

ADDENDUM NO. 02

February 8, 2023

Franklin Central High School Addition & Renovations
6215 S. Franklin Rd.
Indianapolis, IN, 46259

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated January 9, 2023, by VPS Architecture. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2 – 1 through ADD 2 – 4, Specification Sections 00 43 50 – Sub and Products, Guideline Schedule, Pre-Award Schedule, and attached VPS Architecture Addendum 2 dated February 7, 2023, consisting of 6 pages. Specification Section 089119 Fixed Louvers and Addendum Drawings ADD2-SK1, C400, C411, PF1B, MP1A, MP2A, MHR, M501, M503, M601, E-602, E-604 and E-605.

GENERAL NOTE

Combination Bids: Combination Bids will not be accepted if individual bids for each Bid Category are not provided with the Combination Bid.

Below is the link for the Optional Virtual Bid Opening, which Bids are due February 14, at 2:00PM (local time)

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 252 434 332 711

Passcode: D2Kh6Q

[Download Teams](#) | [Join on the web](#)

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[+1 317-762-3960, 1921142#](#) United States, Indianapolis

Phone Conference ID: 192 114 2#

A. **SPECIFICATION SECTION 00 43 50 SUBCONTRACTORS AND PRODUCTS LISTS**

1. Reissued Specification Section is attached herein.

B. **SPECIFICATION SECTION 01 12 00 MULTIPLE CONTRACT SUMMARY**

1. Paragraph 3.03 Bid Categories

A. BID CATEGORY NO. 01 – GENERAL TRADES

Add the following specification section:

08 91 19 – Fixed Louvers

Add the following clarifications:

22. Provide fire protection & domestic water main to first flange above finished floor.
23. Provide Air-Cooled Chiller equipment support pad as referenced on Civil, Mechanical Site Plan and detail 6/M502.
24. Provide grouting of Structural Steel columns.
25. Bid Category No. 8 to provide wood blocking and sheathing required for Display Cases complete per Specifications and interior elevations 3/A602 & 4/A602.
26. Bid Category No. 4 to provide sheathing where direct adhered to TPO. Reference (Addendum 2) – Exhibit A for typical reference of blocking and sheathing within the roof system provided by Bid Category No. 4.
27. Provide factory installed glazing in all doors indicated to be factory finished.
28. Provide all exterior wall rigid insulation. Bid Category No. 3 to provide exterior cavity wall insulation behind for their scope of work.
29. Provide 1-foot-wide stone strip, soil separator and metal edging as referenced in detail 8/C510.
30. Include metal soffit panels as part of the metal wall panel system.
31. Provide all work associated with installation of bollards identified on Civil sheets. Include painting. Bid Category No. 2 to furnish steel bollards delivered to the jobsite.

B. BID CATEGORY NO. 2 – STRUCTURAL STEEL

Add the following clarifications:

2. Furnish steel bollards delivered to the jobsite. Installation provided by Bid Category No. 1.

C. BID CATEGORY NO. 3 – MASONRY

Add the following clarifications:

2. Provide exterior cavity wall insulation for this Bid Categories scope of work.

D. BID CATEGORY NO. 4 – ROOFING

Add the following clarifications:

5. Provide Dens Deck sheathing where direct adhered TPO is required.
6. Reference (Addendum 2) – Exhibit A for typical reference of blocking and sheathing within the roof system required per Project Specific Clarification No. 3 of this bid categories scope of work.

F. BID CATEGORY NO. 6 – METAL FRAMING, DRYWALL & CEILINGS

Add the following clarifications:

4. Bid Category No. 4 to provide sheathing where direct adhered to TPO. Reference (Addendum 2) – Exhibit A for typical reference of blocking and sheathing within the roof system provided by Bid Category No. 4.

H. BID CATEGORY NO. 8 – CASEWORK & MILLWORK

Add the following clarifications:

1. Provide all work associated with Display Cases complete per Specifications and interior elevations 3/A602 & 4/A602. Includes wood blocking and sheathing.
2. Provide spray booths as referenced in interior elevations Note H and Architectural Floor Plans Note 3.
3. Provide hazardous materials cabinet as referenced in interior elevations Note L, Architectural Floor Plans and Addendum 2 Item 2-20 by VPS Architecture.

J. BID CATEGORY NO. 10 – PLUMBING & HVAC

Add the following clarifications:

7. Air-Cooled Chiller equipment support pad provided by Bid Category No. 1.

L. BID CATEGORY NO. 12 – LIGHTING

Revise the following clarifications:

1. There is NO BASE BID WORK for Bid Category **12**; Bid Category No. **12** shall be bid via Bid Alternate No. 2b ONLY.
2. Bid Category No. **12** is the equivalent of Bid Alternate No. 2b using Energy Harness fixtures. Energy Harness shall furnish and install fixture types L1, L1E, L2, L2E, L3, L3E, L4, L4E, L5, L5E, L10, L10E, X1, X2, and X3. Work shall include supporting fixtures to the structure and final terminations. Match the fixture counts indicated in the bid documents and lumen output to provide the lighting levels in each type of room.
3. Bid Category No. **11** Contractor shall provide lighting circuit with junction box and 6' long light fixture whip for all fixtures indicated in the bid documents.

C. **SPECIFICATION SECTION 01 23 00 – BID ALTERNATES**

Paragraph 1.04 SCHEDULE OF ALTERNATES

Revise the following Alternates:

D. ALTERNATE NO. 3:

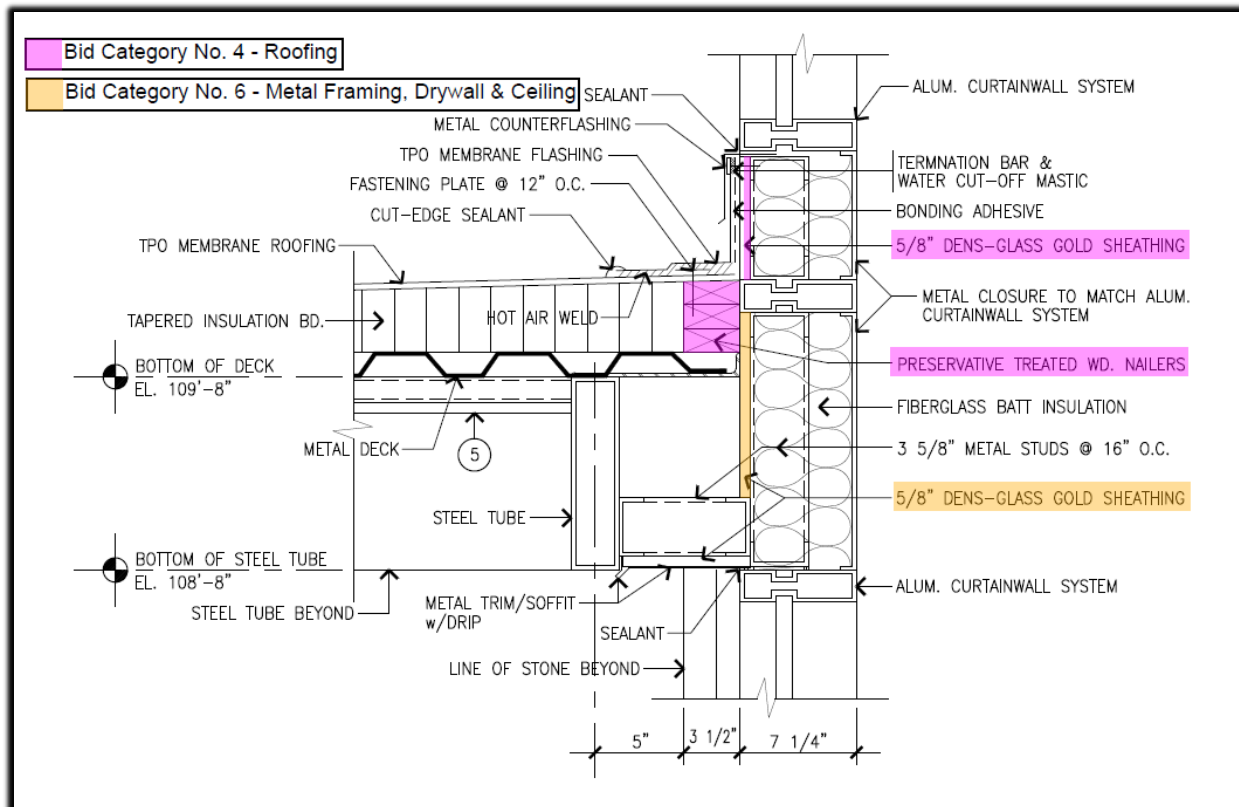
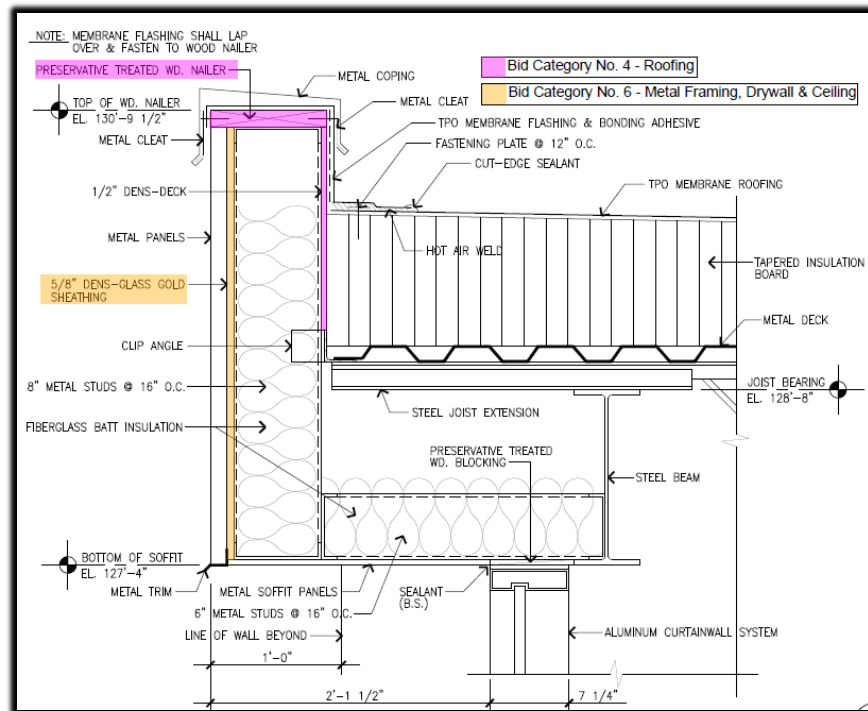
Base Bid: **Chiller** warranty shall provide for 2-years parts and labor.

Alternate Bid: **Chiller** warranty shall provide for 5-years parts and labor.

D. **SPECIFICATION SECTION 01 32 00 SCHEDULES AND REPORTS**

1. Revised Project Guideline Schedule is attached herein.

Exhibit A – Blocking & Sheathing – Typical Scope Reference



PRE-AWARD INTERVIEWS



- Bid Category No. 01 – 2/15/23 @ 10:00 AM
- Bid Category No. 02 – 2/15/23 @ 11:00 AM
- Bid Category No. 03 – 2/15/23 @ 1:30 PM
- Bid Category No. 04 – 2/15/23 @ 2:15 PM
- Bid Category No. 05 – 2/16/23 @ 9:00 AM
- Bid Category No. 06 – 2/16/23 @ 10:00 AM
- Bid Category No. 07 – 2/16/23 @ 11:00 AM
- Bid Category No. 08 – 2/16/23 @ 1:30 PM
- Bid Category No. 09 – 2/16/23 @ 2:15 PM
- Bid Category No. 10 – 2/17/23 @ 9:00 AM
- Bid Category No. 11 – 2/17/23 @ 10:00 AM
- Bid Category No. 12 – 2/17/23 @ 11:00 AM

SECTION 00 43 50 - SUBCONTRACTORS AND PRODUCTS LIST

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The two (2) low responsive Bidders in each Bid Category shall furnish electronically, the following Subcontractors and Products List to the Construction Manager within **two (2) working days (48 hrs.) of bid opening, unless submitted with Bid.** The blanks appropriate to the Bid Category(ies) on which they bid shall be completed.
 - 1. The Owner and Architect shall have the right to select any material or equipment named in the Specifications for any particular item where the Bidder either fails to list same or lists more than one name for the item in question.
 - 2. It is intended that this list will show the manufacturer and supplier of major items of work that will be subcontracted and to whom.

1.02 INSTRUCTIONS FOR SUBCONTRACTORS AND PRODUCTS LISTS

- A. Each Bidder shall submit a copy of his list of subcontractors and manufacturers of products and equipment proposed for work indicated as required above.
- B. The list shall be submitted on forms provided and shall be completely executed. **"As Specified" or "With Equipment" type of terminology will not be accepted.**
- C. Under "Subcontractor", insert the name of the firm which the Bidder proposes to have perform the respective work. If work will be done by the Prime Bidder and no subcontract will be awarded, state "By Own Forces".
- D. Submission does not constitute acceptance for use of listed manufacturers' products. Materials and subcontractors are subject to the provisions of the General Conditions and "Standard of Product Acceptability" and must be formally reviewed and adjudged acceptable by the Architect/Engineer.
- E. Engineer, Architect and Owner reserve the right to reject submissions of materials, work, or subcontractors that do not, in their opinion, meet the requirements of Drawings, Specifications or job conditions.
- F. Materials and subcontractors used for work on the Project shall be in accordance with accepted material list.
 - 1. The list is intended to assure use of materials and vendors acceptably equivalent to those specified and is not a substitution sheet or complete listing of required materials or services.

2. Substitutions for listed items will not be allowed, except when termed acceptable, in writing by the Architect/Engineer, provided that substitution will result in a cost savings to the Owner , determined by the Owner to be a better product, or is made necessary due to unavailability of listed item. Unavailability shall be confirmed in writing by manufacturer named on accepted list.

1.03 CIVIL AND ARCHITECTURAL WORK SUBCONTRACTORS AND PRODUCTS LIST

BID CATEGORY NO. _____
(Insert Category No. and Name)

NAME OF BIDDER _____

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

CIVIL AND ARCHITECTURAL WORK

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
02 01 00	Maintenance of Existing Conditions			
02 41 13	Selective Site Demolition			
02 41 19	Selective Structure Demolition			
03 30 00	Cast-In-Place Concrete			
04 20 00	Unit Masonry			
05 12 00	Structural Steel Framing			
05 21 00	Steel Joist Framing			
05 31 00	Steel Decking			
05 40 00	Cold-Formed Metal Framing			

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
05 50 00	Metal Fabrications			
05 51 00	Metal Stairs			
05 52 13	Pipe and Tube Railings			
06 10 53	Miscellaneous Rough Carpentry			
07 21 00	Thermal Insulation			
07 42 13	Metal Wall Panels			
07 42 46	Cementitious Wall Panels			
07 54 23	Thermoplastic Polyolefin (TPO) Roofing			
07 62 00	Sheet Metal Flashing and Trim			
07 84 13	Penetration Fire Stopping			
07 92 00	Joint Sealants			
08 11 13	Hollow Metal Doors and Frames			
08 14 16	Flush Wood Doors			
08 41 13	Aluminum-Framed Entrances and Storefronts			
08 44 13	Glazed Aluminum Curtain Walls			
08 71 00	Door Hardware			
08 80 00	Glazing			
08 83 00	Mirrors			
08 91 19	Fixed Louvers			
09 22 16	Non-Structural Metal Framing			
09 29 00	Gypsum Board			

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
09 30 00	Tiling			
09 51 13	Acoustical Panel Ceilings			
09 65 13	Resilient Base and Accessories			
09 65 19	Resilient Tile Flooring (LVT)			
09 67 23	Resinous Flooring			
09 68 13	Tile Carpeting			
09 91 13	Exterior Painting			
09 91 23	Interior Painting			
10 11 00	Visual Display Surfaces			
10 21 13	Toilet Compartments			
10 28 00	Toilet and Bath Accessories			
10 44 13	Fire Extinguisher Cabinets			
10 44 16	Fire Extinguishers			
12 32 00	Manufactured Wood Casework			
31 10 00	Site Clearing			
31 20 00	Earthwork			
31 25 00	Erosion Control			
32 12 16	Asphalt Paving			
32 13 00	Site Concrete			
32 17 23	Pavement Marking			
32 92 19	Seeding			
33 05 00	Common Work Results for Utilities			
33 10 00	Site Water Distribution			

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
33 30 00	Sanitary Sewers			
33 40 00	Storm Drainage			

Name of Bidder:	Date:
Address:	
City/State/Zip:	
Telephone:	
By:	

1.04 MECHANICAL WORK SUBCONTRACTORS AND PRODUCTS LIST

BID CATEGORY NO. _____
(Insert Category No. and Name)

NAME OF BIDDER _____

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If dual listing of manufacturers or subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice.

MECHANICAL WORK

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
21 05 17	Sleeves and Sleeve Seals for Fire-Suppression Piping			
21 05 18	Escutcheons For Fire-Suppression Piping			
21 05 23	General-Duty Valves for Water-Based Fire-Suppression Piping			
21 05 29	Hangers And Supports for Fire-Suppression Piping And Equipment			
21 05 53	Identification For Fire-Suppression Piping and Equipment			
21 11 19	Fire Department Connections			
21 13 13	Wet-Pipe Sprinkler Systems			
220517	Sleeves and Sleeve Seals for Plumbing Piping			
220518	Escutcheons for Plumbing Piping			

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
220523.12	Ball Valves for Plumbing Piping			
220523.14	Check Valves for Plumbing Piping			
220523.15	Gate Valves for Plumbing Piping			
220529	Hangers and Supports for Plumbing Piping and Equipment			
220553	Identification for Plumbing Piping and Equipment			
220719	Plumbing Piping Insulation			
221116	Domestic Water Piping			
221119	Domestic Water Piping Specialties			
221316	Sanitary Waste and Vent Piping			
221319	Sanitary Waste Piping Specialties			
221319.13	Sanitary Drains			
22 13 23	Sanitary Waste Interceptors			
221414	Storm Drainage Piping			
221423	Storm Drainage Piping Specialties			
22 31 00	Domestic Water Softeners			
22 34 00	Fuel-Fired Domestic Water Heaters			
22 42 13.13	Commercial Water Closets			
22 42 13.16	Commercial Urinals			

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
22 42 16.13	Commercial Lavatories			
22 42 16.16	Commercial Sinks			
22 47 16	Pressure Water Coolers			
23 05 00	Common Work Results for Mechanical			
23 05 13	Common Motor Requirements HVAC Equipment			
23 05 16	Expansion Fittings and Loops for HVAC Piping			
23 05 17	Sleeves and Sleeve Seals for HVAC Piping			
23 05 19	Meters and Gauges for HVAC Piping			
23 05 23	General Duty Valves for HVAC Piping			
23 05 29	Hangers and Supports for HVAC Piping and Equipment			
23 05 53	Identification for HVAC Piping and Equipment			
23 05 93	Testing, Adjusting, and Balancing for HVAC			
23 07 13	Duct Insulation			
23 07 19	HVAC Pipe Insulation			
23 09 00	Direct Digital Control (DDC) System for HVAC			
23 11 23	Facility Natural Gas Piping			
23 21 13	Hydronic Piping			

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
23 21 13.13	Underground Hydronic Piping			
23 21 16	Hydronic Piping Specialties			
23 21 23	Hydronic Pumps			
23 25 13	Water Treatment for Closed-Loop Hydronic Systems			
23 31 13	Metal Ducts			
23 33 00	Air Duct Accessories			
23 34 23	HVAC Power Ventilators			
23 36 00	Air Terminal Units			
23 37 13	Diffusers, Registers and Grilles			
23 51 23	Gas Vents			
23 52 16	Condensing Boilers			
23 64 26.21	Air Cooled, Rotary Screw Water Chillers			
23 73 13.13	Indoor and Outdoor Basic Air Handling Units			
23 81 26	Split System Air Conditioners			

Plumbing Fixtures:

Manufacturer:

a) _____

b) _____

c) _____

d) _____

e) _____

f) _____

g) _____

h) _____

i) _____

j) _____

k) _____

l) _____

Name of Bidder:	Date:
Address:	
City/State/Zip:	
Telephone:	
By:	

1.05 ELECTRICAL WORK SUBCONTRACTORS AND PRODUCTS LIST

BID CATEGORY NO. _____
(Insert Category No. and Name)

NAME OF BIDDER _____

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If dual listing of manufacturers or subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice.

ELECTRICAL WORK

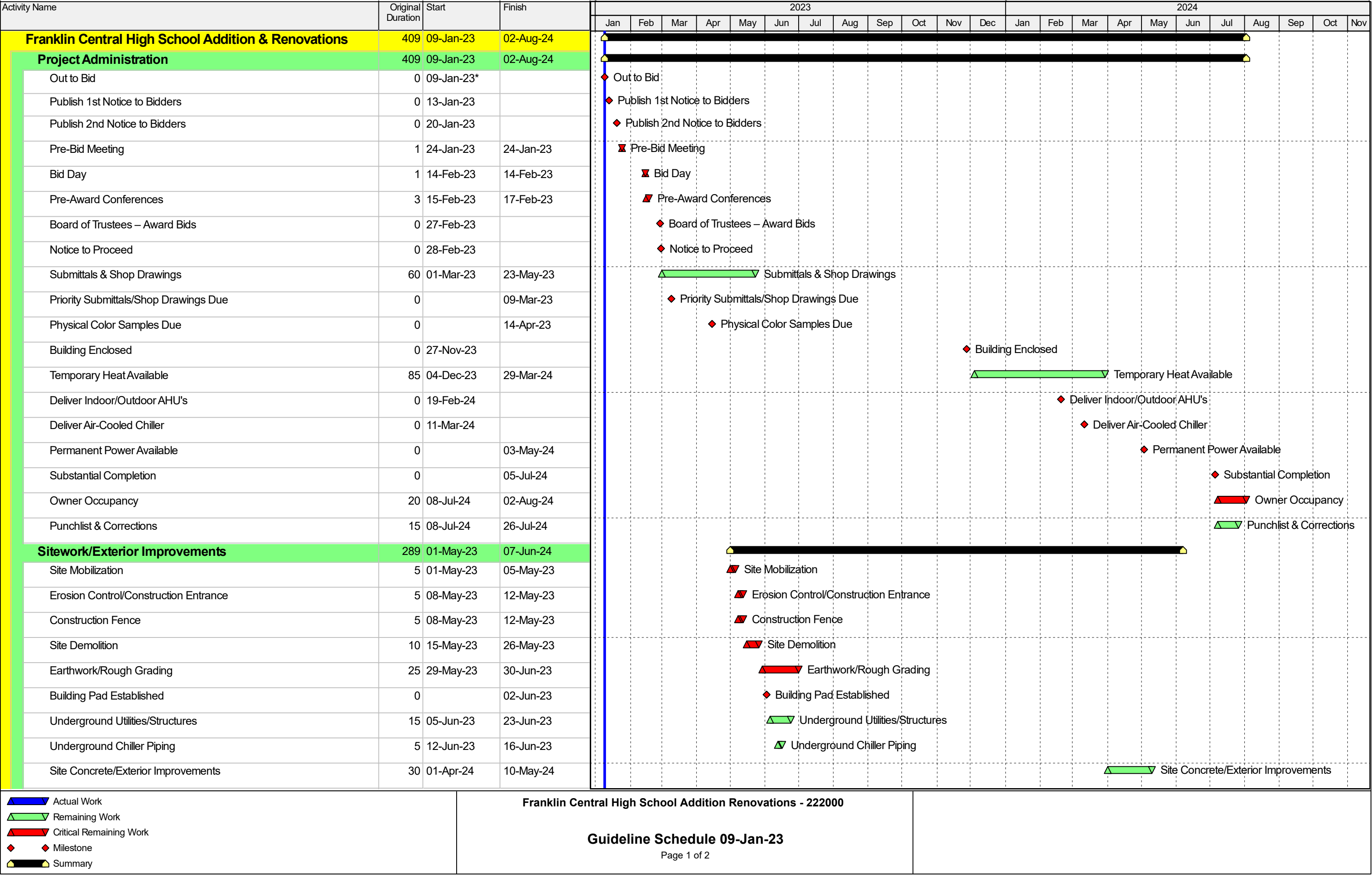
<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
26 05 00	Common Work Results for Electrical			
26 05 19	Low Voltage Electrical Power Conductors and Cables			
26 05 26	Grounding and Bonding for Electrical Systems			
26 05 29	Hangers and Supports for Electrical Systems			
26 05 33	Raceways and Boxes for Electrical Systems			
26 05 43	Underground Ducts and Raceways for Electrical Systems			
26 05 44	Sleeves and Sleeve Seals for Electrical Raceways and Cabling			

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
26 05 53	Identification for Electrical Systems			
26 05 74.99	Short Circuit Coordination Study Arc Flash Risk Assessment			
26 09 23	Lighting Control Devices			
26 22 13	Low Voltage Distribution Transformers			
26 24 13	Switchboards			
26 24 16	Panelboards			
26 27 26	Wiring Devices			
26 28 13	Fuses			
26 28 16	Enclosed Switches and Circuit Breakers			
26 29 13	Enclosed Controllers			
26 29 23	Variable Frequency Motor Controllers			
26 51 19	LED Interior Lighting			
26 52 13	Emergency and Exit Lighting			
26 56 13	Lighting Poles and Standards			
26 56 19	LED Exterior Lighting			
27 05 00	Common Work Results for Communications			

<u>Section</u>	<u>Description</u>	<u>XBE</u>	<u>Subcontractor</u>	<u>Manufacturer</u>
27 05 26	Grounding and Bonding for Communications Systems			
27 05 28	Pathways for Communications Systems			
27 11 00	Communications Equipment Room Fittings			
27 11 16	Communications Cabinets, Racks, Frames and Enclosures			
27 11 19	Communications Termination Blocks and Patch Panels			
27 14 23	Communications Optical Fiber Riser Cabling			
27 41 16	Integrated Audio Video Systems and Equipment			
28 13 00	Access Control			
28 46 21	Addressable Fire-Alarm Systems			

Name of Bidder:	Date:
Address:	
City/State/Zip:	
Telephone:	
By:	

END OF SECTION 00 43 50



Activity Name		Original Duration	Start	Finish	2023												2024																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Distribution: To all Planholders

ADDENDUM NO. 2 (TWO)

DATE: February 7, 2023
PROJECT: Addition & Renovations to Franklin Central High School
OWNER: Franklin Township Community School Corporation
PROJECT NO.: 2022043.00

The original Specifications and Drawings dated January 2023 for the project referenced above, are amended as noted in this Addendum No. 2 (Two). Receipt of this Addendum and any subsequent Addenda must be acknowledged on the Proposal Form. This section of the Addendum consists of 33 (Thirty-Three) items and 14 (Fourteen) attachments.

<u>ITEM</u>	<u>DESCRIPTION</u>
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Bidder Questions / Clarifications:

- | | |
|-----|---|
| 2-1 | Q: What is the current version of the Avigilon ACM deployed at the school?
A: Version 6.34.0.33. |
| 2-2 | Q: Are there any unused licenses for the ACM system that could be utilized for the new doors with access control?
A: No. |
| 2-3 | Q: If additional reader licenses are required, are they to be provided by the Owner or by the Contractor?
A: Additional licenses are to be provided by the Contractor. |

Specification Items:

- 2-4 Section 084113 Aluminum-Framed Entrances and Storefronts / Section 084413 Glazed Aluminum Curtain Walls: The warranties shall be changed to 5 (five) year install and 10 (ten) year finish.
- 2-5 Section 088000 Glazing: The insulated glass shall have a gray tint to match existing.
- 2-6 Section 089119 Fixed Louvers:
- A. Add attached section in its entirety.
 - B. Elite Equipment Company, LLC is an approved manufacturer.
- 2-7 Section 123200 Manufactured Wood Casework:
- A. Solid surface countertops and windowsills shall be equal to Corian (color as selected by Architect from manufacturer's full range).
 - B. Formica is an approved manufacturer for magnetic markerboard laminate.
 - C. Include WB Mfg. Toro Tables, Model No. TOR7083-ADJ09-25-09HDCA, Qty.: 24, Location: 1st Floor.
 - D. Include WB Mfg. Toro Tables, Model No. TOR9083-ADJ09-HDCA, Qty.: 24, Location: 2nd Floor.
- 2-8 Section 230523 General-Duty Valves for HVAC Piping: Delete and replace paragraph 3.5 as follows:
- 3.5 HEATING-WATER VALVE SCHEDULE
- A. Pipe NPS 2 and Smaller:
 - 1. Bronze Valves: May be provided with solder-joint ends instead of threaded ends.
 - 2. Ball Valves: Two- or three-piece, full port, bronze with bronze or stainless-steel trim.
 - 3. Bronze Swing Check Valves: Class 150, bronze or nonmetallic disc.
 - B. Pipe NPS 2-1/2 and Larger:
 - 1. Iron Valves, NPS 2-1/2 to NPS 4: May be provided with threaded ends instead of

- flanged ends.
- 2. Iron, Single-Flange Gate Valves, NPS 2-1/2 to NPS 12: Disc: Solid wedge iron.
- 3. Grooved-End Gate Valves: Class 250, metal or nonmetallic-to-metal seats.
- 4. Iron, Grooved-End Check Valves, NPS 3 to NPS 12: 300 CWP.

3.6 CHILLED-WATER VALVE SCHEDULE

A. Pipe NPS 2 and Smaller:

- 1. Bronze Valves: May be provided with solder-joint ends instead of threaded ends.
- 2. Ball Valves: Two- or three-piece, full port, bronze with bronze or stainless-steel trim.
- 3. Bronze Swing Check Valves: Class 150, bronze or nonmetallic disc.

B. Pipe NPS 2-1/2 and Larger:

- 1. Iron Valves, NPS 2-1/2 to NPS 4: May be provided with threaded ends instead of flanged ends.
- 2. Iron, Single-Flange Gate Valves: NPS 2-1/2 to NPS 12: Disc: Solid wedge iron.
- 3. Grooved-End Gate Valves, NPS 2-1/2 to NPS 12: 175 CWP.
- 4. Iron Swing Check Valves: Class 250, metal or nonmetallic-to-metal seats.
- 5. Iron, Grooved-End Check Valves, NPS 3 to NPS 12: 300 CWP.

2-9 Section 230553 Identification for HVAC Piping and Equipment: Add paragraphs 3.3.D and 3.4.F as follows:

- D. Mark all locations of mechanical equipment above ceiling with engraved plastic tags on ceiling grid below equipment. Equipment shall include but is not limited to terminal boxes.
- F. Mark all locations of valves above ceiling with engraved plastic tags on ceiling grid below valves.

2-10 Section 230900 Direct Digital Control Systems for HVAC: Delete and replace paragraphs 2.11.B.5 and 2.11.D.1 as follows:

- 5. All non-spring-return actuators shall have an external manual gear release to allow manual positioning of the damper when the actuator is not powered. Spring-return actuators with more than 7 N·m (60 in.-lb) torque capacity shall have a manual crank for this purpose. Acceptable Manufacturers: Belimo.

1. Control valves shall be two-way or three-way type for two-position or modulating service as shown in the drawings. Acceptable Manufacturers: Belimo.

2-11 Section 262923 Variable Frequency Motor Controllers: Delete and replace paragraph 2.1.A as follows:

- A. Manufacturers: Subject to compliance with requirements, provide products by the following only:
 - a. ABB Model ACH by Fuller Engineering.

Drawing Items:

2-12 C400: Replace drawing in its entirety with attached revision.

2-13 C411: Replace drawing in its entirety with attached revision.

