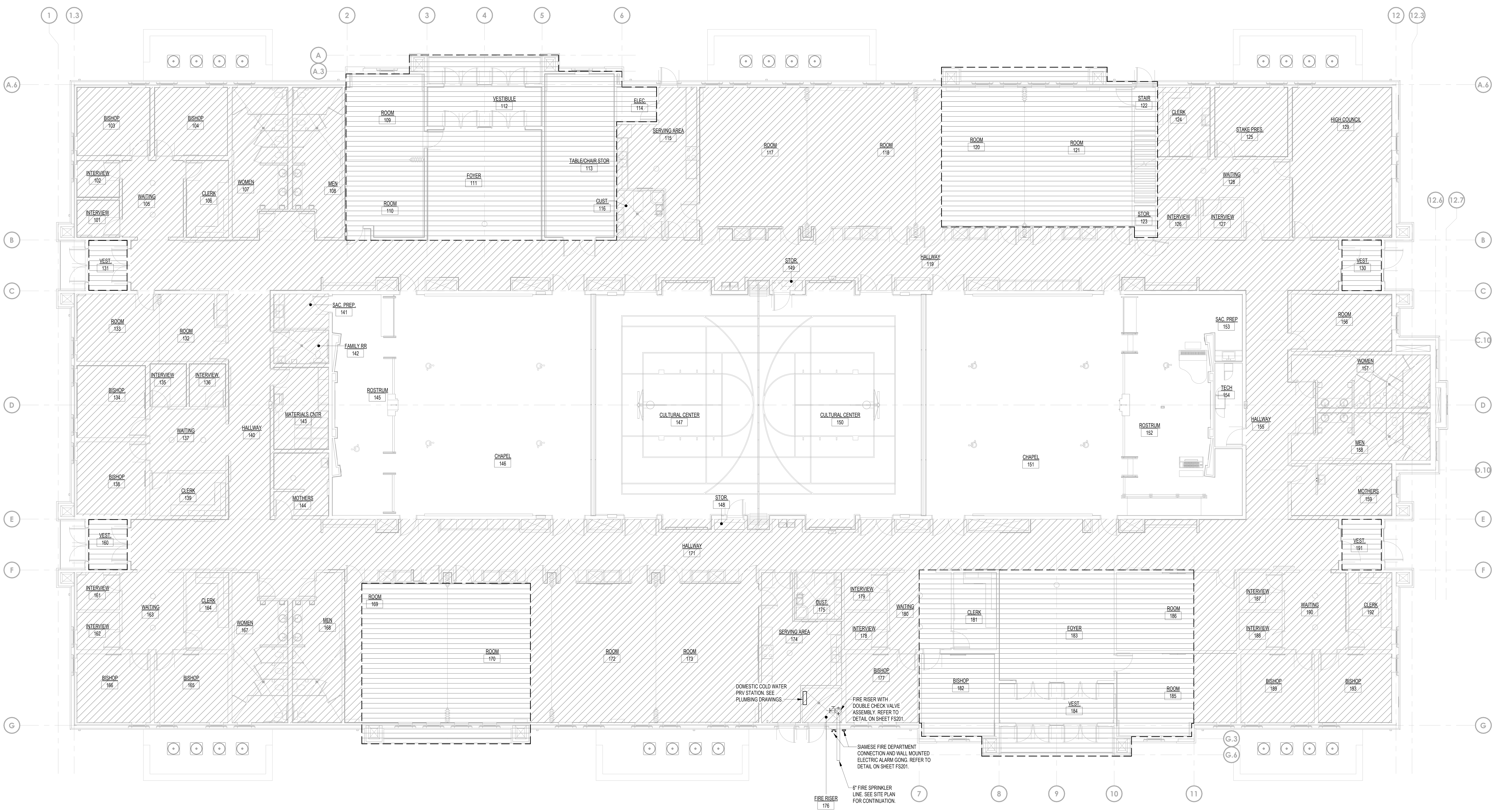

FIRE SPRINKLER SYSTEM FLOOR PLAN

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

FIRE PROTECTION LEGEND

Symbol	Description	Symbol	Description
	UPRIGHT HEAD		FIRE DEP. CONNECTION
	CONCEALED PENDENT HEAD		PRESSURE GAUGE
	CONCEALED DRY PENDENT HEAD		CHECK VALVE
E	DRY EXTENDED COVERAGE SIDEWALL HEAD WITH GUARD		FLOW SWITCH
IT	INSPECTOR'S TEST VALVE		FLEXIBLE COUPLING
	BALL VALVE 2" & SMALLER BUTTERFLY VALVE 2 1/2" & LARGER		SWAY BRACING
	UNION		ANGLE VALVE
FA	FREEZE ALARM		PIPE SUPPORT
LA	LOW AIR ALARM		RELIEF VALVE
C	AIR COMPRESSOR	AUX	DRY SYSTEM AUXILIARY DRAIN
W	WET SYSTEM ALARM VALVE	PS	PRESSURE SWITCH
D	DRY SYSTEM ALARM VALVE	TS	TAMPER SWITCH

HYDRAULIC DESIGN INFORMATION FOR WET SYSTEM

REMOTE AREA = 1500 SQUARE FEET

DENSITY = .10 GPM/SQUARE FEET

RISER BASE ______ GPM ______ PSI

SUPPLY ______ STATIC PSI ______ RESIDUAL PSI ______ GPM FLOWING ______ GPM @ 20 PSI

LEGEND

WET PIPE SPRINKLER SYSTEM

WET PIPE SPRINKLER SYSTEM WITH HEAT TRACE AND DRY PENDANT HEADS

WATER FLOW TEST

TEST DATE: ______ TEST TIME: ______

STATIC: ______ RESIDUAL: ______

FLOW: ______ LOCATION: ______

TEST BY: ______

GENERAL NOTES:

1- INSTALL FIRE PROTECTION PIPING IN AREAS AS SHOWN. INSTALL WET PIPE SYSTEM IN HEATED AREAS. INSTALL WET PIPE SPRINKLER SYSTEM WITH HEAT TRACE ON ALL LINES AND DRY HEADS IN UNHEATED AREAS. OBTAIN APPROVAL FOR PIPING CHANGES FROM ARCHITECT AND ENGINEER BEFORE INSTALLING.

2- SHOP DRAWINGS, CALCULATIONS AND MATERIAL SUBMITTALS SHALL BE SUBMITTED TO THE ENGINEER AND OWNER PRIOR TO SUBMITTAL TO THE FIRE MARSHALL.

3- THE SPACE OCCUPANCY IN LIGHT HAZARD. (NFPA 13) MAIN FLOOR COVERAGE IS LESS THAN 225 SQ. FEET PER HEAD. UPPER LEVEL COVERAGE IS LESS THAN 130 SQ. FEET PER HEAD.

4- SEE SITE PLAN FOR UTILITY CONNECTION FOR FIRE PROTECTION PIPING AND LOCATION OF FIRE HYDRANTS.

5- DO NOT ROUTE PIPING THRU STRUCTURAL MEMBERS OR THRU MECHANICAL DUCTWORK.

6- SEE REFLECTED CEILING PLAN FOR EXACT LOCATION OF SPRINKLER HEADS. SPRINKLER HEADS DO NOT HAVE TO BE CENTERED IN THE 12"x12" ACOUSTICAL TILE.

7- COORDINATE EXACT LOCATION OF PIPING WITH STRUCTURAL MEMBERS, LIGHT FIXTURES, REFLECTED CEILING PLANS, DUCTWORK, MECHANICAL AND PLUMBING PIPING, AND ALL OTHER TRADES.

8- ALL HEADS ARE TO BE PENDANT SPRINKLER QUICK RESPONSE TYPE HEADS.

9- ALL WET PIPE SYSTEM COMPONENTS (EXCEPT DRY OR HEAT TRACED PIPE SPRINKLERS) MUST BE INSIDE THE BUILDING INSULATION ENVELOPE.

10- ALL REQUIRED DRAINS SHALL FOLLOW NFPA 13 CODE REQUIREMENTS. DRAIN SHALL BE VALVED AND PLUGGED TO PREVENT ACCIDENTAL OPENING AND DISCHARGE. DRAINS SHOULD BE LOCATED TO PREVENT PUBLIC ACCESS.

11- ALL WORK DONE SHALL BE PERFORMED WITH WATER CONTROL IN MIND. CONTAINMENT OF WATER IS NECESSARY TO PREVENT WATER FROM DAMAGING SURROUNDING AREA.

12- DRAWINGS SHOULD NOT BE CONSIDERED AS A SHOP DRAWING. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND COORDINATE ALL PIPING WITH STRUCTURAL, MECHANICAL AND ELECTRICAL. SUBMIT SHOP DRAWINGS FOR FINAL REVIEW.

13- CONTRACTOR IS TO DEVELOP SHOP DRAWINGS AND HYDRAULIC CALCULATIONS CONFORMING TO NFPA 13 SPRINKLER. ADDITIONAL HEADS AND/OR PIPING REQUIRED TO MEET SAID STANDARDS IS THE RESPONSIBILITY OF THE CONTRACTOR. LOCATION OF ADDITIONAL HEADS ARE TO BE COORDINATED WITH ARCHITECT AND ENGINEER AND SUBMITTED FOR THEIR REVIEW.

14- OFFSETS ARE TO BE ANTICIPATED IN BRANCH LINES AND ARE TO BE COORDINATED BY THE CONTRACTOR WITH EXISTING CONDITIONS AND OTHER TRADES. MAKE ADDITIONAL OFFSETS AS REQUIRED.

15- HANGERS AND BRACING ARE NOT SHOWN ON THIS DRAWINGS. REFER TO THE SPECIFICATION REQUIREMENTS AND INSTALL ACCORDINGLY.

16- NO FIRE PROTECTION LINE SHALL BE DESIGNED OR INSTALLED PRIOR TO CLOSE COORDINATION WITH ALL OTHER DISCIPLINES. DUCTWORK, MECHANICAL PIPING AND PLUMBING TAKE SPACE PRECEDENCE OVER FIRE PROTECTION PIPING. FAILURE TO COMPLY WILL RESULT IN THE FIRE PROTECTION REMOVAL AND RE-INSTALLATION AT THE FIRE PROTECTION CONTRACTOR'S EXPENSE. DO NOT INSTALL FIRE SPRINLE PIPING ON MECHANICAL ACCESS FLOOR. PROVIDE MAXIMUM CLEARANCE FOR ACCESS.

17- A WARRANTY, FOR PRODUCT AND SYSTEM OPERATIONS, SHALL BE PROVIDED FOR ONE YEAR, UPON SYSTEM ACTIVATION AND ACCEPTANCE.

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THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Rexburg ID Custom 10 Ward Meetinghouse Married Student Second Stake

5th West and University Boulevard, Rexburg, Idaho
43.803303, -111.796612

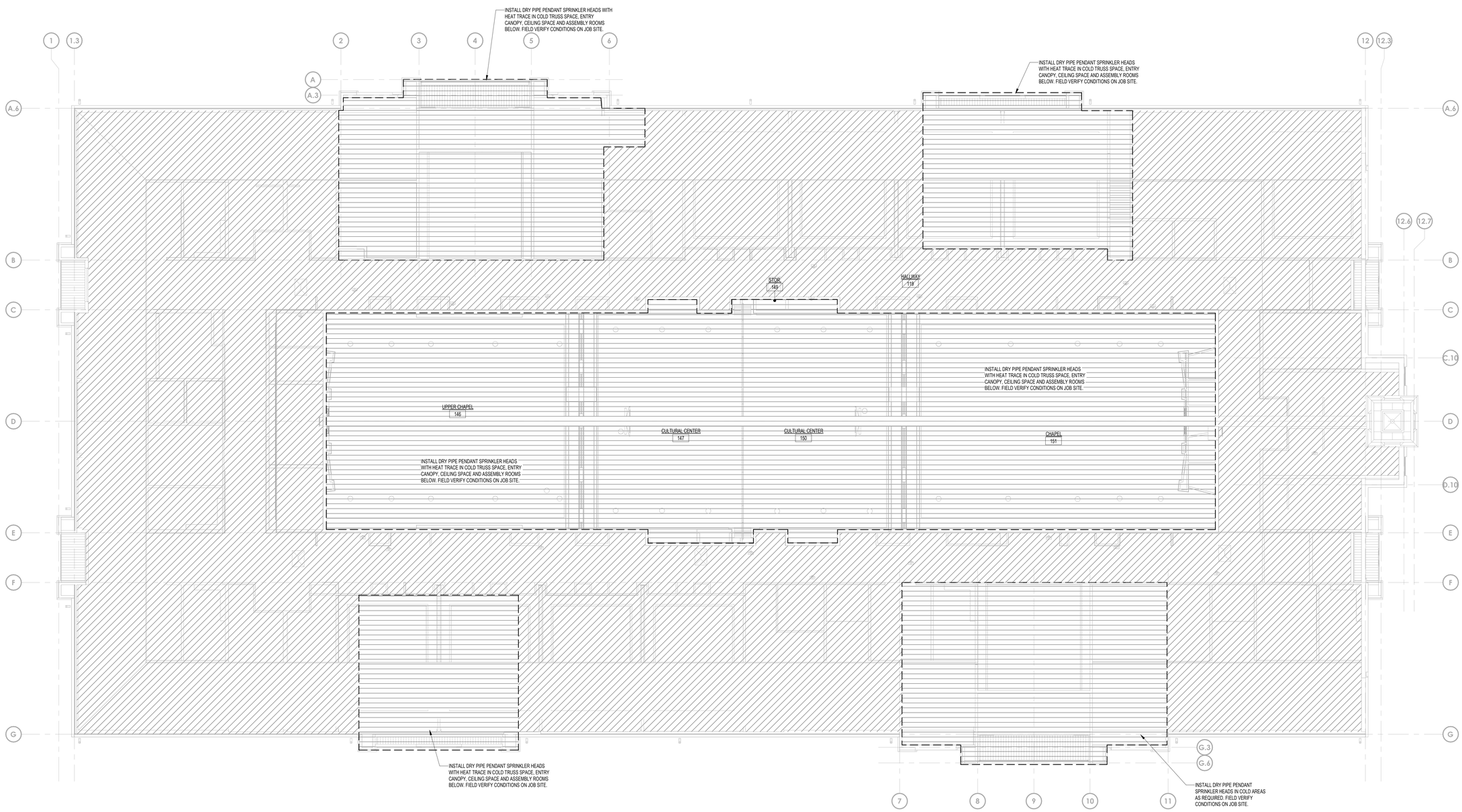
Issue Date	Church Property:	County Parcel:	BHDA Project No.
11 Apr 2023	510-3560	RPR 6N40E315400	2109

Drawing Issue and Revision Schedule

#	Date	Description

FIRE SPRINKLER SYSTEM FLOOR PLAN

FS101



W S N E

UPPER LEVEL FIRE SPRINKLER FLOOR PLAN

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

GENERAL NOTES:

1- INSTALL FIRE PROTECTION PIPING IN AREAS AS SHOWN. INSTALL WET PIPE SYSTEM IN HEATED AREAS. INSTALL DRY PIPE SYSTEM **OR** WET PIPE SPRINKLER SYSTEM WITH HEAT TRACE ON ALL LINES AND HEADS IN UNHEATED AREAS. OBTAIN APPROVAL FOR PIPING CHANGES FROM ARCHITECT AND ENGINEER BEFORE INSTALLING.

2- DRY SPRINKLER SYSTEM INSTALLATION: SLOPE BRANCH LINES AS LEAST 1/2" PER 100 FEET BACK TO MAINS. SLOPE MAIN LINES AT LEAST 1/4" PER 100 FEET BACK TO RISER.

3- THE SPACE OCCUPANCY IN LIGHT HAZARD. (NFPA 13) MAIN FLOOR COVERAGE IS LESS THAN 225 SQ. FEET PER HEAD. UPPER LEVEL COVERAGE IS LESS THAN 130 SQ. FEET PER HEAD.

4- SEE SITE PLAN FOR UTILITY CONNECTION FOR FIRE PROTECTION PIPING AND LOCATION OF FIRE HYDRANTS.

5- DO NOT ROUTE PIPING THRU STRUCTURAL MEMBERS OR THRU MECHANICAL DUCTWORK.

6- SEE REFLECTED CEILING PLAN FOR EXACT LOCATION OF SPRINKLER HEADS. SPRINKLER HEADS DO NOT HAVE TO BE CENTERED IN THE 12'x12' ACOUSTICAL TILE.

7- COORDINATE EXACT LOCATION OF PIPING WITH STRUCTURAL MEMBERS, LIGHT FIXTURES, REFLECTED CEILING PLANS, DUCTWORK, MECHANICAL AND PLUMBING PIPING, AND ALL OTHER TRADES.

8- ALL HEADS ARE TO BE PENDANT SPRINKLER QUICK RESPONSE TYPE HEADS.

9- ALL WET PIPE SYSTEM COMPONENTS (EXCEPT DRY OR HEAT TRACED PIPE SPRINKLERS) MUST BE INSIDE THE BUILDING INSULATION ENVELOPE.

10- ALL REQUIRED DRAINS SHALL FOLLOW NFPA 13 CODE REQUIREMENTS. DRAIN SHALL BE VALVED AND PLUGGED TO PREVENT ACCIDENTAL OPENING AND DISCHARGE. DRAINS SHOULD BE LOCATED TO PREVENT PUBLIC ACCESS.

11- ALL WORK DONE SHALL BE PERFORMED WITH WATER CONTROL IN MIND. CONTAINMENT OF WATER IS NECESSARY TO PREVENT WATER FROM DAMAGING SURROUNDING AREA.

12- DRAWINGS SHOULD NOT BE CONSIDERED AS A SHOP DRAWING. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND COORDINATE ALL PIPING WITH STRUCTURAL, MECHANICAL AND ELECTRICAL. SUBMIT SHOP DRAWINGS FOR FINAL REVIEW.

13- CONTRACTOR IS TO DEVELOP SHOP DRAWINGS AND HYDRAULIC CALCULATIONS CONFORMING TO NFPA 13 SPRINKLER. ADDITIONAL HEADS AND/OR PIPING REQUIRED TO MEET SAID STANDARDS IS THE RESPONSIBILITY OF THE CONTRACTOR. LOCATION OF ADDITIONAL HEADS ARE TO BE COORDINATED WITH ARCHITECT AND ENGINEER AND SUBMITTED FOR THEIR REVIEW.

14- OFFSETS ARE TO BE ANTICIPATED IN BRANCH LINES AND ARE TO BE COORDINATED BY THE CONTRACTOR WITH EXISTING CONDITIONS AND OTHER TRADES. MAKE ADDITIONAL OFFSETS AS REQUIRED.

15- HANGERS AND BRACING ARE NOT SHOWN ON THIS DRAWINGS. REFER TO THE SPECIFICATION REQUIREMENTS AND INSTALL ACCORDINGLY.

16- NO FIRE PROTECTION LINE SHALL BE DESIGNED OR INSTALLED PRIOR TO CLOSE COORDINATION WITH ALL OTHER DISCIPLINES: DUCTWORK, MECHANICAL PIPING AND PLUMBING TAKE SPACE PRECEDENCE OVER FIRE PROTECTION PIPING. FAILURE TO COMPLY WILL RESULT IN THE FIRE PROTECTION REMOVAL AND RE-INSTALLATION AT THE FIRE PROTECTION CONTRACTOR'S EXPENSE.

SHOP DRAWINGS, CALCULATIONS AND MATERIAL SUBMITTALS SHALL BE SUBMITTED TO THE ENGINEER AND OWNER PRIOR TO SUBMITTAL TO THE FIRE MARSHALL.

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5-5-2023

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THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Rexburg ID Custom 10 Ward Meetinghouse
Married Student Second Stake
5th West and University Boulevard, Rexburg, Idaho
43.803303, -111.796612

Issue Date 11 Apr 2023
Church Property: 510-3360
County Parcel: RPK 6N40E013400
BHDA Project No. 2109

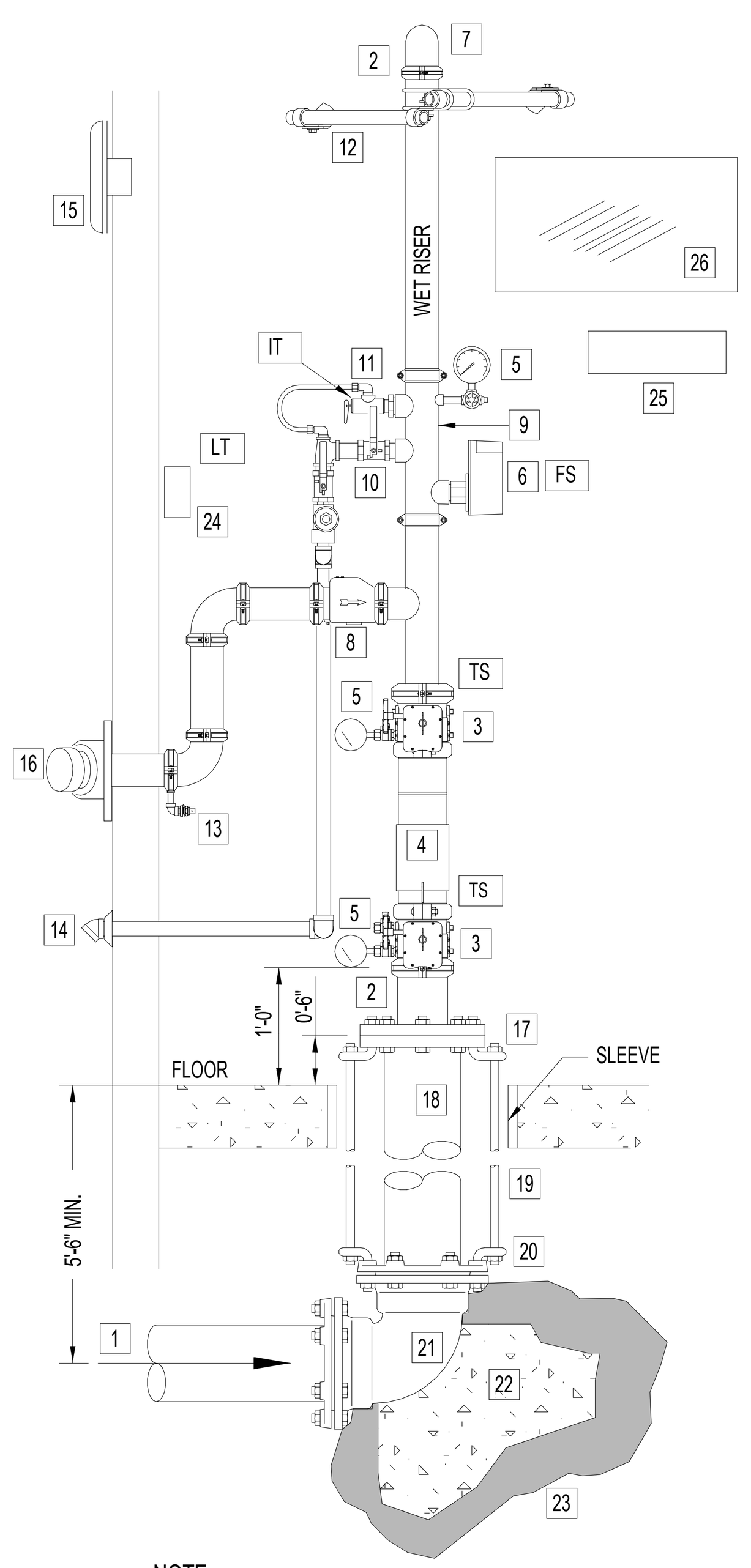
Drawing Issue and Revision Schedule

#	Date	Description

UPPER LEVEL FIRE SPRINKLER SYSTEM FLOOR PLAN

FS102

NOTE:
FIRE RISER TO BE DEFERRED SUBMITTAL FROM LICENSED LIFE SAFETY CONTRACTOR.

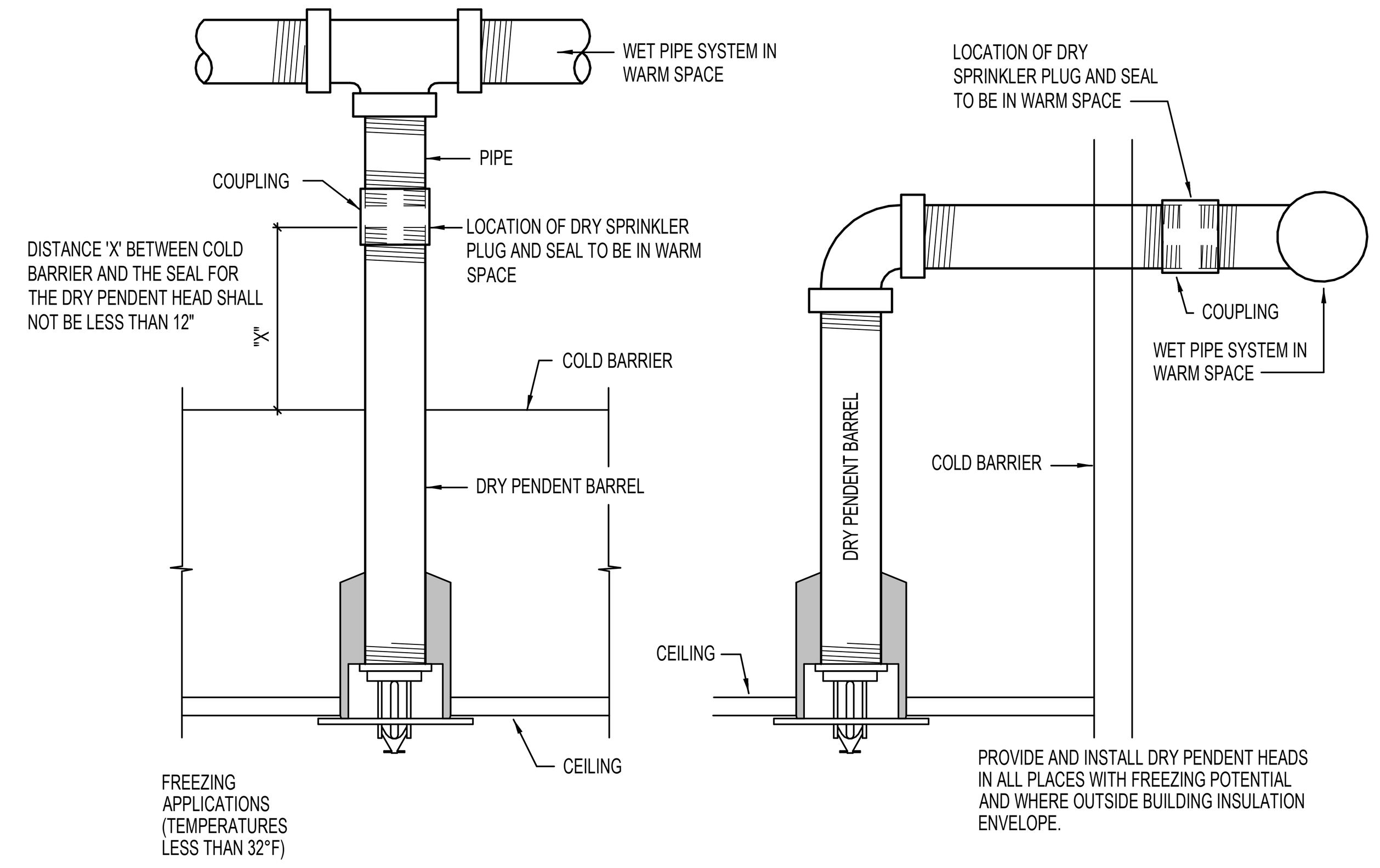


NOTE:
PROVIDE SLEEVES WHERE PIPING PENETRATES BUILDING AT FLOOR AND WALLS. SEAL AROUND PENETRATION WITH FLEXIBLE MASTIC AT FLOOR. PROVIDE 2" ANNULAR SPACE AROUND AND RESTRAIN FLANGE SPIGOT.

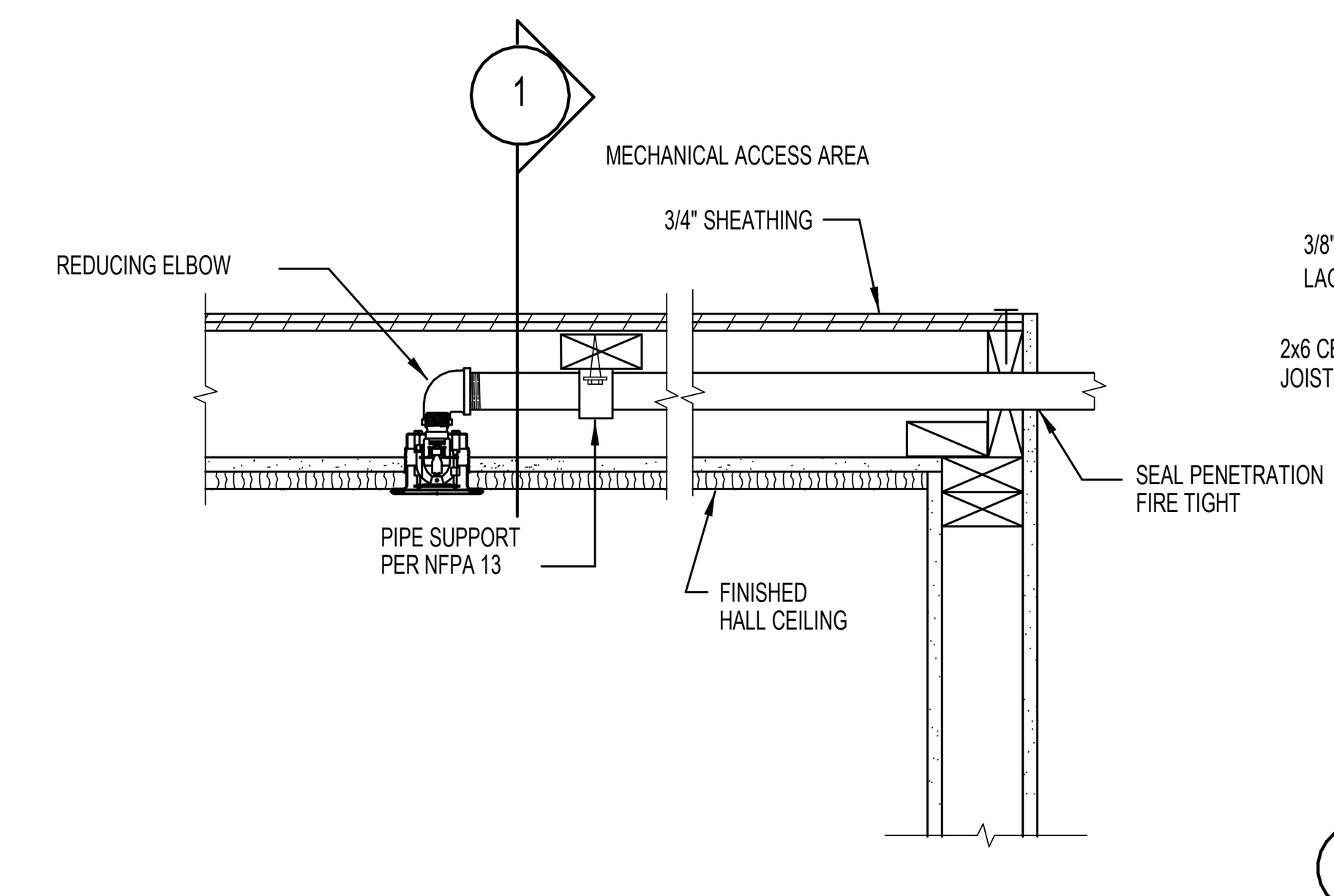
WET RISER DETAIL NOTES

1. WATER SUPPLY FROM CITY WATER MAIN. USE CLASS 53 DUCTILE IRON WHEN CROSSING UNDER BLDG FOUNDATION.
2. USE FLEXIBLE GROOVED PIPE COUPLING ONLY IF SEISMIC BRACING IS REQUIRED. SEE NOTE #12.
3. GROOVED BUTTERFLY VALVE WITH INTEGRAL SUPERVISORY SWITCH.
4. DOUBLE CHECK BACKFLOW PREVENTER WITH RELATED TRIM AND GAUGES.
5. 3-1/2" DIAMETER WATER GAUGE WITH 1/4" TEST AND ISOLATION VALVE.
6. VANE TYPE WATER FLOW SWITCH.
7. SUPPLY TO WET PIPE FIRE SPRINKLER SYSTEM.
8. SWING CHECK VALVE.
9. RISER MANIFOLD - INCLUDES PRESURE GAUGE, FLOW SWITCH, PRESSURE RELIEF VALVE, AND TEST AND MAIN DRAIN DEVICE.
10. INSPECTOR'S TEST & MAIN DRAIN DEVICE 'IT' - PIPE TO OUTSIDE.
11. PRESSURE RELIEF VALVE SHALL BE REQUIRED SET AT 175 PSI.- PIPED TO DISCHARGE OUTSIDE.
12. SEISMIC BRACING REQUIRED IN SEISMIC DESIGN CATEGORY C, D, E, F.
13. 1/2" AUTOMATIC BALL DRIP VALVE.
14. PIPE TO DRAIN OUTSIDE.
15. WEATHERPROOF ELECTRIC BELL OR HORN AND STROBE (OUTSIDE).
16. OUT TO FIRE DEPARTMENT CONNECTION WITH GALVANIZED SCH 40 PIPING- PROVIDE BALL DRIP WHEN TRAPPING PIPE. SIZE CONNECTION AS REQUIRED. NOTE: PIPE FDC TO REMOTE LOCATION WHEN REQUIRED BY FIRE MARSHAL.
17. GALVANIZED FLANGE AND SPOOL PIECE
18. CLASS 53 D.I. FLANGED SPIGOT
19. 3/4" A.T.R.
20. 3/4" BENT EYE BOLT
21. MECHANICAL JOINT 90° ELL
22. CONCRETE THRUST BLOCK WITH 5 SQ. FEET BEARING AREA
23. UNDISTURBED EARTH
24. LOW TEMPERATURE SENSOR - MOUNTED ON WALL - THIS SWITCH IS PROVIDED UNDER DIVISION 28 OF THE SPECIFICATIONS.
25. SPARE HEAD CABINET WITH SPARE SPRINKLER HEADS AND WRENCHES.
26. LAMINATED SYSTEM MAP WITH SYSTEM START-UP AND SHUT-DOWN INSTRUCTIONS.

