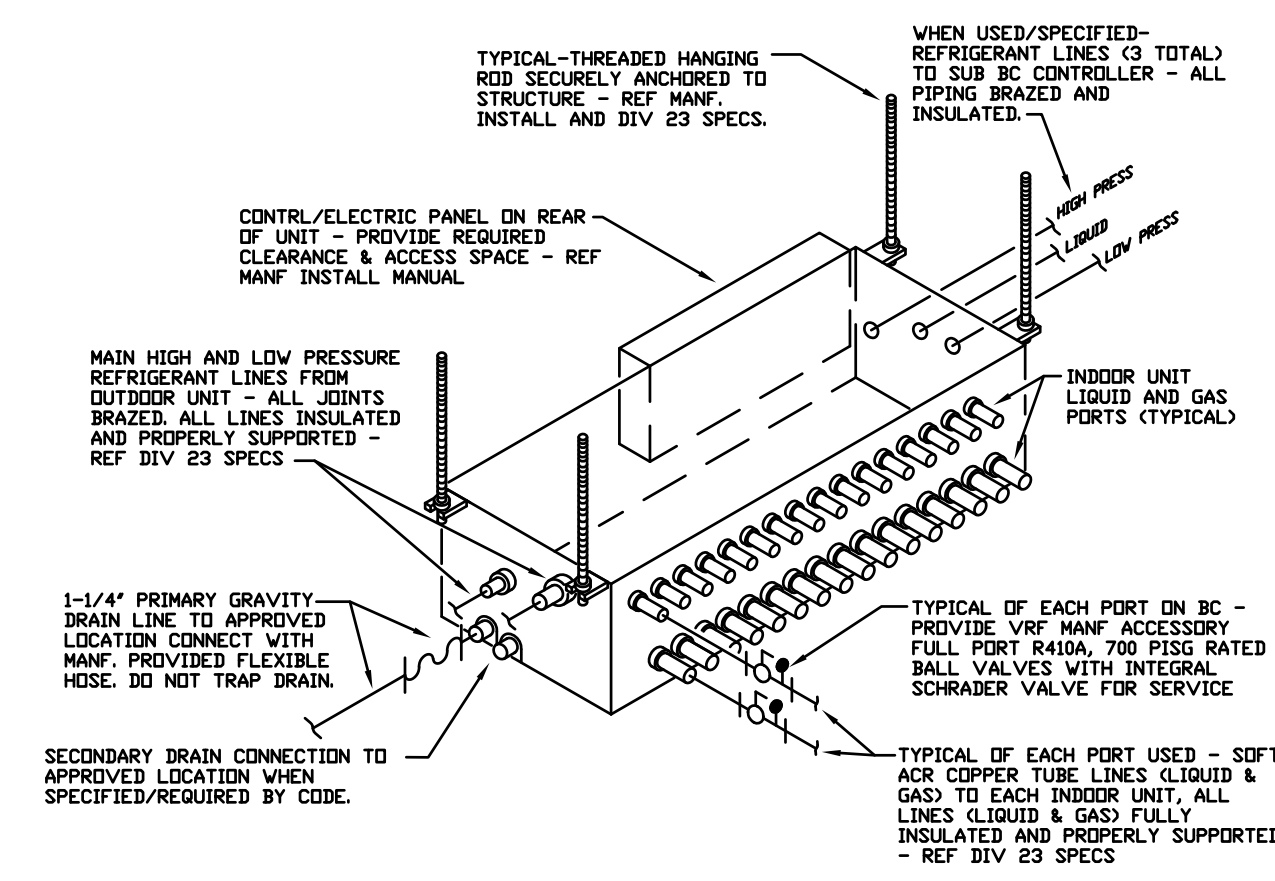
OUTDOOR VRF UNIT (TYP.)
NOT TO SCALE



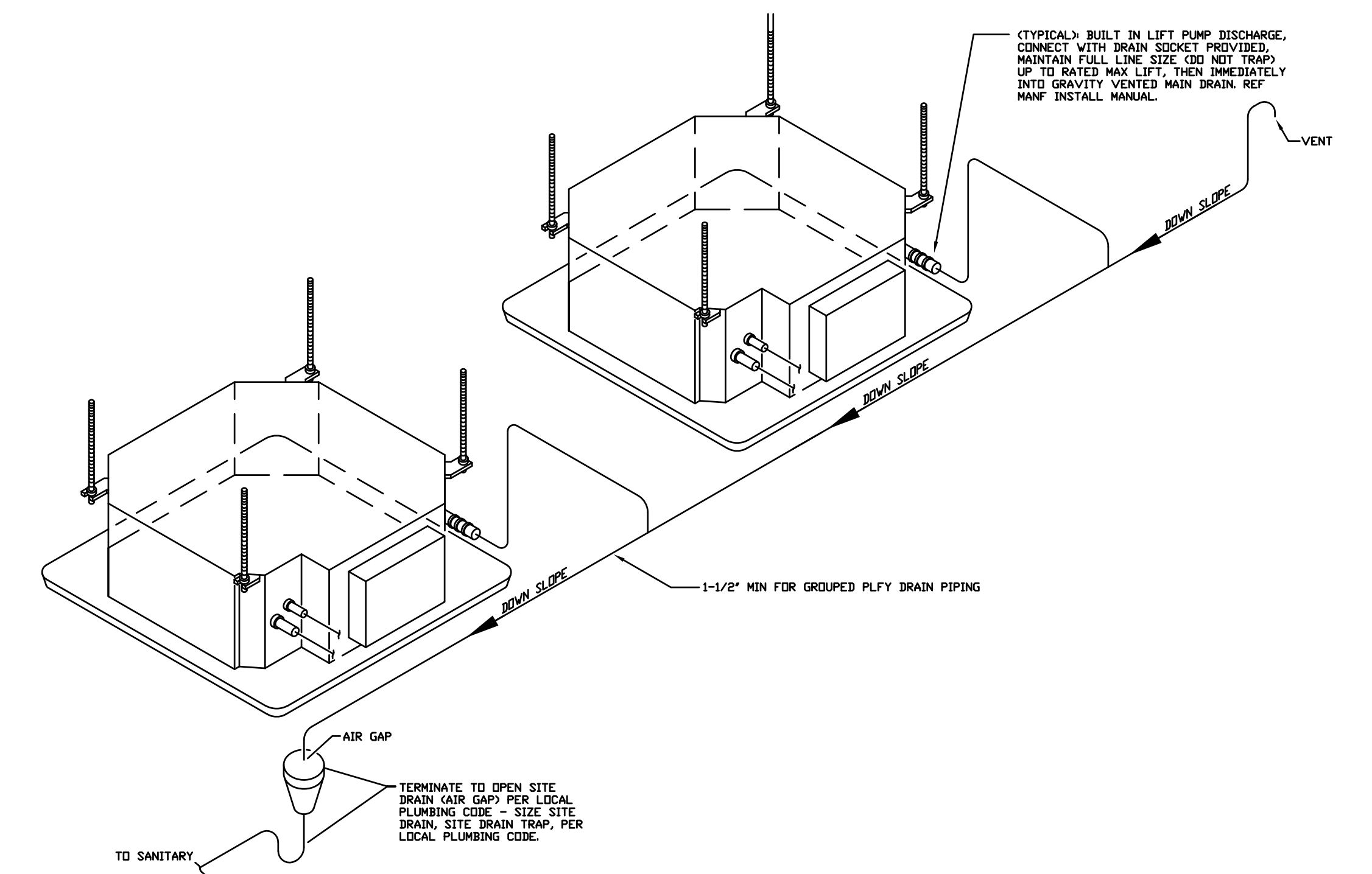