2-14 A101: The countertops in A109, A112, A113, and A114 shall be solid surface.

2-15 A102: Rooms B102 and B103 shall receive porcelain wall tile up to 7'-4" AFF and epoxy paint from 7'-4" AFF to ceiling.

2-16 A103: 1/A103 in the NW corner of the plan, there is an existing window that shall be removed and infilled with CMU. It shall receive Note 8 East of reference 4/A103.

2-17 A105: The edge of the cloud in Vestibule A102A shall be 4" extruded aluminum trim (USG Compasso or equal).

2-18 A602:

- A. The hardwood indicated in Details 7 and 8 shall be Walnut, as specified in Section 123200 Manufactured Wood Casework.
- B. Detail 8 shall have concealed piano hinges and lock with 1/4" tempered glass.

2-19 A701:

- A. Note J shall refer to 2/A404 in lieu of 4/A404.

- B. Spray booth units shall be provided with casework and shall be equal to the item indicated in Reference Note 3 on A101.
- 2-20 A701/A702: The first Note J shall be an L and the reference in 7/A701 and 27/A702 shall be revised to L.
- 2-21 Where tile meets epoxy base in the Toilet Rooms, a Schluter Schiene profile shall be furnished and installed.
- 2-22 Sheathing for direct adhered TPO shall be Dens Deck.
- 2-23 Refer to attached sketch ADD2-SK1 for wall finish clarifications at Toilet Rooms B102, B103, B202, B203, and adjacent Vestibules.
- 2-24 PF1B: Replace drawing in its entirety with attached revision.
- 2-25 MP1A: Replace drawing in its entirety with attached revision.
- 2-26 MP2A: Replace drawing in its entirety with attached revision.
- 2-27 MHR: Replace drawing in its entirety with attached revision.
- 2-28 M501: Replace drawing in its entirety with attached revision.
- 2-29 M503: Replace drawing in its entirety with attached revision.
- 2-30 M601: Replace drawing in its entirety with attached revision.
- 2-31 E-602: Replace drawing in its entirety with attached revision.
- 2-32 E-604: Replace drawing in its entirety with attached revision.
- 2-33 E-605: Replace drawing in its entirety with attached revision.

PREPARED BY: 
George S. Link, AIA

Attachments: Section 089119 Fixed Louvers
 C400
 C411
 ADD2-SK1
 PF1B
 MP1A
 MP2A
 MHR
 M501
 M503
 M601
 E-602
 E-604
 E-605

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. Fixed, extruded-aluminum louvers.
- B. Related Requirements:
 - 1. Section 079200 "Joint Sealants" for sealants installed in joints between louvers and adjoining construction.

1.3 DEFINITIONS

- A. Louver Terminology: Definitions of terms for metal louvers contained in AMCA 501 apply to this Section unless otherwise defined in this Section or in referenced standards.
- B. Horizontal Louver: Louver with horizontal blades (i.e., the axes of the blades are horizontal).
- C. Vertical Louver: Louver with vertical blades (i.e., the axes of the blades are vertical).
- D. Drainable-Blade Louver: Louver with blades having gutters that collect water and drain it to channels in jambs and mullions, which carry it to bottom of unit and away from opening.
- E. Wind-Driven-Rain-Resistant Louver: Louver that provides specified wind-driven rain performance, as determined by testing according to AMCA 500-L.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. For louvers specified to bear AMCA seal, include printed catalog pages showing specified models with appropriate AMCA Certified Ratings Seals.
- B. Shop Drawings: For louvers and accessories. Include plans, elevations, sections, details, and attachments to other work. Show frame profiles and blade profiles, angles, and spacing.

1. Show weep paths, gaskets, flashing, sealant, and other means of preventing water intrusion.
2. Show mullion profiles and locations.

C. Samples: For each type of metal finish required.

1.5 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: Based on evaluation of comprehensive tests performed according to AMCA 500-L by a qualified testing agency or by manufacturer and witnessed by a qualified testing agency, for each type of louver and showing compliance with performance requirements specified.
- B. Windborne-debris-impact-resistance test reports.

1.6 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to the following:
 1. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."

1.7 FIELD CONDITIONS

- A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain louvers from single source from a single manufacturer where indicated to be of same type, design, or factory-applied color finish.

2.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Louvers shall withstand the effects of loads and stresses indicated on drawings without permanent deformation of louver components, noise or metal fatigue caused by louver-blade rattle or flutter, or permanent damage to fasteners and anchors. Wind pressures shall be considered to act normal to the face of the building.
- B. Louver Performance Ratings: Provide louvers complying with requirements specified, as demonstrated by testing manufacturer's stock units identical to those provided, except for length and width according to AMCA 500-L.

- C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- D. SMACNA Standard: Comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" for fabrication, construction details, and installation procedures.

2.3 FIXED, EXTRUDED-ALUMINUM LOUVERS

- A. Horizontal, Drainable-Blade Louver:
 - 1. Greenheck, Type ESD-435 or equal.
 - 2. Louver Depth: 4 inches unless indicated otherwise.
 - 3. Frame and Blade Nominal Thickness: Not less than 0.080 inch.
 - 4. Mullion Type: Exposed.
 - 5. Louver Performance Ratings:
 - a. Free Area: Not less than 8.90 SF for 48-inch- wide by 48-inch- high louver.
 - b. Point of Beginning Water Penetration: Not less than 989 fpm.
 - c. Air Performance: Not more than .073 inch wg static pressure drop at 6000 CFM free-area intake velocity.
 - 6. AMCA Seal: Mark units with AMCA Certified Ratings Seal.

2.4 LOUVER SCREENS

- A. General: Provide screen at each exterior louver.
 - 1. Screen Location for Fixed Louvers: Interior face.
 - 2. Screening Type: Bird screening.
- B. Secure screen frames to louver frames with stainless-steel machine screws, spaced a maximum of 6 inches (150 mm) from each corner and at 12 inches (300 mm) o.c.
- C. Louver Screen Frames: Fabricate with mitered corners to louver sizes indicated.
 - 1. Metal: Same type and form of metal as indicated for louver to which screens are attached. Reinforce extruded-aluminum screen frames at corners with clips.
 - 2. Finish: Same finish as louver frames to which louver screens are attached.
 - 3. Type: Non-rewirable, U-shaped frames.
- D. Louver Screening for Aluminum Louvers:
 - 1. Bird Screen: Aluminum, ½ inch (13 mm) square mesh, 0.063 inch (1.60 mm) wire.

2.5 BLANK-OFF PANELS

- A. Insulated, Blank-Off Panels: Laminated panels consisting of an insulating core surfaced on back and front with metal sheets and attached to back of louver.
 - 1. Thickness: 1 inch (25 mm).
 - 2. Metal Facing Sheets: Aluminum sheet, not less than 0.032-inch (0.81-mm) nominal thickness.
 - 3. Insulating Core: Extruded-polystyrene foam.
 - 4. Edge Treatment: Trim perimeter edges of blank-off panels with louver manufacturer's standard extruded-aluminum-channel frames, not less than 0.080-inch (2.03-mm) nominal thickness, with corners mitered and with same finish as panels.
 - 5. Seal perimeter joints between panel faces and louver frames with gaskets or sealant.
 - 6. Panel Finish: Same type of finish applied to louvers, but black color.
 - 7. Attach blank-off panels with clips or sheet metal screws.

2.6 MATERIALS

- A. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), Alloy 6063-T5, T-52, or T6.
- B. Aluminum Sheet: ASTM B 209 (ASTM B 209M), Alloy 3003 or 5005 with temper as required for forming, or as otherwise recommended by metal producer for required finish.
- C. Fasteners: Use types and sizes to suit unit installation conditions.
 - 1. Use Phillips flat-head screws for exposed fasteners unless otherwise indicated.
 - 2. For fastening aluminum, use aluminum or 300 series stainless-steel fasteners.
 - 3. For fastening galvanized steel, use hot-dip-galvanized steel or 300 series stainless-steel fasteners.
 - 4. For fastening stainless steel, use 300 series stainless-steel fasteners.
 - 5. For color-finished louvers, use fasteners with heads that match color of louvers.
- D. Postinstalled Fasteners for Concrete and Masonry: Torque-controlled expansion anchors, made from stainless-steel components, with capability to sustain, without failure, a load equal to 4 times the loads imposed, for concrete, or 6 times the load imposed for masonry, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.
- E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.

2.7 FABRICATION

- A. Factory assemble louvers to minimize field splicing and assembly. Disassemble units as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.
- B. Vertical Assemblies: Where height of louver units exceeds fabrication and handling limitations, fabricate units to permit field-bolted assembly with close-fitting joints in jambs and mullions, reinforced with splice plates.

1. Continuous Vertical Assemblies: Fabricate units without interrupting blade-spacing pattern where indicated.
 2. Horizontal Mullions: Provide horizontal mullions at joints where indicated.
- C. Maintain equal louver blade spacing to produce uniform appearance.
- D. Fabricate frames, including integral sills, to fit in openings of sizes indicated, with allowances made for fabrication and installation tolerances, adjoining material tolerances, and perimeter sealant joints.
1. Frame Type: Channel unless otherwise indicated.
- E. Include supports, anchorages, and accessories required for complete assembly.
- F. Provide vertical mullions of type and at spacings indicated, but not more than is recommended by manufacturer, or 72 inches (1830 mm) o.c., whichever is less.
1. Exposed Mullions: Where indicated, provide units with exposed mullions of same width and depth as louver frame. Where length of louver exceeds fabrication and handling limitations, provide interlocking split mullions designed to permit expansion and contraction.
- G. Provide subsills made of same material as louvers or extended sills for recessed louvers.
- H. Join frame members to each other and to fixed louver blades with fillet welds concealed from view unless otherwise indicated or size of louver assembly makes bolted connections between frame members necessary.

2.8 ALUMINUM FINISHES

- A. Finish louvers after assembly.
1. Color and Gloss: Clear anodic dark bronze.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and openings, 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. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

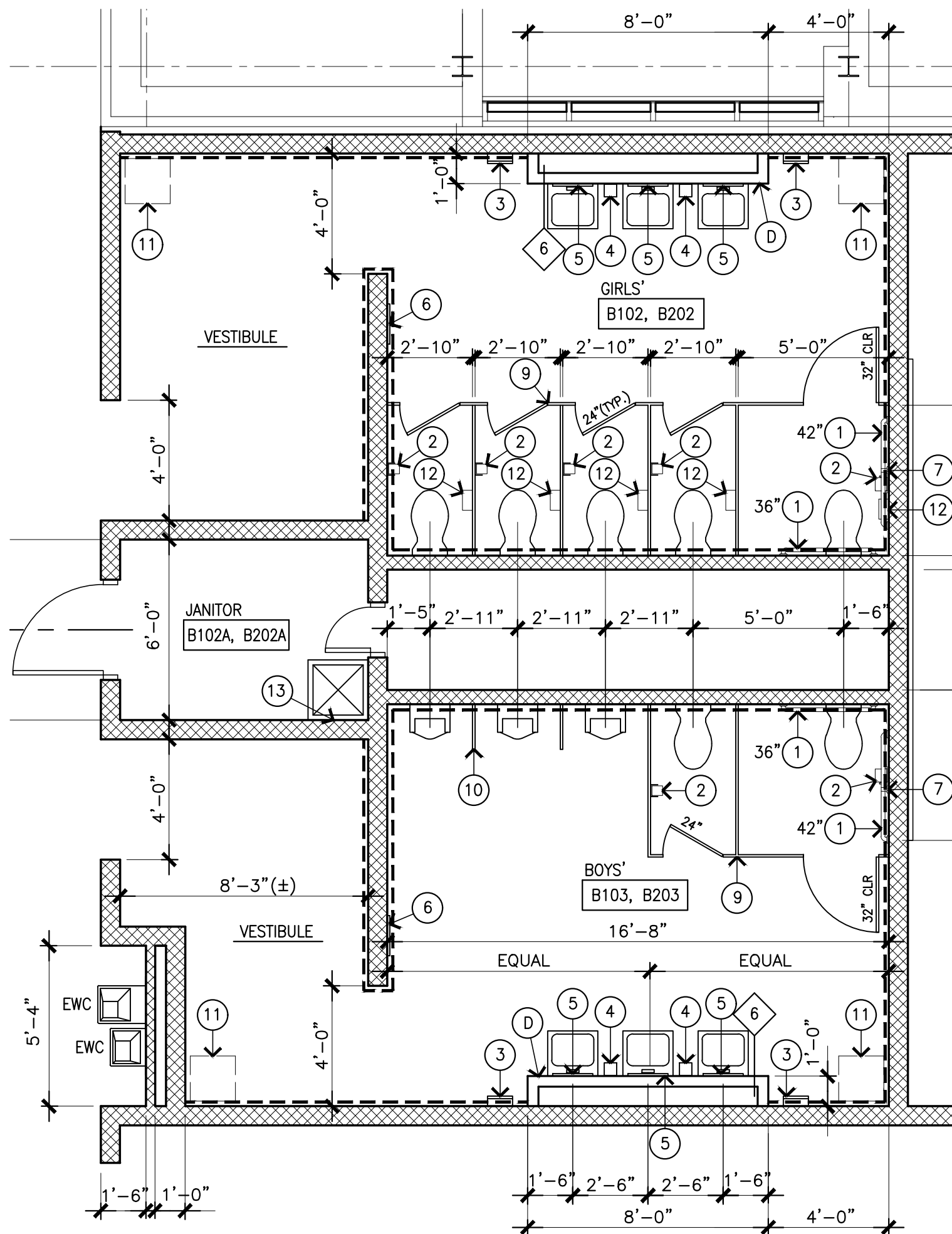
3.3 INSTALLATION

- A. Locate and place louvers level, plumb, and at indicated alignment with adjacent work.
- B. Use concealed anchorages where possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.
- C. Form closely fitted joints with exposed connections accurately located and secured.
- D. Provide perimeter reveals and openings of uniform width for sealants and joint fillers, as indicated.
- E. Protect unpainted galvanized and nonferrous-metal surfaces that are in contact with concrete, masonry, or dissimilar metals from corrosion and galvanic action by applying a heavy coating of bituminous paint or by separating surfaces with waterproof gaskets or nonmetallic flashing.
- F. Install concealed gaskets, flashings, joint fillers, and insulation as louver installation progresses, where weathertight louver joints are required. Comply with Section 079200 "Joint Sealants" for sealants applied during louver installation.

3.4 ADJUSTING AND CLEANING

- A. Clean exposed louver surfaces that are not protected by temporary covering, to remove fingerprints and soil during construction period. Do not let soil accumulate during construction period.
- B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Thoroughly rinse surfaces and dry.
- C. Restore louvers damaged during installation and construction so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by Architect, remove damaged units and replace with new units.
 - 1. Touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with, factory-applied finish coating.

END OF SECTION 089119



GENERAL NOTES:

1. **DASHED LINE INDICATES EXTENT OF PORCELAIN TILE ON WALLS OF TOILET ROOMS & ADJACENT VESTIBULES. TILE EXTENDS TO 7'-4" HT. (U.N.O.) WITH REMAINING C.M.U TO BE PAINTED.**

NOTE: REFER TO REFERENCE NOTE 'D' AS SHOWN ON SHEET A501 FOR PORCELAIN TILE WHICH SHALL EXTEND TO CEILING AT SINK CHASE WALLS.

REFERENCE NOTES:

- (D) EXTEND PORCELAIN TILE TO CEILING AT ALL THREE SIDES OF SINK CHASE WALL, WALL TYPE 6.

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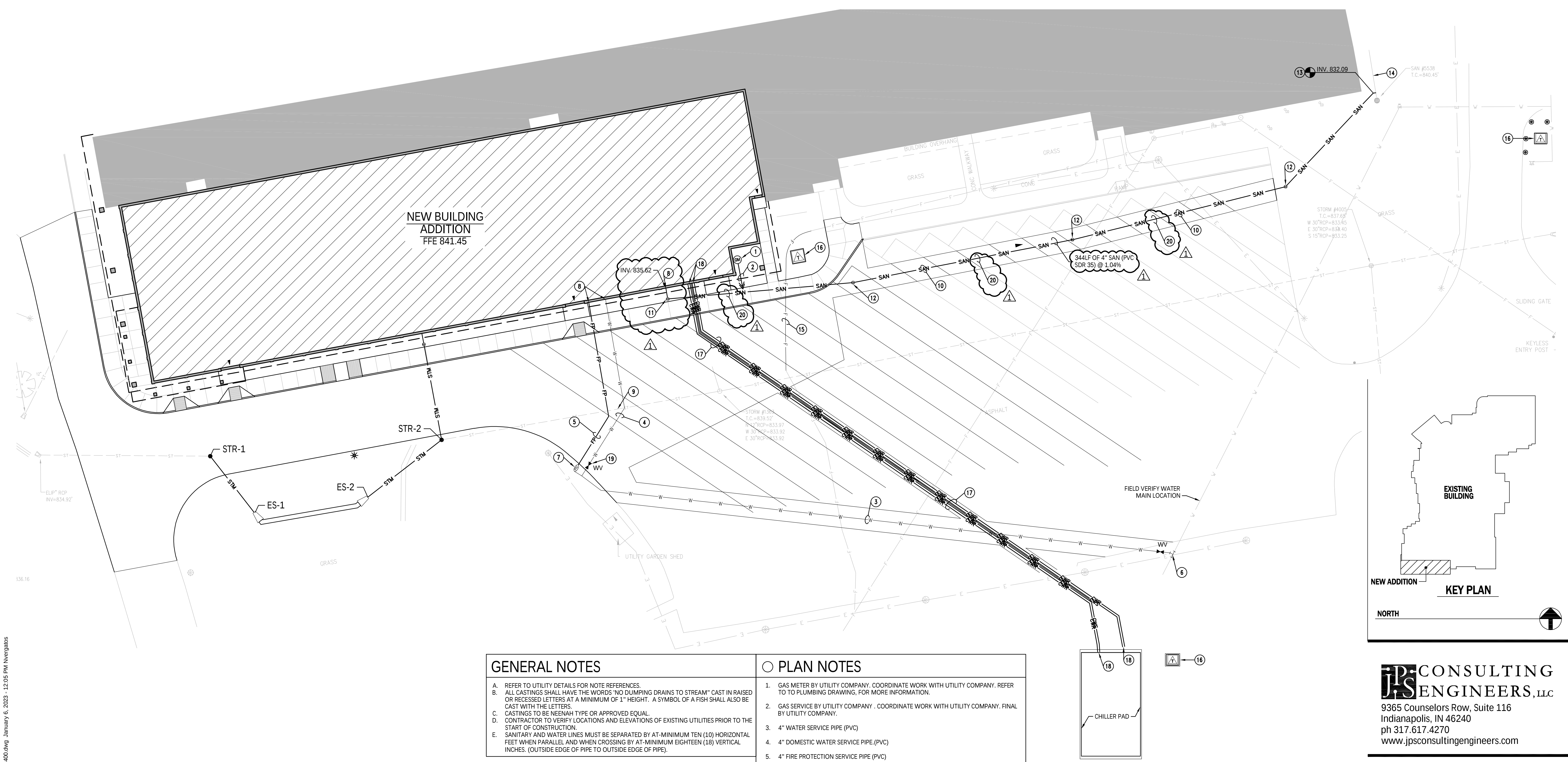
TOILET ROOM WALL CLARIFICATIONS
ROOMS B102, B103, B202 & B203

Project No.:
2022043.00

Date:
2/7/23

Drawing No.:

ADD2-SK1

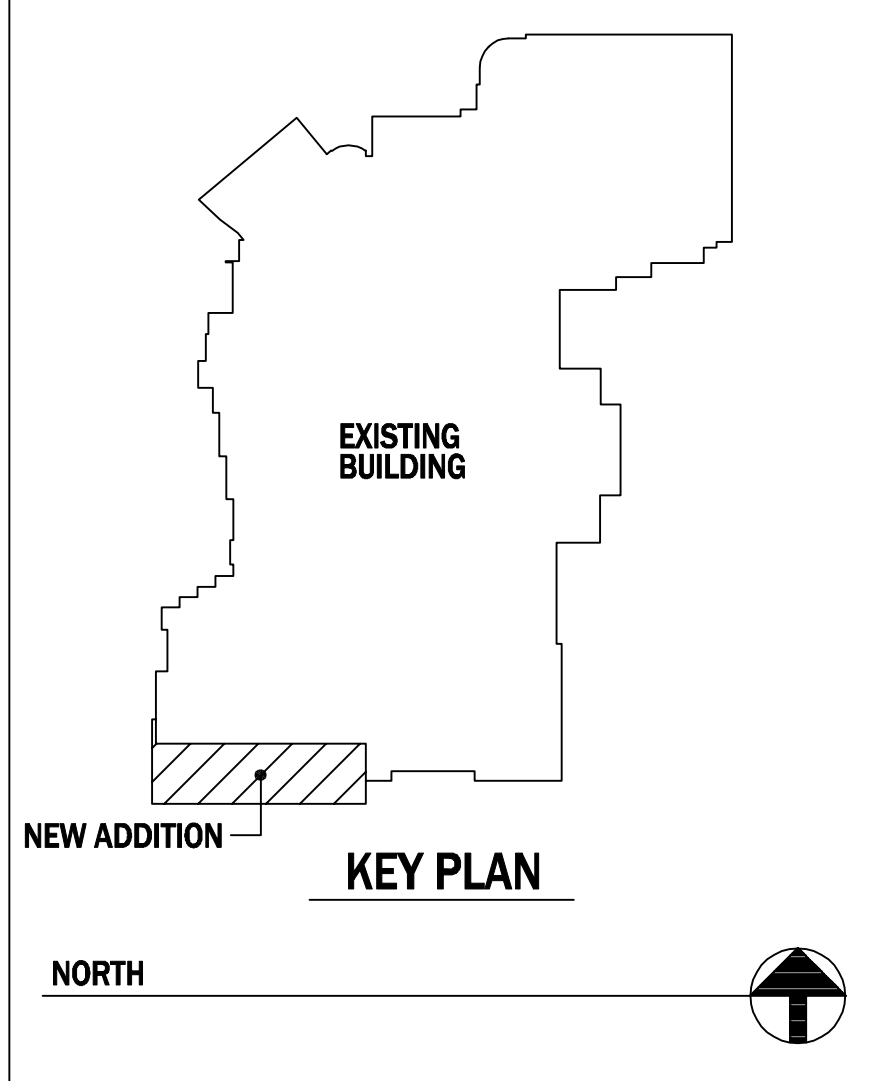


GENERAL NOTES

- A. REFER TO UTILITY DETAILS FOR NOTE REFERENCES.
B. ALL CASTINGS SHALL HAVE THE WORDS "NO DUMPING DRAINS TO STREAM" CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 1" HEIGHT. A SYMBOL OF A FISH SHALL ALSO BE CAST WITH THE LETTERS.
C. CASTINGS TO BE NEENAH TYPE OR APPROVED EQUAL.
D. CONTRACTOR TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
E. SANITARY AND WATER LINES MUST BE SEPARATED BY AT-MINIMUM TEN (10) HORIZONTAL FEET WHEN PARALLEL AND WHEN CROSSING BY AT-MINIMUM EIGHTEEN (18) VERTICAL INCHES. (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).

PLAN NOTES

1. GAS METER BY UTILITY COMPANY. COORDINATE WORK WITH UTILITY COMPANY. REFER TO PLUMBING DRAWING, FOR MORE INFORMATION.
2. GAS SERVICE BY UTILITY COMPANY. COORDINATE WORK WITH UTILITY COMPANY. FINAL BY UTILITY COMPANY.
3. 4" WATER SERVICE PIPE (PVC)
4. 4" DOMESTIC WATER SERVICE PIPE (PVC)
5. 4" FIRE PROTECTION SERVICE PIPE (PVC)
6. TAP EXISTING WATER MAIN. COORDINATE WORK WITH UTILITY COMPANY. FIELD VERIFY EXACT LOCATION OF WATER MAIN
7. POST INDICATOR VALVE.
8. REFER TO PLUMBING DRAWINGS FOR LOCATION, INVERT, SIZE AND CONTINUATION INTO BUILDING.
9. WATER AND SEWER CROSSING.
10. INSTALL GREEN 10-GAUGE TRACE WIRE FROM BUILDING CLEANOUTS TO CONNECTION POINT.
11. BUILDING CLEANOUTS PER CITIZENS ENERGY DETAIL.
12. RIGHT OF WAY CLEANOUT PER CITIZENS ENERGY DETAIL.
13. SEWER SERVICE CONNECTION PER CITIZENS ENERGY DETAIL.
14. CONTRACTOR TO FIELD VERIFY DEPTH OF SANITARY SEWER. NOTIFY ENGINEER OF FINDINGS.
15. REROUTED FIBER LINE. CONDUIT BY CONTRACTOR. FIBER LINE TO BE BY OWNER. MATCH EXISTING CONDUIT SIZE AND NUMBER.
16. TRANSFORMER. REFER TO ELECTRICAL FOR MORE INFORMATION.
17. (2) 8" CHILLED WATER RETURN LINES AND (2) 8" CHILLED WATER SUPPLY LINES. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR PIPE AND INSULATION REQUIREMENTS. REFER TO C401 FOR ROUTING INFORMATION.
18. REFER TO MECHANICAL DRAWINGS FOR CONTINUATION.
19. WATER VALVE
20. BACKFILL ALL PARTS OF THE SANITARY LATERAL PIPE NO TRENCH LOCATED UNDER OR WITHIN 5FT FROM A CONCRETE OR PAVED AREA WITH GRANULAR MATERIAL.