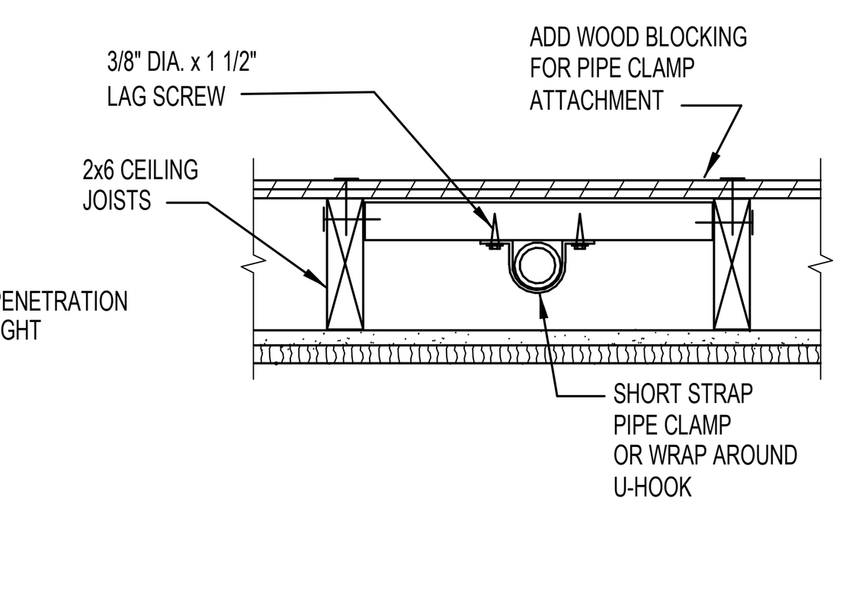
A FIRE RISER AND ALARM VALVE DETAIL
NO SCALE



B DRY PENDANT HEAD DETAIL
NO SCALE



C SPRINKLER HEAD DETAIL
NO SCALE



1 SECTION
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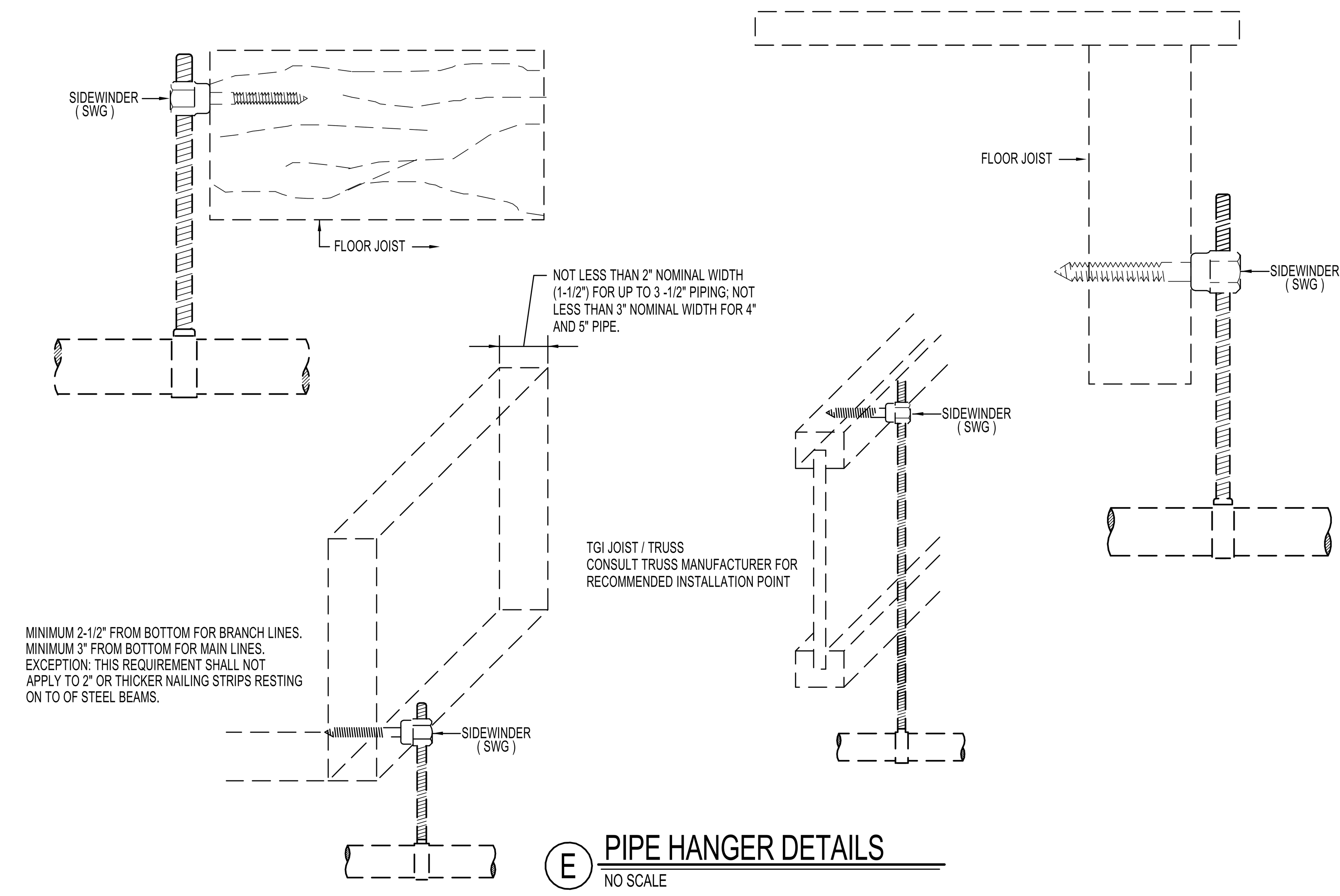
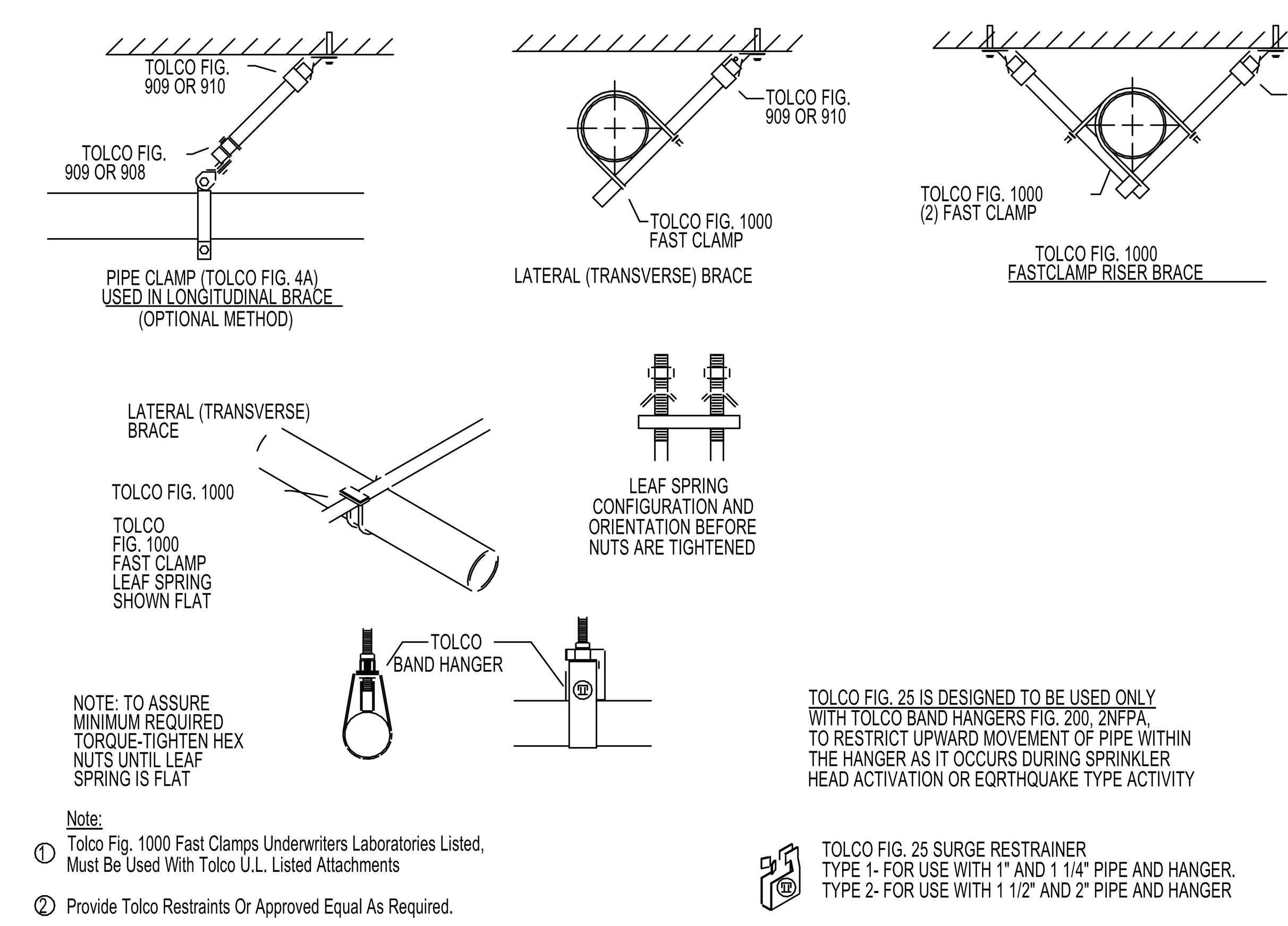


E PIPE HANGER DETAILS
NO SCALE



J SEISMIC RESTRAINT COMPONENETS (TYPICAL APPLICATIONS)
NO SCALE

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Issue Date	Church Property:	County Parcel:	BHDA Project No.
11 Apr 2023	510-3560	RPR 6N40E315400	2109

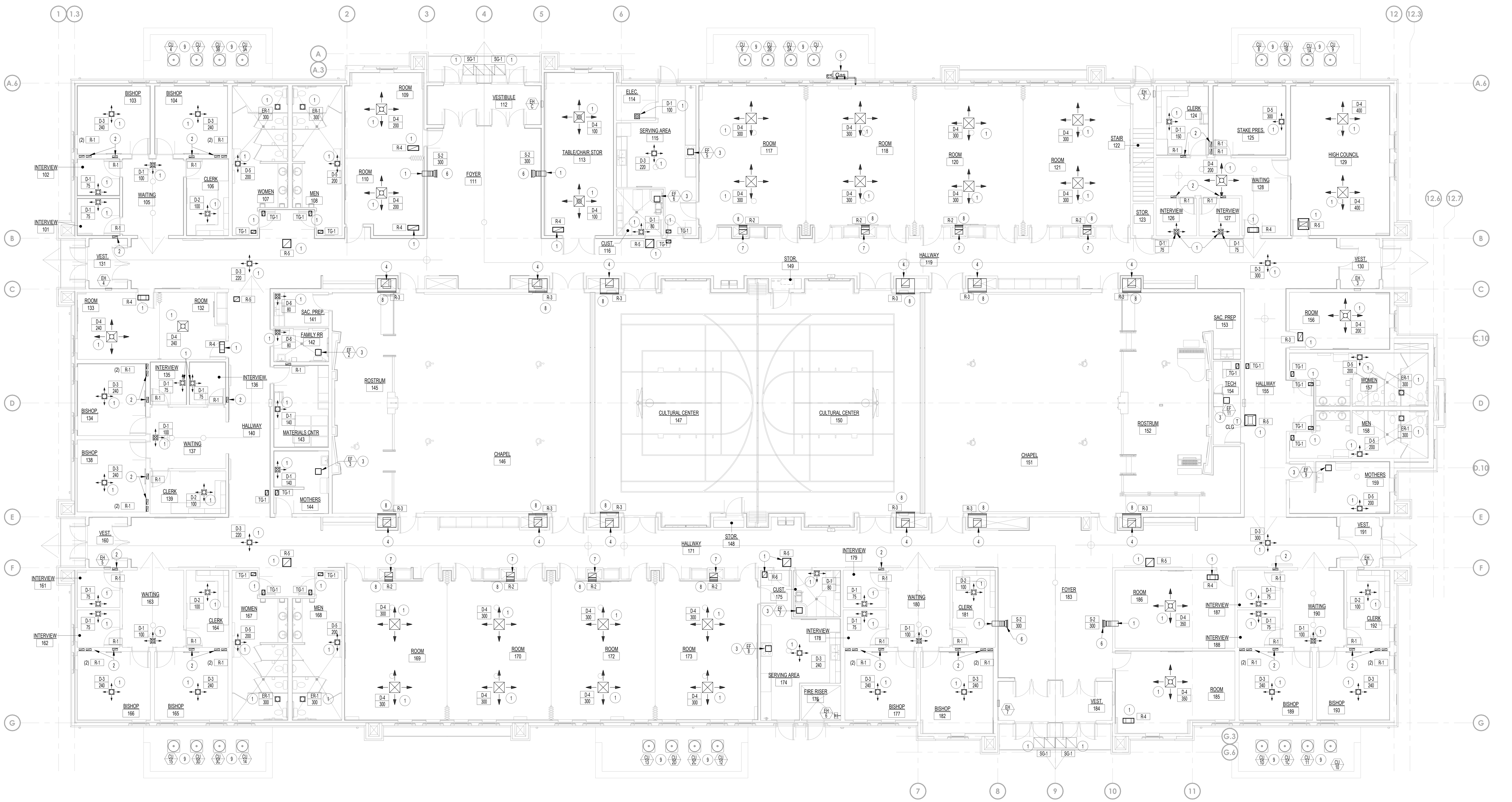
Drawing Issue and Revision Schedule

#	Date	Description

FIRE SPRINKLER SYSTEM DETAILS

FS201

Printed 5/5/2023 8:39:36 AM



MECHANICAL FLOOR PLAN

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

L E G E N D

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	BRANCH DUCT TAKEOFF	SA	SUPPLY AIR
		RA	RETURN AIR
		OA	OUTSIDE AIR
	SINGLE THICKNESS TURNING VANES	EA	EXHAUST AIR
		REFR.	REFRIGERANT
		AFF	ABOVE FINISHED FLOOR
	DUCT TRANSITION	— L —	LIQUID REFRIGERANT PIPING
		— S —	SUCTION REFRIGERANT PIPING
	MOTORIZED DAMPER		
	BACK DRAFT DAMPER		FLEX. CONNECTION 6'-0" MAX LENGTH
	MANUAL VOLUME DAMPER (USE CONCEALED OPERATORS IN DAMPERS INSTALLED OVER SUSPENDED CEILINGS)		DUCT SMOKE DETECTOR

DESIGN CONDITIONS	OUTSIDE	INSIDE
WINTER	-20°F	70°F
SUMMER	95°F db, 63°F wb	75°F db, 64°F wb

REXBURG, IDAHO ELEVATION 4900 FT.

PLAN NOTES:

1. REFER TO SHEET M102 FOR CONTINUATION OF DUCTWORK ABOVE CEILING. TYPICAL OF ALL DUCTWORK ABOVE CEILINGS.
2. DROP 12"x3 1/2" UN-LINED RETURN AIR DUCT DOWN IN WALL CAVITY TO RETURN GRILLE LOCATED AT 6" ABOVE FLOOR. CONNECT GRILLE TO DUCT RISER. COORDINATE DUCT RISER WITH ELECTRICAL CONDUITS AND OTHER DEVICES. REFER TO SHEET M102 FOR CONTINUATION.
3. INSTALL CEILING MOUNTED EXHAUST FAN AS SCHEDULED. COORDINATE LOCATION AND PLACE FAN BEWTEEN CEILING JOISTS AND BELOW MECHANICAL EQUIPMENT PLATFORM FLOOR. CONNECT 6" ROUND DUCT TO FAN AND RUN ABOVE CEILINGS. COORDINATE FAN LOCATION WITH LIGHT FIXTURES AND OTHER DUCTWORK. REFER TO SHEET M102 FOR DUCTWORK ABOVE CEILINGS. REFER TO DETAIL H/M503 FOR TYPICAL FAN INSTALLATION.
4. PROVIDE PLENUM DUCT BEHIND WALL MOUNTED RETURN GRILLE. PLENUM TO BE FULL SIZE AS CORRESPONDING GRILLE. CONNECT 18"x16" RETURN AIR DUCT TO TOP OF PLENUM AND RISE UP IN CHASE. REFER TO SHEET M102 FOR CONNECTION TO CORRESPONDING FURNACE SYSTEM ON EQUIPMENT PLATFORM ABOVE.
5. LOCATE GAS METER INSIDE MECHANICAL ENCLOSURE AND COORDINATE WITH MECHANICAL UNITS. PROVIDE 3'-0" MINIMUM CLEARANCE BEWTEEN GAS METER AND ANY CONDENSING UNITS.
6. MOUNT SIDEWALL SUPPY REGISTER HIGH ON THE WALL NEAR CEILING. REFER TO ARCHITECTURAL ELEVATION PLANS FOR EXACT PLACEMENT.
7. ATTACH 18x10 RETURN DUCT TO RETURN GRILLE NEAR FLOOR. RISE DUCT UP IN CHASE. REFER TO SHEET M102 FOR CONNECTION TO CORRESPONDING FURNACE SYSTEM ON EQUIPMENT PLATFORM ABOVE.
8. MOUNT RETURN AIR GRILLE AT 8" ABOVE THE FLOOR. COORDINATE GRILLE LOCATION WITH CHASE AND WITH ELECTRIAL DEVICES.
9. PROVIDE 2'-0" MINIMUM CLEARANCES ALL AROUND CONDENSING UNITS. PROVIDE 30" MINIMUM CLEARANCE AT SERVICE SIDE. REFER TO SHEET M501 FOR TYPICAL REFRIGERANT PIPING SCHEMATIC AND DETAILS.

GENERAL NOTES:

A- DRAWINGS SHOW GENERAL ARRANGEMENTS OF PIPING, DUCTWORK, EQUIPMENT, ETC. FOLLOW AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED. INVESTIGATE STRUCTURAL AND FINISH CONDITIONS AFFECTING THIS WORK AND ARRANGE WORK ACCORDINGLY. PROVIDE SUCH FITTINGS, VALVES, AND ACCESSORIES REQUIRED TO MEET CONDTIONS AND PROVIDE COMPLETE WORKING SYSTEM.

B- ALL DUCT DIMENSIONS ARE CLEAR DIMENSIONS INSIDE DUCT LINER.

C- DO NOT USE DUCT LINER INSIDE RETURN AIR DUCT RISERS IN 2"x6" WALLS OF PERIMETER ROOMS. COORDINATE SUCH RISERS WITH ELECTRIC CONDUITS AND DEVICES.

D- WRAP ALL OUTSIDE AIR DUCT WITH EXTERNAL INSULATION.

E- SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.

F- ALL PVC EQUIPMENT, VENTS, PLUMBING VENTS, AND PENTHOUSE EXHAUST VENTS SHALL BE PAINTED TO MATCH ROOF COLOR.

G- DO NOT ROUTE PIPES ABOVE ELECTRICAL PANELS 4'-0" DEEP AND 6'-6" HIGH.

H- SEE SHEET M102 FOR CONTINUATION OF ALL DUCT RISERS AND DUCTWORK ABOVE CEILINGS.

J- COORDINATE EQUIPMENT AND DUCTWORK WITH NATURAL GAS, AND WATER PIPING. REFER TO SHEET P102 FOR PIPING LOCATIONS.

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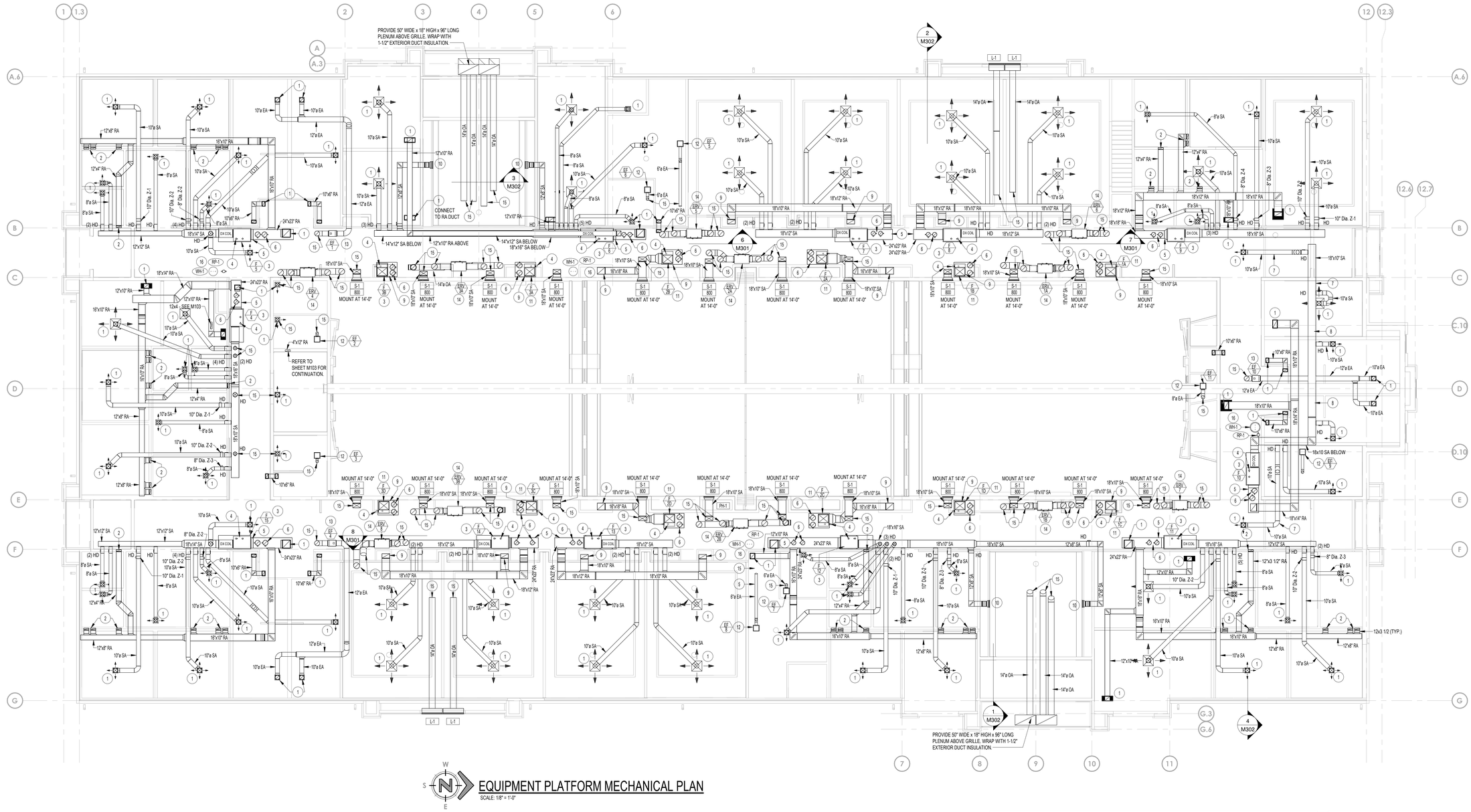
MECHANICAL FLOOR PLAN

M101



EQUIPMENT PLATFORM MECHANICAL PLAN

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

PLAN NOTES:

1. REFER TO SHEET M101 FOR DUCT CONTINUATION TO SUPPLY OR RETURN AIR GRILLES BELOW. SUPPLY AND RETURN DUCTS ARE TO BE RIGID CONSTRUCTION. TYPICAL OF ALL GRILLES.
2. DROP 12"x3 1/2" UN-LINED RETURN AIR DUCT DOWN IN WALL CAVITY TO RETURN GRILLE LOCATED AT 0" ABOVE FLOOR. COORDINATE DUCT RISER WITH ELECTRICAL CONDUITS AND OTHER DEVICES.
3. HORIZONTAL FURNACE WITH DX COOLING COIL. SUPPORT EQUIPMENT FROM PLATFORM WITH 2x6 SUPPORTS. PROVIDE DRAIN PAN BELOW UNITS AND COIL. REFER TO DETAIL D/M502 FOR TYPICAL INSTALLATION, AND DUCT AND PIPING CONNECTIONS.
4. RISE (2) 3" ROUND FURNACE VENTS UP THRU ROOF WITH CONCENTRIC TYPE FITTING. REFER TO DETAILS F/M501 AND D/M502. DO NOT BLOCK FURNACE ACCESS WITH VENTS. TYPICAL FOR ALL FURNACE SYSTEMS. LOCATE VENTS ALIGNED ALONG BUILDING AXIS AND AWAY FROM ROOF PEAKS AND VALLEYS.
5. REFER TO DETAIL G/M502 FOR EXTERNAL FILTER SECTION. TYPICAL OF ALL HORIZONTAL FURNACE SYSTEMS. MIXED AIR PLENUM AT INLET TO FURNACE SYSTEM TO BE FULL SIZED OF FURNACE OPENING. TYPICAL OF ALL SYSTEMS.
6. CONNECT OUTSIDE AIR DUCT AND RELIEF AIR DUCT TO MIXED AIR PLENUM DUCT. PROVIDE MOTORIZED DAMPER, DUCT ACCESS DOOR AND MANUAL BALANCING DAMPER IN EACH DUCT. SEE FURNACE SCHEDULE ON SHEET M601 FOR MAXIMUM CFM AMOUNTS OF OUTSIDE AIR/RELIEF AIR REQUIRED AT EACH FURNACE SYSTEM.
7. DROP DUCTWORK DOWN AS REQUIRED AND RUN AT FLOOR OF EQUIPMENT WALKWAY. SUPPORT WITH UNISTRUT SUPPORTS.
8. RUN RETURN DUCT ABOVE SUPPLY DUCT AND FURNACE. DO NOT BLOCK ANY ACCESS TO FURNACE, DX COIL OR FURNACE VENTS.
9. DROP RETURN DUCT DOWN IN CHASE. REFER TO SHEET M101 FOR DUCT SIZE AND CONNECTION OF DUCTWORK TO GRILLE NEAR FLOOR.
10. MOUNT SIDEWALL SUPPY REGISTER HIGH ON THE WALL NEAR CEILING. REFER TO ARCHITECTURAL ELEVATION PLANS FOR EXACT PLACEMENT. REFER TO SHEET M101 FOR CFM REQUIRED.
11. VERTICAL FURNACE WITH DX COOLING COIL. MOUNT ON 14" HIGH RETURN AIR PLENUM BASE AND SUPPORT EQUIPMENT FROM EQUIPMENT PLATFORM. PROVIDE PROVIDE CONDENSATE SWITCH WITH EACH UNIT. REFER TO DETAIL F/M503 FOR TYPICAL INSTALLATION, AND DUCT CONNECTION.
12. 6" ROUND EXHAUST DUCT FROM CEILING MOUNTED FAN. RISE EXHAUST DUCT UP AS HIGH AS POSSIBLE AND CONNECT TO PENTHOUSE AS SHOWN. PROVIDE BACK-DRAFT DAMPER IN DUCT. SEE DETAIL H/M503 FOR TYPICAL FAN AND DUCT INSTALLATION.
13. MOUNT IN-LINE EXHAUST FAN ON EQUIPMENT PLATFORM WITH VIBRATION ISOLATORS UNDER EACH CORNER. CONNECT FAN TO EXHAUST GRILLES IN TOILET ROOM CEILINGS AND TO PENTHOUSE ON ROOF AS SHOWN. FAN TO BE CONTROLLED WITH OCCUPANCY SENSORS LOCATED IN MEN'S AND/OR WOMEN'S TOILET ROOMS.
14. INSTALL ERV UNIT ON EQUIPMENT PLATFORM WITH VIBRATION ISOLATORS UNDER EACH CORNER. REFER TO ERV SCHEDULE ON SHEET M601 FOR ORIENTATION OF UNITS. CONNECT ERV UNIT TO OUTSIDE AIR DUCT FROM EXTERIOR OF BUILDING, OUTSIDE AIR DUCT(S) TO EACH FURNACE SYSTEM, RELIEF AIR DUCT(S) FROM EACH FURNACE SYSTEM, AND TO EXHAUST AIR DUCTS UP TO PENTHOUSE. REFER TO SECTIONS ON SHEET M301 FOR TYPICAL DUCT CONNECTIONS. COORDINATE WITH ALL OTHER DUCTS AND PIPING.
15. REFER TO SHEET M103 FOR CONTINUATION OF DUCTWORK ABOVE MECHANICAL PLATFORM.
16. WATER HEATER AND RECIRCULATION PUMP BY PLUMBING CONTRACTOR. REFER TO PLUMBING DRAWINGS. COORDINATE DUCTWORK AND EQUIPMENT WITH PLUMBING EQUIPMENT AND PIPING.

GENERAL NOTES:

- A- DRAWINGS SHOW GENERAL ARRANGEMENTS OF PIPING, DUCTWORK, EQUIPMENT, ETC. FOLLOW AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED. INVESTIGATE STRUCTURAL AND FINISH CONDITIONS AFFECTING THIS WORK AND ARRANGE WORK ACCORDINGLY. PROVIDE SUCH FITTINGS, VALVES, AND ACCESSORIES REQUIRED TO MEET CONDITIONS AND PROVIDE COMPLETE WORKING SYSTEM.
- B- ALL DUCT DIMENSIONS ARE CLEAR DIMENSIONS INSIDE DUCT LINER.
- C- DO NOT USE DUCT LINER INSIDE RETURN AIR DUCT RISERS IN 2"x6" WALLS OF PERIMETER ROOMS. COORDINATE SUCH RISERS WITH ELECTRIC CONDUITS AND DEVICES.
- D- WRAP ALL OUTSIDE AIR DUCT WITH EXTERNAL INSULATION.
- E- SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.
- F- ALL PVC EQUIPMENT, VENTS, PLUMBING VENTS, AND PENTHOUSE EXHAUST VENTS SHALL BE PAINTED TO MATCH ROOF COLOR.
- G- DO NOT ROUTE PIPES ABOVE ELECTRICAL PANELS 4'-0" DEEP AND 6'-6" HIGH.
- H- SEE SHEET M101 FOR CONTINUATION OF ALL DUCT RISERS CEILING DIFFUSERS BELOW
- J- COORDINATE EQUIPMENT AND DUCTWORK WITH NATURAL GAS, AND WATER PIPING. REFER TO SHEET P102 FOR PIPING LOCATIONS.
- K- MOUNT ALL DUCT SMOKE DETECTORS IN RETURN AIR STREAM ONLY. DO NOT MOUNT DOWN STREAM OF MINIMUM OUTSIDE AIR CONNECTION.

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THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Rexburg ID Custom 10 Ward Meetinghouse
Married Student Second Stake
5th West and University Boulevard, Rexburg, Idaho
43.803303, -111.796612

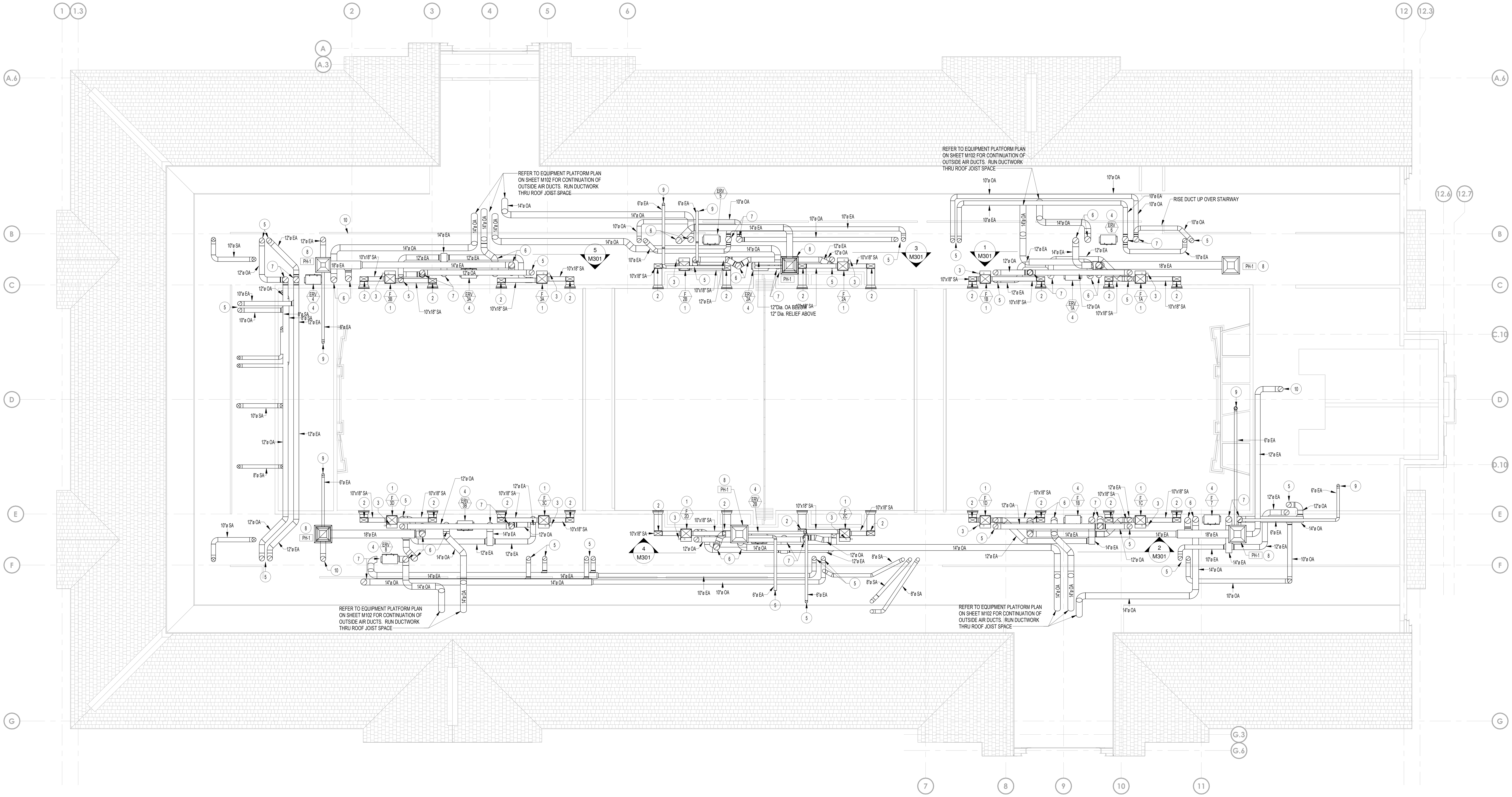
Issue Date: 11 Apr 2023 | Church Property: 310-3560 | County Parcel: RPR 4144E31400 | BHDA Project No. 2109

Drawing Issue and Revision Schedule

#	Date	Description

EQUIPMENT PLATFORM MECHANICAL PLAN

M102



UPPER EQUIPMENT PLATFORM MECHANICAL PLAN

SCALE: 1/4" = 1'-0"

PLAN NOTES:

1. VERTICAL FURNACE WITH DX COOLING COIL. MOUNT ON 14" HIGH RETURN AIR PLENUM BASE AND SUPPORT EQUIPMENT FROM EQUIPMENT PLATFORM. PROVIDE CONDESNATE SENSOR AT EACH UNIT. REFER TO DETAIL F/M503 FOR TYPICAL INSTALLATION, AND DUCT CONNECTION. RISE SUPPLY PLENUM UP AND CONNECT (2) 18x10 SA DUCT AS SHOWN.
2. DROP 18x10 SUPPLY AIR DUCT DOWN TO WALL MOUNTED SUPPLY GRILLE. PROVIDE MANUAL BALANCING DAMPER IN DUCT. REFER TO SHEET M102 FOR GRILLE LOCATIONS AND TYPES.
3. RISE (2) 3" ROUND FURNACE VENTS UP THRU ROOF WITH CONCENTRIC TYPE FITTING. REFER TO DETAILS F/M501 AND D/M502. DO NOT BLOCK FURNACE ACCESS WITH VENTS. TYPICAL FOR ALL FURNACE SYSTEMS. LOCATE VENTS ALIGNED ALONG BUILDING AXIS AND AWAY FROM ROOF PEAKS AND VALLEYS.
4. INSTALL ERV UNIT ON EQUIPMENT PLATFORM WITH VIBRATION ISOLATORS UNDER EACH CORNER. CONNECT ERV UNIT TO OUTSIDE AIR DUCT FROM EXTERIOR OF BUILDING, OUTSIDE AIR DUCT(S) TO EACH FURNACE SYSTEM, RELIEF AIR DUCT(S) FROM EACH FURNACE SYSTEM, AND TO EXHAUST AIR DUCTS UP TO PENTHOUSE. REFER TO SECTIONS ON SHEET M301 FOR TYPICAL DUCT CONNECTIONS. COORDINATE WITH ALL OTHER DUCTWORK AND PIPING.
5. CONNECT OUTSIDE AIR DUCT AND RELIEF AIR DUCT TO MIXED AIR PLENUM DUCT AT EACH FURNACE SYSTEM. REFER TO SHEET M102 FOR LOCATION OF HORIZONTAL FURNACES ON EQUIMENT PLATFORM. PROVIDE MOTORIZED DAMPER, DUCT ACCESS DOOR AND MANUAL BALANCING DAMPER IN EACH DUCT. REFER TO MECHANICAL SECTIONS ON SHEET M301 FOR DUCT SIZES AT EACH FURNACE SYSTEM. SEE FURNACE SCHEDULE ON SHEET M601 FOR MAXIMUM CFM AMOUNTS OF OUTSIDE AIR/RELIEF AIR REQUIRED AT EACH FURNACE SYSTEM.
6. CONNECT 14" Dia. OUTSIDE AIR DUCT FROM EXTERIOR AND 14" Dia. EXHAUST AIR DUCT FROM PENTHOUSE TO ERV UNIT MOUNTED ON PLATFORM FLOOR. PROVIDE FLEXIBLE CONNECTION AND BALANCING DAMPER IN EXHAUST DUCT AT POINT OF CONNECTION.
7. CONNECT 14" Dia. OUTSIDE AIR DUCT FROM FURNACE SYSTEM AND 14" Dia. RELIEF AIR DUCT FROM FURNACE SYSTEM TO ERV UNIT MOUNTED ON PLATFORM FLOOR. PROVIDE FLEXIBLE CONNECTION.
8. MOUNT PENTHOUSE ON SLOPED ROOF WITH SLOPING ROOF CURB. DROP 18x18 PLEUNM DUCT DOWN THRU ROOF FOR EXHAUST DUCTS AS SHOWN. COORDINATE PENTHOUSE LOCATION WITH ROOF JOISTS AND KEEP AS HIGH AS POSSIBLE TO RIDGE LINE.
9. ROUND EXHAUST DUCT FROM CEILING MOUNTED FAN. RISE EXHAUST DUCT UP AS HIGH AS POSSIBLE AND CONNECT TO PENTHOUSE AS SHOWN. PROVIDE BACK-DRAFT DAMPER IN DUCT. SEE DETAIL H/M503 FOR TYPICAL FAN AND DUCT INSTALLATION.
10. ROUND EXHAUST DUCT FROM EXHAUST FAN ON EQUIPMENT PLATFORM. RISE UP AND CONNECT TO PENTHOUSE AS SHOWN. REFER TO MECHANICAL SECTIONS ON SHEET M301 FOR TYPICAL INSTALLATION OF EXHAUST FAN.

GENERAL NOTES:

A- DRAWINGS SHOW GENERAL ARRANGEMENTS OF PIPING, DUCTWORK, EQUIPMENT, ETC. FOLLOW AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED. INVESTIGATE STRUCTURAL AND FINISH CONDITIONS AFFECTING THIS WORK AND ARRANGE WORK ACCORDINGLY. PROVIDE SUCH FITTINGS, VALVES, AND ACCESSORIES REQUIRED TO MEET CONDTIONS AND PROVIDE COMPLETE WORKING SYSTEM.

B- ALL DUCT DIMENSIONS ARE CLEAR DIMENSIONS INSIDE DUCT LINER.

C- DO NOT USE DUCT LINER INSIDE RETURN AIR DUCT RISERS IN 2"x6" WALLS OF PERIMETER ROOMS. COORDINATE SUCH RISERS WITH ELECTRIC CONDUITS AND DEVICES.

D- WRAP ALL OUTSIDE AIR DUCT WITH EXTERNAL INSULATION.

E- SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.

F- ALL PVC EQUIPMENT, VENTS, PLUMBING VENTS, AND PENTHOUSE EXHAUST VENTS SHALL BE PAINTED TO MATCH ROOF COLOR.

G- DO NOT ROUTE PIPES ABOVE ELECTRICAL PANELS 4'-0" DEEP AND 6'-6" HIGH.

H- SEE SHEET M101 FOR CONTINUATION OF ALL DUCT RISERS CEILING DIFFUSERS BELOW

J- COORDINATE EQUIPMENT AND DUCTWORK WITH NATURAL GAS, AND WATER PIPING. REFER TO SHEET P102 FOR PIPING LOCATIONS.

K- MOUNT ALL DUCT SMOKE DETECTORS IN RETURN AIR STREAM ONLY. DO NOT MOUNT DOWN STREAM OF MINIMUM OUTSIDE AIR CONNECTION.

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43.803303, -111.796612

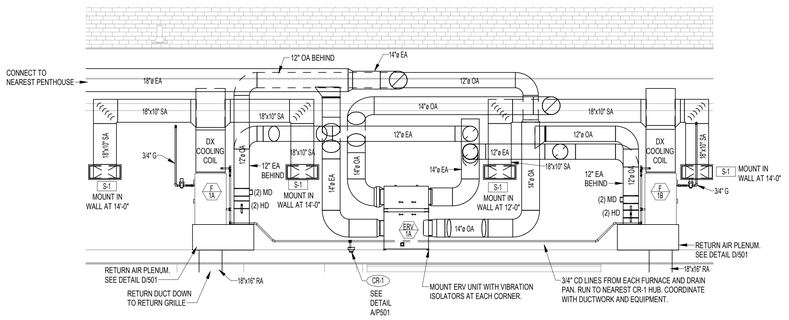
Issue Date	Church Property:	County Parcel:	BHDA Project No.
11 Apr 2023	510-3560	RPR 6N40E315400	2109

Drawing Issue and Revision Schedule

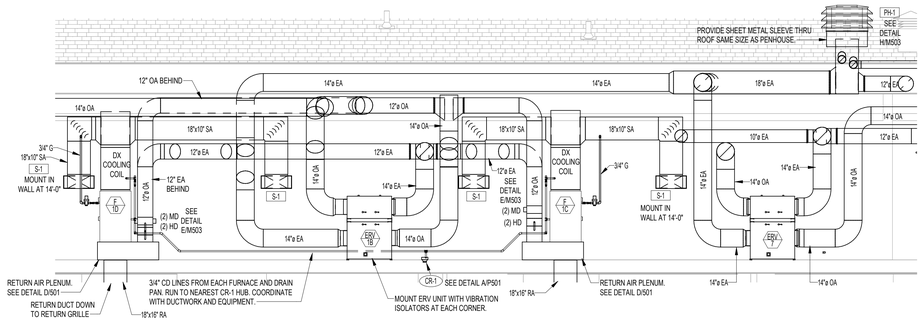
#	Date	Description

UPPER EQUIPMENT PLATFORM MECHANICAL PLAN

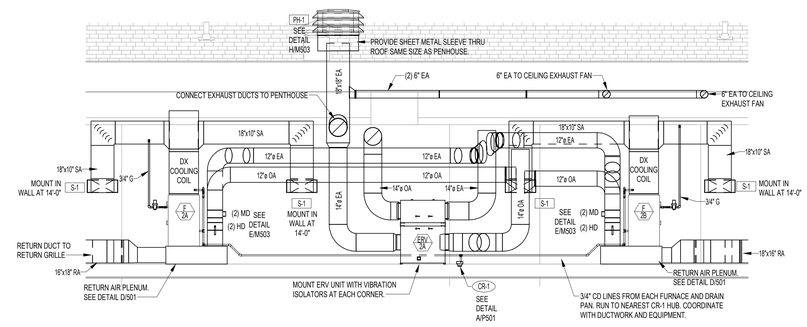
M103



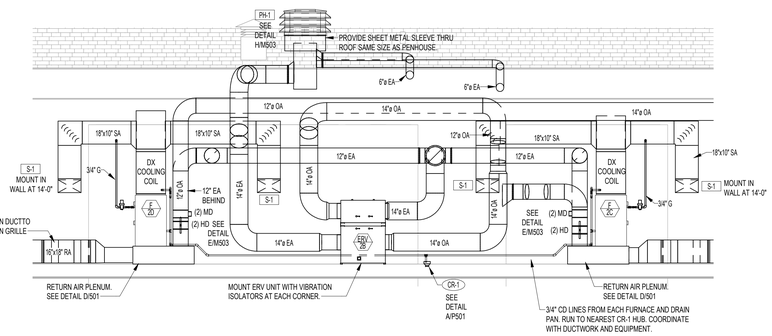
1 M301 **MECHANICAL SECTION**
SCALE: 1/4" = 1'-0"



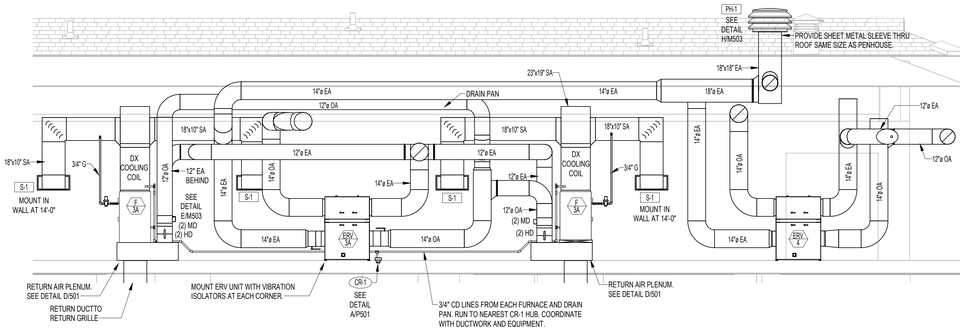
2 M301 **MECHANICAL SECTION**
SCALE: 1/4" = 1'-0"



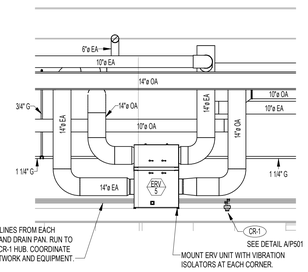
3 M301 **MECHANICAL SECTION**
SCALE: 1/4" = 1'-0"



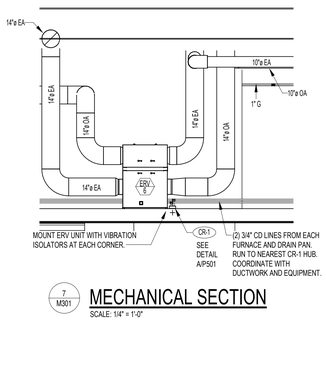
4 M301 **MECHANICAL SECTION**
SCALE: 1/4" = 1'-0"



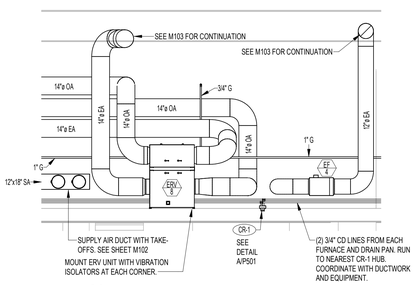
5 M301 **MECHANICAL SECTION**
SCALE: 1/4" = 1'-0"



5 M301 **MECHANICAL SECTION**
SCALE: 1/4" = 1'-0"



7 M301 **MECHANICAL SECTION**
SCALE: 1/4" = 1'-0"



8 M301 **MECHANICAL SECTION**
SCALE: 1/4" = 1'-0"

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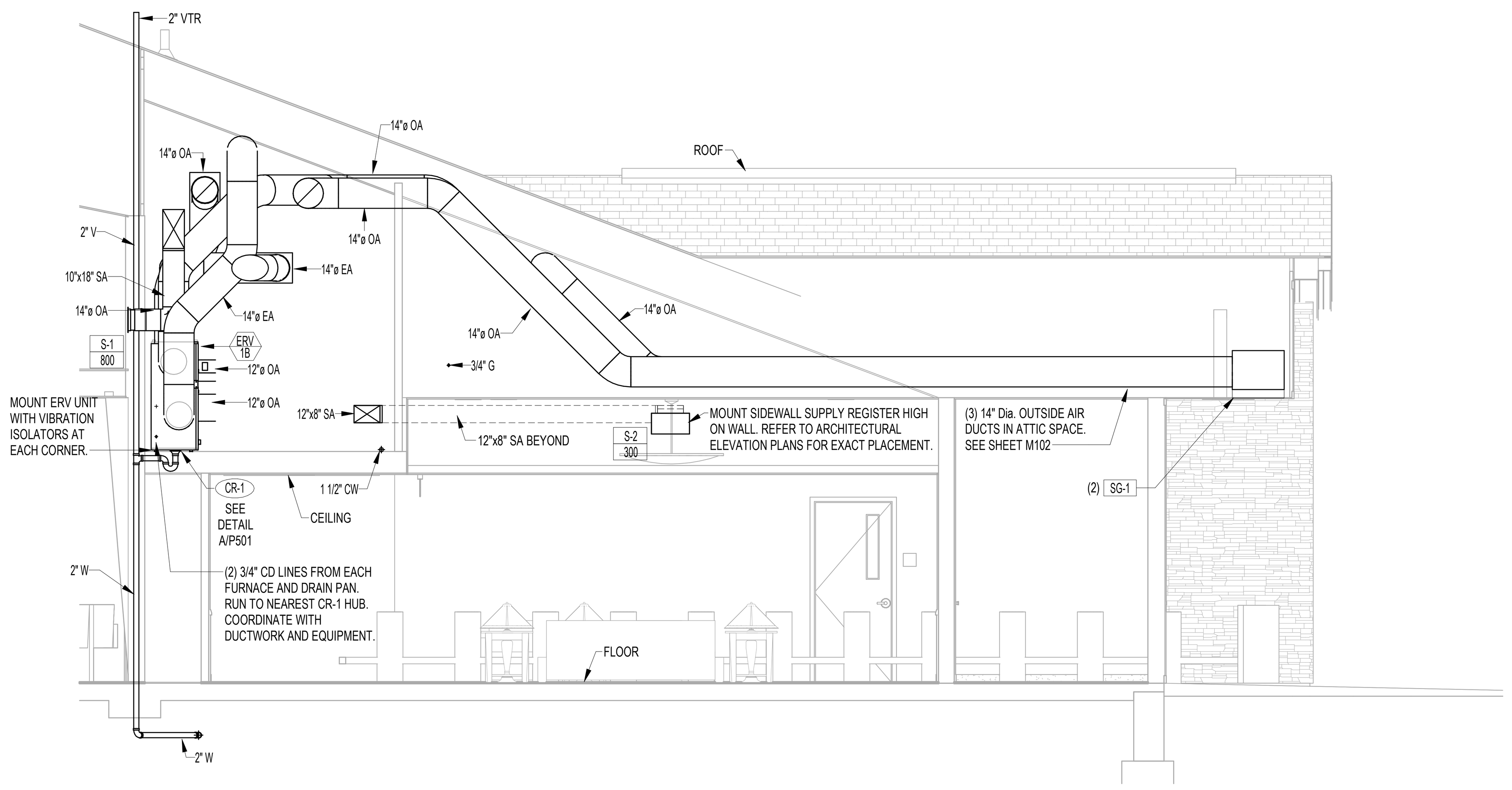
Issue Date	Church Property:	BHDA Project No.
11 Apr 2023	County Parcel: RPR 6N40E315400	2109
	510-3560	

Drawing Issue and Revision Schedule

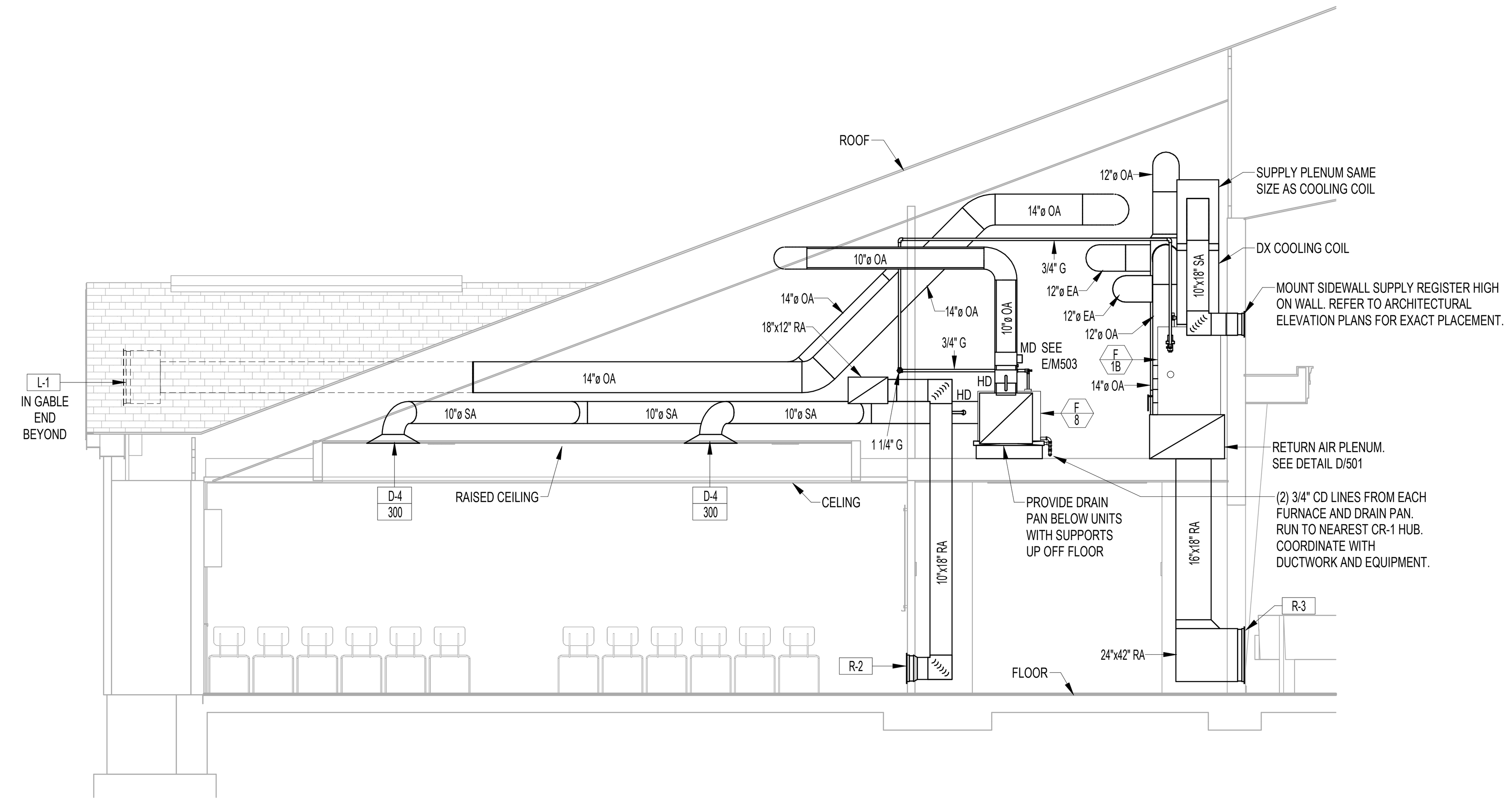
#	Date	Description

MECHANICAL SECTION

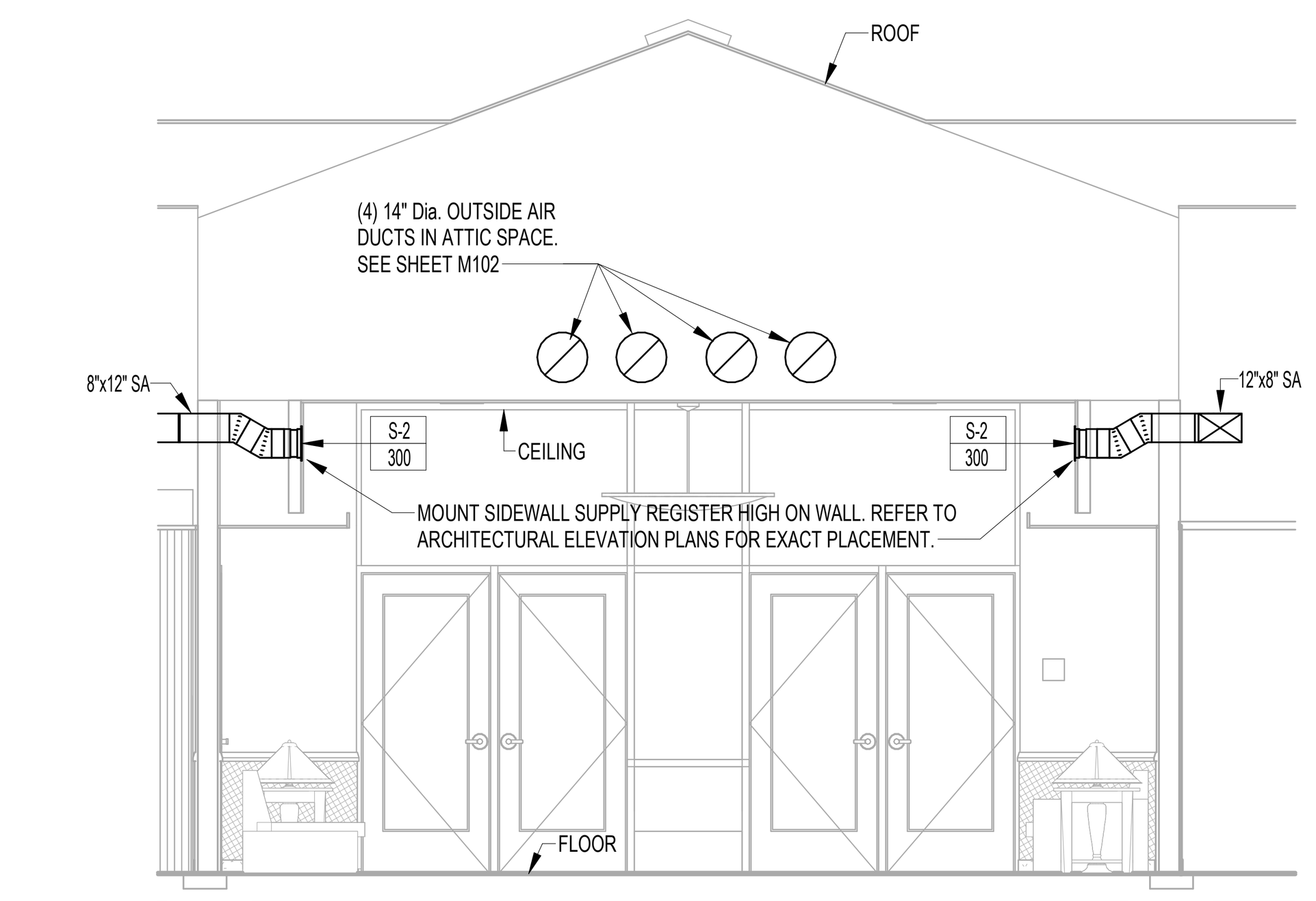
M301



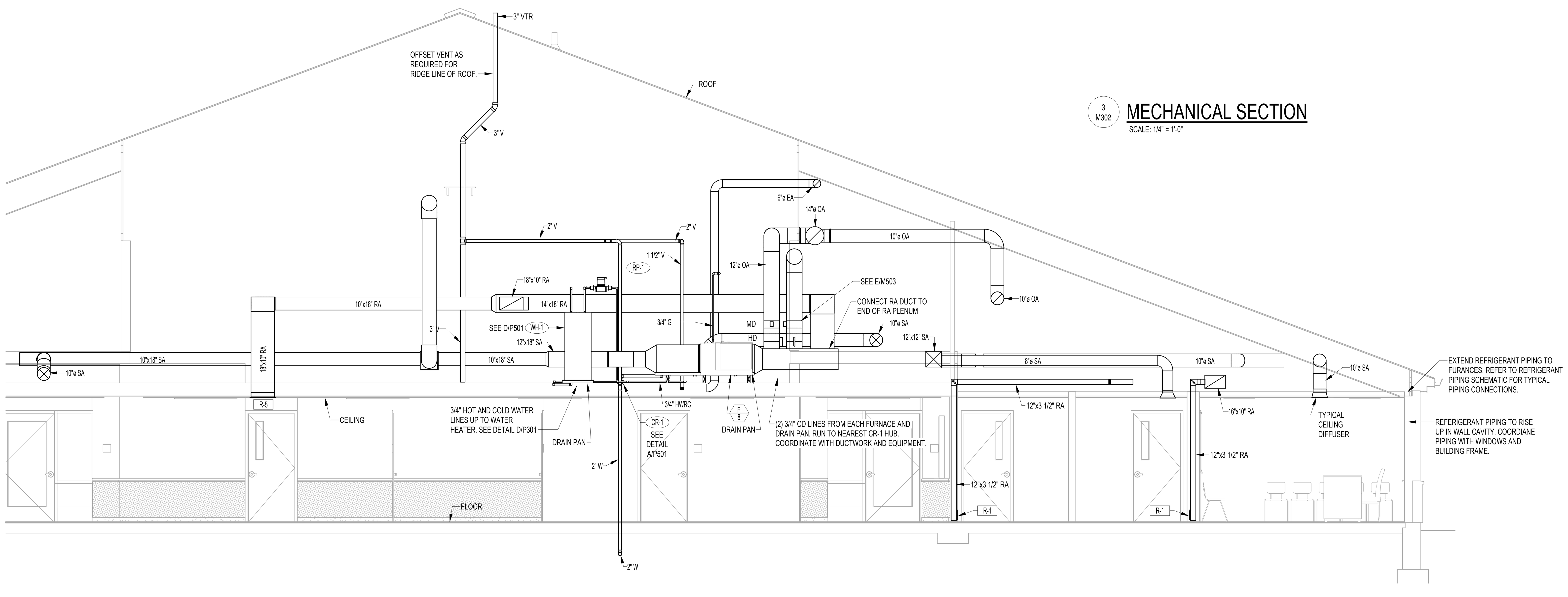
1 M302 MECHANICAL SECTION
SCALE: 1/4" = 1'-0"



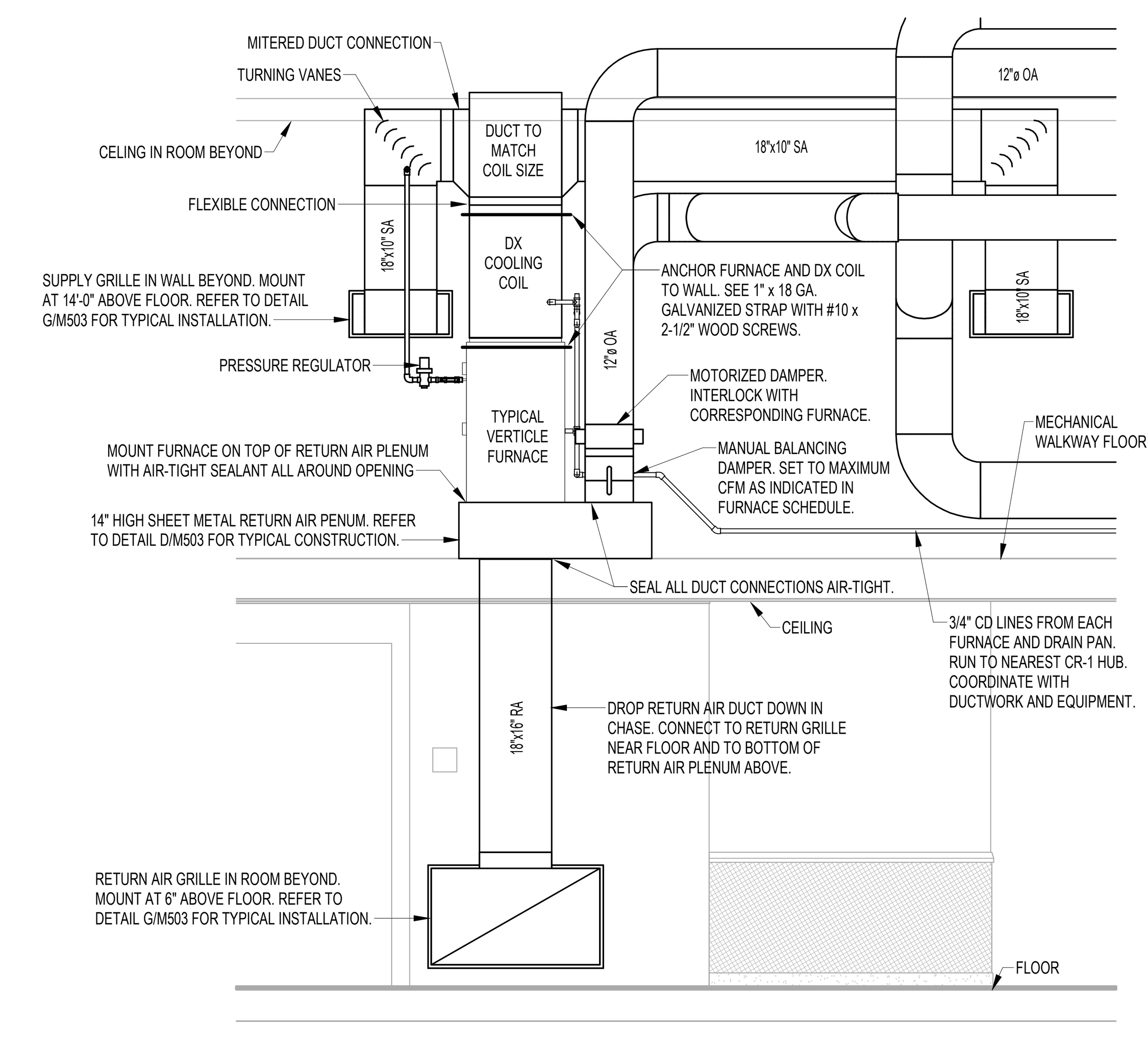
2 M302 MECHANICAL SECTION
SCALE: 1/4" = 1'-0"



3 M302 MECHANICAL SECTION
SCALE: 1/4" = 1'-0"



4 M302 MECHANICAL SECTION
SCALE: 1/4" = 1'-0"



5 M302 TYPICAL VERTICAL FURNACE DETAIL
SCALE: 3/8" = 1'-0"

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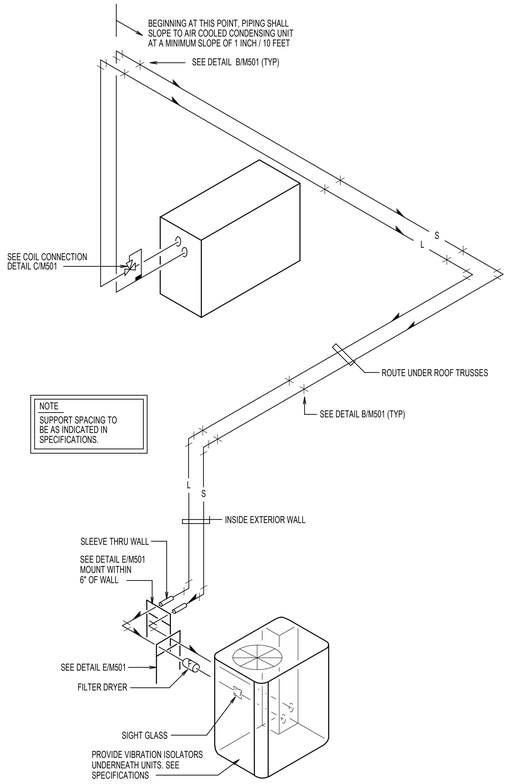
11 Apr 2023	510-3560	RPR 6N40E315400	2109

Drawing Issue and Revision Schedule

#	Date	Description

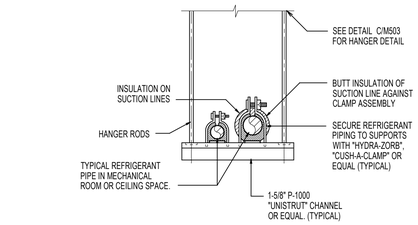
MECHANICAL SECTIONS

M302



A TYPICAL REFRIGERANT SCHEME

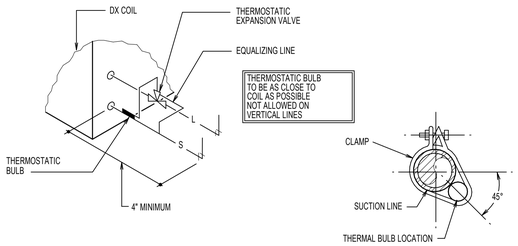
SCALE: NONE



B SUSPENDED REFRIGERANT PIPE SUPPORT AT CEILING

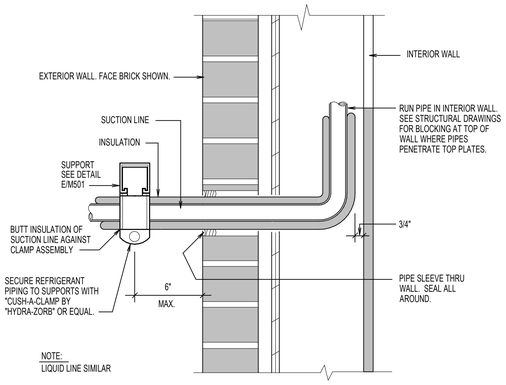
SCALE: NONE

REFRIGERANT PIPING LEGEND	
SYMBOL	DESCRIPTION
	EXPANSION VALVE. SEE DETAIL (B M3.2)
	MOISTURE INDICATING SIGHT GLASS
	FLEXIBLE CONNECTION
F	FILTER DRIER
	PIPE SUPPORT. SEE DETAILS (C M3.2) (D M3.2)
	EXTERIOR PIPE SUPPORT. SEE DETAIL (E M3.2)
	TRAP. ONE PIECE FACTORY FABRICATED
	DIRECTION OF SLOPE DOWN
S	SUCTION LINE
L	LIQUID LINE



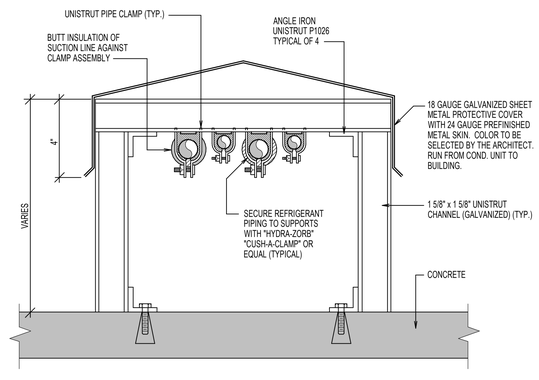
C REFRIGERANT COIL CONNECTION DETAIL

SCALE: NONE



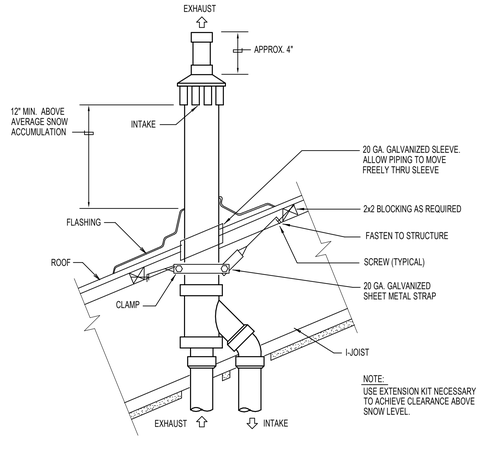
D REFRIGERANT PIPE SUPPORT AT WALL

SCALE: NONE



E EXTERIOR REFRIGERANT PIPE SUPPORT DETAIL

SCALE: NONE



F CONCENTRIC ROOF TERMINATION DETAIL

SCALE: NONE

REFRIGERANT LINE SIZES					
UNIT *	LIQUID	SUCTION	UNIT *	LIQUID	SUCTION
CC 1A	3/8"	7/8"	CC 4	3/8"	1 1/8"
CC 1B	3/8"	7/8"	CC 5	3/8"	7/8"
CC 1C	3/8"	7/8"	CC 6	3/8"	7/8"
CC 1D	3/8"	7/8"	CC 7	3/8"	3/4"
CC 2A	3/8"	7/8"	CC 8	3/8"	3/4"
CC 2B	3/8"	7/8"	CC 9	3/8"	7/8"
CC 2C	3/8"	7/8"	CC 10	3/8"	7/8"
CC 2D	3/8"	7/8"	CC 11	3/8"	7/8"
CC 3A	3/8"	7/8"	CC 12	3/8"	1 1/8"
CC 3B	3/8"	7/8"	CC 13	3/8"	3/4"
CC 3C	3/8"	7/8"	CC 14	3/8"	7/8"
CC 30	3/8"	7/8"	CC 15	3/8"	7/8"

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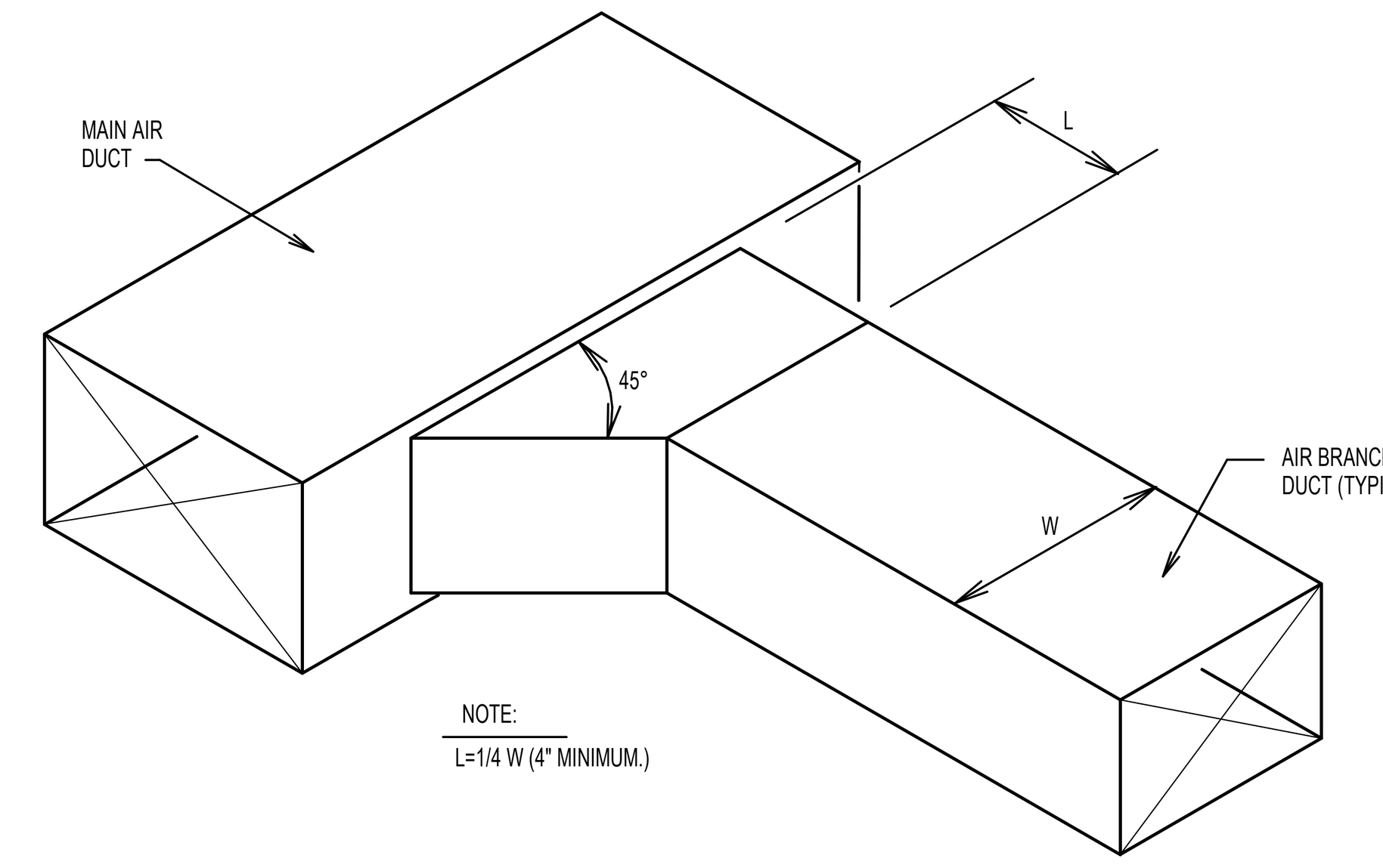
Drawing Issue and Revision Schedule

#	Date	Description

MECHANICAL DETAILS

M501

Printed 5/5/2023 8:40:01 AM



A SUPPLY OR RETURN AIR DUCT BRANCH CONNECTION DETAIL

SCALE: NONE

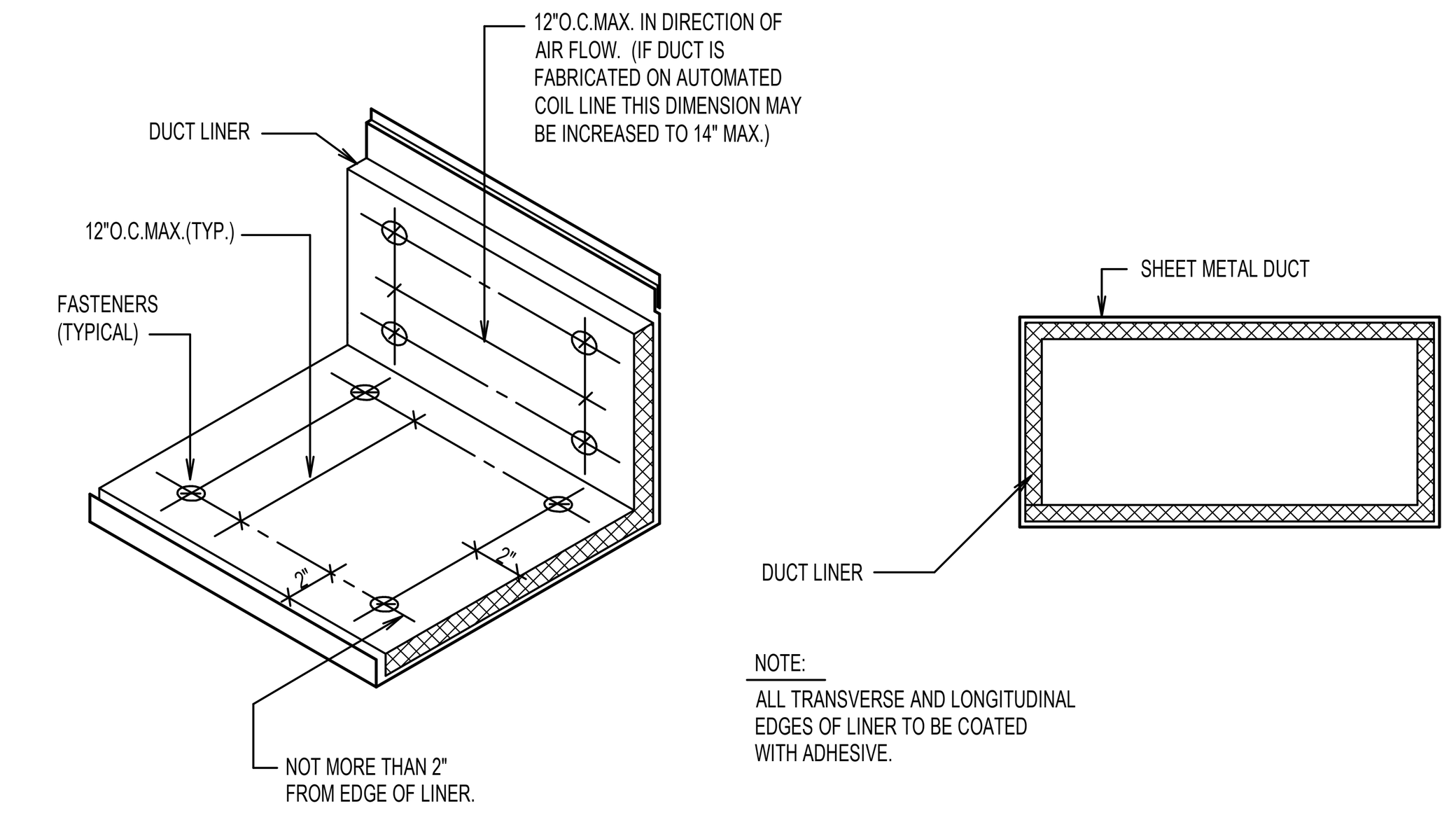
DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAGE (ALL FOUR SIDES)	TRANSVERSE REINFORCING (1)					
		MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	AT JOINTS				
			MIN. H. IN.	DRIVE SLIP / PLAIN S SLIP	HEMMED S SLIP	ALTER'NT BAR SLIP	REIN-FORCED BAR SLIP
				RECOM-MENDED GAGE	RECOM-MENDED GAGE	RECOM-MENDED GAGE	RECOM-MENDED GAGE
UP THRU 12	26	NONE REQUIRED	1	26	26	24	24
13 - 18	24	NONE REQUIRED	1	24	24	24	24
19 - 30	24	1"X1"X1/8" @ 60 IN	1	-	24	24	24
31 - 36	22	1"X1"X1/8" @ 60 IN	1	-	-	22	22

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

(2) LONGITUDINAL JOINTS TO BE PITTSBURGH OR SNAP LOCK TYPE.

