

STUDIO 333

ADDENDUM 01

DATE 11.09.22
 PROJECT NO. 2150
 PROJECT OCS – SPECIAL NEEDS AND ANNEX BUILDING REMODELS
 FROM STUDIO 333 ARCHITECTS

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This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated 10.26.22, as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of 2 pages and the attached Drawing Sheets:

Special Education Building Remodel: MD100, MD101, MD102, M101, M102, M501, M502, M601, M602, PD100, PD101, PD102, P100, P101, P102, P103, P401, P501, P502, P601, EG1.1 and EX1.2.

Annex Building Remodel: D1.2, A1.2, MD100, MD101, M100, M101, M501, M502, M503, M601, PD100, PD101, P001, P100, P101, P501, P502, P601, EG1.1 and EX1.1.

A. Changes to drawings:

1. Special Education Building Remodel – Sheets MD100, M502, M602 and PD100:
 - a. Add sheets MD100, M502, M602 and PD100 to the construction documents.
2. Special Education Building Remodel – Sheets MD101, MD102, M101, M102, M501, M601, PD101, PD102, P100, P101, P102, P103, P401, P501, P502 and P601:
 - a. Update the drawing title on sheets MD101, MD102, M101, M102, M501, M601, PD101, PD102, P100, P101, P102, P103, P401, P501, P502 and P601
3. Special Education Building Remodel – Sheet EG1.1:
 - a. Drawing Index updated to match changed sheet EX1.2 name 'Luminaire and Mechanical Schedules'
4. Special Education Building Remodel – Sheet EX1.2:
 - a. Sheet name updated to 'Luminaire and Mechanical Schedules'. Added Luminaire Schedule to sheet.
5. Annex Building Remodel – Sheets D1.2 and A1.2:
 - a. Demolish wood access door systems between private restrooms at Restroom 111, infill openings with framing to match existing, install new lathe and plaster wall finish to match existing and paint walls.

6. Annex Building Remodel – Sheets MD100, MD101, M100, M101, M501, M502, M503, M601, PD100, PD101, P001, P100, P101, P501, P502 and P601:
 - a. Update the drawing title on sheets MD100, MD101, M100, M101, M501, M502, M503, M601, PD100, PD101, P001, P100, P101, P501, P502 and P601.
7. Annex Building Remodel – Sheet EG1.1:
 - a. Drawing Index updated to match changed sheet EX1.1 name 'Electrical Schedules'
8. Annex Building Remodel – Sheet EX1.1:
 - a. Sheet name updated to 'Electrical Schedules'. Added Luminaire Schedule to sheet.

1	ALL EXISTING STEAM AND CONDENSATE PIPING IN CRAWL SPACES TO BE REMOVED BY ASBESTOS ABATEMENT CONTRACTOR OR LEFT INTACT AND UNDISTURBED.
2	EXISTING ABANDONED HEATING HOT WATER TANK TO REMAIN INTACT.
3	EXISTING CONDENSATE RETURN PUMP TO BE REMOVED BY ASBESTOS ABATEMENT CONTRACTOR OR LEFT INTACT AND UNDISTURBED.
4	CRAWL SPACE ACCESS FLOOR HATCH
5	CAP EXISTING MAIN STEAM LINE IN THIS LOCATION.
6	CAP EXISTING MAIN CONDENSATE RETURN LINE IN THIS LOCATION.
7	EXISTING STEAM LINE, IF PRESENT, TO REMAIN INTACT.

- A. NO ATTEMPT HAS BEEN MADE TO SHOW ALL EXISTING MECHANICAL EQUIPMENT AND DEVICES. LOCATION OF EXISTING MECHANICAL EQUIPMENT AND DEVICES SHOWN ON THE "EXISTING" DRAWINGS TAKEN BY THE OWNER'S "AS-CONSTRUCTED" DRAWINGS AND IS INTENDED AS AN AID TO SHOW APPROXIMATE LOCATION AND EXTENT OF MAJOR SYSTEMS. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING MECHANICAL EQUIPMENT AND EXTENT OF MECHANICAL DEMOLITION REQUIRED PRIOR TO BIDDING.
- B. REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING MATERIALS AND PIPING IS THE RESPONSIBILITY OF THE OGDEN SCHOOL DISTRICT. CONTRACTOR SHALL BE RESPONSIBLE FOR ENGAGING "ASBESTOS REMEDIATION" CONTRACTORS. WHERE PIPING OR MATERIAL INDICATED TO BE REMOVED IS SUSPECTED OF CONTAINING ASBESTOS, CONTRACTOR SHALL BE RESPONSIVE IMMEDIATELY. DO NOT DISTURB PIPING OR MATERIALS SUSPECTED OF CONTAINING ASBESTOS UNTIL ASBESTOS ANALYSIS HAS BEEN VERIFIED AND REMOVED BY OWNER'S "ASBESTOS REMEDIATION" CONTRACTOR.
- C. ITEMS INDICATED TO REMAIN: PROTECT MECHANICAL PIPING AND EQUIPMENT INDICATED TO REMAIN AGAINST DAMAGE DURING SELECTIVE DEMOLITION.
- D. PROVIDE PROTECTION TO ENSURE SAFE PASSAGE OF PERSONNEL AROUND AND THROUGH SELECTIVE DEMOLITION AREAS TO AND FROM OCCUPIED PORTIONS OF THE BUILDING.
- E. PROTECT EXISTING UTILITIES AND SERVICES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS.
- F. PROTECT WALLS, CEILINGS, FLOORS, AND OTHER EXISTING FINISH WORK THAT ARE TO REMAIN OR THAT ARE EXPOSED DURING SELECTIVE DEMOLITION OPERATIONS.
- G. COVER AND PROTECT FURNITURE, FURNISHINGS, AND EQUIPMENT THAT HAVE NOT BEEN REMOVED DURING SELECTIVE DEMOLITION OPERATIONS.

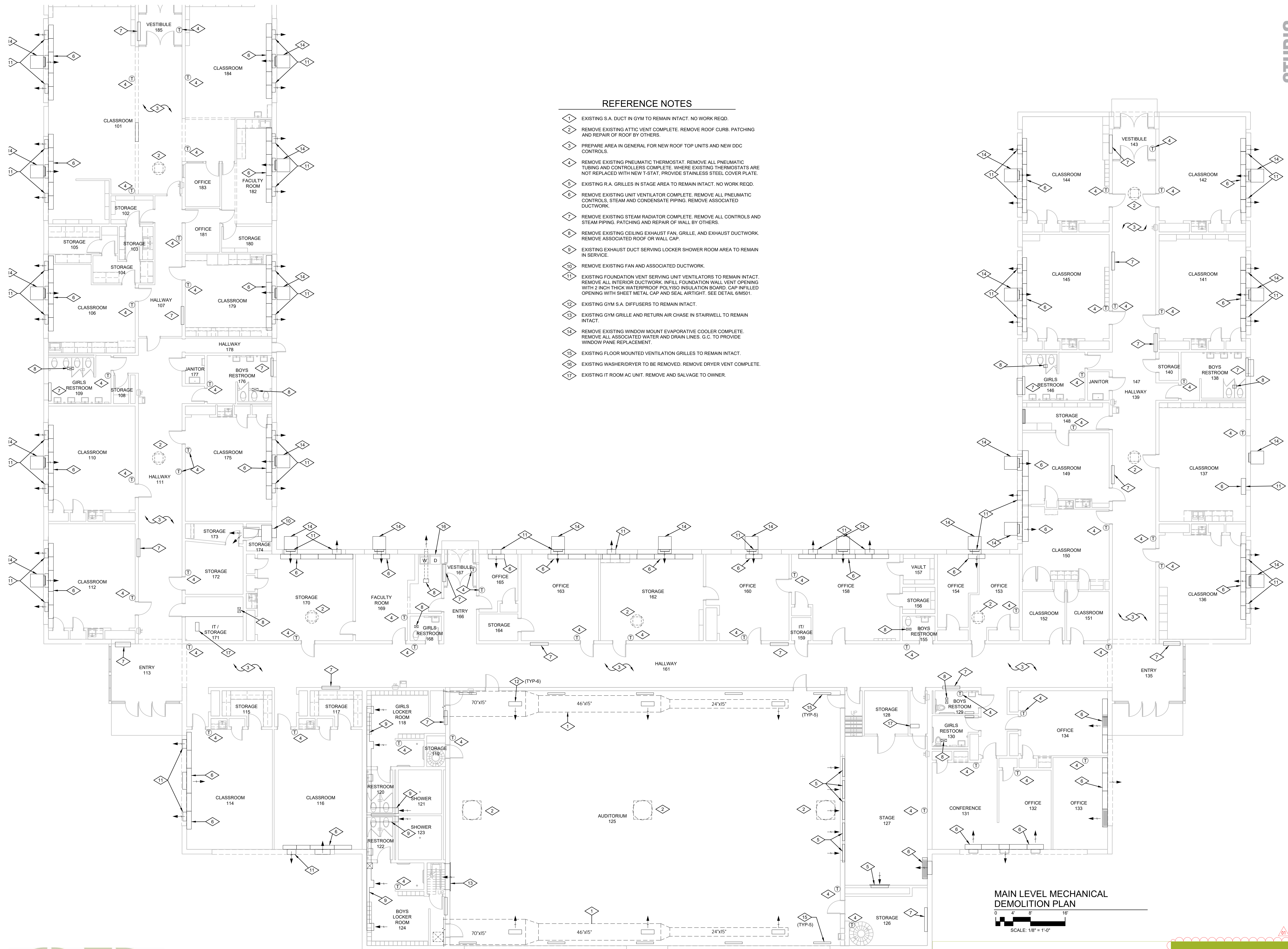
0 4' 8' 16'

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

MD100

REFERENCE NOTES

- 1 EXISTING S.A. DUCT IN GYM TO REMAIN INTACT. NO WORK REQD.
- 2 REMOVE EXISTING ATTIC VENT COMPLETE. REMOVE ROOF CURB. PATCHING AND REPAIR OF ROOF BY OTHERS.
- 3 PREPARE AREA IN GENERAL FOR NEW ROOF TOP UNITS AND NEW DDC CONTROLS.
- 4 REMOVE EXISTING PNEUMATIC THERMOSTAT. REMOVE ALL PNEUMATIC TUBING AND CONTROLLERS COMPLETE. WHERE EXISTING THERMOSTATS ARE NOT REPLACED WITH NEW T-STAT, PROVIDE STAINLESS STEEL COVER PLATE.
- 5 EXISTING R.A. GRILLES IN STAGE AREA TO REMAIN INTACT. NO WORK REQD.
- 6 REMOVE EXISTING UNIT VENTILATOR COMPLETE. REMOVE ALL PNEUMATIC CONTROLS, STEAM AND CONDENSATE PIPING. REMOVE ASSOCIATED DUCTWORK.
- 7 REMOVE EXISTING STEAM RADIATOR COMPLETE. REMOVE ALL CONTROLS AND STEAM PIPING. PATCHING AND REPAIR OF WALL BY OTHERS.
- 8 REMOVE EXISTING CEILING EXHAUST FAN, GRILLE, AND EXHAUST DUCTWORK. REMOVE ASSOCIATED ROOF OR WALL CAP.
- 9 EXISTING EXHAUST DUCT SERVING LOCKER SHOWER ROOM AREA TO REMAIN IN SERVICE.
- 10 REMOVE EXISTING FAN AND ASSOCIATED DUCTWORK.
- 11 EXISTING FOUNDATION VENT SERVING UNIT VENTILATORS TO REMAIN INTACT. REMOVE ALL INTERIOR DUCTWORK. INFILL FOUNDATION WALL VENT OPENING WITH 2 INCH THICK WATERPROOF POLYISO INSULATION BOARD. CAP INFILLED OPENING WITH SHEET METAL CAP AND SEAL AIRTIGHT. SEE DETAIL 6/M501.
- 12 EXISTING GYM S.A. DIFFUSERS TO REMAIN INTACT.
- 13 EXISTING GYM GRILLE AND RETURN AIR CHASE IN STAIRWELL TO REMAIN INTACT.
- 14 REMOVE EXISTING WINDOW MOUNT EVAPORATIVE COOLER COMPLETE. REMOVE ALL ASSOCIATED WATER AND DRAIN LINES. G.C. TO PROVIDE WINDOW PANE REPLACEMENT.
- 15 EXISTING FLOOR MOUNTED VENTILATION GRILLES TO REMAIN INTACT.
- 16 EXISTING WASHER/DRYER TO BE REMOVED. REMOVE DRYER VENT COMPLETE.
- 17 EXISTING IT ROOM AC UNIT. REMOVE AND SALVAGE TO OWNER.

MAIN LEVEL MECHANICAL
DEMOLITION PLAN

0 4' 8' 16'

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

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
SCALE:

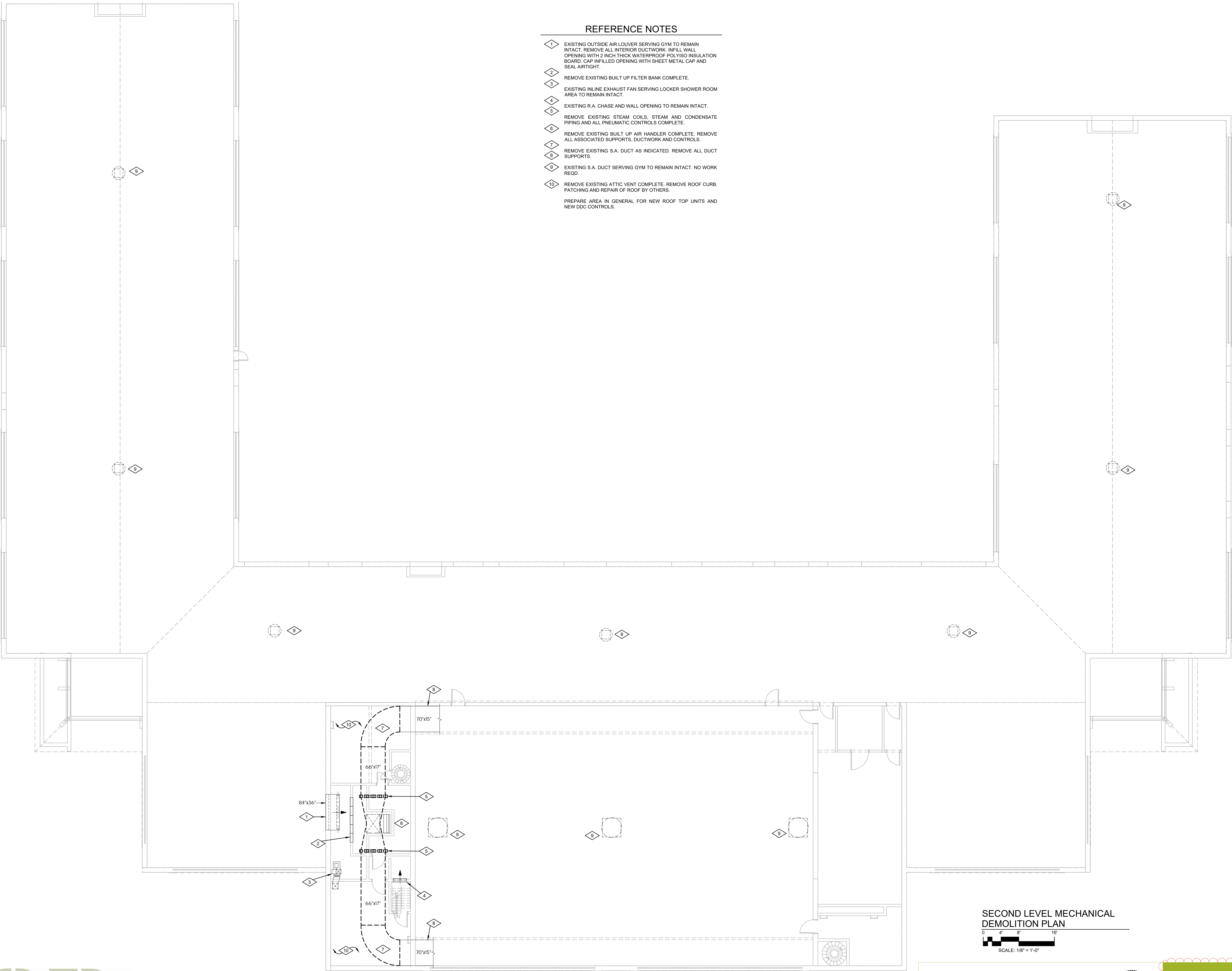


MAIN LEVEL MECHANICAL
DEMOLITION PLAN

MD101

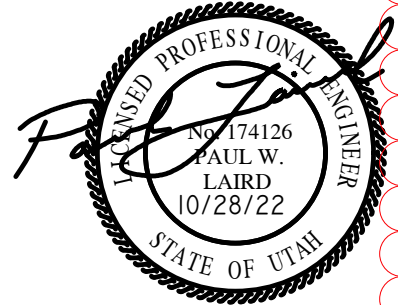
REFERENCE NOTES

- 1 EXISTING OUTSIDE AIR LOUVER SERVING GYM TO REMAIN INTACT. REMOVE ALL INTERIOR DUCTWORK. INFILL WALL OPENING WITH 2 INCH THICK WATERPROOF POLYISO INSULATION BOARD. CAP INFILLED OPENING WITH SHEET METAL CAP AND SEAL AIRTIGHT.
- 2 REMOVE EXISTING BUILT UP FILTER BANK COMPLETE.
- 3 EXISTING INLINE EXHAUST FAN SERVING LOCKER SHOWER ROOM AREA TO REMAIN INTACT.
- 4 EXISTING R.A. CHASE AND WALL OPENING TO REMAIN INTACT.
- 5 REMOVE EXISTING STEAM COILS. STEAM AND CONDENSATE PIPING AND ALL PNEUMATIC CONTROLS COMPLETE.
- 6 REMOVE EXISTING BUILT UP AIR HANDLER COMPLETE. REMOVE ALL ASSOCIATED SUPPORTS, DUCTWORK AND CONTROLS.
- 7 REMOVE EXISTING S.A. DUCT AS INDICATED. REMOVE ALL DUCT SUPPORTS.
- 8 EXISTING S.A. DUCT SERVING GYM TO REMAIN INTACT. NO WORK REQD.
- 9 REMOVE EXISTING ATTIC VENT COMPLETE. REMOVE ROOF CURB. PATCHING AND REPAIR OF ROOF BY OTHERS.
- 10 PREPARE AREA IN GENERAL FOR NEW ROOF TOP UNITS AND NEW DDC CONTROLS.



SECOND LEVEL MECHANICAL
DEMOLITION PLAN

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
SCALE:



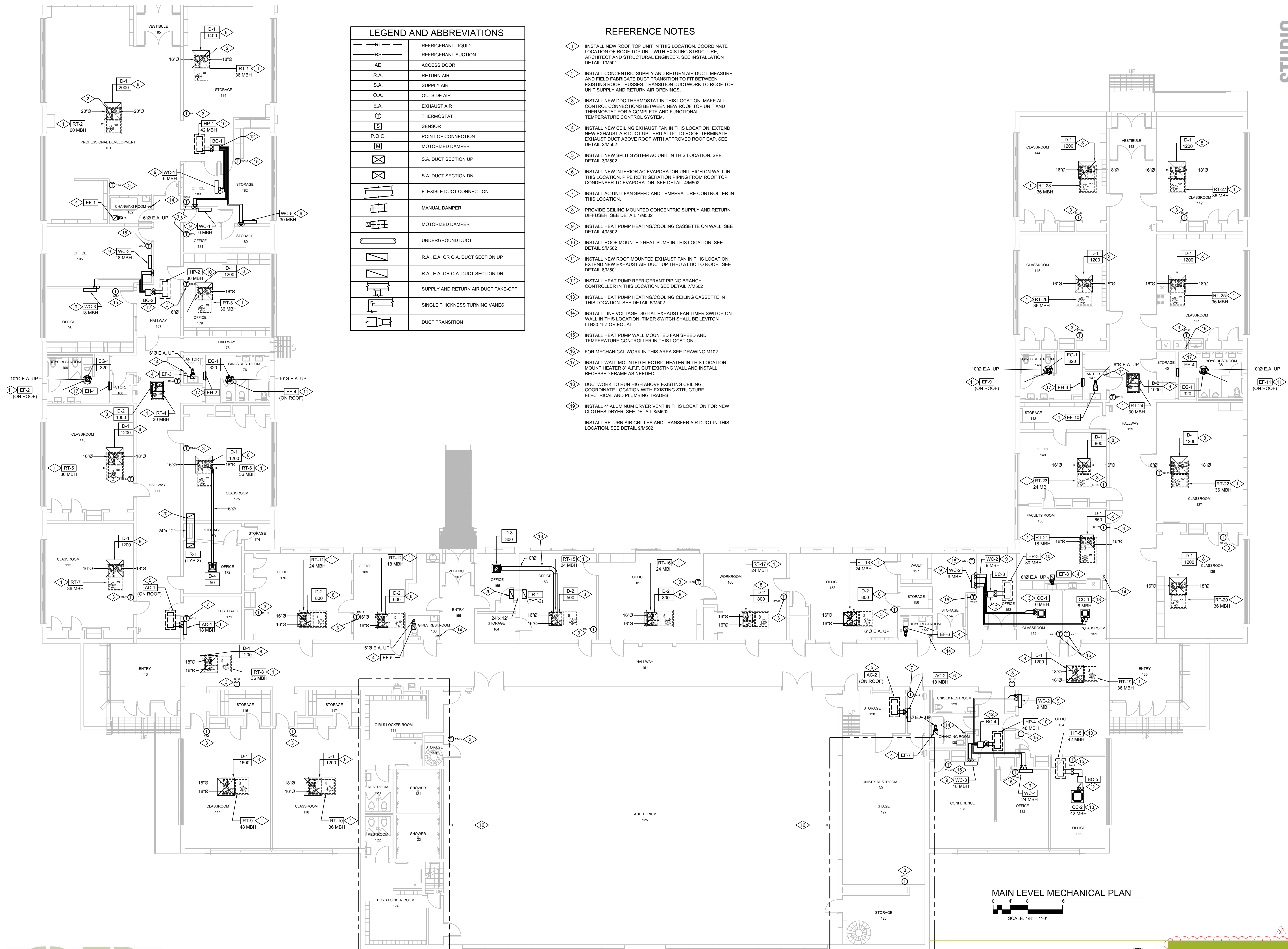
SECOND LEVEL
MECHANICAL DEMOLITION
PLAN

MD102

LEGEND AND ABBREVIATIONS	
—RL—	REFRIGERANT LIQUID
—RS—	REFRIGERANT SUCTION
AD	ACCESS DOOR
R.A.	RETURN AIR
S.A.	SUPPLY AIR
O.A.	OUTSIDE AIR
E.A.	EXHAUST AIR
T	THERMOSTAT
S	SENSOR
P.O.C.	POINT OF CONNECTION
M	MOTORIZED DAMPER
⊠	S.A. DUCT SECTION UP
⊠	S.A. DUCT SECTION DN
—	FLEXIBLE DUCT CONNECTION
—	MANUAL DAMPER
—	MOTORIZED DAMPER
—	UNDERGROUND DUCT
—	R.A., E.A. OR O.A. DUCT SECTION UP
—	R.A., E.A. OR O.A. DUCT SECTION DN
—	SUPPLY AND RETURN AIR DUCT TAKE-OFF
—	SINGLE THICKNESS TURNING VANES
—	DUCT TRANSITION

REFERENCE NOTES

1. INSTALL NEW ROOF TOP UNIT IN THIS LOCATION. COORDINATE LOCATION OF ROOF TOP UNIT WITH EXISTING STRUCTURE, ARCHITECT AND STRUCTURAL ENGINEER. SEE INSTALLATION DETAIL 1/M501
 2. INSTALL CONCENTRIC SUPPLY AND RETURN AIR DUCT. MEASURE AND FIELD FABRICATE DUCT TRANSITION TO FIT BETWEEN EXISTING ROOF TRUSSES. TRANSITION DUCTWORK TO ROOF TOP UNIT SUPPLY AND RETURN AIR OPENINGS.
 3. INSTALL NEW DDC THERMOSTAT IN THIS LOCATION. MAKE ALL CONTROL CONNECTIONS BETWEEN NEW ROOF TOP UNIT AND THERMOSTAT FOR A COMPLETE AND FUNCTIONAL TEMPERATURE CONTROL SYSTEM.
 4. INSTALL NEW CEILING EXHAUST FAN IN THIS LOCATION. EXTEND NEW EXHAUST AIR DUCT UP THRU ATTIC TO ROOF. TERMINATE EXHAUST DUCT ABOVE ROOF WITH APPROVED ROOF CAP. SEE DETAIL 2/M502
 5. INSTALL NEW SPLIT SYSTEM AC UNIT IN THIS LOCATION. SEE DETAIL 3/M502
 6. INSTALL NEW INTERIOR AC EVAPORATOR UNIT HIGH ON WALL IN THIS LOCATION. PIPE REFRIGERATION PIPING FROM ROOF TOP CONDENSER TO EVAPORATOR. SEE DETAIL 4/M502
 7. INSTALL AC UNIT FAN SPEED AND TEMPERATURE CONTROLLER IN THIS LOCATION.
 8. PROVIDE CEILING MOUNTED CONCENTRIC SUPPLY AND RETURN DIFFUSER. SEE DETAIL 1/M502
 9. INSTALL HEAT PUMP HEATING/COOLING CASSETTE ON WALL. SEE DETAIL 4/M502
 10. INSTALL ROOF MOUNTED HEAT PUMP IN THIS LOCATION. SEE DETAIL 5/M502
 11. INSTALL NEW ROOF MOUNTED EXHAUST FAN IN THIS LOCATION. EXTEND NEW EXHAUST AIR DUCT UP THRU ATTIC TO ROOF. SEE DETAIL 6/M501
 12. INSTALL HEAT PUMP REFRIGERANT PIPING BRANCH CONTROLLER IN THIS LOCATION. SEE DETAIL 7/M502
 13. INSTALL HEAT PUMP HEATING/COOLING CEILING CASSETTE IN THIS LOCATION. SEE DETAIL 6/M502
 14. INSTALL LINE VOLTAGE DIGITAL EXHAUST FAN TIMER SWITCH ON WALL IN THIS LOCATION. TIMER SWITCH SHALL BE LEVITON LTB30-1LZ OR EQUAL.
 15. INSTALL HEAT PUMP WALL MOUNTED FAN SPEED AND TEMPERATURE CONTROLLER IN THIS LOCATION.
 16. FOR MECHANICAL WORK IN THIS AREA SEE DRAWING M102.
 17. INSTALL WALL MOUNTED ELECTRIC HEATER IN THIS LOCATION. MOUNT HEATER 8" A.F.F. CUT EXISTING WALL AND INSTALL RECESSED FRAME AS NEEDED.
 18. DUCTWORK TO RUN HIGH ABOVE EXISTING CEILING. COORDINATE LOCATION WITH EXISTING STRUCTURE, ELECTRICAL AND PLUMBING TRADES.
 19. INSTALL 4" ALUMINUM DRYER VENT IN THIS LOCATION FOR NEW CLOTHES DRYER. SEE DETAIL 6/M502
- INSTALL RETURN AIR GRILLES AND TRANSFER AIR DUCT IN THIS LOCATION. SEE DETAIL 9/M502



MAIN LEVEL MECHANICAL PLAN

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

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
SCALE:

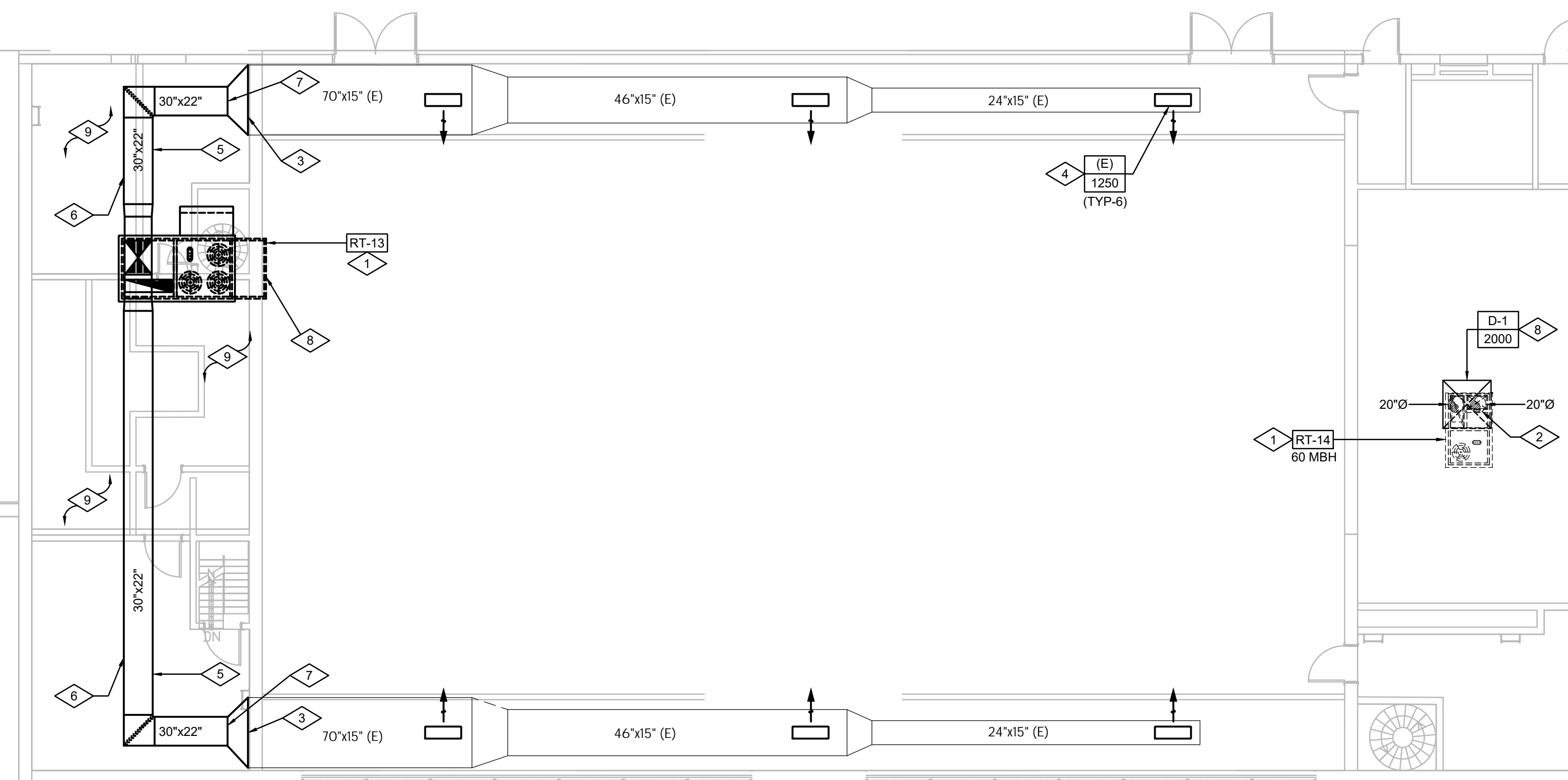


MAIN LEVEL
MECHANICAL PLAN

M101

REFERENCE NOTES

- 1 INSTALL NEW ROOF TOP UNIT IN THIS LOCATION. COORDINATE LOCATION OF ROOF TOP UNIT WITH EXISTING STRUCTURE, ARCHITECT AND STRUCTURAL ENGINEER. SEE INSTALLATION DETAIL 1/M501
- 2 EXTEND S.A. AND R.A. DUCTS DOWN THROUGH EXISTING ROOF AS INDICATED. G.C. TO FRAME ROOF OPENING FOR NEW DUCTWORK.
- 3 EXTEND NEW S.A. DUCT OF SIZE INDICATED AND CONNECT TO EXISTING S.A. DUCT IN THIS LOCATION.
- 4 BALANCE EXISTING CEILING DIFFUSER TO CFM INDICATED.
- 5 NEW S.A. DUCT TO RUN HIGH CLOSE TO ROOF BETWEEN EXISTING ROOF TRUSSES. COORDINATE LOCATION WITH EXISTING DUCTWORK.
- 6 WHERE EXISTING "X" BRACING OCCURS, CONSULT WITH ARCHITECT AND STRUCTURAL ENGINEER BEFORE REMOVING BRACING. BRACING WILL NEED TO BE REMOVED AND REPLACED AS PART OF THE NEW DUCTWORK INSTALLATION.
- 7 PROVIDE DUCT TRANSITION AS NEEDED.
- 8 ROOF CURB SHALL EXTEND OVER THREE(3) EXISTING ROOF TRUSSES FOR SUPPORT. FABRICATE AND INSTALL CUSTOM ROOF CURB TO MATCH ROOF TOP UNIT AND PROVIDE REQUIRED ROOF SUPPORT.
- 9 EXISTING CEILING SYSTEM IN THIS AREA TO BE REMOVED TO ALLOW FOR INSTALLATION OF NEW S.A. DUCTWORK AND PROVIDE FOR RETURN AIR PATH TO ROOF TOP UNIT.