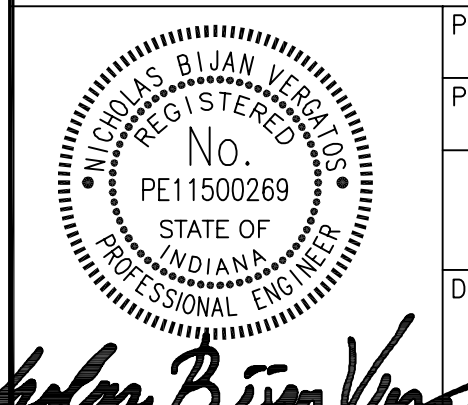


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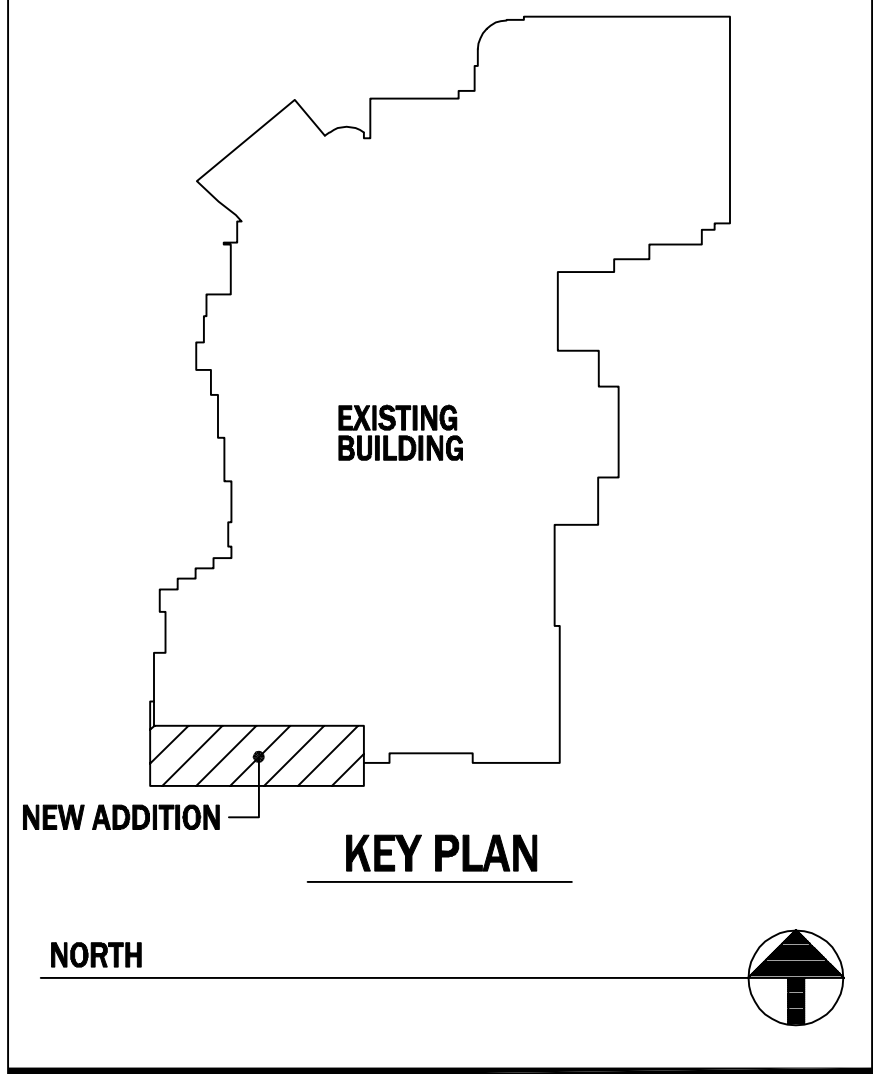
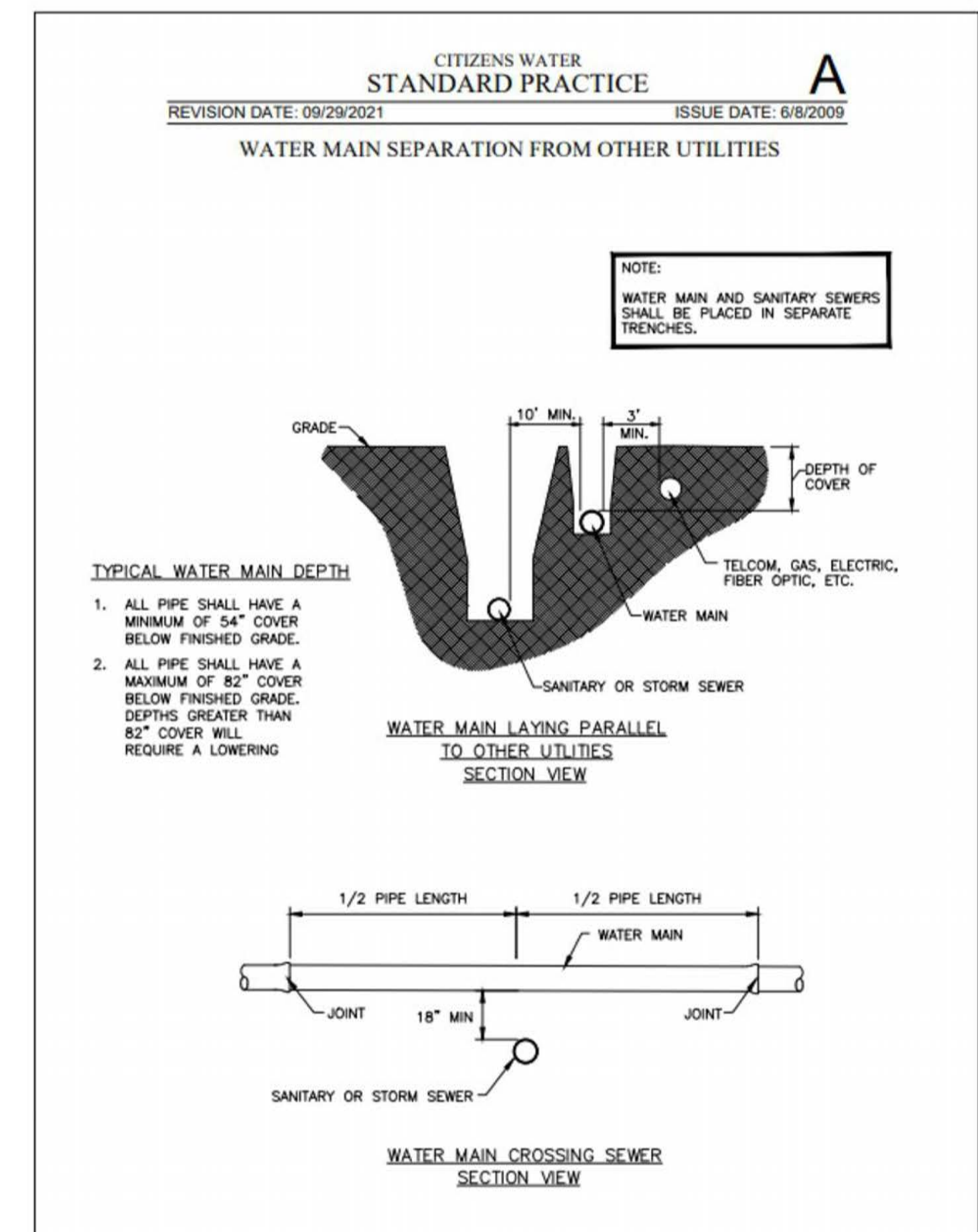
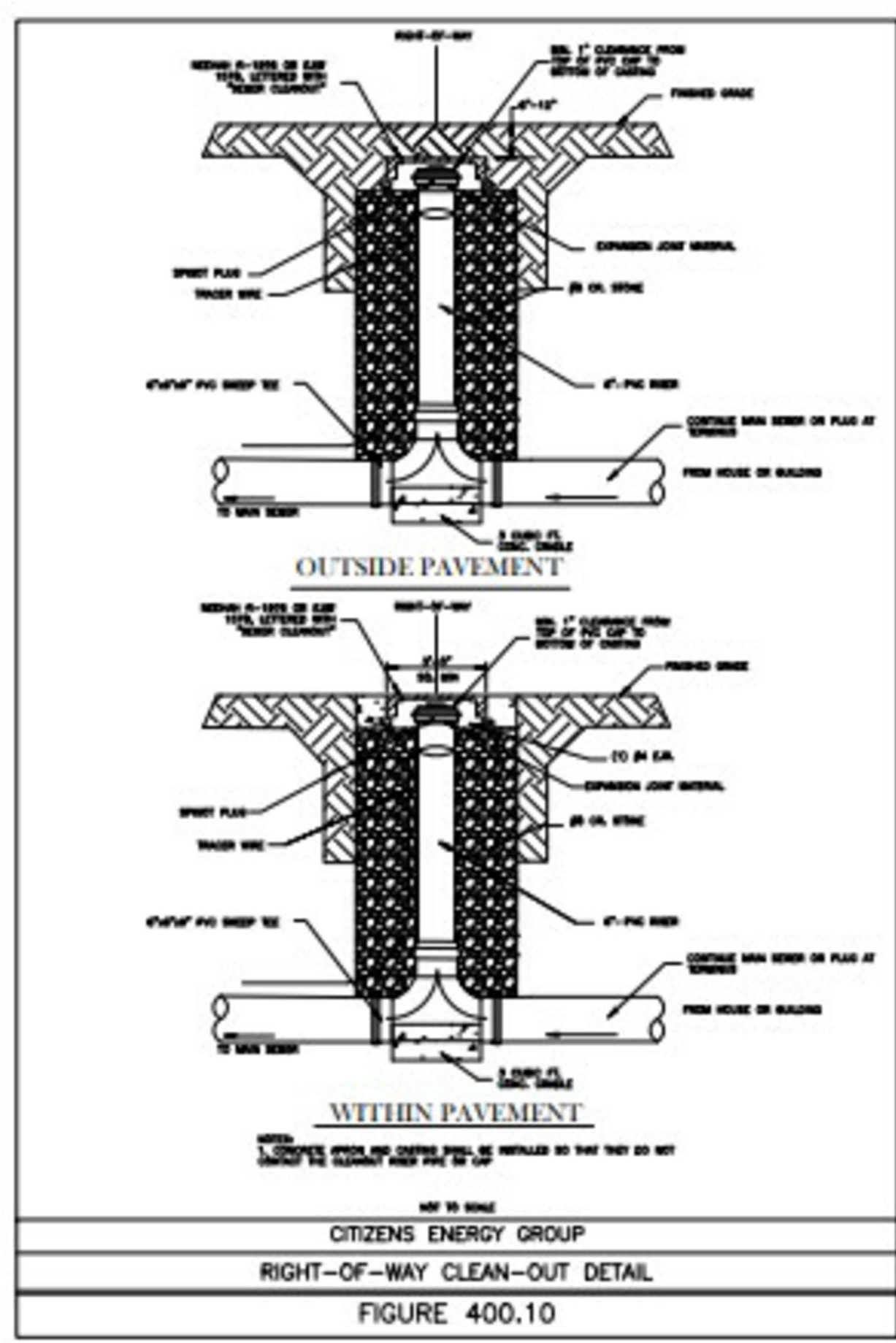
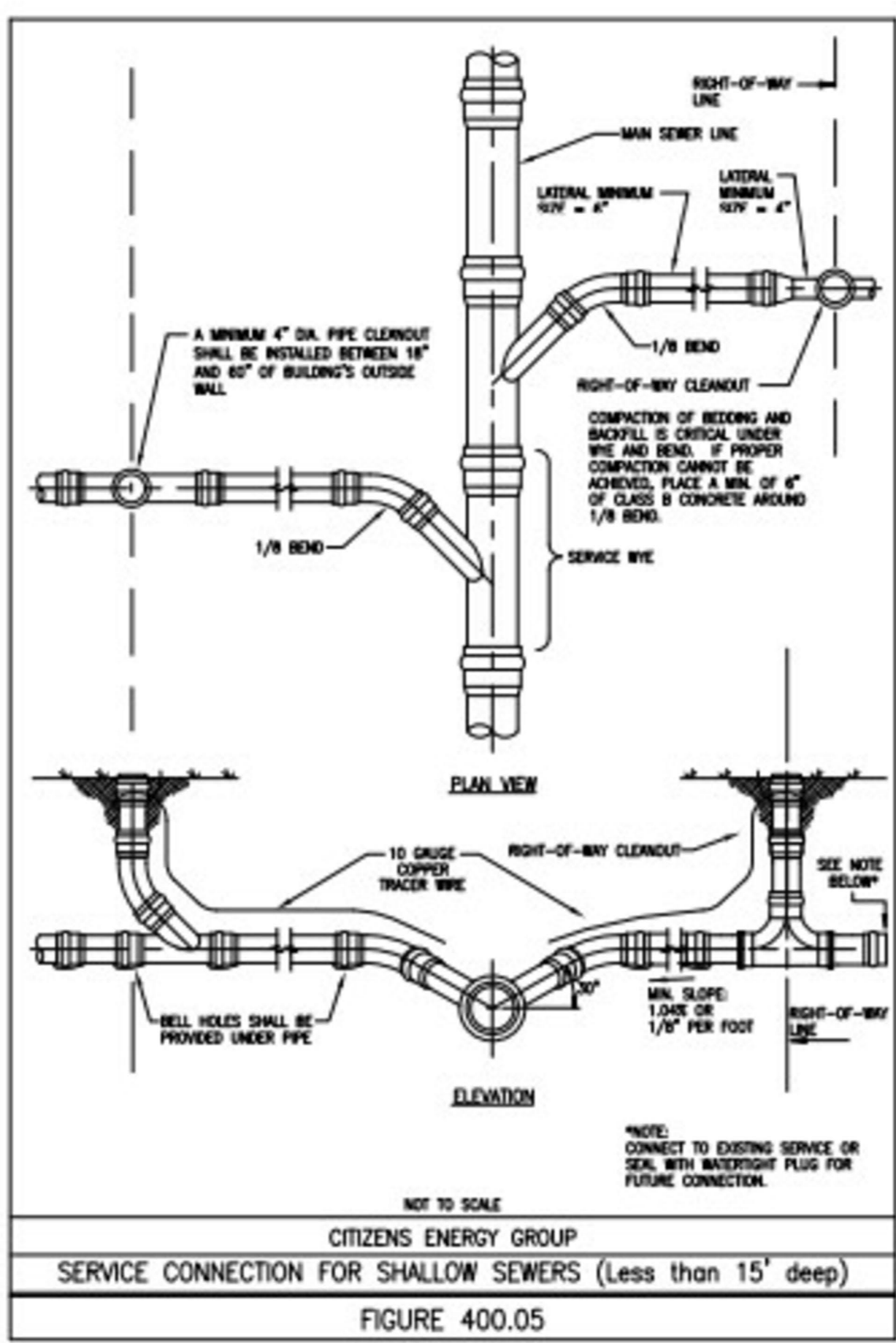
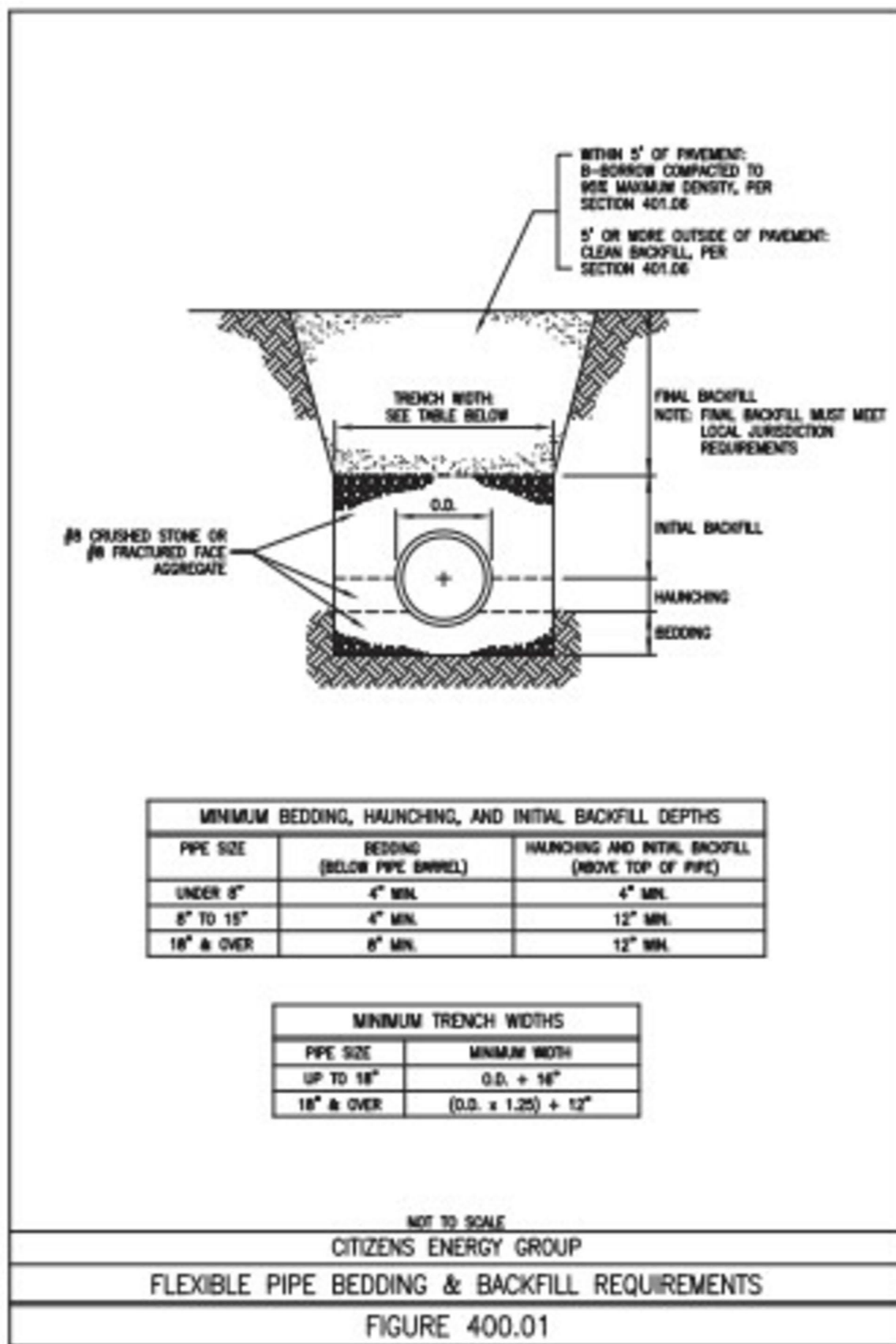
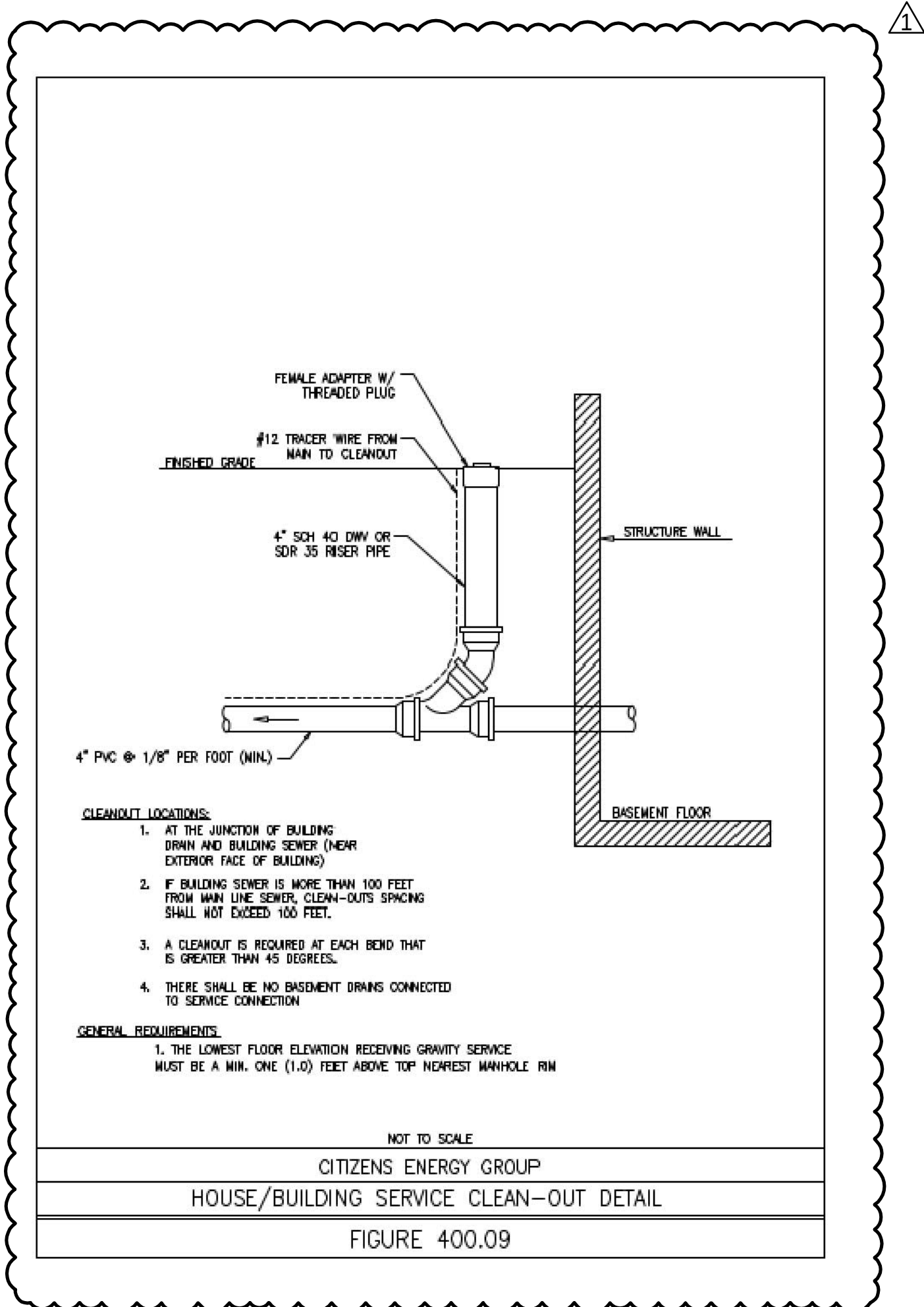
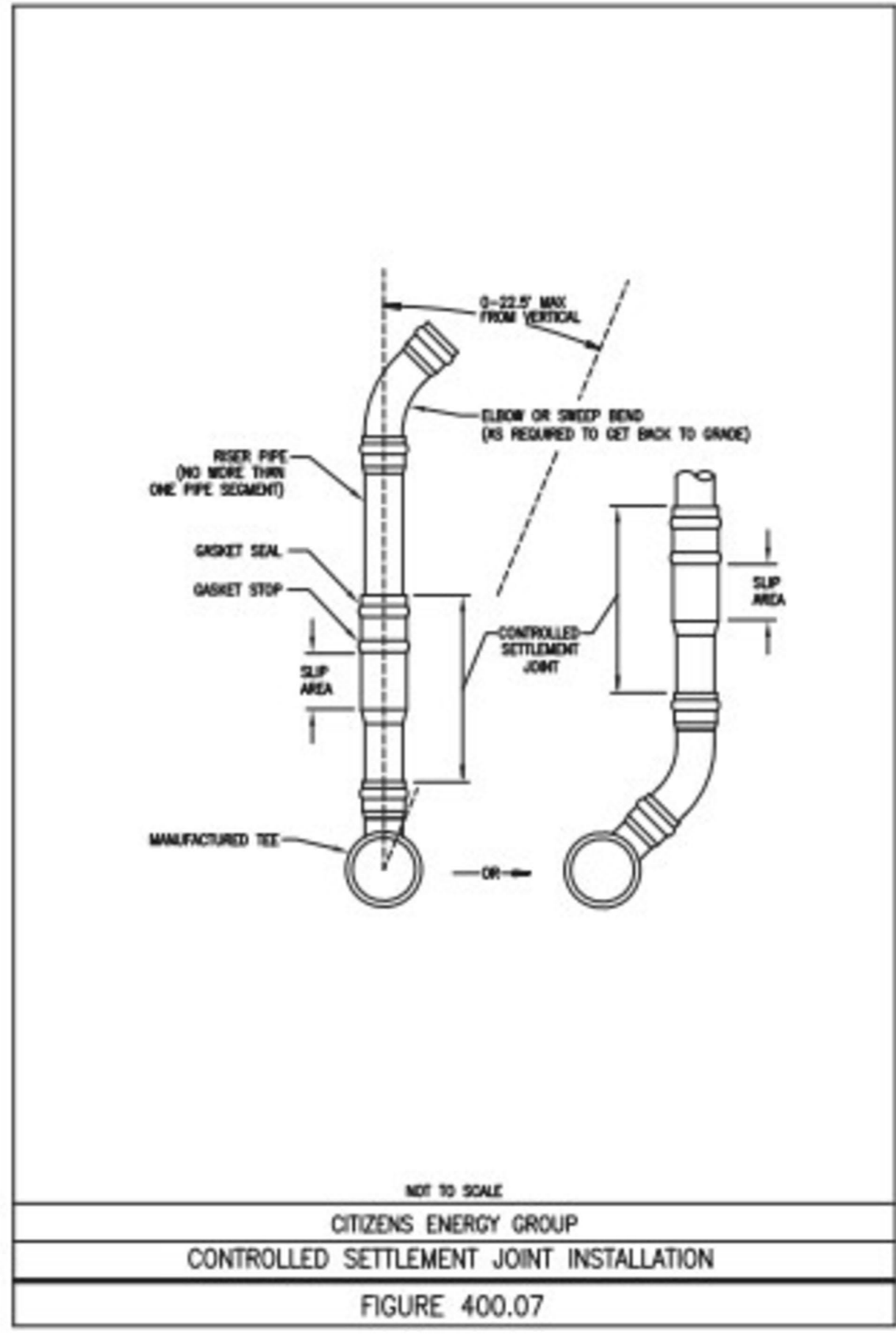
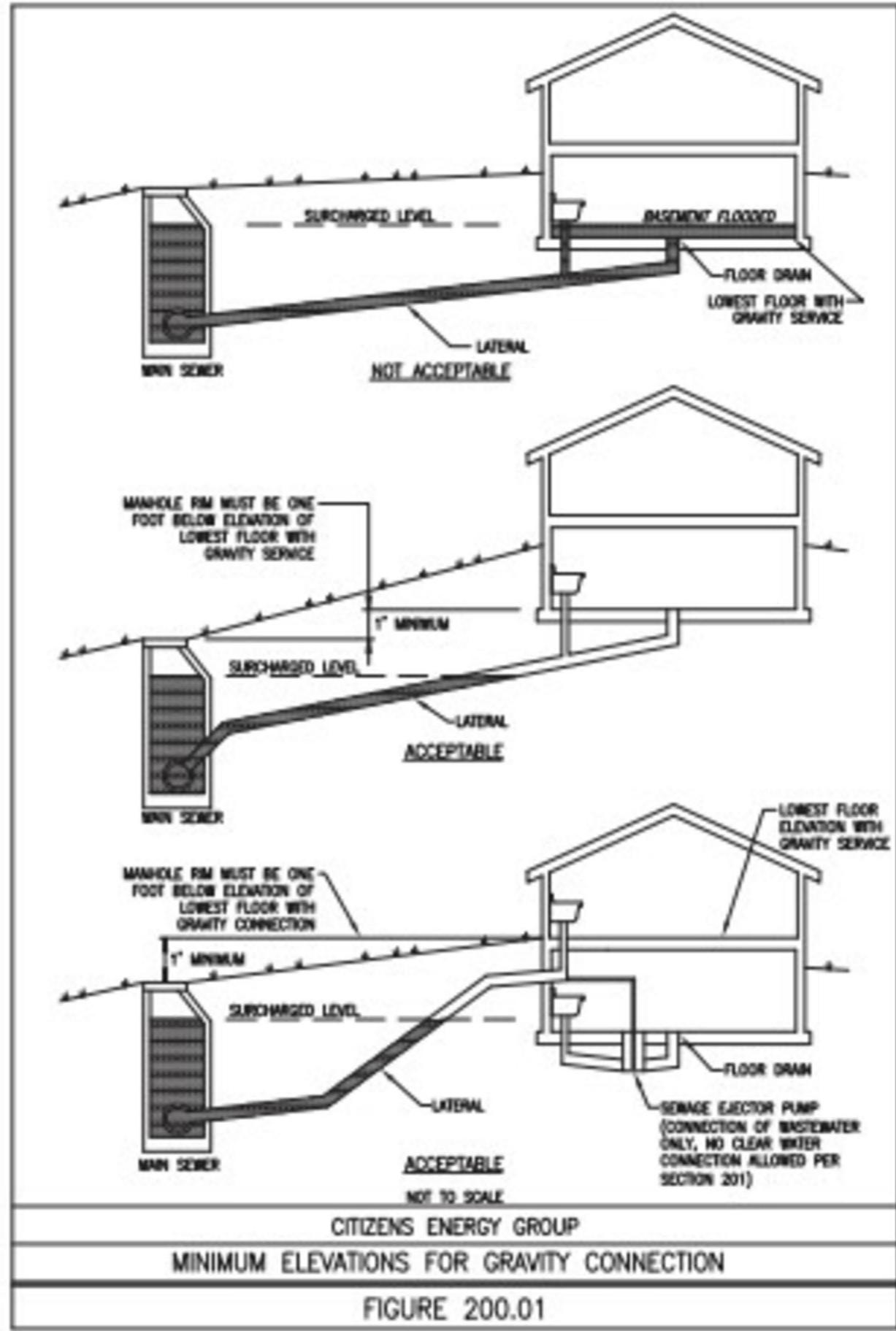
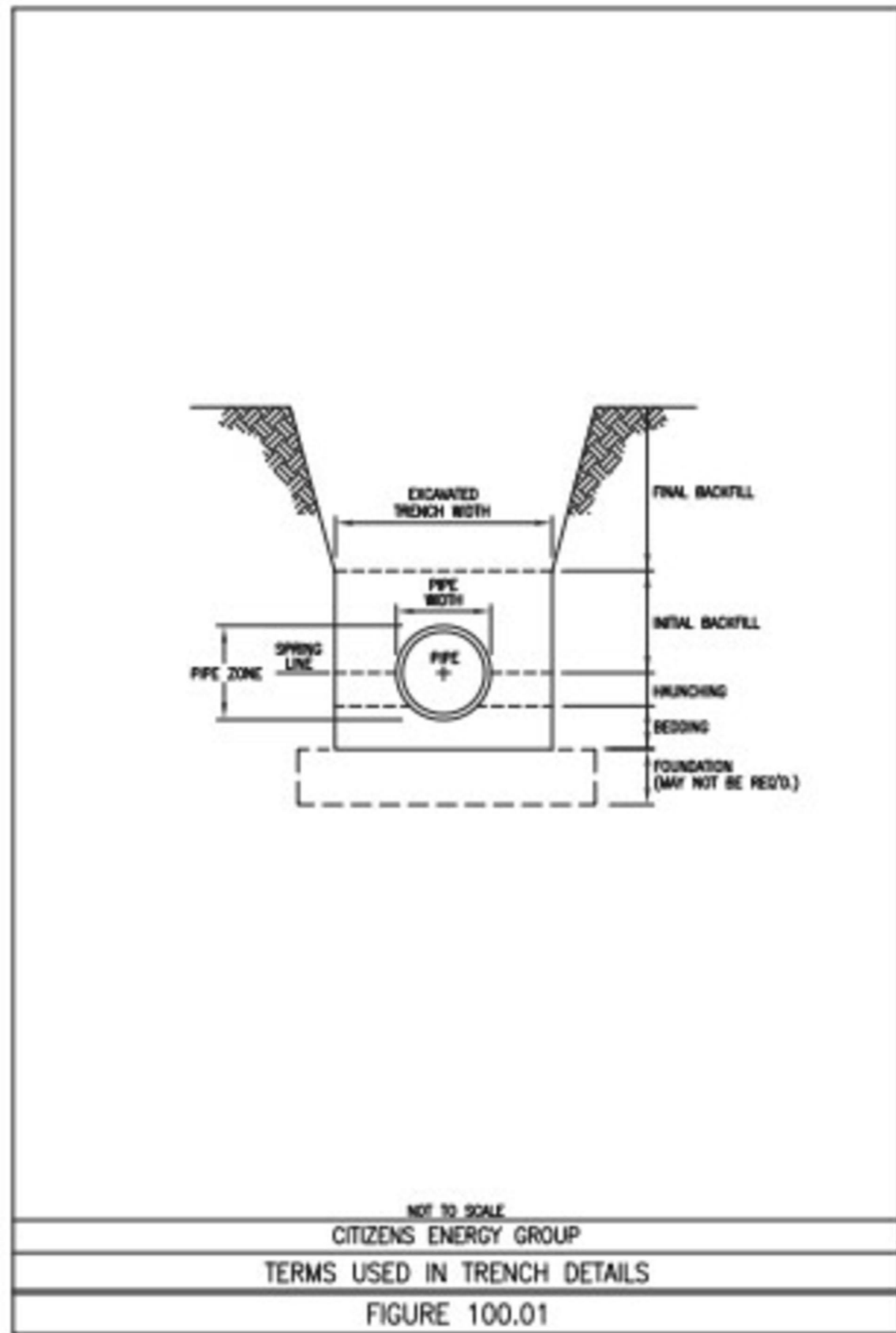
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Drawing Title: SITE UTILITY PLAN	
Project No: 2022043.00	Project Date: JANUARY 09, 2023
Drawing No: C400	



Nicholas Brian Vegetar



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Drawing Title:
CITIZENS ENERGY DETAILS

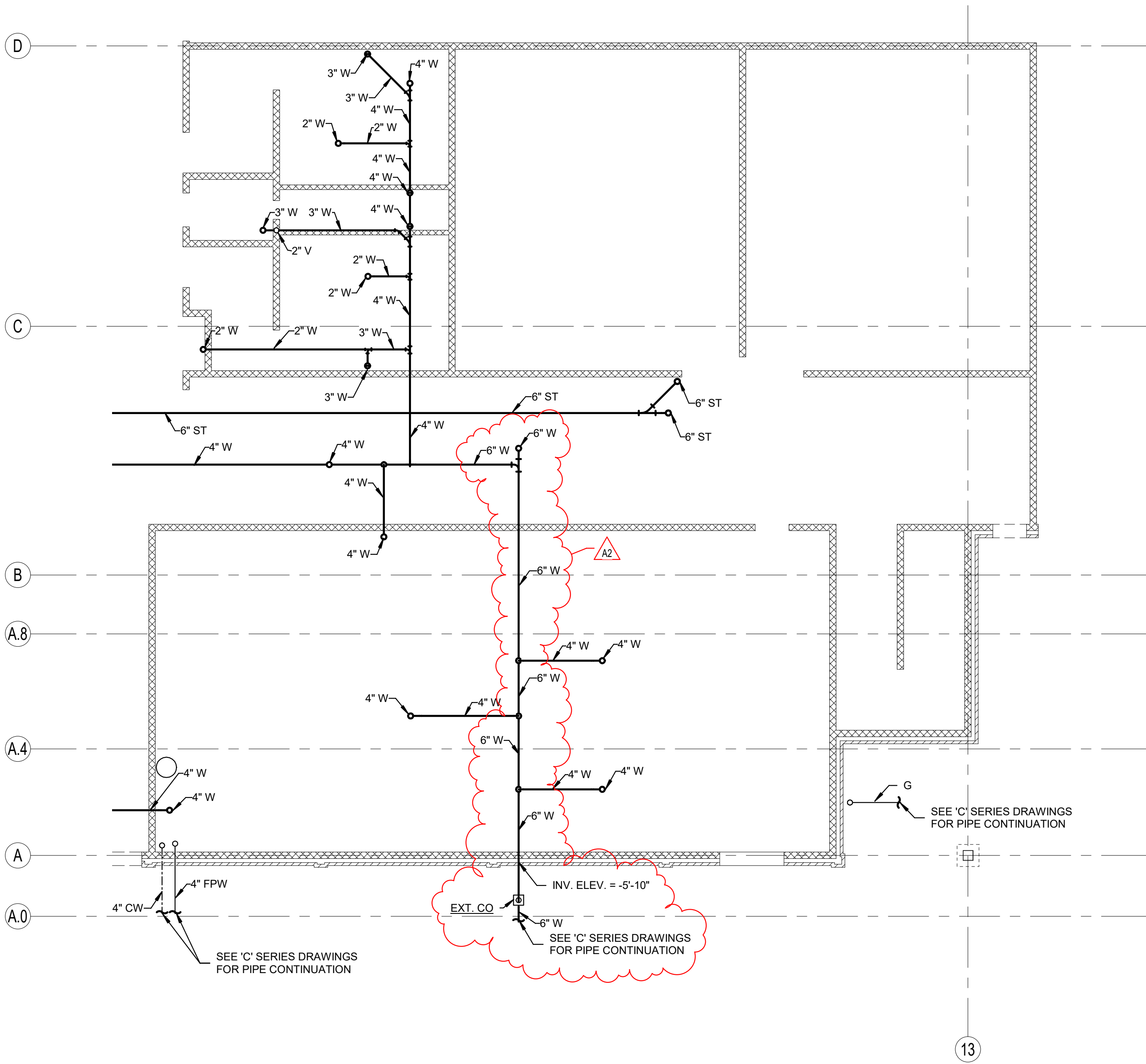
Project No: 2022043.00
Project Date: JANUARY 09, 2023

Drawing No: **C411**

PLUMBING GENERAL NOTES

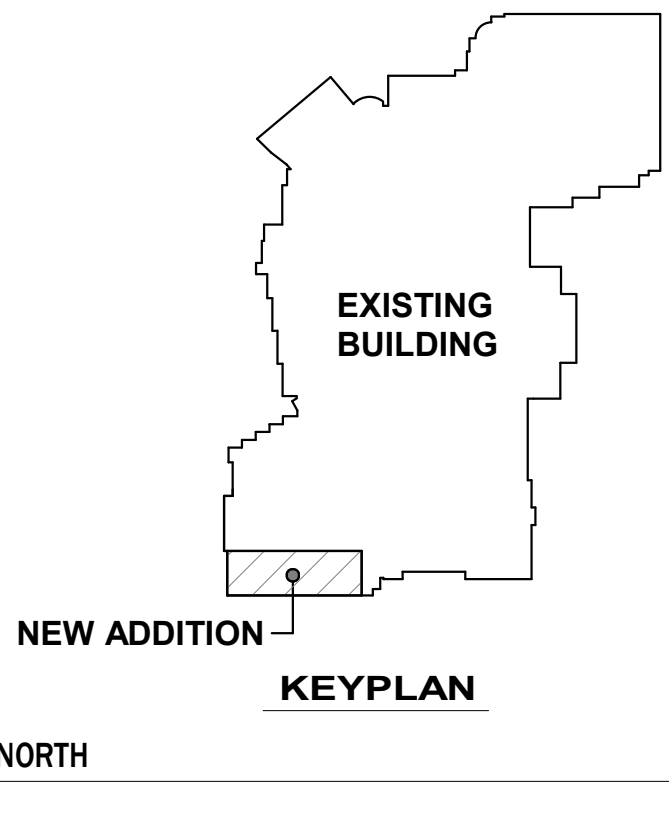
- SEE DRAWING P-001 FOR ADDITIONAL NOTES.
- MECHANICAL CONTRACTOR SHALL PROVIDE CONCRETE PADS FOR ALL FLOOR MOUNTED PLUMBING EQUIPMENT.
- THE BUILDING WILL BE A FULLY SPRINKLERED. FIRE PROTECTION CONTRACTOR SHALL DESIGN THE COMPLETE SYSTEM ACCORDING TO THE CRITERIA OUTLINED ON THE DRAWINGS, IN THE SPECIFICATIONS, N.F.P.A. 13. THE ENTIRE BUILDING SHALL BE PROTECTED BY A WET PIPE SPRINKLER SYSTEM.
- FIRE PROTECTION CONTRACTOR SHALL PREPARE ALL DRAWINGS AND APPLICATIONS REQUIRED TO OBTAIN APPROVAL OF THE SYSTEM BY OWNERS INSURANCE UNDERWRITER, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION. ALL DRAWINGS TO BE SUBMITTED DURING CONSTRUCTION.
- FIRE PROTECTION CONTRACTOR SHALL SUBMIT DRAWINGS WITH ALL SPRINKLER HEAD LOCATIONS. ALL SPRINKLER HEADS TO BE LAID OUT NEATLY WITHIN THE CEILING SYSTEMS AND BE COORDINATED WITH ALL BULKHEADS, CEILINGS AND STRUCTURE. REFERENCE ARCHITECTURAL DRAWINGS FOR CEILING PLANS.
- ALL PIPING, SIZES, ZONES AND SPRINKLER MAINS SHOWN ON DRAWINGS ARE FOR BIDDING AND DESIGN INTENT ONLY. FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR PROPER COVERAGE AND CAPACITY OF THE SPRINKLER SYSTEM.
- SPRINKLER PIPING SHALL NOT BE ROUTED THRU ANY TECHNOLOGY EQUIPMENT ROOMS (TR OR ER), USE SIDEWALL SPRINKLER HEADS WITH GUARDS TO SERVE THE ROOM.
- REFER TO SPECIFICATION 231123 FOR NATURAL GAS PIPING SYSTEM.
- MARK ALL LOCATIONS OF VALVES ON CEILING GRID WITH ENGRAVED PLASTIC LABELS.