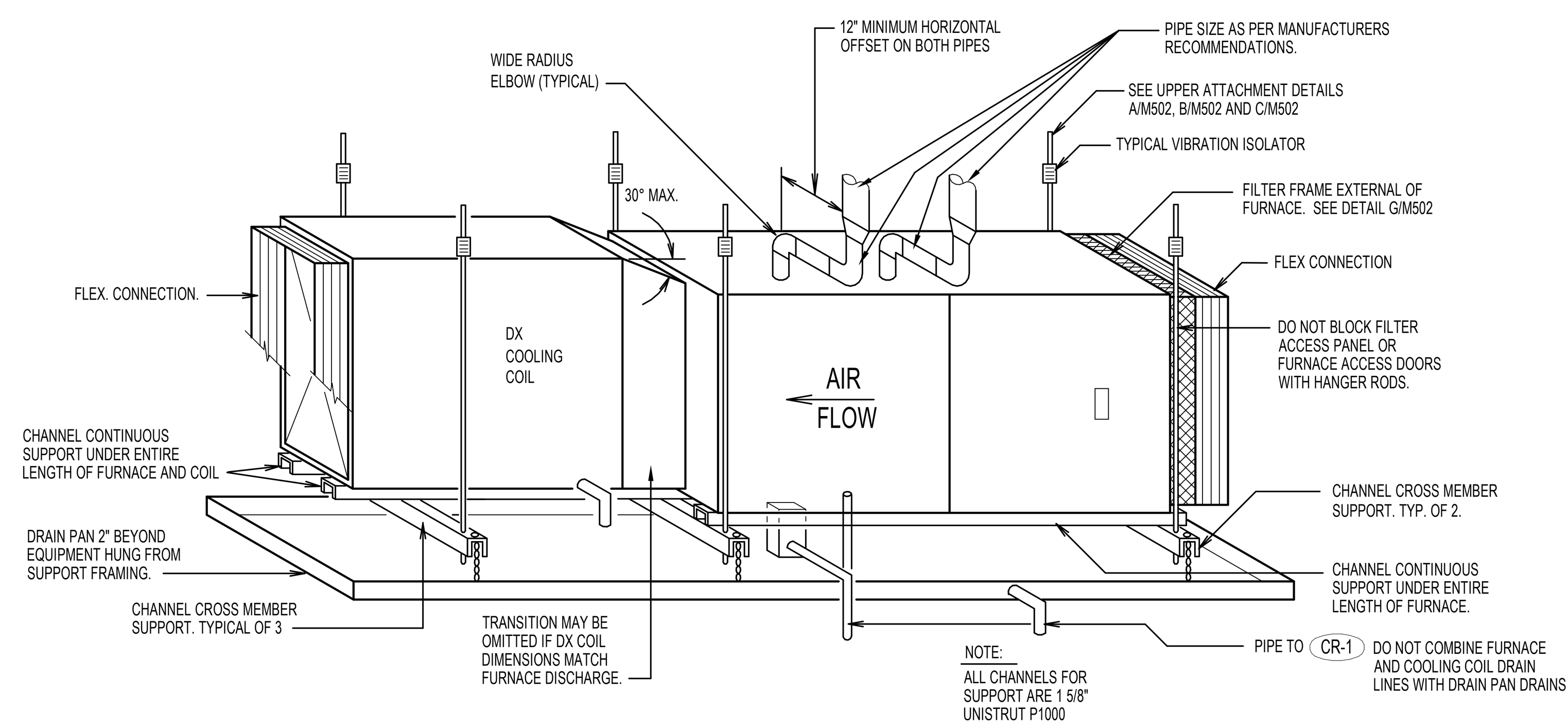
B DUCT CONSTRUCTION DETAIL

SCALE: NONE

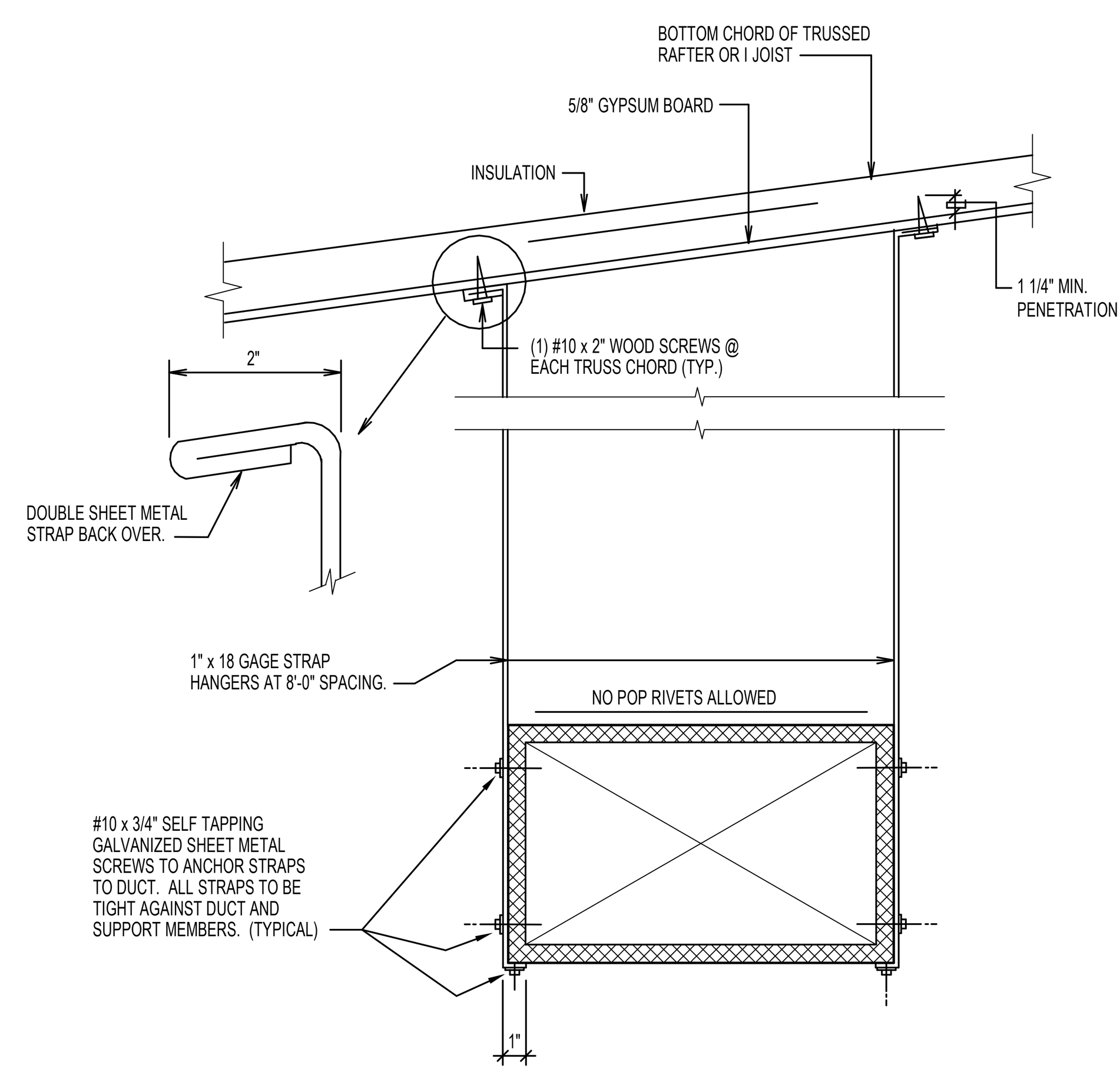


C DUCT LINER DETAIL

SCALE: NONE

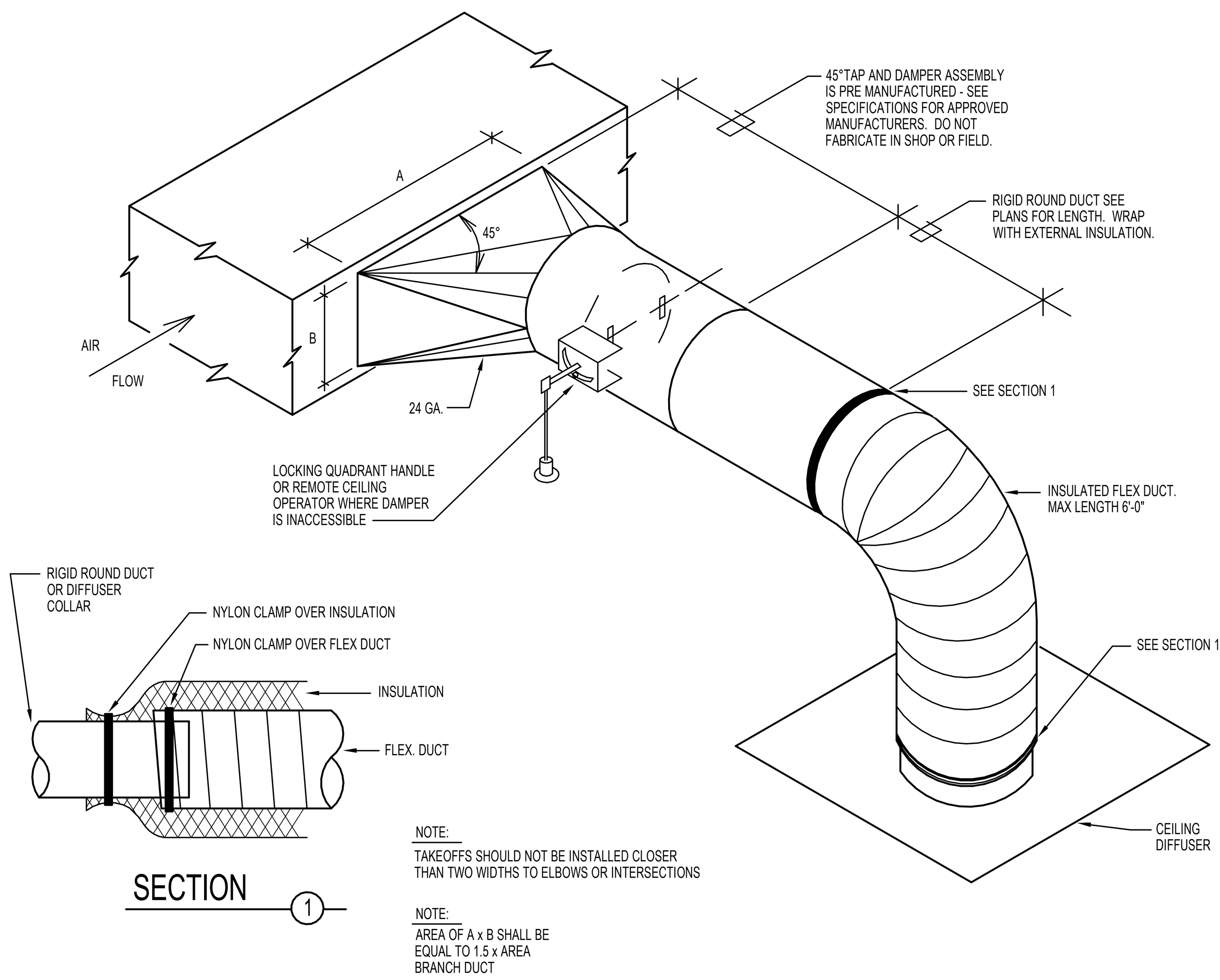


D FURNACE AND CASED DX COOLING COIL



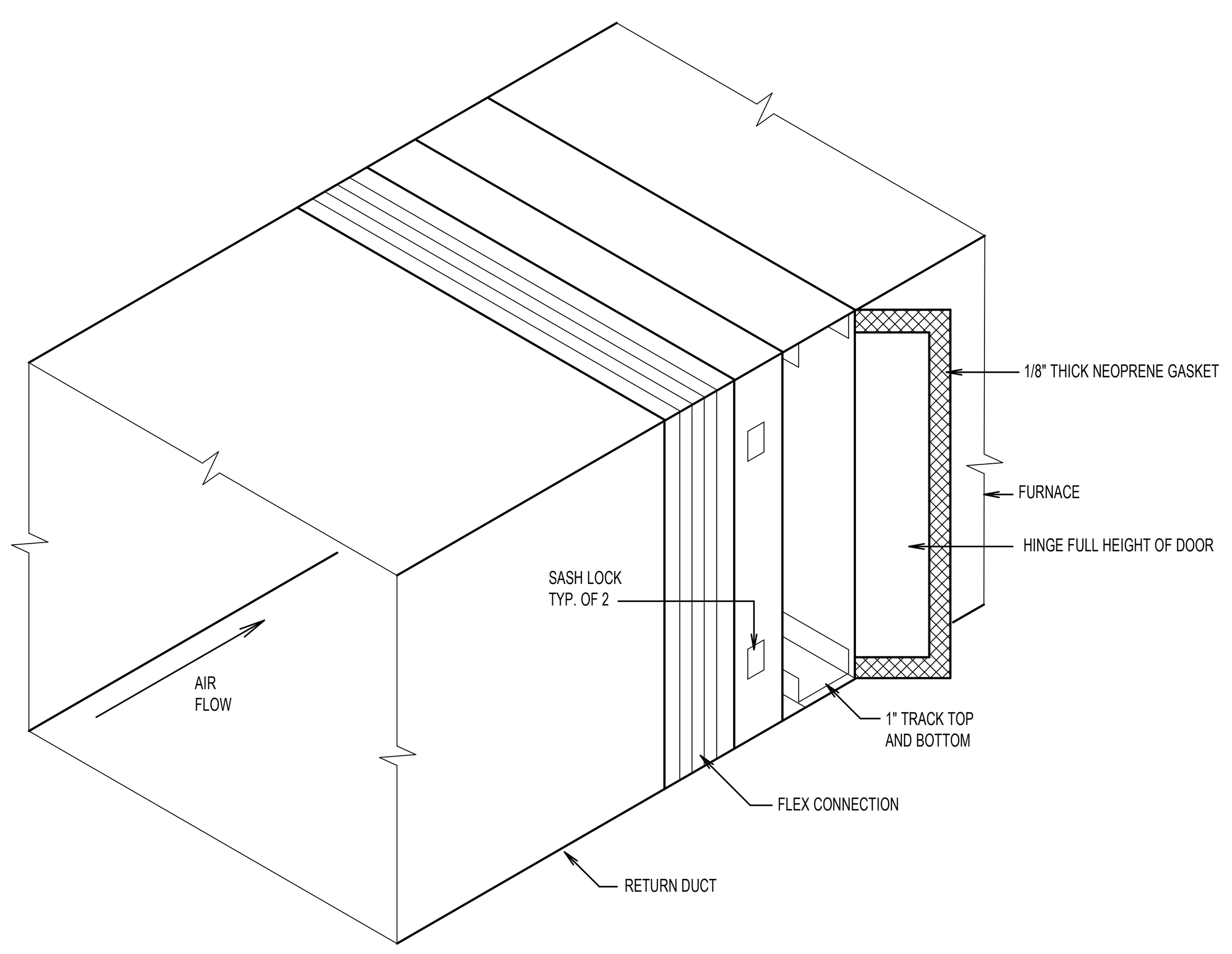
E DUCT STRAP HANGER DETAIL

SCALE: NONE



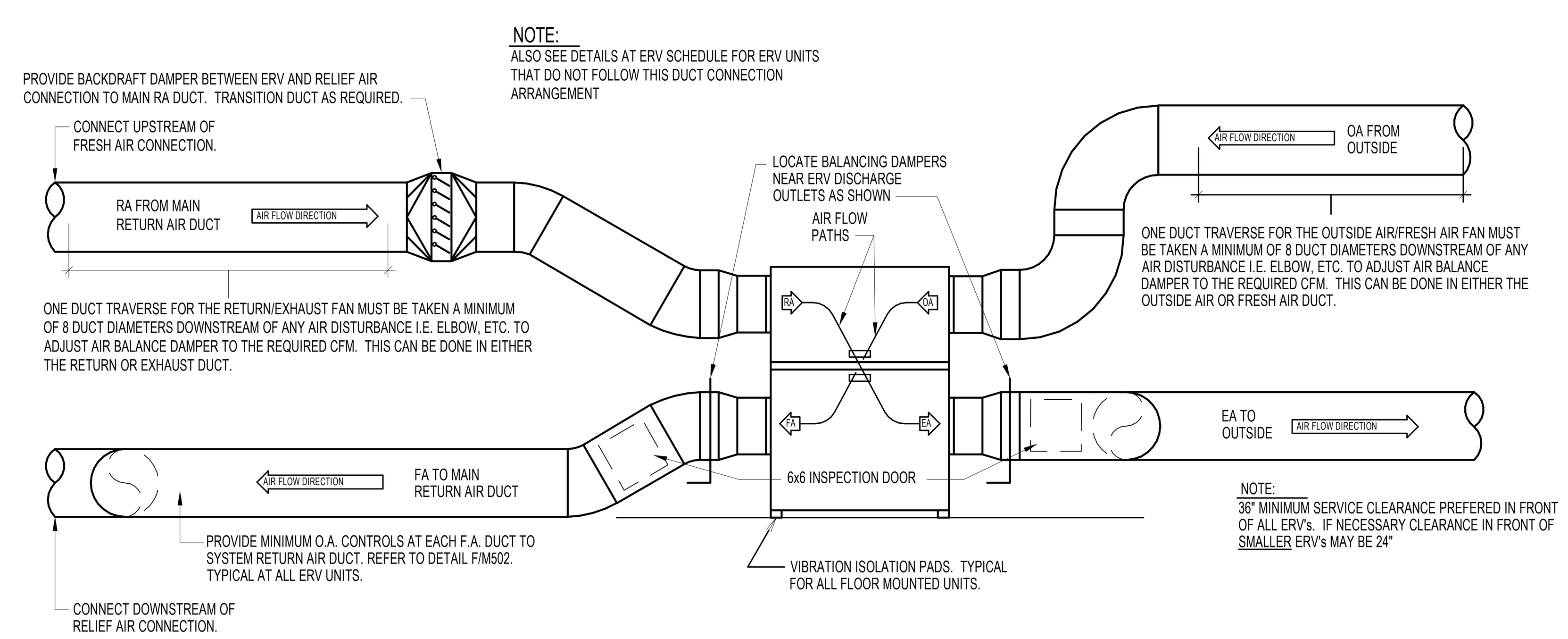
F HIGH EFFICIENCY SQUARE TO ROUND TAKEOFF DETAIL

SCALE: NONE



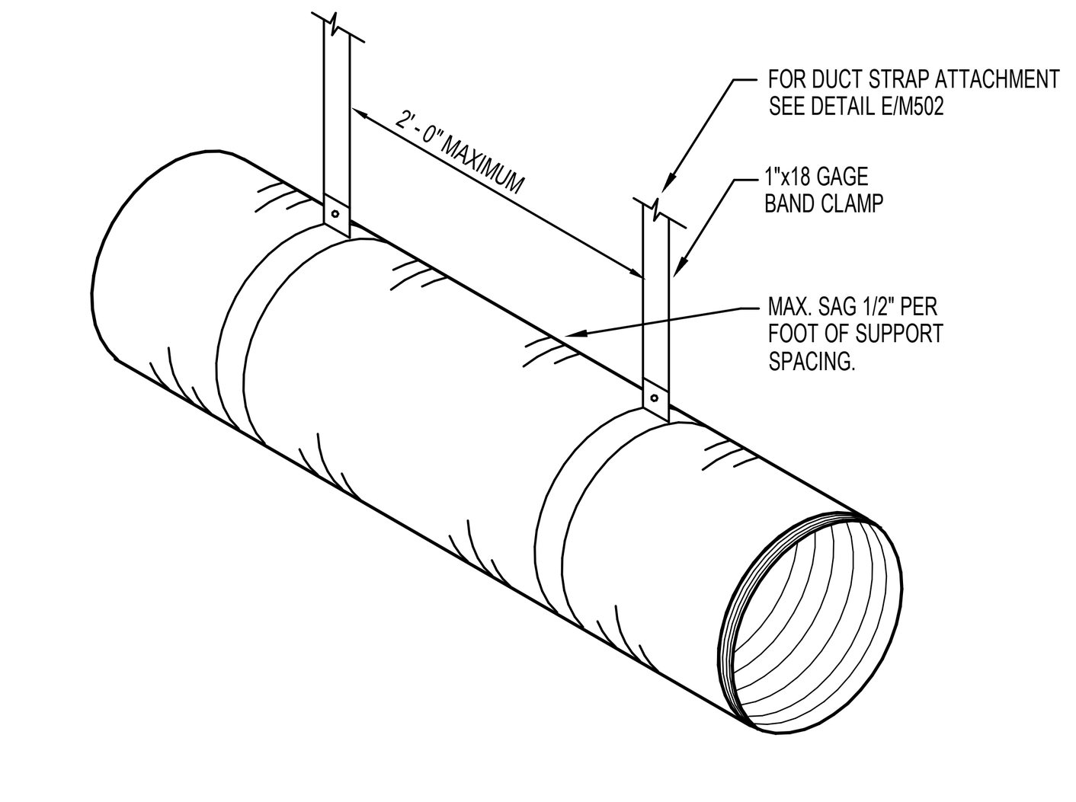
G EXTERNAL FILTER SECTION DETAIL

SCALE: NONE



H TYPICAL ERV DAMPERING DETAIL

SCALE: NONE



J FLEXIBLE DUCT SUPPORT DETAIL

SCALE: NONE

bhd ARCHITECTS
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PROFESSIONAL ENGINEER REGISTERED P-18184 STATE OF IDAHO DAVID L. HANSEN

5-5-2023

ESA Engineered Systems Associates
1355 EAST CENTER
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FAX: (208) 233-0529
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ESA JOB NUMBER: 22169

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Rexburg ID Custom 10 Ward Meetinghouse
Married Student Second Stake

5th West and University Boulevard, Rexburg, Idaho
43.803303, -111.796612

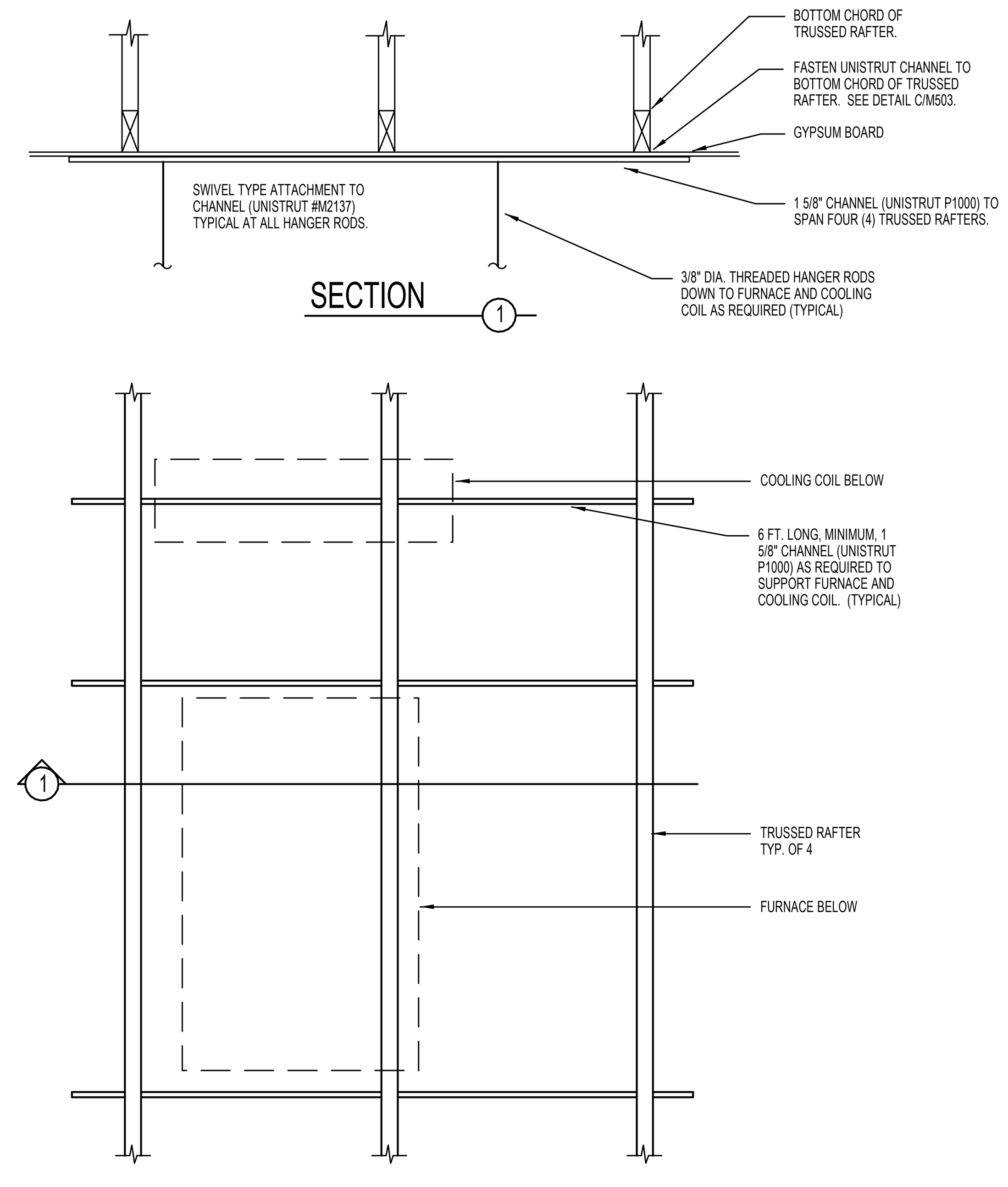
Issue Date	Church Property:	County Parcel:	BHDA Project No.
11 Apr 2023	510-3560	RPR 6N40E315400	2109

Drawing Issue and Revision Schedule

#	Date	Description

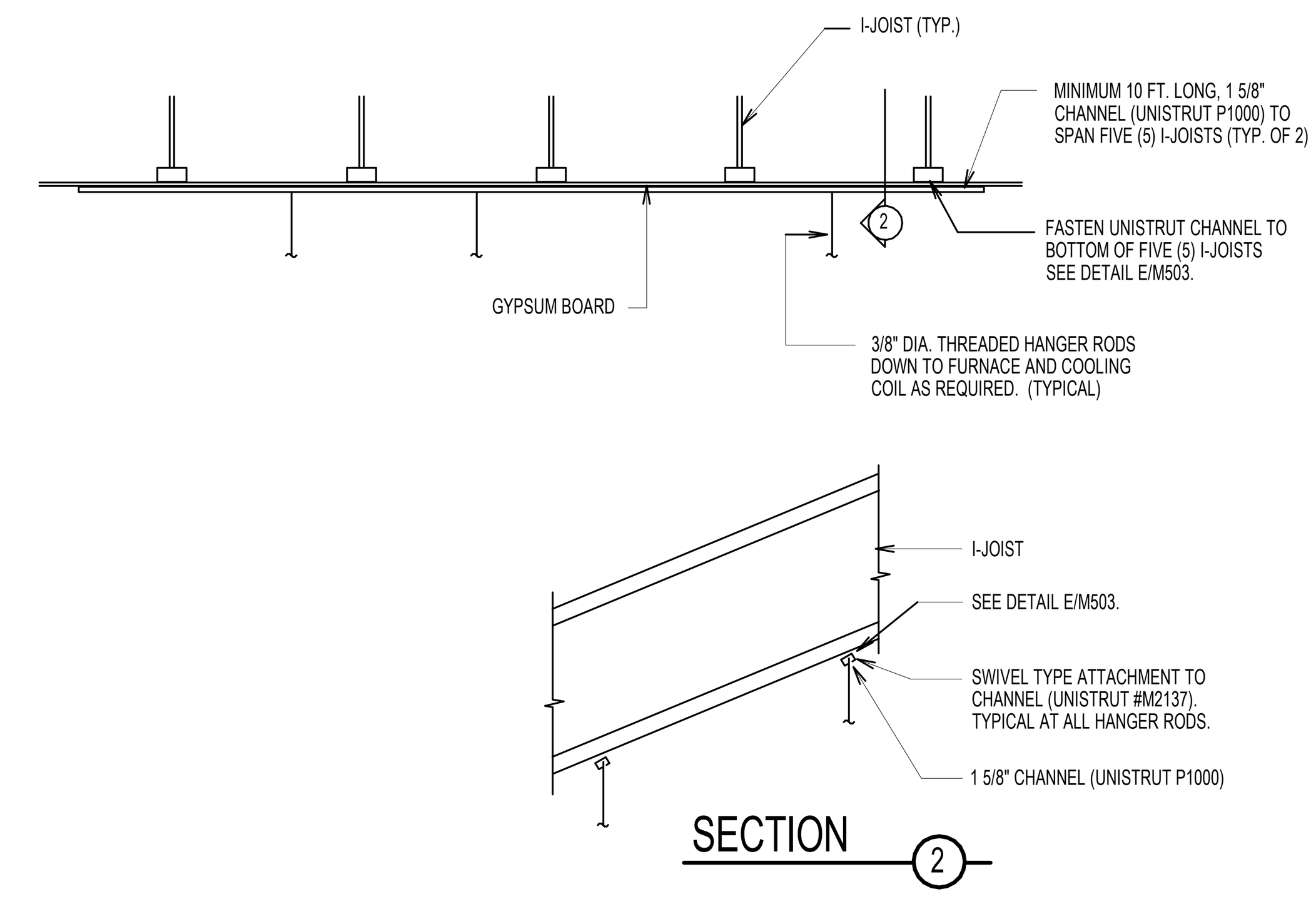
MECHANICAL DETAILS

M502



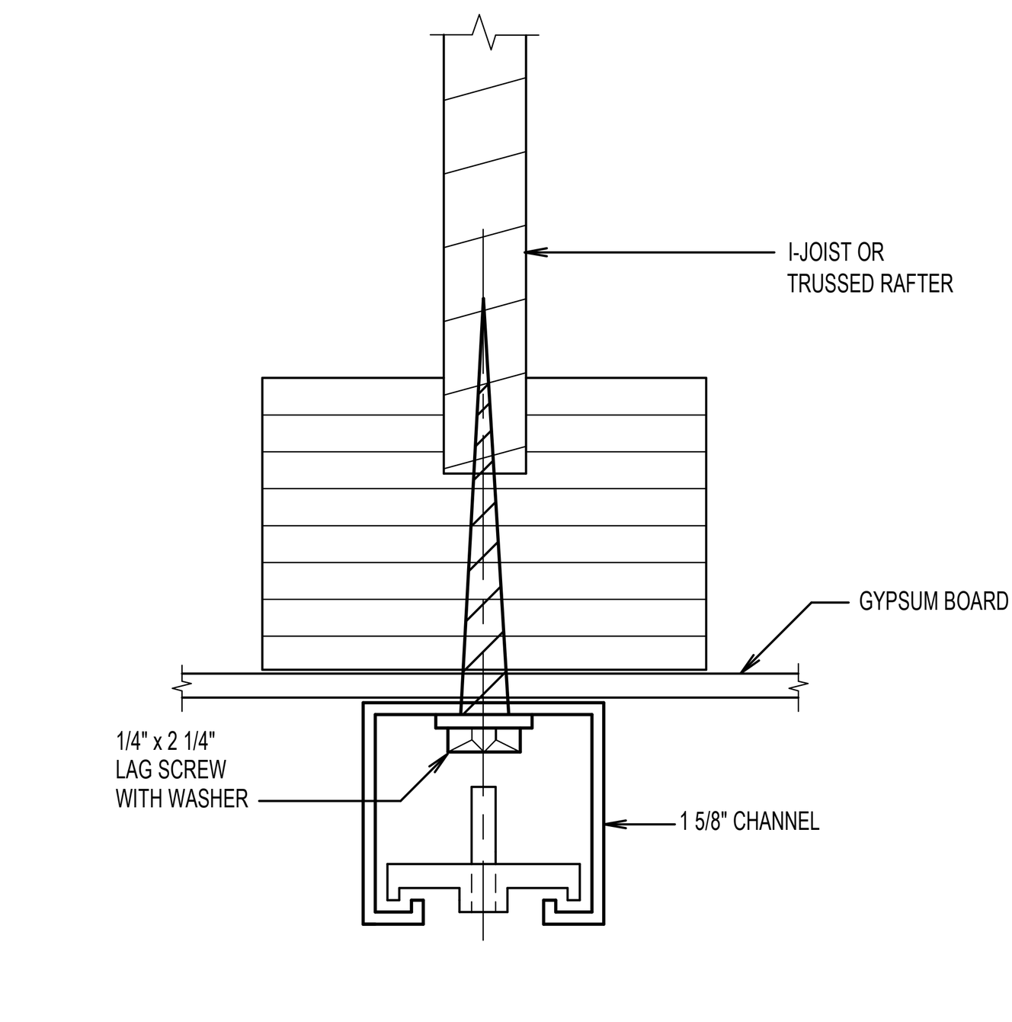
A UPPER SUPPORT DETAIL FOR TRUSSED RAFTERS