ALTERNATE 3-PIPE VRF BRANCH BOX DETAIL
NOT TO SCALE



ALTERNATE HEAT PUMP BRANCH CONNECTION DETAIL TO INDOOR UNIT AS REQUIRED.
NOT TO SCALE

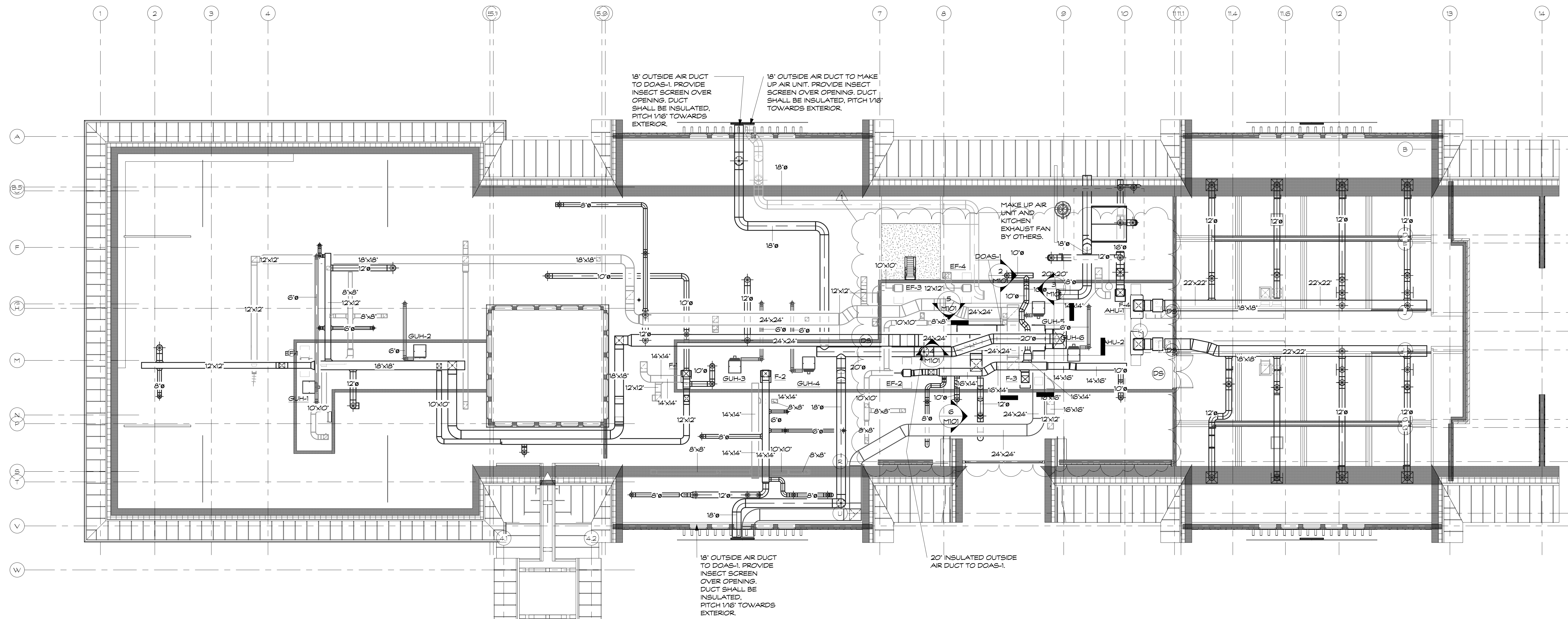


BRANCH CIRCUIT CONTROLLER DETAIL