PLUMBING FIXTURE ROUGH-IN LEGEND				
MARK	FIXTURE CONNECTION			
	CW	HW	W	V
EW-1	3/4"	1 1/2"	1 1/2"	
EW-2	1/2"		1 1/2"	1 1/2"
FD-1			2"	
FD-2			4"	
L-1	1/2"	1/2"	1 1/2"	1 1/2"
HB-1	3/4"			
MB-1	1/2"			
NFWH-1	3/4"	0"		
RH-1	3/4"			
SH-1			1 1/2"	
OFD-1			4"	
RD-1			4"	
MB-1	3/4"	3/4"	3"	1 1/2"
SK-1	1/2"	1/2"	1 1/2"	1 1/2"
SK-2	1/2"	1/2"	1 1/2"	1 1/2"
SK-3	1/2"	1/2"	1 1/2"	1 1/2"
UR-1	3/4"		2"	1 1/2"
UR-2	3/4"		2"	1 1/2"
WC-1	1"		4"	2"
WC-2	1"		4"	2"



1 FOUNDATION PLUMBING PLAN - UNIT B
1/8" = 1'-0"

#	Revision	Date
A2	ADDENDUM #2	02.06.2023



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Drawing Title:
**FOUNDATION PLUMBING
PLAN - UNIT B**

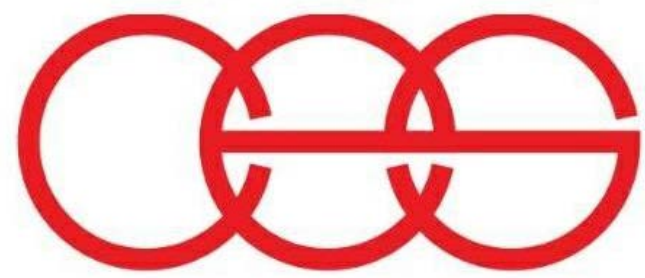
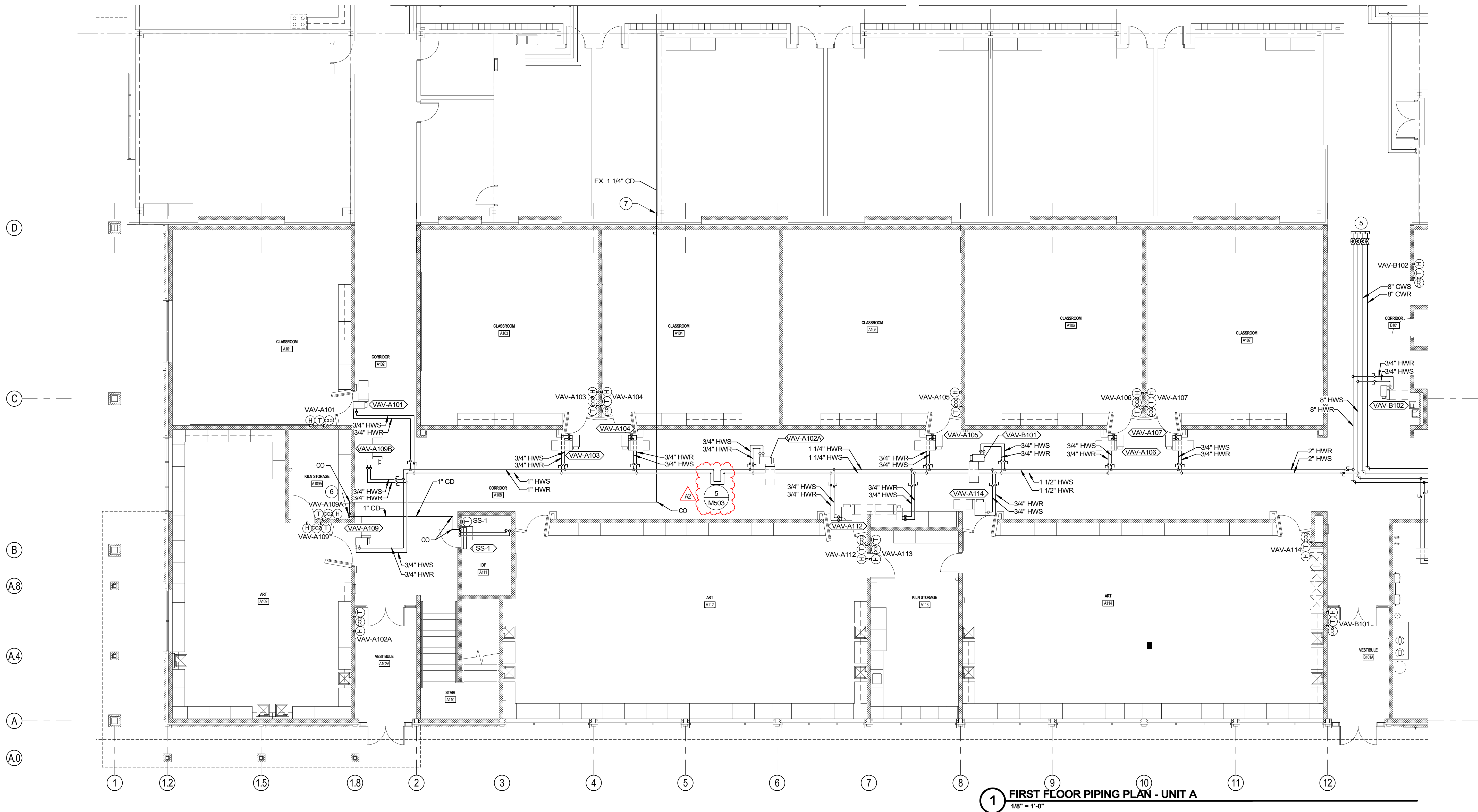
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	Project Date:	JANUARY 09, 2023
	Drawing No:	PF1B

GENERAL PIPING NOTES

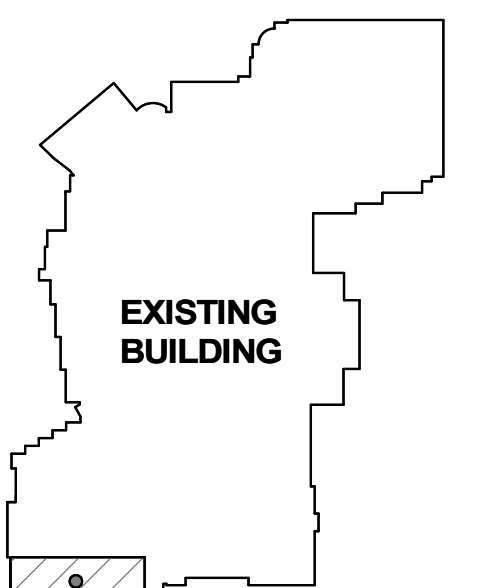
- A. DARK LINES INDICATE NEW WORK.
B. LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING.
C. PROVIDE SHUTOFF VALVES AT EVERY BRANCH CONNECTION TO A MAIN.
D. PROVIDE SHUTOFF VALVES ON HYDRONIC PIPING AT ALL MECHANICAL EQUIPMENT.
E. PROVIDE GATE VALVES ON ALL HYDRONIC PIPING 2-1/2" AND ABOVE.
F. MARK ALL LOCATIONS OF VALVES WITH ENGRAVED PLASTIC TAGS ON CEILING GRID BELOW VALVE.

MECHANICAL PIPING PLAN NOTES

- # NOTE
1. SEE ENLARGED MECHANICAL ROOM DETAIL SHEET M401 FOR CONTINUATION OF PIPING.
2. 2-1/2" CWS/CWR, 2" HWS/HWR PIPE UP IN CHASE TO SECOND FLOOR.
3. 2-1/2" CWS/CWR, 2" HWS/HWR PIPE DOWN IN CHASE TO FIRST FLOOR.
4. 2-1/2" CWS/CWR, 2" HWS/HWR PIPE UP THROUGH ROOF TO AHU-2.
5. VALVE AND CAP 8" CWS/CWR, 8" HWS/HWR PIPE FOR FUTURE CONNECTION.
6. ROUTE CONDENSATE TO FLOOR DRAIN. PROVIDE FUNNEL TO PREVENT SPLASHING.
7. DEMO EXISTING CONDENSATE PIPE FROM EXTERIOR OF BUILDING UP TO HORIZONTAL RUN. CONNECT NEW 1-1/4" CONDENSATE TO EXISTING 1-1/4" CONDENSATE. ROUTE NEW CONDENSATE TO CONDENSATE PUMP MOUNTED ABOVE CEILING IN ROOM A104 AND ROUTE TO FLOOR DRAIN AS SHOWN. CONDENSATE PUMP SIMILAR TO LITTLE GIANT CONDENSATE PUMP VQMA-1S SERIES PUMP.
8. DEMO EXISTING CONDENSATE PIPE FROM EXTERIOR OF BUILDING TO RISE TO SECOND FLOOR. CONNECT NEW 1-1/4" CONDENSATE TO EXISTING 1-1/4" CONDENSATE AND ROUTE TO MOP SINK WHERE SHOWN.
9. ROUTE REFRIGERANT LINES UP THROUGH STUD WALL TO ROOF PIPE PORTAL.



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NEW ADDITION
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ADDITION & RENOVATIONS TO:
**FRANKLIN CENTRAL
HIGH SCHOOL**
FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:
**FIRST FLOOR PIPING PLAN
- UNIT A**



Project No: 2022043.00

Project Date:
JANUARY 09, 2023

Drawing No:

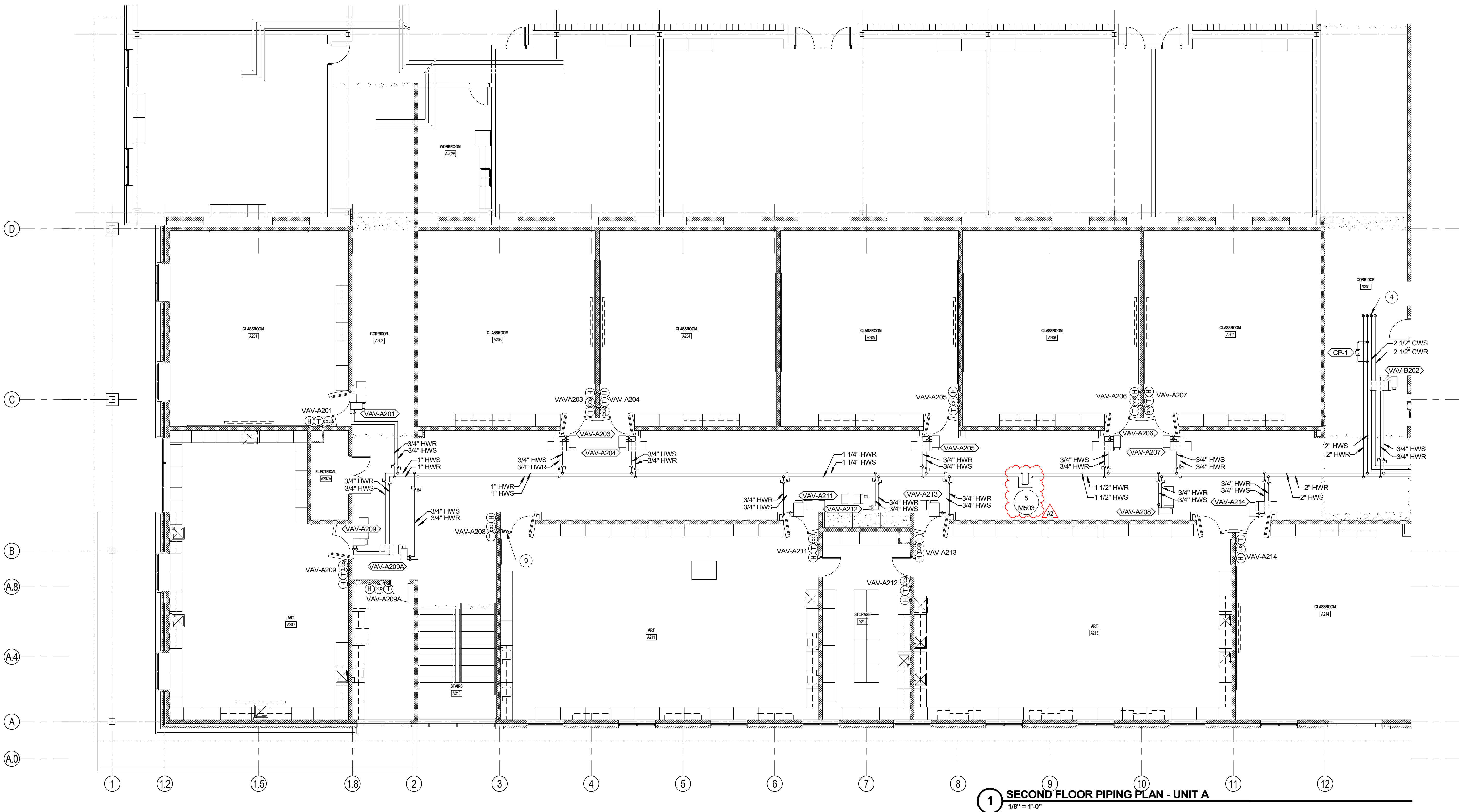
MP1A

GENERAL PIPING NOTES

- A. DARK LINES INDICATE NEW WORK.
- B. LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING.
- C. PROVIDE SHUTOFF VALVES AT EVERY BRANCH CONNECTION TO A MAIN.
- D. PROVIDE SHUTOFF VALVES ON HYDRONIC PIPING AT ALL MECHANICAL EQUIPMENT.
- E. PROVIDE GATE VALVES ON ALL HYDRONIC PIPING 2-1/2" AND ABOVE.
- F. MARK ALL LOCATIONS OF VALVES WITH ENGRAVED PLASTIC TAGS ON CEILING GRID BELOW VALVE.

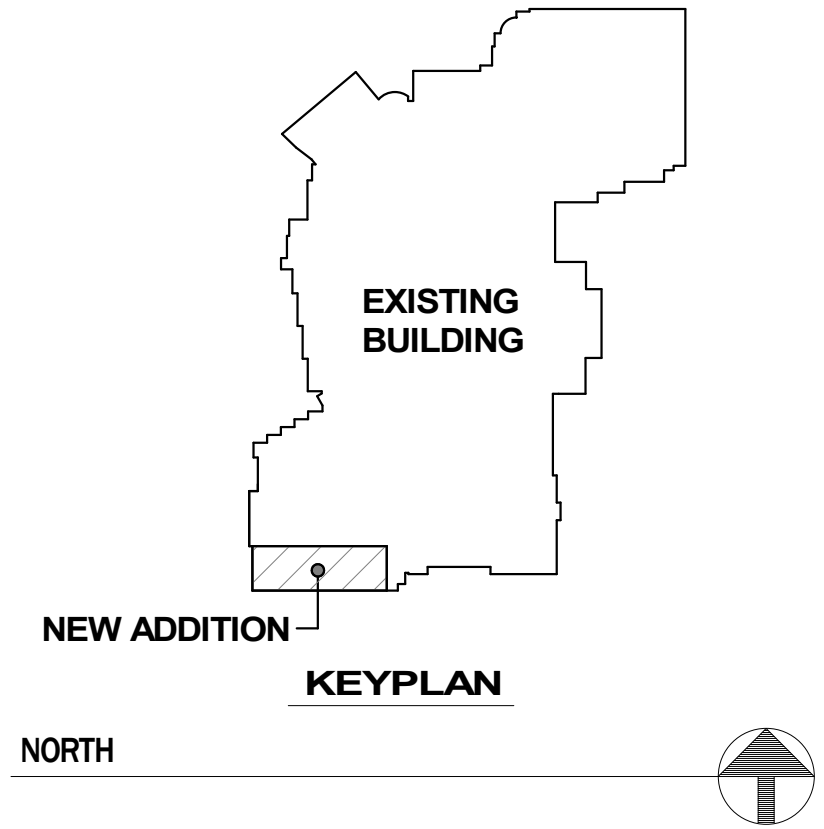
MECHANICAL PIPING PLAN NOTES

- | # | NOTE |
|---|---|
| 1 | SEE ENLARGED MECHANICAL ROOM DETAIL SHEET M401 FOR CONTINUATION OF PIPING. |
| 2 | 2-1/2" CWS/CWR, 2" HWS/HWR PIPE UP IN CHASE TO SECOND FLOOR. |
| 3 | 2-1/2" CWS/CWR, 2" HWS/HWR PIPE DOWN IN CHASE TO FIRST FLOOR. |
| 4 | 2-1/2" CWS/CWR, 2" HWS/HWR PIPE UP THROUGH ROOF TO AHU-2. |
| 5 | VALVE AND CAP 8" CWS/CWR, 8" HWS/HWR PIPE FOR FUTURE CONNECTION. |
| 6 | ROUTE CONDENSATE TO FLOOR DRAIN. PROVIDE FUNNEL TO PREVENT SPLASHING. |
| 7 | DEMO EXISTING CONDENSATE PIPE FROM EXTERIOR OF BUILDING UP TO HORIZONTAL RUN. CONNECT NEW 1-1/4" CONDENSATE TO EXISTING 1-1/4" CONDENSATE. ROUTE NEW CONDENSATE TO CONDENSATE PUMP MOUNTED ABOVE CEILING IN ROOM 4104 AND ROUTE TO FLOOR DRAIN AS SHOWN. CONDENSATE PUMP SIMILAR TO LITTLE GIANT CONDENSATE PUMP VDMA-15 SERIES PUMP. |
| 8 | DEMO EXISTING CONDENSATE PIPE FROM EXTERIOR OF BUILDING TO RISE TO SECOND FLOOR. CONNECT NEW 1-1/4" CONDENSATE TO EXISTING 1-1/4" CONDENSATE AND ROUTE TO MOP SINK WHERE SHOWN. |
| 9 | ROUTE REFRIGERANT LINES UP THROUGH STUD WALL TO ROOF PIPE PORTAL. |



1 SECOND FLOOR PIPING PLAN - UNIT A
1/8" = 1'-0"

#	Revision	Date
A1	ADDENDUM #1	01.31.2023
A2	ADDENDUM #2	02.06.2023



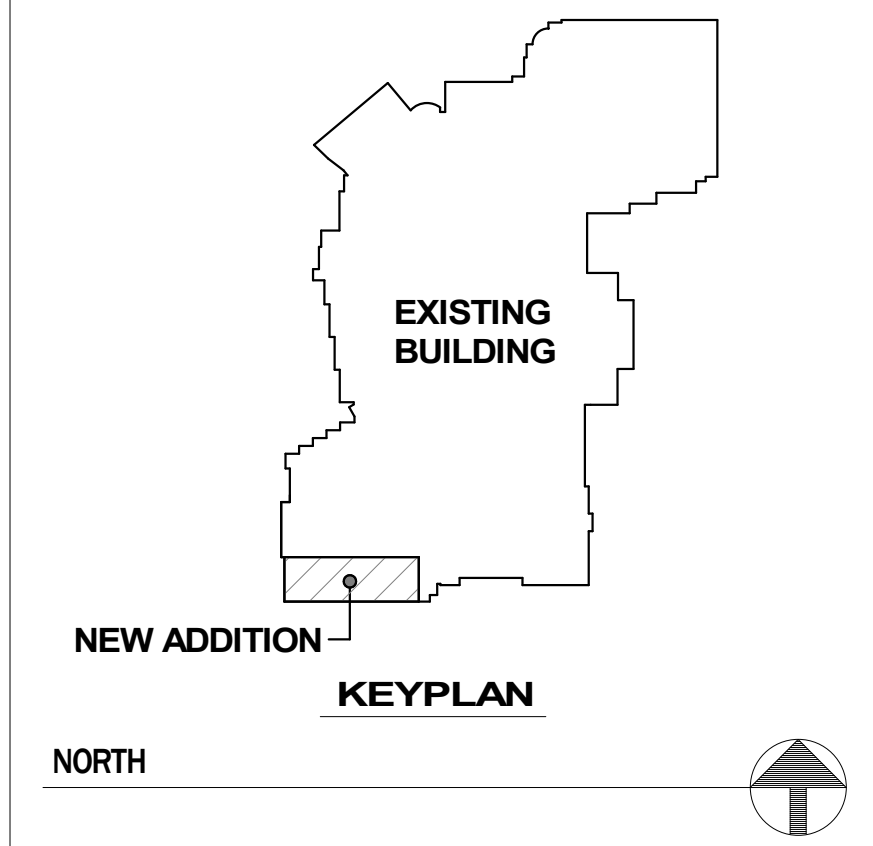
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FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:
SECOND FLOOR PIPING PLAN - UNIT A

	Project No:	2022043.00
	Project Date:	JANUARY 09, 2023
	Drawing No:	MP2A

#	Revision	Date
A2	ADDENDUM #2	02.06.2023

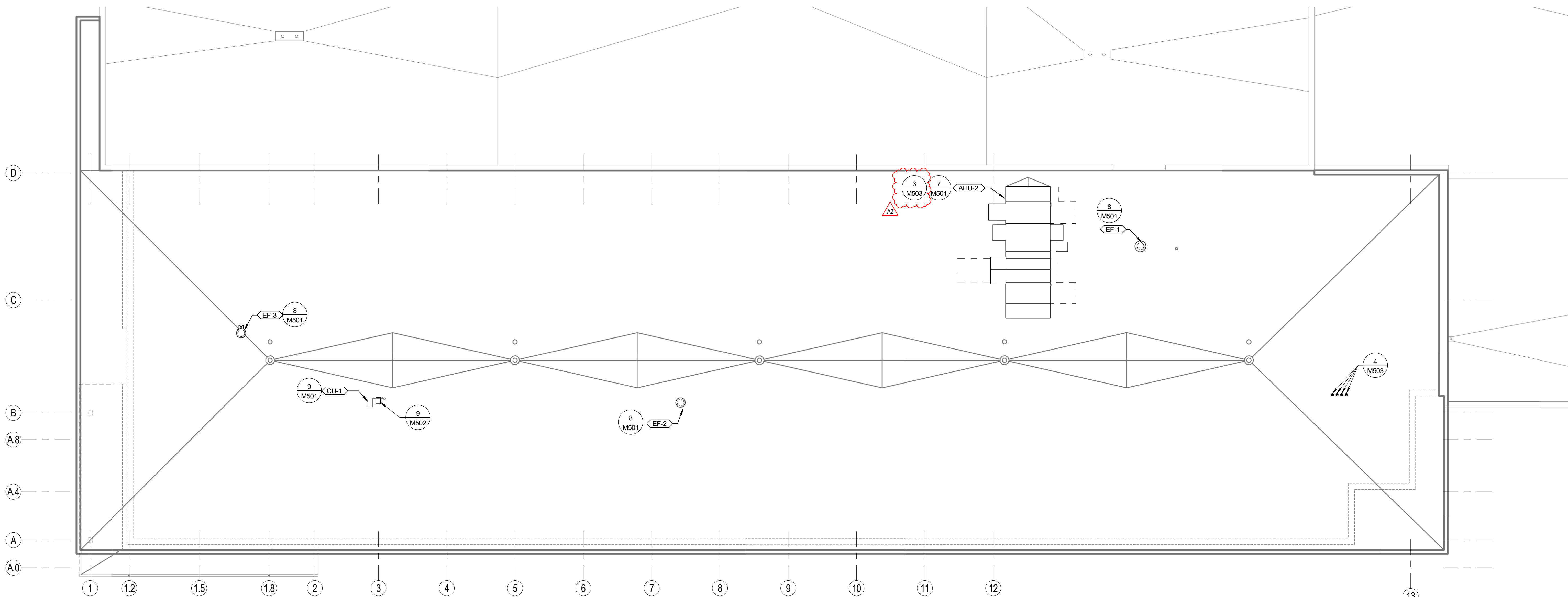


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FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
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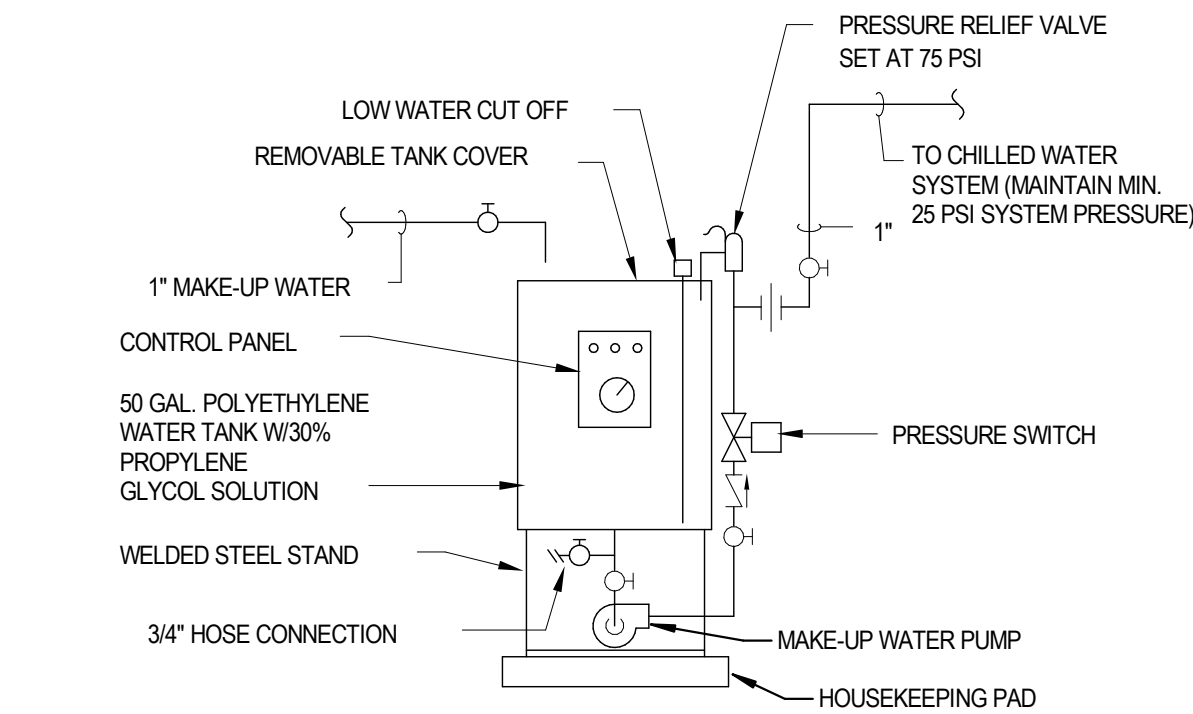
Drawing Title:
MECHANICAL ROOF PLAN