SCALE: NONE



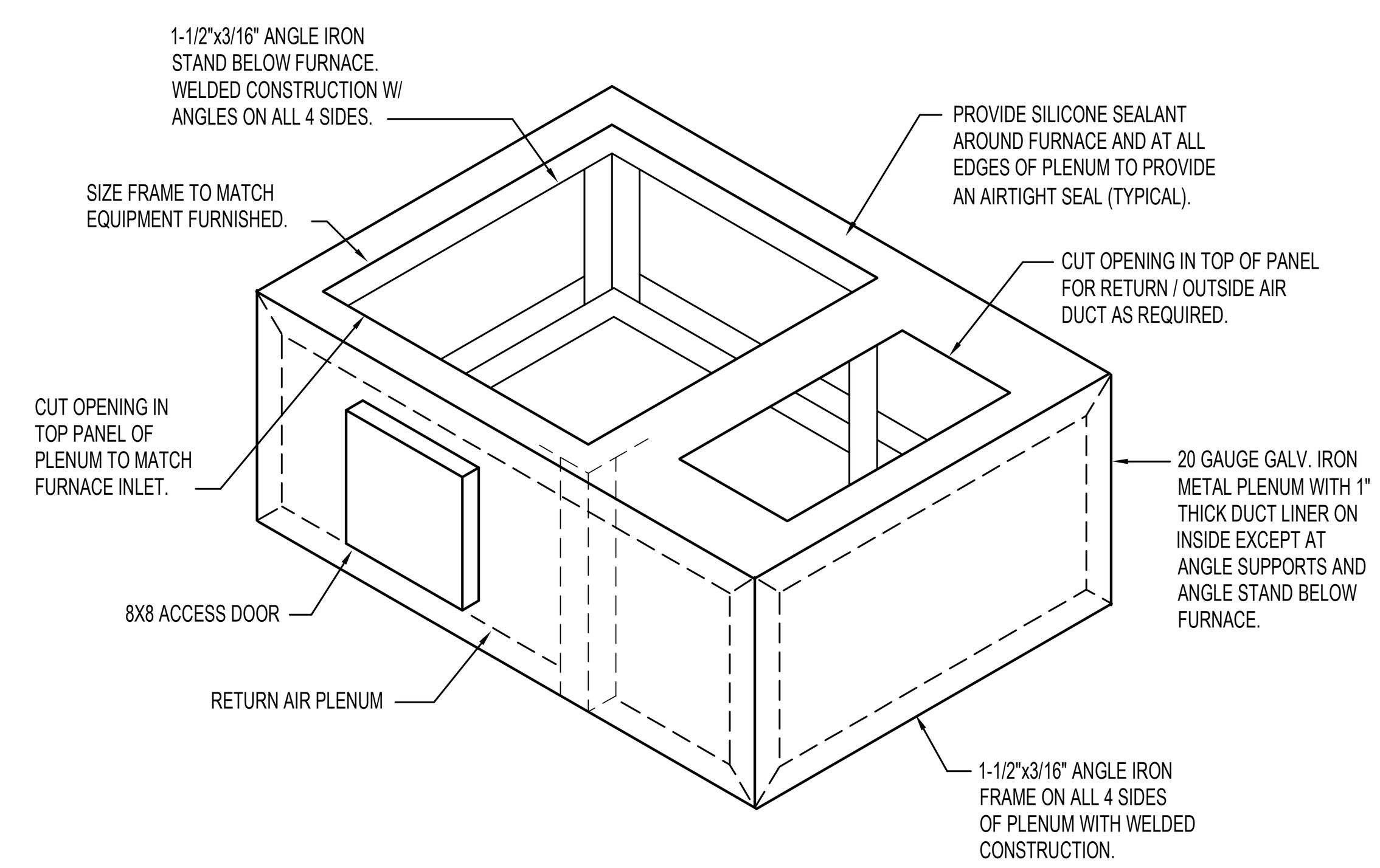
B UPPER SUPPORT DETAIL FOR TRUSSED RAFTER LOCATIONS

SCALE: NONE



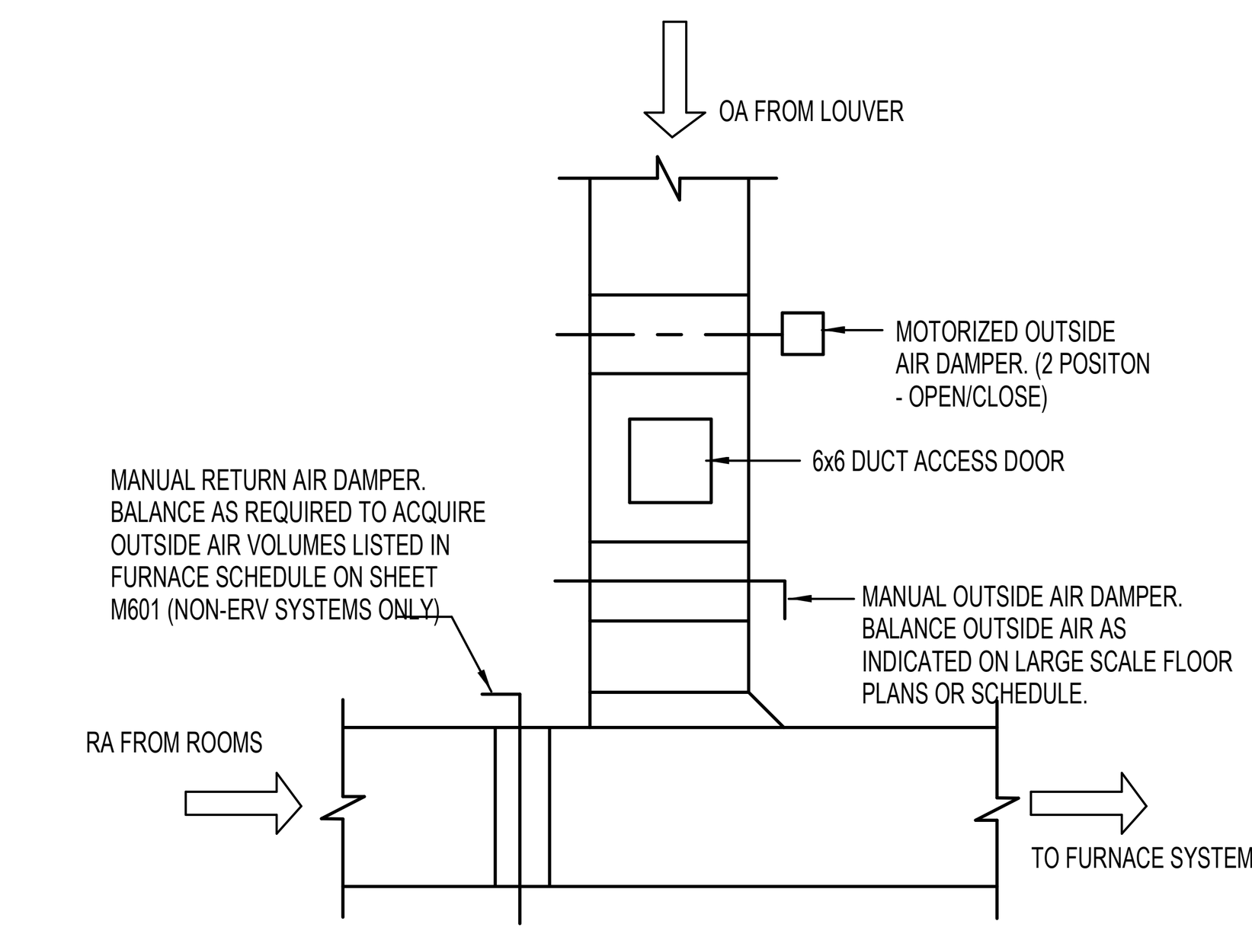
C UPPER ATTACHMENT DETAIL

SCALE: NONE



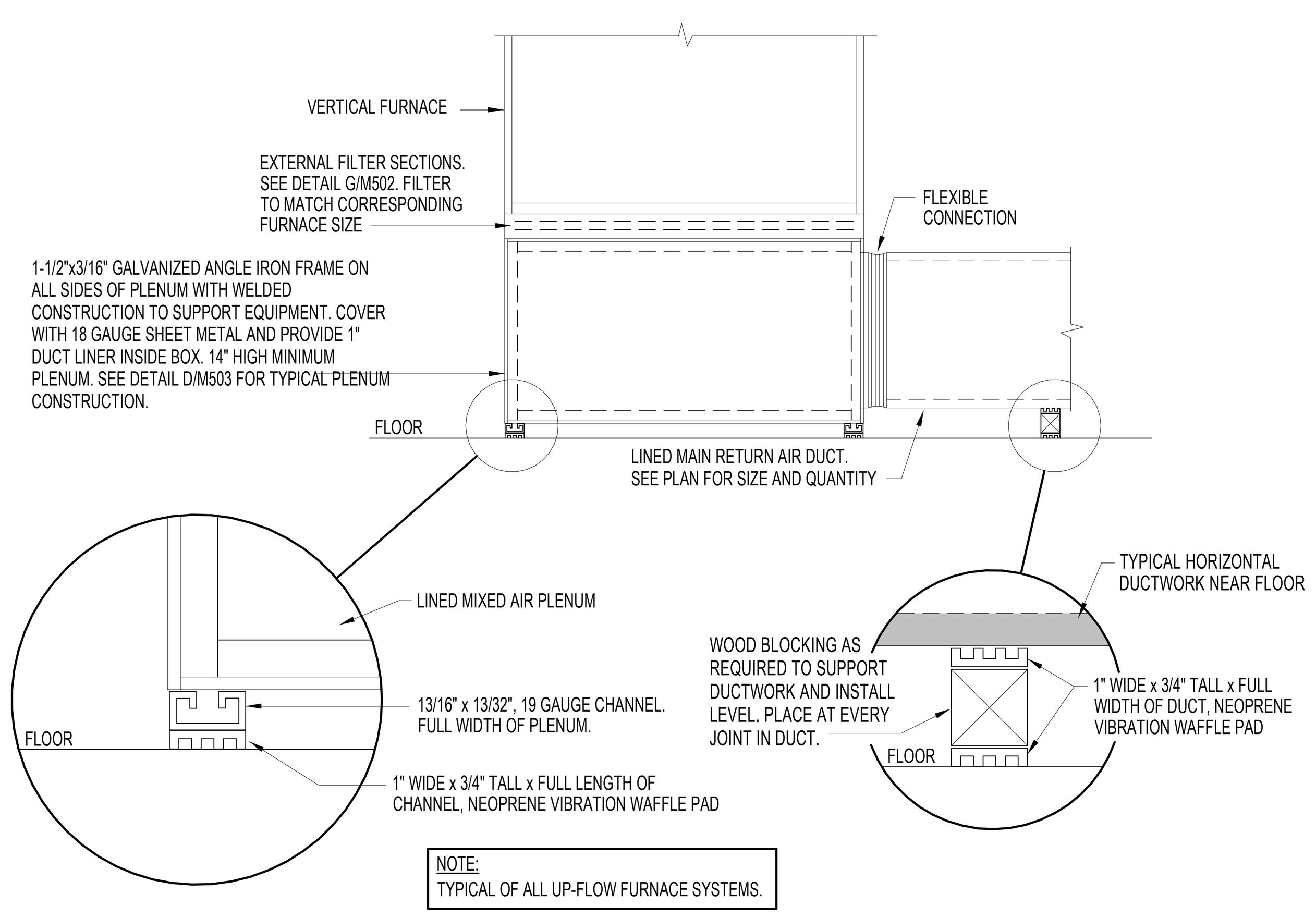
D RETURN AIR PLENUM DETAIL

SCALE: NONE



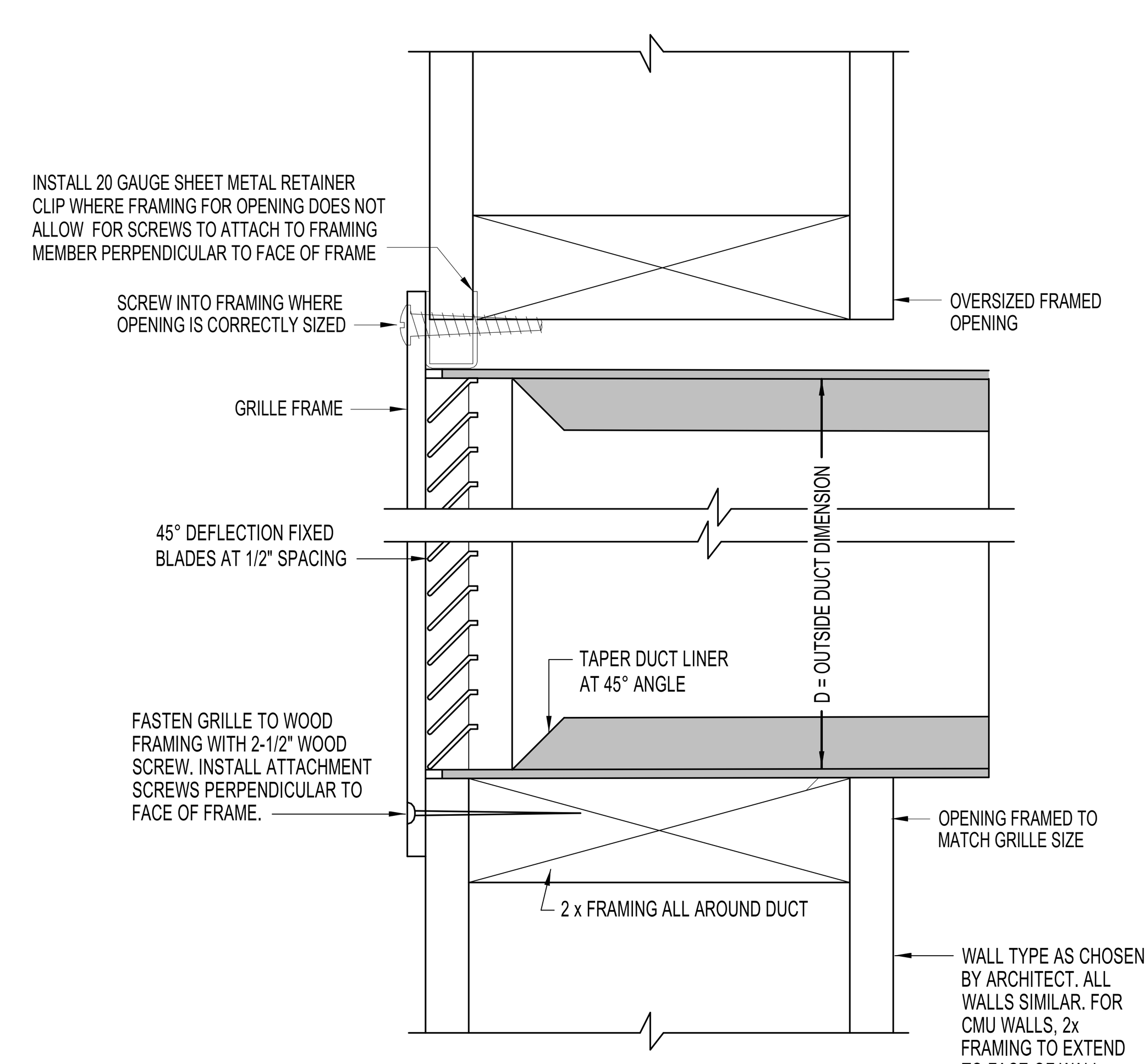
E TYPICAL OUTSIDE AIR DUCT DETAIL

NO SCALE



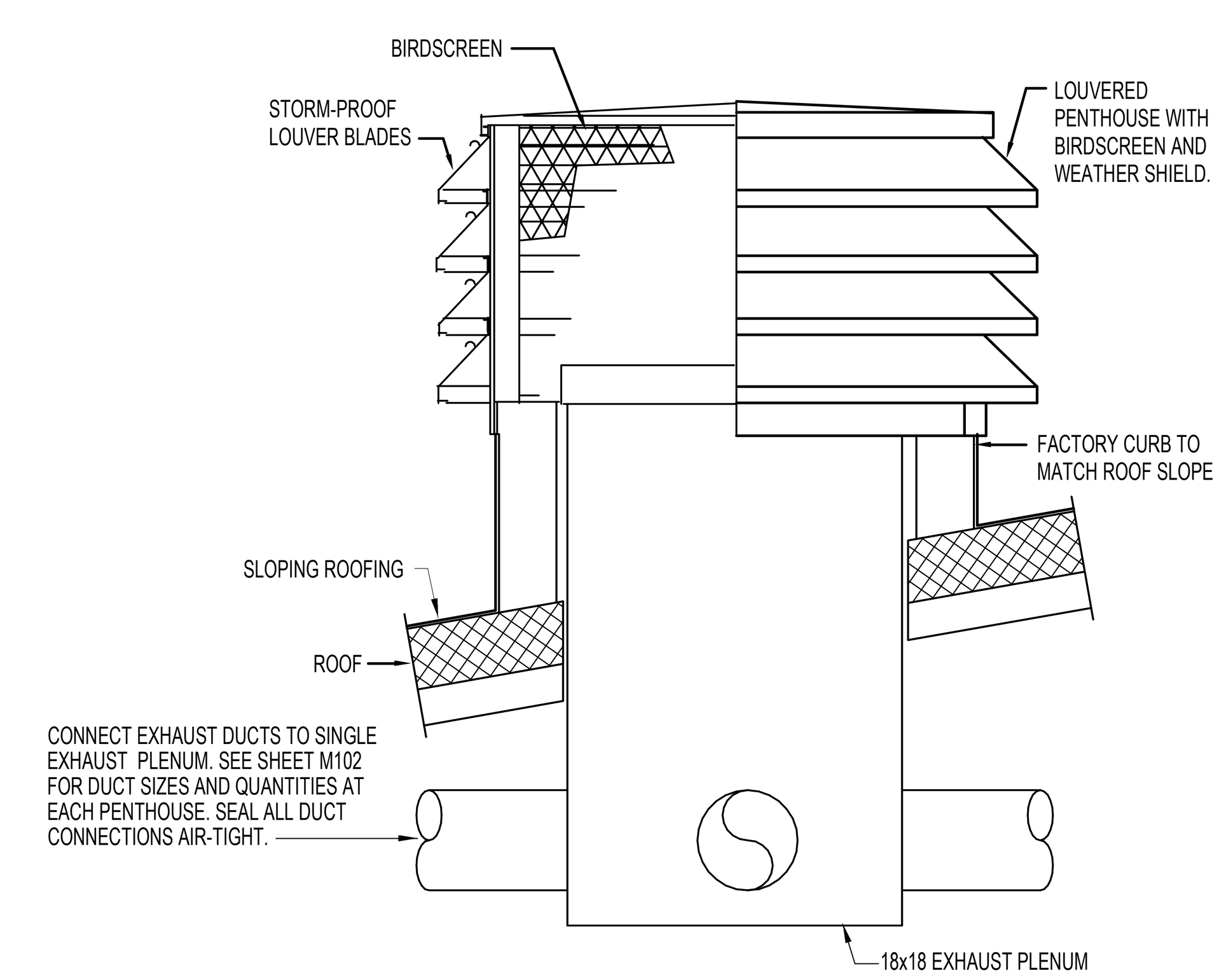
F VERTICAL FURNACE MOUNTING AND SUPPORT DETAIL

SCALE: NONE



G GRILLE ATTACHMENT DETAIL

NO SCALE



H DUCT CONNECTION AT PENTHOUSE

NO SCALE

bhd ARCHITECTS
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Rexburg ID Custom 10 Ward Meetinghouse
Married Student Second Stake

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Issue Date	Church Property:	County Parcel:	BHDA Project No.
11 Apr 2023	510-3560	RPR 6N40E315400	2109

Drawing Issue and Revision Schedule

#	Date	Description

MECHANICAL DETAILS

M503

Printed 5/5/2023 8:40:01 AM

EXHAUST FAN SCHEDULE

(2)(3)(4)(5)

MARK	SERVES ROOM	MIN. (1) A.C.F.M.	STATIC PRESSURE IN. W.G.	MINIMUM WATTS	CONTROL	REMARKS
EF-1	MEN & WOMEN REST ROOM 107 108	600	.50"	1/8 HP	WITH LIGHTS	DIRECT DRIVE IN-LINE FAN
EF-2	FAMILY RESTROOM 142	80	.38"	87 W	WITH LIGHTS	CEILING MOUNT
EF-3	MOTHER'S ROOM 144	80	.38"	87 W	WITH LIGHTS	CEILING MOUNT
EF-4	MEN & WOMEN REST ROOM 167 168	600	.50"	1/8 HP	WITH LIGHTS	DIRECT DRIVE IN-LINE FAN
EF-5	SERVING AREA 115	150	.38"	127 W	WALL SWITCH	CEILING MOUNT
EF-6	CUSTODIAN 116	80	.38"	87 W	WITH LIGHTS	CEILING MOUNT
EF-7	CUSTODIAN 175	80	.38"	87 W	WITH LIGHTS	CEILING MOUNT
EF-8	SERVING AREA 174	150	.38"	127 W	WALL SWITCH	CEILING MOUNT
EF-9	MOTHER'S ROOM 159	80	.38"	87 W	WITH LIGHTS	CEILING MOUNT
EF-10	MEN & WOMEN REST ROOM 157 158	600	.50"	1/8 HP	WITH LIGHTS	DIRECT DRIVE IN-LINE FAN
EF-11	TECH ROOM 154	200	.38"	166 W	COOLING STAT	CEILING MOUNT

1. SET BALANCE DAMPERS SHOWN ON M101 TO CFM LISTED.
2. PROVIDE BACK-DRAFT DAMPER.
3. CONTROL BY DIVISION 26.
4. ELECTRICAL CHARACTERISTICS - COMPRESS: 120V / 1 PHASE / 60 HZ
5. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.

REGISTER, LOUVER & GRILLE SCHEDULE

MARK	TYPE	SERVICE	CFM (1) RANGE	NOMINAL SIZE	REMARKS (3)
S-1	SIDEWALL (5)	SA	800	24 x 10	(9)
S-2	SIDEWALL (5)	SA	300	16 x 8	(9)
R-1	LOW SIDEWALL (5)(6)	RA	150	12 x 6	SERVICED BY 12 x 3-1/2 UNLINED R.A. DUCT IN WALL (10)
R-2	LOW SIDEWALL (5)(6)	RA	600	18 x 12	SERVICED BY 18 x 10 R.A. DUCT IN CHASE (10)(13)
R-3	LOW SIDEWALL (5)(6)	RA	1600	42 x 24	SERVICED BY 18 x 16 R.A. DUCT IN CHASE (10)(13)
R-4	CELING (4)	RA	350	24 x 10	COORDINATE WITH CEILING GRID AND LIGHT FIXTURES WHERE APPLICABLE. (13)
R-5	CELING (4)	RA	800	18 x 18	COORDINATE WITH CEILING GRID AND LIGHT FIXTURES WHERE APPLICABLE.
R-6	CELING (4)	RA	300	12 x 10	(13)
ER-1	CELING (4)	EA	300	10 x 10	COORDINATE WITH LIGHT FIXTURES WHERE APPLICABLE. (14)
TG-1	CELING (4)	TA	200	10 x 6	COORDINATE WITH LIGHT FIXTURES WHERE APPLICABLE. (13)
SG-1	SOFFIT GRILLE (5)	OA	1000	48 x 24	COORDINATE WITH LIGHT FIXTURES WHERE APPLICABLE. (12)
PH-1	PENTHOUSE (5)	EA	1000	18 x 18 x 18	COORDINATE WITH ROOF PEAKS AND VALLEYS (7)(8)(11)(12)
L-1	LOUVER	OA	2000	42 x 42	COORDINATE WITH BUILDING STRUCTURE AND TRIM (8)(11)(12)(13)

1. MAXIMUM NC = 25 AT MAXIMUM CFM NOTED.
2. DESIGN BASED ON TITUS TDC TYPE 6. SEE SPECIFICATIONS FOR OTHER APPROVED MANUFACTURERS.
3. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
4. FINISH SHALL BE OFF-WHITE ENAMEL.
5. BAKED ENAMEL FINISH WITH COLOR AS DIRECTED BY ARCHITECT.
6. RETURN AIR GRILLE TO BE MOUNTED 6" FROM FLOOR TO BOTTOM EDGE OF GRILLES.
7. BAKED ENAMEL FINISHED TO MATCH ROOF COLOR AS DIRECTED BY THE ARCHITECT.
8. PROVIDE ALUMINUM BIRD SCREENS.
9. SET REGISTER BLADES FOR 15" Deg. UPWARD DEFLECTION.
10. BLADE ORIENTATION SHALL BE HORIZONTAL.
11. MAXIMUM ACCEPTABLE FACE VELOCITY THROUGH NEW FREE AREA: 400 FPM
12. FINISH COLOR AS DIRECTED BY ARCHITECT.
13. BLADE ORIENTATION SHALL BE WITH LONG DIMENSION.
14. WITH OPPOSED BLADE DAMPER IN GRILLE

AIR COOLED CONDENSING UNIT SCHEDULE

MARK (3)	MIN. NOMINAL SIZE (TONS) (2)	MINIMUM CIRCUIT AMPACITY	MCOP	CHAR. (5)(6)	REMARKS (1)(4)
CU-1A	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-1B	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-1C	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-1D	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-2A	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-2B	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-2C	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-2D	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-3A	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-3B	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-3C	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-3D	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-4	5	34.6	60	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-5	3 1/2"	25.3	40	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-6	3 1/2"	25.3	40	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-7	3	21.9	35	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-8	3	21.9	35	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-9	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-10	3 1/2	21.9	40	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-11	4	27.9	50	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-12	5	34.6	60	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-13	3	21.9	35	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-14	3	21.9	35	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT
CU-15	3 1/2	25.3	40	208/60/1	WITH 0°F LOW AMBIENT HARD START KIT

1. REFRIGERANT = R-410a
2. AT DESIGN CONDITIONS AND 95 Deg. F ENTERING AIR TEMPERATURE TO CONDENSER.
3. COIL MARKS CORRESPOND WITH COOLING COIL AND FURNACE MARKS.
4. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS. 13.0 SEER MINIMUM.
5. ELECTRICAL CHARACTERISTICS - COMPRESS: 208V / 1 PHASE / 60 HZ
6. COORDINATE ACTUAL ELECTRICAL RATINGS OF UNIT SUPPLIED WITH DIVISION 26.

DIFFUSER SCHEDULE

(2)(4)

MARK	C.F.M. RANGE (1)	DIFFUSER SIZE	NECK CONN.	BLOW	PATTERN	AIR DIST./SIDE A (%)	AIR DIST./SIDE B (%)
D - 1 CFM	50 - 199	9 x 9	8" Dia.	3 WAY	A, B, B	38	31
D - 2 CFM	50 - 199	9 x 9	8" Dia.	4 WAY	A, B, B, A	25	25
D- 3 CFM	200-400	12 x 12	10" Dia.	4 WAY	A, B, B, A	25	25
D - 4 CFM	200-400	24 x 24 MODULE 12 x 12 GRILLE	10" Dia.	4 WAY	A, B, B, A	25	25
D - 5 CFM	200-400	12 x 12	10" Dia.	4 WAY	A, B, B	38	31
D - 6 CFM	50 - 199	9 x 9	8" Dia.	2 WAY	B, A	50	50

COOLING COIL SCHEDULE

(1)(2)

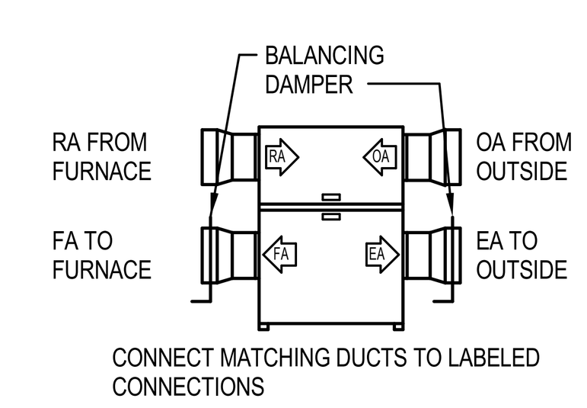
MARK	MIN. REQ'D. CAP. TOT.MBH	MIN. REQ'D. CAP. SEN.MBH	COND.ENT.EVAP. DB° F	COND.ENT.EVAP. WB° F	S.C.F.M.	MAX. PR. DR. IN.W.G. (3)	POSITION	REMARKS (4)(7)
CC-1A	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-1B	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-1C	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-1D	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-2A	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-2B	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-2C	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-2D	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-3A	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-3B	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-3C	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-3D	49.2	40.4	79	66	1600	0.22	UPFLOW	4 TON NOMINAL, R410A REFRIGERANT (5)
CC-4	61.1	40.9	79	66	1750	0.29	HORIZONTAL	5 TON NOMINAL, R410A REFRIGERANT (6)
CC-5	42.0	35.2	79	66	1450	0.29	HORIZONTAL	3 1/2 TON NOMINAL, R410A REFRIGERANT (6)
CC-6	42.0	35.2	79	66	1450	0.29	HORIZONTAL	3 1/2 TON NOMINAL, R410A REFRIGERANT (6)
CC-7	36.0	32.4	79	66	1200	0.22	HORIZONTAL	3 TON NOMINAL, R410A REFRIGERANT (6)
CC-8	36.0	32.4	79	66	1200	0.22	HORIZONTAL	3 TON NOMINAL, R410A REFRIGERANT (6)
CC-9	49.2	40.2	79	66	1600	0.22	HORIZONTAL	4 TON NOMINAL, R410A REFRIGERANT (6)
CC-10	42.0	35.2	79	66	1400	0.29	HORIZONTAL	3 1/2 TON NOMINAL, R410A REFRIGERANT (6)
CC-11	49.2	40.4	79	66	1600	0.22	HORIZONTAL	4 TON NOMINAL, R410A REFRIGERANT (6)
CC-12	61.1	40.9	79	66	1750	0.29	HORIZONTAL	5 TON NOMINAL, R410A REFRIGERANT (6)
CC-13	36.0	32.4	79	66	1200	0.22	HORIZONTAL	3 TON NOMINAL, R410A REFRIGERANT (6)
CC-14	36.0	32.4	79	66	1200	0.22	HORIZONTAL	3 TON NOMINAL, R410A REFRIGERANT (6)
CC-15	42.0	35.2	79	66	1400	0.29	HORIZONTAL	3 1/2 TON NOMINAL, R410A REFRIGERANT (6)

1. COIL MARKS CORRESPOND WITH CONDENSING UNIT AND FURNACE MARKS.
2. COMPLETE WITH FACTORY COIL BOX AND COIL.
3. WET COIL
4. USE NEXT LARGE SIZE COIL IF NECESSARY TO MEET MAX. PRESSURE DROP REQUIREMENTS.
5. UP-FLOW COIL.
6. HORIZONTAL COIL.
7. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.

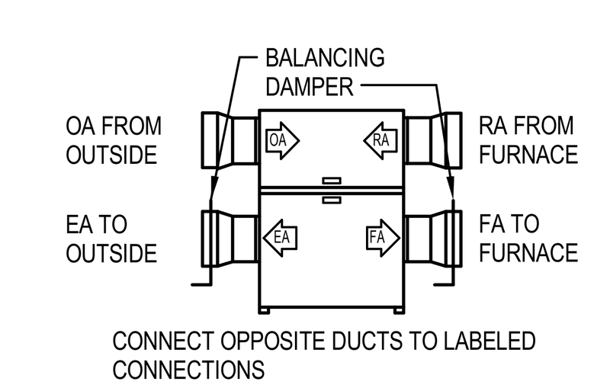
ENERGY RECOVERY VENTILATOR

MARK	CFM	ELECTRICAL FLA	ELECTRICAL MCA	ELECTRICAL MCOP	ELECTRICAL H.P.	ELECTRICAL VOLTS	ELECTRICAL HERTZ	ELECTRICAL PHASE	REMARKS
ERV-1A	840	18.0	20.3	25	(2) 3/4	115	60	1	(1)(2)
ERV-1B	840	18.0	20.3	25	(2) 3/4	115	60	1	(1)(3)
ERV-2A	840	18.0	20.3	25	(2) 3/4	120	60	1	(1)(2)
ERV-2B	840	18.0	20.3	25	(2) 3/4	120	60	1	(1)(3)
ERV-3A	840	18.0	20.3	25	(2) 3/4	120	60	1	(1)(2)
ERV-3B	840	18.0	20.3	25	(2) 3/4	120	60	1	(1)(3)
ERV-4	600	18.0	20.3	25	(2) 3/4	120	60	1	(1)(2)
ERV-5	550	18.0	20.3	25	(2) 3/4	120	60	1	(1)(2)
ERV-6	550	18.0	20.3	25	(2) 3/4	120	60	1	(1)(2)
ERV-7	700	18.0	20.3	25	(2) 3/4	120	60	1	(1)(2)
ERV-8	950	18.0	20.3	25	(2) 3/4	120	60	1	(1)(2)

1. RENEWAIRE MODEL HE1XINV. TWO 0.75 HP FANS. 25 MAX. FUSE SIZE.
2. THIS UNIT TO BE HUNG UPSIDE DOWN AS SHOWN IN DETAIL AT RIGHT.
3. THIS UNIT TO BE HUNG RIGHT SIDE UP CONNECT DUCTWORK AS LABELED.



ERV-UNITS 1A, 1B



ERV-UNITS 2A, 2B, 3A, 3B, 4, 5, 6, 7, & 8

NOTE: PROVIDE BACKDRAFT DAMPER ON FA DUCT BEFORE CONNECTING TO MAIN RETURN AIR DUCT. TYPICAL ALL ERV UNITS.

FURNACE SCHEDULE

(2)(8)

MARK	MIN.REQ'D OUTPUT BTU/HR (1)	MINIMUM A.C.F.M.	MINIMUM OUTSIDE AIR	EXT. S.P. IN.W.G.	MOTOR (3) MIN. H.P.	MOTOR SPEED (5)	REMARKS
F-1A	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-1B	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-1C	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-1D	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-2A	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-2B	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-2C	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-2D	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-3A	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-3B	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-3C	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-3D	93,000	1600	420	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (6)
F-4	112,000	1750	200	0.60	1	MED. HIGH (4)	120,000 BTU INPUT (7)
F-5	93,000	1450	200	0.60	1/2	MED. HIGH (4)	88,000 BTU INPUT (7)
F-6	93,000	1400	200	0.60	1/2	MED. HIGH (4)	88,000 BTU INPUT (7)
F-7	68,000	1200	350	0.60	1/3	MED. HIGH (4)	88,000 BTU INPUT (7)
F-8	68,000	1200	350	0.60	1/3	MED. HIGH (4)	88,000 BTU INPUT (7)
F-9	93,000	1600	200	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (7)
F-10	93,000	1400	400	0.60	1/2	MED. HIGH (4)	88,000 BTU INPUT (7)
F-11	93,000	1600	300	0.60	1/2	MED. HIGH (4)	110,000 BTU INPUT (7)
F-12	112,000	1750	200	0.60	1	MED. HIGH (4)	120,000 BTU INPUT (7)
F-13	68,000	1200	350	0.60	1/3	MED. HIGH (4)	88,000 BTU INPUT (7)
F-14	93,000	1400	400	0.60	1/2	MED. HIGH (4)	88,000 BTU INPUT (7)
F-15	93,000	1400	200	0.60	1/2	MED. HIGH (4)	88,000 BTU INPUT (7)

1. BTU/HR OUTPUT AT SEA LEVEL RATING
2. FURNACE MARKS CORRESPOND WITH CONDENSING UNIT AND COOLING COIL MARKS.
3. ELECTRICAL CHARACTERISTICS - MOTOR: 120V / 1 PHASE / 60 HZ
4. MAY VARY ACCORDING TO MANUFACTURER. INSTALL NECESSARY JUMPERS SO THAT FAN OPERATES ONLY AT COOLING SPEED WHENEVER THE FAN CIRCUIT IS ENERGIZED.
5. SET FAN MOTOR SPEED TAP TO LOWEST POSSIBLE SETTING TO ACHIEVE DESIGN AIR FLOW.
6. UP-FLOW UNIT WITH 14" HIGH PLENUM BASE.
7. HORIZONTAL UNIT WITH ATTACHED DX COIL.
8. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS. - 92% MINIMUM AFUE.

ELECTRIC HEATER SCHEDULE

MARK	SERVES ROOM	WATTS	CHAR.	AMPS	REMARKS (1)
EH-1	122	2000	208V / 1 PHASE / 60HZ	8.5	QMARK MODEL AWH-4204 WITH SM-1 SEMI-RECESSED FRAME
EH-2	122	2000	208V / 1 PHASE / 60HZ	8.5	QMARK MODEL AWH-4204 WITH SM-1 SEMI-RECESSED FRAME
EH-3	122	2000	208V / 1 PHASE / 60HZ	8.5	QMARK MODEL AWH-4204 WITH SM-1 SEMI-RECESSED FRAME
EH-4	122	2000	208V / 1 PHASE / 60HZ	8.5	QMARK MODEL AWH-4204 WITH SM-1 SEMI-RECESSED FRAME
EH-5	122	2000	208V / 1 PHASE / 60HZ	8.5	QMARK MODEL AWH-4204 WITH SM-1 SEMI-RECESSED FRAME
EH-6	176	3000	208V / 1 PHASE / 60HZ	14.5	QMARK MODEL MUH03-81 WITH B10 WALL MOUNTING BRACKET.
EH-7	122	2000	208V / 1 PHASE / 60HZ	8.5	QMARK MODEL AWH-4204 WITH SM-1 SEMI-RECESSED FRAME
EH-8	122	2000	208V / 1 PHASE / 60HZ	8.5	QMARK MODEL AWH-4204 WITH SM-1 SEMI-RECESSED FRAME

1. SEE SPECIFICATIONS FOR OTHER APPROVED MANUFACTURERS.

NOTES:

1- THE MECHANICAL CONTRACTOR SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWINGS BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS. STANDARD 200 VOLT FOR 208 VOLT MOTOR NAME PLATE VOLTAGE SHALL BE NEMA STANDARD 230 VOLT FOR THREE PHASE SYSTEM AND SHALL BE NEMA STANDARD. STARTER HEATERS 240 VOLT THREE PHASE OR SINGLE PHASE INSTALLED SHALL BE COORDINATED WITH THE NAME PLATE DATA.