SECOND LEVEL MECHANICAL PLAN

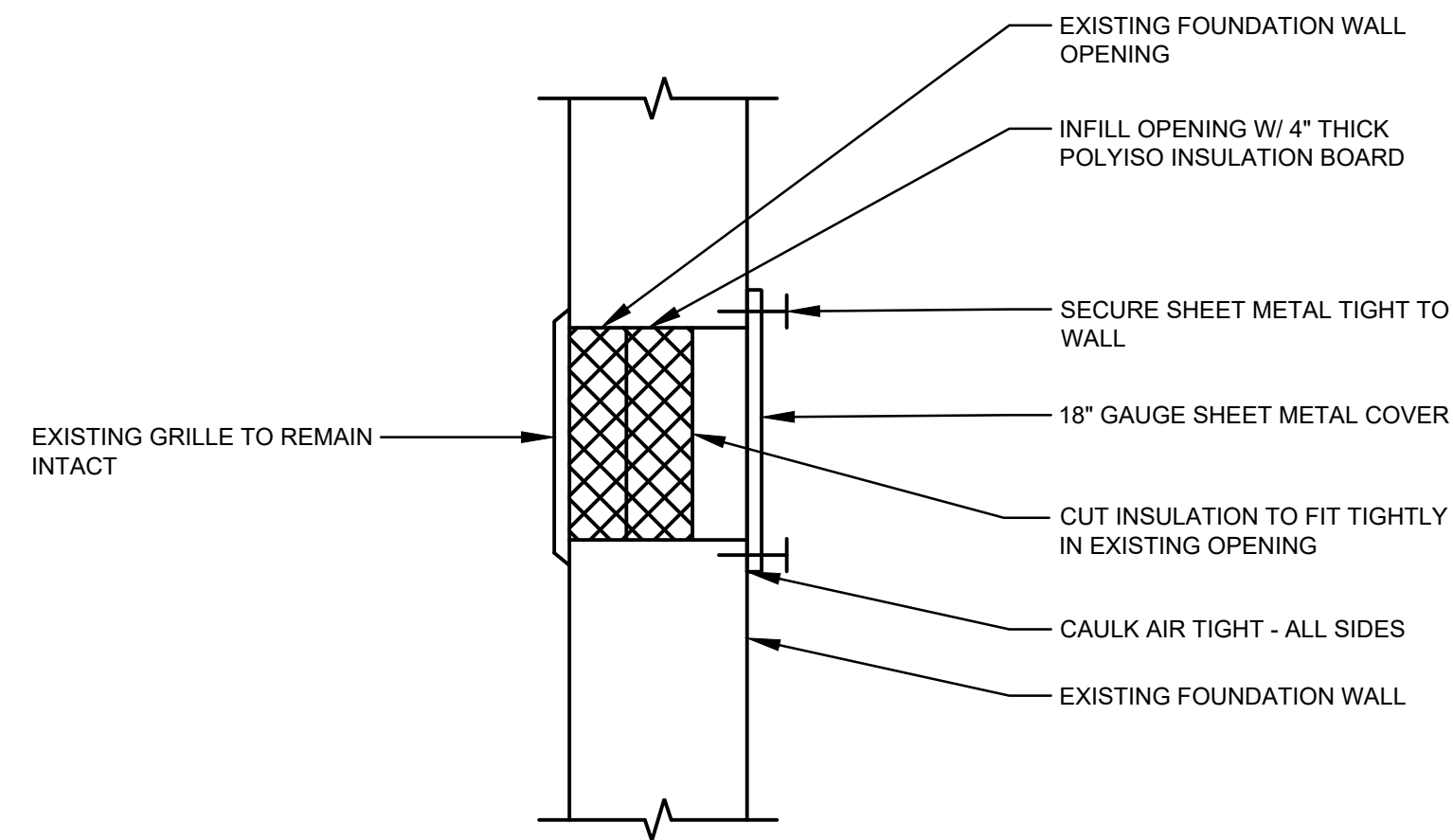
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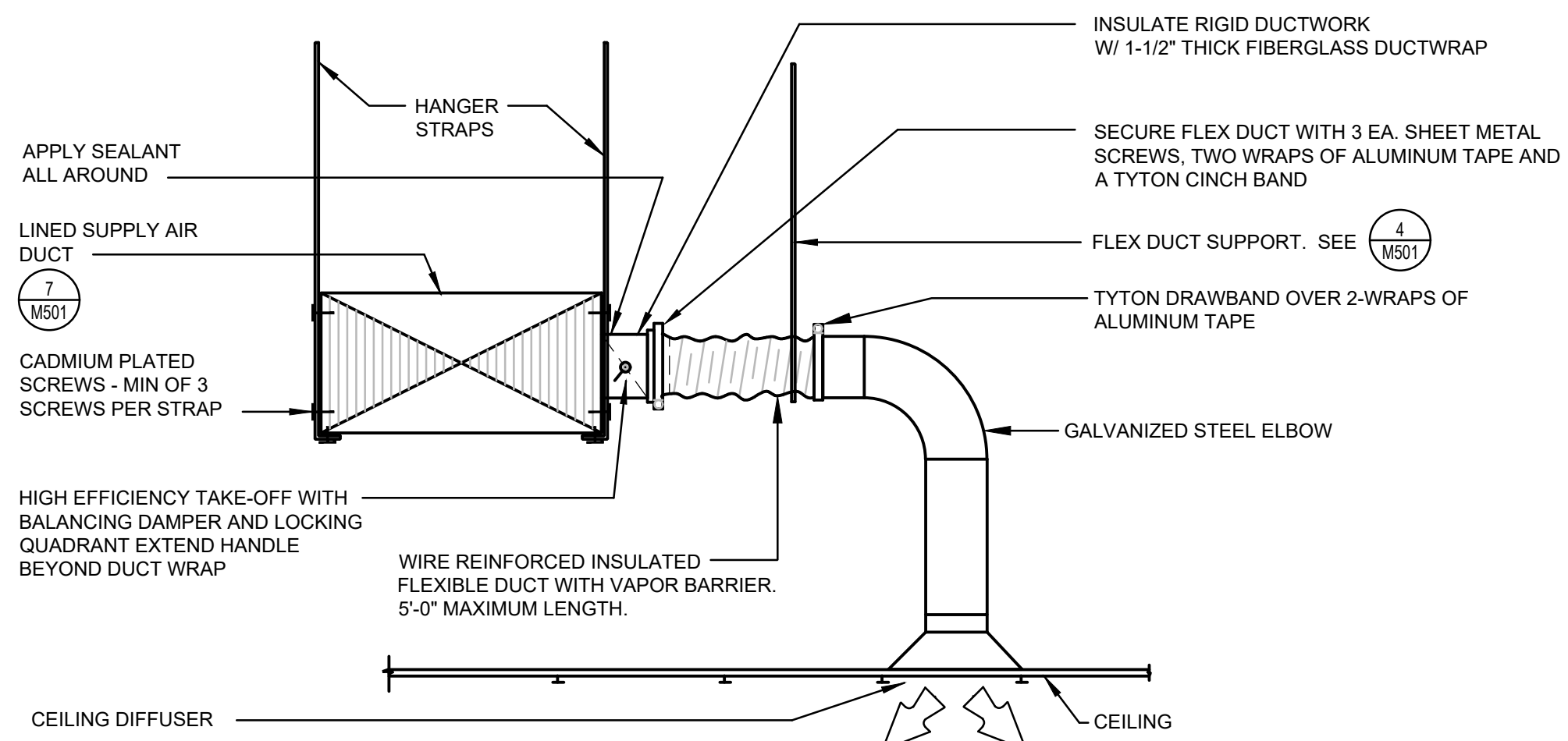
SECOND LEVEL
MECHANICAL PLAN

M102



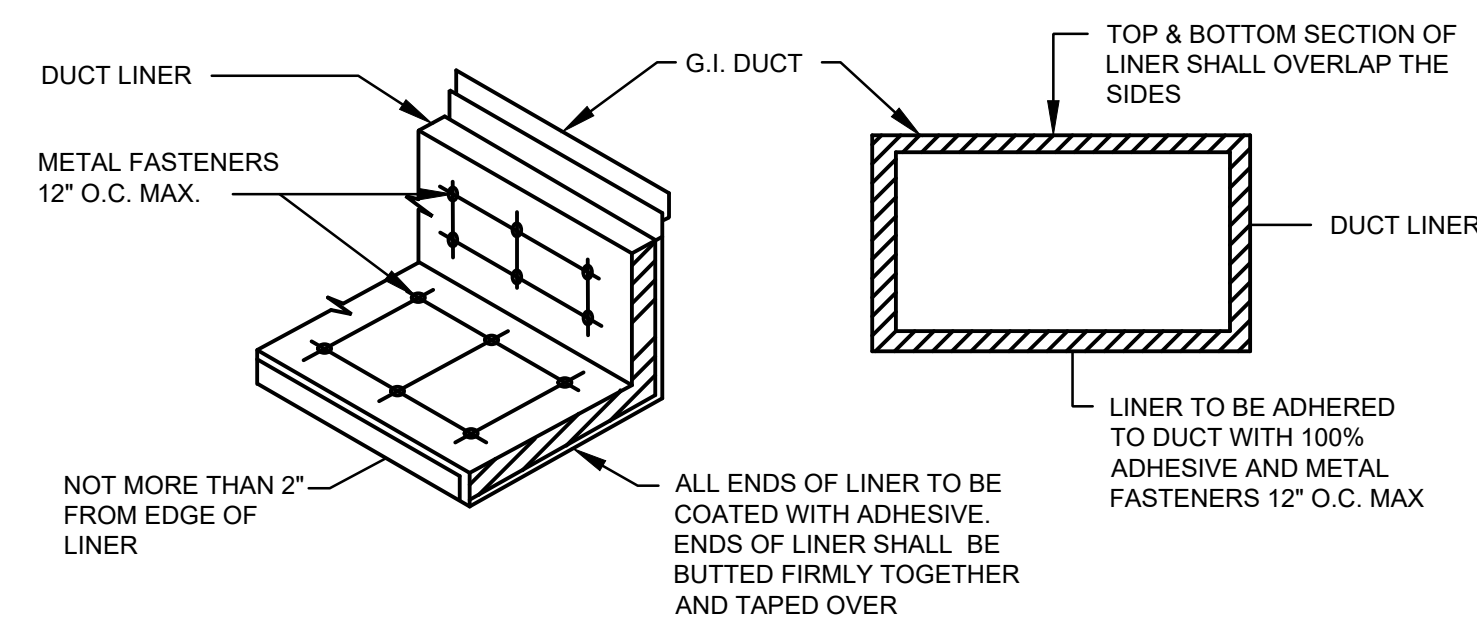
FOUNDATION VENT DETAIL

NOT TO SCALE

6
M501

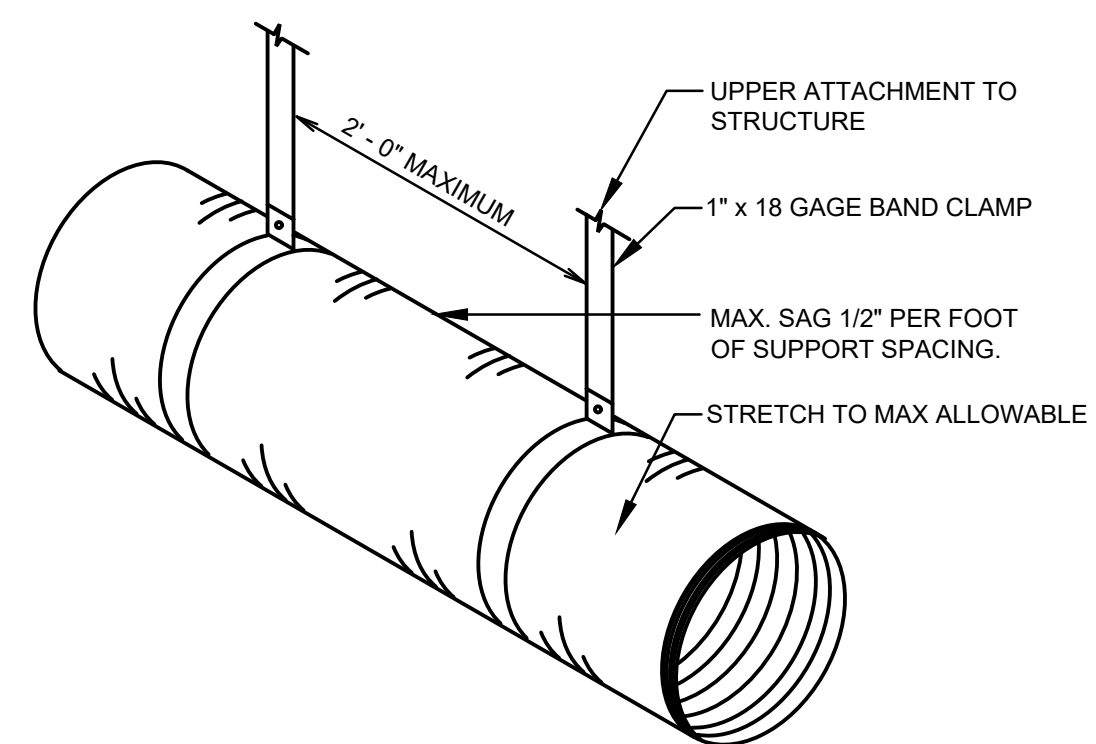
CEILING DIFFUSER DETAIL

NOT TO SCALE

3
M501

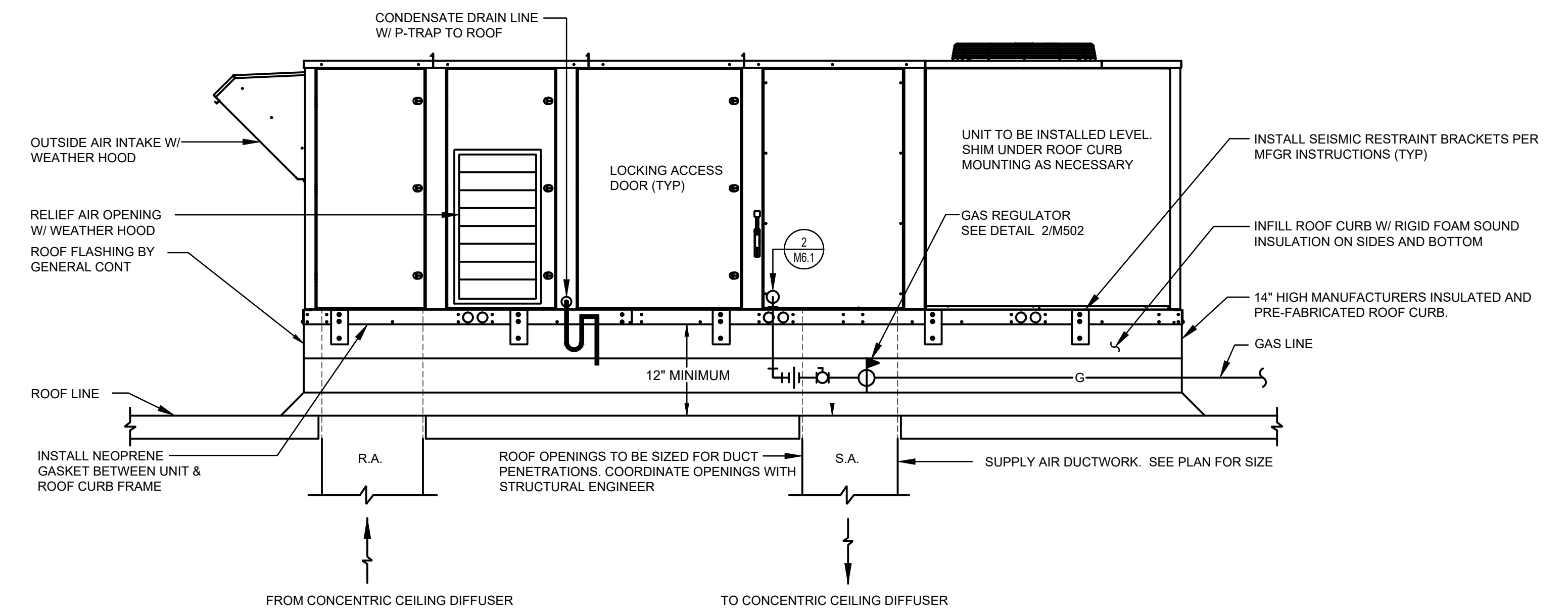
DUCT LINER DETAIL

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7
M501

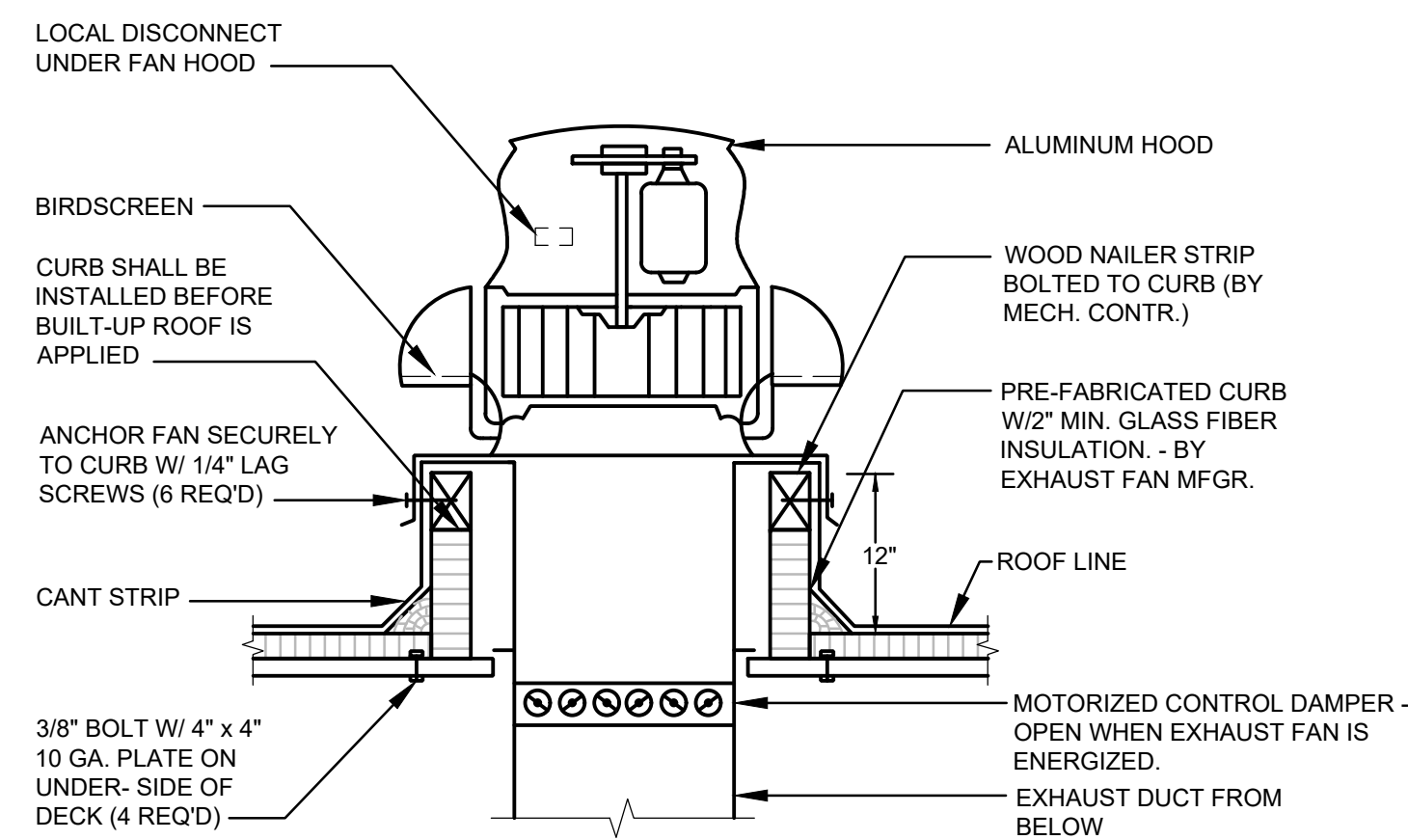
FLEXIBLE DUCT SUPPORT DETAIL

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4
M501

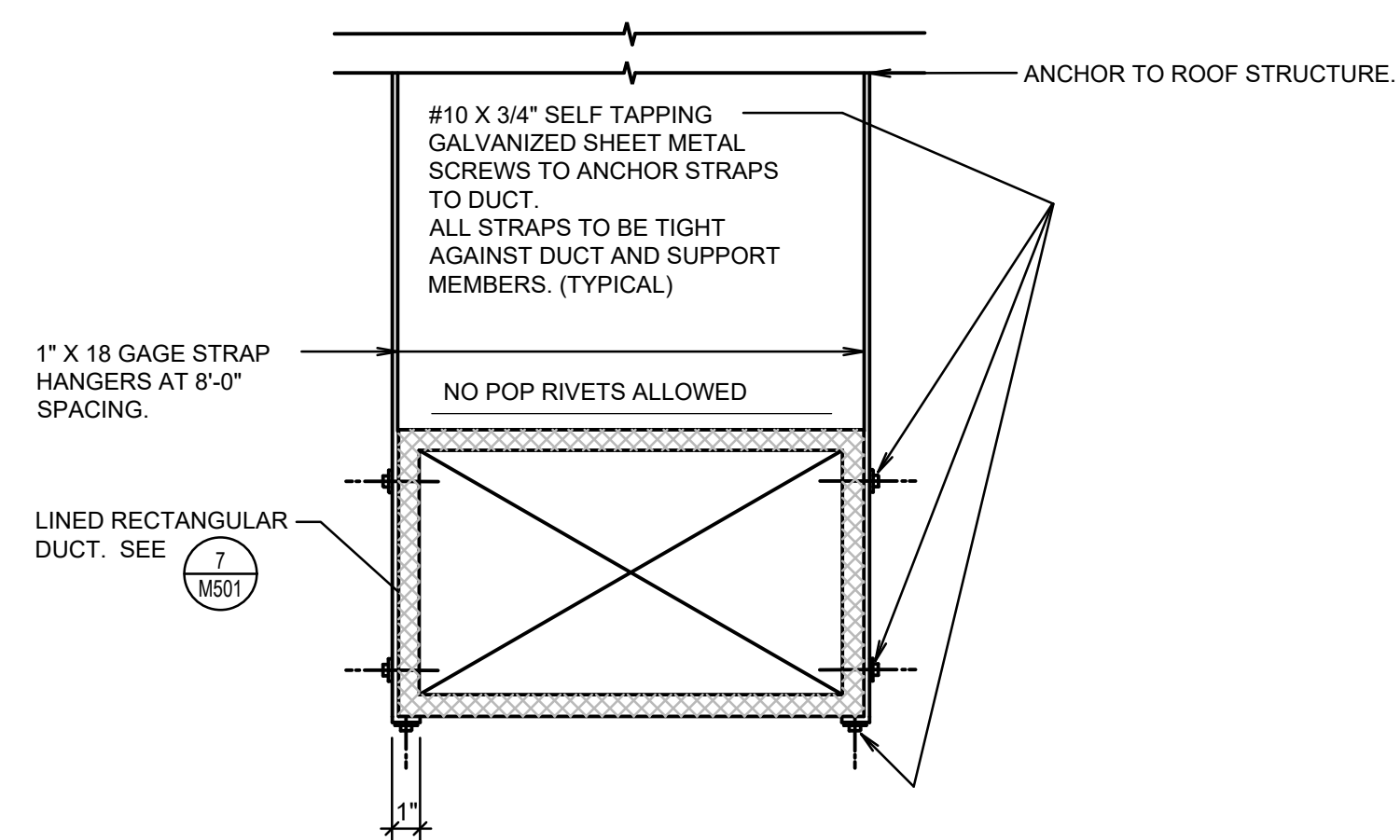
PACKAGED ROOF-TOP UNIT DETAIL

NOT TO SCALE

1
M501

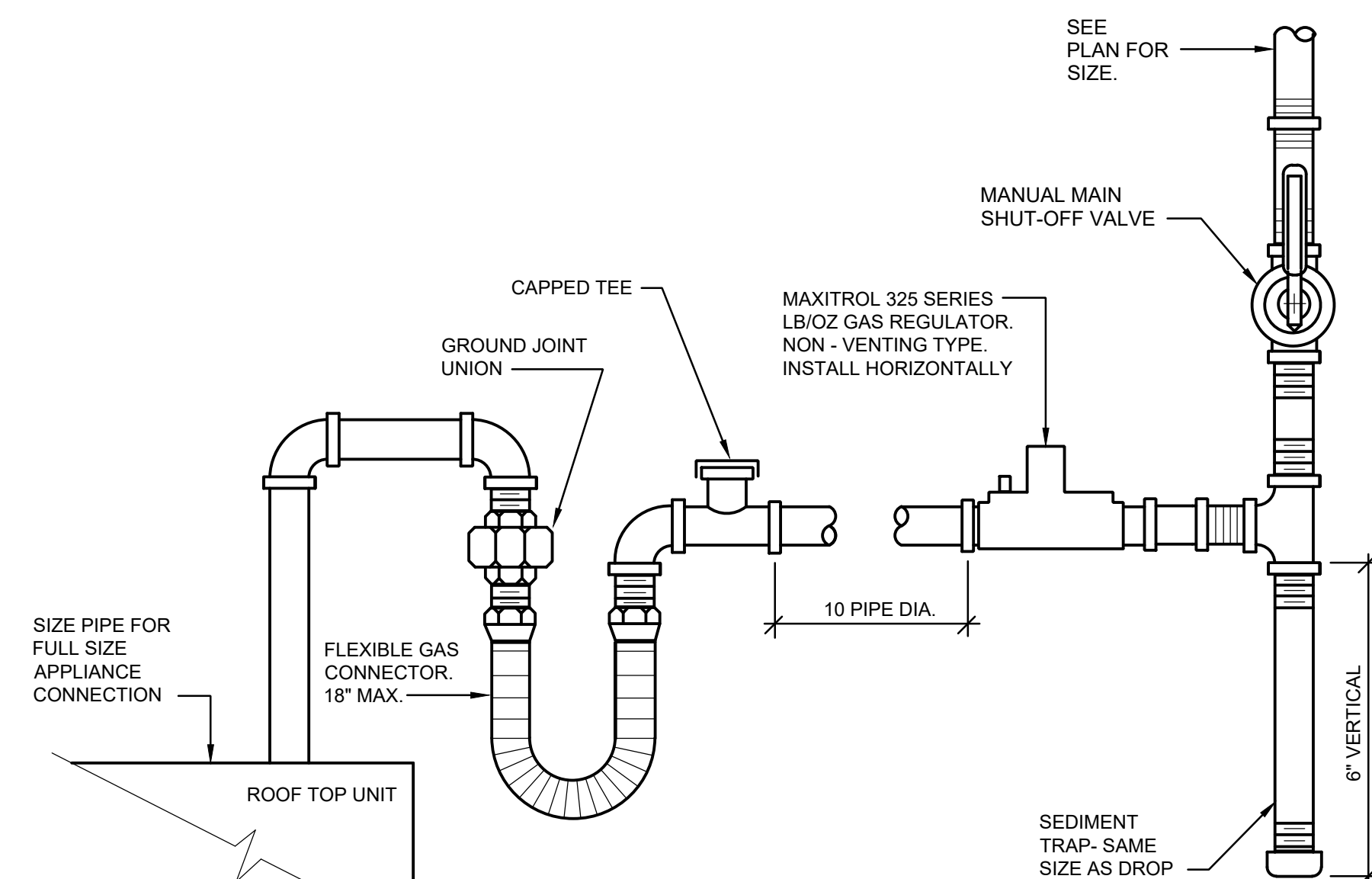
ROOF MOUNTED EXHAUST FAN DETAIL

NOT TO SCALE

8
M501

MAIN DUCT INSTALLATION DETAIL

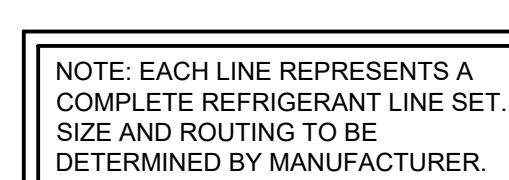
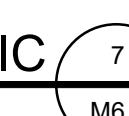
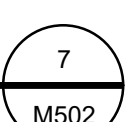
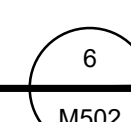
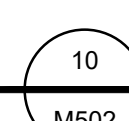
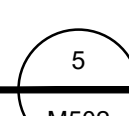
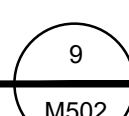
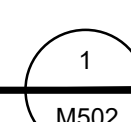
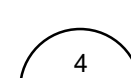
NOT TO SCALE

5
M501

GAS LINE CONNECTION DETAIL

NOT TO SCALE

2
M501



GENERAL MECHANICAL NOTES:

- A. CODE COMPLIANCE. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL PLUMBING CODE (IPC), INTERNATIONAL FUEL GAS CODE (IFGC), NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), NATIONAL ENERGY CONSERVATION CODE (NECC) INCLUDING ALL STATE AND LOCAL AMENDMENTS AND LIFE SAFETY CODES ENFORCED OR CURRENTLY IMPLEMENTED BY THE BUILDING AUTHORITY HAVING JURISDICTION IN WHICH THE PROJECT RESIDES.
- B. COORDINATION PROCEDURES. CONTRACTOR SHALL COORDINATE ALL MECHANICAL (M) AND PLUMBING (P) WORK WITH THE ARCHITECTURAL, STRUCTURAL, CIVIL AND ELECTRICAL TRADES OF THIS PROJECT. REFER TO DRAWINGS, SPECIFICATIONS, SUBMITTALS AND SHOP DRAWINGS OF THE VARIOUS TRADES FOR PROJECT SPECIFIC REQUIREMENTS FOR COORDINATION PURPOSES.
- C. DRAWINGS (M) AND (P) DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT TO BE SCALED. DUCT AND PIPE ROUTING INDICATED ON THE DRAWINGS IS APPROXIMATE. NO ATTEMPT HAS BEEN MADE TO SHOW ALL EXISTING (M) AND (P) EQUIPMENT AND DEVICES. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND TRANSITIONS AS NEEDED TO FACILITATE INSTALLATION OF THE MECHANICAL AND PLUMBING SYSTEMS IN HARMONY WITH THE OTHER RESPECTIVE TRADES OF THE PROJECT.
- D. EQUIPMENT SELECTIONS. ALL PROJECT EQUIPMENT PROVIDED BY THE CONTRACTOR SHALL BE SELECTED TO MEET AND OPERATE AT THE CAPACITIES INDICATED IN THE CONTRACT DOCUMENTS AT THE JOB SITE CONDITIONS. JOB SITE CONDITIONS INCLUDE ELEVATION ABOVE SEA LEVEL, AMBIENT SUMMER AND WINTER DRY BULB/WET BULB TEMPERATURES, WIND DIRECTION AND PROPERTY SITE AND PROPERTY LINES.
- E. WORKMANSHIP. INSTALL ALL PRODUCTS AND MATERIALS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND CONSTRUCTION INDUSTRY STANDARDS. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER.
- F. DUCT CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL CONSTRUCT ALL DUCTWORK, UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS, IN ACCORDANCE WITH THE LATEST VERSION OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- G. SEISMIC CONDITIONS. ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE SEISMICALLY BRACED IN ACCORDANCE WITH THE IBC, IMC, ASHRAE AND SMACNA STANDARDS. WHERE REQUIRED, THIS CONTRACTOR SHALL EMPLOY THE PROFESSIONAL SERVICES OF A RECOGNIZED SEISMIC BRACING COMPANY TO PROVIDE SHOP DRAWINGS, DETAILS, CONFIGURATIONS, ANCHORS, SUPPORTS, ATTACHMENTS AND MATERIALS FOR BRACING THE MECHANICAL EQUIPMENT, DUCTWORK AND PIPING.
- H. WARRANTY. THE CONTRACTOR SHALL WARRANT TO THE OWNER THAT ALL MATERIALS AND EQUIPMENT FURNISHED UNDER THE CONTRACT WILL BE NEW AND OF GOOD QUALITY, UNLESS OTHERWISE REQUIRED OR PERMITTED BY THE CONTRACT DOCUMENTS, AND THAT THE WORK WILL BE FREE FROM DEFECTS NOT INHERENT IN THE QUALITY REQUIRED OR PERMITTED, AND THAT THE WORK WILL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. WARRANTY PERIOD FOR THIS WORK SHALL EXTEND FOR ONE YEAR AFTER DATE OF SUBSTANTIAL COMPLETION.
- I. CHANGES. IF CONCEALED OR UNKNOWN PHYSICAL CONDITIONS ARE ENCOUNTERED AT THE SITE THAT DIFFER MATERIALLY FROM THOSE INDICATED IN THE CONTRACT DOCUMENTS OR FROM THOSE CONDITIONS ORDINARILY FOUND TO EXIST, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE OWNER OR ARCHITECT OF THOSE CONDITIONS. SHOULD THE CONTRACTOR PROCEED WITH THE WORK WITHOUT INSTRUCTION, NOTIFICATION OF CHANGE OR AN APPROVED CHANGE ORDER, HE DOES SO AT HIS OWN FINANCIAL RISK.
- J. UTILITY INTERRUPTIONS. EXISTING (M), (P) AND (FP) WORK SHALL REMAIN IN SERVICE EXCEPT AS REQUIRED FOR SCHEDULED INTERRUPTIONS. INTERRUPTIONS OF SERVICE OR UTILITIES SHALL BE SCHEDULED WITH THE OWNER AND ARCHITECT AT LEAST TWO WEEKS IN ADVANCE.
- K. TIME IS OF THE ESSENCE. THE CONTRACTOR SHALL COMMENCE WORK UNDER THIS CONTRACT UPON RECEIPT OF THE OWNER'S WRITTEN NOTICE TO THE CONTRACTOR TO PROCEED. THE CONTRACTOR SHALL COMPLETE THE WORK AND HAVE IT READY FOR SUBSTANTIAL COMPLETION INSPECTION BY THE DATE NOTED IN THE CONTRACT.