	Project No: 2022043.00
	Project Date: JANUARY 09, 2023
	Drawing No: MHR



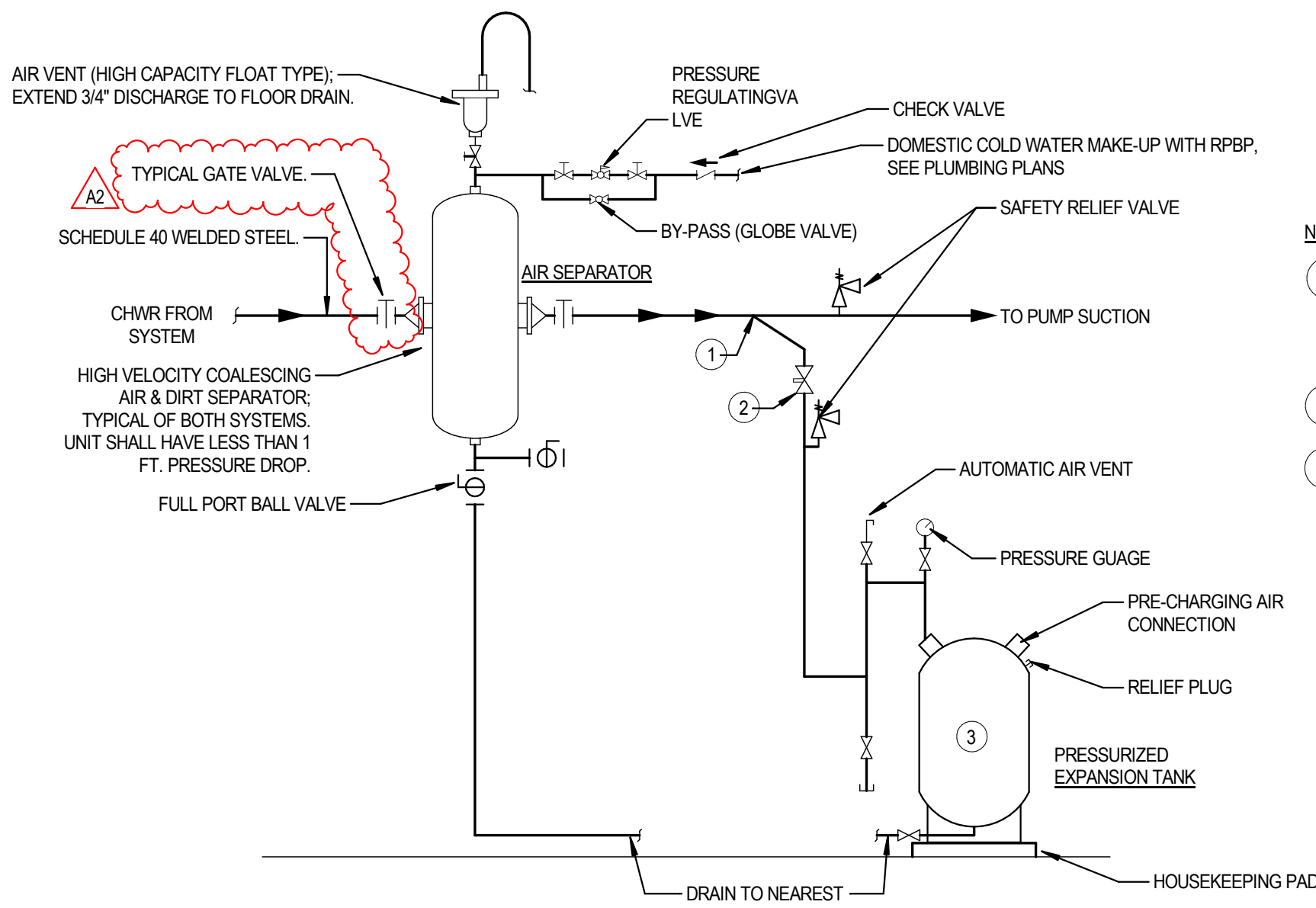
1 MECHANICAL HVAC ROOF PLAN
3/32" = 1'-0"

#	Revision	Date
A2	ADDENDUM #2	02.06.2023

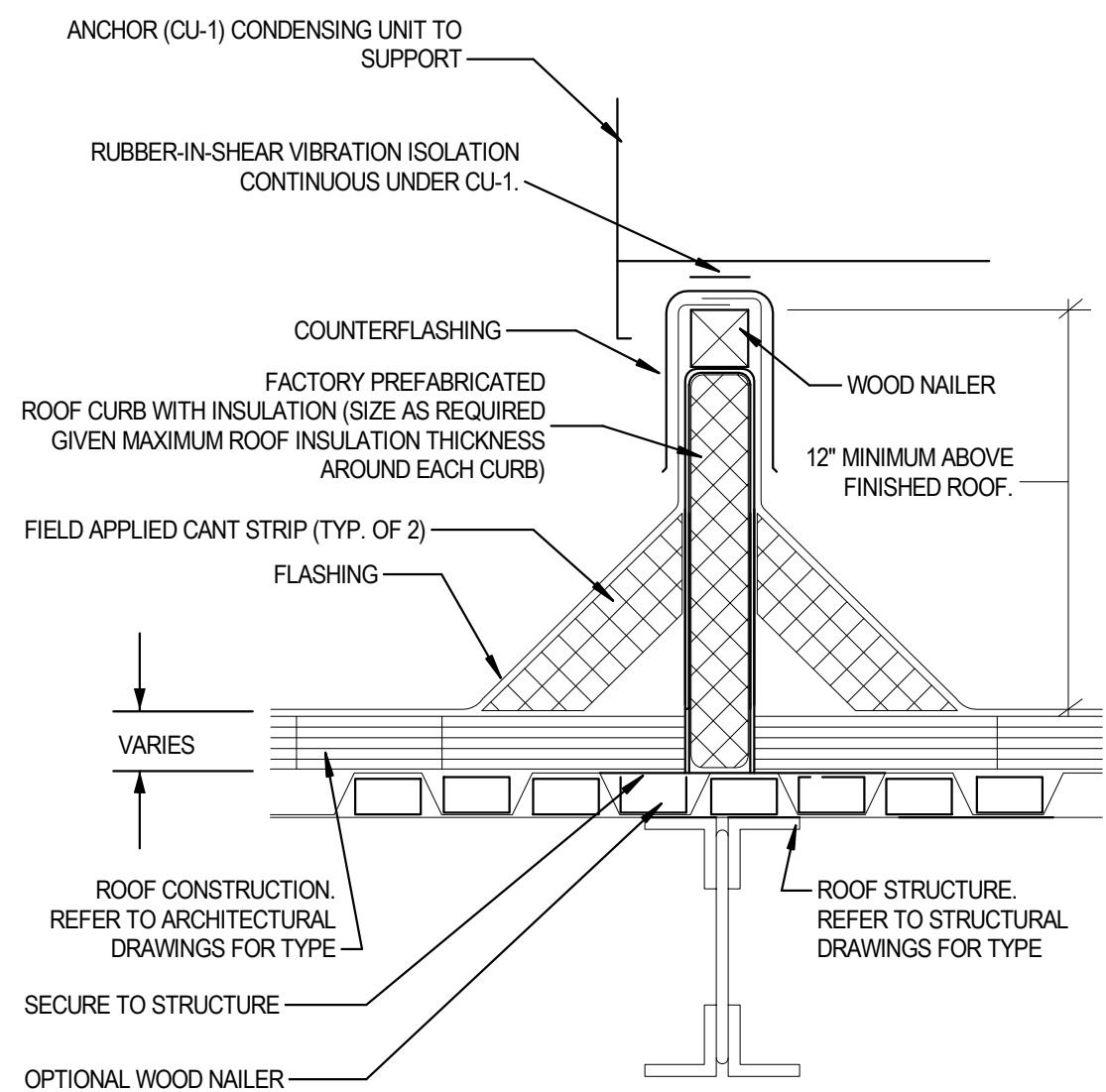


CLOSED LOOP GLYCOL FILL SYSTEM LIKE PULSAFEEDER MODEL GF-1. GLYCOL FILL SYSTEM TO MAKE POSSIBLE AUTOMATIC SYSTEM FILLING WITH NO CONNECTION TO CITY WATER SUPPLY. SUPPLY A PACKAGE UNIT ON A BASE COMPRISING A 50 GALLON COVERED STORAGE RESERVOIR, A TURBINE TYPE PUMP CAPABLE OF HANDLING 10 GPM OF SOLUTION AT 20 PSIG AND 5.25 GPM AT 50 PSIG, WITH 120/60/1.15 AMP MOTOR, A PRESSURE SWITCH TO OPERATE THE PUMP, A LOW WATER CUT-OFF WITH ALARM SWITCH AND ALL NECESSARY PIPING PER DRAWING. UNIT WEIGHT ~750 LBS.

11 GLYCOL FILL DETAIL (GF-1)
NOT TO SCALE

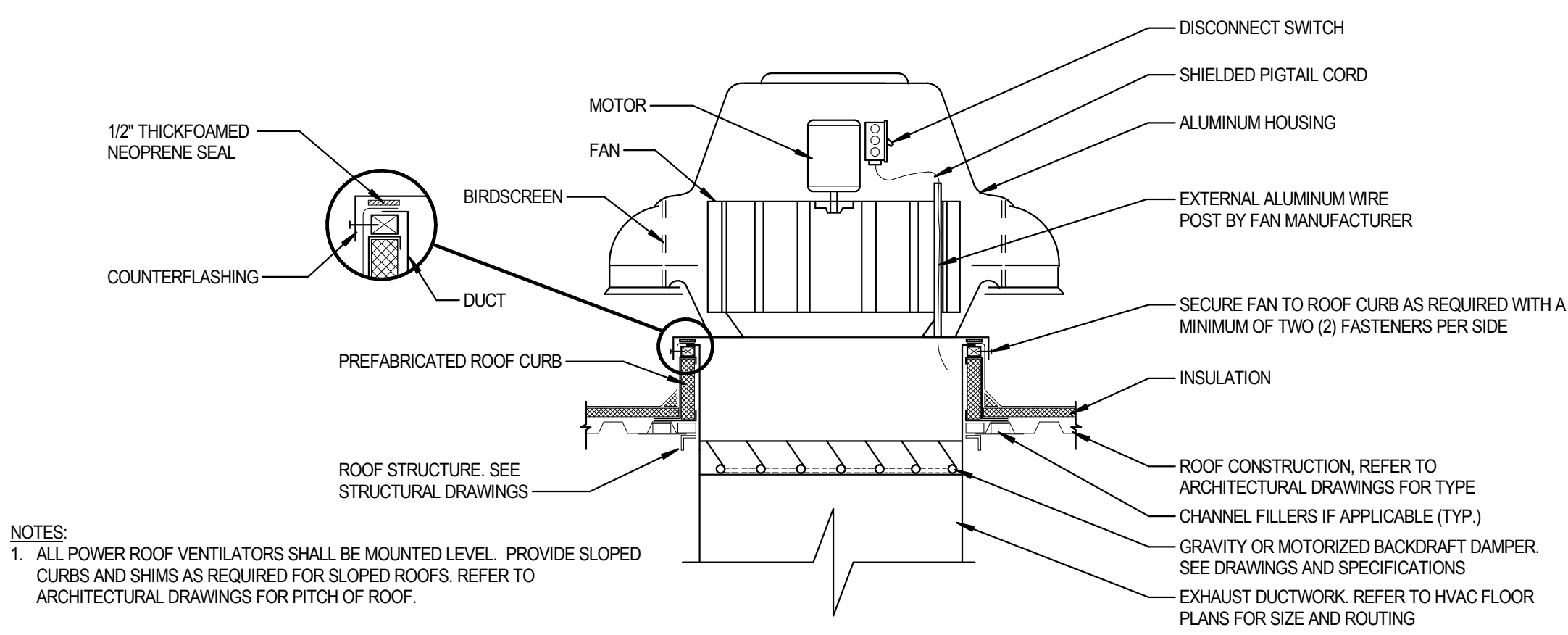


10 AIR/DIRT SEPARATOR AND BAG FILTER AND EXPANSION TANK PIPING DETAIL (W/FLOOR MOUNTED EXPANSION TANK)
NOT TO SCALE



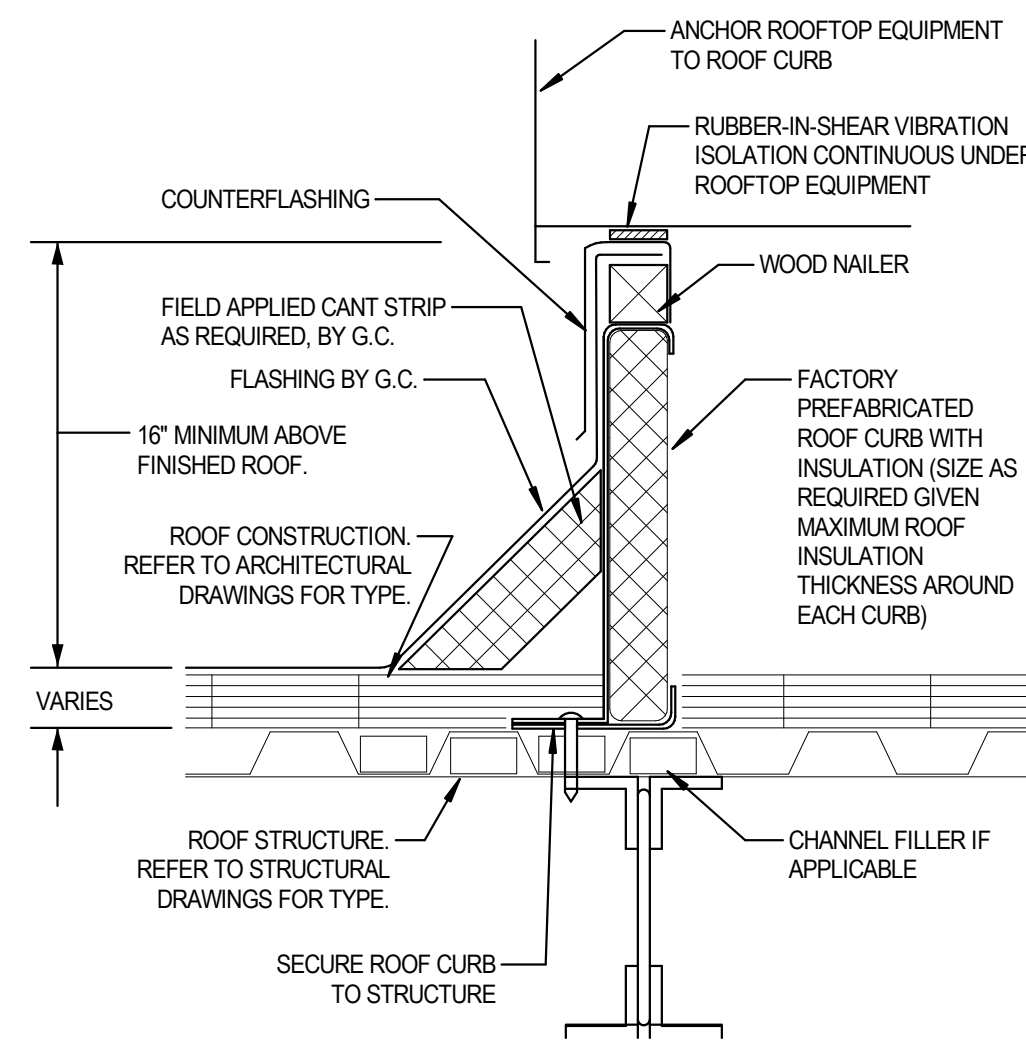
- NOTES:
- EQUIPMENT SUPPORTS SHALL BE PROVIDED WITH PROPERLY DESIGNED FABRICATED LEVELING DEVICES SO EQUIPMENT IS LEVEL AND THE ROOF CURB IS INSTALLED TO MATCH ROOF SLOPE.
 - PROVIDE PERIMETER ANGLE SUPPORT AT ALL SIDES BETWEEN STRUCTURAL STEEL SIZE OF ANGLE BASED ON LOAD OF EQUIPMENT. MINIMUM SIZE SHALL BE 3" X 3" X 1/4".
 - ROOF CURBS SHALL NOT BE SUPPORTED FROM THE ROOF INSULATION.
 - COORDINATE LOCATION OF ROOF CURB AND ROOF OPENING WITH STRUCTURE.
 - ROOFING INSULATION SHALL BE CONTINUOUS UNDER THE ROOFTOP EQUIPMENT.

9 CONDENSING UNIT ROOF SUPPORT DETAIL
NOT TO SCALE



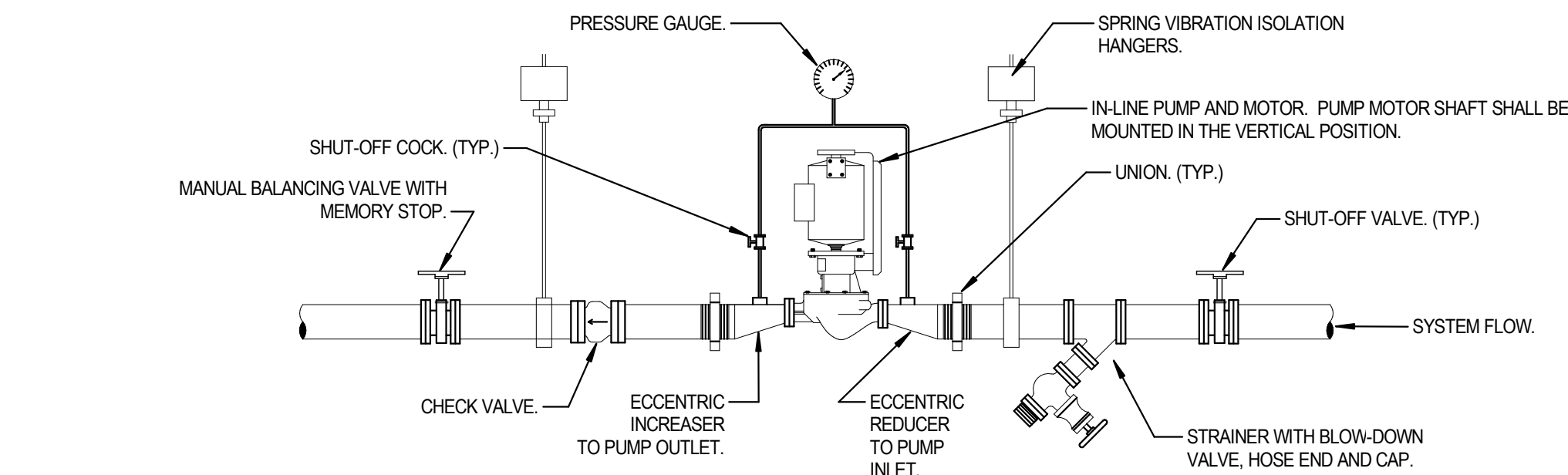
- NOTES:
- ALL POWER ROOF VENTILATORS SHALL BE MOUNTED LEVEL. PROVIDE SLOPED CURBS AND SHIMS AS REQUIRED FOR SLOPED ROOFS. REFER TO ARCHITECTURAL DRAWINGS FOR PITCH OF ROOF.

8 POWER ROOF VENTILATOR INSTALLATION DETAIL
NOT TO SCALE

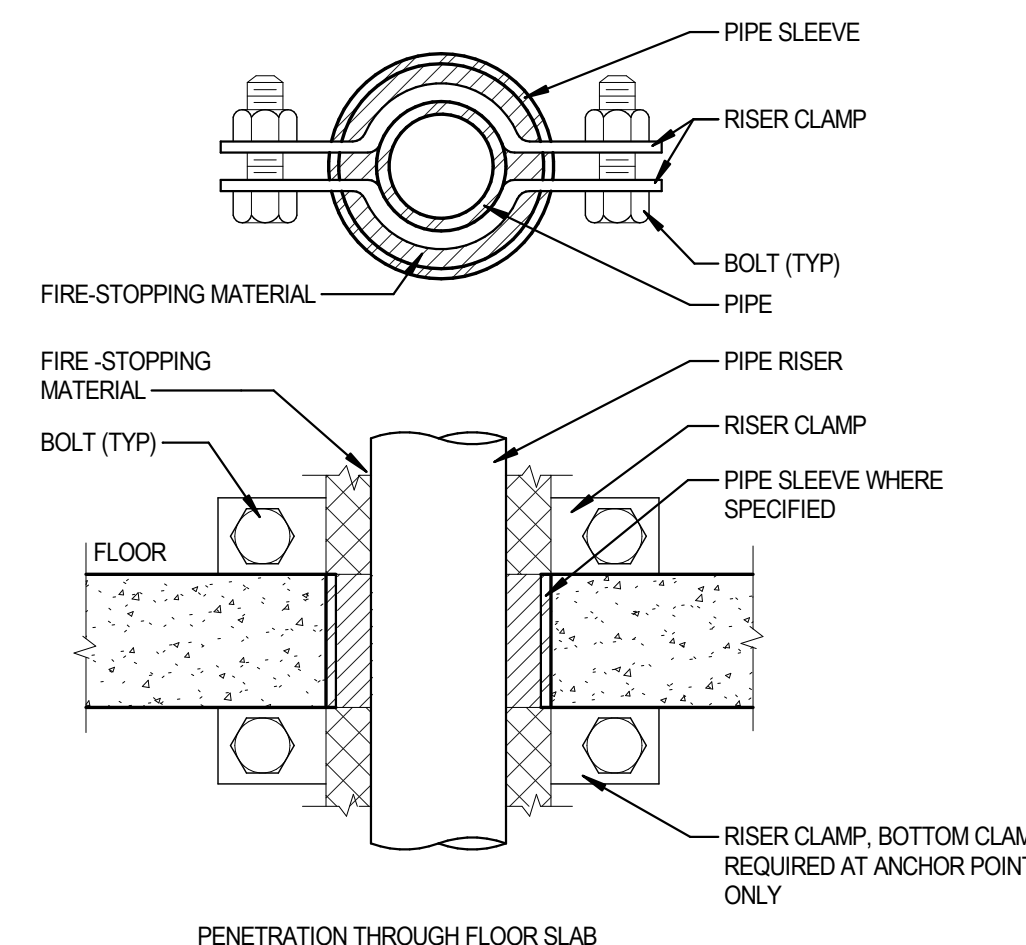
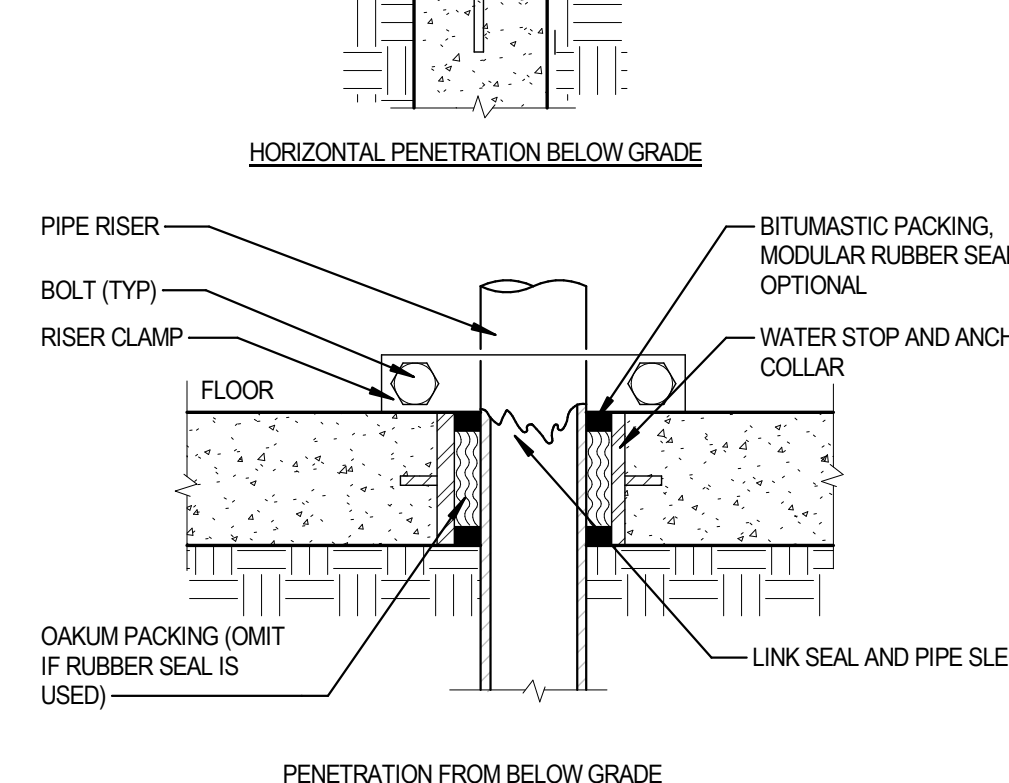
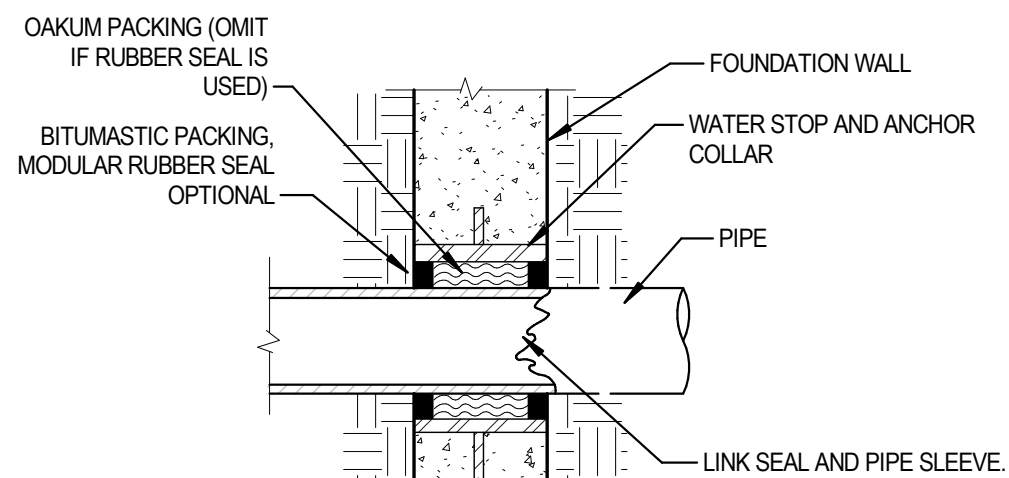


- NOTES:
- ROOF CURBS SHALL BE PROVIDED WITH PROPERLY DESIGNED FABRICATED LEVELING DEVICES SO EQUIPMENT IS LEVEL AND THE ROOF CURB IS INSTALLED TO MATCH THE ROOF SLOPE.
 - PROVIDE PERIMETER ANGLE SUPPORT AT ALL SIDES BETWEEN STRUCTURAL STEEL SIZE OF ANGLE BASED ON LOAD OF EQUIPMENT. MINIMUM SIZE SHALL BE 3" X 3" X 1/4".
 - ROOF CURBS SHALL NOT BE SUPPORTED FROM THE ROOF INSULATION.
 - COORDINATE LOCATION OF ROOF CURB AND ROOF OPENING WITH STRUCTURE.
 - ROOFING INSULATION SHALL BE CONTINUOUS UNDER THE ROOFTOP EQUIPMENT.

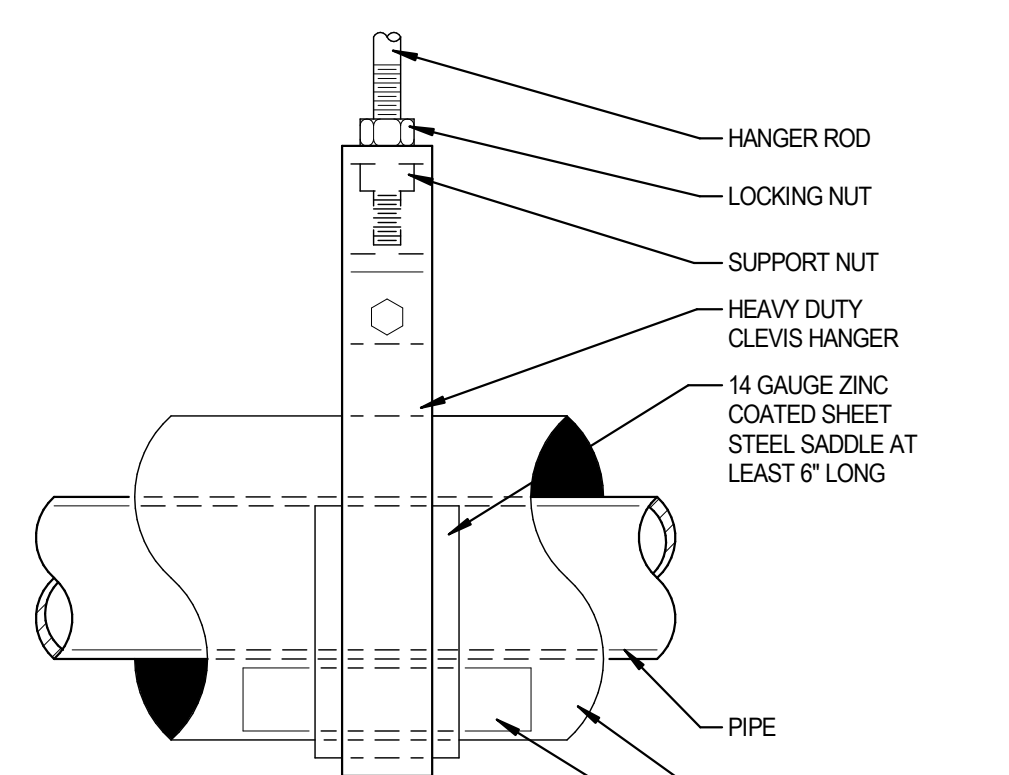
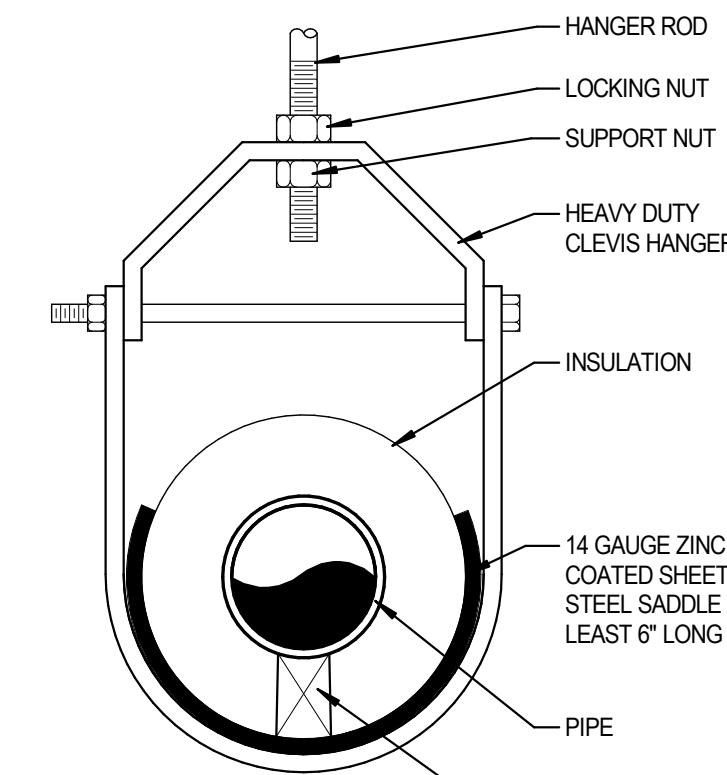
7 ROOF EQUIPMENT SUPPORT CURB DETAIL
NOT TO SCALE