2- S.C.F.M. LISTED IS STANDARD AIR.

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43.803303, -111.796612

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MECHANICAL SCHEDULES

M601

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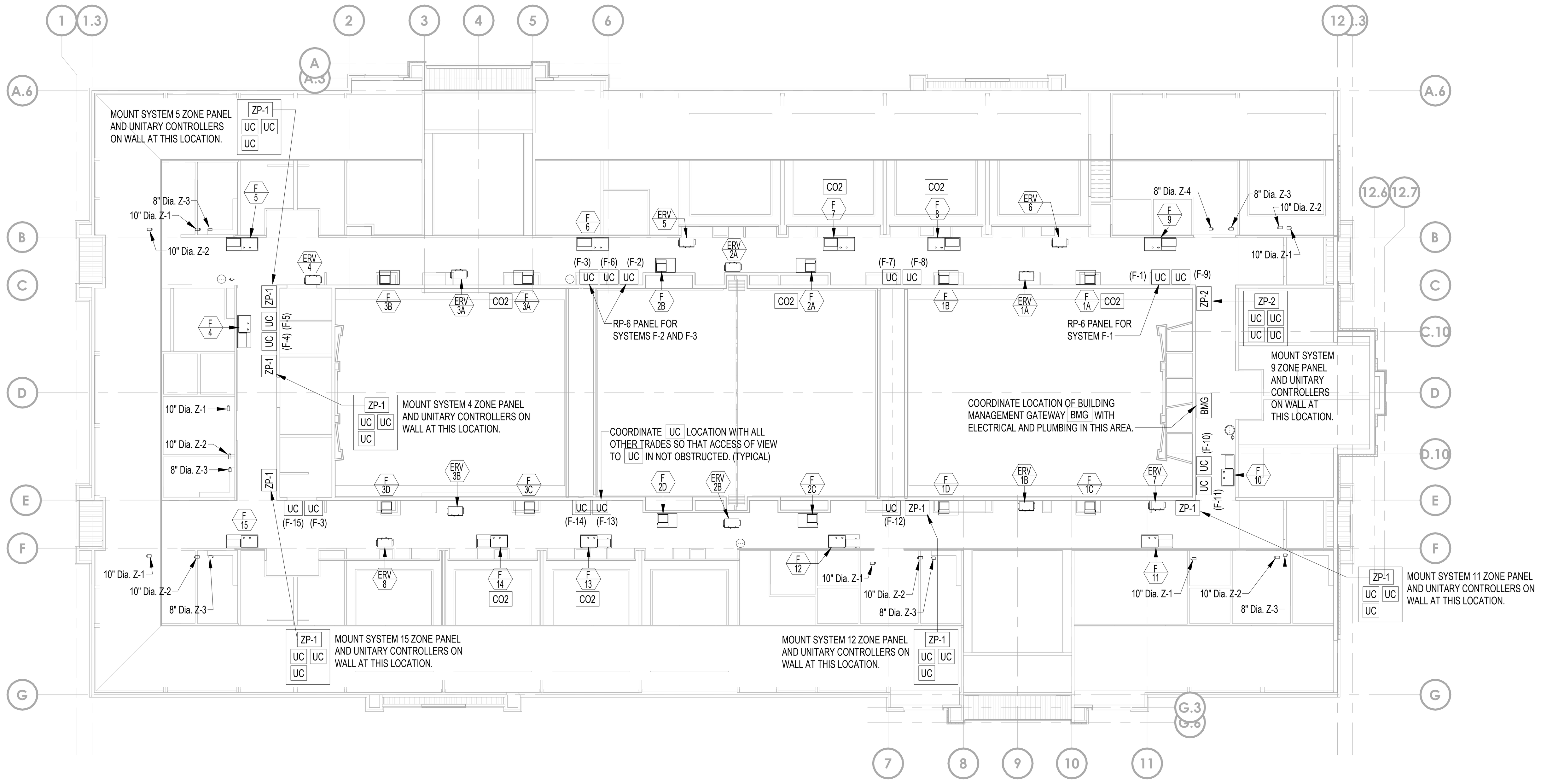
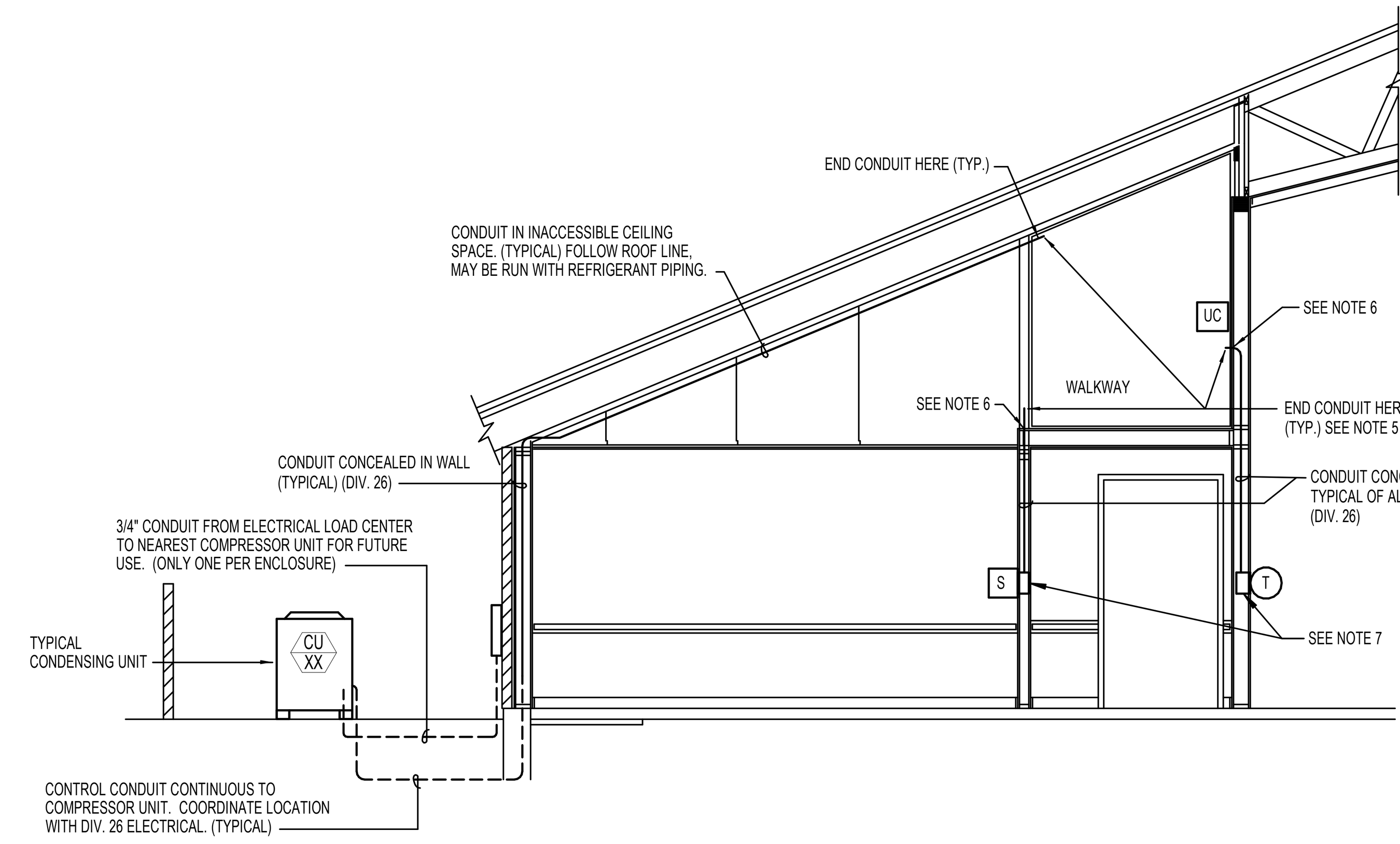


EQUIPMENT PLATFORM - TEMPERATURE CONTROLS

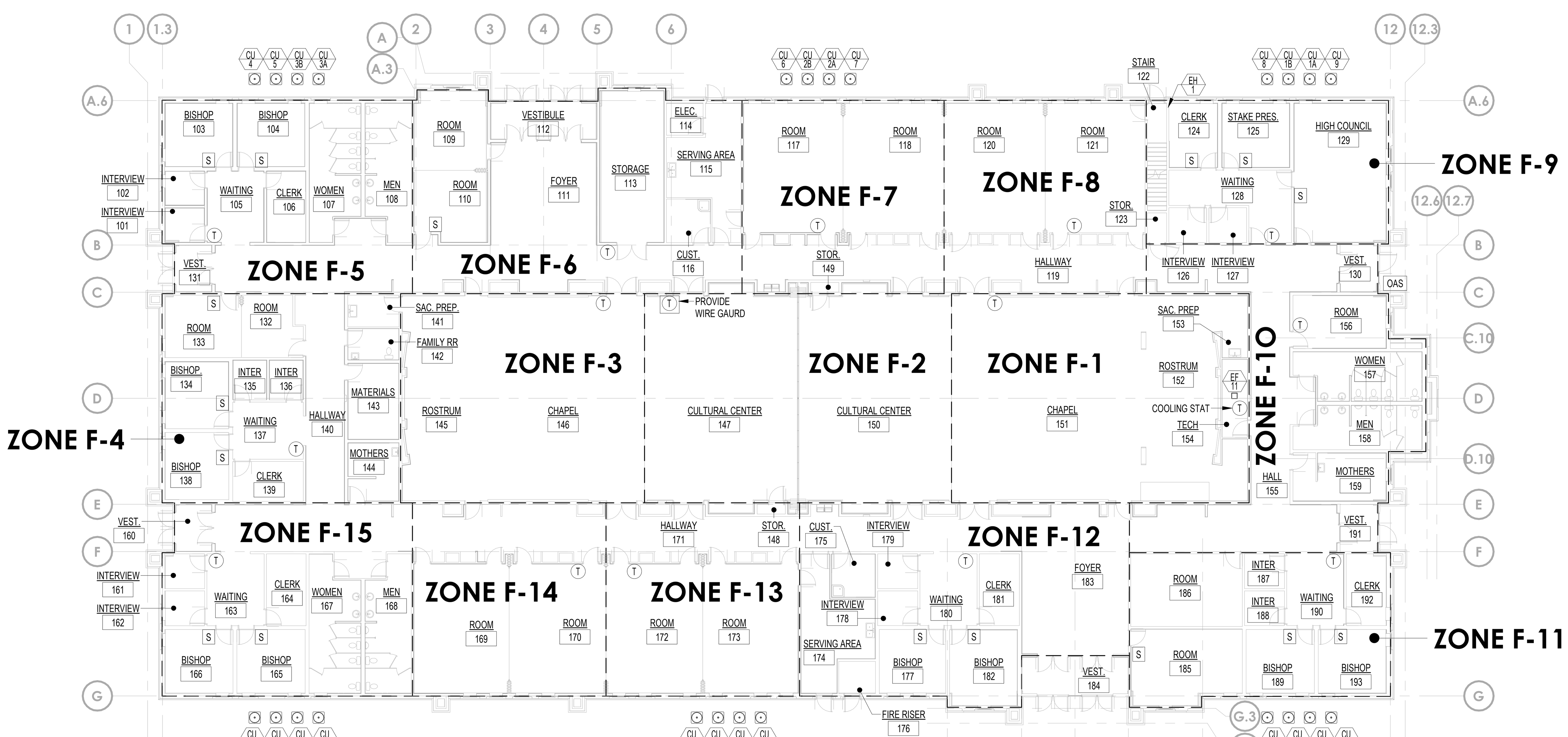
SCALE: 1/16" = 1'-0"



A MINIMUM REQUIRED CONDUIT-TYPICAL DETAIL

SCALE: NONE

NOTE:
ALL TEMPERATURE CONTROL CONDUIT SHALL BE FURNISHED AND INSTALLED BY DIVISION 26.



MAIN FLOOR PLAN - TEMPERATURE CONTROLS

SCALE: 1/16" = 1'-0"

SYMBOLS

UC	UNITARY CONTROLLER (DIV. 23). MOUNT MODULE IN ACCESSIBLE LOCATION ON OR NEAR ASSOCIATED FURNACE.
RP-6	RELAY PANEL (DIV. 23). MOUNT AT 5'-0" TO BOTTOM OF CABINET.
(T)	THERMOSTAT (LCBS) OUTLET (CONDUIT BY DIV. 26)
S	INDOOR AIR SENSOR OUTLET (CONDUIT BY DIV. 26)
BMG	BUILDING MANAGEMENT GATEWAY (DIV. 23)
OAS	GLOBAL OUTDOOR AIR SENSOR (DIV. 23) TO BE INSTALLED ON THE NORTH SIDE OF THE BUILDING (OUT OF DIRECT SUNLIGHT) AND CONNECTED TO ANY ZONE.
C02	CO_2 SENSOR (DIV. 23). INSTALL UPSTREAM OF RELIEF OR OUTSIDE AIR CONNECTION.
CRO	COMBINATION RELAY AND THERMAL OVERLOAD DISCONNECT (WITH 20 AMP RIB PANEL 240 1B)
ZP-1	3 ZONE PANEL (DIV. 23)
ZP-2	4 ZONE PANEL (DIV. 23)
Z*	ZONE PANEL (* = ZONE NUMBER)
SD	DUCT SMOKE DETECTOR

NOTES:

1. BOXES FOR THERMOSTAT (T) AND S OUTLETS SHALL BE 2"x4" WITH LONG DIMENSION VERTICAL. USE METAL BRACKET OF COVER PLATE ASSEMBLY TO MOUNT THERMOSTAT HORIZONTAL.
2. CONDUIT TO BE 1/2" UNLESS NOTED OTHERWISE.
3. TEMPERATURE CONTROL WIRING THAT IS NOT IN CONDUIT SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING CONSTRUCTION LINES. SEE SPECIFICATIONS FOR ACCEPTABLE FASTENING METHODS AND MAXIMUM ALLOWABLE SPACING BETWEEN FASTENERS.
4. TEMPERATURE CONTROL WIRING THAT IN NOT IN CONDUIT SHALL BE LABELED. PROVIDE A LABEL AT ALL POINTS WHERE TEMPERATURE CONTROL WIRING ENTERS CONDUIT AND AT CONNECTIONS TO DEVICES.
5. SEAL OPEN END OF CONDUIT AIR-TIGHT AROUND THERMOSTAT / SENSOR WIRE WITH SEALANT COMPOUND. SEE SPECIFICIATIONS FOR APPROVED PRODUCT.
6. SEAL ANNULAR SPACE BETWEEN CONDUIT AND OPENING IN FLOOR OR WALL PENETRATIONS WITH SEALANT COMPOUND. SEE SPECIFICATIONS FOR APPROVED PRODUCT.
7. SEAL OPEN END OF CONDUIT AT J-BOX AIR-TIGHT AROUND THERMOSTAT / SENSOR WIRE. SEAL ALL AIR GAPS AROUND J-BOX TO ISLOATE J-BOX FROM WALL CAVITY. SEAL BACK OF THERMOSTAT AROUND WIRES. PACK J-BOX WITH GLASS FIRE BAT INSULATION. USE SEALING COMPOUND SPECIFICALLY MADE FOR REFRIGERANT AND AIR-CONDITIONING APPLICATIONS. SEE SPECIFICATIONS FOR APPROVED PRODUCTS.

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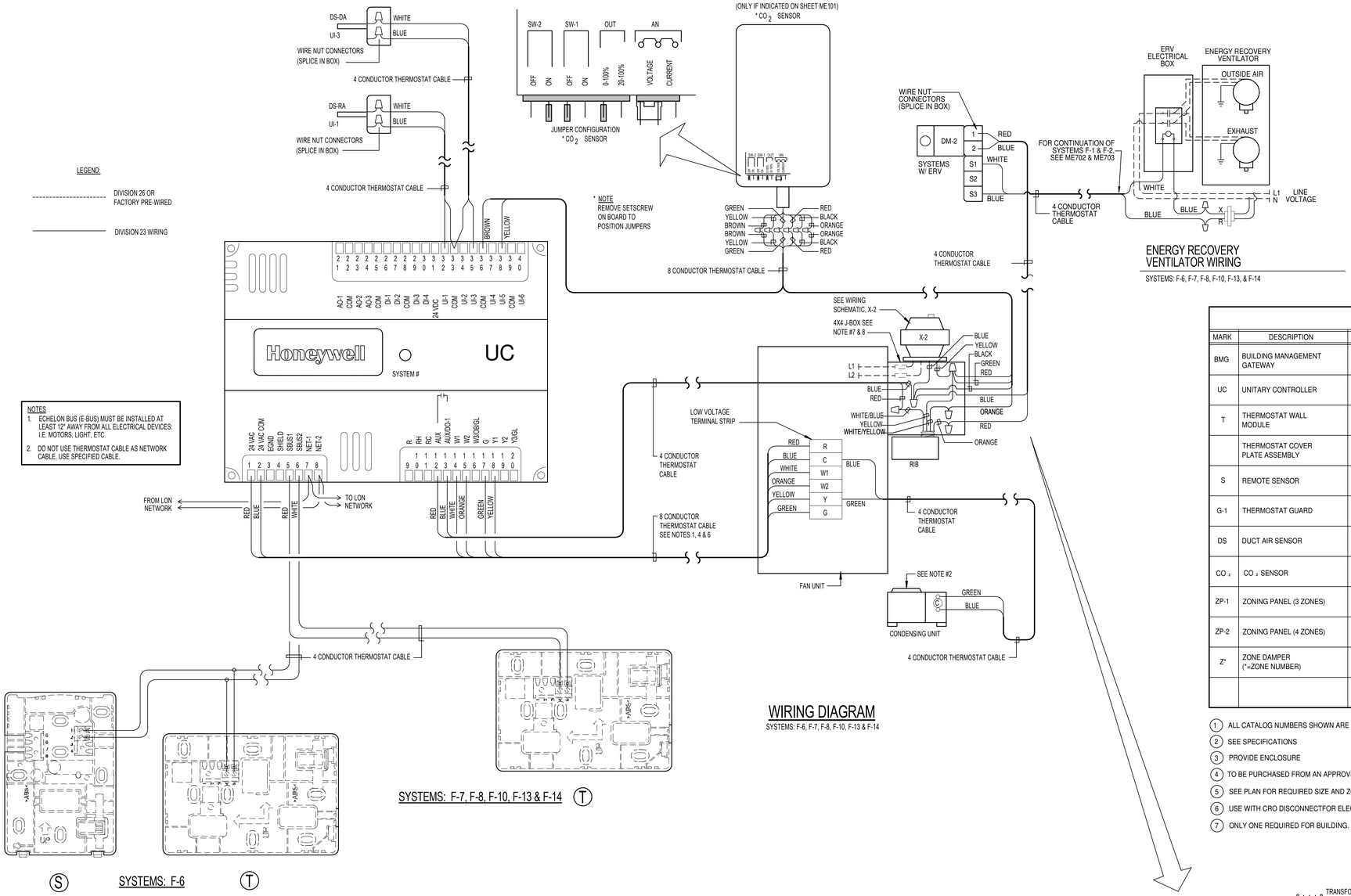
AUTOMATIC TEMPERATURE CONTROL PLANS

ME101



NOTES :

1. THERMOSTAT CABLE- 4, 8 OR 12 CONDUCTOR- 18 AWG SOLID COPPER WIRE INSULATED WITH HIGH DENSITY POLYETHYLENE. CONDUCTORS PARALLEL. ENCLOSED IN BROWN PVC JACKET. (NO 22 AWG CABLE ALLOWED).
2. IF COMPRESSOR UNITS HAVE THEIR OWN POWER SUPPLY IT MAY BE NECESSARY TO ADD ADDITIONAL RELAYS IN COMPRESSOR UNIT TO PROPERLY INTERFACE CONTROLS.
3. USE WIRE NUT CONNECTORS FOR SPLICING CONDUCTORS IN SPECIFIED LOCATIONS. AND TYTON TYPE CRIMP CONNECTORS FOR TERMINAL CONNECTIONS. NO TERMINAL CONNECTORS REQUIRED AT THERMOSTAT OR SENSOR.
4. DO NOT RUN ANY OTHER WIRING IN THIS CONDUIT EXCEPT THERMOSTAT CABLE.
5. VERIFY THAT FAN UNIT FAN SPEED CONTROL WIRING IS SET TO MATCH SCHEDULE SHEET AND THAT FAN OPERATES AT COOLING SPEED ONLY.
6. DO NOT SPLICE WIRE IN RUNS FROM SENSOR TO THERMOSTAT, THERMOSTAT TO FURNACE, AND THERMOSTAT TO DISCHARGE AIR SENSOR.
7. PROVIDE CHASE NIPPLE WITH PLASTIC BUSHING WHEN ATTACHING J-BOX TO EQUIPMENT.
8. PROVIDE CABLE-CLAMP SO THAT CABLES CANNOT BE PULLED OUT OF J-BOX.

CONTROL EQUIPMENT

MARK	DESCRIPTION	CAT. NO. 1	MARK	DESCRIPTION	CAT. NO. 1
BMG	BUILDING MANAGEMENT GATEWAY	LGW1000 (GATEWAY) WPM-8000 (WALL PLUG)	RP-6	RELAY PANEL 24X18X6W/COVER	2 4
UC	UNITARY CONTROLLER	YCRL64385R1000	DM-1	DAMPER MOTOR TWO POSITION	MS8105A1030
T	THERMOSTAT WALL MODULE	LCBS WALL MODULE	DM-2	DAMPER MOTOR 2 POS W/END SWITCH	MS8105A1130
	THERMOSTAT COVER PLATE ASSEMBLY	50002883-001	X-1	TRANSFORMER 120, 208, 240V/24V 75VA	AT175F1023
S	REMOTE SENSOR	TR40	X-2	TRANSFORMER 120V/24V 50VA	AT150F1022
G-1	THERMOSTAT GUARD	2	SD-1	DUCT SMOKE DETECTOR	2
DS	DUCT AIR SENSOR	C7041B2005	SR	SMOKE RELAY 30 AMP 120V COIL	DP2030B5003 3
CO_2	CO_2 SENSOR	C7232B1006	RIB	TWO POLE RELAY	RIBU1C 2
ZP-1	ZONING PANEL (3 ZONES)	HZ322	RIB 20A	TWO POLE RELAY 20 AMP	RIB2401B 6
ZP-2	ZONING PANEL (4 ZONES)	HZ432	OAS	GLOBAL OUTDOOR AIR SENSOR	C7041F2006 7
Z*	ZONE DAMPER (*=ZONE NUMBER)	ZD or ARD 5	CRO	COMBINATION RELAY & THERMAL OVERLOAD DISCONNECT	2 4
			E-BUS	ECHELON NETWORK CABLE	W221P-2001B

1. ALL CATALOG NUMBERS SHOWN ARE HONEYWELL UNLESS NOTED OTHERWISE.
2. SEE SPECIFICATIONS
3. PROVIDE ENCLOSURE
4. TO BE PURCHASED FROM AN APPROVED PER-BUILT PANEL BUILDER SEE SPECIFICATION.
5. SEE PLAN FOR REQUIRED SIZE AND ZONE NUMBER.
6. USE WITH CRO DISCONNECTFOR ELECTRIC WALL HEATER. CONTROL FROM UC.
7. ONLY ONE REQUIRED FOR BUILDING. MAY BE CONNECTED TO ANY CONTROLLER AT NORTH SIDE.

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Drawing Issue and Revision Schedule

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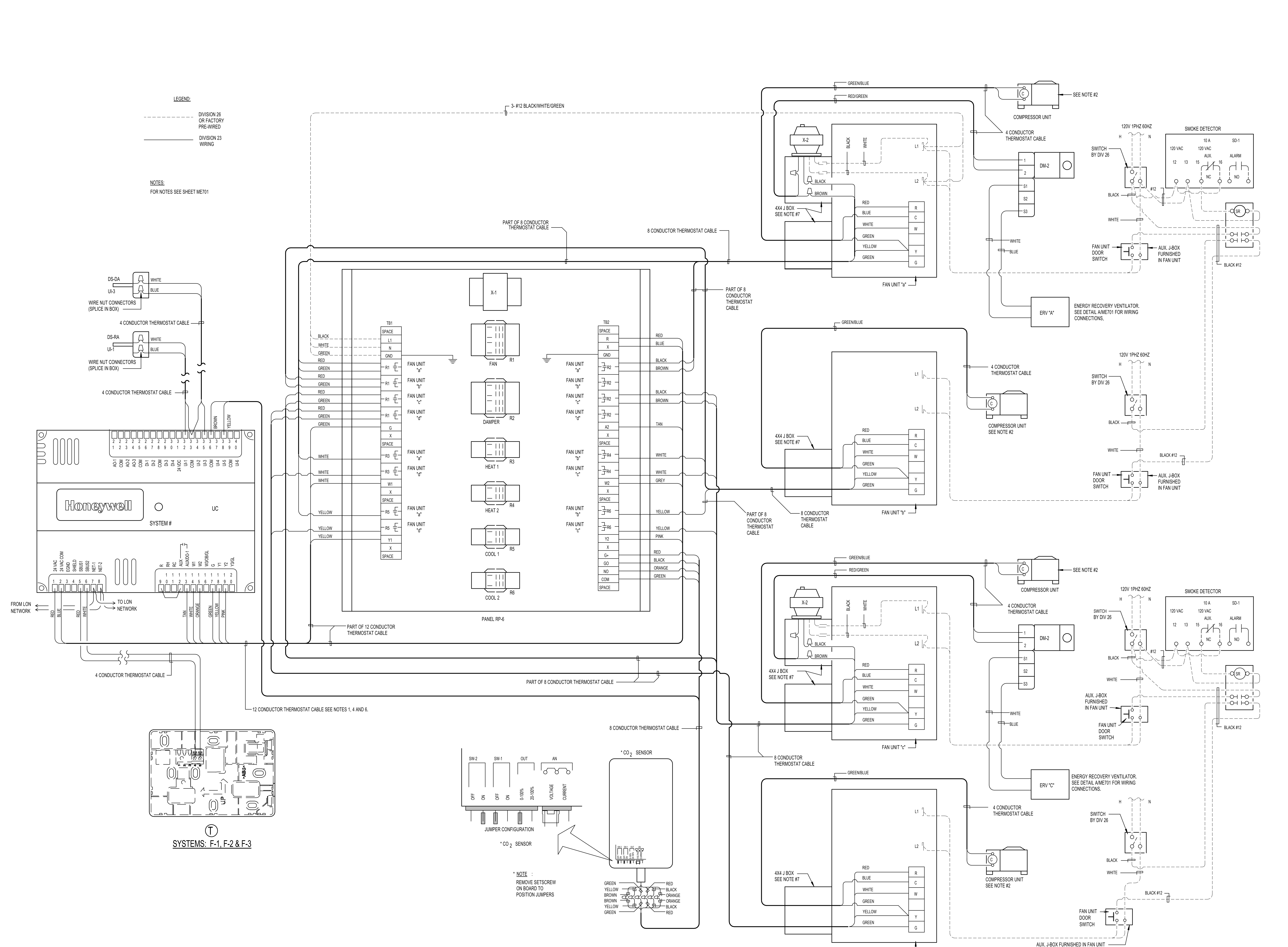
AUTOMATIC TEMPERATURE CONTROL DIAGRAMS

ME701



WIRING DIAGRAM

SYSTEMS: F-1, F-2, F-3

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AUTOMATIC TEMPERATURE CONTROL DIAGRAMS

ME702

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WHITE

ZONE 4

Z4

ZONE 1

Z1

ZONE 2

Z2

ZONE 3

Z3

T ZONE 4

UC
ZONE 4 ON ZP-2 PANEL ONLY.
(SYSTEM F-9 ONLY)

AO-1 COM AO-2 AO-3 COM DI-1 DI-2 COM DI-3 DI-4 24 VDC UI-1 COM UI-2 UI-3 COM UI-4 UI-5 COM UI-6

24 VAC 24 VAC COM EGND SHIELD SBUS1 SBUS2 NET-1 NET-2

R RH RC AUX AUX/DO-1 W1 W2 W3/OB/GL G Y1 Y2 Y3/GL

BROWN YELLOW

FROM LON NETWORK

TO LON NETWORK

RED BLUE RED WHITE

RED BLUE WHITE ORANGE GREEN YELLOW WHITE

4 CONDUCTOR THERMOSTAT CABLE

8 CONDUCTOR THERMOSTAT CABLE

ZONE 4 DAMPER M1 M4 M6

THERMOSTAT R C W1/E W2 Y1 Y2 G O/B L

RED BLUE WHITE BROWN YELLOW GREEN

EQUIPMENT RH RC W1/E W2 W3 Y1 Y2 G O B DS/BK

POWER (24 VAC) R C

ADD-A-ZONE AZ1 AZ2

SENSOR OT OT DATS DATS

WIRELESS A B C D

DEDICATED TRANSFORMER X-1

X-2

L1 L2

DS-SUPPLY

HZ432K

HEAT 1 HEAT 2 HEAT 3 COOL 1 COOL 2 FAN PURGE EM HEAT

ZONE 1 ZONE 2 ZONE 3 ZONE 4

EMERGENCY HEAT

WIRELESS HOME CONFIG CHECK OUT MODE

BACK ADJUST SETTING NEXT

ZP-1 ZP-1 HAS (3) ZONE DAMPERS (SYSTEM F-4, F-5, F-11, F-12, & F-15)

ZP-2 ZP-2 HAD (4) ZONE DAMPERS (SYSTEM F-9 ONLY)

T ZONE 1

UC
ZONE 1
SYSTEM F-4, F-5, F-11, F-12, & F-15

T ZONE 2

UC
ZONE 2
SYSTEM F-4, F-5, F-11, F-12, & F-15

T ZONE 3

UC
ZONE 3
SYSTEM F-4, F-5, F-11, F-12, & F-15

8 CONDUCTOR THERMOSTAT CABLE

8 CONDUCTOR THERMOSTAT CABLE

8 CONDUCTOR THERMOSTAT CABLE

8 CONDUCTOR THERMOSTAT CABLE

4 CONDUCTOR THERMOSTAT CABLE

4 CONDUCTOR THERMOSTAT CABLE

4 CONDUCTOR THERMOSTAT CABLE

4 CONDUCTOR THERMOSTAT CABLE

8 CONDUCTOR THERMOSTAT CABLE SEE NOTES 1, 4 & 6

RED BLUE

SW-2 SW-1 OUT AN

OFF ON OFF ON 0-100% 20-100% VOLTAGE CURRENT

JUMPER CONFIGURATION

* CO 2 SENSOR

* CO 2 SENSOR

* NOTE:
REMOVE SETSCREW ON BOARD TO POSITION JUMPERS

GREEN YELLOW BROWN BROWN YELLOW GREEN

RED BLACK ORANGE ORANGE BLACK RED

4X4 J-BOX SEE NOTE #7 & 8

X-2

BLUE YELLOW BLACK GREEN RED

L1 L2

BLUE RED

BLUE ORANGE RED

WHITE/BLUE YELLOW WHITE/YELLOW

ORANGE

RIB

RED BLUE WHITE ORANGE YELLOW GREEN

R C W1 W2 Y G

BLUE GREEN

LOW VOLTAGE TERMINAL STRIP

FAN UNIT

DM-2 1 2 S1 S2 S3

RED BLUE WHITE BLUE

WIRE NUT CONNECTORS (SPLICE IN BOX)

TO ERV. REFER TO DETAIL A/ME701

SEE NOTE #2

GREEN BLUE

CONDENSING UNIT

FOR X-2 TRANSFORMER AND RIB RELAY WIRING SEE 'WIRING SCHEMATIC,X-2' ON SHEET ME701

LEGEND:

DIVISION 26 OR FACTORY PRE-WIRED

DIVISION 23 WIRING

NOTES:

FOR NOTES SEE SHEET ME701

WIRING DIAGRAM

SYSTEM: F-4, F-5, F-9, F-11, F-12 & F-14

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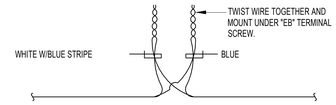
AUTOMATIC TEMPERATURE CONTROL DIAGRAMS

ME703



A E-BUS CONNECTION DETAIL

NO SCALE

E-BUS WIRING DIAGRAM

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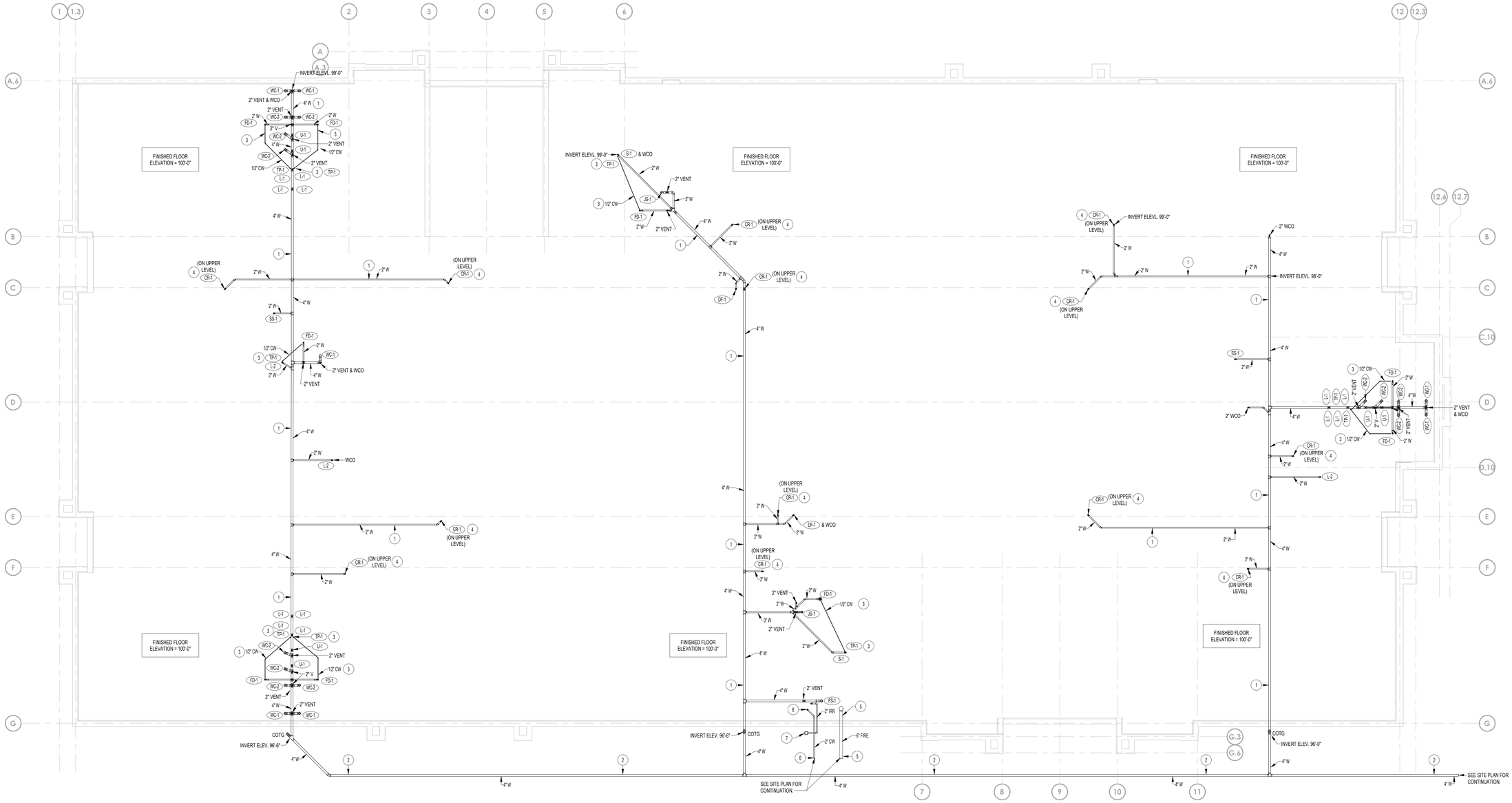
AUTOMATIC TEMPERATURE CONTROL PANELS

ME704



PLUMBING FOUNDATION PLAN

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

PLAN NOTES:

1. ALL WASTE LINES BELOW FLOORS TO BE GRADED AT 1/4" SLOPE PER FOOT. PROVIDE CLEAN OUTS IN LINES AT ALL CHANGES IN DIRECTION AND AT 100'-0" MAXIMUM INTERVALS.
2. REFER TO SITE PLAN FOR ACTUAL LOCATION AND GRADING OF WASTE PIPING OUTSIDE OF BUILDING. PIPE SHOWN HERE FOR COORDINATION PURPOSES.
3. RUN 1/2" COLD WATER LINE WITH 'PEX' PIPING BELOW FLOOR BETWEEN TRAP PRIMER AND FLOOR DRAIN. REFER TO TRAP PRIMER DETAILS ON SHEET P501 FOR TYPICAL INSTALLATION. SEE DETAIL H/P501.
4. CONDENSATE RECEIVER LOCATED ON EQUIPMENT PLATFORM LEVEL. RISE 2" WASTE LINE UP IN WALL ABOVE WITH CLEANOUT AT 12" ABOVE FLOOR. REFER TO SHEET P101 FOR CONTINUATION OF PIPING ABOVE.
5. 6" FIRE WATER LINE TO BUILDING. RISE UP THRU FLOOR AND CONNECT TO FIRE RISER AND ALARM VALVE. REFER TO LARGE SCALE PLAN ON SHEET P402. AND TO FIRE RISER DETAIL ON SHEET FS201 FOR PIPING CONNECTIONS.
6. 2" DOMESTIC COLD WATER SERVICE LINE TO BUILDING. RISE UP THRU FLOOR AND CONNECT TO PRV STATION ABOVE. REFER TO LARGE SCALE PLAN ON SHEET P402 AND TO WATER PRV DETAIL K/ P501.
7. DROP 2" LAWN SPRINKLER LINE DOWN FROM PRV STATION ABOVE. RUN TO EXTERIOR OF BUILDING AND CAP FOR FUTURE CONNECTION. MINIMUM BURY OF IRRIGATION LINE TO BE 36" BELOW GRADE. REFER TO DETAIL K/P501.