NOT TO SCALE

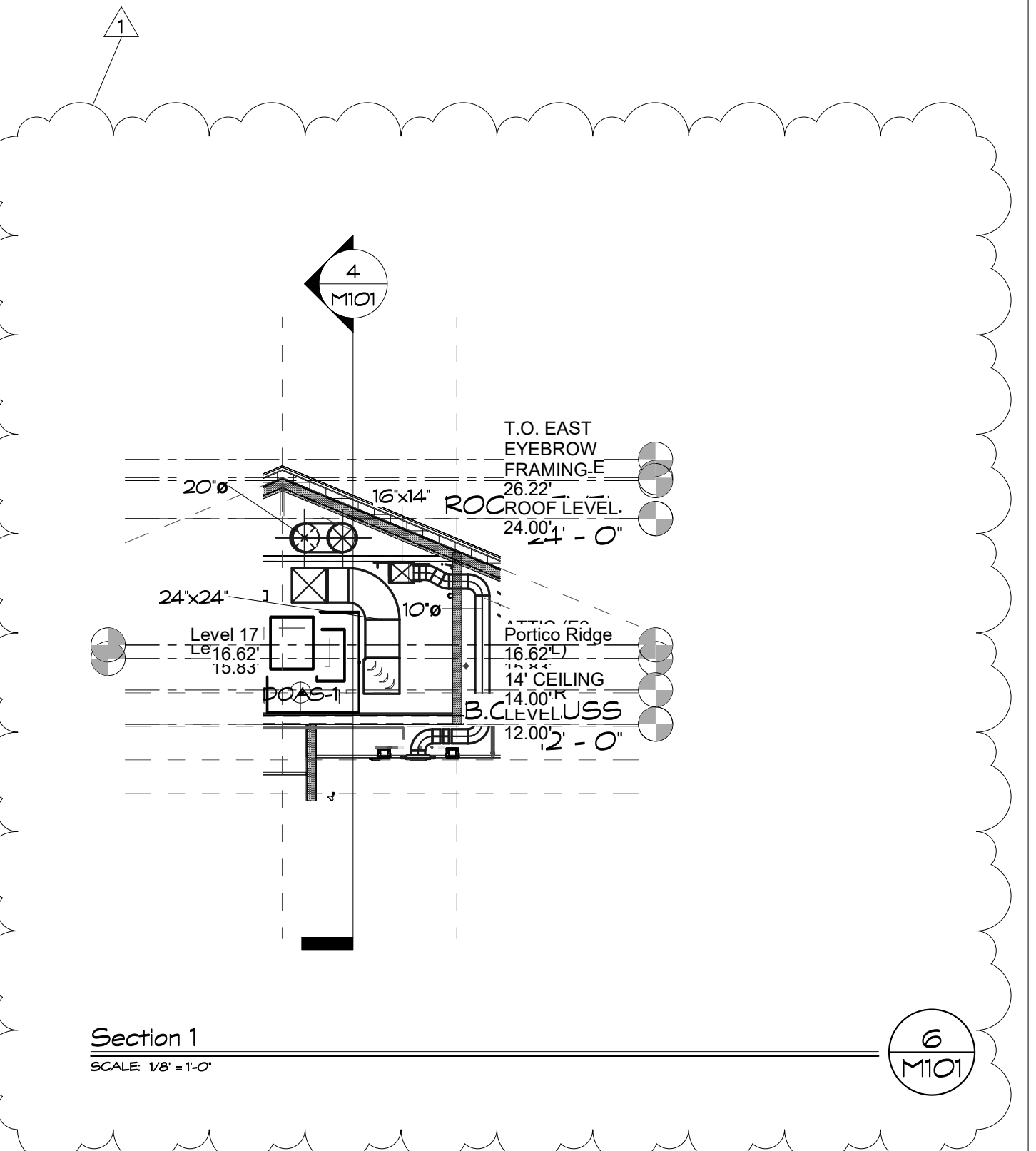
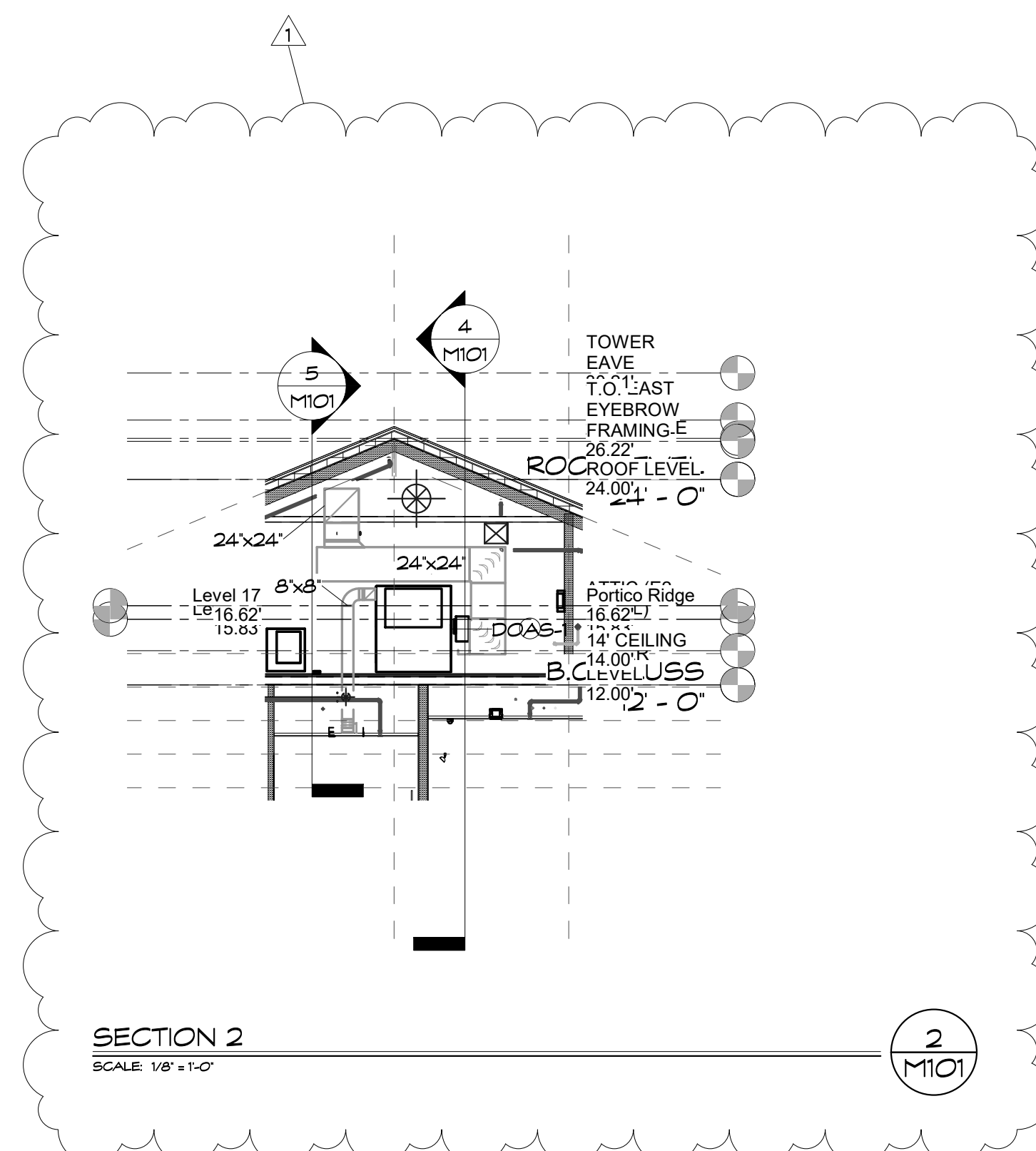