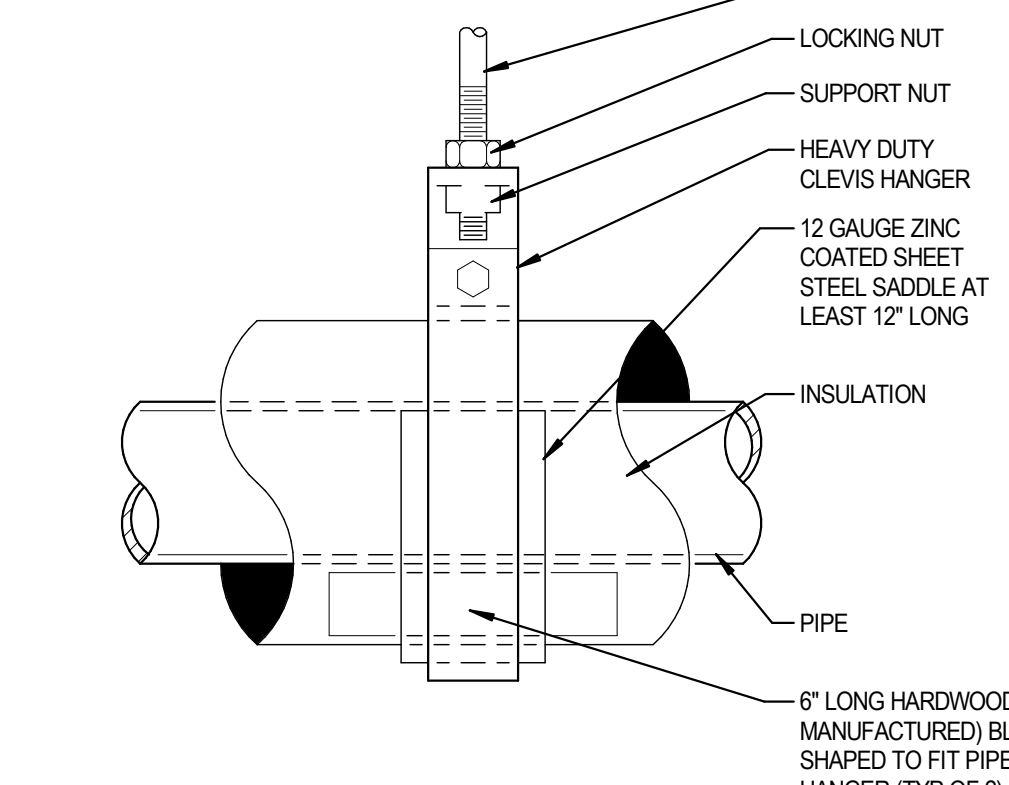
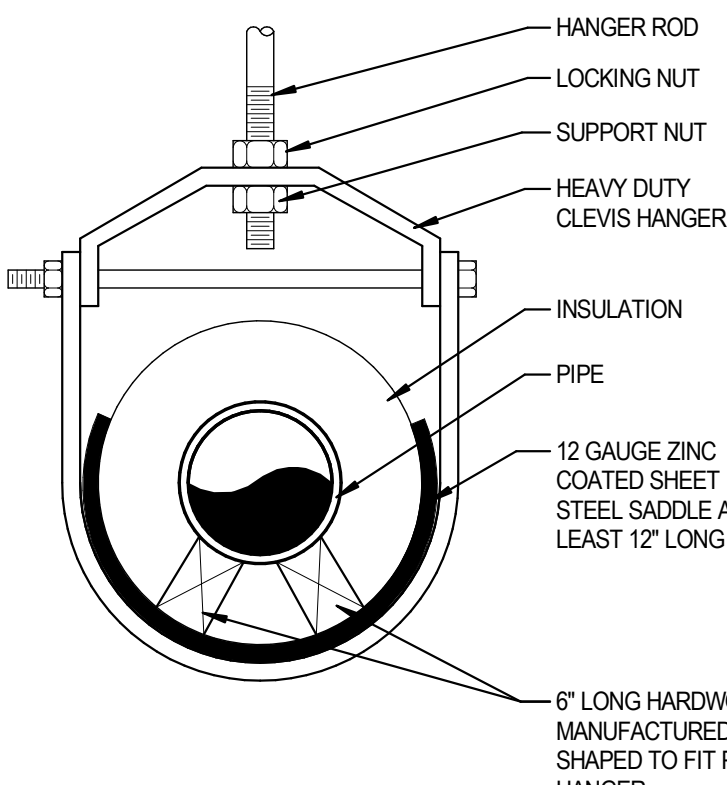
6 IN-LINE PUMP PIPING DETAIL (SUSPENDED)
NOT TO SCALE



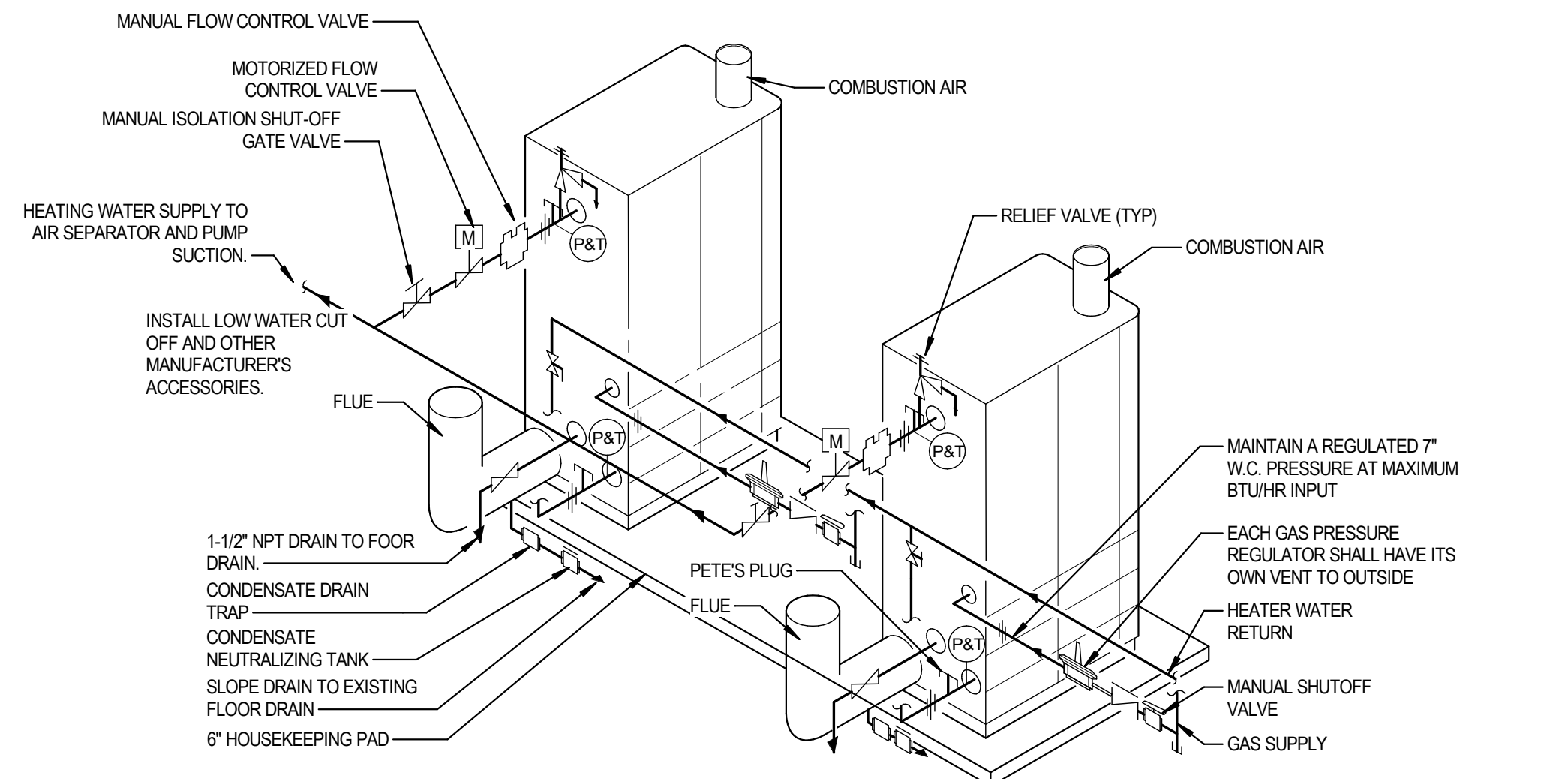
5 PIPE FLOOR PENETRATION DETAIL
NOT TO SCALE



4 PIPE HANGER (6" AND SMALLER) DETAIL
NOT TO SCALE



3 PIPE HANGER (8" AND LARGER) DETAIL
NOT TO SCALE



2 BOILER PIPING DETAIL (WITH MOTORIZED VALVES)
NOT TO SCALE

NOTES:

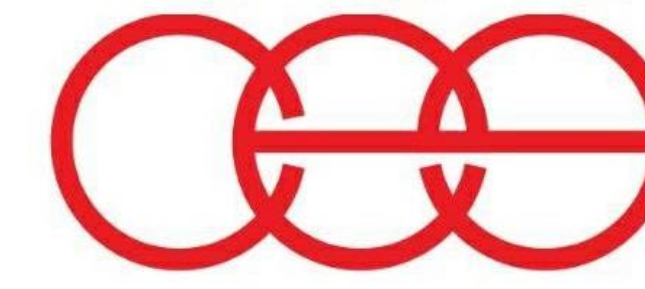
- PUMPS SHALL BE SUPPLIED WITH UNIONS ON SUCTION AND DISCHARGE IF NOT FLANGED.
- PRESSURE GAUGE SHALL BE LIKE TRICORE 700 LBS, 2 1/2\"/>

STRAINER WITH BLOW-DOWN BALL VALVE. ROUTE 3/4\"/>

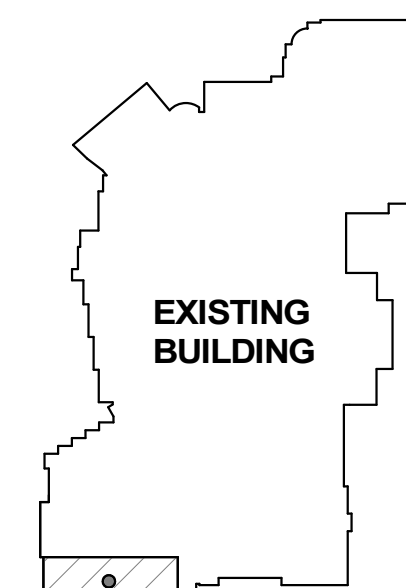
LONG RADIUS FOR METRAFLEX \"ORV FLEX\" OR SUCTION DIFFUSER. MAXIMUM WATER PRESSURE DROP NOT TO EXCEED 4 FT. W.C.

6. VALVES AND STRAINER TO BE FULL PIPE SIZE.

1 BASE MOUNTED END SUCTION PUMP PIPING DETAIL
NOT TO SCALE



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NEW ADDITION
EXISTING BUILDING
NORTH

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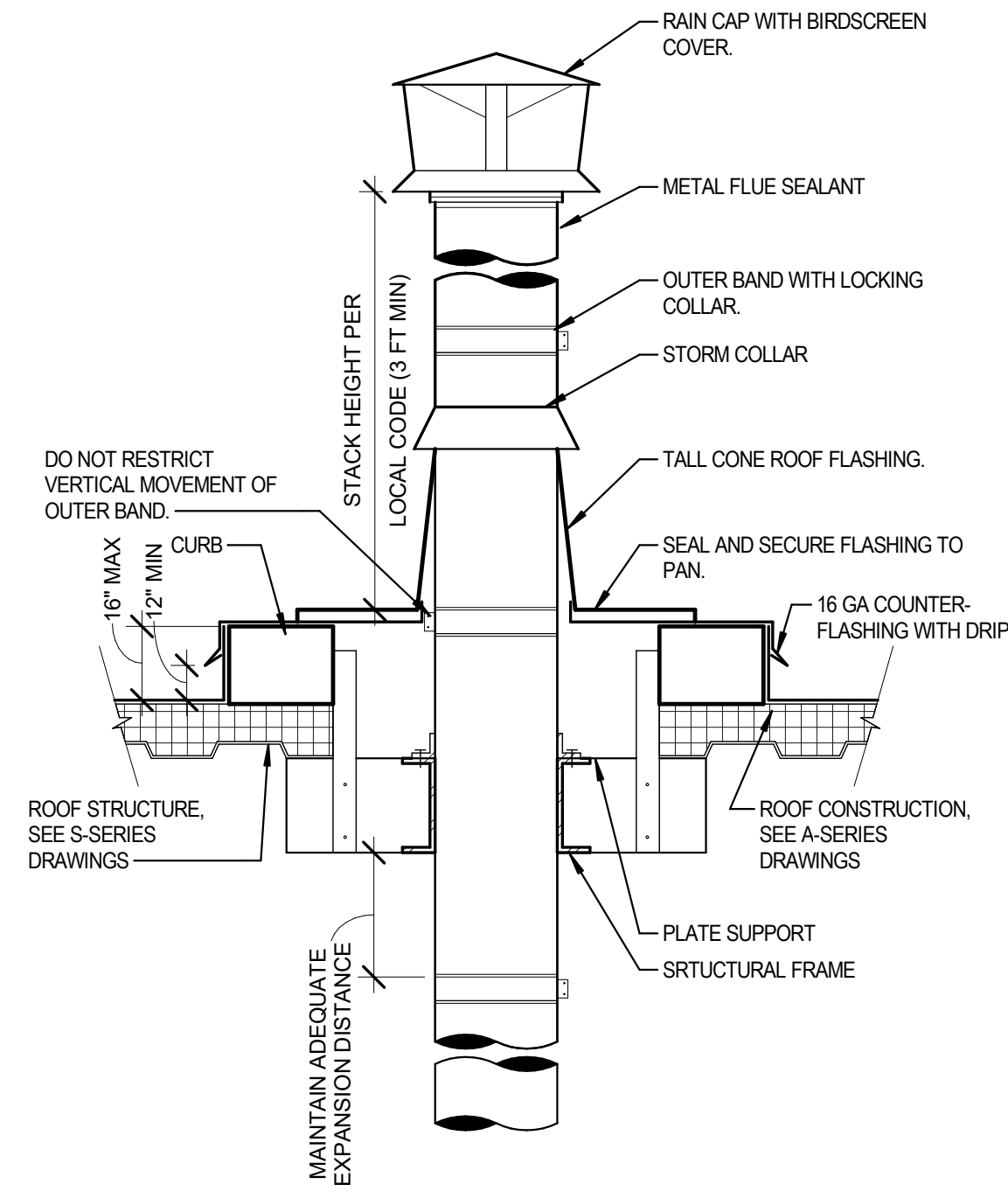
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FRANKLIN CENTRAL HIGH SCHOOL
FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:
MECHANICAL DETAILS

	Project No:	2022043.00
	Project Date:	JANUARY 09, 2023
	Drawing No:	M501

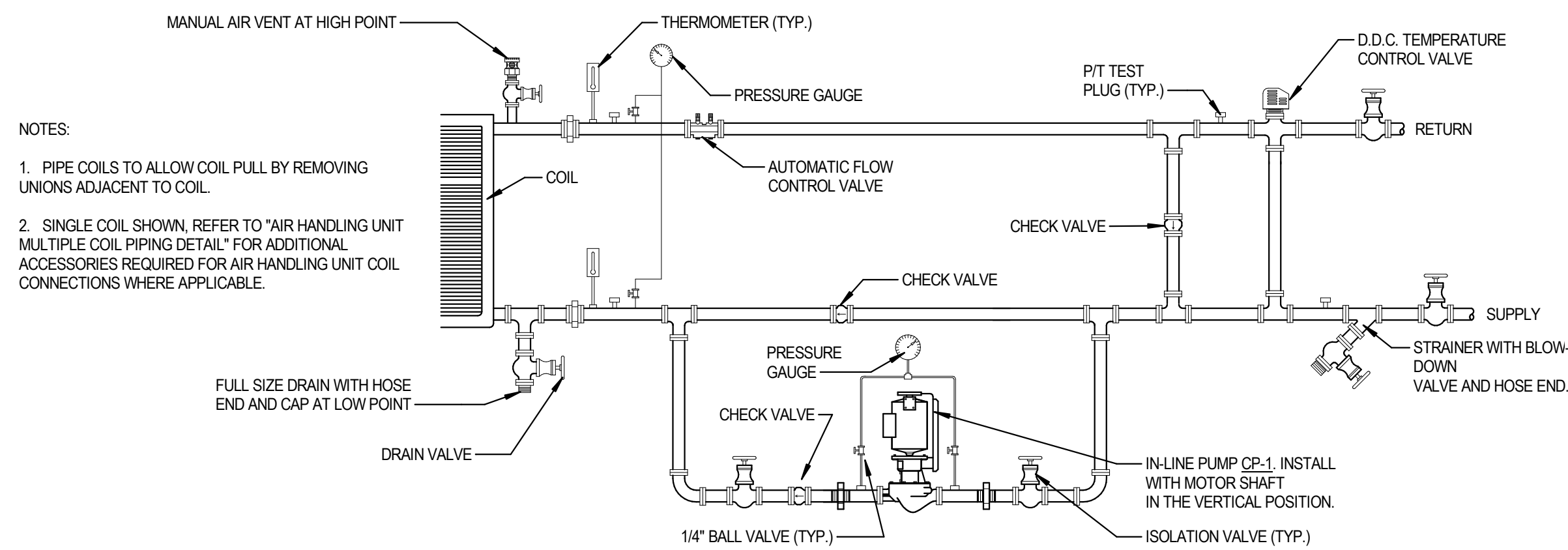
#	Revision	Date
A2	ADDENDUM #2	02.06.2023



NOTE:
TYPICAL FOR FLUES THRU ROOF FROM DOMESTIC GAS-FIRED WATER HEATERS EXCEPT FOR TYPE "B" FLUES.

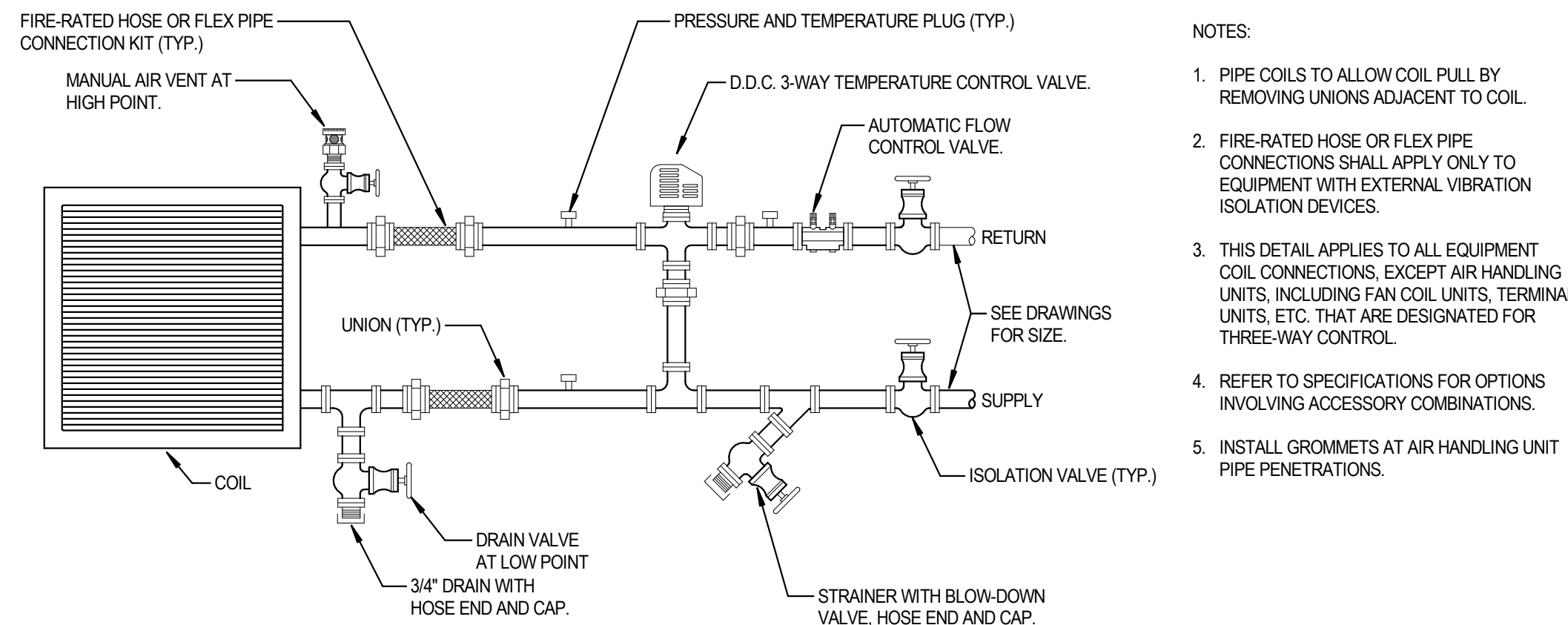
4 BOILER BREECHING FLUE DETAIL

NOT TO SCALE



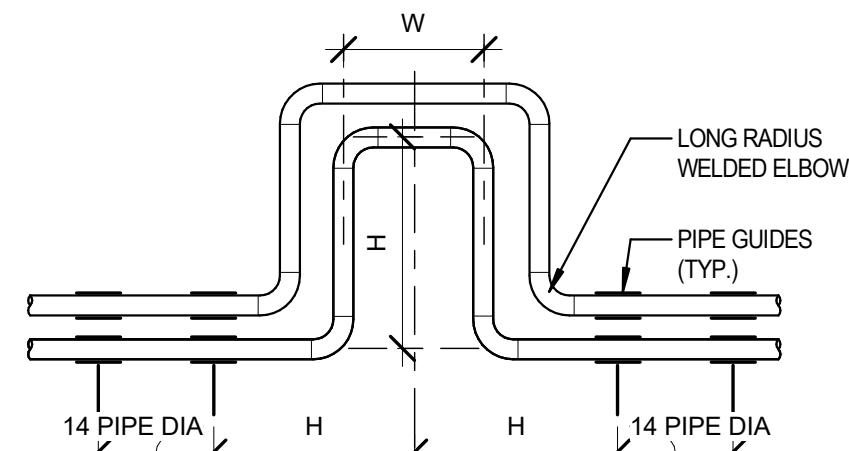
3 THREE-WAY PUMPED AIR HANDLING UNIT COIL PIPING DETAIL

NOT TO SCALE



2 THREE-WAY COIL PIPING DETAIL

NOT TO SCALE

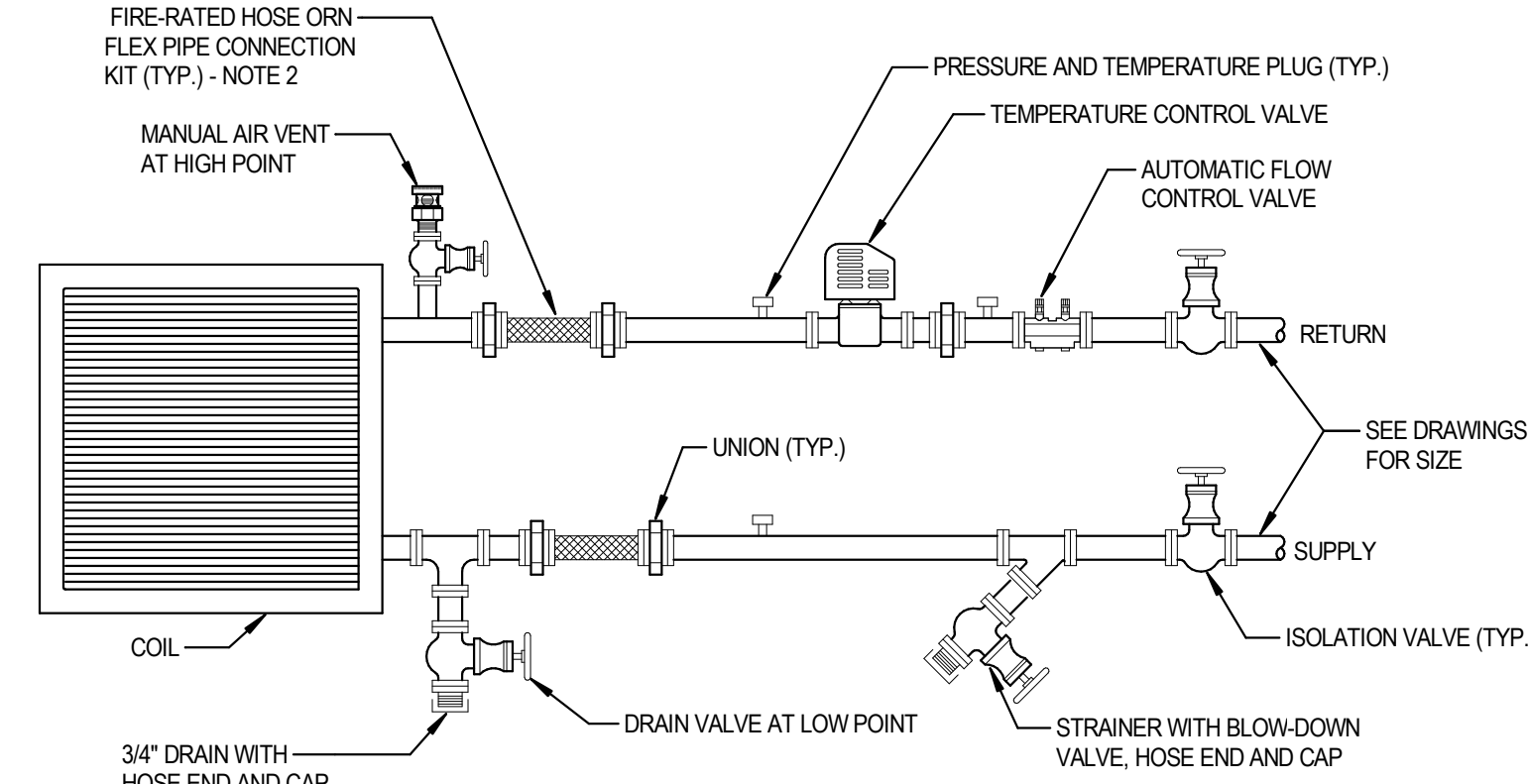


NOTES: FACTORY PRE-ENGINEERED EXPANSION LOOPS MAY BE SUBSTITUTED.
H = 12"
W = 6"

ANCHORS SHALL BE PROVIDED IN ACCORDANCE TO STRUCTURAL REQUIREMENTS. SUBMIT ANCHORING DATA FOR APPROVAL BY A/E.

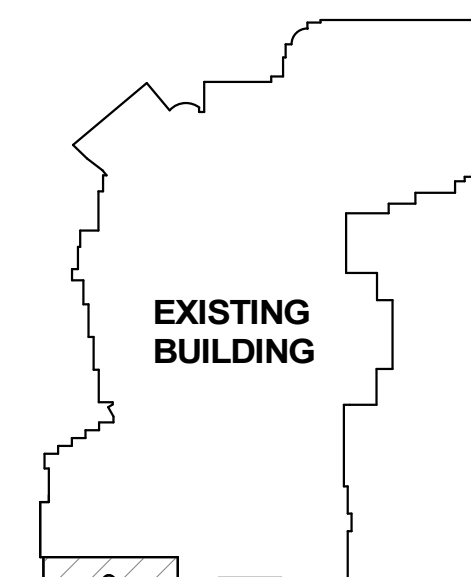
5 EXPANSION LOOP PIPING DETAIL

NOT TO SCALE



1 TWO WAY COIL PIPING DETAIL

NOT TO SCALE



KEYPLAN

NORTH

VPS ARCHITECTURE

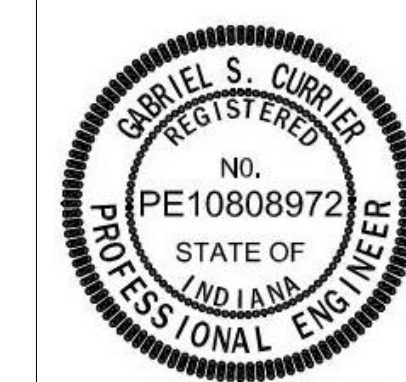
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ADDITION & RENOVATIONS TO:
FRANKLIN CENTRAL HIGH SCHOOL
FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

MECHANICAL DETAILS



Project No: 2022043.00

Project Date: JANUARY 09, 2023

Drawing No: M503

AHU SCHEDULE																																		
IDENTITY DATA					WEIGHT (LBS)	DIMENSIONS			SUPPLY FAN DATA					SUPPLY FAN ELECTRICAL DATA						RETURN FAN DATA					RETURN FAN ELECTRICAL DATA									
MARK	MANUFACTURER	MODEL	LOCATION	AREA SERVED		L	W	H	AIRFLOW (CFM)	ESP (IN-WG)	TSP (IN-WG)	RPM	MOTOR			VOLTS (V)	PH	FREQ (HZ)	FLA (A)	MCA (A)	MOCP (A)	AIRFLOW (CFM)	ESP (IN-WG)	TSP (IN-WG)	RPM	MOTOR			VOLTS (V)	PH	FREQ (HZ)	FLA (A)	MCA (A)	MOCP (A)
													QTY	HP EACH	BHP EACH											QTY	HP EACH	BHP EACH						
AHU-1	TRANE	CSAA035	MECHANICAL ROOM	1ST FLOOR	5,937	193.9"	100"	70.8"	16,575	2.25	3.9	1,200	2	7.5	7.2	460	3	60	11.4	14.3	25	-	-	-	-	-	-	-	-	-	-	-	-	45
AHU-2	TRANE	CSAA040	ROOF	2ND FLOOR	12,643	344"	112.5"	73.4"	19,250	2.25	4.2	1,800	2	15.0	10.8	460	3	60	-	-	-	19,250	1.00	2.06	1,474	2	7.5	5.5	460	3	60	11	14	25

AIR HANDLING UNIT SCHEDULE NOTES

- PROVIDE WITH OUTDOOR CONSTRUCTION AND 22" ROOF CURB.
- SINGLE POINT POWER CONNECTION WITH FACTORY MOUNTED VFD & DISCONNECT.
- 5kA SCOR RATING.
- TCC TO PROVIDE VFD FOR EACH FAN. EC TO INSTALL.
- PROVIDE WITH 6" BASE RAIL.
- SHIP WITH MODULES SEPARATED.

PREHEAT COIL DATA														COOLING COIL DATA														MIN OA (CFM)	NOTES	
MARK	AIRFLOW (CFM)	CAPACITY (BTUH)	FLOW (GPM)	EDB (°F)	LDB (°F)	EWT (°F)	LWT (°F)	WPD (FT-WG)	FACE VEL. (FPM)	APD (IN-WG)	ROWS	FINS PER IN	FLUID TYPE	TOTAL CAP. (BTUH)	SENSIBLE CAP. (BTUH)	FLOW (GPM)	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	EWT (°F)	LWT (°F)	WPD (FT-WG)	FACE VEL. (FPM)	APD (IN-WG)	ROWS	FINS PER IN			FLUID TYPE
AHU-1	9,600	721,270	72.22	0.0	69.3	150	120	3.26	275	0.05	2	6.0	WATER	849,590	545,920	153	84.8	70.4	55.0	54.7	42	54	10	494	0.70	8	7.0	30% PG	9,450	3-6
AHU-2	10,800	797,880	53.28	0.0	68.1	150	120	4.2	270	0.05	2	6.0	WATER	990,520	634,020	179	84.8	70.4	55.0	54.4	42	54	11	499	0.68	8	7.0	30% PG	10,975	1-3

PUMP SCHEDULE - 23 21 23																		
IDENTITY DATA					WEIGHT (LBS)	TYPE	FLUID DATA				MOTOR DATA			ELECTRICAL DATA			NOTES	
MARK	MANUFACTURER	MODEL	IMPELLER SIZE (IN)	SYSTEM SERVED			FLUID TYPE	FLOW (GPM)	HEAD (FT-WG)	TEMP (°F)	EFF (%)	HP	BHP	SPEED (RPM)	VOLTS (V)	PH		FREQ (HZ)
PCWP-1	BELL & GOSSETT	e1510-5EB	11.00	CHILLER	730	BASE MOUNTED END SUCTION	30% PG	700	42.0	42	86.4	15.0	9.0	1,200	480	3	60	1
SCWP-1	BELL & GOSSETT	e1510-4EB	11.00	BUILDING	693	BASE MOUNTED END SUCTION	30% PG	765	80.0	42	79.7	25.0	20.0	1,800	480	3	60	1
SCWP-2	BELL & GOSSETT	e1510-4EB	11.00	BUILDING	693	BASE MOUNTED END SUCTION	30% PG	765	80.0	42	79.7	25.0	20.0	1,800	480	3	60	1
HWP-1	BELL & GOSSETT	e1510-3GB	10.75	BUILDING	670	BASE MOUNTED END SUCTION	WATER	335	87.0	140	70.4	15.0	9.2	1,800	480	3	60	1
HWP-2	BELL & GOSSETT	e1510-3GB	10.75	BUILDING	670	BASE MOUNTED END SUCTION	WATER	335	87.0	140	70.4	15.0	9.2	1,800	480	3	60	1
BP-1	BELL & GOSSETT	e90-2AB	6.63	BOILER	100	IN-LINE CENTRIFUGAL PUMP	WATER	180	20.0	120	58.2	2.0	1.8	1,800	230	1	60	2
BP-2	BELL & GOSSETT	e90-2AB	6.63	BOILER	100	IN-LINE CENTRIFUGAL PUMP	WATER	180	20.0	120	58.2	2.0	1.8	1,800	230	1	60	2
CP-1	BELL & GOSSETT	e90-2AAC	5.25	AHU-2	68	IN-LINE CIRCULATOR PUMP	WATER	76	20.0	140	75.8	0.8	0.5	1,800	120	1	60	3

PUMP SCHEDULE NOTES:

- VFD PROVIDED BY TCC.
- STARTER BY EC. CONTROLLED BY BOILER.
- CONSTANT SPEED CONTROLLED BY TCC.