PROJECT DESIGN DATA:
LOCATION: OGDEN, UTAH
LATITUDE: 41.05°
LONGITUDE: 111.36°
ELEVATION: 4200 FT
SUMMER DESIGN DRY BULB: 97°F
SUMMER DESIGN WET BULB: 65°F
WINTER DESIGN DRY BULB: 1°F
DEFAULT SUMMER INDOOR DRY BULB: 75°F
DEFAULT WINTER INDOOR DRY BULB: 72°F

BUILDING PLUMBING SERVICES PIPING MATERIALS LISTING

CONDENSATE PIPING SYSTEMS
ABOVE-GRADE - COPPER PIPE AND TUBING MEETING REQUIREMENTS OF ASTM B 88, TYPE L WITH WROUGHT COPPER SWEAT FITTINGS WITH 95/5 OR 96/4 TIN-ANTIMONY SOLDER.

REFRIGERANT PIPING SYSTEMS:
HARD COPPER TUBING MEETING REQUIREMENTS OF ASTM B 280, HARD DRAWN STRAIGHT LENGTHS WITH WROUGHT COPPER SWEAT FITTINGS WITH AWS CLASSIFICATION BCUP-4 COPPER PHOSPHORUS OR AWS CLASSIFICATION BCUP-5 COPPER PHOSPHORUS RODS AND WHITE BRAZING OR HIGH QUALITY SILVER SOLDER FLUX.

DIFFUSER SCHEDULE

(1) FURNISH WITH PLENUM SUPPLY BOX					
SYMBOL	TYPE	NECK SIZE	LOCATION	AIR PATTERN	MAKE & MODEL
D-1 CFM	COMBINATION SUPPLY/RETURN	48" x 48"	CEILING	4-WAY	PRICE CSRD 53" x 53" FACE (1)(2)(3)
D-2 CFM	COMBINATION SUPPLY/RETURN	36" x 36"	CEILING	4-WAY	PRICE CSRD 41" x 41" FACE (1)(2)(3)
D-3 CFM	LAY-IN	10"Ø	CEILING	4-WAY	PRICE SPD 24 x 24 FACE (1)(2)
D-4 CFM	LAY-IN	6"Ø	CEILING	4-WAY	PRICE SPD 12 x 12 FACE (1)(2)

NOTES:

- (1) PROVIDE REQUIRED CEILING FRAMES FOR MOUNTING IN LAY-IN OR GYP-BOARD CEILING.
(2) TO HAVE BRIGHT WHITE POWDER COAT FINISH.

RETURN AND EXHAUST GRILLE SCHEDULE

SYMBOL	NECK SIZE	LOCATION	TYPE	MAKE & MODEL
R-1	24" x 12"	CEILING	RETURN AIR	PRICE 535 (1)
EG-1 CFM	12" x 12"	CEILING	EXHAUST AIR	PRICE 535 (1)

NOTES:

- (1) TO HAVE BRIGHT WHITE POWDER COAT FINISH.

ROOFTOP UNIT SCHEDULE

SYMBOL	SERVES	CFM	EXTERNAL STATIC PRESS	FAN		DRIVE	COOLING CAPACITY					HEATING CAPACITY				ELEC	MCA	MFS	WEIGHT LBS	SIZE	MANUFACTURER & MODEL (1)(2)(3)(4)
				H.P.	BHP		OAT	EDB EWB	TOTAL MBH	SENSIBLE MBH	SEER / EER	TYPE	GAS CONN.	MBH IN	MBH OUT						
RT-1	STORAGE 184	1400	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-2	PROF. DEVEL. 101	2000	0.5	2.0 1.47		BELT	95	80 62	66.0	53.4	11.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	28.0	45	900	74" x 47" x 42"	CARRIER 48FCEA07B2A5 (5)
RT-3	OFFICE 179	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-4	HALLWAY 111	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/1/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-5	CLASSROOM 110	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-6	CLASSROOM 175	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-7	CLASSROOM 112	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-8	ENTRY 113	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-9	CLASSROOM 114	1600	0.5	1.5 0.85		BELT	95	80 62	42.7	35.9	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	26.0	30	800	74" x 47" x 34"	CARRIER 48FCEA05B2A5
RT-10	CLASSROOM 116	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-11	OFFICE 170	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-12	OFFICE 169	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-13	AUDITORIUM 125	7500	0.6	5.0 4.6		BELT	95	80 62	180.0	152.0	10.8	INDIRECT GAS	3/4"	310 248	248 198	208 V/3/60	88.6	100.0	1800	116" x 67" x 58"	CARRIER 48FCEM16B2A5 (5)(6)
RT-14	STAGE 127	2000	0.5	2.0 1.47		BELT	95	80 62	66.0	53.4	11.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	28.0	45	900	74" x 47" x 42"	CARRIER 48FCEA07B2A5 (5)
RT-15	OFFICE 163	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-16	OFFICE 162	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-17	WORKROOM 160	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-18	OFFICE 158	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-19	ENTRY 135	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-20	CLASSROOM 136	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-21	FACULTY 150	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-22	CLASSROOM 137	1200	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-23	OFFICE 149	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-24	HALLWAY 139	1000	0.5	0.5 0.28		BELT	95	80 62	24.0	23.3	14.0	INDIRECT GAS	1/2"	40 -	32 -	208 V/3/60	21.1	30	400	49" x 33" x 46"	CARRIER 48VL-F3
RT-25	CLASSROOM 141	1400	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-26	CLASSROOM 145	1400	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-27	CLASSROOM 142	1400	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5
RT-28	CLASSROOM 144	1400	0.5	1.0 0.43		BELT	95	80 62	30.7	28.0	14.0	INDIRECT GAS	1/2"	110 82	88 66	208 V/3/60	20.0	30	720	74" x 47" x 34"	CARRIER 48FCEA04A2A5

NOTES:

- (1) FURNISH ROOF TOP UNIT COMPLETE WITH FULL DRY BULB ECONOMIZER, BACNET CARD AND OPEN PROTOCOL CONTROLS FOR UTAH-YAMAS CONTROLS, MOTORIZED R.A. & O.A. DAMPERS, GRAVITY RELIEF, WEATHERHOODS FOR O.A. AND RELIEF AIR, HAIL GUARDS, POWERED CONVENIENCE OUTLET, SINGLE POINT POWER CONNECTION W/ NON-FUSED DISCONNECT, STAINLESS STEEL DRAIN PAN, HIGH ALTITUDE KIT, LB/OZ GAS REGULATOR, MERV 8 AIR FILTERS, 2 STAGE MEDIUM GAS HEAT & LOCKING HINGED SERVICE ACCESS DOORS.
- (2) INSTALL NEW ROOF-TOP UNIT LEVEL AND PLUMB PER MANUFACTURERS INSTRUCTIONS. MAINTAIN MANUFACTURERS RECOMMENDED SERVICE AND OPERATIONAL CLEARANCES AROUND UNIT.
- (3) PROVIDE 14 INCH HIGH FACTORY FABRICATED AND INSULATED ROOF CURB. VERIFY LOCATION OF ROOF CURB AND ROOF OPENINGS WITH STRUCTURAL ENGINEER PRIOR TO INSTALLING. ROOF OPENINGS FOR SUPPLY AND RETURN AIR DUCTWORK TO BE STRUCTURALLY FRAMED TO MATCH DUCTWORK SIZES INDICATED.
- (4) AIRFLOW, HEATING AND COOLING CAPACITIES ARE MINIMUM ACCEPTABLE. CONTRACTOR TO SELECT EQUIPMENT FOR PROJECT SITE ALTITUDE OF 4200 FT ASL, 97 DEG F DB AND 62 DEG F WB.
- (5) TWO STAGE COOLING.
- (6) PROVIDE IONIZATION TYPE, DUCT MOUNTED SMOKE DETECTOR INTEGRATED WITH BUILDING FIRE ALARM CONTROLS. SMOKE DETECTOR TO BE MOUNTED IN R.A. DUCT.

EXHAUST FAN SCHEDULE

SYMBOL	SERVES	TYPE	C.F.M	S.P.	R.P.M.	MOTOR HP ELECTRICAL	DRIVE	SONES	CONTROL	MAKE & MODEL	NOTES
EF-1	CHANGING ROOM 102	CEILING	100	0.25	1075	0.125 H.P. 120/1/60	DIRECT	2.0	WALL SWITCH	COOK GC-148	(1)(3)(5)(6)
EF-2	BOYS RESTROOM 109	ROOF MTD DOWNBLAST	320	0.25	1045	0.25 H.P. 120/1/60	BELT	4.2	ATC	COOK ACE-B-100C2B	(1)(2)(3)(4)(5)
EF-3	JANITOR ROOM 177	CEILING	70	0.25	900	0.125 H.P. 120/1/60	DIRECT	2.0	WALL SWITCH	COOK GC-148	(1)(3)(5)(6)
EF-4	GIRLS RESTROOM 176	ROOF MTD DOWNBLAST	320	0.25	1045	0.25 H.P. 120/1/60	BELT	4.2	ATC	COOK ACE-B-100C2B	(1)(2)(3)(4)(5)
EF-5	GIRLS RESTROOM 168	CEILING	100	0.25	1075	0.125 H.P. 120/1/60	DIRECT	2.0	WALL SWITCH	COOK GC-148	(1)(3)(5)(6)
EF-6	BOYS RESTROOM 155	CEILING	100	0.25	1075	0.125 H.P. 120/1/60	DIRECT	2.0	WALL SWITCH	COOK GC-148	(1)(3)(5)(6)
EF-7	UNISEX RESTROOM 130	CEILING	150	0.25	1100	0.125 H.P. 120/1/60	DIRECT	3.1	WALL SWITCH	COOK GC-166	(1)(3)(5)(6)
EF-8	FACULTY ROOM 150	CEILING	125	0.25	1100	0.125 H.P. 120/1/60	DIRECT	2.0	WALL SWITCH	COOK GC-148	(1)(3)(5)(6)
EF-9	GIRLS RESTROOM 146	ROOF MTD DOWNBLAST	320	0.25	1045	0.25 H.P. 120/1/60	BELT	4.2	ATC	COOK ACE-B-100C2B	(1)(2)(3)(4)(5)
EF-10	JANITORS ROOM 147	CEILING	70	0.25	900	0.125 H.P. 120/1/60	DIRECT	2.0	WALL SWITCH	COOK GC-148	(1)(3)(5)(6)
EF-11	BOYS RESTROOM 138	ROOF MTD DOWNBLAST	320	0.25	1045	0.25 H.P. 120/1/60	BELT	4.2	ATC	COOK ACE-B-100C2B	(1)(2)(3)(4)(5)

NOTES:

- (1) FIELD VERIFY ELECTRICAL VOLTAGE AND POWER PHASE PRIOR TO ORDERING FAN. FIELD VERIFY LOCATION OF EXHAUST FAN WITH G.C. AND STRUCTURAL ENGINEER.
(2) MOUNT EXHAUST FAN SECURELY ON 24 INCH HIGH SOUND INSULATED ROOF CURB. CURB TO BE BOLTED OR WELDED TO METAL ROOF DECK.
(3) FURNISH EXHAUST FAN WITH LOCALIZED, FACTORY WIRED DISCONNECT SWITCH AND BACK DRAFT DAMPER.
(4) PROVIDE REQUIRED DUCT TRANSITION FROM EXHAUST DUCT TO EXHAUST FAN. PROVIDE FRAMED ROOF OPENING FOR EXHAUST DUCT AND FAN SUPPORT.
(5) REFER TO SPECIFICATIONS FOR EXHAUST FAN CONTROL SEQUENCE.
(6) BALANCE EXHAUST FAN TO CFM INDICATED. PROVIDE VARIABLE FAN SPEED CONTROL OR ADJUSTABLE DAMPERS WHERE NEEDED TO MATCH CFM LISTED.

RECESSED WALL ELECTRIC HEATER SCHEDULE

SYMBOL	WATTS	TYPE	VOLTS	PHASE	AMPS	MOCF	WEIGHT	SIZE	MAKE & MODEL (1)(2)(3)
EH-1	1800	RECESSED	120	1	15.0	20	25 LBS	20"x16"x4"	QMARK MODEL AWH3180F
EH-2	1800	RECESSED	120	1	15.0	20	25 LBS	20"x16"x4"	QMARK MODEL AWH3180F
EH-3	1800	RECESSED	120	1	15.0	20	25 LBS	20"x16"x4"	QMARK MODEL AWH3180F
EH-4	1800	RECESSED	120	1	15.0	20	25 LBS	20"x16"x4"	QMARK MODEL AWH3180F

NOTES:

- (1) FURNISH W/ INTEGRAL THERMOSTAT, 16 GAUGE HEAVY DUTY, DECORATIVE BRONZE GRILLE, SATIN ALUMINUM FRAME, AND RECESSED MOUNTING BOX.
(2) PROVIDE THERMAL CUTOUT AND CONCEALED POWER ON/OFF SWITCH
(3) SET THERMOSTAT TO ENERGIZE HEATING ELEMENTS WHEN TEMPERATURE DROPS BELOW 67 DEG F. (ADJUSTABLE)

INDOOR CEILING AND WALL CASSETTE SCHEDULE																	
ID	LOCATION	TYPE	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	AIR FLOW RATE (CFM)	EXT STATIC PRESS (IN)	CONDENSATE DRAIN	REFRIGERANT SUCTION	REFRIGERANT LIQUID	WEIGHT (LBS)	NOMINAL UNIT SIZE W" x L" x H"	REFRIGERANT TYPE	SOUND PRESSURE LEVELS (HML)(dB(A))	ELECTRICAL	MCA (A)	MOCP (A)	MAKE & MODEL
CC-1	CEILING	4-WAY CASSETTE	7500	8500	265	0.125	1"	1/2"	1/4"	40	24" x 24" x 10"	R410A	29/27/26	208-230/60/1	0.2	15	LG - ARNU073TRD4
CC-2	CEILING	4-WAY CASSETTE	42000	43800	1091	0.125	1"	5/8"	3/8"	72	36" x 36" x 14"	R410A	54/51/48	208-230/60/1	1.67	15	LG - ARNU423TAA4
WC-1	WALL	2-WAY CASSETTE	7500	8500	254	0.125	5/8"	1/2"	1/4"	25	32" x7.5" x 12.5"	R410A	32/30/28	208-230/60/1	0.25	15	LG - ARNU073SJA4
WC-2	WALL	2-WAY CASSETTE	9600	10900	275	0.125	5/8"	1/2"	1/4"	25	32" x7.5" x 12.5"	R410A	34/32/28	208-230/60/1	0.25	15	LG - ARNU093SJA4
WC-3	WALL	2-WAY CASSETTE	15400	17100	371	0.125	5/8"	1/2"	1/4"	25	32" x7.5" x 12.5"	R410A	42/39/31	208-230/60/1	0.25	15	LG - ARNU153SJA4
WC-4	WALL	2-WAY CASSETTE	24200	25600	537	0.125	5/8"	5/8"	3/8"	35	38" x8" x 14"	R410A	46/41/34	208-230/60/1	0.52	15	LG - ARNU243SKA4
WC-5	WALL	2-WAY CASSETTE	30000	32000	812	0.125	5/8"	5/8"	3/8"	48	46.5" x10.5" x 14.5"	R410A	49/44/42	208-230/60/1	0.51	15	LG - ARNU303SVA4

- NOTES:
- (1) PROVIDE INDOOR UNITS WITH Y BRANCHES AND BRAZED REFRIGERANT CONNECTORS WITH BALL ISOLATION VALVES.
- (2) INDOOR UNITS TO BE MOUNTED HIGH ON WALL OR CENTERED BETWEEN CEILING TILES. PROVIDE FACTORY FABRICATED MOUNTING BRACKETS AND ISOLATORS. COORDINATE LOCATION OF INDOOR UNITS WITH ELECTRICIAN AND ARCHITECT.
- (3) PROVIDE INTEGRAL CONDENSATE LIFT PUMP (5 GPH @ 20" HEAD) WITH CONDENSATE DRAIN CONNECTION FOR EACH INDOOR UNIT. WHERE CONDENSATE PUMPS ARE NOT INTEGRALLY PROVIDED FURNISH CONDENSATE PUMP MOUNTED TO UNIT. PIPE CONDENSATE DRAIN LINE FULL SIZE TO NEAREST INDIRECT FLOOR SINK. SERVICE SINK OR SINK TAIL PIECE.

INDOOR BRANCH CONTROLLER SCHEDULE															
SYMBOL	COOLING BTUH	HEATING BTUH	MAX INDOOR PORTS	VOLTAGE & PHASE	RATED AMPS	PIPING CONNECTIONS				MAX DIMENSIONS				MANUFACTURER & MODEL	
						INT. LIQUID	INT. VAPOR	EXT. LIQUID	EXT. VAPOR	WIDTH	DEPTH	HEIGHT	WEIGHT		
BC-1	42000	45000	4	208/230/1	0.15	1/4"	3/8"	3/8"	3/4"	12"	14"	7"	16 LB	LG 4 BRANCH PMBD SERIES	
BC-2	36000	39000	4	208/230/1	0.14	1/4"	3/8"	3/8"	3/4"	12"	14"	7"	15 LB	LG 4 BRANCH PMBD SERIES	
BC-3	30000	34000	4	208/230/1	0.12	1/4"	3/8"	3/8"	3/4"	12"	14"	7"	15 LB	LG 4 BRANCH PMBD SERIES	
BC-4	48000	51000	4	208/230/1	0.16	1/4"	3/8"	3/8"	3/4"	12"	14"	7"	18 LB	LG 4 BRANCH PMBD SERIES	
BC-5	42000	45000	4	208/230/1	0.15	1/4"	3/8"	3/8"	3/4"	12"	14"	7"	16 LB	LG 4 BRANCH PMBD SERIES	

- NOTES:
- (1) INSTALL BRANCH CONTROLLERS WITH BRAZED REFRIGERANT CONNECTORS AND BALL ISOLATION VALVES.

OUTDOOR HEAT PUMP UNIT SCHEDULE																		
SYSTEM ID	MANUFACTURER	LG MODEL NUMBER	MAX. NUMBER INT UNITS	NOMINAL COOLING CAPACITY (BTUH)	NOMINAL HEATING CAPACITY (BTUH)	DESIGN COOLING OUTDOOR TEMP DB (°F)	DESIGN HEATING OUTDOOR TEMP DB (°F)	REFRIG PIPE SIZE LIQUID / SUCTION (INCH)	REFRIG	COND FANS	CFM	SOUND PRESSURE (dBA)	VOLTAGE / PHASE	ELECTRICAL		UNIT PHYSICAL		NOTES / OPTIONS
														208-230 VOLT - 1 PHASE		SIZE	WEIGHT	
														MCA	MFS			
HP-1	LG HVAC	ARUN042- SERIES V	6	42,000	48,000	95	-3	3/8 / 5/8	R410A	2	3885	51	208-230 / 1 PH	30.0	50	55" x 38" x 13"	265	(1)(2)(3)(4)(5)
HP-2	LG HVAC	ARUN036 - SERIES V	6	36,000	42,000	95	-3	3/8 / 5/8	R410A	2	4238	53	208-230 / 1 PH	23.5	40	55" x 38" x 13"	265	(1)(2)(3)(4)(5)
HP-3	LG HVAC	ARUN030- SERIES V	4	30,000	33,000	95	-3	1/4 / 3/8	R410A	1	1955	54	208-230 / 1 PH	20.1	30	35" x 26" x 16"	200	(1)(2)(3)(4)(5)
HP-4	LG HVAC	ARUN048- SERIES V	8	48,000	54,000	95	-3	3/8 / 5/8	R410A	2	3885	51	208-230 / 1 PH	30.0	50	55" x 38" x 13"	265	(1)(2)(3)(4)(5)
HP-5	LG HVAC	ARUN042- SERIES V	6	42,000	48,000	95	-3	3/8 / 5/8	R410A	2	3885	51	208-230 / 1 PH	30.0	50	55" x 38" x 13"	265	(1)(2)(3)(4)(5)

- NOTES & OPTIONS:
- (1) PROVIDE OUTDOOR UNITS WITH 18 IN. BASE RAILS WITH VIBRATION ISOLATION ANCHORED SECURELY AND SEISMICALLY TO THE ROOF DECK.
- (2) PROVIDE LOCALIZED NON-FUSED DISCONNECT FOR EACH OUTDOOR HEAT PUMP UNIT.
- (3) HEAT PUMP UNIT SHALL BE CAPABLE OF PROVIDING 100% RATED HEAT CAPACITY DOWN TO 5 DEG F
- (4) FURNISH WITH OPTIONAL LOW AMBIENT WIND BAFFLE KITS.
- (5) SIZING AND ROUTING OF REFRIGERATION PIPING TO BE DETERMINED BY HEAT PUMP MANUFACTURER. PROVIDE SHOP DRAWINGS AND SCHEMATIC LADDER DIAGRAMS INDICATING LENGTHS AND SIZES OF ALL REFRIGERATION PIPING FROM OUTDOOR HEAT PUMPS TO BRANCH CONTROLLERS, TO INDOOR CASSETTE UNITS. .

AC CONDENSING UNIT AND WALL MOUNTED FAN COIL SCHEDULE															
ID	LOCATION	CFM RANGE	NOMINAL COOLING CAPACITY (BTUH)	DESIGN COOLING OUTDOOR TEMP	ELECTRICAL REQUIREMENTS				REFRIGERANT REQUIREMENTS				WEIGHT (LBS)	MAKE & MODEL (1)(2)(3)(4)(5)	
					POWER	MCA	MOP	RATED AMPS	TYPE	LIQUID	VAPOR (HIGH)	VAPOR (LOW)			
AC-1	IT/STORAGE IT1	290-380	8,000 -18,000		208/1/60	1.00	15	0.33	R-410A	1/4"	1/2"	-	29	MITSUBISHI PKA-A18HA4	
AC-2	IT ROOM 186	290-380	6,000 -12,000		208/1/60	1.00	15	0.33	R-410A	1/4"	1/2"	-	29	MITSUBISHI PKA-A12HA4	
AC-1	ROOF MOUNTED	1200	8,000 -18,000	95	208/1/60	13.00	20	12	R-410A	1/4"	1/2"	-	95	MITSUBISHI PUY-A18NHA4	
AC-2	ROOF MOUNTED	1200	6,000 -12,000	95	208/1/60	13.00	20	12	R-410A	1/4"	1/2"	-	90	MITSUBISHI PUY-A12NHA4	

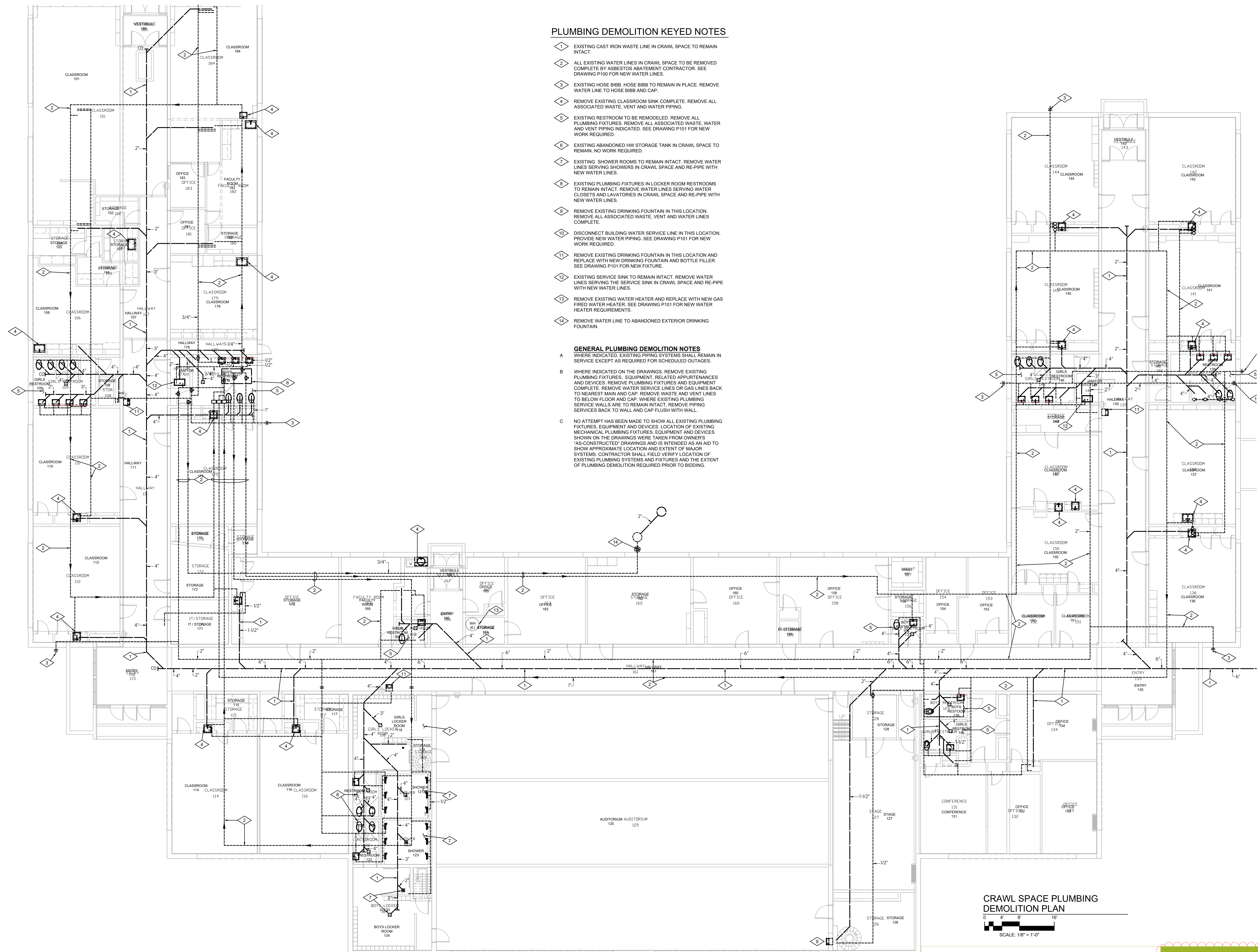
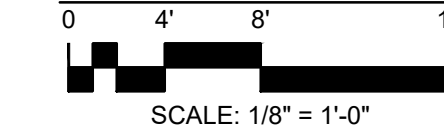
- NOTES:
- (1) PROVIDE OUTDOOR UNIT WITH 18 IN. HIGH BASE RAILS WITH VIBRATION ISOLATION.
- (2) PROVIDE SINGLE POINT POWER CONNECTION TO OUTDOOR UNIT WITH FIELD MOUNTED ELECTRICAL DISCONNECT. INDOOR UNITS TO RECEIVE POWER FROM OUTDOOR UNIT.
- (3) INDOOR UNITS TO BE MOUNTED HIGH ON WALL IN IT ROOMS. COORDINATE LOCATION OF INDOOR UNITS WITH ELECTRICIAN AND OWNER'S IT SPECIALIST.
- (4) PROVIDE INTEGRAL CONDENSATE LIFT PUMP (5 GPH @ 20" HEAD) WITH 5/8" CONDENSATE DRAIN CONNECTION FOR EACH INDOOR UNIT. .
- (5) PIPE CONDENSATE DRAIN LINE FULL SIZE TO FLOOR SINK. SERVICE SINK OR PLUMBING VENT.