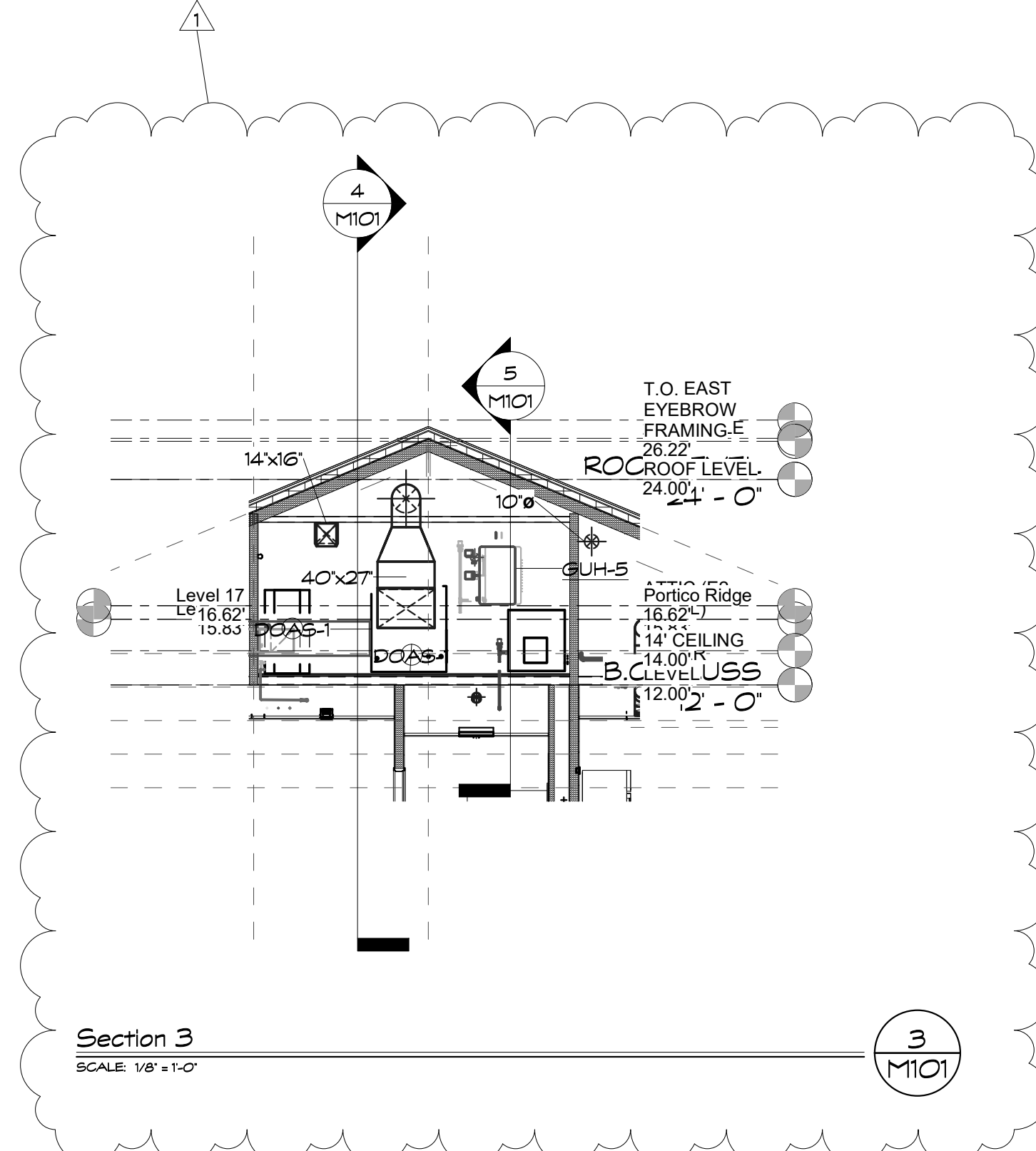
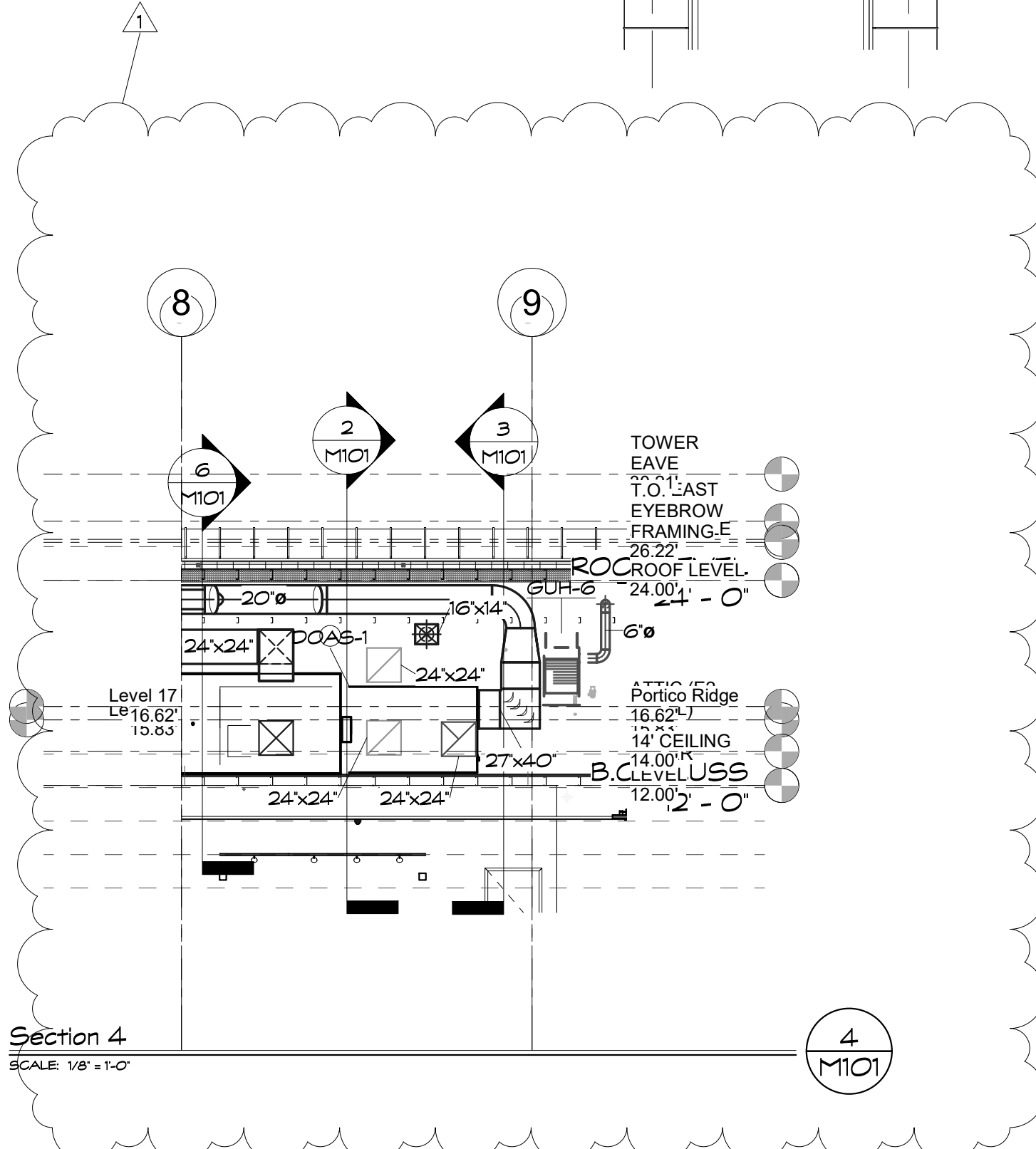
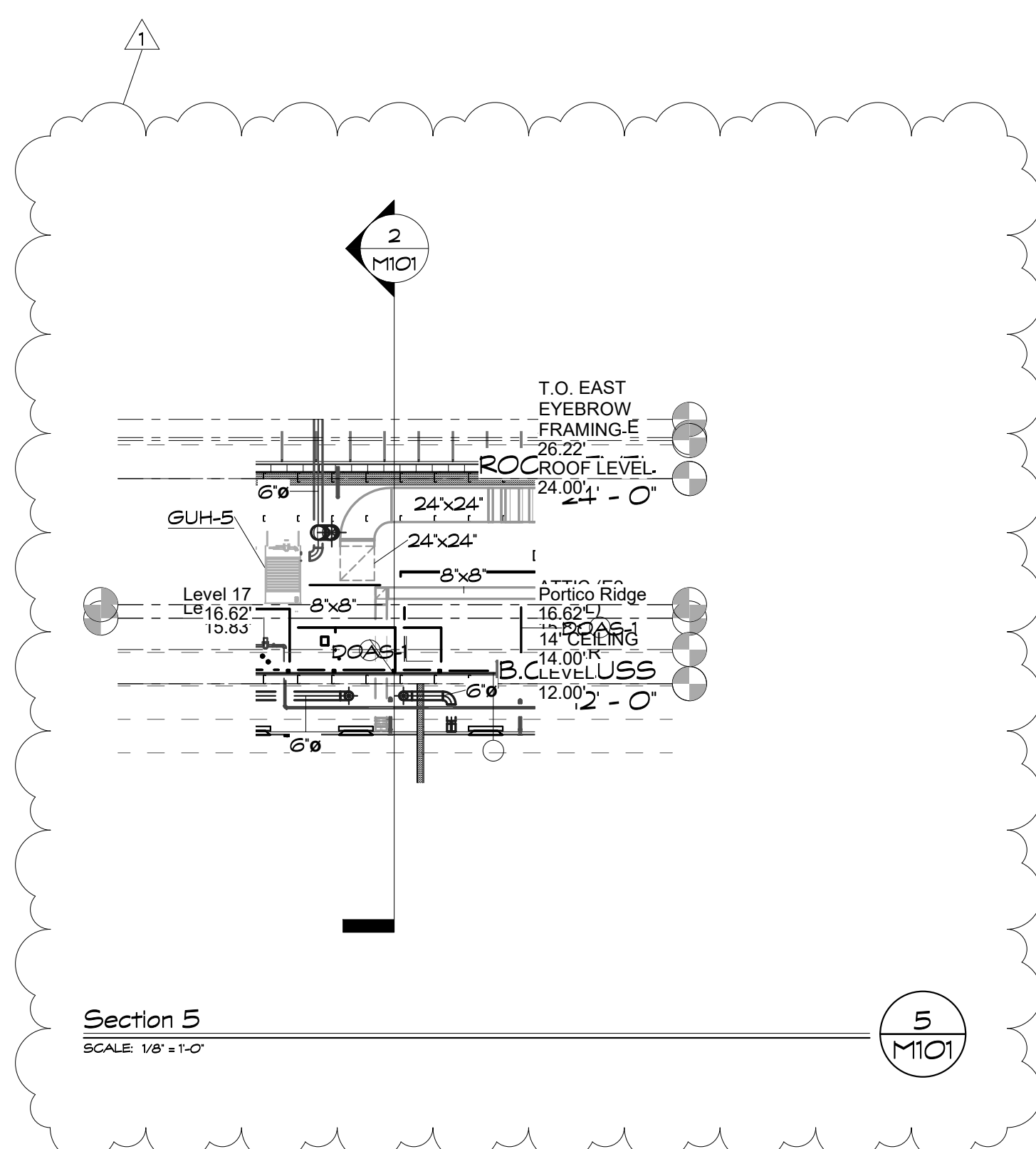