BOILER SCHEDULE - 23 52 16																					
IDENTITY DATA				HEATING DATA				GAS PRESSURE DATA			WATER DATA				ELECTRICAL DATA				NOTES		
MARK	MANUFACTURER	MODEL	TYPE	INPUT (BTUH)	OUTPUT (BTUH)	EFF (%)	STAGES	MINIMUM (PSI)	MAXIMUM (PSI)	FLOW (GPM)	WPD (FT-WG)	EWT (°F)	LWT (°F)	FLUID TYPE	VOLTS (V)	PH	FREQ (HZ)	FLA (A)		MOCp (A)	
B-1	KN	KN-20	CONDENSING	1,999,000	1,799,000	95.9	-	1/10	1/2	180	2.9	120	140	WATER	230	1	60	20	25	1-3	
B-2	KN	KN-20	CONDENSING	1,999,000	1,799,000	95.9	-	1/10	1/2	180	2.9	120	140	WATER	230	1	60	20	25	1-3	

BOILER SCHEDULE NOTES:

- SEE BOILER PIPING INSTALLATION DETAIL 2 ON M601.
- SEE M-700 SERIES SHEETS FOR TEMPERATURE CONTROLS INFORMATION.
- INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND COORDINATE ALL TRADES. MANUFACTURER-DEFINED SERVICE CLEARANCES SHALL BE MAINTAINED.

AIR COOLED CHILLER SCHEDULE - 23 64 26																							CONDENSER FAN														
IDENTITY DATA			UNIT DIMENSIONS			WEIGHT (LBS)	CAPACITY		PERFORMANCE DATA			EVAPORATOR DATA									FLUID TYPE	COMPRESSOR DATA			REFRIGERANT DATA		DATA		SOUND DATA		ELECTRICAL DATA						
MARK	MANUFACTURER	MODEL	L	W	H		NOMINAL (TONS)	EFFECTIVE (TONS)	EER	IPLV	COP	FLOW (GPM)	MIN. FLOW (GPM)	CURRENT PROJ. FLOW (GPM)	EWT (°F)	LWT (°F)	AMBIENT (°F)	WPD (FT-WG)	FOULING FACTOR	TYPE		TYPE	QTY	# OF CIRCUITS	VFD	TYPE	CHARGE (LB)	QTY	FAN RLA EACH	POWER (DBA)	PRESSURE (DBA)	VOLTS (V)	PH	FREQ (HZ)	UNIT POWER (KW)	MCA (A)	MOCP (A)
CH-1	TRANE	ACR	510.4"	87.813"	98.375"	17,676	375	330	9.9	-	-	700	200	390	54.0	42.0	95	32.4	0.0001	30% PG	SCREW	4	2	YES	HFC-134a	448	18	-	99	74	460	3	60	401	704	800	1-10

AIR COOLED CHILLER SCHEDULE NOTES:

- MANUFACTURER-PROVIDED FUSED DISCONNECT.
- SINGLE POINT POWER.
- HIGH-FAULT 65 KA SCOR.
- STARTER TYPE: INTEGRAL VFD. PROVIDE 120V/1PH 15A HEATER FOR FREEZE PROTECTION OF BUNDLE.
- HAIL GUARDS.
- SEE CHILLER INSTALLATION DETAIL 6 ON SHEET M502.
- SEE M-700 SERIES DRAWINGS FOR TEMPERATURE CONTROLS INFORMATION.
- MUFFLER AND EACH COMPRESSOR FAN TO BE LOW NOISE AS STANDARD. PROVIDE WITH INVISISOUND SUPERIOR SOUND MATERIAL TO SUCTION AND DISCHARGE LINES.
- FOR INITIAL ADDITON PHASE, CHILLER SHALL RUN AT 400 GPM WHILE STILL MAINTAINING A DELT T ± 4°F FROM DESIGN. NOMINAL SIZE AND DESIGN GPM IS SIZED FOR A FUTURE PLANS AND SHALL REMAIN AS SCHEDULED.
- MANUFACTURER PROVIDED AND INSTALLED PHASE MONITOR.

EXHAUST FAN SCHEDULE - 23 34 23																		
IDENTITY DATA				WEIGHT (LBS)	FAN DATA							SOUND CRITERIA		ELECTRICAL DATA			UNIT CONTROL	NOTES
MARK	MANUFACTURER	MODEL	SERVICES		FAN TYPE	DRIVE TYPE	AIRFLOW (CFM)	ESP (IN-WG)	RPM	HP	BHP	SONES	DBA	VOLTS (V)	PH	FREQ (HZ)		
EF-1	GREENHECK	G-130-VG	RESTROOMS	69	DOWNBLAST CENTIFUGAL	DIRECT	1700	1.20	1718	0.75	0.57	14.1	65	120	1	60	BAS	1-4
EF-2	GREENHECK	G-120-VG	KILNS	65	DOWNBLAST CENTIFUGAL	DIRECT	1100	1.00	1477	0.50	0.3	12	63	120	1	60	SWITCH / BAS	1-4
EF-3	GREENHECK	G-098-VG	KILNS	57	DOWNBLAST CENTIFUGAL	DIRECT	500	1.00	1719	0.25	0.18	10.5	60	120	1	60	SWITCH / BAS	1-4

EXHAUST FAN SCHEDULE NOTES:

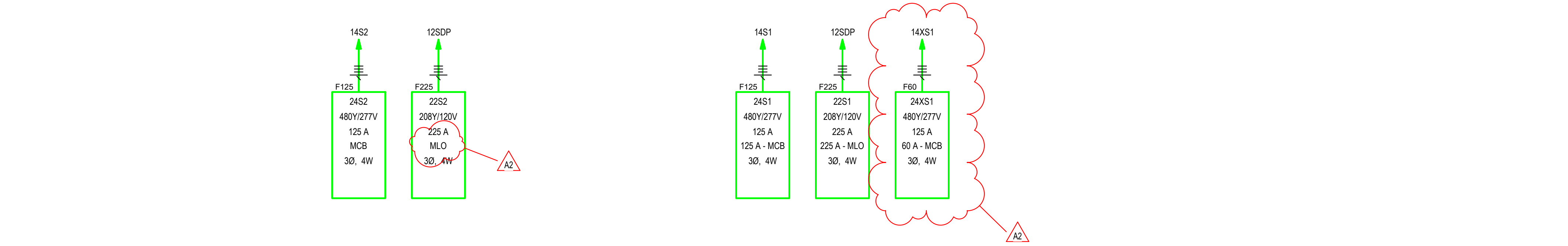
- DISCONNECT BY MANUFACTURER.
- SEE M-700 SERIES SHEETS FOR TEMPERATURE CONTROL INFORMATION.
- FAN SPEED CONTROLLER FOR BALANCING.
- PROVIDE WITH 12" ROOF CURB.

VAV BOX WITH HOT WATER REHEAT SCHEDULE - 23 36 00																					
IDENTITY DATA				AIRFLOW DATA				NOISE DATA			REHEAT COIL DATA										
MARK	MANUFACTURER	MODEL	INLET DIAMETER	COOLING MAX (CFM)	HEATING MAX (CFM)	OCCUPIED MINIMUM (CFM)	STATIC INLET (IN-WG)	MAX DISCH.	MAX RAD.	CAPACITY (BTUH)	EAT (°F)	LAT (°F)	APD (IN-WG)	FLOW (GPM)	EWT (°F)	LWT (°F)	WPD (FT-WG)	ROWS	VALVE TYPE	NOTES	
VAV-A101	PRICE	SDV	10"	1,000	580	300	1.0	-	-	25,500	55	95	0.5	2.09	150	125	1.0	2	3-WAY	1-3	
VAV-A102A	PRICE	SDV	10"	950	475	285	1.0	-	-	20,900	55	95	0.4	1.4	150	120	0.5	2	2-WAY	1-3	
VAV-A103	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A104	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A105	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A106	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A107	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A108	PRICE	SDV	14"	1,755	878	526	1.0	-	-	38,500	55	95	0.7	3.52	150	128	3.3	2	2-WAY	1-3	
VAV-A109	PRICE	SDV	12"	1,300	750	390	1.0	-	-	32,900	55	95	0.4	2.46	150	123	1.7	2	3-WAY	1-3	
VAV-A112	PRICE	SDV	16"	1,920	960	576	1.0	-	-	42,100	55	95	0.5	2.63	150	117	0.9	2	2-WAY	1-3	
VAV-A113	PRICE	SDV	6"	350	175	100	1.0	43	32	8,300	55	98	0.2	0.55	150	119	0.06	2	2-WAY	1-3	
VAV-A114	PRICE	SDV	16"	1,920	960	576	1.0	-	-	42,100	55	95	0.5	2.63	150	117	0.9	2	2-WAY	1-3	
VAV-B101	PRICE	SDV	10"	1,050	525	315	1.0	-	-	23,100	55	95	0.5	1.7	150	122	0.7	2	2-WAY	1-3	
VAV-B103	PRICE	SDV	6"	500	250	150	1.0	28	23	11,000	55	95	0.4	0.81	150	122	0.1	2	2-WAY	1-3	
VAV-B104	PRICE	SDV	10"	900	450	270	1.0	-	-	19,800	55	95	0.4	1.27	150	118	0.4	2	2-WAY	1-3	
VAV-B105	PRICE	SDV	10"	900	450	270	1.0	-	-	19,800	55	95	0.4	1.27	150	118	0.4	2	2-WAY	1-3	
VAV-B107	PRICE	SDV	12"	1,200	600	360	1.0	-	-	26,300	55	95	0.6	2.28	150	126	1.2	2	2-WAY	1-3	
VAV-A201	PRICE	SDV	10"	1,000	580	300	1.0	-	-	25,500	55	95	0.5	2.09	150	125	1.0	2	3-WAY	1-3	
VAV-A203	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A204	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A205	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A206	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A207	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-A208	PRICE	SDV	14"	1,400	700	420	1.0	-	-	30,700	55	95	0.5	2.14	150	121	1.4	2	2-WAY	1-3	
VAV-A209A	PRICE	SDV	6"	550	275	165	1.0	21	-	12,100	55	95	0.3	0.73	150	116	0.3	2	2-WAY	1-3	
VAV-A209	PRICE	SDV	12"	1,300	750	390	1.0	-	-	32,900	55	95	0.4	2.46	150	123	1.7	2	3-WAY	1-3	
VAV-A211	PRICE	SDV	14"	1,680	840	500	1.0	-	-	36,900	55	95	0.6	3.15	150	126	2.7	2	2-WAY	1-3	
VAV-A212	PRICE	SDV	6"	350	175	100	1.0	43	32	8,300	55	98	0.2	0.55	150	119	0.06	2	2-WAY	1-3	
VAV-A213	PRICE	SDV	14"	1,680	840	500	1.0	-	-	36,900	55	95	0.6	3.15	150	126	2.7	2	2-WAY	1-3	
VAV-A214	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-B203	PRICE	SDV	6"	500	250	150	1.0	28	23	11,000	55	95	0.4	0.81	150	122	0.1	2	2-WAY	1-3	
VAV-B204	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-B205	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-B206	PRICE	SDV	6"	440	220	132	1.0	26	21	9,700	55	95	0.3	0.64	150	119	0.1	2	2-WAY	1-3	
VAV-B207	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	
VAV-B208	PRICE	SDV	10"	960	480	288	1.0	-	-	21,100	55	95	0.4	1.42	150	120	0.5	2	2-WAY	1-3	

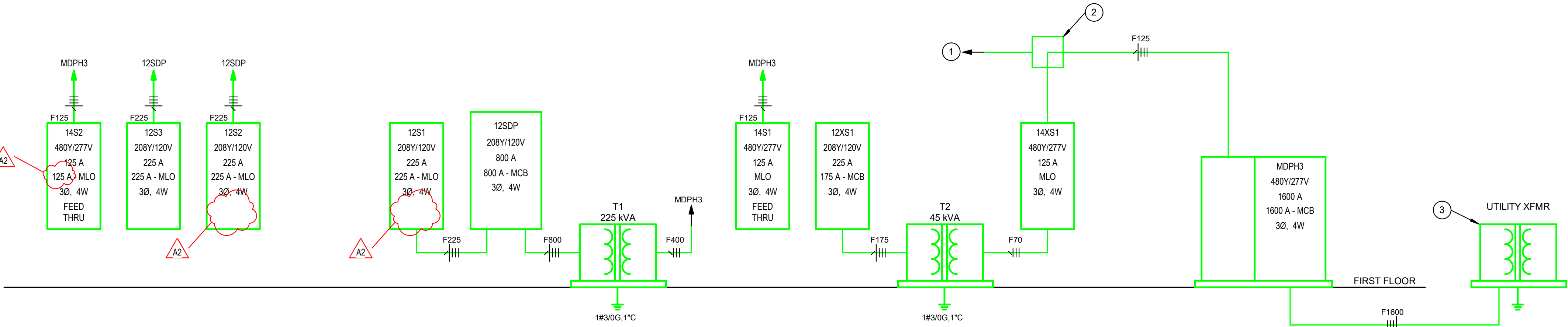
FEEDER & BRANCH CIRCUIT SCHEDULE (COPPER)										
FEEDER/BRANCH CIRCUIT LABEL	CONDUCTOR SIZE PER CONDUIT				CONDUIT SIZE & QUANTITY					
	PHASE & EQUIP/SERV NEUTRAL		GROUND	1P, 1G	2P, 1N, 1G	3P, 1N, 1G	3P, 1N	3P, 2N, 1G	3P, 3N, 1G	3P, 1N, 2G
F20	12	12		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
F30	10	10		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
F40	8	10		3/4"	3/4"	1"	1"	1-1/4"	1-1/4"	1"
F50	6	10		1"	1"	1"	1"	1-1/4"	1-1/4"	1"
F60	4	10		1"	1"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"
F70	4	8		1"	1-1/4"	1-1/4"	1-1/4"	1-1/2"	1-1/4"	1-1/4"
F80	3	8		1"	1-1/4"	1-1/4"	1-1/2"	1-1/2"	1-1/2"	1-1/4"
F90	2	8		1"	1-1/4"	1-1/2"	1-1/2"	2"	2"	1-1/2"
F100	1	8		1-1/4"	1-1/2"	1-1/2"	2"	2"	2"	2"
F110	1	6		1-1/4"	1-1/2"	2"	2"	2-1/2"	2"	2"
F125	1/0	6		1-1/4"	1-1/2"	2"	2"	2-1/2"	2"	2"
F150	1/0	6		1-1/4"	1-1/2"	2"	2"	2-1/2"	2"	2"
F175	2/0	6		1-1/2"	2"	2"	2"	2-1/2"	2-1/2"	2"
F200	3/0	6		1-1/2"	2"	2"	2"	2-1/2"	3"	2-1/2"
F225	4/0	4		2"	2"	2-1/2"	3"			2-1/2"
F250	250	4		2"	2-1/2"	3"	3"			3"
F300	350	4		2"	2-1/2"	3"	3-1/2"			3"
F350	500	3		2-1/2"	3"	3-1/2"	4"			3-1/2"
F400	3/0	3		(2) 1-1/2"	(2) 2"	(2) 2-1/2"	(2) 2-1/2"			(2) 2-1/2"
F450	4/0	2		(2) 2"	(2) 2"	(2) 2-1/2"	(2) 3"			(2) 2-1/2"
F500	250	2		(2) 2"	(2) 2-1/2"	(2) 3"	(2) 3"			(2) 3"
F600	350	1		(2) 2-1/2"	(2) 3"	(2) 3"	(2) 3-1/2"			(2) 3"
F700	500	1/0		(2) 2-1/2"	(2) 3"	(2) 3-1/2"	(2) 4"			(2) 3-1/2"
F800	350	2/0		(3) 2-1/2"	(3) 3"	(3) 3"	(3) 3-1/2"			(3) 3"
F900	350	2/0		(3) 2-1/2"	(3) 3"	(3) 3"	(3) 3-1/2"			
F1000	500	2/0		(3) 2-1/2"	(3) 3"	(3) 3-1/2"	(3) 4"			
F1200	350	3/0		(4) 2-1/2"	(4) 3"	(4) 3"	(4) 3-1/2"			
F1600	500	4/0		(5) 3"	(5) 3"	(5) 3-1/2"	(5) 4"			
F2000	500	250		(6) 3"	(6) 3"	(6) 3-1/2"	(6) 4"			
F2500	500	350		(7) 4"	(7) 3-1/2"	(7) 3-1/2"	(7) 4"			
F3000	500	500		(8) 4"		(8) 4"	(8) 4"			

RISER DIAGRAM NOTES		
#	NOTES	
1	PROVIDE 2" C WITH PULL STRING FOR FUTURE GENERATOR FEEDER. SEE SHEET EP-18 FOR CONDUIT ROUTING.	
2	PROVIDE JUNCTION BOX FOR FUTURE GENERATOR FEEDER CONNECTION. SIZE PER NEC BENDING RADIUS REQUIREMENTS.	
3	PROVIDE METERING AND/OR METERING SUPPORT PER UTILITY COMPANIES GUIDELINES.	

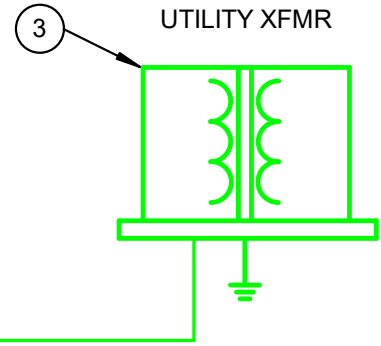
#	Revision	Date
A2	ADDENDUM #2	02.06.2023



SECOND FLOOR

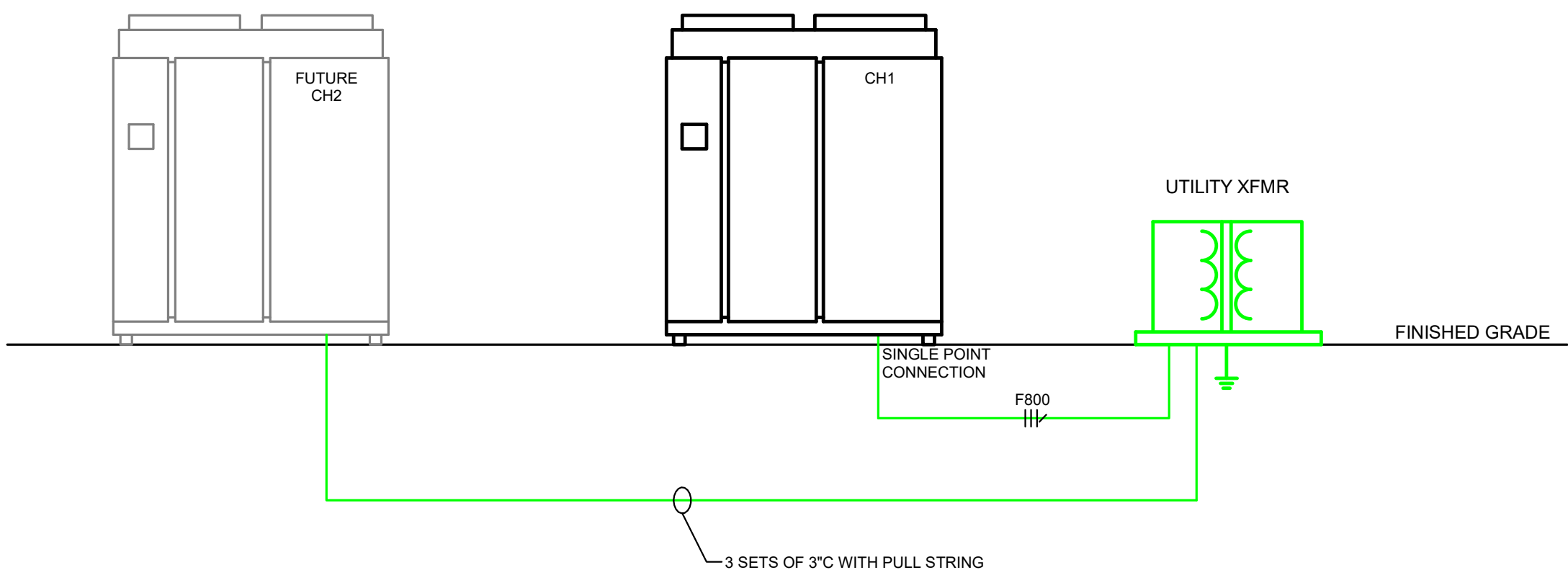


FIRST FLOOR



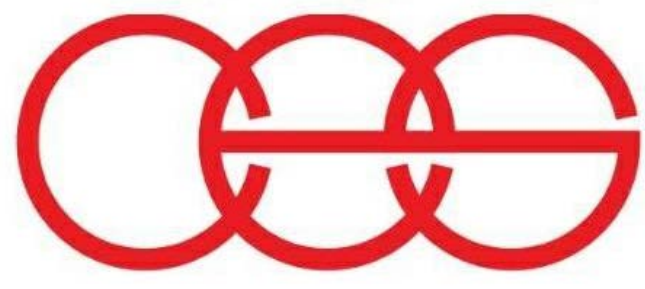
1 ADDITION RISER DIAGRAM

NOT TO SCALE

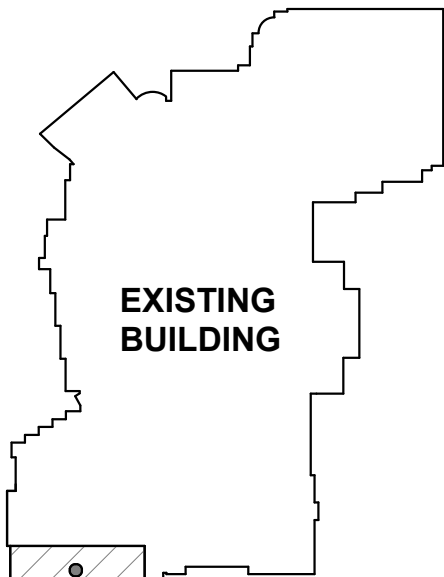


2 CHILLER RISER DIAGRAM

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KEYPLAN

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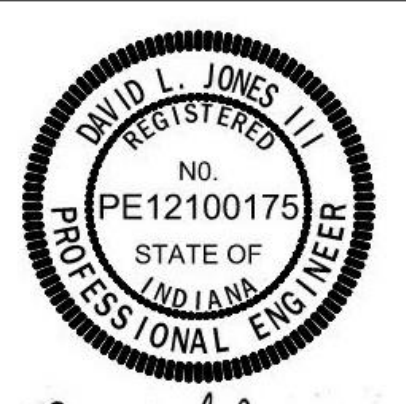
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INDIANAPOLIS, INDIANA

Drawing Title:

RISER DIAGRAM



David L. Jones

Project No: 2022043.00

Project Date: JANUARY 09, 2023

Drawing No:

E-602

POWER DISTRIBUTION PANELBOARD SCHEDULE														
DESIGNATION: 12SDP					VOLTS: 208Y/120 V					MAINS RATING: 800 A				
LOCATION: MECHANICAL B107					PHASES: 3					MAINS TYPE: MCB				
MOUNTING: SURFACE					WIRES: 4					MCB RATING: 800 A				
SUPPLY FROM: T1					AIC RATING: 22K					MCB OPTIONS: X				
O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.	O
	1	12S3		225 A	3	7.76	12.72		3	225 A	12S5		2	
	3	--	--	--	--	--	7.68	11.70		--	--	--	4	--
	5	--	--	--	--	--		7.58	12.88	--	--	--	6	--
	7	--	--	--	--	--				--	--	--	8	--
	9	12S2		225 A	3		11.56						10	
	11	--	--	--	--	11.14	12.76	11.54	11.82	3	225 A	12S1	12	
	13	--	--	--	--	--				--	--	--	14	--
	15	12S4		225 A	3		17.91	12.28					16	--
	17	--	--	--	--	--		17.91	0.94	3	20 A	B107 - BOILER PUMP 2	18	
	19	--	--	--	--	18.61	0.94			--	--	--	20	--
	21	A113 - KILN		60 A	3		5.61	0.94					22	--
	23	--	--	--	--	--		5.61	5.61	3	60 A	A113 - KILN	24	--
	25	--	--	--	--	5.61	5.61			--	--	--	26	--
	27	A113 - KILN		60 A	3		5.61	5.61					28	--
	29	--	--	--	--	--		5.61					30	--
	31	--	--	--	--	5.61	--		1	--	SPACE		32	--
	33	SPACE		--	1	--	--	--	1	--	SPACE		34	--
	35	SPACE		--	1	--	--	--	1	--	SPACE		36	--
	37	SPACE		--	1	--	--	--	1	--	SPACE		38	--
	39	SPACE		--	1	--	--	--	1	--	SPACE		40	--
	41	SPACE		--	1	--	--	--	1	--	SPACE		42	--
TOTAL LOAD:					80.75 kVA					79.49 kVA				
TOTAL AMPS:					674 A					663 A				
TOTAL CONNECTED LOAD:					239.13 kVA					173.40 kVA				
TOTAL CONNECTED AMPS:					674 A					481 A				
TOTAL DEMAND LOAD:														
TOTAL DEMAND AMPS:														
PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)					LOAD CLASSIFICATION					CONNECTED LOAD (VA)				
C					Receptacle - General					140980 VA				
G					Mechanical - Motor					80528 VA				
P					Mechanical - Heating					960 VA				
S					Power - Continuous					16660 VA				
X					80% RATED MAIN CIRCUIT BREAKER WITH LSI									
Y					100% RATED MAIN CIRCUIT BREAKER WITH LSI									
Z					100% RATED MAIN CIRCUIT BREAKER WITH LSI									
FEED THROUGH LUGS (FTL)														
SUB FEED LUGS (SFL)														
NOTES:														

BRANCH PANELBOARD SCHEDULE														
DESIGNATION: 24S1				VOLTS: 480Y/277 V				MAINS RATING: 125 A						
LOCATION: ELECTRICAL B206A				PHASES: 3				MAINS TYPE: MLO						
MOUNTING: SURFACE				WIRES: 4				MCB RATING: 125 A						
SUPPLY FROM: MDPH3				AIC RATING: 22K				MCB OPTIONS:						
O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.	O
	1	B204	LIGHTING	20 A	1	1.08	0.57			1	20 A	LIGHTING B206	2	
	3	B203	LIGHTING	20 A	1		0.38	1.62		1	20 A	LIGHTING B207	4	
	5	B206A	LIGHTING	20 A	1			0.05	0.02	1	20 A	LIGHTING EXIT SIGNS	6	
--	7	SPARE		20 A	1	0.00	0.00			1	20 A	SPARE	8	--
	9	SPARE		20 A	1		0.00	0.00		1	20 A	SPARE	10	--
	11	SPARE		20 A	1			0.00	0.00	1	20 A	SPARE	12	--
	13	SPARE		20 A	1	0.00	0.00			1	20 A	SPARE	14	--
	15	SPARE		20 A	1		0.00	0.00		1	20 A	SPARE	16	--
	17	SPARE		20 A	1			0.00	0.00	1	20 A	SPARE	18	--
	19	SPARE		20 A	1	0.00	0.00			1	20 A	SPARE	20	--
	21	SPARE		20 A	1		0.00	0.00		1	20 A	SPARE	22	--
	23	SPACE		--	1	--	--	--	--	1	--	SPACE	24	--
	25	SPACE		--	1	--	--	--	--	1	--	SPACE	26	--
	27	SPACE		--	1	--	--	--	--	1	--	SPACE	28	--
	29	SPACE		--	1	--	--	--	--	1	--	SPACE	30	--
TOTAL LOAD:					1.65 kVA		2.00 kVA		0.07 kVA					
TOTAL AMPS:					7 A		8 A		0 A					
TOTAL CONNECTED LOAD:					3.71 kVA						4.64 kVA TOTAL DEMAND LOAD:			
TOTAL CONNECTED AMPS:					9 A						6 A TOTAL DEMAND AMPS:			
PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)					LOAD CLASSIFICATION			CONNECTED LOAD (VA)			DEMAND FACTOR		ESTIMATE DEMAND (VA)	
C CONTACTOR CONTROLLED					Lighting - Interior			3710 VA			125.00%		4638 VA	
G GFCI PROTECTED														
P HANDLE LOCKING DEVICE														
S SHUNT TRIP														
X 80% RATED MAIN CIRCUIT BREAKER WITH LSI														
Y 100% RATED MAIN CIRCUIT BREAKER WITH LSI														
Z 100% RATED MAIN CIRCUIT BREAKER WITH LSI														
FEED THROUGH LUGS (FTL)														
SUB FEED LUGS (SFL)														
NOTES:														

BRANCH PANELBOARD SCHEDULE															
DESIGNATION: 24S2				VOLTS: 480Y/277 V				MAINS RATING: 125 A							
LOCATION: ELECTRICAL A202A				PHASES: 3				MAINS TYPE: MLO							
MOUNTING: SURFACE				WIRES: 4											
SUPPLY FROM: MDPH3				AIC RATING: 22K											
O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.	O	
	1	EXIT SIGNS	LIGHTING	20 A	1	0.02	0.05			1	20 A	LIGHTING A202A	2		
	3	A206	LIGHTING	20 A	1		1.08	1.62			1	20 A	LIGHTING A203	4	
	5	A208	LIGHTING	20 A	1			1.37	1.50	1	20 A	LIGHTING A209	6		
	7	A211	LIGHTING	20 A	1	2.16	0.00			1	20 A	SPARE	8	--	
--	9	SPARE		20 A	1		0.00	0.00		1	20 A	SPARE	10	--	
--	11	SPARE		20 A	1			0.00	0.00	1	20 A	SPARE	12	--	
--	13	SPARE		20 A	1	0.00	0.00			1	20 A	SPARE	14	--	
--	15	SPARE		20 A	1		0.00	0.00		1	20 A	SPARE	16	--	
--	17	SPARE		20 A	1			0.00	--	1	--	SPACE	18	--	
--	19	SPACE		--	1	--	--	--		1	--	SPACE	20	--	
--	21	SPACE		--	1	--	--	--		1	--	SPACE	22	--	
--	23	SPACE		--	1	--	--	--		1	--	SPACE	24	--	
--	25	SPACE		--	1	--	--	--		1	--	SPACE	26	--	
--	27	SPACE		--	1	--	--	--		1	--	SPACE	28	--	
--	29	SPACE		--	1	--	--	--		1	--	SPACE	30	--	
TOTAL LOAD:				2.23 kVA				2.87 kVA							
TOTAL AMPS:				8 A				10 A							
</															