PLUMBING DEMOLITION KEYED NOTES

- 1 EXISTING CAST IRON WASTE LINE IN CRAWL SPACE TO REMAIN INTACT.
- 2 ALL EXISTING WATER LINES IN CRAWL SPACE TO BE REMOVED COMPLETE BY ASBESTOS ABATEMENT CONTRACTOR. SEE DRAWING P100 FOR NEW WATER LINES.
- 3 EXISTING HOSE BIBB. HOSE BIBB TO REMAIN IN PLACE. REMOVE WATER LINE TO HOSE BIBB AND CAP.
- 4 REMOVE EXISTING CLASSROOM SINK COMPLETE. REMOVE ALL ASSOCIATED WASTE, VENT AND WATER PIPING.
- 5 EXISTING RESTROOM TO BE REMODELED. REMOVE ALL PLUMBING FIXTURES. REMOVE ALL ASSOCIATED WASTE, WATER AND VENT PIPING INDICATED. SEE DRAWING P101 FOR NEW WORK REQUIRED.
- 6 EXISTING ABANDONED HW STORAGE TANK IN CRAWL SPACE TO REMAIN. NO WORK REQUIRED.
- 7 EXISTING SHOWER ROOMS TO REMAIN INTACT. REMOVE WATER LINES SERVING SHOWERS IN CRAWL SPACE AND RE-PIPE WITH NEW WATER LINES.
- 8 EXISTING PLUMBING FIXTURES IN LOCKER ROOM RESTROOMS TO REMAIN INTACT. REMOVE WATER LINES SERVING WATER CLOSETS AND LAVATORIES IN CRAWL SPACE AND RE-PIPE WITH NEW WATER LINES.
- 9 REMOVE EXISTING DRINKING FOUNTAIN IN THIS LOCATION. REMOVE ALL ASSOCIATED WASTE, VENT AND WATER LINES COMPLETE.
- 10 DISCONNECT BUILDING WATER SERVICE LINE IN THIS LOCATION. PROVIDE NEW WATER PIPING. SEE DRAWING P101 FOR NEW WORK REQUIRED.
- 11 REMOVE EXISTING DRINKING FOUNTAIN IN THIS LOCATION AND REPLACE WITH NEW DRINKING FOUNTAIN AND BOTTLE FILLER. SEE DRAWING P101 FOR NEW FIXTURE.
- 12 EXISTING SERVICE SINK TO REMAIN INTACT. REMOVE WATER LINES SERVING THE SERVICE SINK IN CRAWL SPACE AND RE-PIPE WITH NEW WATER LINES.
- 13 REMOVE EXISTING WATER HEATER AND REPLACE WITH NEW GAS FIRED WATER HEATER. SEE DRAWING P101 FOR NEW WATER HEATER REQUIREMENTS.
- 14 REMOVE WATER LINE TO ABANDONED EXTERIOR DRINKING FOUNTAIN.

GENERAL PLUMBING DEMOLITION NOTES

- A WHERE INDICATED, EXISTING PIPING SYSTEMS SHALL REMAIN IN SERVICE EXCEPT AS REQUIRED FOR SCHEDULED OUTAGES.
- B WHERE INDICATED ON THE DRAWINGS, REMOVE EXISTING PLUMBING FIXTURES, EQUIPMENT, RELATED APPURTENANCES AND DEVICES. REMOVE PLUMBING FIXTURES AND EQUIPMENT COMPLETE. REMOVE WATER SERVICE LINES OR GAS LINES BACK TO NEAREST MAIN AND CAP. REMOVE WASTE AND VENT LINES TO BELOW FLOOR AND CAP. WHERE EXISTING PLUMBING SERVICE WALLS ARE TO REMAIN INTACT, REMOVE PIPING SERVICES BACK TO WALL AND CAP FLUSH WITH WALL.
- C NO ATTEMPT HAS BEEN MADE TO SHOW ALL EXISTING PLUMBING FIXTURES, EQUIPMENT AND DEVICES. LOCATION OF EXISTING MECHANICAL PLUMBING FIXTURES, EQUIPMENT AND DEVICES SHOWN ON THE DRAWINGS WERE TAKEN FROM OWNER'S "AS-CONSTRUCTED" DRAWINGS AND IS INTENDED AS AN AID TO SHOW APPROXIMATE LOCATION AND EXTENT OF MAJOR SYSTEMS. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING PLUMBING SYSTEMS AND FIXTURES AND THE EXTENT OF PLUMBING DEMOLITION REQUIRED PRIOR TO BIDDING.

CRAWL SPACE PLUMBING
DEMOLITION PLAN

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
SCALE:



CRAWL SPACE PLUMBING
DEMOLITION PLAN

PD100

PLUMBING DEMOLITION KEYED NOTES

- 1 REMOVE EXISTING CLASSROOM SINK COMPLETE. REMOVE ALL ASSOCIATED WASTE, VENT AND WATER PIPING.
- 2 EXISTING RESTROOM TO BE REMODELED. REMOVE ALL PLUMBING FIXTURES. REMOVE ALL ASSOCIATED WASTE, WATER AND VENT PIPING. SEE DRAWING P101 FOR NEW WORK REQUIRED.
- 3 EXISTING SHOWER ROOM TO REMAIN INTACT. REMOVE WATER LINES SERVING SHOWERS IN CRAWL SPACE AND RE-PIPE WITH NEW WATER LINES.
- 4 EXISTING PLUMBING FIXTURES IN LOCKER ROOM TO REMAIN INTACT. REMOVE WATER LINES SERVING WATER CLOSETS AND LAVATORIES IN CRAWL SPACE AND RE-PIPE WITH NEW WATER LINES.
- 5 REMOVE EXISTING DRINKING FOUNTAIN IN THIS LOCATION. REMOVE ALL ASSOCIATED WASTE, VENT AND WATER LINES COMPLETE. CAP EXPOSED LINES INSIDE WALL.
- 6 REMOVE EXISTING DRINKING FOUNTAIN IN THIS LOCATION AND REPLACE WITH NEW DRINKING FOUNTAIN AND BOTTLE FILLER. SEE DRAWING P101 FOR NEW FIXTURE.
- 7 EXISTING SERVICE SINK TO REMAIN INTACT. REMOVE WATER LINES SERVING THE SERVICE SINK IN CRAWL SPACE AND RE-PIPE WITH NEW WATER LINES.
- 8 REMOVE EXISTING WATER HEATER AND REPLACE WITH NEW GAS FIRED WATER HEATER. SEE DRAWING P101 FOR NEW WATER HEATER REQUIREMENTS.
- 9 EXISTING ROOF DRAIN LINES ARE NOT SHOWN ON THIS DRAWING. ROOF DRAIN LINES ENCOUNTERED ARE TO REMAIN INTACT. NO WORK REQUIRED. (TYP)
- 10 EXISTING VENT PIPING ABOVE CEILING SPACES TO REMAIN INTACT. NO WORK REQUIRED UNLESS OTHERWISE NOTED. (TYP)

MAIN LEVEL PLUMBING
DEMOLITION PLAN

0 4' 8' 16'

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

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
SCALE:

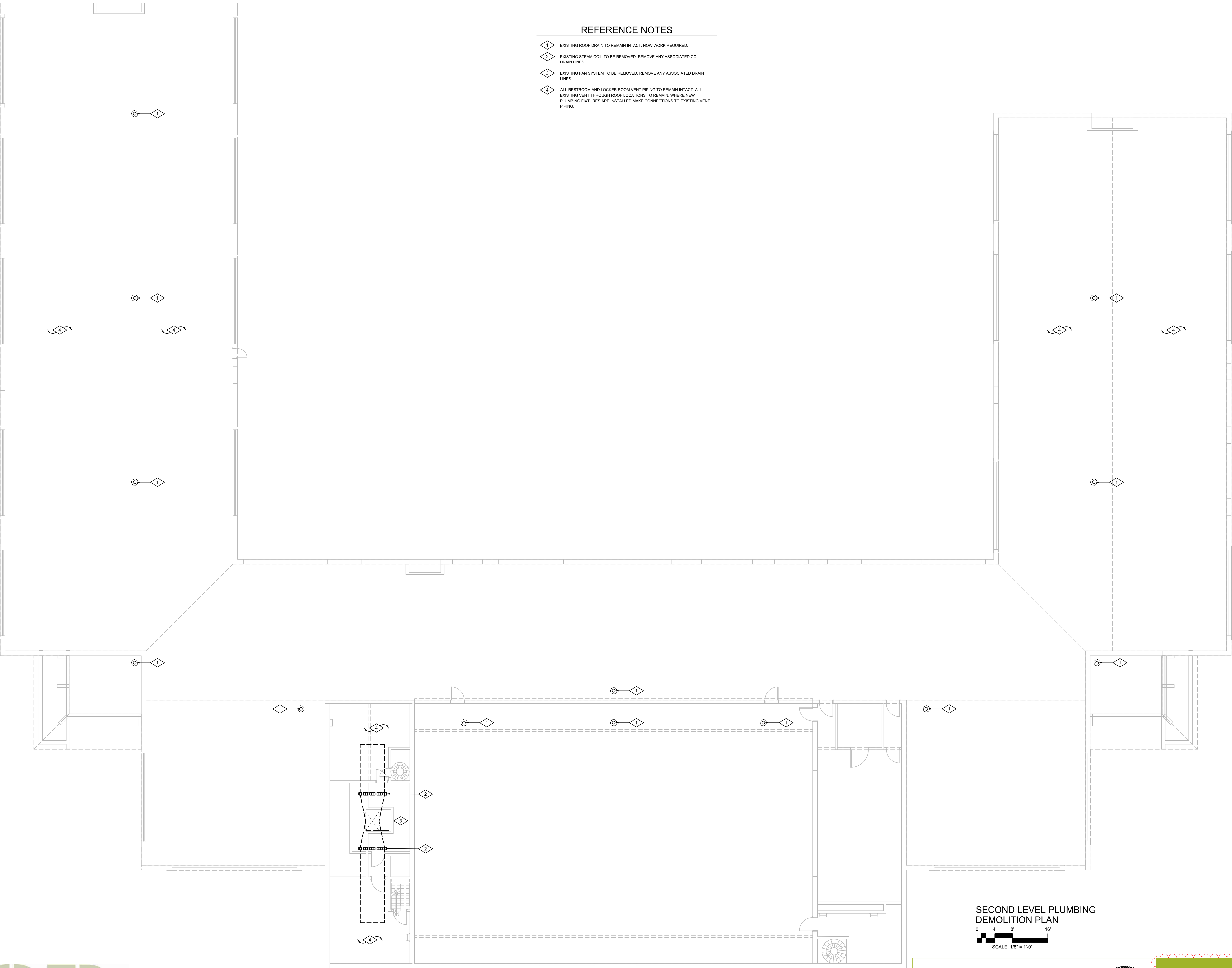


MAIN LEVEL PLUMBING
DEMOLITION PLAN

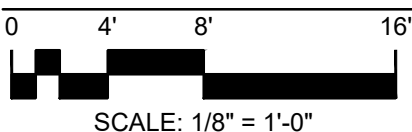
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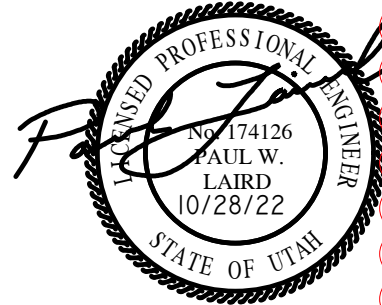
- 1 EXISTING ROOF DRAIN TO REMAIN INTACT. NOW WORK REQUIRED.
- 2 EXISTING STEAM COIL TO BE REMOVED. REMOVE ANY ASSOCIATED COIL DRAIN LINES.
- 3 EXISTING FAN SYSTEM TO BE REMOVED. REMOVE ANY ASSOCIATED DRAIN LINES.
- 4 ALL RESTROOM AND LOCKER ROOM VENT PIPING TO REMAIN INTACT. ALL EXISTING VENT THROUGH ROOF LOCATIONS TO REMAIN. WHERE NEW PLUMBING FIXTURES ARE INSTALLED MAKE CONNECTIONS TO EXISTING VENT PIPING.



SECOND LEVEL PLUMBING
DEMOLITION PLAN



PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
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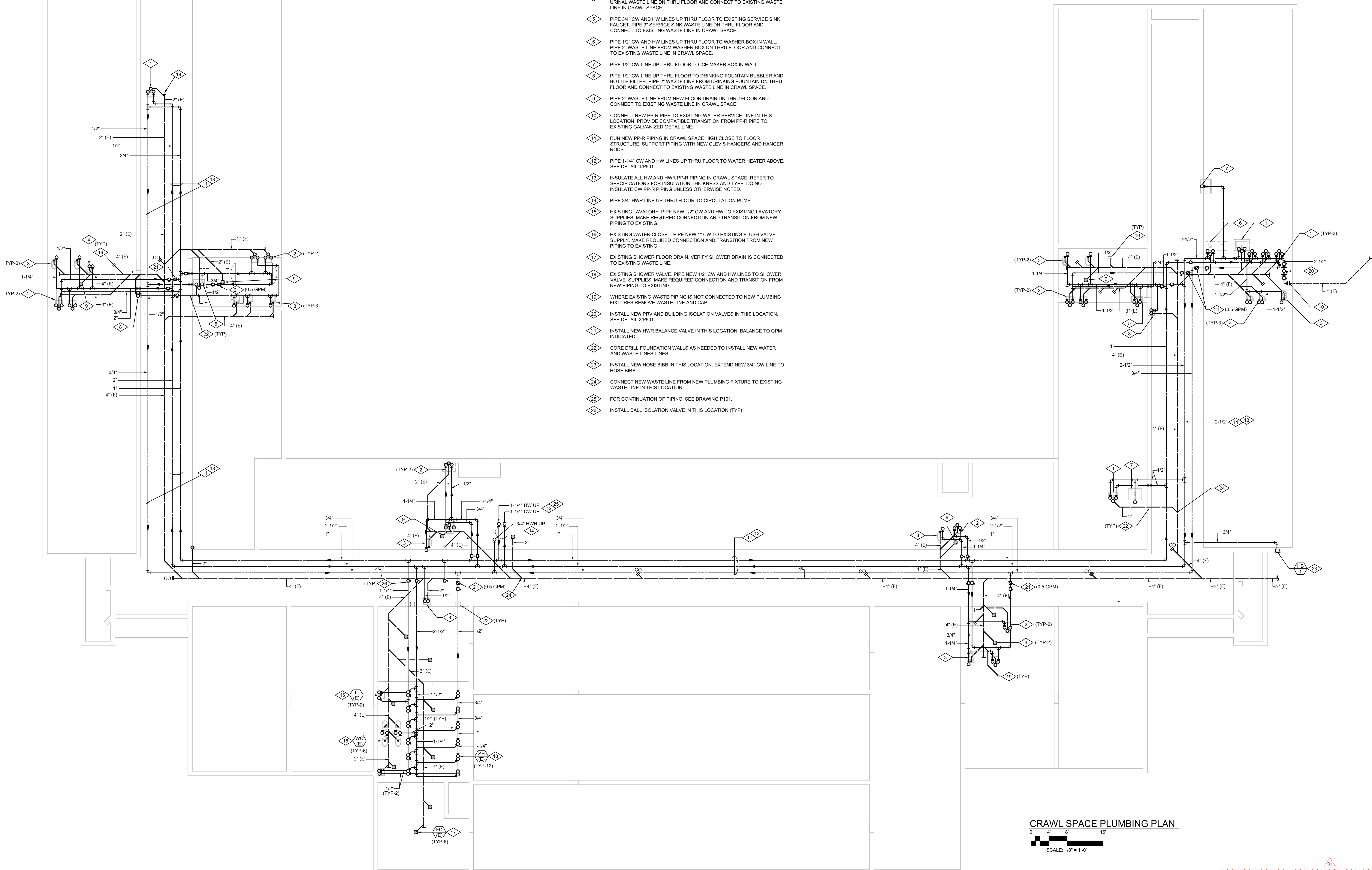


SECONDLEVEL PLUMBING
DEMOLITION PLAN

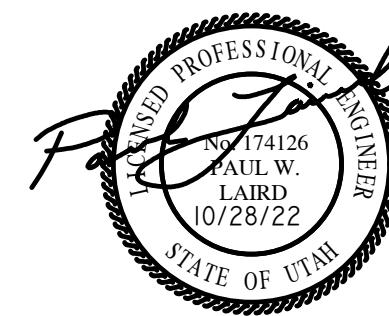
PD102

REFERENCE NOTES

- 1 PIPE 1/2" CW AND HW LINES UP THRU FLOOR TO SINK FAUCET. PIPE 2" SINK WASTE LINE DN THRU FLOOR AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
- 2 PIPE 1/2" CW AND HW LINES UP THRU FLOOR TO LAVATORY FAUCET. PIPE 1-1/2" LAVATORY WASTE LINE DN THRU FLOOR AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
- 3 PIPE 1" CW LINE UP THRU FLOOR TO WATER CLOSET FLUSH VALVE. PIPE 4" WATER CLOSET WASTE LINE DN THRU FLOOR AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
- 4 PIPE 3/4" CW LINE UP THRU FLOOR TO URINAL FLUSH VALVE. PIPE 2" URINAL WASTE LINE DN THRU FLOOR AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
- 5 PIPE 3/4" CW AND HW LINES UP THRU FLOOR TO EXISTING SERVICE SINK FAUCET. PIPE 3" SERVICE SINK WASTE LINE DN THRU FLOOR AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
- 6 PIPE 1/2" CW AND HW LINES UP THRU FLOOR TO WASHER BOX IN WALL. PIPE 2" WASTE LINE FROM WASHER BOX DN THRU FLOOR AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
- 7 PIPE 1/2" CW LINE UP THRU FLOOR TO ICE MAKER BOX IN WALL.
- 8 PIPE 1/2" CW LINE UP THRU FLOOR TO DRINKING FOUNTAIN BUBBLER AND BOTTLE FILLER. PIPE 2" WASTE LINE FROM DRINKING FOUNTAIN DN THRU FLOOR AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
- 9 PIPE 2" WASTE LINE FROM NEW FLOOR DRAIN DN THRU FLOOR AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
- 10 CONNECT NEW PP-R PIPE TO EXISTING WATER SERVICE LINE IN THIS LOCATION. PROVIDE COMPATIBLE TRANSITION FROM PP-R PIPE TO EXISTING GALVANIZED METAL LINE.
- 11 RUN NEW PP-R PIPING IN CRAWL SPACE HIGH CLOSE TO FLOOR STRUCTURE. SUPPORT PIPING WITH NEW CLEVIS HANGERS AND HANGER RODS.
- 12 PIPE 1-1/4" CW AND HW LINES UP THRU FLOOR TO WATER HEATER ABOVE. SEE DETAIL 1/P501.
- 13 INSULATE ALL HW AND HWR PP-R PIPING IN CRAWL SPACE. REFER TO SPECIFICATIONS FOR INSULATION THICKNESS AND TYPE. DO NOT INSULATE CW PP-R PIPING UNLESS OTHERWISE NOTED.
- 14 PIPE 3/4" HWR LINE UP THRU FLOOR TO CIRCULATION PUMP.
- 15 EXISTING LAVATORY. PIPE NEW 1/2" CW AND HW TO EXISTING LAVATORY SUPPLIES. MAKE REQUIRED CONNECTION AND TRANSITION FROM NEW PIPING TO EXISTING.
- 16 EXISTING WATER CLOSET. PIPE NEW 1" CW TO EXISTING FLUSH VALVE SUPPLY. MAKE REQUIRED CONNECTION AND TRANSITION FROM NEW PIPING TO EXISTING.
- 17 EXISTING SHOWER FLOOR DRAIN. VERIFY SHOWER DRAIN IS CONNECTED TO EXISTING WASTE LINE.
- 18 EXISTING SHOWER VALVE. PIPE NEW 1/2" CW AND HW LINES TO SHOWER VALVE SUPPLIES. MAKE REQUIRED CONNECTION AND TRANSITION FROM NEW PIPING TO EXISTING.
- 19 WHERE EXISTING WASTE PIPING IS NOT CONNECTED TO NEW PLUMBING FIXTURES REMOVE WASTE LINE AND CAP.
- 20 INSTALL NEW PRV AND BUILDING ISOLATION VALVES IN THIS LOCATION. SEE DETAIL 2/P501.
- 21 INSTALL NEW HWR BALANCE VALVE IN THIS LOCATION. BALANCE TO GPM INDICATED.
- 22 CORE DRILL FOUNDATION WALLS AS NEEDED TO INSTALL NEW WATER AND WASTE LINES LINES.
- 23 INSTALL NEW HOSE BIBB IN THIS LOCATION. EXTEND NEW 3/4" CW LINE TO HOSE BIBB.
- 24 CONNECT NEW WASTE LINE FROM NEW PLUMBING FIXTURE TO EXISTING WASTE LINE IN THIS LOCATION.
- 25 FOR CONTINUATION OF PIPING, SEE DRAWING P101.
- 26 INSTALL BALL ISOLATION VALVE IN THIS LOCATION (TYP)



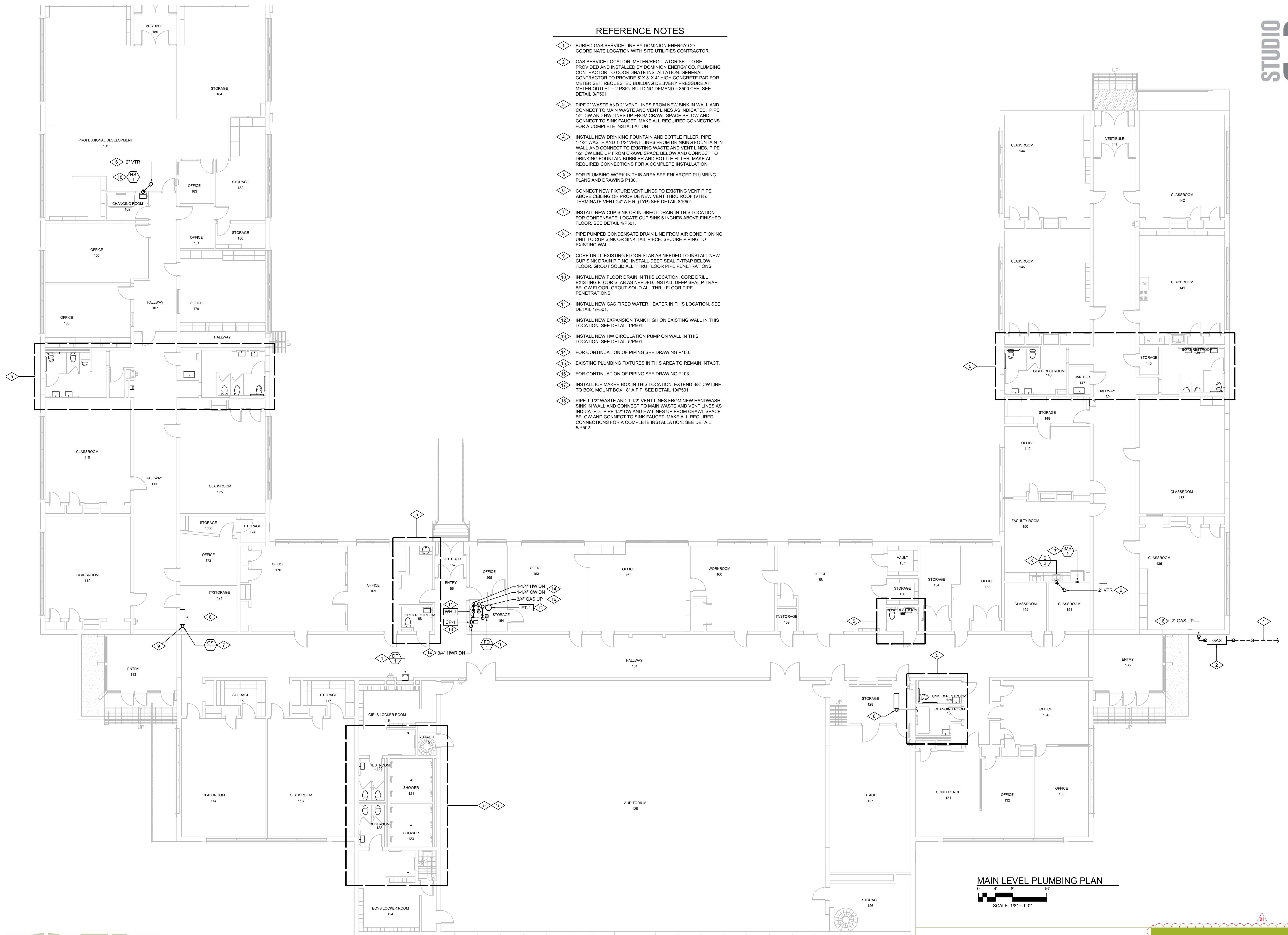
CRAWL SPACE PLUMBING PLAN

0 4 8 16'
SCALE: 1/8" = 1'-0"PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
SCALE:CRAWL SPACE PLUMBING
PLAN

P100

REFERENCE NOTES

- 1 BURIED GAS SERVICE LINE BY DOMINION ENERGY CO. COORDINATE LOCATION WITH SITE UTILITIES CONTRACTOR.
- 2 GAS SERVICE LOCATION. METER/REGULATOR SET TO BE PROVIDED AND INSTALLED BY DOMINION ENERGY CO. PLUMBING CONTRACTOR TO COORDINATE INSTALLATION. GENERAL CONTRACTOR TO PROVIDE 5' X 3' X 4" HIGH CONCRETE PAD FOR METER SET. REQUESTED BUILDING DELIVERY PRESSURE AT METER OUTLET = 2 PSIG. BUILDING DEMAND = 3500 CFH. SEE DETAIL 3/P501
- 3 PIPE 2" WASTE AND 2" VENT LINES FROM NEW SINK IN WALL AND CONNECT TO MAIN WASTE AND VENT LINES AS INDICATED. PIPE 1/2" CW AND HW LINES UP FROM CRAWL SPACE BELOW AND CONNECT TO SINK FAUCET. MAKE ALL REQUIRED CONNECTIONS FOR A COMPLETE INSTALLATION.
- 4 INSTALL NEW DRINKING FOUNTAIN AND BOTTLE FILLER. PIPE 1-1/2" WASTE AND 1-1/2" VENT LINES FROM DRINKING FOUNTAIN IN WALL AND CONNECT TO EXISTING WASTE AND VENT LINES. PIPE 1/2" CW LINE UP FROM CRAWL SPACE BELOW AND CONNECT TO DRINKING FOUNTAIN SUBLER AND BOTTLE FILLER. MAKE ALL REQUIRED CONNECTIONS FOR A COMPLETE INSTALLATION.
- 5 FOR PLUMBING WORK IN THIS AREA SEE ENLARGED PLUMBING PLANS AND DRAWING P100.
- 6 CONNECT NEW FIXTURE VENT LINES TO EXISTING VENT PIPE ABOVE CEILING OR PROVIDE NEW VENT THRU ROOF (VTR). TERMINATE VENT 24" A.F.R. (TYP) SEE DETAIL 8/P501
- 7 INSTALL NEW CUP SINK OR INDIRECT DRAIN IN THIS LOCATION FOR CONDENSATE. LOCATE CUP SINK 6 INCHES ABOVE FINISHED FLOOR. SEE DETAIL 4/P501.
- 8 PIPE PUMPED CONDENSATE DRAIN LINE FROM AIR CONDITIONING UNIT TO CUP SINK OR SINK TAIL PIECE. SECURE PIPING TO EXISTING WALL.
- 9 CORE DRILL EXISTING FLOOR SLAB AS NEEDED TO INSTALL NEW CUP SINK DRAIN PIPING. INSTALL DEEP SEAL P-TRAP BELOW FLOOR. GROUT SOLID ALL THRU FLOOR PIPE PENETRATIONS.
- 10 INSTALL NEW FLOOR DRAIN IN THIS LOCATION. CORE DRILL EXISTING FLOOR SLAB AS NEEDED. INSTALL DEEP SEAL P-TRAP BELOW FLOOR. GROUT SOLID ALL THRU FLOOR PIPE PENETRATIONS.
- 11 INSTALL NEW GAS FIRED WATER HEATER IN THIS LOCATION. SEE DETAIL 1/P501.
- 12 INSTALL NEW EXPANSION TANK HIGH ON EXISTING WALL IN THIS LOCATION. SEE DETAIL 1/P501.
- 13 INSTALL NEW HW CIRCULATION PUMP ON WALL IN THIS LOCATION. SEE DETAIL 5/P501.
- 14 FOR CONTINUATION OF PIPING SEE DRAWING P100.
- 15 EXISTING PLUMBING FIXTURES IN THIS AREA TO REMAIN INTACT.
- 16 FOR CONTINUATION OF PIPING SEE DRAWING P103.
- 17 INSTALL ICE MAKER BOX IN THIS LOCATION. EXTEND 3/8" CW LINE TO BOX. MOUNT BOX 18" A.F.F. SEE DETAIL 10/P501
- 18 PIPE 1-1/2" WASTE AND 1-1/2" VENT LINES FROM NEW HANDWASH SINK IN WALL AND CONNECT TO MAIN WASTE AND VENT LINES AS INDICATED. PIPE 1/2" CW AND HW LINES UP FROM CRAWL SPACE BELOW AND CONNECT TO SINK FAUCET. MAKE ALL REQUIRED CONNECTIONS FOR A COMPLETE INSTALLATION. SEE DETAIL 5/P502



MAIN LEVEL PLUMBING PLAN

0 4 8 16'
SCALE: 1/8" = 1'-0"

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
SCALE:

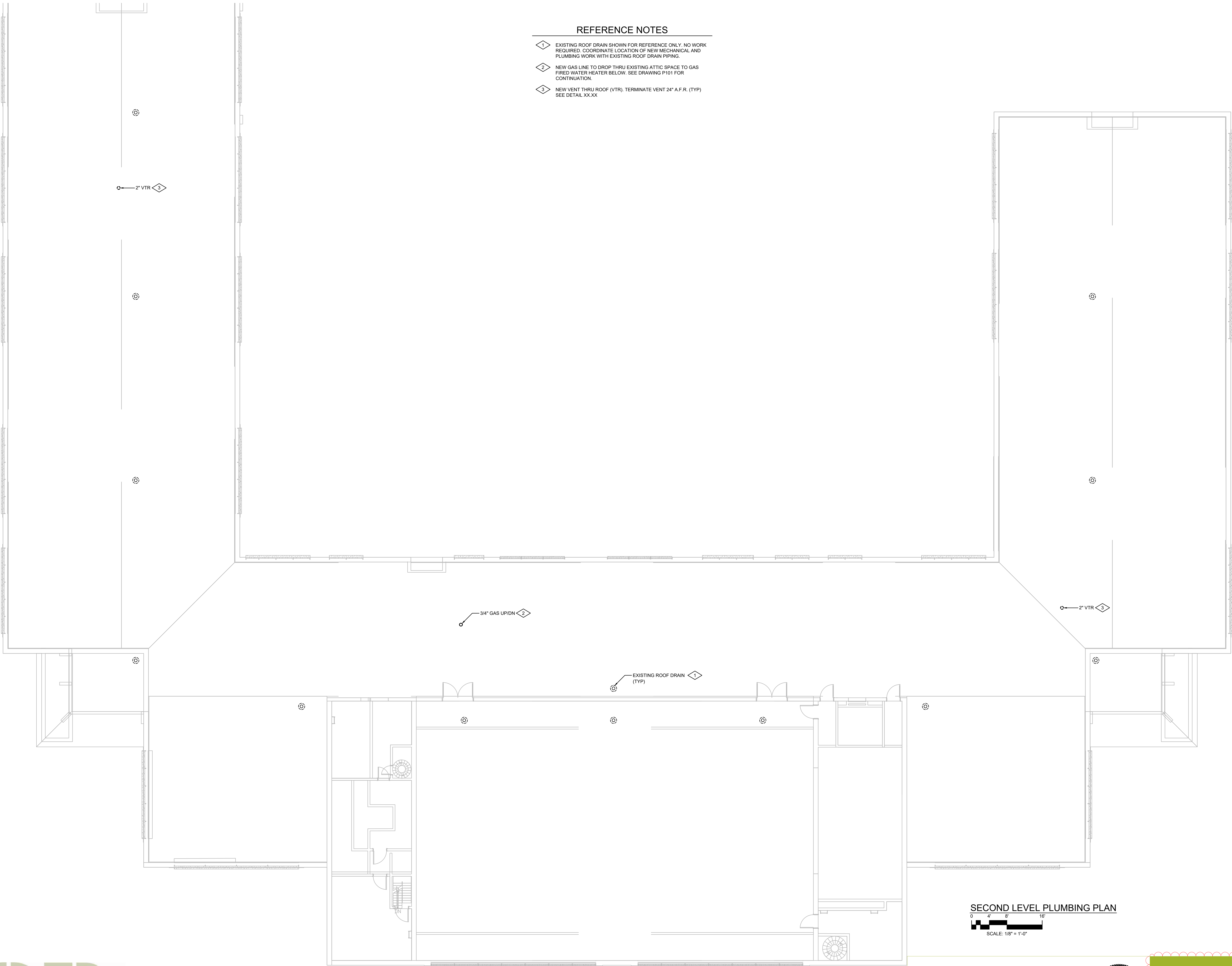


MAIN LEVEL PLUMBING
DEMOLITION PLAN

P101

REFERENCE NOTES

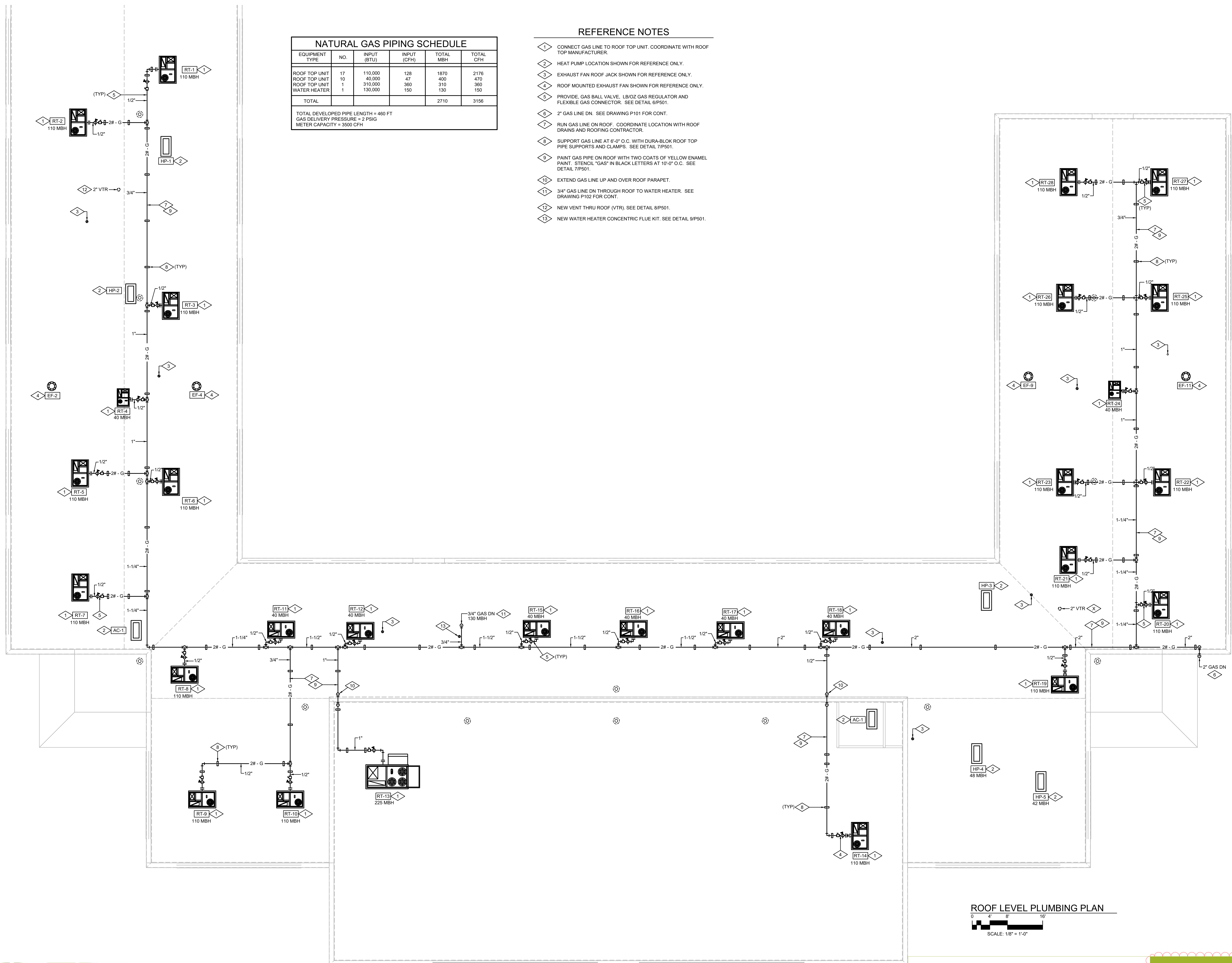
- 1 EXISTING ROOF DRAIN SHOWN FOR REFERENCE ONLY. NO WORK REQUIRED. COORDINATE LOCATION OF NEW MECHANICAL AND PLUMBING WORK WITH EXISTING ROOF DRAIN PIPING.
- 2 NEW GAS LINE TO DROP THRU EXISTING ATTIC SPACE TO GAS FIRED WATER HEATER BELOW. SEE DRAWING P101 FOR CONTINUATION.
- 3 NEW VENT THRU ROOF (VTR). TERMINATE VENT 24" A.F.R. (TYP) SEE DETAIL XX.XX

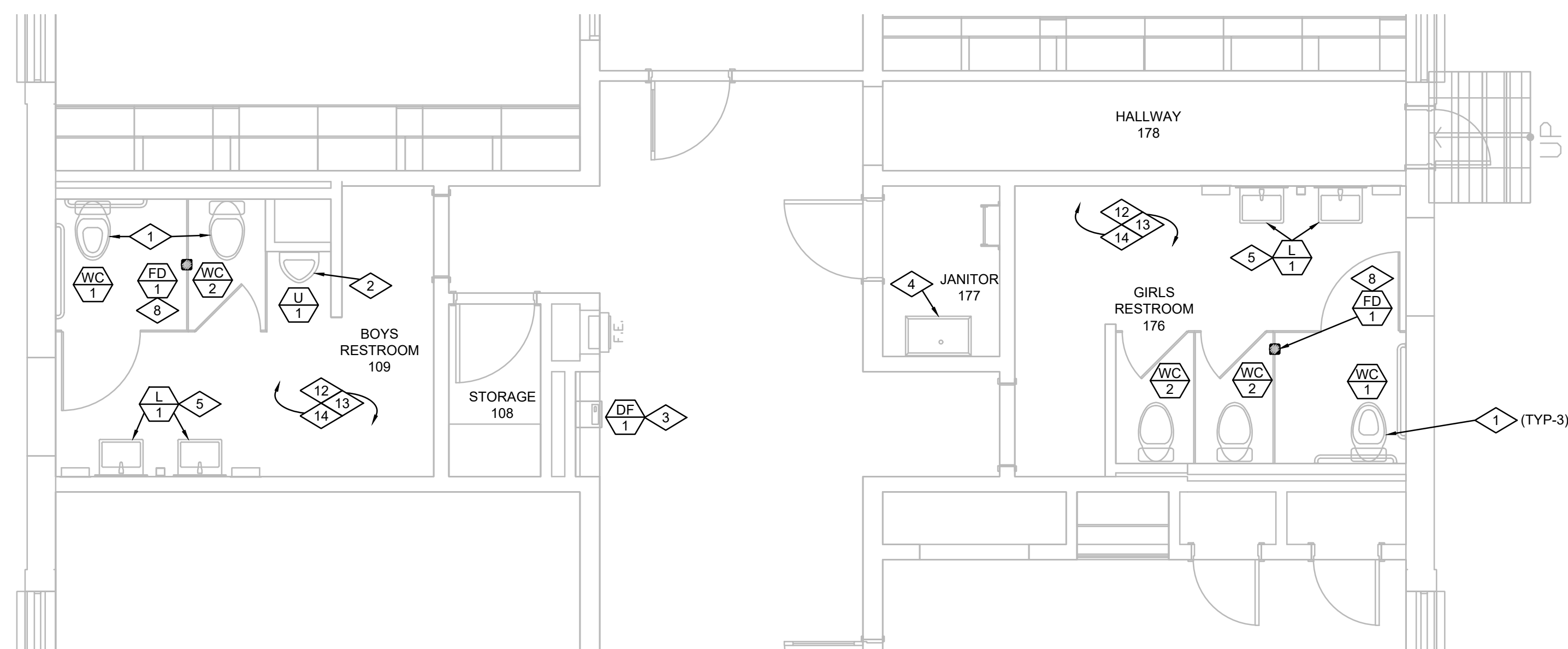


SECOND LEVEL PLUMBING PLAN
0 4 8 16
SCALE: 1/8" = 1'-0"

NATURAL GAS PIPING SCHEDULE					
EQUIPMENT TYPE	NO.	INPUT (BTU)	INPUT (CFH)	TOTAL MBH	TOTAL CFH
ROOF TOP UNIT	17	110,000	128	1870	2176
ROOF TOP UNIT	10	40,000	47	400	470
ROOF TOP UNIT	1	310,000	360	310	360
WATER HEATER	1	130,000	150	130	150
TOTAL				2710	3156
TOTAL DEVELOPED PIPE LENGTH = 460 FT GAS DELIVERY PRESSURE = 2 PSIG METER CAPACITY = 3500 CFH					

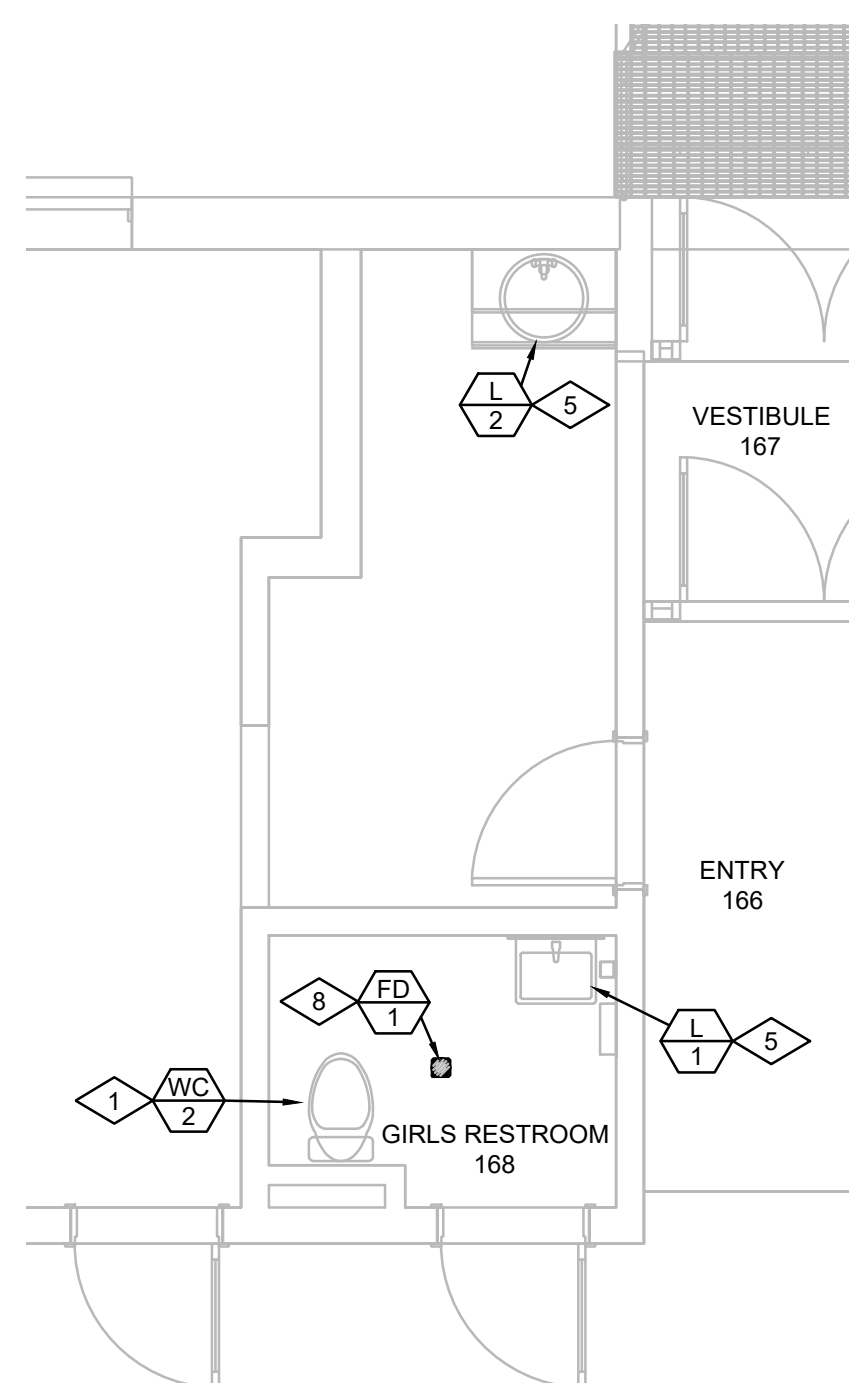
- REFERENCE NOTES
- CONNECT GAS LINE TO ROOF TOP UNIT. COORDINATE WITH ROOF TOP MANUFACTURER.
 - HEAT PUMP LOCATION SHOWN FOR REFERENCE ONLY.
 - EXHAUST FAN ROOF JACK SHOWN FOR REFERENCE ONLY.
 - ROOF MOUNTED EXHAUST FAN SHOWN FOR REFERENCE ONLY.
 - PROVIDE GAS BALL VALVE, LB/OZ GAS REGULATOR AND FLEXIBLE GAS CONNECTOR. SEE DETAIL 6/P501.
 - 2" GAS LINE DN. SEE DRAWING P101 FOR CONT.
 - RUN GAS LINE ON ROOF. COORDINATE LOCATION WITH ROOF DRAINS AND ROOFING CONTRACTOR.
 - SUPPORT GAS LINE AT 6'-0" O.C. WITH DURA-BLOK ROOF TOP PIPE SUPPORTS AND CLAMPS. SEE DETAIL 7/P501.
 - PAINT GAS PIPE ON ROOF WITH TWO COATS OF YELLOW ENAMEL PAINT. STENCIL "GAS" IN BLACK LETTERS AT 10'-0" O.C. SEE DETAIL 7/P501.
 - EXTEND GAS LINE UP AND OVER ROOF PARAPET.
 - 3/4" GAS LINE DN THROUGH ROOF TO WATER HEATER. SEE DRAWING P102 FOR CONT.
 - NEW VENT THRU ROOF (VTR). SEE DETAIL 8/P501.
 - NEW WATER HEATER CONCENTRIC FLUE KIT. SEE DETAIL 9/P501.