BUILT IN CONDENSATE LIFT GROUPED PIPING DETAIL
NOT TO SCALE

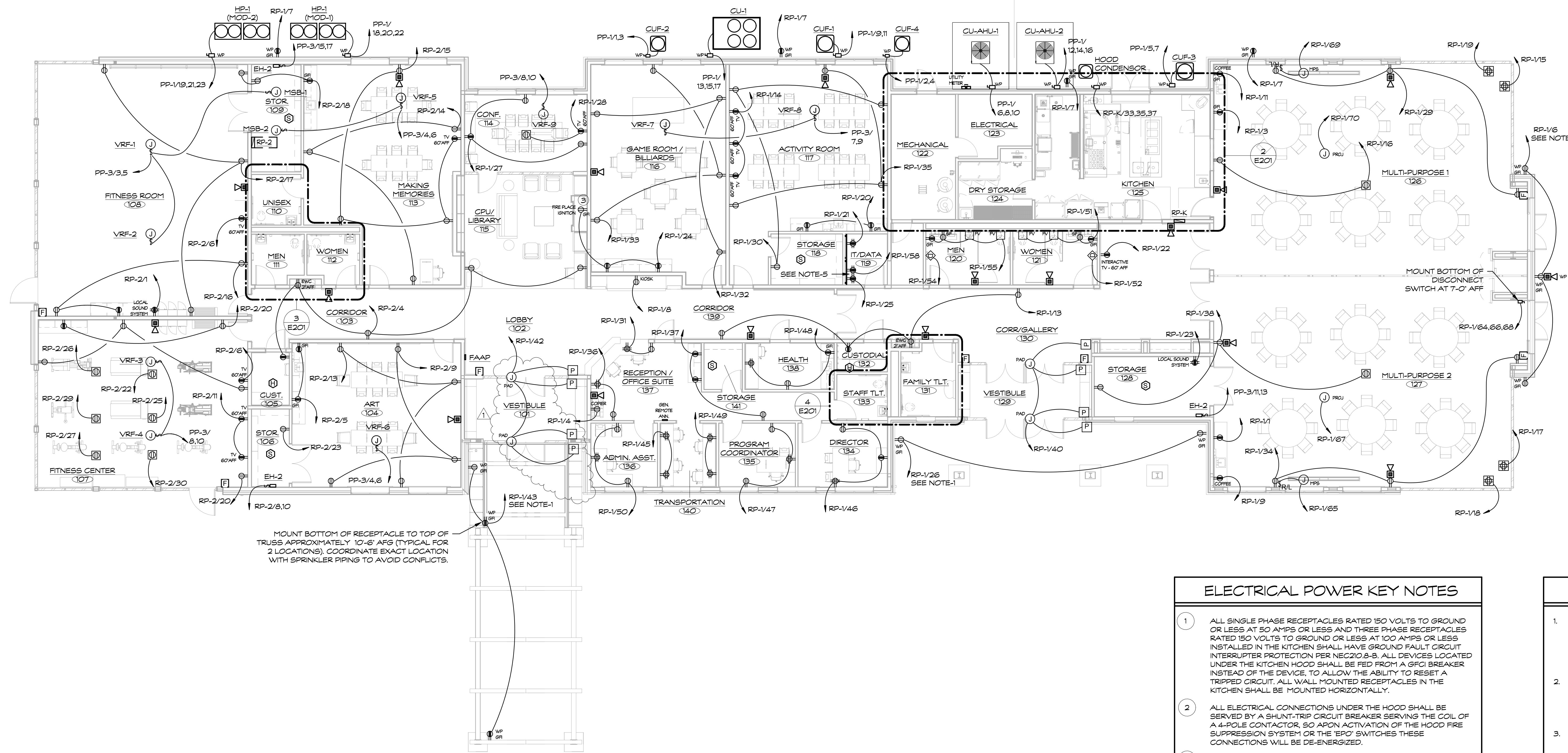




1 ATTIC LEVEL DUCT PLAN
1/8" = 1'-0"



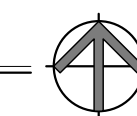
Revision:	Description:	Date:	Revised By:
Δ	ISSUED FOR BID	09/09/2022	
	ADDENDUM 2	10/06/2022	



MOUNT BOTTOM OF RECEPTACLE TO TOP OF TRUSS APPROXIMATELY 10'-6" AFS (TYPICAL FOR 2 LOCATIONS). COORDINATE EXACT LOCATION WITH SPRINKLER PIPING TO AVOID CONFLICTS.

1 MAIN LEVEL POWER PLAN

1/8" = 1'-0"

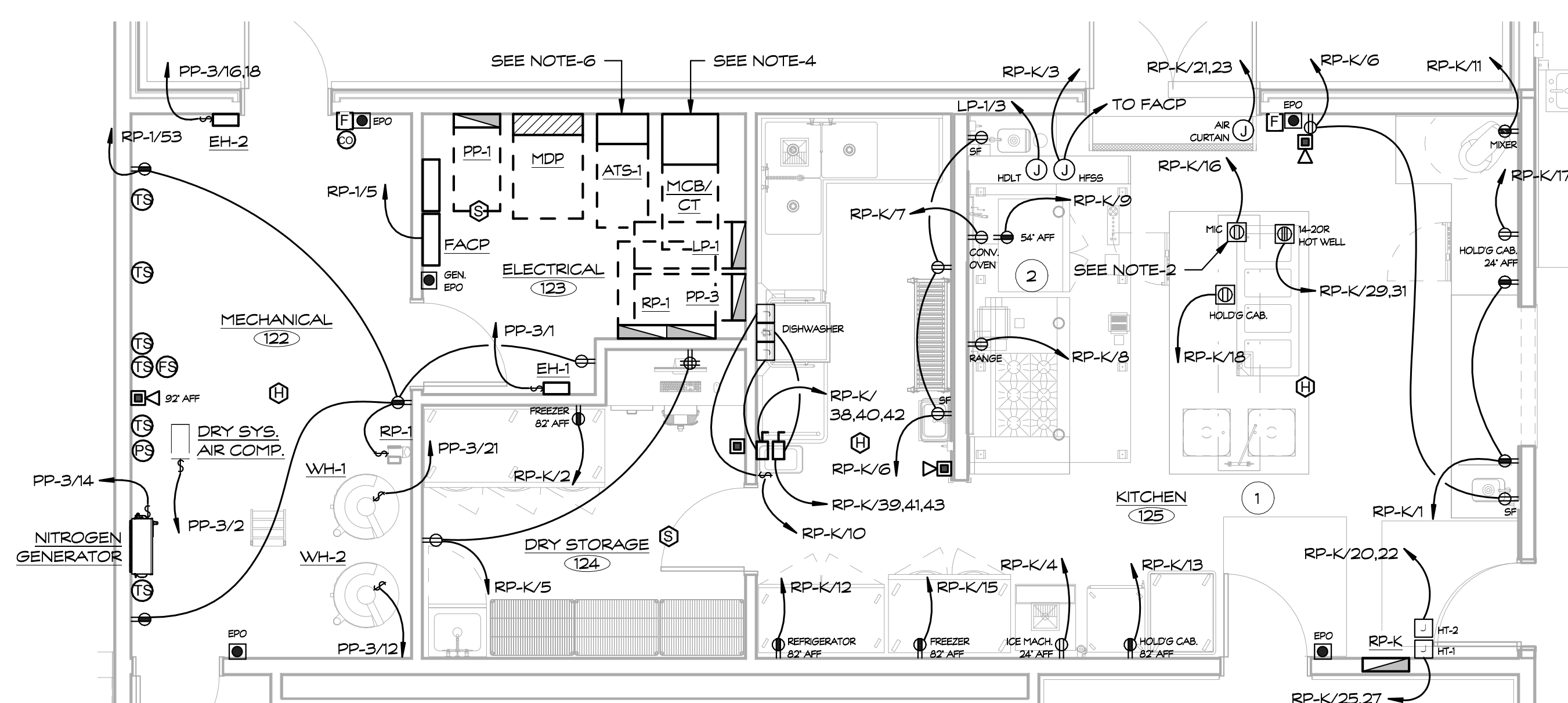


ELECTRICAL POWER KEY NOTES

- 1 ALL SINGLE PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS AT 50 AMPS OR LESS AND THREE PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS AT 100 AMPS OR LESS INSTALLED IN THE KITCHEN SHALL HAVE GROUND FAULT CIRCUIT INTERRUPTER PROTECTION PER NEC 210.8-B. ALL DEVICES LOCATED UNDER THE KITCHEN HOOD SHALL BE FED FROM A GFCI BREAKER INSTEAD OF THE DEVICE TO ALLOW THE ABILITY TO RESET A TRIPPED CIRCUIT. ALL WALL MOUNTED RECEPTACLES IN THE KITCHEN SHALL BE MOUNTED HORIZONTALLY.
- 2 ALL ELECTRICAL CONNECTIONS UNDER THE HOOD SHALL BE SERVED BY A SHUNT-TRIP CIRCUIT BREAKER SERVING THE COIL OF A 4-POLE CONTACTOR, SO UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM OR THE 'EPO' SWITCHES THESE CONNECTIONS WILL BE DE-ENERGIZED.
- 3 CONTRACTOR SHALL CONFIRM POWER REQUIREMENTS WITH APPROVED FIRE PLACE SUBMITTAL. IF A POWER VENTILATOR (EXHAUST) FAN IS REQUIRED, POWER BOTH THE IGNITION RECEPTACLE AND THE FAN FROM A DEDICATED 20 AMP - 1 POLE CIRCUIT BREAKER IN PANEL 'RP-1'.