GENERAL NOTES:

- A- ALL PLUMBING SHALL COMPLY WITH THE MOST STRINGENT OF APPLICABLE CODES, ORDINANCES, OR THE SPECIFICATIONS.
- B- ALL FIXTURES SHALL BE PROPERLY VENTED TO THE ATMOSPHERE.
- C- REFER TO MECHANICAL SHEETS FOR LOCATIONS OF MECHANICAL EQUIPMENT AND DUCTWORK. COORDINATE ALL WORK TO FIT AVAILABLE SPACE.
- D- GAS LINE TO BE RUN ON EQUIPMENT PLATFORM LEVEL UNLESS OTHERWISE NOTED OR SHOWN.
- E- WATER PIPING AND VENT PIPING SHALL BE RUN ON EQUIPMENT PLATFORM LEVEL UNLESS OTHERWISE NOTED OR SHOWN.
- F- FOR INDIVIDUAL LINE SIZES TO FIXTURES, SEE PLUMBING FIXTURE SCHEDULE ON SHEET P401.
- G- DO NOT RUN PLUMBING PIPES IN SHEAR WALLS UNLESS NOTED OTHERWISE.
- H- MINIMUM WASTE PIPING BELOW CONCRETE FLOORS SHALL BE 2".
- J- DUE TO CLOSE PROXIMITY OF WATER, VENT AND DRAIN PIPING AS WELL AS DUCTWORK, EQUIPMENT, AND HVAC PIPING, THE PLUMBING CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH THE MECHANICAL AND SHEET METAL CONTRACTORS.
- K- FOR PIPE SIZES NOT SHOWN ON THIS SHEET, REFER TO LARGE SCALE PLANS, PIPING SCHEMATICS AND FIXTURE SCHEDULE ON SHEET P401.
- L- REFER TO MECHANICAL SHEETS FOR ANY ADDITIONAL WORK.
- M- COORDINATE LOCATION OF EACH DOMESTIC WATER ISOLATION VALVE WITH MECHANICAL AND SHEET METAL INSTALLATION TO PROVIDE REQUIRED ACCESS AND VISIBILITY TO VALVE.
- N- CONTRACTOR SHALL RUN ALL WATER LINES WITHIN BUILDING INSULATION ENVELOPE.
- O- LEAVE 6" CLEAR SPACE ON EQUIPMENT DECK BETWEEN FURNACES, DUCTWORK, ETC. AND HIGH WALL FOR GAS PIPING, CONDUIT, DRAINS, ETC. RACK ALL PIPING AND CONDUIT ON WALL WITH UNISTRUT SUPPORTS.
- P- MINIMIZE RUNNING PIPES ON PLATFORM FLOOR THAT WILL IMPEDE WALKWAYS.

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THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Rexburg ID Custom 10 Ward Meetinghouse
Married Student Second Stake
5th West and University Boulevard, Rexburg, Idaho
43.803303, -111.796612

Issue Date 11 Apr 2023 | Church Property: 510-3560 | County Parcel: RPR #4482E31400 | BHDA Project No. 2109

Drawing Issue and Revision Schedule

#	Date	Description

PLUMBING FOUNDATION PLAN

P100

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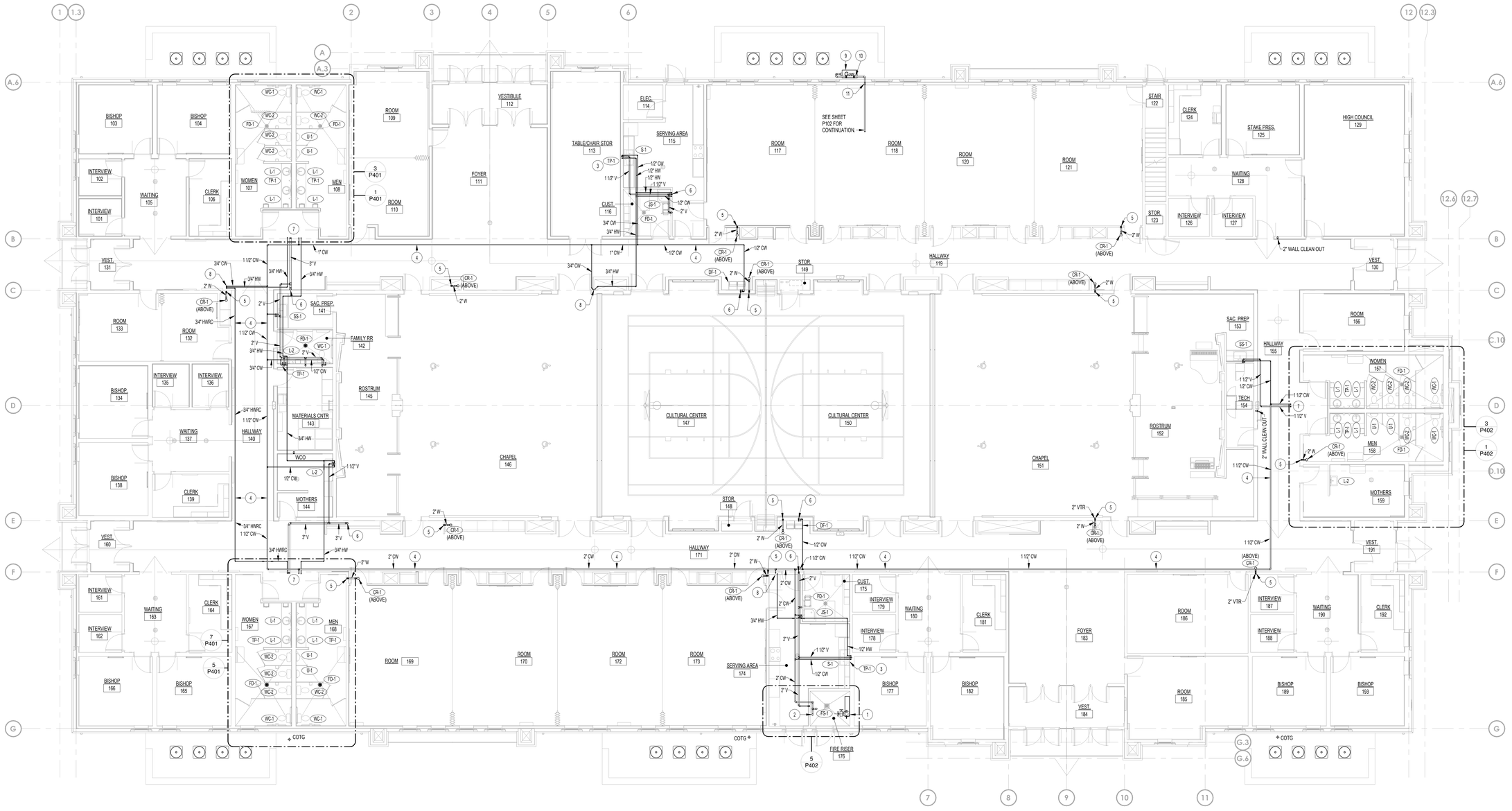
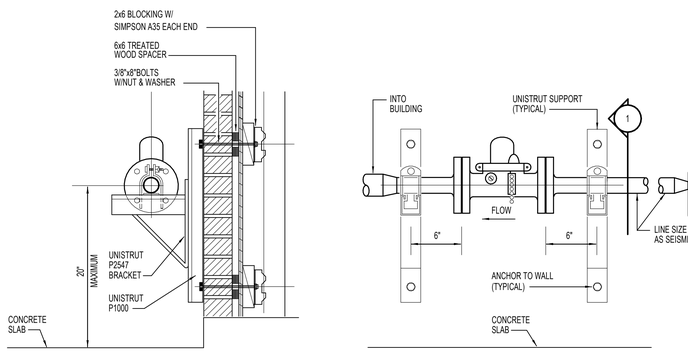


PLUMBING FLOOR PLAN

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



1 SECTION

SCALE: NONE

A SEISMIC VALVE DETAIL

SCALE: NONE

NOTES:

1. VALVE MUST BE INSTALLED WITH THE CHAIN AND RESET BUTTON FACING OUT AND ACCESSIBLE.
2. THE CHAIN IS A PLUMB LINE. MAKE SURE VALVE IS MOUNTED ABSOLUTELY LEVEL AND NO PART OF THE CHAIN IS TOUCHING THE RING.
3. VALVE MUST BE INSTALLED WITH GAS FLOW IN DIRECTION OF "ARROW" CAST INTO VALVE BODY.
4. SIZE SEISMIC VALVE ACCORDING TO TOTAL BUILDING MBH.
5. SEISMIC VALVE TO BE LOCATED WITHIN THE FIRST SIX LINEAL FEET OF PIPE FROM METER.
6. SEISMIC VALVE MUST BE 2" MIN. WITH FLANGE.

LEGEND

SYMBOL OR ABBREVIATION	MEANING	SYMBOL OR ABBREVIATION	MEANING
HOT WATER LINE		WALL CLEANOUT	WCO
COLD WATER LINE		CLEANOUT	CO
VENT LINE		CLEANOUT TO GRADE	COTG
WASTE LINE		FLOOR CLEANOUT	FCO
GAS LINE	G	BALL VALVE	
VENT THRU ROOF	VTR	UNION	
CONDENSATE DRAIN	CD	SNOW MELT SYSTEM HOT WATER SUPPLY	SMS
SECONDARY CONDENSATE DRAIN	SD	SNOW MELT SYSTEM HOT WATER RETURN	SMR

PLAN NOTES:

1. RISE 6" FIRE WATER LINE UP THRU FLOOR AND CONNECT TO FIRE RISER AND ALARM VALVE. REFER TO LARGE SCALE PLAN ON SHEET P402 AND TO FIRE RISER DETAIL ON SHEET FS201 FOR PIPING CONNECTIONS.
2. RISE 2" DOMESTIC COLD WATER SERVICE LINE UP THRU FLOOR AND CONNECT TO PRV STATION ABOVE. REFER TO LARGE SCALE PLAN ON SHEET P402 AND TO WATER PRV DETAIL ON SHEET KIP501.
3. INSTALL TRAP PRIMER BELOW COUNTER. CONNECT TO 1/2" COLD WATER LINE AND RUN 1/2" COLD WATER LINE BELOW FLOOR TO CORRESPONDING FLOOR DRAIN. REFER TO FOUNDATION PLAN ON SHEET P100 FOR PIPING BELOW FLOOR AND TO DETAILS HIP501 FOR TYPICAL INSTALLATION OF TRAP PRIMER.
4. DOMESTIC WATER PIPING TO BE RUN ABOVE CEILINGS AND/OR EQUIPMENT PLATFORM ABOVE. PIPING SHOWN HERE FOR CLARITY. PIPING RUNS ARE SHOWN HORIZONTALLY FOR CLARITY PURPOSES. PIPING SHALL BE STACKED ON WALL. REFER TO GENERAL NOTE #O.
5. CONDENSATE RECEIVER LOCATED ON EQUIPMENT PLATFORM LEVEL. DROP 2" WASTE LINE DOWN IN WALL WITH CLEANOUT AT 12" ABOVE FLOOR. REFER TO SHEET P102 FOR VENT PIPING ABOVE. REFER TO DETAIL A/P501 FOR TYPICAL INSTALLATION OF FIXTURE.
6. VENT PIPING UP IN WALL. REFER TO SHEET P102 FOR CONTINUATION.
7. REFER TO LARGE SCALE PLANS ON SHEETS P401 AND P402 FOR CONTINUATION OF WATER AND VENT PIPING ABOVE TOILET ROOMS.
8. RISE 3/4" COLD WATER AND 3/4" HOT WATER LINES (AND 3/4" HOT WATER RECIRC. (WHERE APPLICABLE) UP AND CONNECT TO WATER HEATER ON EQUIPMENT PLATFORM. REFER TO SHEET P102 FOR WATER HEATER AND RECIRCULATING PUMP WHERE APPLICABLE) LOCATIONS.
9. GAS METER BY LOCAL GAS COMPANY. SIZE FOR 2,750,000 BTU WITH 2 PSI DISCHARGE PRESSURE. REFER TO GAS LOAD CALCUATIONS ON SHEET P801.
10. RISE 2" GAS LINE ABOVE METER AND INSTALL SEISMIC GAS VALVE. SEE DETAIL ON THIS SHEET.
11. RISE 2" (2 psi) GAS LINE UP INSIDE WALL CAVITY TO ABOVE CEILINGS. REFER TO SHEET P102 FOR CONTINUATION OF PIPING.

GENERAL NOTES:

- A- ALL PLUMBING SHALL COMPLY WITH THE MOST STRINGENT OF APPLICABLE CODES, ORDINANCES, OR THE SPECIFICATIONS.
- B- ALL FIXTURES SHALL BE PROPERLY VENTED TO THE ATMOSPHERE.
- C- REFER TO MECHANICAL SHEETS FOR LOCATIONS OF MECHANICAL EQUIPMENT AND DUCTWORK. COORDINATE ALL WORK TO FIT AVAILABLE SPACE.
- D- GAS LINE TO BE RUN ON EQUIPMENT PLATFORM LEVEL UNLESS OTHERWISE NOTED OR SHOWN.
- E- WATER PIPING AND VENT PIPING SHALL BE RUN ON EQUIPMENT PLATFORM LEVEL UNLESS OTHERWISE NOTED OR SHOWN.
- F- FOR INDIVIDUAL LINE SIZES TO FIXTURES, SEE PLUMBING FIXTURE SCHEDULE ON SHEET P402.
- G- DO NOT RUN PLUMBING PIPES IN SHEAR WALLS UNLESS NOTED OTHERWISE.
- H- MINIMUM WASTE PIPING BELOW CONCRETE FLOORS SHALL BE 2".
- J- DUE TO CLOSE PROXIMITY OF WATER, VENT AND DRAIN PIPING AS WELL AS DUCTWORK, EQUIPMENT, AND HVAC PIPING, THE PLUMBING CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH THE MECHANICAL AND SHEET METAL CONTRACTORS.
- K- FOR PIPE SIZES NOT SHOWN ON THIS SHEET, REFER TO LARGE SCALE PLANS, PIPING SCHEMATICS AND FIXTURE SCHEDULE ON SHEET P402.
- L- REFER TO MECHANICAL SHEETS FOR ANY ADDITIONAL WORK.
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43.803303, -111.794612

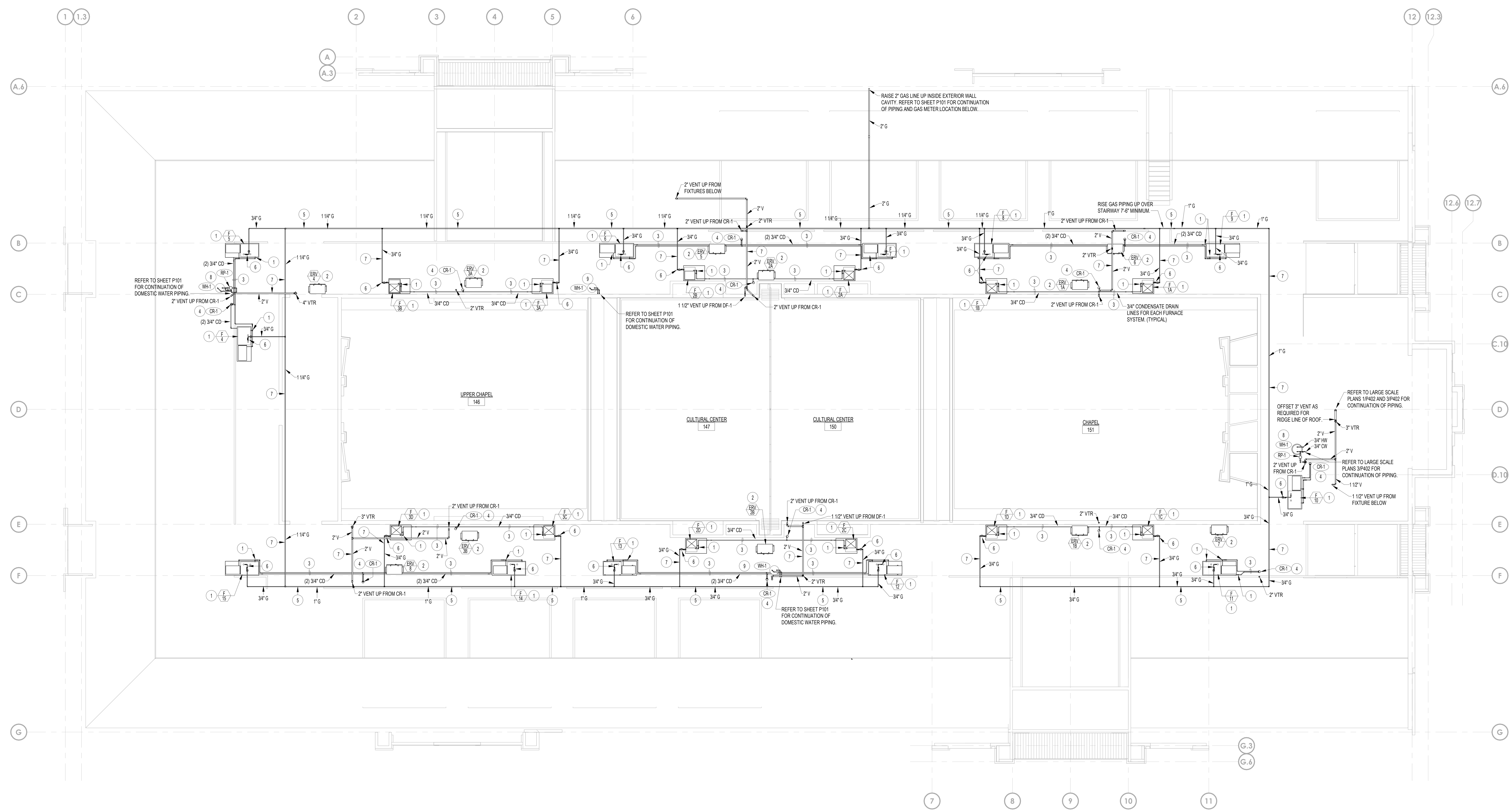
Issue Date 11 Apr 2023 | Church Property: 510-3560 | County Parcel: RPR 6H40E315400 | BHDA Project No. 2107

Drawing Issue and Revision Schedule

#	Date	Description

PLUMBING FLOOR PLAN

P101



EQUIPMENT PLATFORM PLUMBING PLAN

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

PLAN NOTES:

1. FURNACE, DX COOLING COIL, AND DRAIN PAN BY MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS. PLUMBING CONTRACTOR TO ROUGH-IN AND CONNECT 3/4" CONDENSATE DRAIN LINE FROM DX COIL AND FROM FURNACE. CONNECT SEPARATE 3/4" DRAIN LINE TO DRAIN PAN. RUN (2) SEPARATE DRAIN LINES FROM EQUIPMENT TO NEAREST CR-1 DRAIN HUB.
2. ERV UNIT TO BE INSTALLED BY MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS. COORDINATE DRAIN LINES, WATER LINES, AND GAS PIPING WITH UNIT AND CORRESPONDING DUCTWORK.
3. RUN CONDENSATE DRAIN LINE NEAR FLOOR. SUPPORT WITH FLOOR MOUNTED SUPPORTS AT 6'-0" MAXIMUM SPACING. PIPING TO BE GRADED AT 1/8" MINIMUM SLOPE TOWARDS CR-1. ADJUST SUPPORTS AS REQUIRED FOR GRADING. COORDINATE PIPE WITH EQUIPMENT MOUNTED ON PLATFORM FLOOR. SEE DETAIL E/P501
4. CONDENSATE RECEIVER LOCATED ON EQUIPMENT PLATFORM LEVEL. DROP 2" WASTE LINE DOWN IN WALL BELOW. RISE 2" VENT UP AND CONNECT TO NEAREST VTR AS SHOWN. REFER TO DETAIL A/P501 FOR TYPICAL CR-1 INSTALLATION.
5. RUN GAS PIPING ABOVE EQUIPMENT PLATFORM. REFER TO MECHANICAL DRAWINGS TO COORDIANTE WITH DUCTWORK AND EQUIPMENT.
6. CONNECT 3/4" GAS LINE TO FURNACE WITH SHUT-OFF VALVE, PRESSURE REGULATOR AND FLEXIBLE HOSE CONNECTION. REFER TO DETAIL G/P501 FOR TYPICAL GAS LINE CONNECTION. VENT REGULATOR TO EXTERIOR AS RECOMMENDED BY MANUFACTURER.
7. RISE ALL PIPING TO MINIMUM OF 7'-0" ABOVE PLATFORM FLOOR WHEN CROSSING FROM ONE SIDE TO THE OTHER. COORDINATE PIPING WITH EQUIPMENT AND DUCTWORK. REFER TO MECHANICAL DRAWINGS FOR DUCTWORK LOCATIONS.
8. RISE 3/4" HOT AND COLD WATER LINES, AND 3/4" HOT WATER RECIRC LINES UP THRU FLOOR AND CONNECT TO WATER HEATER. REFER TO DETAIL D/P501 FOR TYPICAL PIPING CONNECTIONS.
9. RISE 3/4" HOT AND COLD WATER LINES UP THRU FLOOR AND CONNECT TO WATER HEATER. REFER TO DETAIL D/P501 FOR TYPICAL PIPING CONNECTIONS.

GENERAL NOTES:

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C- REFER TO MECHANICAL SHEETS FOR LOCATIONS OF MECHANICAL EQUIPMENT AND DUCTWORK. COORDINATE ALL WORK TO FIT AVAILABLE SPACE.

D- GAS LINE TO BE RUN ON EQUIPMENT PLATFORM LEVEL UNLESS OTHERWISE NOTED OR SHOWN.

E- WATER PIPING AND VENT PIPING SHALL BE RUN ON EQUIPMENT PLATFORM LEVEL UNLESS OTHERWISE NOTED OR SHOWN.

F- FOR INDIVIDUAL LINE SIZES TO FIXTURES, SEE PLUMBING FIXTURE SCHEDULE ON SHEET P402.

G- DO NOT RUN PLUMBING PIPES IN SHEAR WALLS UNLESS NOTED OTHERWISE.

H- MINIMUM WASTE PIPING BELOW CONCRETE FLOORS SHALL BE 2".

J- DUE TO CLOSE PROXIMITY OF WATER, VENT AND DRAIN PIPING AS WELL AS DUCTWORK, EQUIPMENT, AND HVAC PIPING, THE PLUMBING CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH THE MECHANICAL AND SHEET METAL CONTRACTORS.

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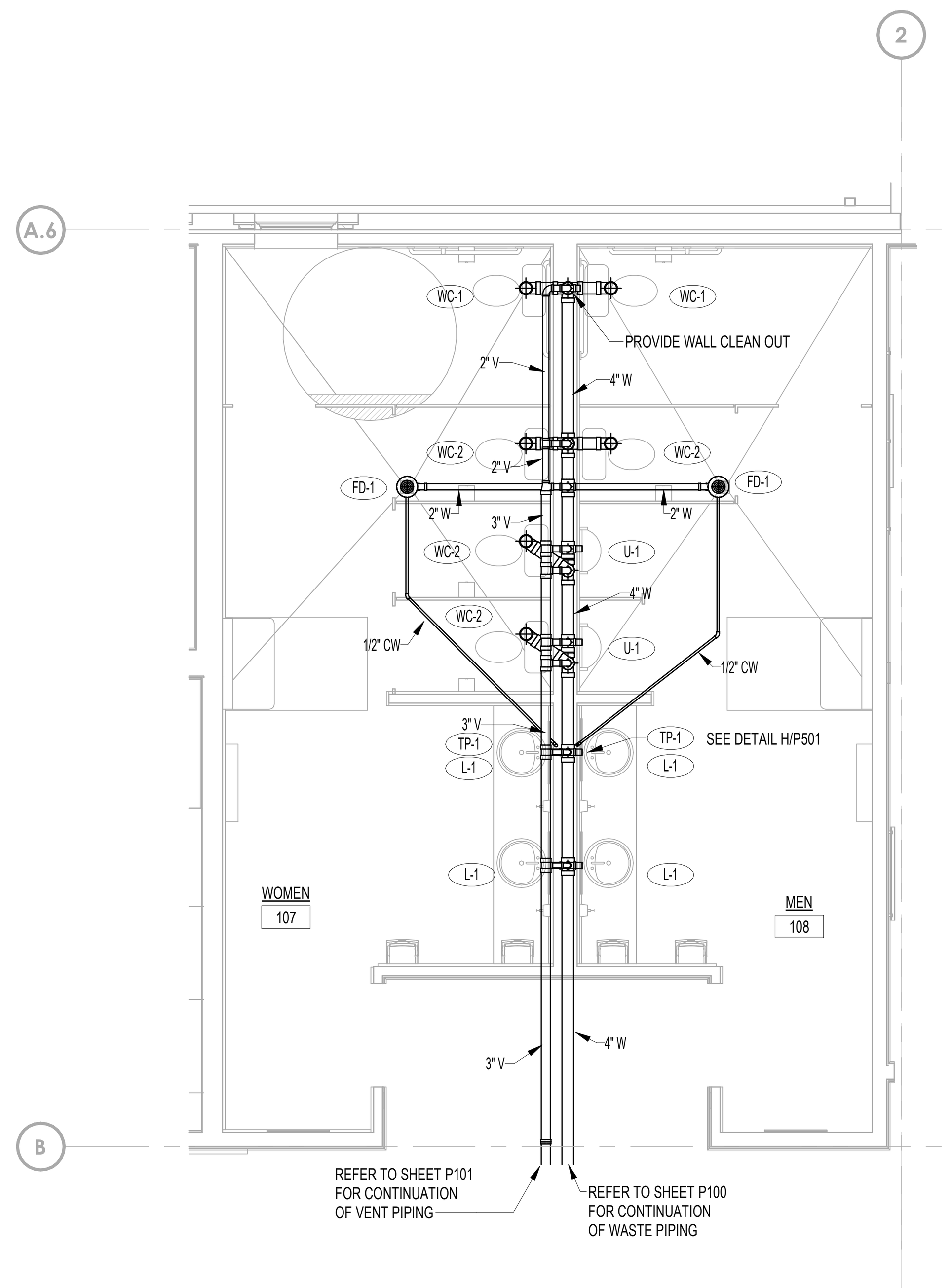
Issue Date	Church Property:	County Parcel:	BHDA Project No.
11 Apr 2023	510-3560	RPR 6N40E315400	2109

Drawing Issue and Revision Schedule

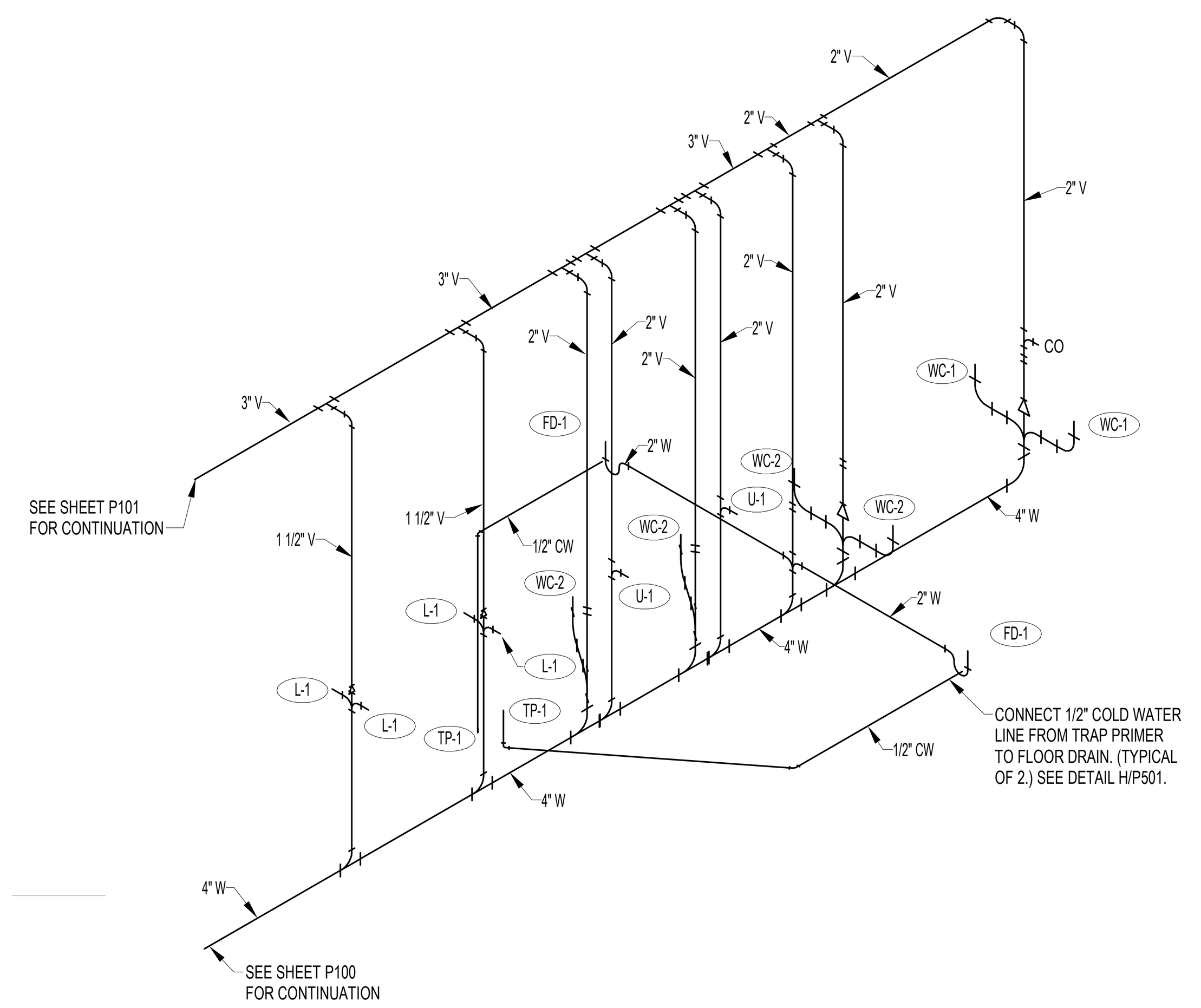
#	Date	Description

EQUIPMENT PLATFORM PLUMBING PLAN

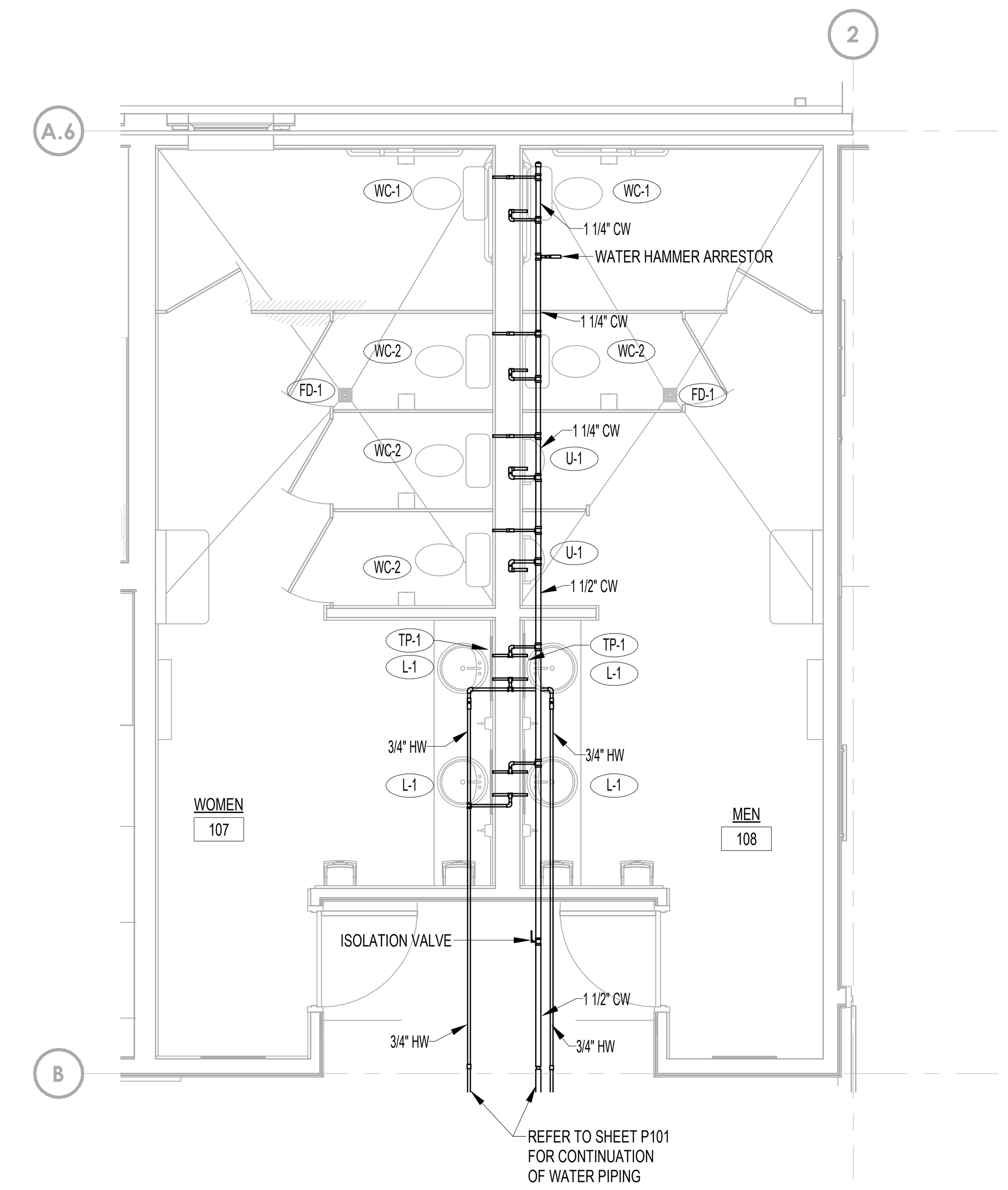
P102



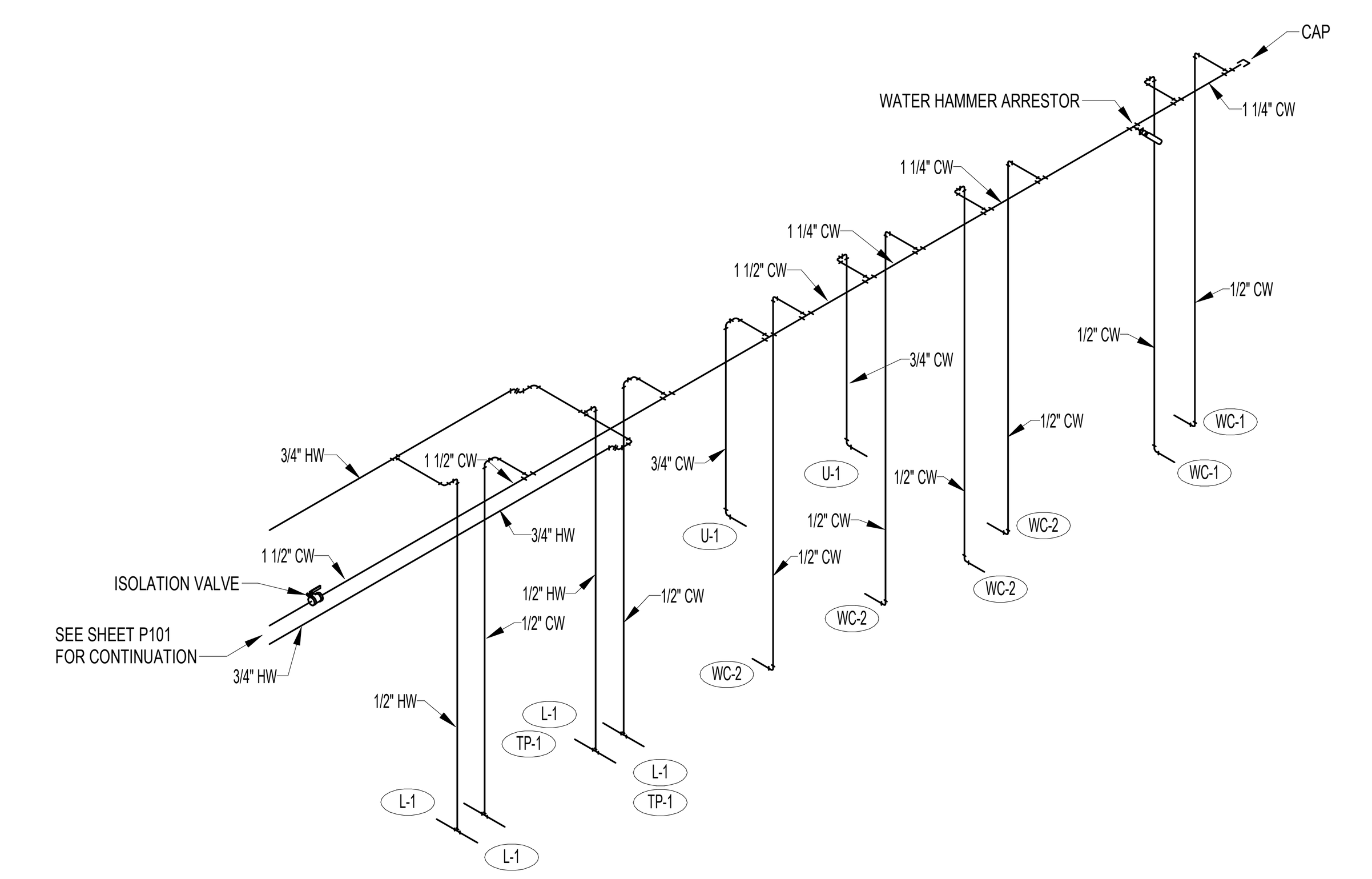
1 P401 LARGE SCALE WASTE AND VENT PIPING PLAN - TOILET ROOMS 107 & 108
SCALE: 1/4" = 1'-0"