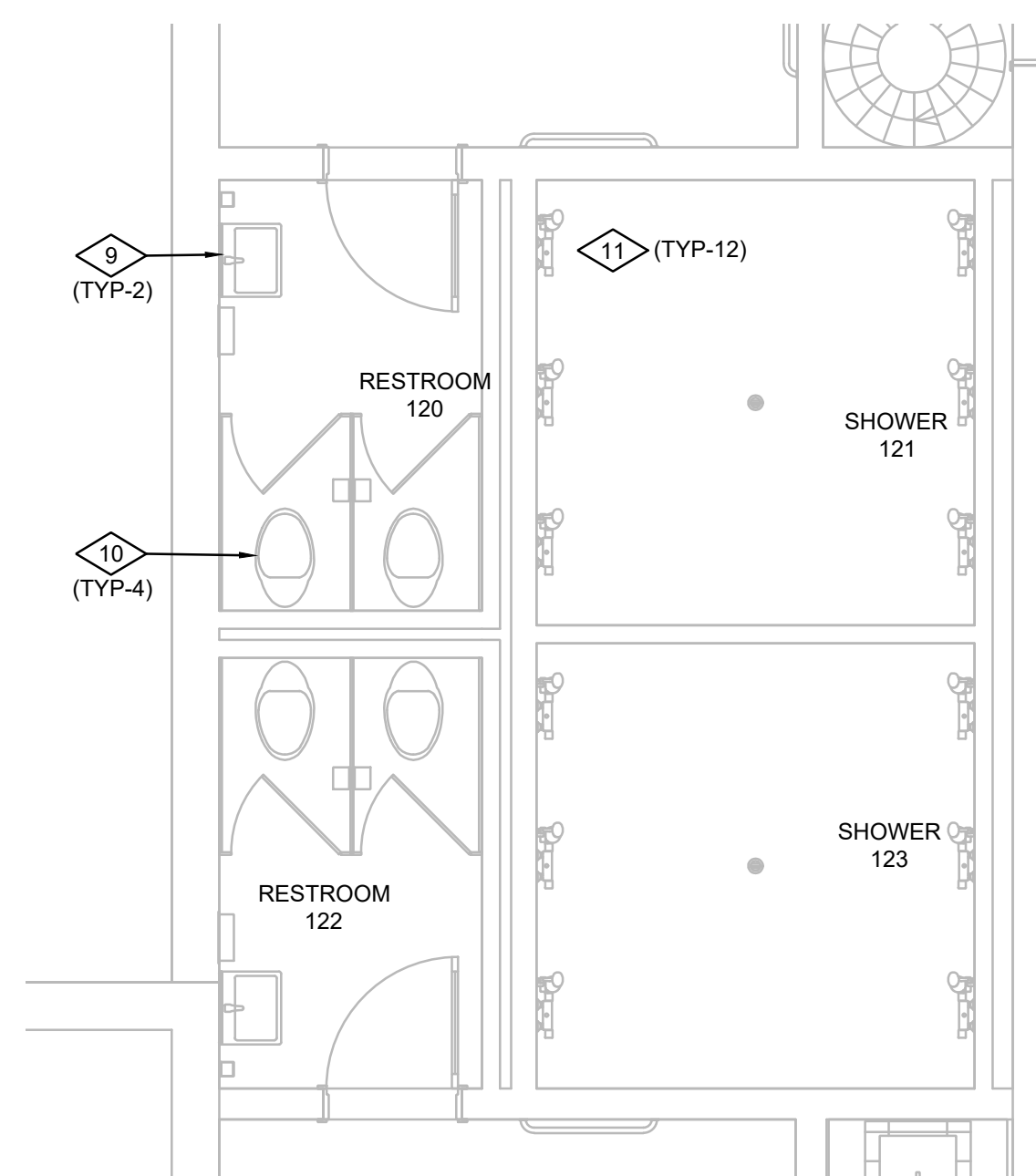
GIRLS 109 & BOYS 176 RESTROOM

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



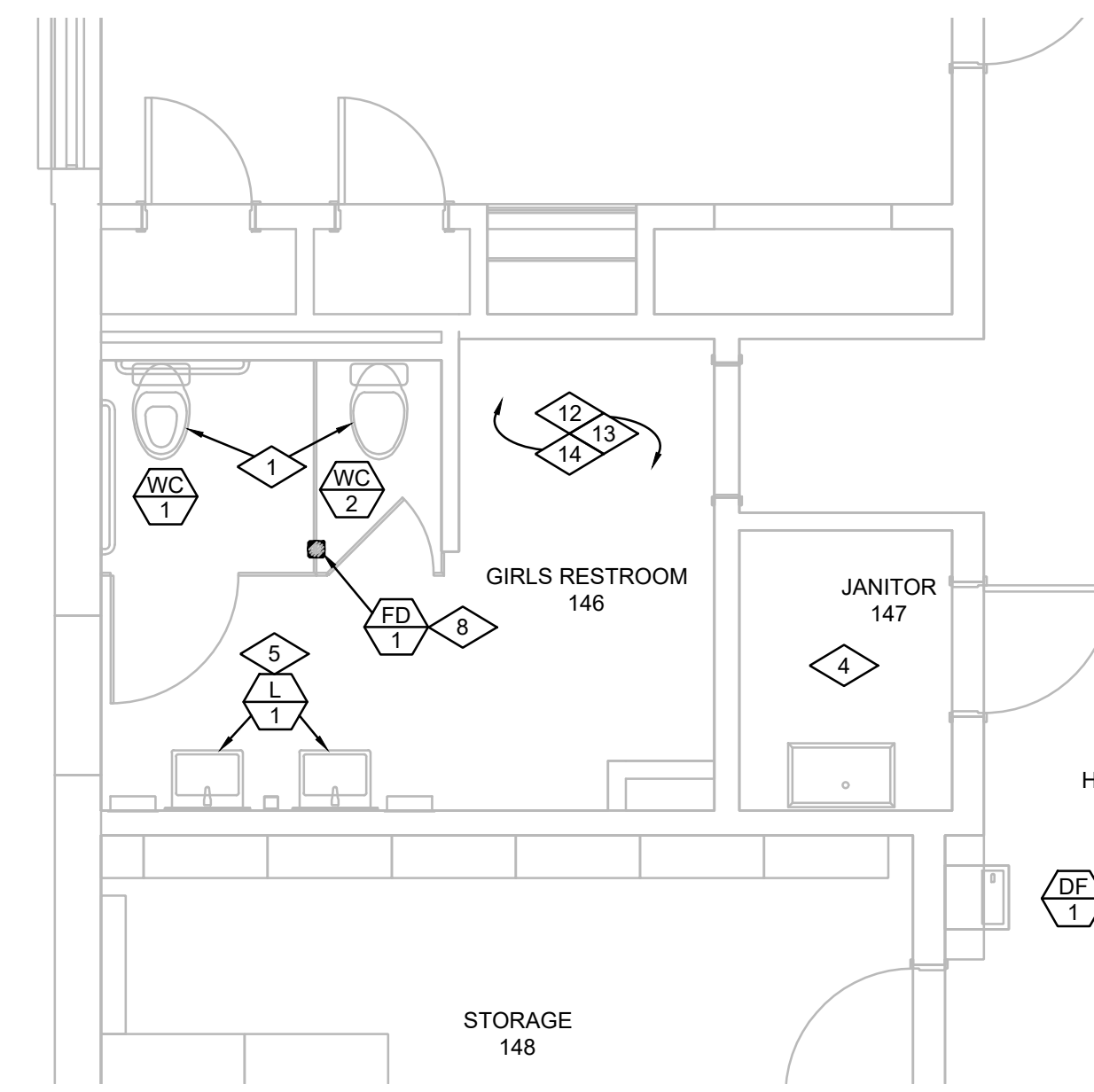
GIRLS RESTROOM 168

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



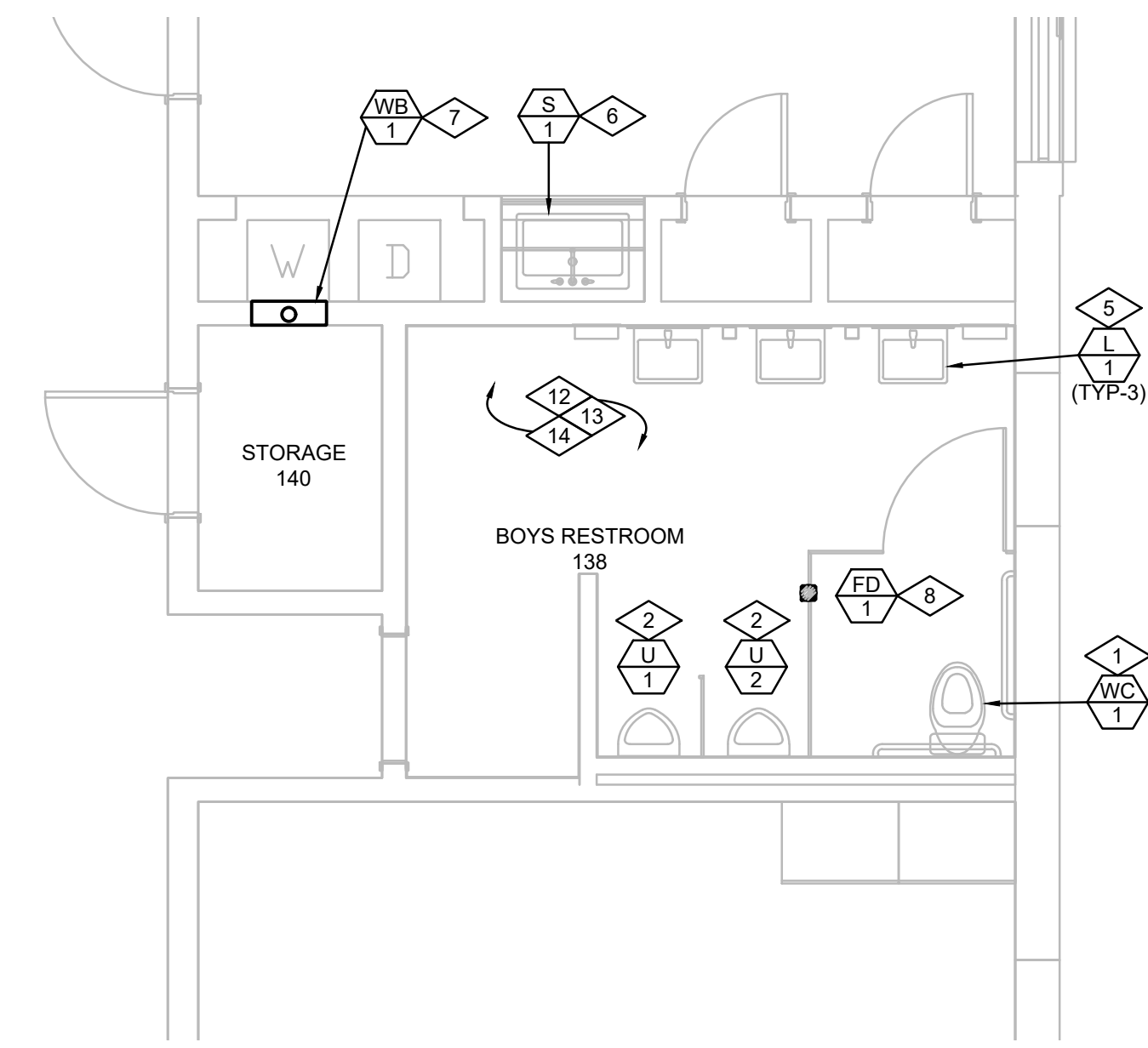
RESTROOM 120 & RESTROOM 122

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



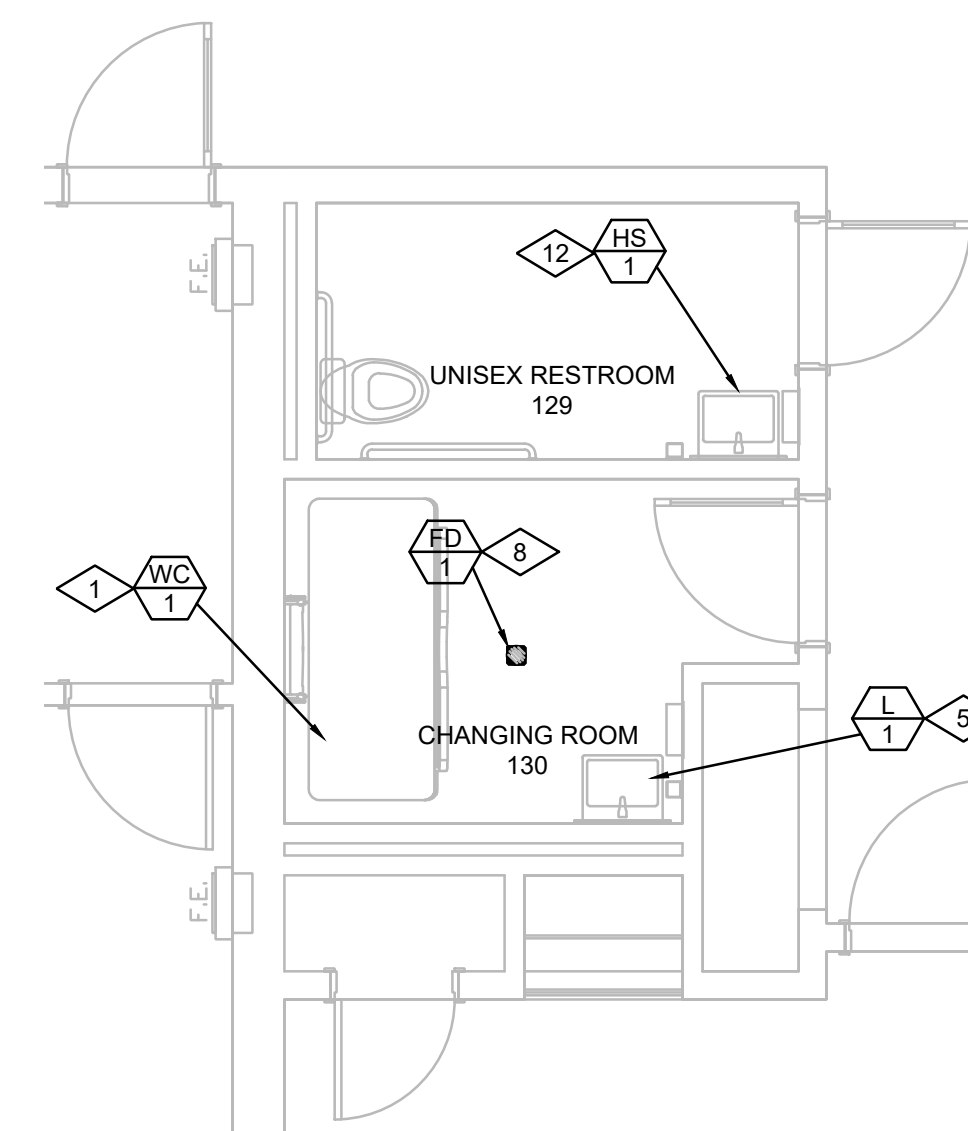
GIRLS 146 & BOYS 138

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



BOYS RESTROOM 155

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

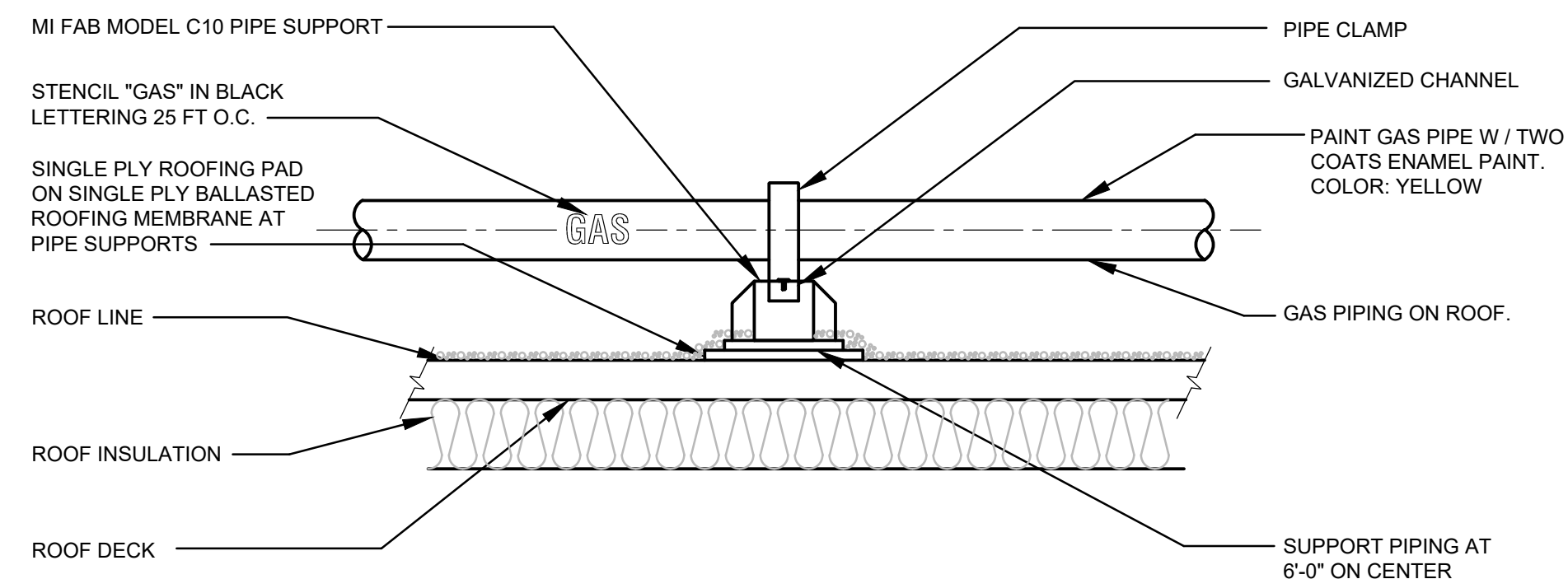


UNISEX RESTROOM 130

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

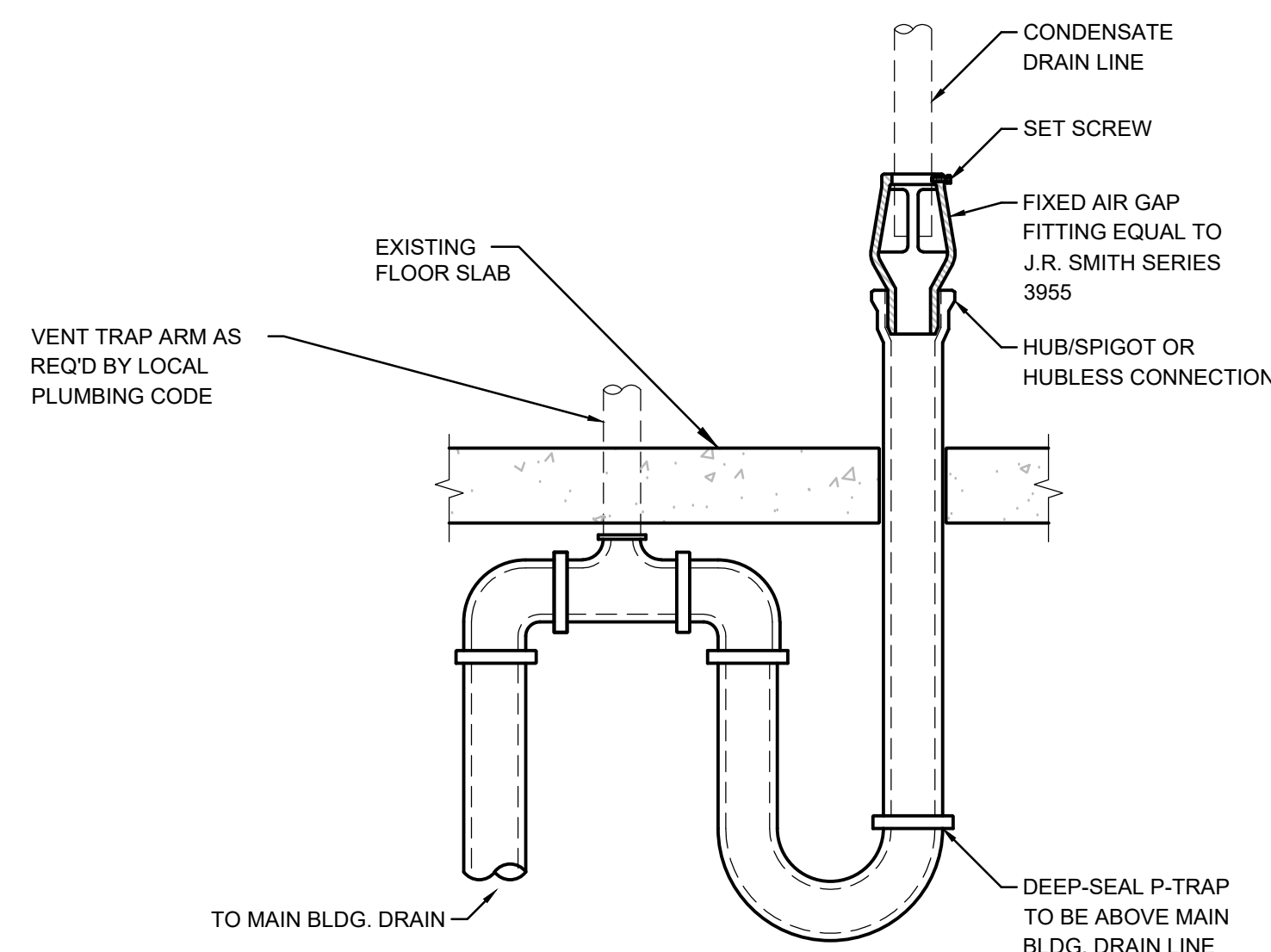
REFERENCE NOTES

1. PIPE 4" WASTE AND 2" VENT LINES FROM FLOOR MOUNTED WATER CLOSET AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE AND EXISTING VENT LINE IN ATTIC SPACE. PIPE 1" CW LINE UP FROM CRAWL SPACE IN WALL AND CONNECT TO FLUSH VALVE.
2. PIPE 3" WASTE AND 2" VENT LINES FROM WALL MOUNTED URINAL AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE AND EXISTING VENT LINE IN ATTIC SPACE. PIPE 3/4" CW LINE UP FROM CRAWL SPACE IN WALL AND CONNECT TO FLUSH VALVE.
3. PIPE 2" WASTE AND 2" VENT LINES FROM WALL MOUNTED DRINKING FOUNTAIN AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE AND EXISTING VENT LINE IN ATTIC SPACE. PIPE 1/2" CW LINE UP FROM CRAWL SPACE IN WALL AND CONNECT TO BUBBLER AND BOTTLE FILLER.
4. EXISTING SERVICE SINK. CONNECT NEW 3/4" CW AND HW LINES IN CRAWL SPACE TO EXISTING SERVICE SINK SUPPLIES.
5. PIPE 1-1/2" WASTE AND 1-1/2" VENT LINES FROM WALL MOUNTED LAVATORY AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE AND EXISTING VENT LINE IN ATTIC SPACE. PIPE 1/2" CW AND HW LINES UP FROM CRAWL SPACE IN WALL AND CONNECT TO LAVATORY FAUCET.
6. PIPE 2" WASTE AND 2" VENT LINES FROM COUNTER MOUNTED SINK AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE AND EXISTING VENT LINE IN ATTIC SPACE. PIPE 1/2" CW AND HW LINES UP FROM CRAWL SPACE IN WALL AND CONNECT TO SINK FAUCET.
7. INSTALL WASHER BOX 34" A.F.F. PIPE 2" WASTE AND 2" VENT LINES FROM WASHER BOX AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE AND EXISTING VENT LINE IN ATTIC SPACE. PIPE 1/2" CW AND HW LINES UP FROM CRAWL SPACE IN WALL AND CONNECT TO WASHER BOX OUTLETS.
8. INSTALL NEW FLOOR DRAIN. REFER TO ARCHITECTURAL FLOOR PLANS FOR EXACT LOCATION. PIPE 2" WASTE LINE FROM FLOOR DRAIN AND CONNECT TO EXISTING WASTE LINE IN CRAWL SPACE.
9. EXISTING LAVATORY. CONNECT NEW 1/2" CW AND HW LINES IN CRAWL SPACE TO EXISTING LAVATORY SUPPLIES.
10. EXISTING WATER CLOSET. CONNECT NEW 1" CW LINE IN CRAWL SPACE TO EXISTING WATER CLOSET SUPPLY.
11. EXISTING SHOWER VALVE. CONNECT NEW 1/2" CW AND HW LINES IN CRAWL SPACE TO EXISTING SHOWER VALVE SUPPLIES.
12. COORDINATE LOCATION OF ALL NEW WATER SUPPLY AND WASTE LINES IN CRAWL SPACE WITH EXISTING STRUCTURAL FOOTINGS AND FOUNDATIONS. CORE DRILL INTERIOR FOUNDATION WALLS AS NEEDED TO FACILITATE INSTALLATION OF PIPING IN CRAWL SPACE.
13. WATER LINES 2-1/2" THRU 1-1/4" IN CRAWL SPACE SHALL BE AQUATHERM GREEN PIPE. WATER LINES 1" AND UNDER IN CRAWL SPACE SHALL BE PEX TUBING. (RED - HW / BLUE-CW). SEE DETAIL 6/P502
14. ALL WATER PIPING ABOVE FLOOR SHALL BE TYPE "L" COPPER. PROVIDE REQUIRED PP-R OR PEX TUBING TRANSITIONS FROM COPPER TO PLASTIC IN CRAWL SPACE.