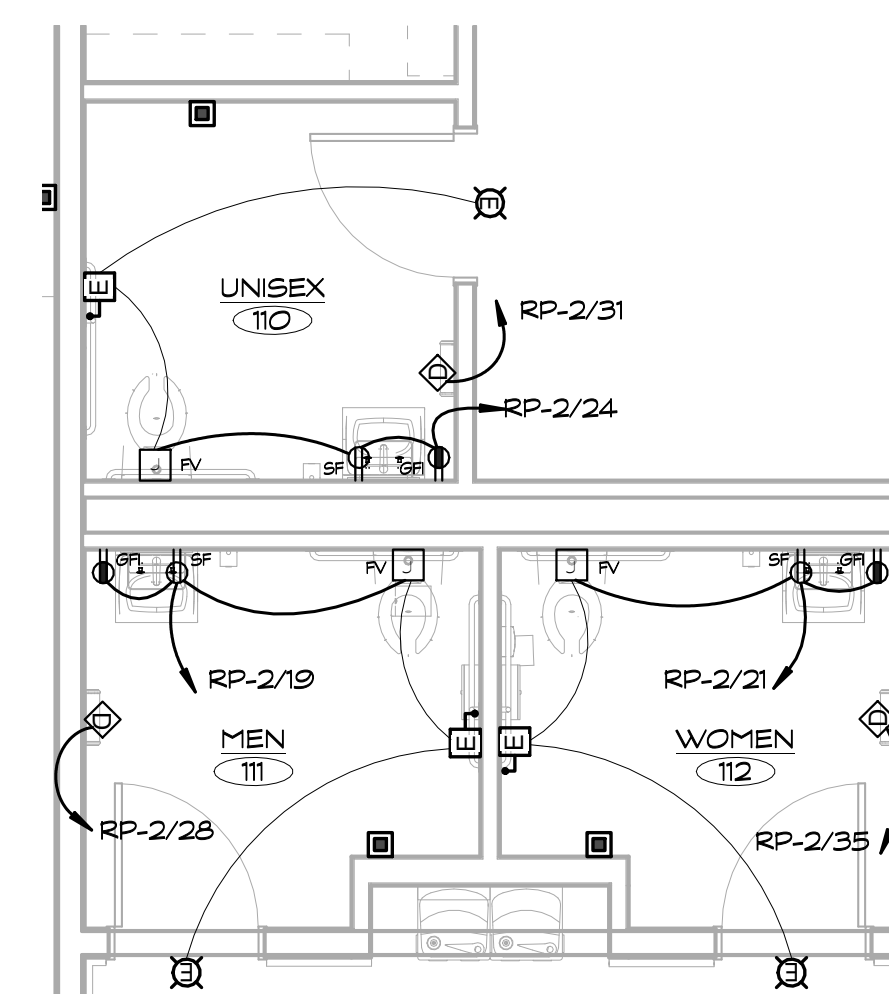
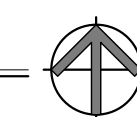
GENERAL NOTES

1. CONTRACTOR SHALL FURNISH AND INSTALL A 6-POLE CONTACTOR AND 7 DAY ASTRONOMICAL TIME CLOCK TO CONTROL EXTERIOR RECEPTACLES AT FOUR LOCATIONS (MAIN ENTRY POTD, SOUTH-WEST ENTRY, COVERED PORCH AREA & PATIO). RECEPTACLES WILL ONLY BE OPERATIONAL DURING SET HOURS CONTROLLED BY THE CLOCK AND CONTACTOR.
2. IN ADDITION TO THE FLOOR RECEPTACLE SHOWN, CONTRACTOR SHALL FURNISH AND INSTALL A MATCHING RECEPTACLE TO THE UNDERSIDE OF THE SHELF WHERE THE MICROWAVE IS TO BE INSTALLED. THIS RECEPTACLE SHALL HAVE A SIX FOOT CORD & PLUG TO PLUG INTO THE FLOOR RECEPTACLE.
3. ALL RECEPTACLES IN THE KITCHEN THAT REQUIRE GFCI PROTECTION THAT SERVE EQUIPMENT THAT CAN NOT BE EASILY MOVED TO RESET THE TRIP SHALL BE SERVED BY A GFCI PROTECTED BREAKER NOT A RECEPTACLE.
4. CONTRACTOR SHALL FURNISH AND INSTALL A SIGN MOUNTED ON OR ADJACENT TO THE SERVICE ENTRANCE MAIN SWITCH, INDICATING THE GENERATOR AND ITS LOCATION PER NEC 700.7.
5. CONTRACTOR SHALL COORDINATE LOCATION OF OUTLETS WITH NETWORK CABINET. CONFIRM WITH I.T. CONTRACTOR IF THE PREFERRED LOCATION IS WITHIN THE CABINET OR BELOW IT AND INSTALL THEM IN THAT LOCATION.
6. CONTRACTOR SHALL LEAVE SPACE BETWEEN 'MGB' AND 'MDP' IF GENERATOR ADD ALTERNATE IS NOT APPROVED, ALLOWING FOR FUTURE ATS TO BE INSTALLED IN THIS LOCATION.