#	Revision	Date
A2	ADDENDUM #2	02.06.2023

BRANCH PANELBOARD SCHEDULE															
DESIGNATION: 22S2						VOLTS: 208Y/120 V				MAINS RATING: 225 A					
LOCATION: ELECTRICAL 4202A						PHASES: 3				MAINS TYPE: M.L.O.					
MOUNTING: SURFACE						WIRES: 4									
SUPPLY FROM: 12SDP						A/C RATING: 22K									
O	CKT NO	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO	O	
	1	A201 - PROJECTOR	PROJ	20 A	1	0.36	0.50		1	20 A	RECEPT	A201 - SOUND	2		
	3	A202A	EF-3	20 A	1		0.70	1.20		1	20 A	COPIER	A209A	4	
	5	A209 - PROJECTOR	RECEPT	20 A	1			0.72	1.20	1	20 A	RECEPT	Receptacle - General	6	
	7	A201 - RECEPT WALL	RECEPT	20 A	1	0.90	0.36			1	20 A	RECEPT	ROOF	8	
	9	Receptacle - General	RECEPT	20 A	1		0.36	0.36		1	20 A	RECEPT	A211 - PROJECTOR	10	
	11	Receptacle - General	RECEPT	20 A	1			0.36	0.36	1	20 A	RECEPT	A211 - RECEPT TEACHER	12	
	13	A209 - PROJECTOR	RECEPT	20 A	1	0.36	0.36			1	20 A	RECEPT	A203 - RECEPT TEACHER	14	
	15	A209 - PROJECTOR	PROJ	20 A	1		0.36	0.36		1	20 A	RECEPT	A204 - RECEPT TEACHER	16	
	17	A209 - RECEPT TEACHER	RECEPT	20 A	1			0.36	0.36	1	20 A	PROJ	A205 - PROJECTOR	18	
	19	A204 - PROJECTOR	PROJ	20 A	1	0.36	0.36			1	20 A	RECEPT	A201 - RECEPT TEACHER	20	
	21	A203 - PROJECTOR	PROJ	20 A	1		0.36	0.50		1	20 A	CORD RE	A211 - CORD REEL	22	
	23	A203 - RECEPT TEACHER	RECEPT	20 A	1			0.36	0.50	1	20 A	RECEPT	A211 - SOUND	24	
	25	A211 - CORD REEL	CORD RE	20 A	1	0.50	0.50			1	20 A	CORD RE	A211 - CORD REEL	26	
	27	A211 - CORD REEL	CORD RE	20 A	1		0.50	0.50		1	20 A	CORD RE	A211 - CORD REEL	28	
	29	A211 - CORD REEL	CORD RE	20 A	1			0.50	0.50	1	20 A	CORD RE	A211 - CORD REEL	30	
	31	A211 - CORD REEL	CORD RE	20 A	1	0.50	0.50			1	20 A	CORD RE	A209 - CORD REEL	32	
	33	A209 - CORD REEL	CORD RE	20 A	1			0.50	0.50	1	20 A	CORD RE	A209 - CORD REEL	34	
	35	A209 - SOUND	RECEPT	20 A	1			0.50	0.50	1	20 A	CORD RE	A209 - CORD REEL	36	
	37	A209 - CORD REEL	CORD RE	20 A	1	0.50	0.50			1	20 A	CORD RE	A209 - CORD REEL	38	
	39	A209 - CORD REEL	CORD RE	20 A	1		0.50	0.50		1	20 A	RECEPT	A204 - SOUND	40	
	41	A209 - CORD REEL	CORD RE	20 A	1			0.50	0.50	1	20 A	RECEPT	A205 - SOUND	42	
	43	A203 - SOUND	RECEPT	20 A	1	0.50	0.54			1	20 A	RECEPT	A209 - RECEPT WALL	44	
	45	A212	RECEPT	20 A	1		0.54	0.72		1	20 A	RECEPT	A211 - RECEPT WALL	46	
	47	A212	RECEPT	20 A	1			0.54	0.72	1	20 A	RECEPT	A211 - RECEPT WALL	48	
	49	A211 - RECEPT WALL	RECEPT	20 A	1	0.72	0.90			1	20 A	RECEPT	A205 - RECEPT WALL	50	
	51	A205 - RECEPT WALL	RECEPT	20 A	1		0.90	0.90		1	20 A	RECEPT	A204 - RECEPT WALL	52	
	53	A209 - RECEPT WALL	RECEPT	20 A	1		0.90	0.90		1	20 A	RECEPT	A204 - RECEPT WALL	54	
	55	A208 - RECEPT CORRIDOR	RECEPT	20 A	1		0.90	0.54		1	20 A	RECEPT	A201 - RECEPT WALL	56	
	57	A202 - A208 - RECEPT CORRIDOR	RECEPT	20 A	1					1	20 A	RECEPT	A22B	58	
	59	A205 - RECEPT WALL	RECEPT	20 A	1					1	20 A	COPIER	A209A	60	
--	61	SPARE	20 A	1	0.00	1.70			0.00	1.70	2	15 A	COPIER	A209A	62
--	63	SPARE	20 A	1		0.00	0.00			--	--	--	--	--	64
--	65	SPARE	20 A	1				0.00	0.00	1	20 A	SPARE	SPARE	SPARE	66
--	67	SPARE	20 A	1	0.00	0.00				1	20 A	SPARE	SPARE	SPARE	68
--	69	SPARE	20 A	1			0.00	0.00		1	20 A	SPARE	SPARE	SPARE	70
--	71	SPARE	20 A	1				0.00	0.00	1	20 A	SPARE	SPARE	SPARE	72
--	73	SPARE	20 A	1	0.00	0.00				1	20 A	SPARE	SPARE	SPARE	74
--	75	SPARE	20 A	1			0.00	0.00		1	20 A	SPARE	SPARE	SPARE	76
--	77	SPARE	--	1					--	0.00	1	20 A	SPARE	SPARE	78
--	79	SPARE	--	1	--	0.00		--	--	--	1	20 A	SPARE	SPARE	80
--	81	SPARE	--	1			--	--		--	1	--	SPACE	SPACE	82
--	83	SPARE	--	1			--	--	--	--	1	--	SPACE	SPACE	84

TOTAL CONNECTED LOAD: 37.30 kVA		TOTAL AMPS: 107 A		96 A		109 A		25.50 kVA		TOTAL DEMAND LOAD:	
TOTAL CONNECTED AMPS: 109 A								71 A		TOTAL DEMAND AMPS:	
PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION		CONNECTED LOAD (VA)		DEMAND FACTOR		ESTIMATE DEMAND (VA)			
C	CONTRACTOR CONTROLLED	Receptacle - General		33600 VA		64.88%		21800 VA			
G	CMFCI PROTECTED	Mechanical - Motor		700 VA		100.00%		700 VA			
P	HANDLE LOCKING DEVICE	Power - Continuous		3000 VA		100.00%		3000 VA			
S	SHUNT TRIP										
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI										
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI										
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSI										
FEED THROUGH LUGS (FTL)											
SUB FEED LUGS (SFL)											
NOTES:											

DESIGNATION: 12XS1
LOCATION: MECHANICAL B107
MOUNTING: SURFACE
SUPPLY FROM: T2

BRANCH PANELBOARD SCHEDULE
VOLTS: 208Y/120 V
PHASES: 3
WIRES: 4
AIC RATING: 22K

MAINS RATING: 225 A
MAINS TYPE: MLO
MCB RATING: 175 A
MCB OPTIONS:

O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.
	1	A111	RECEPT.	20 A	1	0.18	0.18		1	20 A	RECEPT.	A111	2
	3	ROOF	CU-1	20 A	2		1.04	4.16		2	25 A	B-1	4
--	5	--	--	--	--			1.04	4.16	--	--	--	6
	7	A 111	RECEPT.	20 A	1	0.72	4.00			2	20 A	RECEPT.	8
--	9	B107	CNTL PNL	20 A	1		0.00	4.00		--	--	--	10
	11	A111	RECEPT.	20 A	2			4.00	0.94	3	20 A	B107	12
--	13	--	--	--	--	4.00	0.94			--	--	--	14
	15	B107	TC PNL	20 A	1		0.10	0.94		--	--	--	16
--	17	SPARE		20 A	1			0.00	0.00	1	20 A	SPARE	18
--	19	SPARE		20 A	1	0.00	0.00			1	20 A	SPARE	20
--	21	SPARE		20 A	1		0.00	0.00		1	20 A	SPARE	22
--	23	SPARE		20 A	1			0.00	0.00	1	20 A	SPARE	24
TOTAL LOAD:				10.02 kVA		10.24 kVA		10.14 kVA					
TOTAL AMPS:				83 A		85 A		85 A					
TOTAL CONNECTED LOAD: 30.39 kVA										25.81 kVA TOTAL DEMAND LOAD:			
TOTAL CONNECTED AMPS: 85 A										72 A TOTAL DEMAND AMPS:			
PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)				LOAD CLASSIFICATION		CONNECTED LOAD (VA)		DEMAND FACTOR		ESTIMATE DEMAND (VA)			
C CONTACTOR CONTROLLED				Receptacle - General		17080 VA		79.27		13540 VA			
G GFCI PROTECTED				Mechanical - Motor		9050 VA		100.00%		9050 VA			
P HANDLE LOCKING DEVICE				Mechanical - Heating		4160 VA		75.00%		3120 VA			
S SHUNT TRIP				Power - Continuous		100 VA		100.00%		100 VA			
X 80% RATED MAIN CIRCUIT BREAKER WITH LSI													
Y 100% RATED MAIN CIRCUIT BREAKER WITH LSI													
Z 100% RATED MAIN CIRCUIT BREAKER WITH LSI													
FEED THROUGH LUGS (FTL)													
SUB FEED LUGS (SFL)													

NOTES:

BRANCH PANELBOARD SCHEDULE															
DESIGNATION: 12SD						VOLTS: 208Y/120 V					MAINS RATING: 225 A				
LOCATION: IDF A111						PHASES: 3					MAINS TYPE: MLO				
MOUNTING: SURFACE						WIRES: 4									
SUPPLY FROM: 12SDP						AIC RATING: 22K									
O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.	O	
	1	A112	CORD RE	20 A	1	0.50	1.20			1	20 A	POTT. WH. A112	2		
	3	A112	CORD RE	20 A	1		0.50	1.20		1	20 A	POTT. WH. A112	4		
	5	A112	POTT. WH.	20 A	1			1.20	1.20	1	20 A	POTT. WH. A112	6		
	7	A112	POTT. WH.	20 A	1	1.20	0.50			1	20 A	CORD RE. A112	8		
	9	A112	POTT. WH.	20 A	1		1.20	0.50		1	20 A	CORD RE. A112	10		
	11	A112	POTT. WH.	20 A	1			1.20	0.50	1	20 A	CORD RE. A112	12		
	13	A112	CORD RE.	20 A	1	0.50	1.20			1	20 A	POTT. WH. A112	14		
	15	A112	CORD RE.	20 A	1		0.50	1.20		1	20 A	POTT. WH. A112	16		
	17	A112	CORD RE.	20 A	1			0.50	1.20	1	20 A	POTT. WH. A112	18		
	19	A112	POTT. WH.	20 A	1	1.20	1.20			1	20 A	POTT. WH. A112	20		
	21	A112	POTT. WH.	20 A	1		1.20	1.20		1	20 A	POTT. WH. A112	22		
	23	A112	POTT. WH.	20 A	1			1.20	1.20	1	20 A	POTT. WH. A112	24		
	25	A112	POTT. WH.	20 A	1	1.20	1.20			1	20 A	POTT. WH. A112	26		
	27	A112	POTT. WH.	20 A	1		1.20	1.20		1	20 A	POTT. WH. A112	28		
	29	A112	POTT. WH.	20 A	1			1.20	1.20	1	20 A	POTT. WH. A112	30		
	31	A112	POTT. WH.	20 A	1	1.20	1.20			1	20 A	POTT. WH. A112	32		
	33	A112	POTT. WH.	20 A	1		1.20	1.20		1	20 A	POTT. WH. A112	34		
	35	A112	POTT. WH.	20 A	1			1.20	1.20	1	20 A	POTT. WH. A112	36		
	37	A109A	KLN	60 A	3	5.61	0.00			1	20 A		38	--	
	39	--	--	--	--		5.61	0.00		1	20 A		40	--	
	41	--	--	--	--			5.61	0.00	1	20 A	SPARE	42	--	
	43	SPARE	--	20 A	1	0.00	0.00			1	20 A	SPARE	44	--	
	45	SPARE	--	20 A	1		0.00	0.00		1	20 A	SPARE	46	--	
	47	SPARE	--	20 A	1			0.00	0.00	1	20 A	SPARE	48	--	
	49	SPARE	--	20 A	1	0.00	0.00			1	20 A	SPARE	50	--	
TOTAL LOAD:						17.91 kVA	17.91 kVA	18.61 kVA							
TOTAL AMPS:						149 A	149 A	155 A							
TOTAL CONNECTED LOAD: 54.42 kVA										40.62 kVA TOTAL DEMAND LOAD:					
TOTAL CONNECTED AMPS: 155 A										113 A TOTAL DEMAND AMPS:					
PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCS OPTIONS ABBREVIATIONS)						LOAD CLASSIFICATION			CONNECTED LOAD (VA)			DEMAND FACTOR		ESTIMATE DEMAND (VA)	
C CONTACTOR CONTROLLED						Receptacle - General			37600 VA			63.30%		23800 VA	
G GFCI PROTECTED						Mechanical - Motor			16824 VA			100.00%		16824 VA	
P HANDLE LOCKING DEVICE						Power - Continuous			0 VA			0.00%		0 VA	
S SHUNT TRIP															
X 80% RATED MAIN CIRCUIT BREAKER WITH LSI															
Y 100% RATED MAIN CIRCUIT BREAKER WITH LSI															
Z 100% RATED MAIN CIRCUIT BREAKER WITH LSI															
FEED THROUGH LUGS (FTL)															
SUB FEED LUGS (SFL)															
NOTES:															

BRANCH PANELBOARD SCHEDULE												DESIGNATION: 2251		VOLTS: 208Y/120 V		MAINS RATING: 225 A		MAINS TYPE: MLO		LOCATIONS: ELECTRICAL B206A		PHASES: 3		WIRES: 4		MOUNTING: SURFACE		SUPPLY FROM: 125DP		AIC RATING: 22K	
O	CKT NO	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO	O																	
	1	B205	RECEPT	20 A	1	0.36	0.36			1	20 A	RECEPT	B208	2																	
	3	B205	RECEPT	20 A	1		0.90	0.90			1	20 A	RECEPT	B208	4																
	5	B205	RECEPT	20 A	1			0.90	0.90	1	20 A	RECEPT	B208	6																	
	7	B205	RECEPT	20 A	1	0.50	0.50			1	20 A	RECEPT	B208	8																	
	9	B205	PROJ.	20 A	1		0.36	0.36			1	20 A	PROJ.	B208	10																
	11	B207	RECEPT	20 A	1			0.36	0.36	1	20 A	RECEPT	B204	12																	
	13	B207	RECEPT	20 A	1	0.90	0.90			1	20 A	RECEPT	B204	14																	
	15	B207	RECEPT	20 A	1		0.90	0.90		1	20 A	RECEPT	B204	16																	
	17	B207	RECEPT	20 A	1			0.50	0.50	1	20 A	RECEPT	B204	18																	
	19	B208	PROJ.	20 A	1	0.36	0.36			1	20 A	PROJ.	B204	20																	
	21	A213	RECEPT	20 A	1		0.36	1.08		1	20 A	RECEPT	B201, B206	22																	
	23	A213	RECEPT	20 A	1			0.90	0.36	1	20 A	RECEPT	A213	24																	
	25	A213	RECEPT	20 A	1	0.90	0.18			1	20 A	RECEPT	A213	26																	
	27	A213	RECEPT	20 A	1		0.50	0.90		1	20 A	RECEPT	A213	28																	
	29	A213	PROJ.	20 A	1			0.36	0.90	1	20 A	RECEPT	A213	30																	
	31	B202, B202A, B203	RECEPT	20 A	1	0.54	0.90			1	20 A	RECEPT	A213	32																	
	33	B201	RECEPT	20 A	1		0.18	0.50		1	20 A	CORD RE	A213	34																	
	35	B201	RECEPT	20 A	1			0.18	0.50	1	20 A	CORD RE	A213	36																	
	37	A207	RECEPT	20 A	1	0.36	0.50			1	20 A	CORD RE	A213	38																	
	39	A207	RECEPT	20 A	1		0.90	0.50		1	20 A	CORD RE	A213	40																	
	41	A207	RECEPT	20 A	1			0.90	0.50	1	20 A	CORD RE	A213	42																	
	43	A207	RECEPT	20 A	1	0.50	0.50			1	20 A	CORD RE	A213	44																	
	45	A207	PROJ.	20 A	1		0.36	0.50		1	20 A	CORD RE	A213	46																	
	47	A206	RECEPT	20 A	1			0.36	0.50	1	20 A	CORD RE	A213	48																	
	49	A206	RECEPT	20 A	1	0.90	0.50			1	20 A	RECEPT	A213	50																	
	51	A206	RECEPT	20 A	1		0.90	0.36		1	20 A	PROJ.	A213	52																	
	53	A206	RECEPT	20 A	1			0.50	1.66	1	30 A	EF-1	2ND FLR PLUMBING CHASE	54																	
	55	A206	PROJ.	20 A	1	0.36	1.18			1	30 A	EF-2	A212	56																	
	57	ROOF	RECEPT	20 A	1		0.18	0.00		1	20 A	SPARE		58																	
	59	SPARE	20 A	1				0.00	0.00	1	20 A	SPARE		60																	
	61	SPARE	20 A	1	0.00	0.00				1	20 A	SPARE		62																	
	63	SPARE	20 A	1			0.00	0.00		1	20 A	SPARE		64																	
	65	SPARE	20 A	1				0.00	0.00	1	20 A	SPARE		66																	
	67	SPARE	20 A	1	0.00	0.00				1	20 A	SPARE		68																	
	69	SPARE	20 A	1			0.00	0.00		1	20 A	SPARE		70																	
	71	SPARE	20 A	1				0.00	0.00	1	20 A	SPARE		72																	
	73	SPARE	20 A	1	0.00	--				1	--	SPACE		74																	
	75	SPACE	--	1		--	--	--		1	--	SPACE		76																	
	77	SPACE	--	1		--	--	--		1	--	SPACE		78																	
	79	SPACE	--	1	--	--	--	--		1	--	SPACE		80																	
	81	SPACE	--	1		--	--	--		1	--	SPACE		82																	
	83	SPACE	--	1		--	--	--		1	--	SPACE		84																	
						TOTAL LOAD:	11.56 KVA	11.54 KVA	11.44 KVA																						
						TOTAL AMPS:	97 A	97 A	93 A																						
TOTAL CONNECTED LOAD: 34.24 KVA										25.54 KVA					TOTAL DEMAND LOAD:																
TOTAL CONNECTED AMPS: 97 A										71 A					TOTAL DEMAND AMPS:																
PANELBOARD & CIRCUIT BREAKER OPTIONS (TOP COLUMN / MCB OPTIONS AVAILABLE)						LOAD CLASSIFICATION			CONNECTED LOAD (VA)			DEMAND FACTOR		ESTIMATE DEMAND (VA)																	
C [C] CONTACTOR CONTROLLED						Resistive - General			27400 VA			68 %		18700 VA																	
G [G] GFCI PROTECTED						Mechanical - Motor			2840 VA			100.00 %		2840 VA																	
P [P] HANDLE LOCKING DEVICE						Power - Continuous			4000 VA			100.00 %		4000 VA																	
S [S] SHUNT TRIP																															
X [X] 80% RATED MAIN CIRCUIT BREAKER WITH LSI																															
Y [Y] 100% RATED MAIN CIRCUIT BREAKER WITH LSI																															
Z [Z] 100% RATED MAIN CIRCUIT BREAKER WITH LSIg																															
FEED THROUGH LUGS (FTL)																															
SUB FEED LUGS (SFL)																															
NOTES:																															

BRANCH PANELBOARD SCHEDULE														
DESIGNATION: 12S1					VOLTS: 208Y/120 V									
LOCATION: MECHANICAL B107					PHASES: 3									
MOUNTING: SURFACE					WIRES: 4									
SUPPLY FROM: 12SDP					A/C RATING: 22K									
O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.	O
	1	EAST EXIT DOOR	DOOR..	20 A	1	0.00	0.50			1	20 A	RECEPT. A105	2	
	3	A105	RECEPT.	20 A	1		0.36	0.36		1	20 A	PROJ. A105	4	
	5	A114	RECEPT.	20 A	1			0.72	0.18	1	20 A	RECEPT. A104	6	
	7	B107	HWCP-2	20 A	1	0.53	0.53			1	20 A	HWCP-1 B107	8	
	9	B107	B-2	25 A	2		4.16	0.18		1	20 A	RECEPT. B107	10	
--	11	--	--	--	--			4.16	0.18	1	20 A	WC B101	12	
	13	A114	RECEPT.	20 A	1	0.72	0.48			1	20 A	DHW-1 B107	14	
	15	B101	WC	20 A	1		0.18	0.36		1	20 A	PROJ. B105	16	
	17	EXTERIOR	RECEPT.	20 A	1			0.36	0.36	1	20 A	PROJ. B104	18	
	19	B101-ABOVE CEILING	CP-1	30 A	1	1.66	0.18			1	20 A	SOFTNER B107	20	
	21	B104	RECEPT.	20 A	1		0.36	0.36		1	20 A	RECEPT. A107	22	
	23	A114	RECEPT.	20 A	1			0.36	0.50	1	20 A	RECEPT. B105	24	
	25	A114	RECEPT.	20 A	1	0.18	0.36			1	20 A	RECEPT. B105	26	
	27	B104	RECEPT.	20 A	1		0.50	0.50		1	20 A	CORD RE A114	28	
	29	A114	CORD RE	20 A	1			0.50	0.50	1	20 A	CORD RE A114	30	
	31	A114	PROJ.	20 A	1	0.36	0.36			1	20 A	PROJ. A107	32	
	33	A114	CORD RE	20 A	1		0.50	0.50		1	20 A	CORD RE A114	34	
	35	A114	CORD RE	20 A	1			0.50	0.54	1	20 A	RECEPT. B107	36	
	37	A114	CORD RE	20 A	1	0.50	0.50			1	20 A	CORD RE A114	38	
	39	B106	RECEPT.	20 A	1		0.54	0.72		1	20 A	RECEPT. A114	40	
	41	A114	RECEPT.	20 A	1			0.72	0.90	1	20 A	RECEPT. B105	42	
	43	A114	CORD RE	20 A	1	0.50	0.50			1	20 A	RECEPT. A107	44	
	45	B105	RECEPT.	20 A	1		0.90	0.90		1	20 A	RECEPT. A114	46	
	47	B104	RECEPT.	20 A	1			0.90	0.90	1	20 A	RECEPT. A107	48	
	49	B102, B102A, B103	RECEPT.	20 A	1	0.54	0.72			1	20 A	RECEPT. A114	50	
	51	A105	RECEPT.	20 A	1		0.90	0.48		1	20 A	DWH-1 B107	52	
--	53	SPARE	20 A	1				0.00	0.00	1	20 A	SPARE	54	--
	55	B104	RECEPT.	20 A	1	0.90	0.90			1	20 A	RECEPT. A107	56	
	57	SPARE	20 A	1			0.00	0.00		1	20 A	SPARE	58	
	59	SPARE	20 A	1				0.00	0.00	1	20 A	SPARE	60	
	61	A105	RECEPT.	20 A	1	0.90	0.00			1	20 A	SPARE	62	--
	63	SPARE	20 A	1			0.00	0.00		1	20 A	SPARE	64	--
--	65	SPARE	20 A	1				0.00	0.00	1	20 A	SPARE	66	--
TOTAL LOAD:						11.82 kVA	12.76 kVA	12.28 kVA						
TOTAL AMPS:						99 A	107 A	103 A						
TOTAL CONNECTED LOAD: 36.86 kVA										30.44 kVA TOTAL DEMAND LOAD:				
TOTAL CONNECTED AMPS: 107 A										84 A TOTAL DEMAND AMPS:				
PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / ICB'S OTHER ABBREVIATIONS)			LOAD CLASSIFICATION		CONNECTED LOAD (VA)				DEMAND FACTOR		ESTIMATE DEMAND (VA)			
			Receptacle - General		22320 VA				75.36%		16180 VA			
C	CONTRACTOR CONTROLLED		Mechanical - Motor		6880 VA				100.00%		6880 VA			
G	GFCI PROTECTED		Mechanical - Heating		860 VA				75.00%		720 VA			
P	HANDLE LOCKING DEVICE		Power - Continuous		6660 VA				100.00%		6660 VA			
S	SHUNT TRIP													
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI													
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI													
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSI													
FEED THROUGH LUGS (FTL)														
SUB FEED LUGS (SFL)														
NOTES:														

DESIGNATION: 1252

LOCATION: IDF A111

MOUNTING: SURFACE

SUPPLY FROM: 1252DP

VOLTS: 208Y/120 V

PHASES: 3

WIRES: 4

A/C RATING: 22K

MAINS RATING: 225 A

MAINS TYPE: MLO

O	CKT NO	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A	B	C	P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO	O	
1	A101	PROJ.	20 A	1	0.36	1.26				1	20 A	RECEPT.	A108	2	
3	A101	SOUND	20 A	1			0.50	0.50			1	20 A	SOUND	A103	4
5	A109	RECEPT.	20 A	1					0.54	0.90	1	20 A	RECEPT.	A101	6
7	A112	RECEPT.	20 A	1	0.36	0.36					1	20 A	PROJ.	A105	8
9	A109	RECEPT.	20 A	1			0.54	0.36			1	20 A	PROJ.	A112	10
11	A113	RECEPT.	20 A	1					0.36	0.36	1	20 A	PROJ.	A109	12
13	A104	RECEPT.	20 A	1	0.36	0.36					1	20 A	RECEPT.	A101	14
15	A109	RECEPT.	20 A	1			0.36	0.36			1	20 A	RECEPT.	A104	16
17	A105	RECEPT.	20 A	1					0.36	0.36	1	20 A	RECEPT.	A103	18
19	A103	CORD RE	20 A	1	0.50	0.50					1	20 A	CORD RE	A109	20
21	A103	PROJ.	20 A	1			0.36	0.50			1	20 A	SOUND	A109	22
23	A112	SOUND	20 A	1					0.50	0.50	1	20 A	CORD RE	A109	24
25	A109	CORD RE	20 A	1	0.50	0.50					1	20 A	SOUND	A104	26
27	A109	CORD RE	20 A	1			0.50	0.50			1	20 A	CORD RE	A109	28
29	A109	CORD RE	20 A	1					0.50	0.50	1	20 A	CORD RE	A109	30
31	A105	RECEPT.	20 A	1	0.90	0.90					1	20 A	RECEPT.	A104	32
33	A105	SOUND	20 A	1			0.50	0.90			1	20 A	RECEPT.	A112	34
35	A112	RECEPT.	20 A	1					0.90	0.90	1	20 A	RECEPT.	A105	36
37	A101	RECEPT.	20 A	1	0.90	0.00					1	20 A	SPARE	38	--
39	A104	RECEPT.	20 A	1			0.90	0.90			1	20 A	RECEPT.	A103	40
41	A103	RECEPT.	20 A	1					0.90	0.00	1	20 A	SPARE	42	--
43	A102A	DOOR...	20 A	1	0.00	0.00					1	20 A	SPARE	44	--
45	SPARE		20 A				0.00	0.00			1	20 A	SPARE	46	--
47	SPARE		20 A	1					0.00	0.00	1	20 A	SPARE	48	--
49	SPARE		20 A	1	0.00	0.00					1	20 A	SPARE	50	--
51	SPARE		20 A	1			0.00	0.00			1	20 A	SPARE	52	--
53	SPARE		20 A	1					0.00	0.00	1	20 A	SPARE	54	--
55	SPARE		20 A	1	0.00	0.00					1	20 A	SPARE	56	--
57	SPARE		20 A	1			0.00	0.00			1	20 A	SPARE	58	--
59	SPARE		20 A	1					0.00	0.00	1	20 A	SPARE	60	--
61	SPARE		20 A	1	0.00	--					1	20 A	SPACE	62	--
63	SPACE	--	--	--	--	--	--	--	--	--	1	--	SPACE	64	--
65	SPACE	--	--	--	--	--	--	--	--	--	1	--	SPACE	66	--
67	SPACE	--	--	--	--	--	--	--	--	--	1	--	SPACE	68	--
69	SPACE	--	--	--	--	--	--	--	--	--	1	--	SPACE	70	--
71	SPACE	--	--	--	--	--	--	--	--	--	1	--	SPACE	72	--

TOTAL CONNECTED LOAD: 7.76 kVA

TOTAL AMPS: 65 A

7.68 kVA

64 A

7.58 kVA

63 A

18.01 kVA

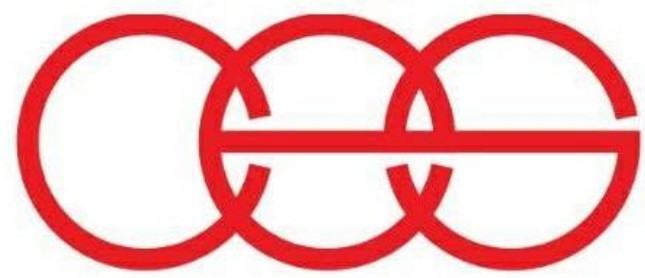
50 A

TOTAL DEMAND LOAD: 18.01 kVA

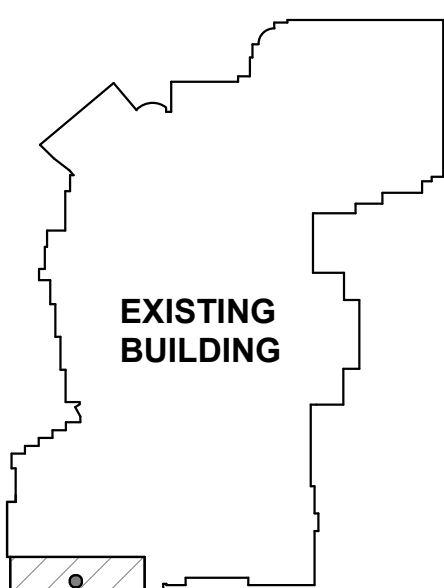
TOTAL DEMAND AMPS: 50 A

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)	LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
C CONTACTOR CONTROLLED	Receptacle - General	2020 VA	74.98%	15010 VA
G GFCI PROTECTED	Power - Continuous	3000 VA	100.00%	3000 VA
P HANDLE LOCKING DEVICE				
S SHUNT TRIP				
X 80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y 100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z 100% RATED MAIN CIRCUIT BREAKER WITH LSI				
FEED THROUGH LUGS (FTL)				
SUB FEED LUGS (SFL)				

NOTES:



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ADDITION & RENOVATIONS TO:

**FRANKLIN CENTRAL
HIGH SCHOOL**

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

PANELBOARD SCHEDULES



Project No: 2022043.00

Project Date:
JANUARY 09, 2023

Drawing No:

E-605