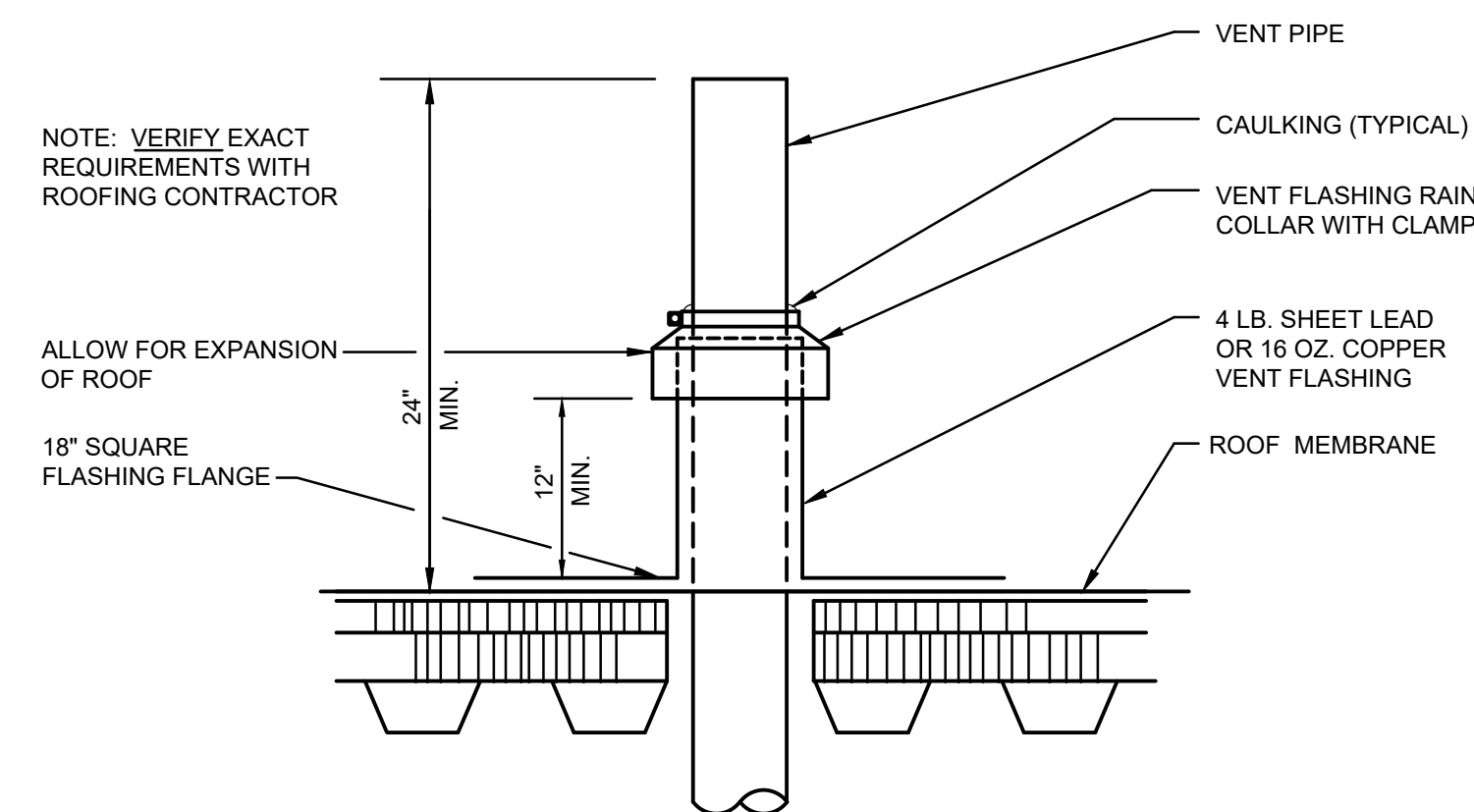
TYPICAL PIPING SUPPORT ON ROOF DETAIL

NOT TO SCALE

7
P501

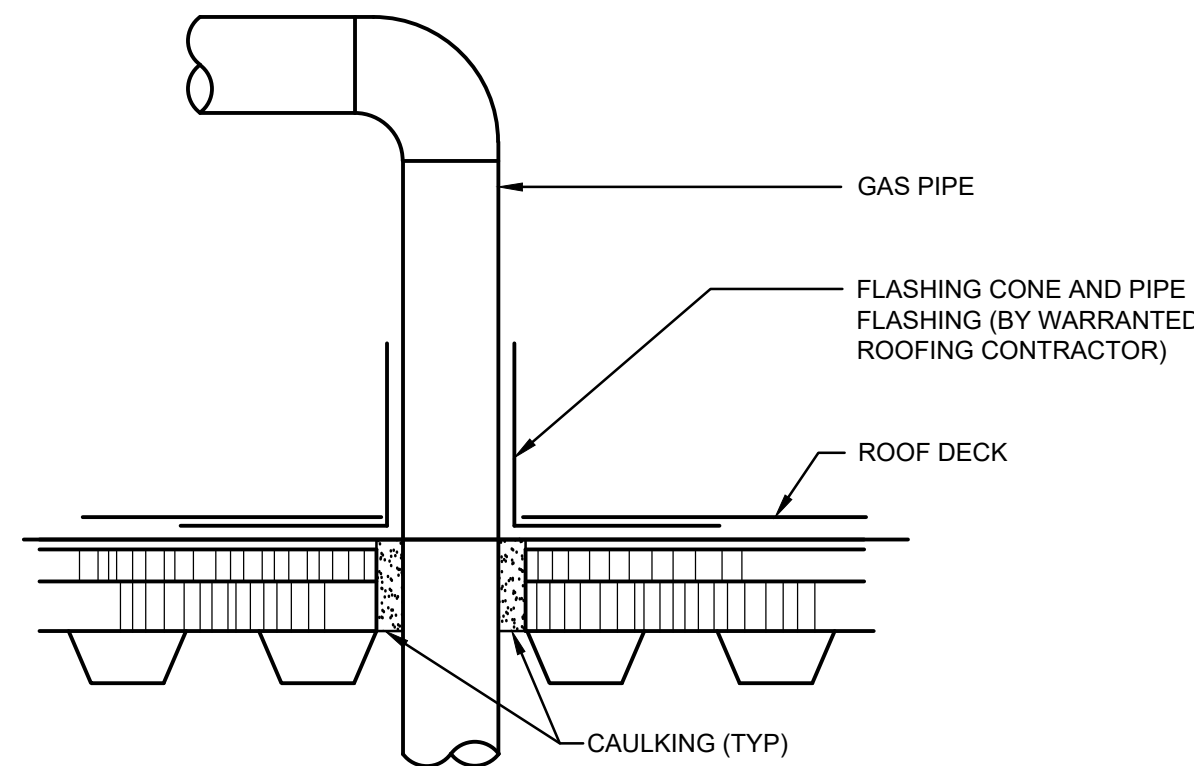
CUP SINK DRAIN DETAIL

NOT TO SCALE

4
P501

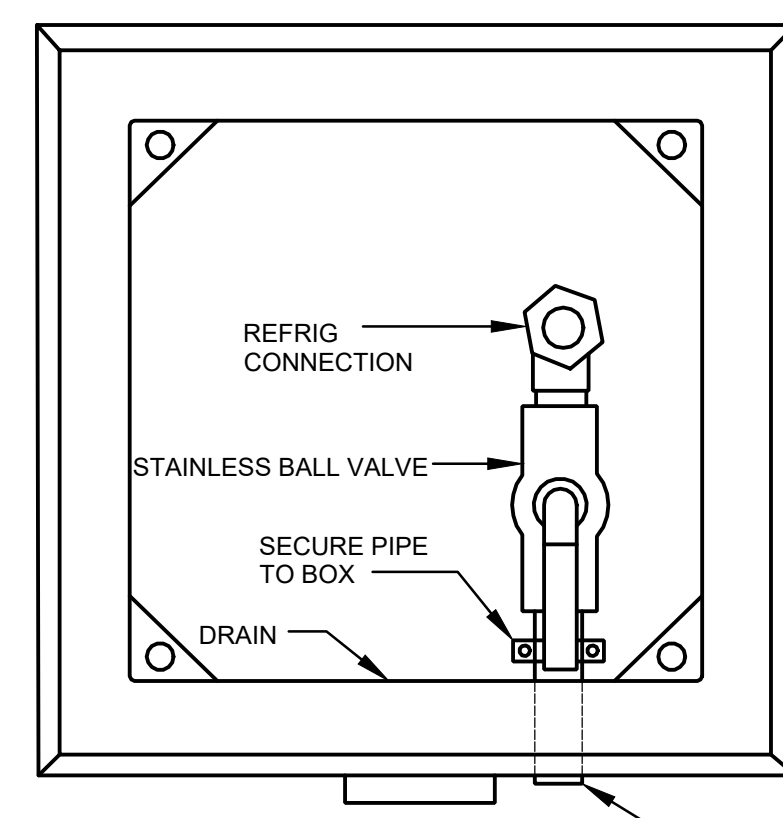
VENT THRU ROOF DETAIL

NOT TO SCALE

8
P501

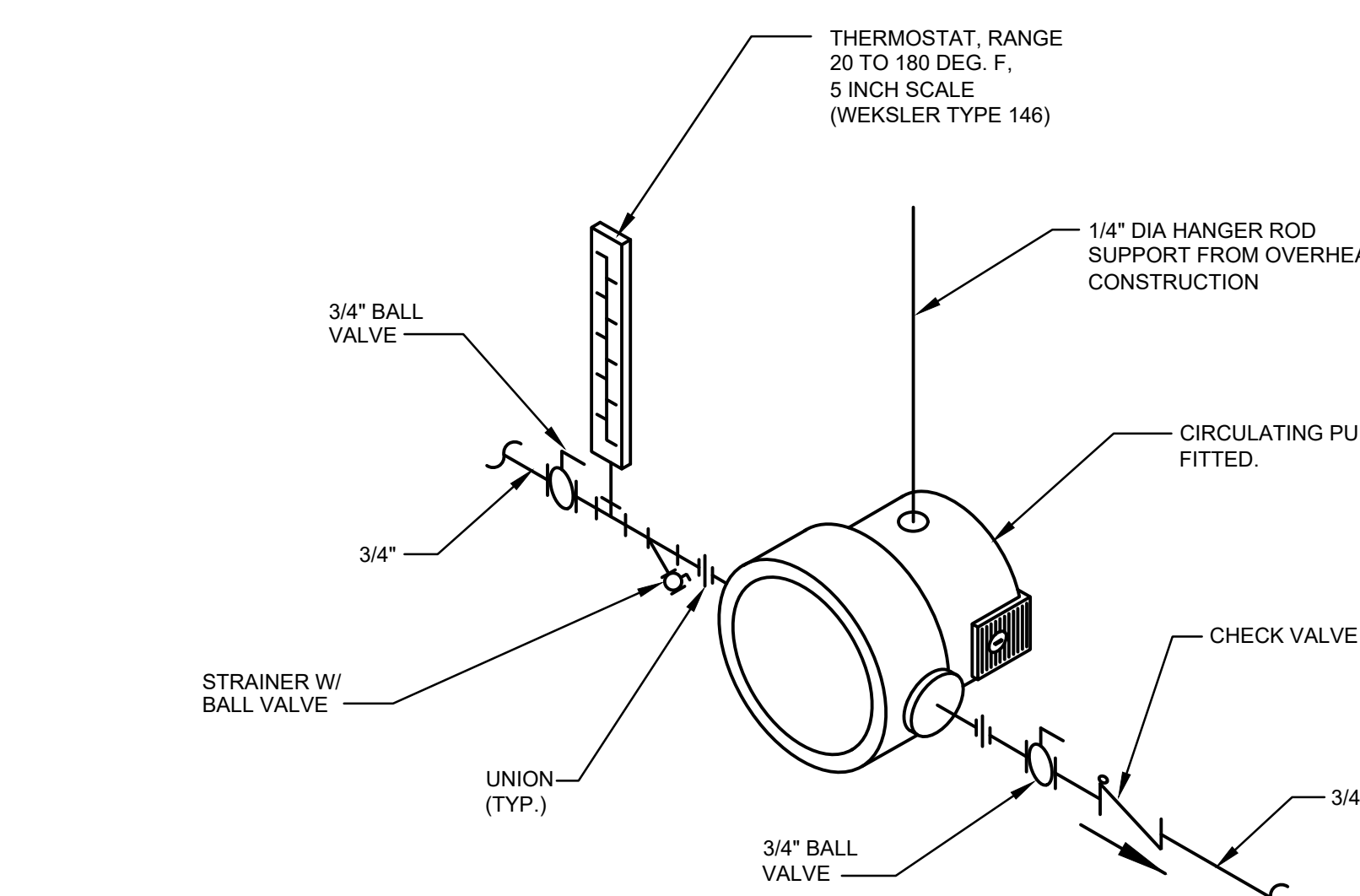
PIPE THRU ROOF PENETRATION DETAIL

NOT TO SCALE

9
P501

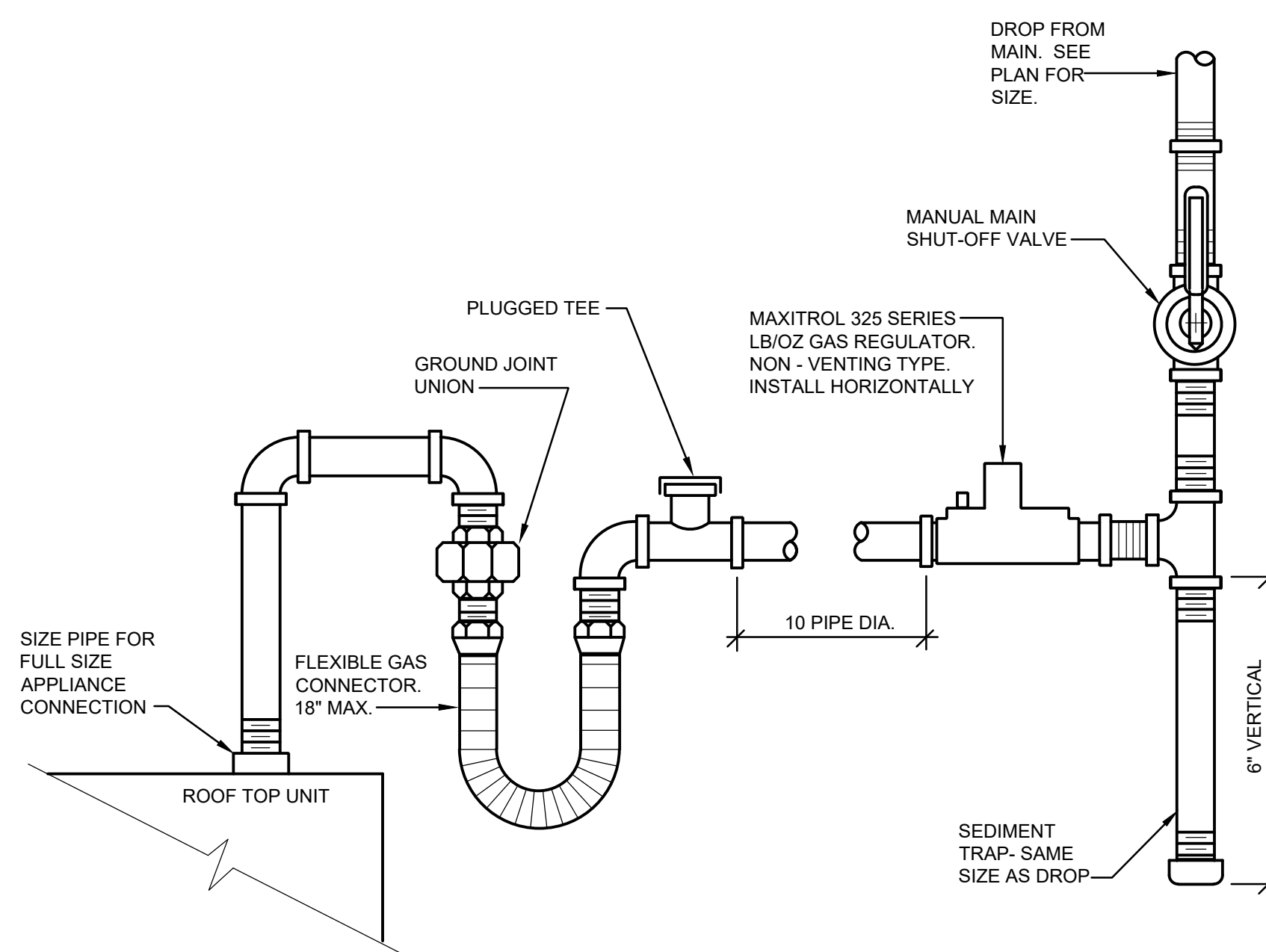
ICE MAKER BOX PIPING DETAIL

NOT TO SCALE

10
P501

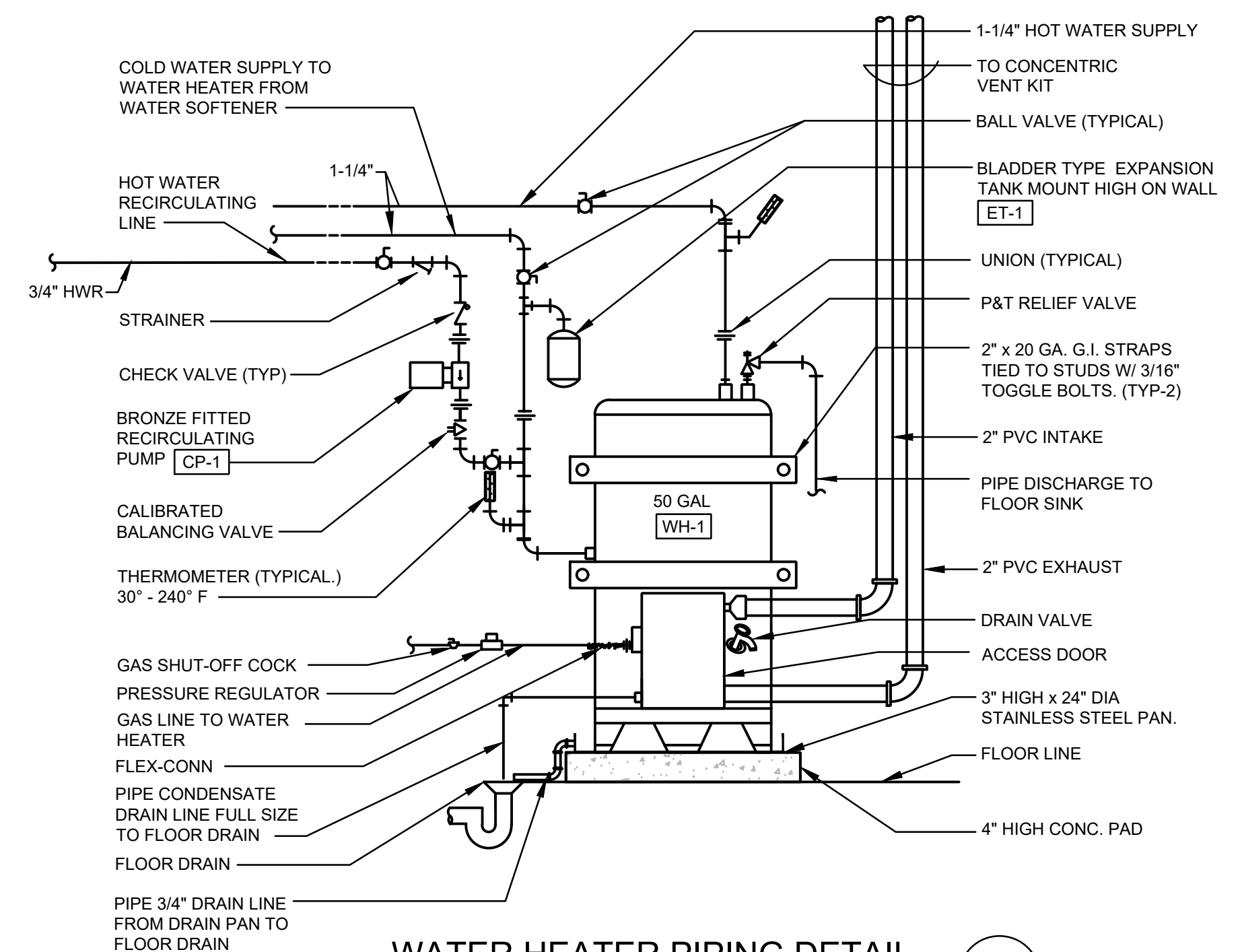
HOT WATER RECIRCULATING PUMP DETAIL

NOT TO SCALE

5
P501

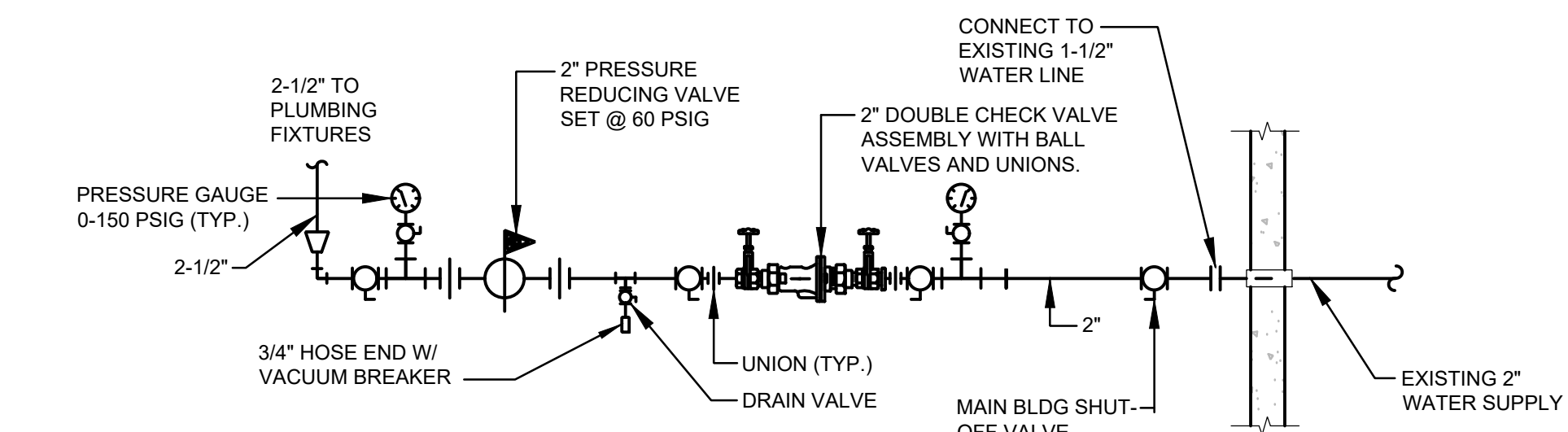
GAS LINE CONNECTION DETAIL

NOT TO SCALE

6
P501

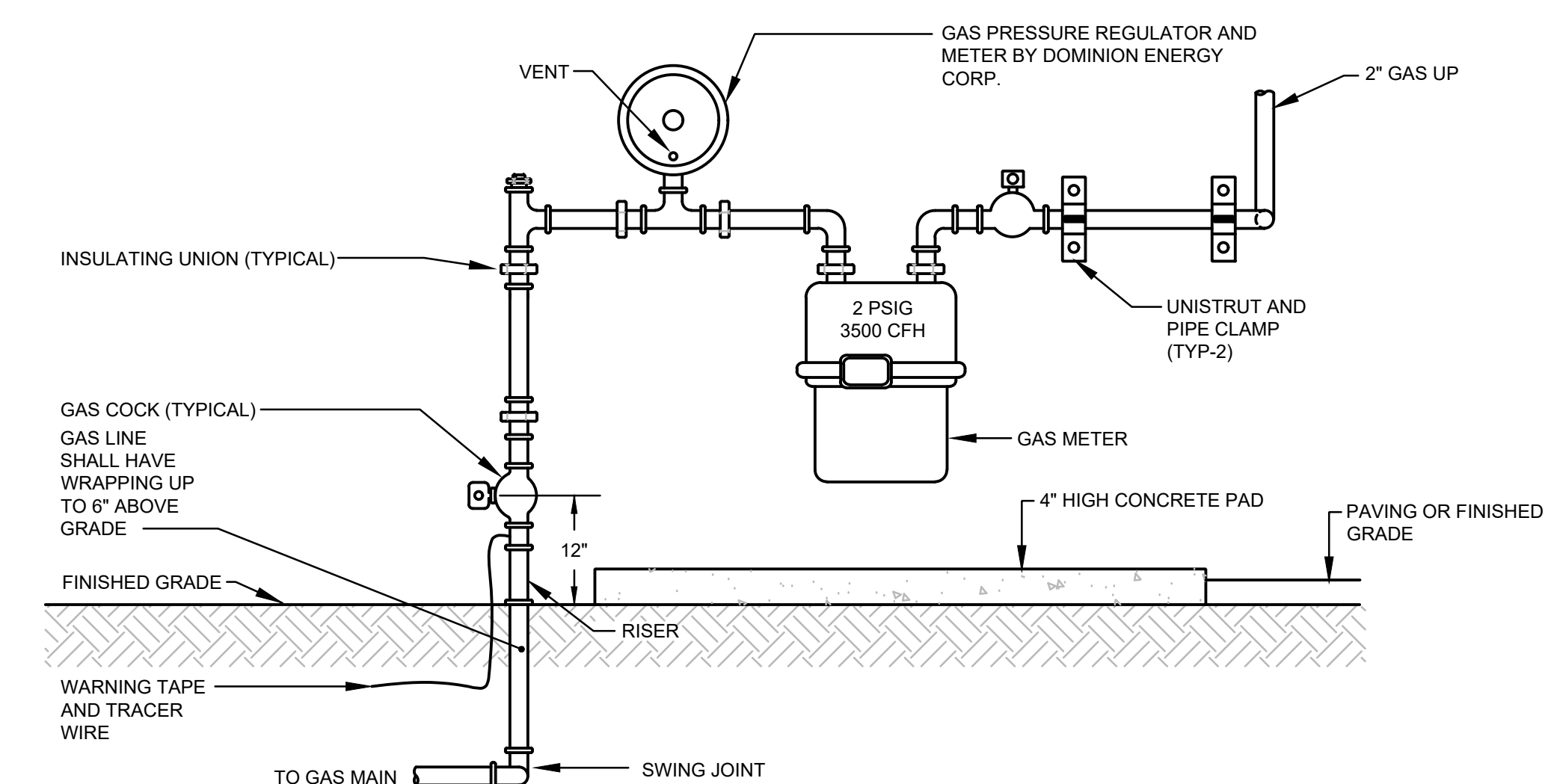
WATER HEATER PIPING DETAIL

NOT TO SCALE

1
P501

WATER PRESSURE REDUCING STATION DETAIL

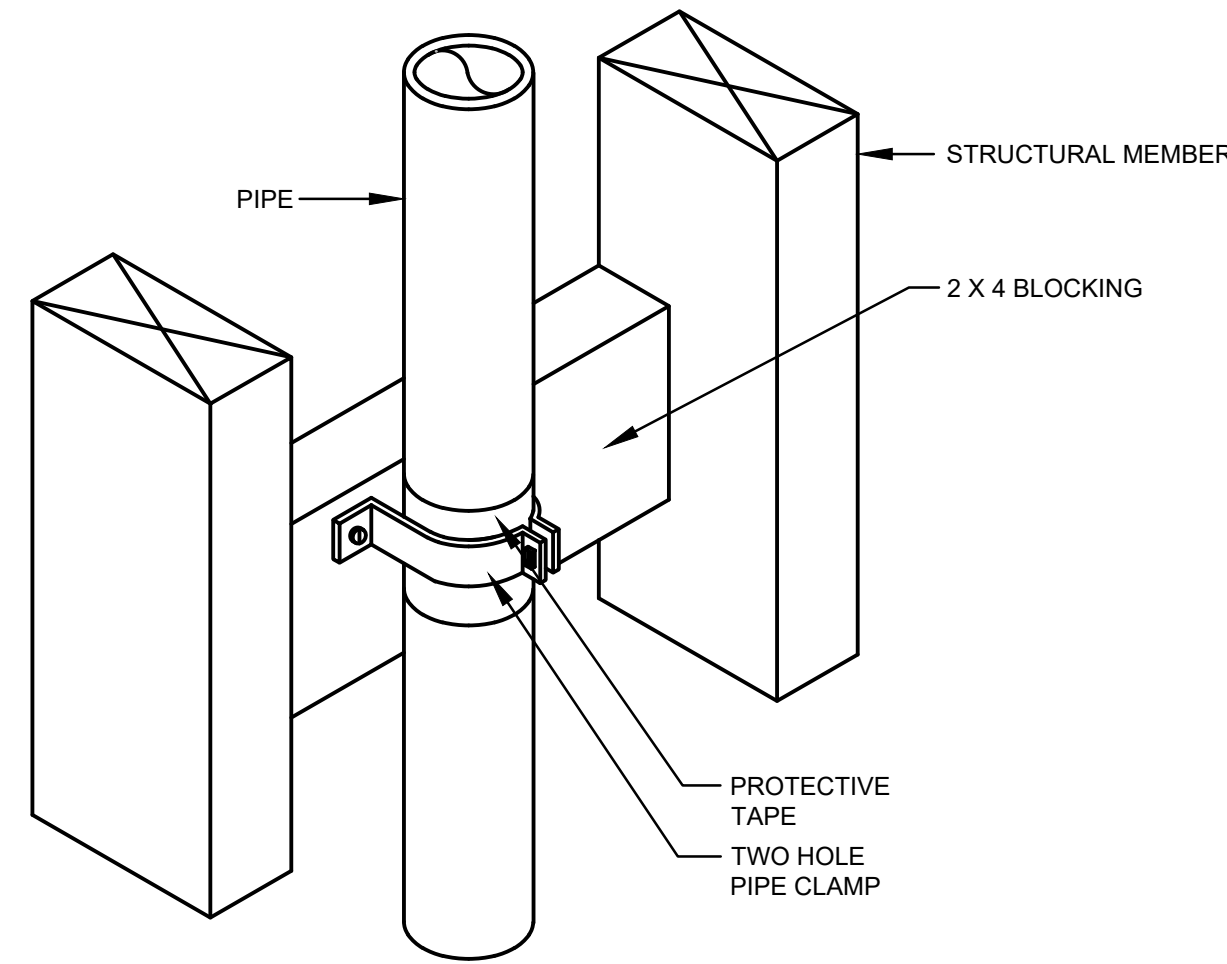
NOT TO SCALE

2
P501

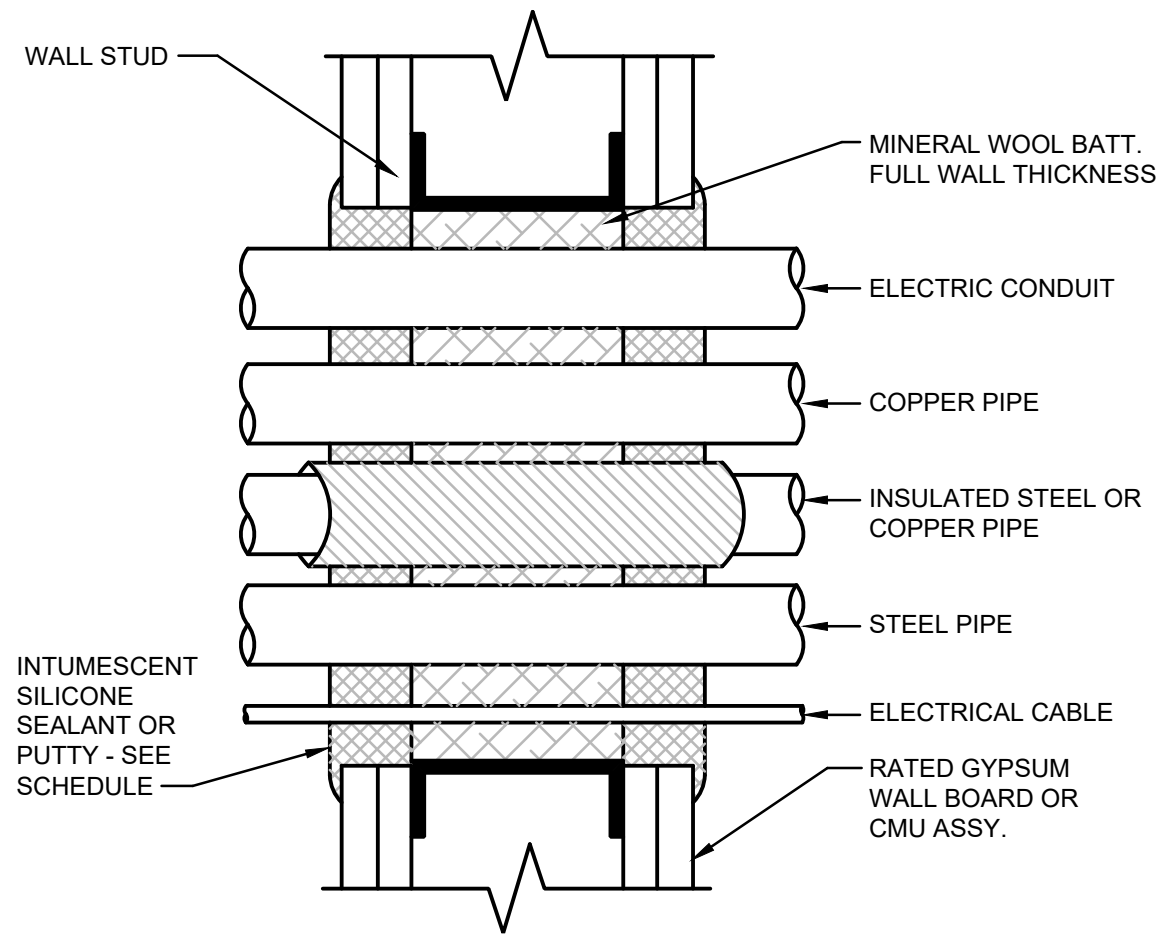
GAS METER SERVICE CONNECTION DETAIL

NOT TO SCALE

3
P501

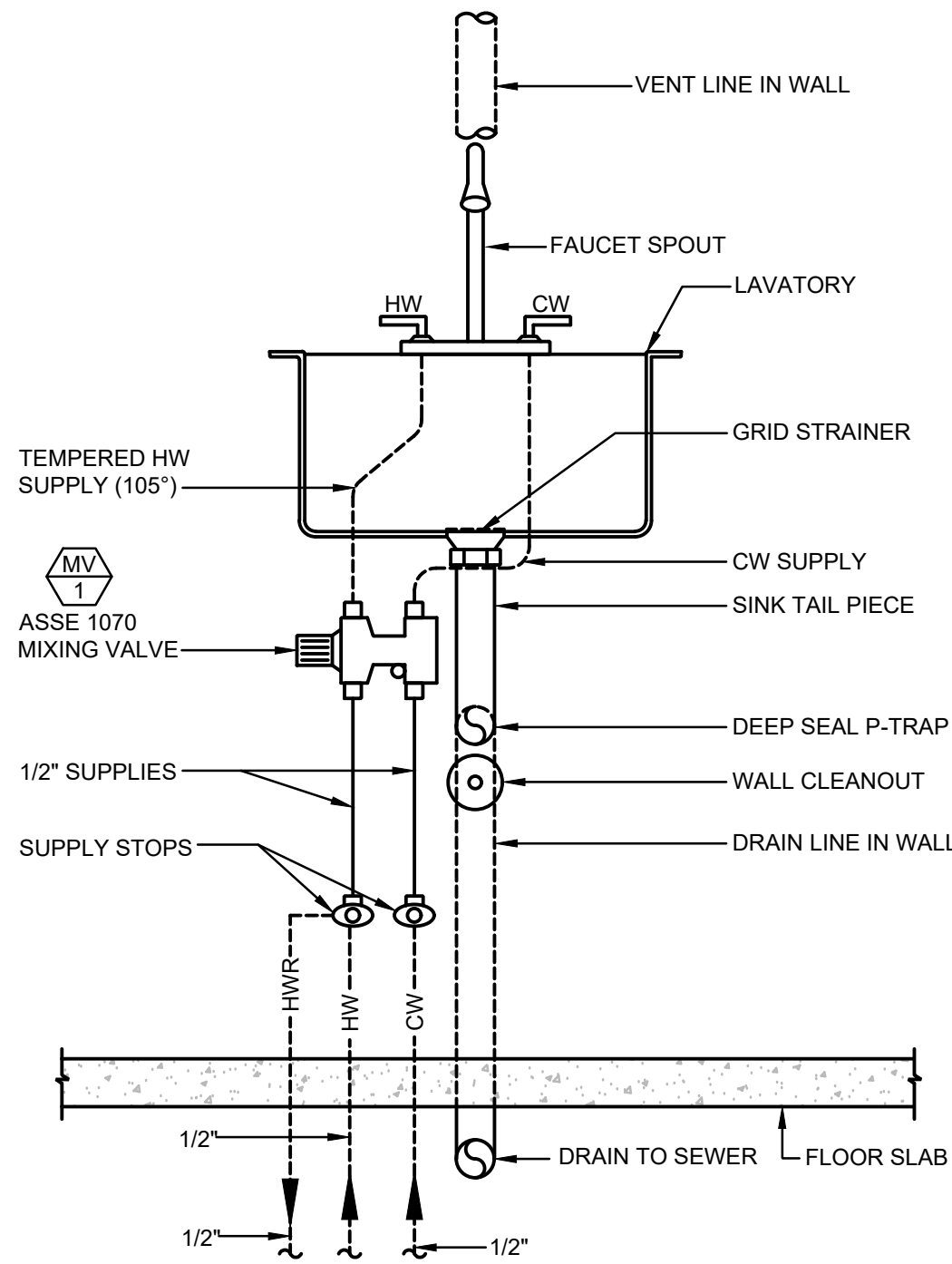


VERTICAL PIPE SUPPORT DETAIL 4
NOT TO SCALE P502

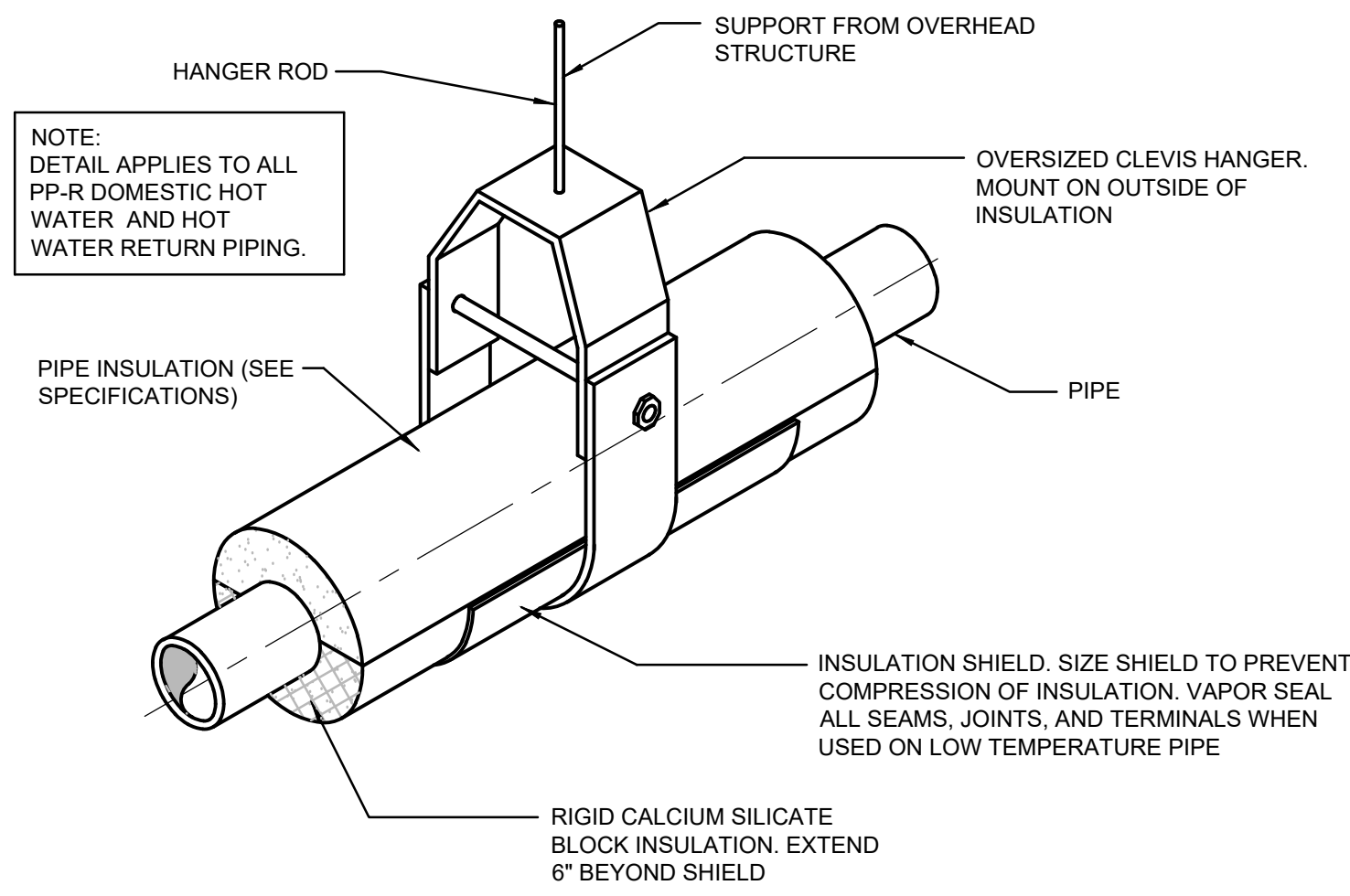


WALL RATING	DEPTH OF SEALANT	SEALANT CROWN
1 HR	1"	1/4"
2 HR	1-1/4"	3/8"
3 HR	1-1/2"	1/2"

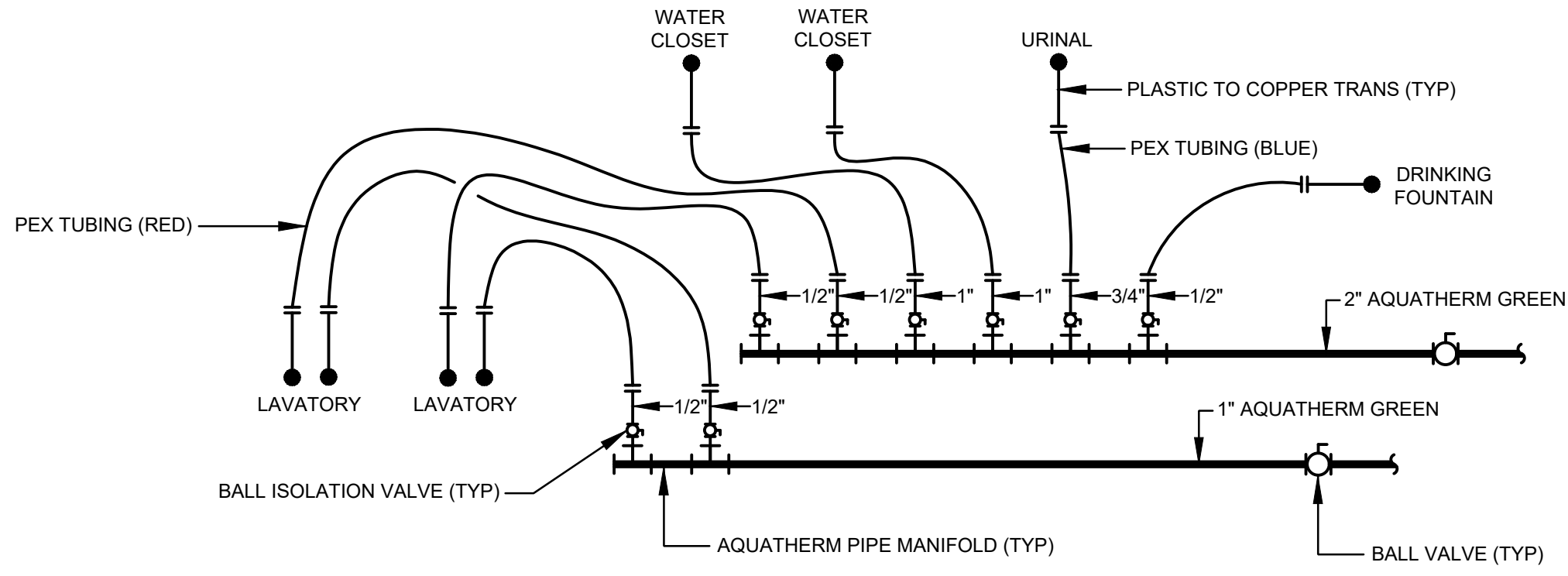
PIPE & CONDUIT FIRE STOP DETAIL 1
NOT TO SCALE P502



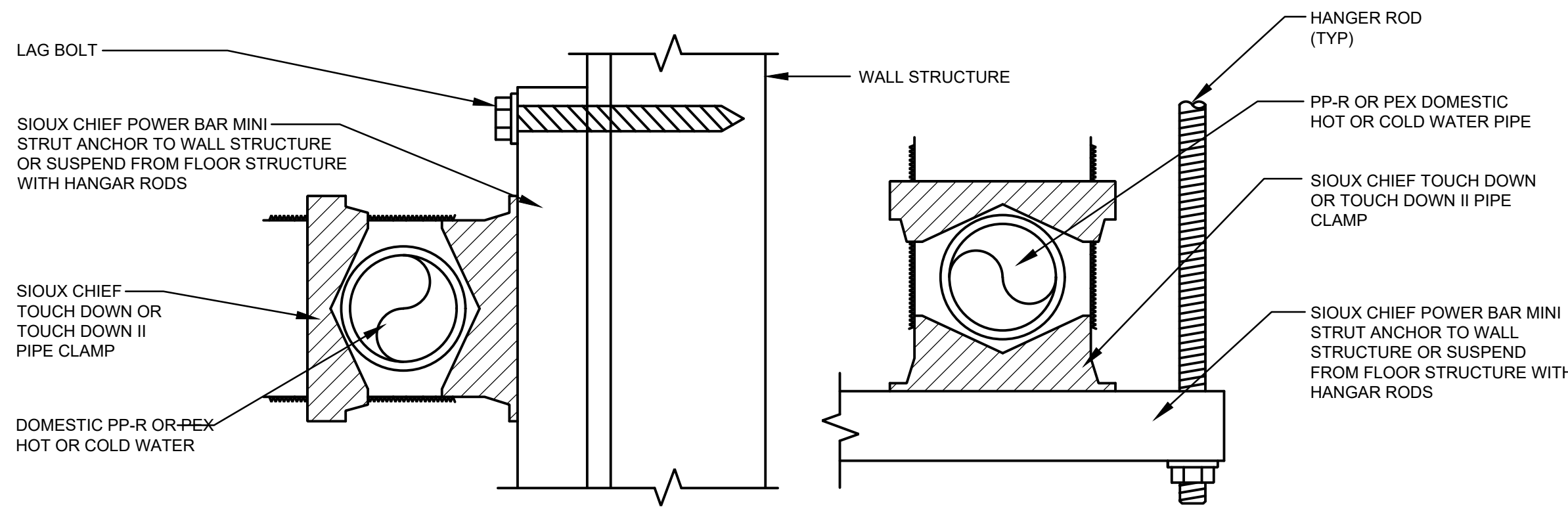
LAVATORY PIPING DETAIL 5
NOT TO SCALE P502



PIPE SUPPORT DETAIL 2
NOT TO SCALE P502



TYPICAL WATER PIPING SCHEMATIC 6
NOT TO SCALE P502



DOMESTIC WATER PIPE SUPPORT DETAIL 3
NOT TO SCALE P502

PLUMBING EQUIPMENT SCHEDULE	
SYMBOL	EQUIPMENT DESCRIPTION
[WH-1]	WATER HEATER: GAS FIRED, HIGH EFFICIENCY 96%, CONDENSING DESIGN, STAINLESS STEEL CONSTRUCTION, 2" DIA DIRECT VENT COMBUSTION AIR AND FLUE W/ CONCENTRIC FLUE ROOF KIT, 50 GALLON STORAGE CAPACITY, 130 MBH INPUT, 165 GPH RECOVERY @ 90 DEG F RISE, P&T VALVE, INSULATED CASING 1" INLET AND OUTLET, 3/4" GAS INLET, FURNISH SEISMIC WALL STRAPS AND BALL DRAIN VALVE. MANUFACTURER: STATE MODEL: GHX-50-130N ELECTRICAL: 120 VOLT, 1 PHASE LCD DISPLAY SIZE: 22" DIA X 62.75" HIGH OPER WEIGHT: 550 LBS
[ET-1]	EXPANSION TANK: NON-ASME TYPE, 4.4 GALLON TOTAL VOLUME, 0.73 ACCEPTANCE FACTOR, 3/4" NPT CONNECTION, MAXIMUM WORKING PRESSURE = 150 PSIG, NSF 61 LISTED, MAX ALLOWABLE WORKING TEMP = 200 DEG F MANUFACTURER: AMTROL MODEL: ST-12 ELECTRICAL: NONE SIZE: 11" DIA X 15" HIGH OPER WEIGHT: 45 LBS
[CP-1]	CIRCULATION PUMP: DOMESTIC WATER, BRONZE CONSTRUCTION, STAINLESS STEEL SHAFT, INTEGRAL CHECK VALVE, 5 GPM @ 10 FT HEAD, 1/2" CONNECTIONS, FURNISH COMPLETE WITH AQUASTAT PUMP CONTROLLER SET AT 120 DEG. F. MANUFACTURER: TACO MODEL: 008-IFC ELECTRICAL: 1/25 HP 120 VOLT, 1PHASE SIZE: 2" x 6" x 7" WEIGHT: 7 LBS

BUILDING SERVICES PIPING MATERIALS LISTING AND IDENTIFICATION	
Potable Water Piping Systems: Above Floor - Copper pipe and tubing meeting requirements of ASTM B 88, Type L with wrought copper sweat fittings with 95/5 or 96/4 Tin-Antimony solder. Identification: Cold Water (CW); Blue Lettering on White Background. Hot Water (HW); Red Lettering on White Background. Below Floor - Aquatherm Green Pipe 3" and under, PP-R resin pipe and fusion fittings meeting requirements of ASTM F 2389. Extruded type pipe with thermal welded fusion fittings. Certified by NSF International as complying with NSF 14, NSF 61, and ASTM F 2389 or CSA B137.11. Use Aquatherm Pipe for all Domestic Water Mains Below Floor - Sioux Chief PowerPEX, 1" thru 1/2" sizes branch piping only. Cross-linked polyethylene (PEX) tubing meeting requirements of SDR 9, ASTM F876 and ASTM F877 CSA International B137.5, with mechanical flare or crimp fittings. Use red for hot water and blue for cold water. Provide Copper to PEX tubing transitions. Sanitary Waste and Vent Piping Systems: Above Floor - ABS Schedule 40 solid-wall ASTM D 2661, plastic pipe and socket type fittings, made to ASTM D 3311, drain, waste, and vent patterns. Joined using pipe cement meeting requirements of ASTM F 656 and pipe cement meeting requirements of ASTM D 2564. Above Floor - PVC Schedule 40 solid-wall ASTM D 2665, plastic pipe and socket type fittings, made to ASTM D 3311, drain, waste, and vent patterns. Joined using cement primer meeting requirements of ASTM F 656 and pipe cement meeting requirements of ASTM D 2564. Below Floor - ABS Schedule 40 solid-wall ASTM D 2661, plastic pipe and socket type fittings, made to ASTM D 3311, drain, waste, and vent patterns. Joined using pipe cement meeting requirements of ASTM F 656 and pipe cement meeting requirements of ASTM D 2564. Below Floor - PVC Schedule 40 solid-wall ASTM D 2665, plastic pipe and socket type fittings, made to ASTM D 3311, drain, waste, and vent patterns. Joined using cement primer meeting requirements of ASTM F 656 and pipe cement meeting requirements of ASTM D 2564. Below Floor - Service weight, no-hub type cast iron soil pipe and fittings meeting requirements of ASTM A 74 with neoprene gaskets with type 304 and 24 ga type 304 stainless steel clamps. Minimum of 4 clamps. Refrigerant Piping Systems: Hard copper tubing meeting requirements of ASTM B 280, hard drawn straight lengths with wrought copper brazed fittings with AWS Classification BCuP-4 Copper Phosphorus or AWS Classification BCuP-5 Copper Phosphorus rods and white brazing or high quality silver solder flux. Identification: Black Lettering on Yellow Background Natural Gas Piping Systems: Above Floor - Schedule 40 black carbon steel pipe meeting requirements of ASTM A 53 with standard weight butt welded steel forged welding type fittings. Identification: Black Lettering on Yellow Painted Background. Painting: All exposed gas piping on roof shall be painted with two coats of yellow enamel grade paint and stenciled "GAS". Below Grade - Polyethylene pipe and fittings meeting requirements of ASTM D 2513 with No. 14 coated copper trace wire and warning tape.	

PIPING INSULATION SCHEDULE						
FLUID OPERATING TEMPERATURE RANGE (°F) AND USAGE	INSULATION CONDUCTIVITY		≥ NOMINAL PIPE OR TUBE SIZE, IN.			
	CONDUCTIVITY, BTU IN/ FT ² °F	MEAN RATING TEMPERATURE, °F	< 1	1 TO < 1-1/2	1-1/2 TO < 4	4 TO < 8
			INSULATION THICKNESS, IN.			
> 350	0.32 TO 0.34	250	4.5	5.0	5.0	5.0
251 TO 350	0.29 TO 0.32	200	3.0	4.0	4.5	4.5
201 TO 250	0.27 TO 0.30	150	2.5	2.5	3.0	3.0
141 TO 200	0.25 TO 0.29	125	1.5	1.5	2.0	2.0
105 TO 140	0.22 TO 0.28	100	1.0	1.0	1.5	1.5
400 TO 60	0.21 TO 0.27	75	0.5	0.5	1	1.5
< 40	0.20 TO 0.29	50	0.5	1.0	1.5	2.0

TABLE APPLIES TO ALL DOMESTIC HOT AND COLD WATER SYSTEMS, STORM DRAIN AND REFRIGERANT PIPING SYSTEMS.

BRANCH WATER LINE SCHEDULE						
FIXTURE	FIXTURE UNITS	TOTAL QUANTITY OF FIXTURES SERVED BY A GIVEN PIPE SIZE				
		1/2"	3/4"	1"	1 1/4"	2"
WATER CLOSET	10	--	--	1	2	3
LAVATORY	2	1	3	5	7	15
BREAK ROOM SINK	2	1	3	5	7	15
SERVICE SINK	4	--	1	2	3	7
DRINKING FOUNTAIN	1	2	6	10	15	30
HOSE BIBB	3	--	1	3	5	10
TOTAL FIXTURE UNITS SERVED BY PIPE SIZE		2	6	10	15	30

NOTE:

(1) MINIMUM PIPE SIZE TO ANY FIXTURE TO BE 1/2". WHERE PIPE SIZE IS SHOWN ON DRAWINGS, IT SHALL BE FOLLOWED.