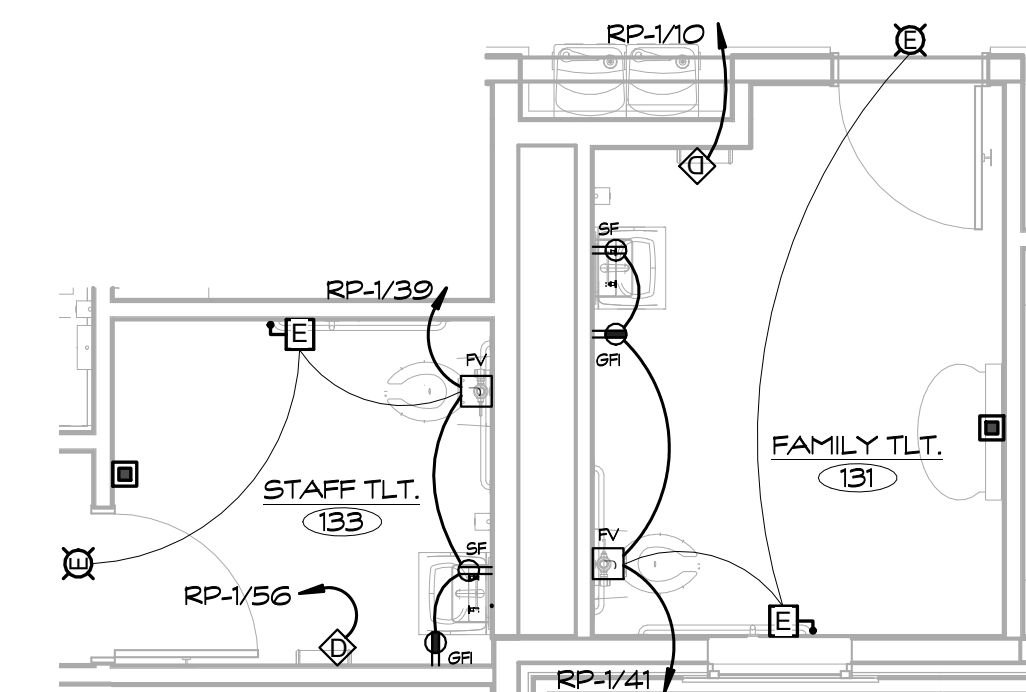
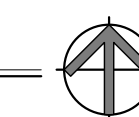
2 ENLARGED PLAN - KITCHEN/ELEC./MECH.

1/4" = 1'-0"



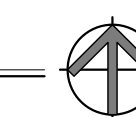
3 ENLARGED TOILET PLAN

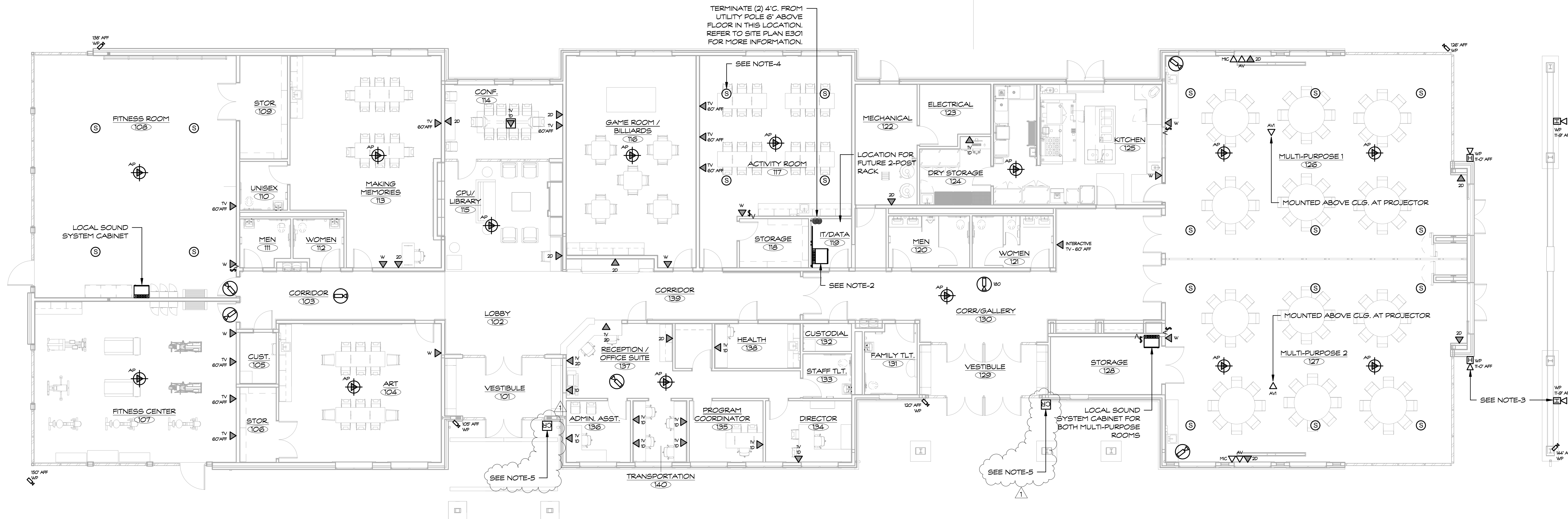
1/4" = 1'-0"



4 ENLARGED STAFF TOILET PLAN

1/4" = 1'-0"





1 MAIN LEVEL COMM PLAN
1/8" = 1'-0"

GENERAL NOTES

1. INCOMING CONDUITS (2-4) FOR LOW VOLTAGE SYSTEMS (VOICE, DATA, FIRE ALARM, TV, ETC.), TERMINATE MINIMUM OF SIX INCHES ABOVE FLOOR, REFER TO SITE PLAN (E301) TO SEE WHERE CONDUITS ARE TERMINATED (POLE #XXXX).
2. CONTRACTOR SHALL FURNISH AND INSTALL A WALL MOUNTED NETWORK CABINET WITH (2) 48 PORT PATCH PANELS FOR NETWORK DROPS AND A 24 PORT PATCH PANEL FOR SECURITY CONNECTIONS. THE PANEL SHALL BE SIZED TO ACCOMMODATE EQUIPMENT LISTED ABOVE AND ALLOW ROOM FOR OWNER FURNISHED SWITCHES, SERVER(S), UPS, ETC.
3. THE (4) EXTERIOR MOUNTED SPEAKERS ARE TO BE WIRED TO THE LOCAL SOUND SYSTEM SERVING THE TWO MULTI-PURPOSE ROOMS. THESE SPEAKERS SHALL BE ON THEIR OWN ZONE AND CONTROLLED FROM A VOLUME SWITCH LOCATED NEXT TO THE SOUND SYSTEM CABINET.
4. THE RECESSED CEILING SPEAKERS IN THIS ROOM ARE TO BE INTERCONNECTED WITH THE (8) TV'S IN THIS ROOM VIA THE SPLITTER AND HDMI AUDIO EXTRACTOR. THE TV SPEAKERS AND THE CEILING SPEAKERS ARE ALL TO BE SYNC'D TOGETHER. LOCATE THE SPLITTER AND EXTRACTOR ON A SHELF IN THE WALL CABINETS ON THE SOUTH SIDE OF THE ROOM.
5. COORDINATE EXACT LOCATION OF ACCESS CONTROL DEVICE WITH OWNER/ARCHITECT, AND SIZE AND STYLE OF DEVICE WITH APPROVED HARDWARE SUBMITTAL.