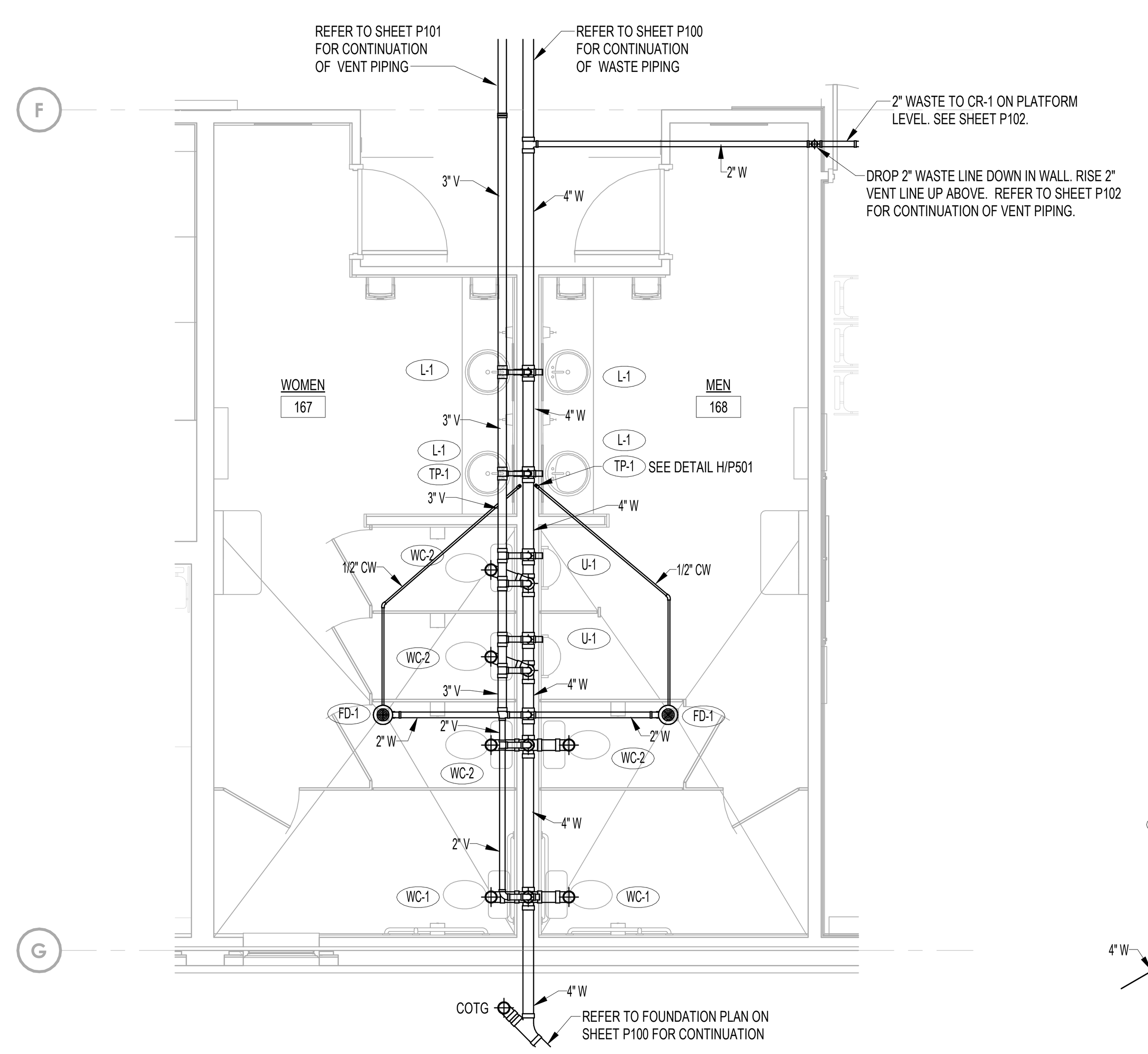
2 P401 LARGE SCALE WASTE AND VENT PIPING SCHEMATIC - TOILET ROOMS 107 & 108
SCALE: 1/4" = 1'-0"



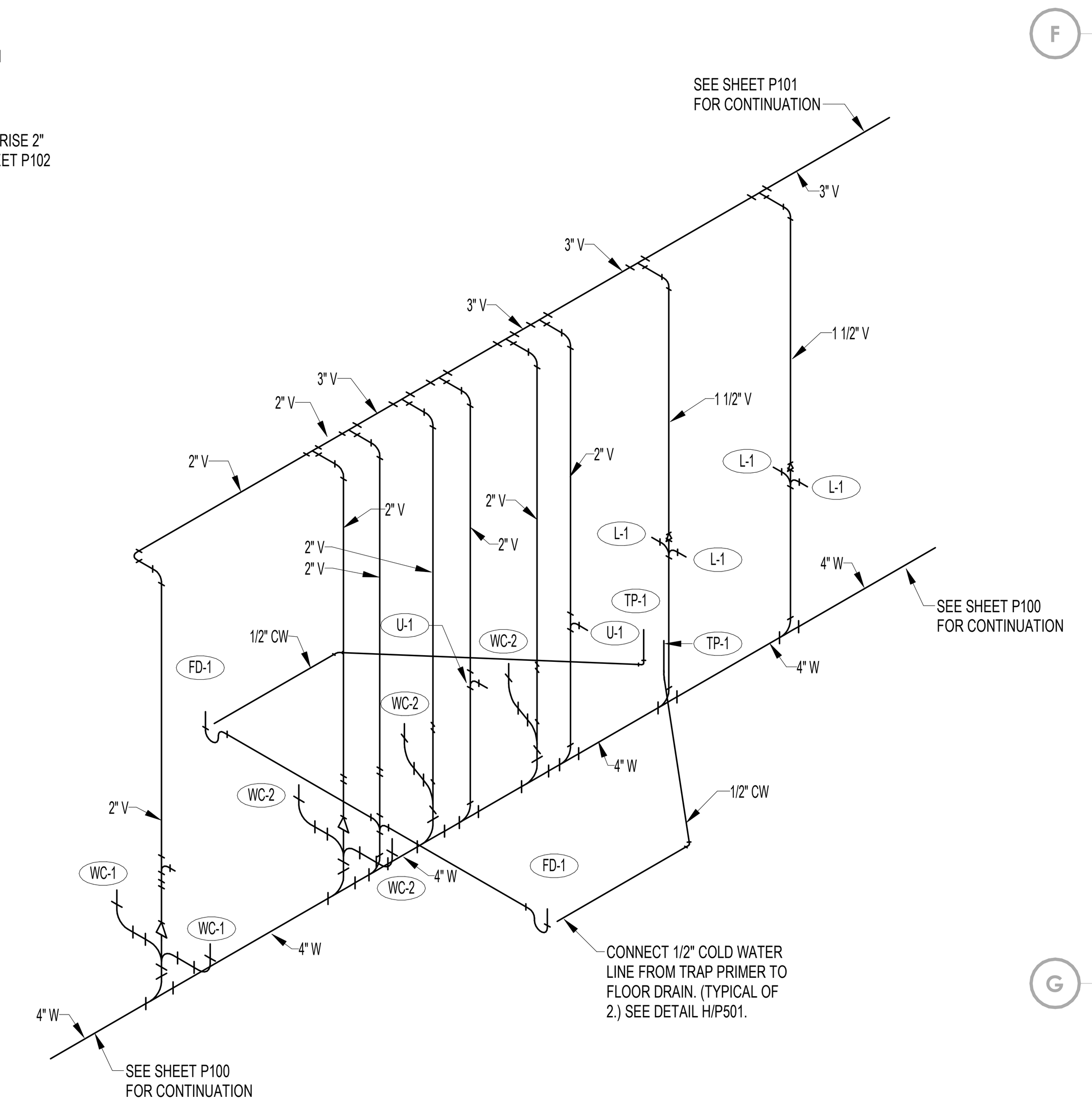
3 P401 LARGE SCALE WATER PIPING PLAN - TOILET ROOMS 107 & 108
SCALE: 1/4" = 1'-0"



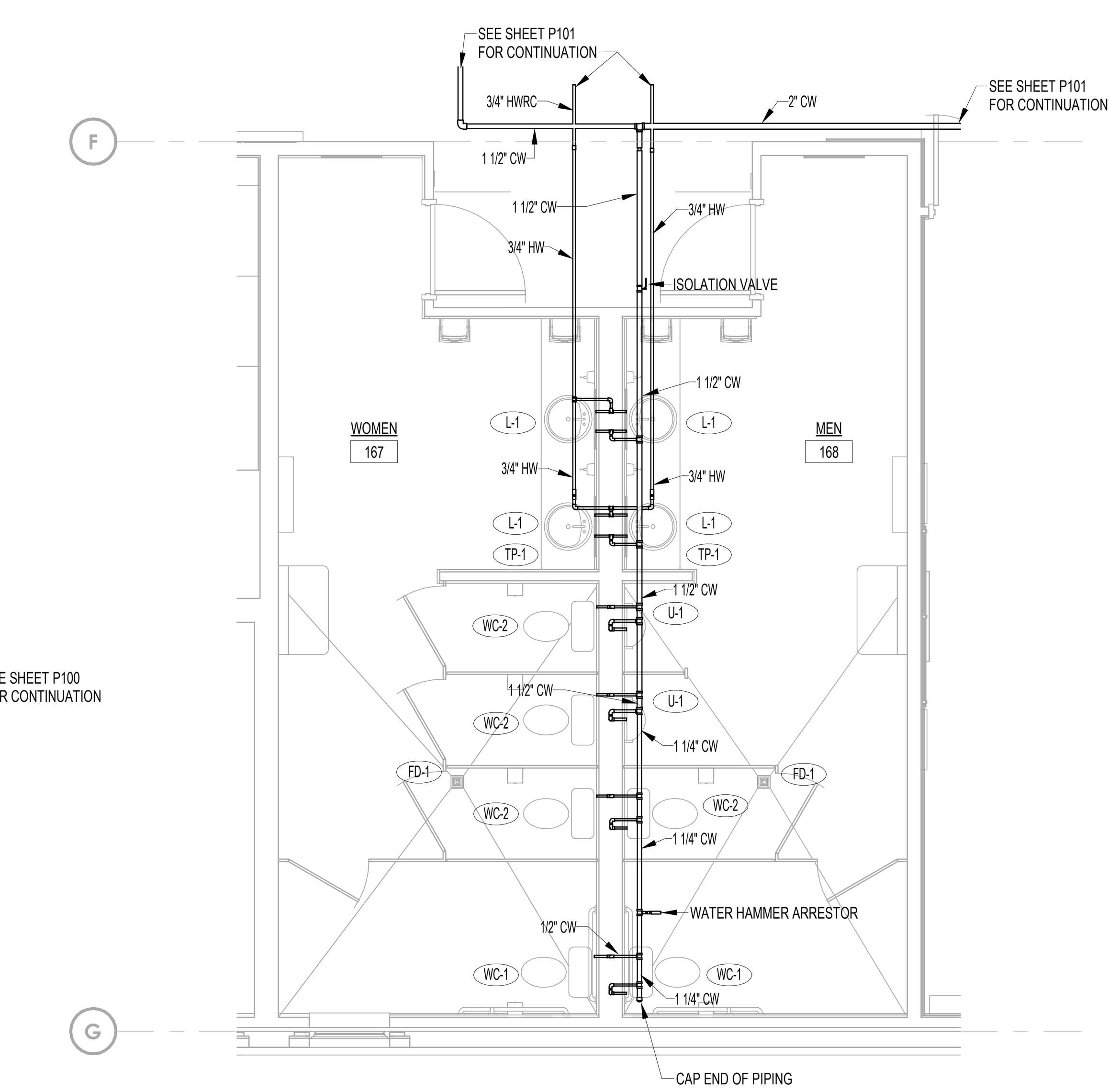
4 P401 LARGE SCALE WATER PIPING SCHEMATIC - TOILET ROOMS 107 & 108
SCALE: 1/4" = 1'-0"



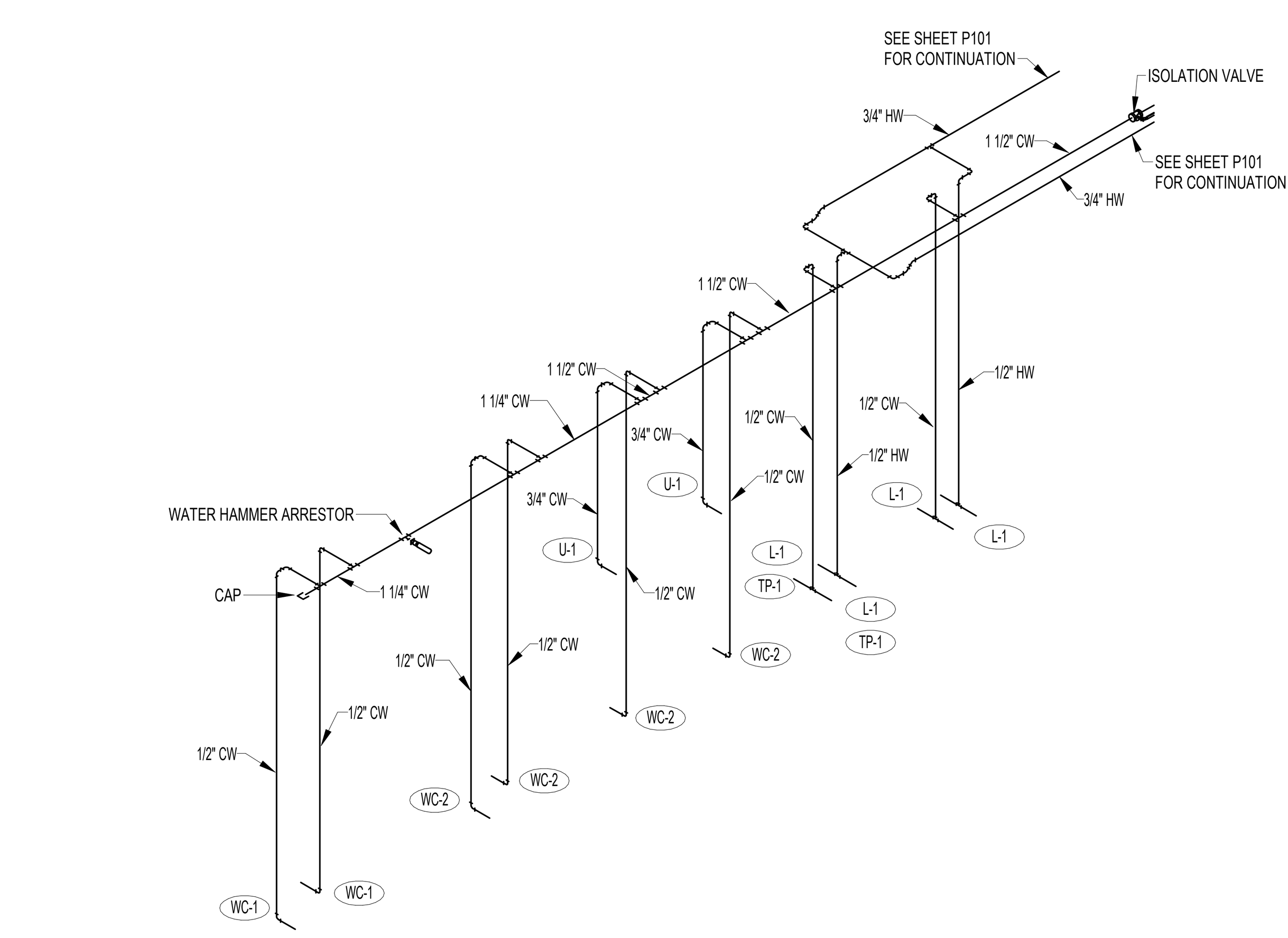
5 P401 LARGE SCALE WASTE AND VENT PIPING PLAN - TOILET ROOMS 167 & 168
SCALE: 1/4" = 1'-0"



6 P401 LARGE SCALE WASTE AND VENT PIPING SCHEMATIC - TOILET ROOMS 167 & 168
SCALE: 1/4" = 1'-0"



7 P401 LARGE SCALE WATER PIPING PLAN - TOILET ROOMS 167 & 168
SCALE: 1/4" = 1'-0"



8 P401 LARGE SCALE WATER PIPING SCHEMATIC - TOILET ROOMS 167 & 168
SCALE: 1/4" = 1'-0"

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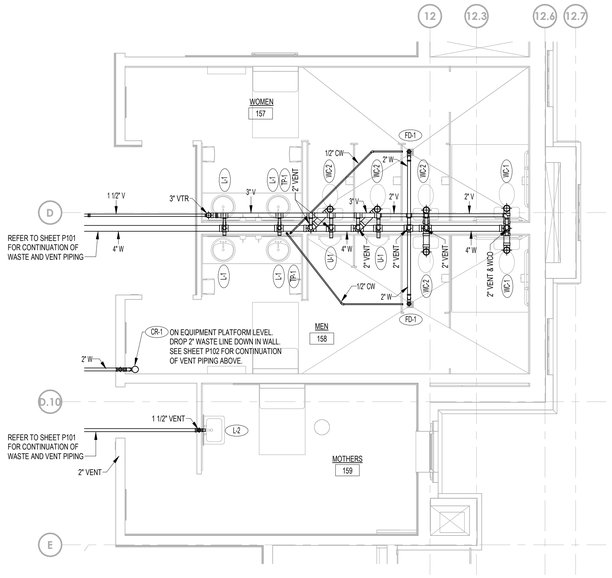
11 Apr 2023	510-3560	RPR 6N40E315400	2109

Drawing Issue and Revision Schedule

#	Date	Description

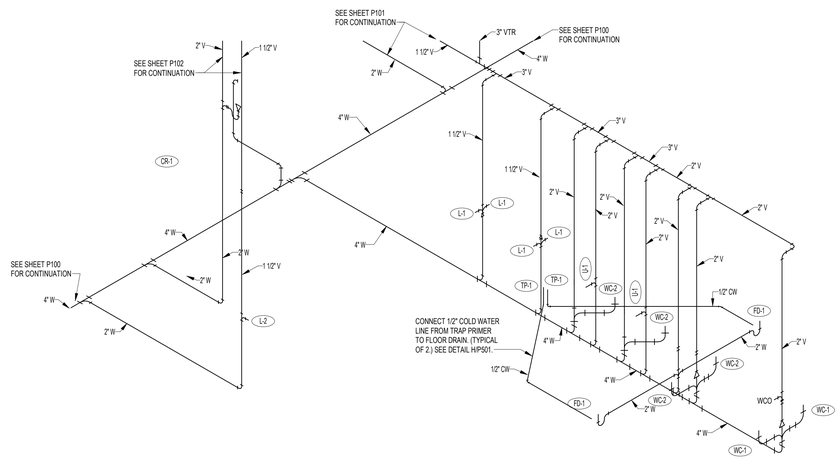
LARGE SCALE PLUMBING PLANS AND SCHEMATICS

P401



1 P402 LARGE SCALE WASTE AND VENT PIPING PLAN TOILET ROOMS 157 & 158

SCALE: 1/4" = 1'-0"



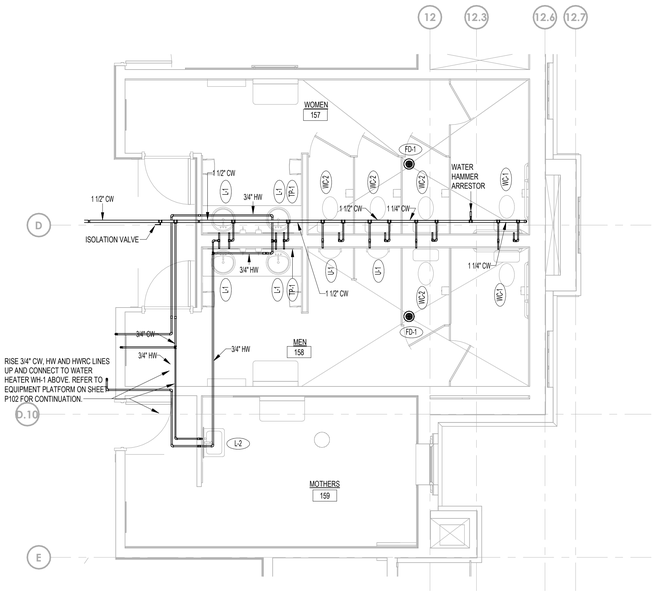
2 P402 LARGE SCALE WASTE AND VENT PIPING SCHEMATIC - TOILET ROOMS 157 & 158

SCALE: 1/4" = 1'-0"

PLUMBING FIXTURE SCHEDULE (1)

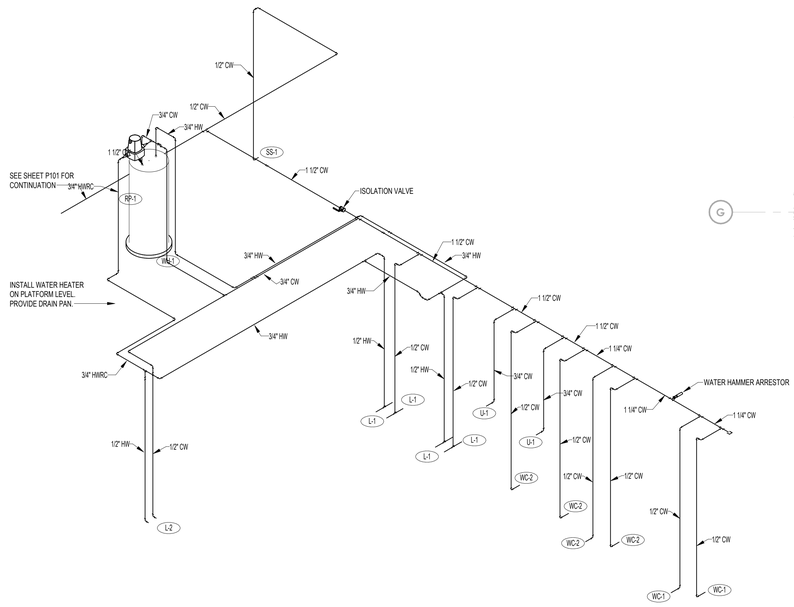
MARK	FIXTURE	PIPE SIZE					REMARKS
		TRAP	WASTE	VENT	C.W.	H.W.	
CR-1	CONDENSATE RECEPTOR	2"	2"	2"	-	-	SEE DETAIL A/P501
DF-1	DRINKING FOUNTAIN	1-1/2"	1-1/2"	1-1/2"	1/2"	-	ELECTRIC BI-LEVEL (ADA APPROVED)
FD-1	FLOOR DRAIN	2"	2"	2"	1/2"	-	WITH DEEP SEAL P-TRAP AND TRAP PRIMER CONNECTION
FS-1	FLOOR SINK	4"	4"	2"	-	-	WITH DEEP SEAL P-TRAP
JS-1	SERVICE SINK	3"	3"	2"	1/2"	1/2"	FLOOR TYPE
L-1	LAVATORY	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	COUNTER TOP MOUNT (ADA APPROVED) WITH OFFSET DRAIN AND PIPE COVERS FOR DRAIN, HOT & CW
L-2	LAVATORY	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	SELF SUPPORTING 20"X18" (ADA APPROVED) WITH OFFSET DRAIN AND PIPE COVERS FOR DRAIN, HOT & CW
RP-1	HOT WATER RECIRC. PUMP	-	-	-	-	3/4"	IN-LINE PUMP WITH3 GPM, 3 SPEED MOTOR, AND STRAP-ON AQUASTAT
S-1	SERVING AREA SINK	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	TWO COMPARTMENT
SS-1	SACRAMENT SINK	1-1/2"	1-1/2"	1-1/2"	1/2"	-	COUNTER TOP
TP-1	TRAP PRIMER	-	-	-	1/2"	-	PRECISION PRODUCTS MODEL PTS-8. RUN 1/2" PEX PIPING TO CORRESPONDING FLOOR DRAIN AND CONNECT SEE H/P501.
U-1	URINAL	INT.	2"	2"	3/4"	-	FLUSH VALVE, WALL HUNG
WC-1	WATER CLOSET	INT.	4"	2"	1/2"	-	FLUSH TANK, 18" RIM HEIGHT (ADA APPROVED)
WC-2	WATER CLOSET	INT.	4"	2"	1/2"	-	FLUSH TANK
WH-1	WATER HEATER	-	-	-	3/4"	3/4"	ELECTRIC, 50 GALLON, (2) NON-SIMULTANEOUS 4500 WATT ELEMENTS, 208V-1P

(1) SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND MODEL NUMBERS.



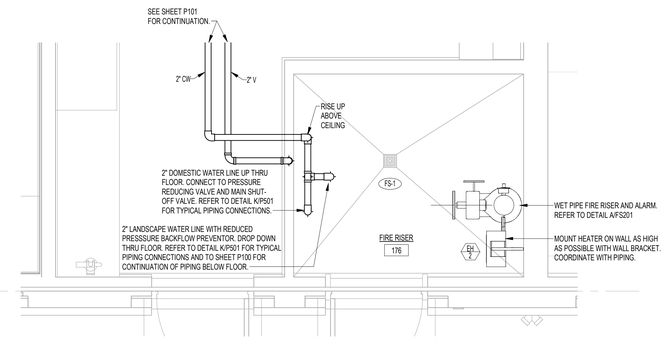
3 P402 LARGE SCALE WATER PIPING PLAN TOILET ROOMS 157 & 158

SCALE: 1/4" = 1'-0"



4 P402 LARGE SCALE WATER PIPING SCHEMATIC - TOILET ROOMS 157 & 158

SCALE: 1/4" = 1'-0"



5 P402 LARGE SCALE FIRE RISER ROOM

SCALE: 1/4" = 1'-0"

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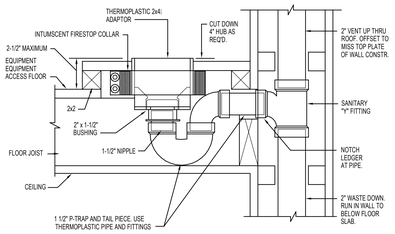
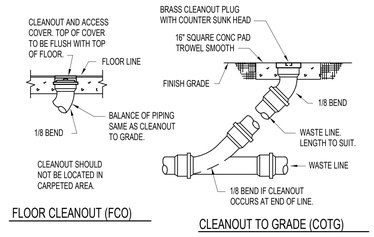
LARGE SCALE PLUMBING PLANS AND SCHEMATICS

P402



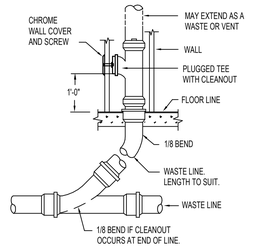
A CONDENSATE RECEIVER DETAIL
NO SCALE



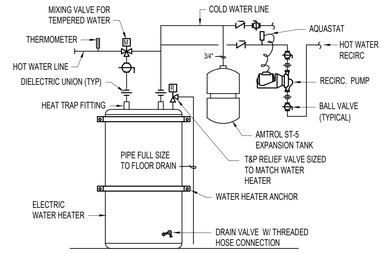
FLOOR CLEANOUT (FCO)

CLEANOUT TO GRADE (COTG)

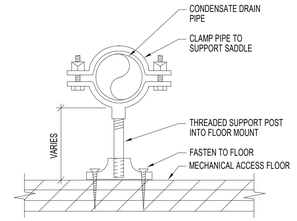
B CLEANOUT TO GRADE DETAIL
NO SCALE



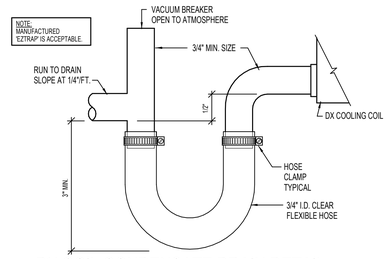
C WALL CLEANOUT DETAIL
NO SCALE



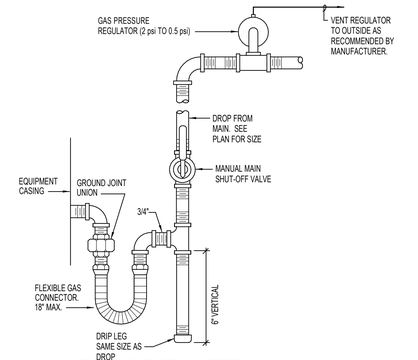
D WATER HEATER PIPING DETAIL
NO SCALE



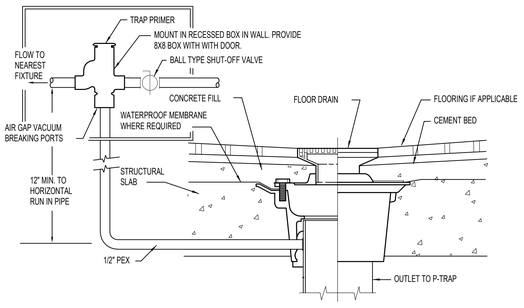
E CONDENSATE DRAIN PIPE SUPPORT DETAIL
NO SCALE



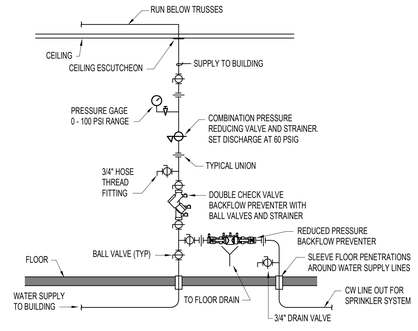
F DX COIL CONDENSATE DRAIN DETAIL
NO SCALE



G GAS LINE CONNECTION DETAIL
NO SCALE



H TRAP PRIMER DETAIL
NO SCALE



K VERTICAL WATER PRESSURE REDUCING STATION
NO SCALE

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THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Rexburg ID Custom 10 Ward Meetinghouse
Married Student Second Stake
5th West and University Boulevard, Rexburg, Idaho
43.803303, -111.796612

Issue Date 11 Apr 2023
Church Property: 510-3560
County Parcel: RPR #4DES15400
BHDA Project No. 2109

Drawing Issue and Revision Schedule

#	Date	Description

PLUMBING DETAILS

P501

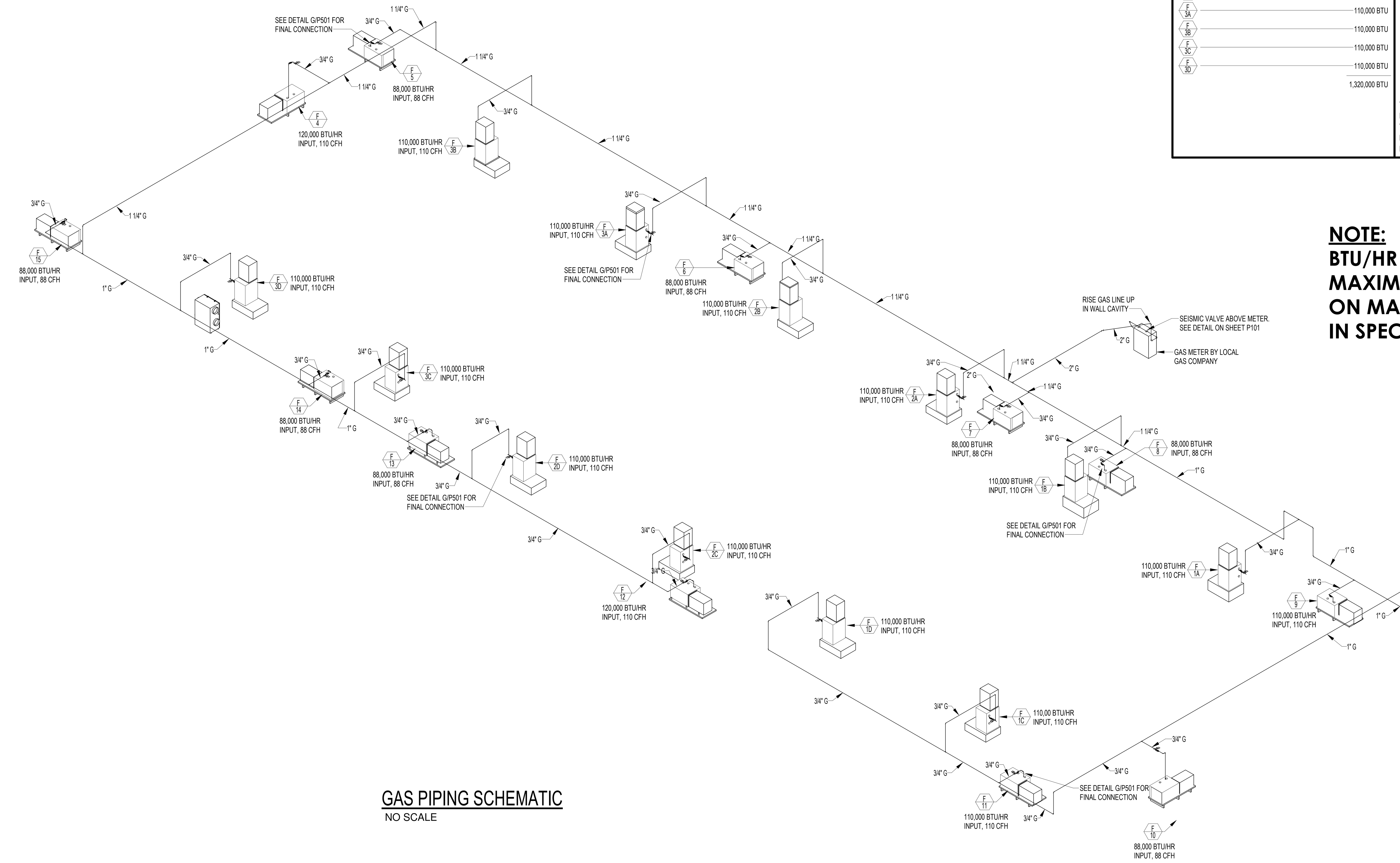
GAS PIPING CALCULATIONS:

Fixture	BTU	Fixture	BTU
F 1A	110,000 BTU	F 4	120,000 BTU
F 1B	110,000 BTU	F 5	88,000 BTU
F 1C	110,000 BTU	F 6	88,000 BTU
F 1D	110,000 BTU	F 7	88,000 BTU
F 2A	110,000 BTU	F 8	88,000 BTU
F 2B	110,000 BTU	F 9	110,000 BTU
F 2C	110,000 BTU	F 10	88,000 BTU
F 2D	110,000 BTU	F 11	110,000 BTU
F 3A	110,000 BTU	F 12	120,000 BTU
F 3B	110,000 BTU	F 13	88,000 BTU
F 3C	110,000 BTU	F 14	88,000 BTU
F 3D	110,000 BTU	F 15	88,000 BTU
	1,320,000 BTU		1,144,000 BTU

TOTAL BTU LOAD	2,484,000 BTU ACTUAL 2,750,000 DESIGN
BTU / 1000 = CFH	2,750 CFH
TOTAL PIPE DESIGN LENGTH	450 FEET
LP GAS PIPE SIZE	2"
DISCHARGE PRESSURE	2 PSI

NOTE:

BTU/HR CAPCITIES ARE MAXIMUM POSSIBLE, BASED ON MANUFACTURER'S LISTED IN SPECIFICATIONS.



GAS PIPING SCHEMATIC

NO SCALE

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Issue Date	Church Property:	County Parcel:	BHDA Project No.
11 Apr 2023	510-3560	RPR 6N40E315400	2109

Drawing Issue and Revision Schedule

#	Date	Description

GAS PIPING CALCULATION AND SCHEMATIC

P601