(2) WATER SUPPLY FIXTURE UNITS: 18.65

PLUMBING FIXTURE SCHEDULE						
SYMBOL	FIXTURE	WASTE	VENT	C.W.	H.W.	NOTES (1)
[WC 1]	WATER CLOSET	4"	2"	1"	--	FLOOR MOUNTED - (ADA) FLUSH VALVE
[WC 2]	WATER CLOSET	4"	2"	1"	--	FLOOR MOUNTED FLUSH VALVE
[L 1]	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	WALL MOUNTED - (ADA)
[L 2]	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	COUNTER TOP MOUNTED
[U 1]	URINAL	3"	2"	3/4"	--	WALL MOUNTED - (ADA) FLUSH VALVE
[U 2]	URINAL	3"	2"	3/4"	--	WALL MOUNTED FLUSH VALVE
[FD 1]	FLOOR DRAIN	2"	1-1/2"	--	--	WITH DEEP SEAL P-TRAP AND ASSE PROSET TRAP GUARD
[DF 1]	DRINKING FOUNTAIN	1-1/2"	1-1/2"	1/2"	--	SINGLE LEVEL - ELECTRIC /W/ BOTTLE FILLER - (ADA) 120V /1/60 POWER
[HS 1]	HAND WASH SINK	1-1/4"	1-1/4"	1/2"	1/2"	SINGLE COMPARTMENT (ADA) WALL MOUNTED
[S 1]	WASH TUB SINK	1-1/2"	1-1/2"	1/2"	1/2"	SINGLE COMPARTMENT STAINLESS STEEL DEEP TUB COUNTER MOUNT
[S 2]	BREAK ROOM SINK	1-1/2"	1-1/2"	1/2"	1/2"	SINGLE COMPARTMENT STAINLESS STEEL UNDER COUNTER MOUNTED
[HB 1]	HOSE BIBB	--	--	3/4"	--	NON FREEZE TYPE
[MV 1]	MIXING VALVE	--	--	3/8"	3/8"	UNDER SINK MIXING VALVE ASSE 1070 WATTS LEMM-UT-MI
[IMB 1]	ICE MAKER BOX	--	--	3/8"	--	RECESSED WALL MOUNT
[WB 1]	WASHER BOX	2"	2"	1/2"	1/2"	RECESSED TYPE - OATEY 38477

NOTES:

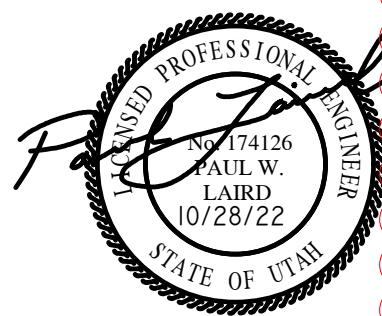
(1) CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN OR INSTALLATION.

GENERAL PLUMBING NOTES:

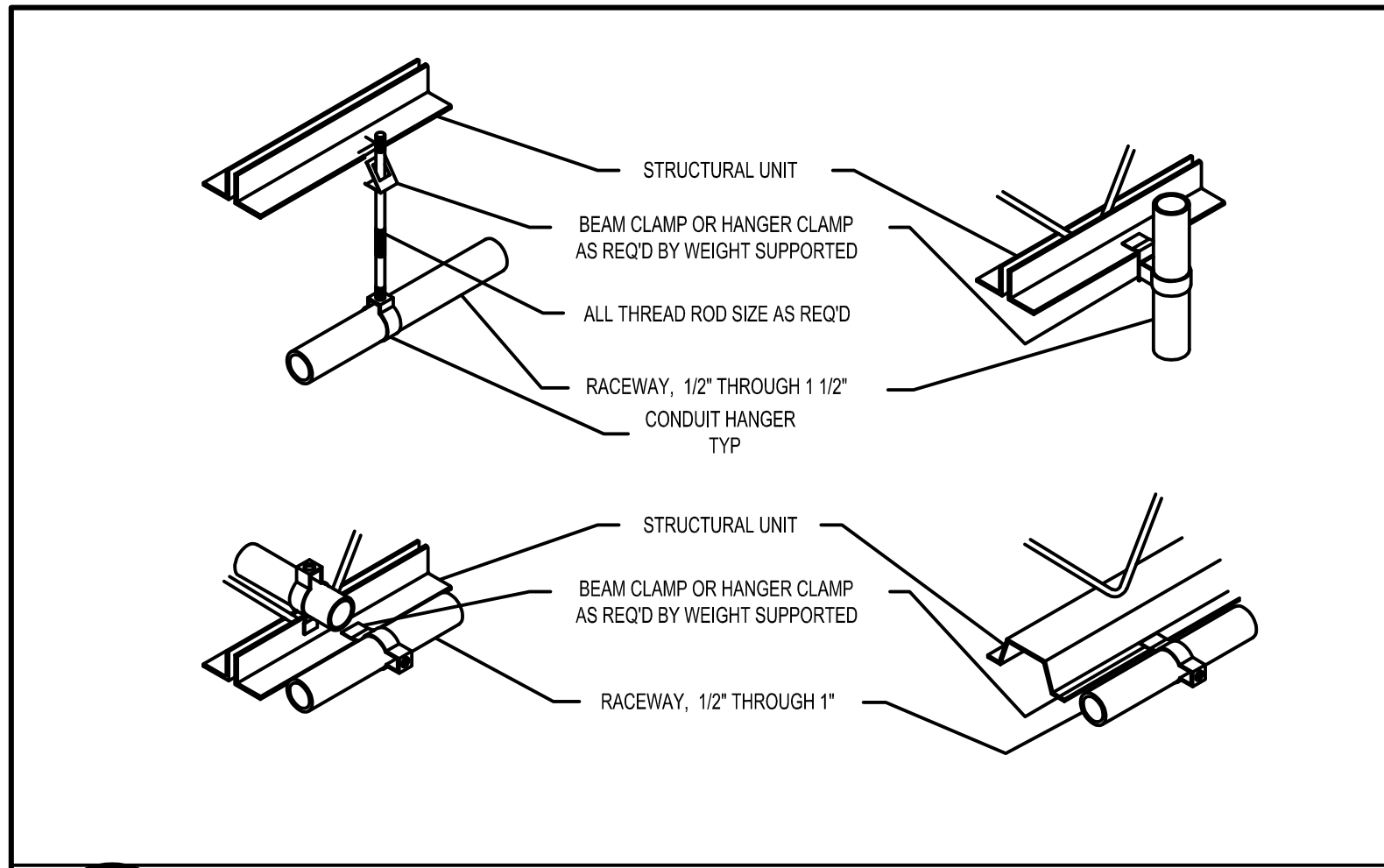
- A. CODE COMPLIANCE: ALL PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL PLUMBING CODE (IPC), INTERNATIONAL FUEL GAS CODE (IFGC) AND NATIONAL ELECTRICAL CODE (NEC) INCLUDING ALL STATE AND LOCAL AMENDMENTS AND LIFE SAFETY CODES ENFORCED OR CURRENTLY IMPLEMENTED BY THE BUILDING AUTHORITY HAVING JURISDICTION IN WHICH THE PROJECT RESIDES.
- B. COORDINATION PROCEDURES: CONTRACTOR SHALL COORDINATE ALL PLUMBING (P) WORK WITH THE ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL (M), AND ELECTRICAL TRADES OF THIS PROJECT. REFER TO DRAWINGS, SPECIFICATIONS, SUBMITTALS AND SHOP DRAWINGS OF THE VARIOUS TRADES FOR PROJECT SPECIFIC REQUIREMENTS FOR COORDINATION PURPOSES.
- C. DRAWINGS: DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT TO BE SCALED. PIPE ROUTING, PLUMBING EQUIPMENT AND FIXTURE LOCATIONS INDICATED ON THE DRAWINGS IS APPROXIMATE. NO ATTEMPT HAS BEEN MADE TO SHOW ALL PLUMBING OFFSETS, EQUIPMENT AND DEVICES. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL PLUMBING EQUIPMENT AND FIXTURES REQUIRED PRIOR TO BIDDING. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND TRANSITIONS AS NEEDED TO FACILITATE INSTALLATION OF THE PLUMBING SYSTEMS IN HARMONY WITH THE OTHER RESPECTIVE TRADES OF THE PROJECT.
- D. EQUIPMENT SELECTIONS: ALL PROJECT EQUIPMENT PROVIDED BY THE CONTRACTOR SHALL BE SELECTED TO MEET AND OPERATE AT THE CAPACITIES INDICATED IN THE CONTRACT DOCUMENTS AT THE JOB SITE CONDITIONS. JOB SITE CONDITIONS INCLUDE ELEVATION ABOVE SEA LEVEL, AMBIENT SUMMER AND WINTER DRY BULB/WET BULB TEMPERATURES, WIND DIRECTION AND PROPERTY LINES.
- E. SUBMITTALS: PRODUCT DATA FOR ALL PLUMBING EQUIPMENT AND MATERIALS TO BE PROVIDED BY THE PLUMBING CONTRACTOR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AS PART OF THE SUBMITTAL PROCESS IN ACCORDANCE WITH THE SPECIFICATIONS PRIOR TO ORDERING, PURCHASING OR INSTALLATION.
- F. WORKMANSHIP: ALL PLUMBING WORK TO BE INSTALLED IN A PROFESSIONAL AND WORKMANLIKE MANNER. INSTALL ALL PRODUCTS AND MATERIALS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND CONSTRUCTION INDUSTRY STANDARDS.
- G. INVERTS: ALL INVERT PIPE ELEVATIONS SHOWN ON THE DRAWINGS ARE BASED OFF OF A FINISHED FLOOR ELEVATION OF 100'-0". THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GENERAL AND SITE CIVIL CONTRACTOR FOR PIPE CONNECTION LOCATIONS. PLUMBING CONTRACTOR SHALL CONNECT TO THE SITE UTILITY PIPING; MATCHING PIPING SIZE AND MATERIAL OR PROVIDING COMPATIBLE TRANSITIONS.
- H. SEISMIC CONDITIONS: ALL PLUMBING PIPING AND EQUIPMENT INSTALLED SHALL BE SEISMICALLY BRACED OR RESTRAINED IN COMPLIANCE WITH REQUIREMENTS IN THE IBC. PROVIDE VIBRATION ISOLATION AND SEISMIC-RESTRAINT DEVICES, RESTRAINTS AND SUPPORTS AS REQUIRED. PROVIDE AND SUBMIT SEISMIC RESTRAINT CALCULATIONS, DETAILS, DESIGN CRITERIA AND ANALYSIS DATA SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.
- I. WARRANTY: THE CONTRACTOR SHALL WARRANT TO THE OWNER THAT ALL PLUMBING MATERIALS AND EQUIPMENT FURNISHED UNDER THE CONTRACT WILL BE NEW AND OF GOOD QUALITY, UNLESS OTHERWISE REQUIRED OR PERMITTED BY THE CONTRACT DOCUMENTS, AND THAT THE WORK WILL BE FREE FROM DEFECTS NOT INHERENT IN THE QUALITY REQUIRED OR PERMITTED, AND THAT THE WORK WILL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. WARRANTY PERIOD FOR THIS WORK SHALL EXTEND FOR ONE YEAR AFTER DATE OF SUBSTANTIAL COMPLETION.
- J. CHANGES: IF CONCEALED OR UNKNOWN PHYSICAL CONDITIONS ARE ENCOUNTERED AT THE SITE THAT DIFFER MATERIALLY FROM THOSE INDICATED IN THE CONTRACT DOCUMENTS OR FROM THOSE CONDITIONS ORDINARILY FOUND TO EXIST, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE OWNER OR ARCHITECT OF THOSE CONDITIONS. THE CONTRACTOR SHALL BE INSTRUCTED AND DIRECTED ON HOW TO PROCEED WITH ANY REQUIRED CHANGES. THE CONTRACT SUM AND CONTRACT TIME SHALL BE SUBJECT TO EQUITABLE ADJUSTMENT FOR CHANGES TO THE CONTRACT DOCUMENTS FOR SUCH CHANGES. SHOULD THE CONTRACTOR PROCEED WITH THE WORK WITHOUT INSTRUCTION, NOTIFICATION OF CHANGE OR AN APPROVED CHANGE ORDER, HE DOES SO AT HIS OWN FINANCIAL RISK.
- K. EXISTING CONDITIONS: PRIOR TO BIDDING OR BEGINNING THE WORK THE CONTRACTOR SHALL CAREFULLY EXAMINE THE BUILDING SITE AND COMPARE THE CONTRACT DOCUMENTS WITH EXISTING CONDITIONS. ACCEPTANCE OF THE CONTRACT IS ACKNOWLEDGMENT BY THE CONTRACTOR THAT HE HAS VISITED THE SITE AND IS AWARE AND ACCEPTING OF THE EXISTING CONDITIONS.
- L. CLEANUP: DURING THE CONSTRUCTION AND UPON COMPLETION OF THE WORK, THE PLUMBING CONTRACTOR SHALL REMOVE FROM THE PROJECT SITE ALL UNUSED MATERIALS, EQUIPMENT, PACKAGING AND DEBRIS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. ALL UNUSED MATERIALS, EQUIPMENT, PACKAGING AND DEBRIS NOT ECONOMICALLY RECOVERABLE SHALL BE REMOVED, TRANSPORTED AND LEGALLY DISPOSED OF OFF-SITE.
- M. UTILITY INTERRUPTIONS: EXISTING PLUMBING UTILITIES SHALL REMAIN IN SERVICE EXCEPT AS REQUIRED FOR SCHEDULED INTERRUPTIONS. INTERRUPTIONS OF SERVICE OR UTILITIES SHALL BE SCHEDULED WITH THE OWNER AND ARCHITECT AT LEAST TWO WEEKS IN ADVANCE.
- N. TIME IS OF THE ESSENCE: THE CONTRACTOR SHALL COMMENCE WORK UNDER THIS CONTRACT UPON RECEIPT OF THE OWNER'S WRITTEN NOTICE TO TO PROCEED. THE CONTRACTOR SHALL COMPLETE THE WORK AND HAVE IT READY FOR SUBSTANTIAL COMPLETION INSPECTION BY THE DATE NOTED IN THE CONTRACT.

PLUMBING PIPING LEGEND

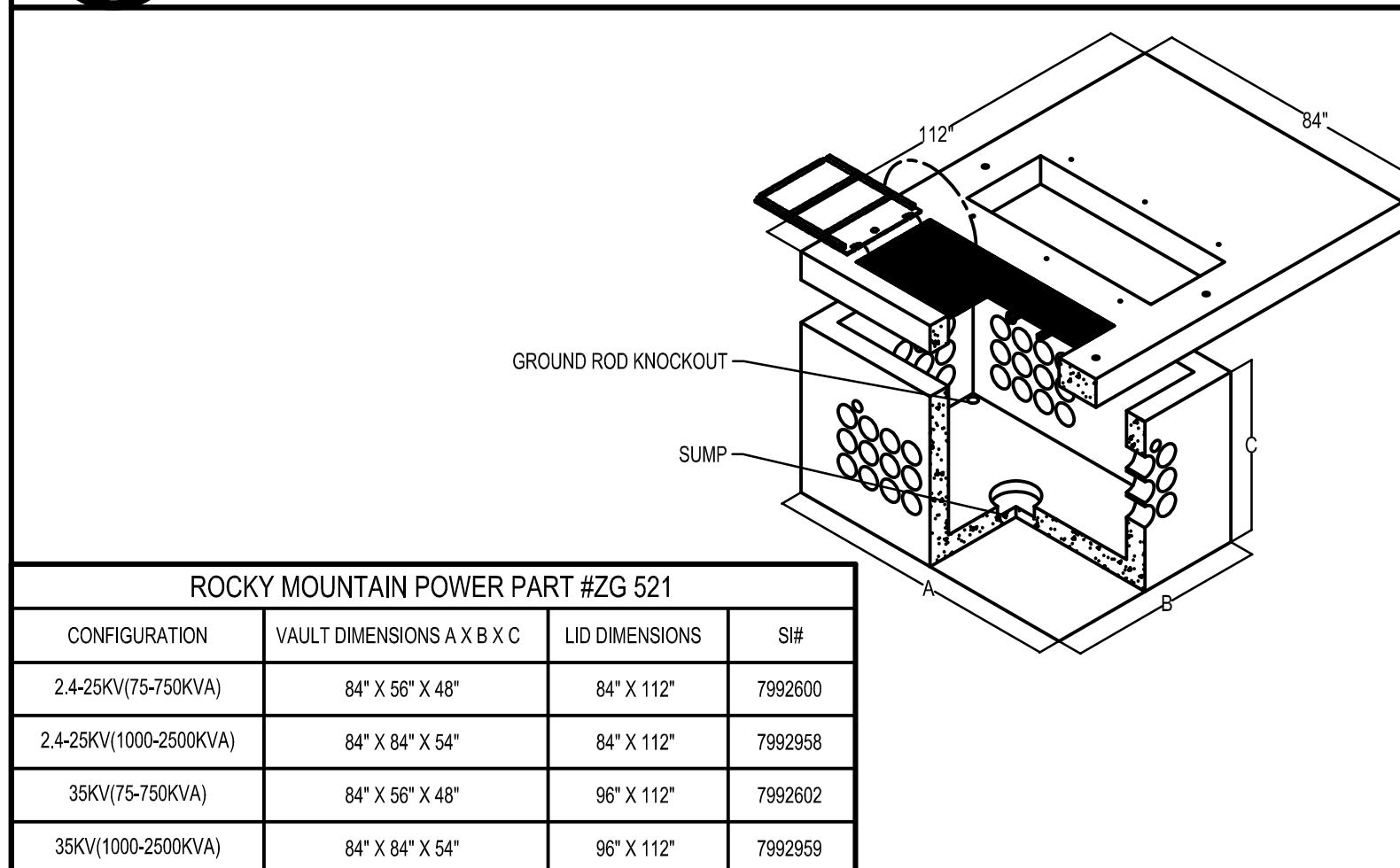
DESCRIPTION	SYMBOL
WASTE	_____
VENT	-----
COLD WATER	-----
HOT WATER	-----
NATURAL GAS	_____G_____
DRAIN	_____D_____



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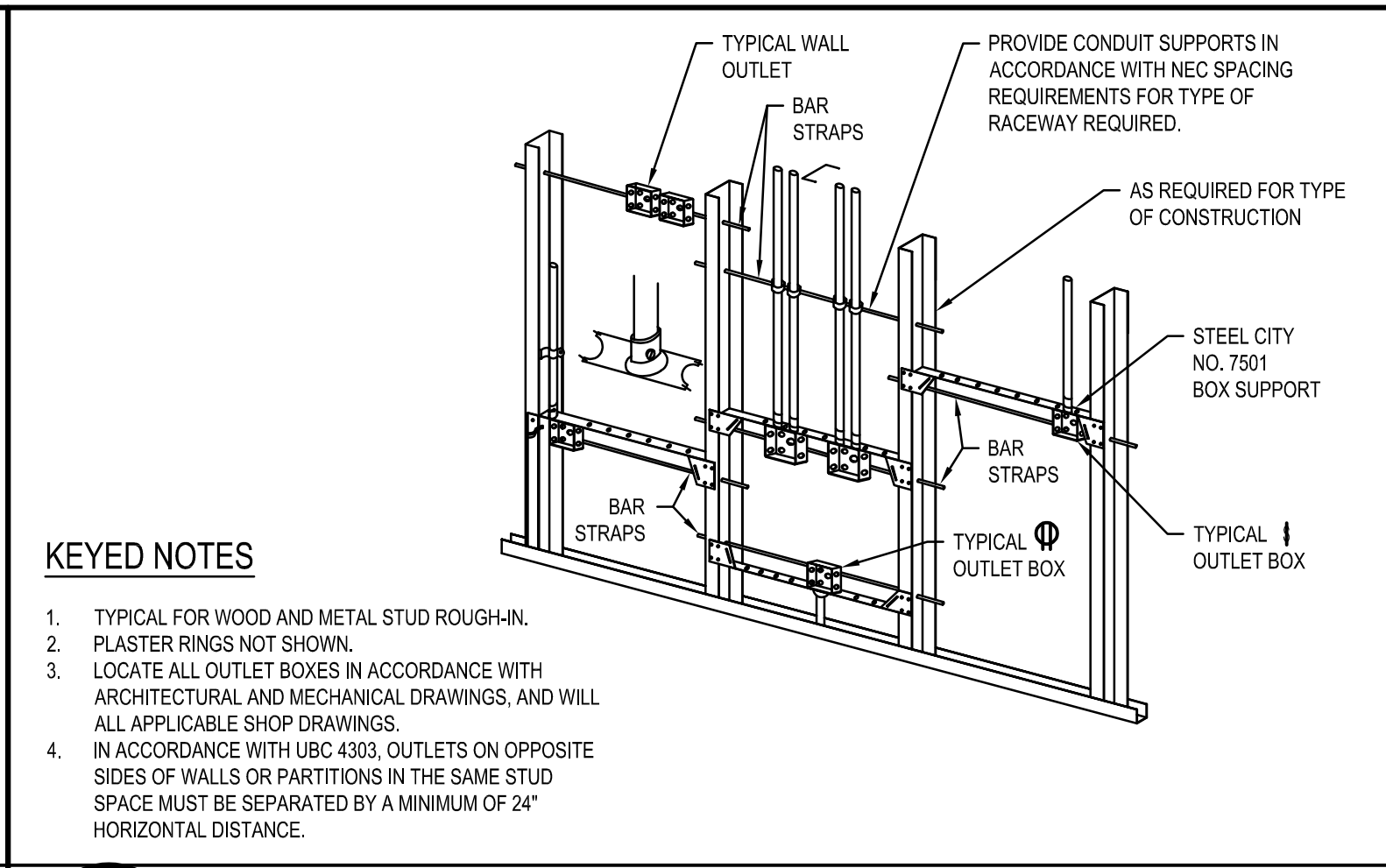


4 RACEWAY SUPPORT DETAIL
NO SCALE

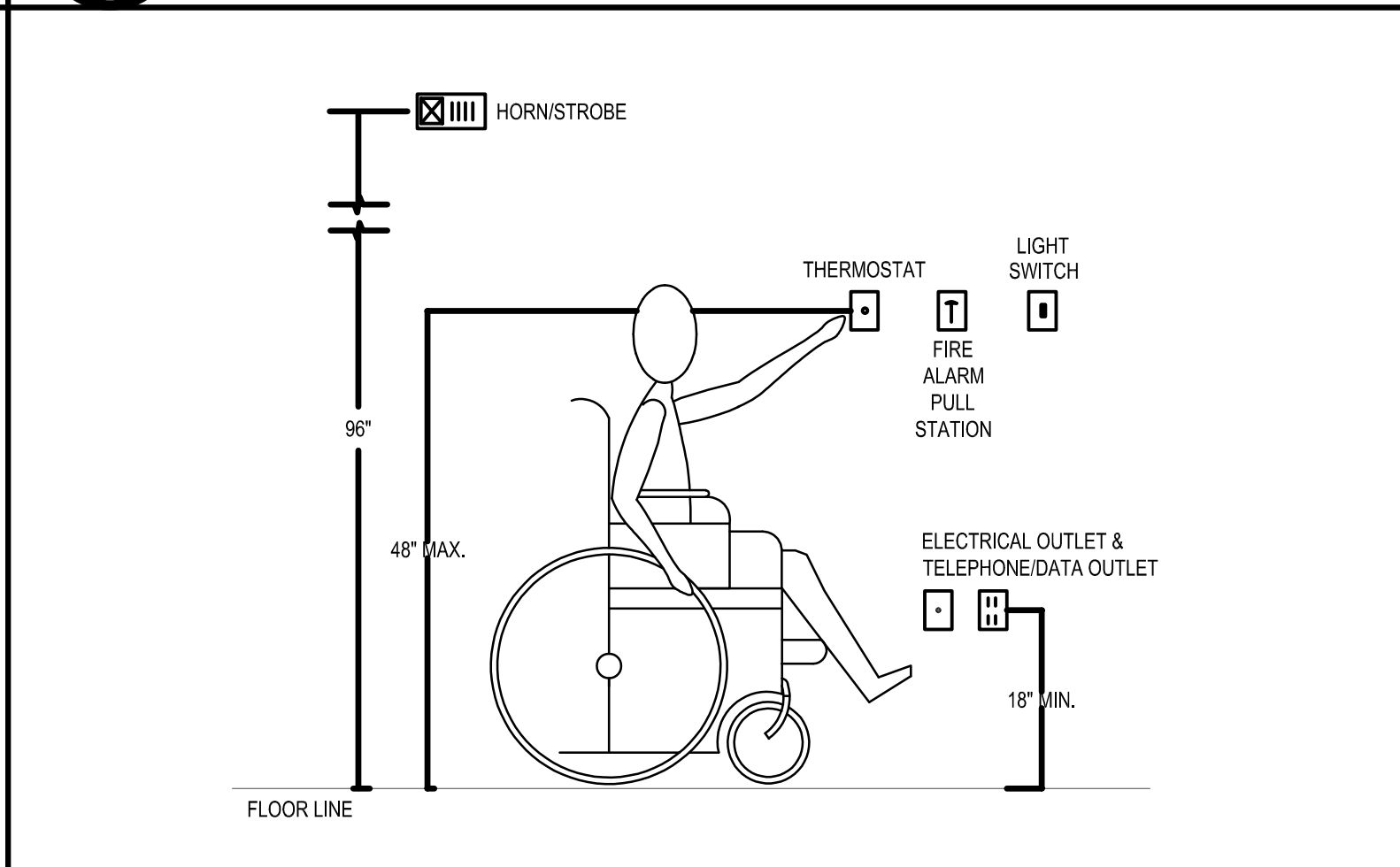


5 THREE-PHASE TRANSFORMER PAD/VAULT
NO SCALE

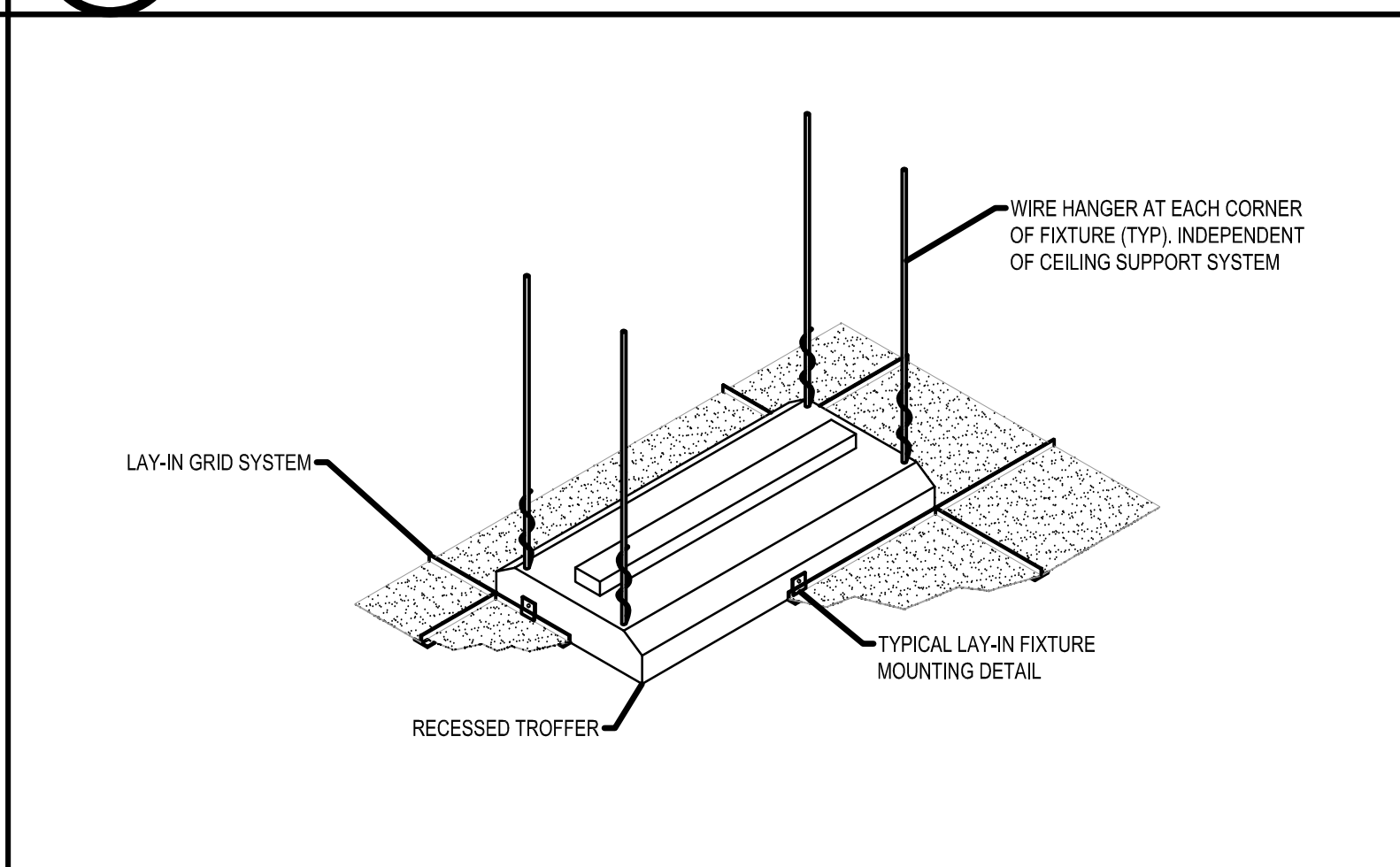
ROCKY MOUNTAIN POWER PART #ZG 521			
CONFIGURATION	VAULT DIMENSIONS A X B X C	LID DIMENSIONS	SI#
2,4-25KV(75-750KVA)	84" X 56" X 48"	84" X 112"	7992600
2,4-25KV(1000-2500KVA)	84" X 84" X 54"	84" X 112"	7992656
35KV(75-750KVA)	84" X 56" X 48"	96" X 112"	7992602
35KV(1000-2500KVA)	84" X 84" X 54"	96" X 112"	7992656



1 TYPICAL ROUGH-IN REQUIREMENTS
NO SCALE



2 R 1 - ADA MOUNTING HEIGHTS FOR ELECTRICAL DEVICES
NO SCALE



3 LM-1 TYPICAL LAY-IN FIXTURE MOUNTING DETAIL
NO SCALE

ABBREVIATIONS	
(E)	EXISTING
(F)	FUTURE
(N)	NEW
(R)	RELOCATED
(X)	DEMOLISH/DELETE
AFF	ABOVE FINISHED FLOOR
AIC	AMP INTERRUPTING CURRENT (SYMMETRICAL)
AL	ALUMINUM
BG	BELOW GRADE
C	CONDUIT
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CKT	CIRCUIT
CLG	CEILING
CO	CONDUIT ONLY
CTR	ABOVE COUNTER DEVICE
CU	COPPER
EM	EMERGENCY
EMC	DOMESTIC HOT WATER RECIRC.
EWV	ELECTRIC WATER COOLER
EWV	ELECTRIC WATER HEATER
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTOR
OND	GROUND
GRC	GALVANIZED RIGID CONDUIT
IG	ISOLATED GROUND
LGT	LIGHTING
MCS	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MLO	MAIN LUGS ONLY
NAC	NOTIFICATION APPLIANCE CIRCUIT
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NTS	NOT TO SCALE
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
PNL	PANEL
S	SWITCHED
SPD	SURGE PROTECTIVE DEVICE
ST	SHUNT TRIP
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VR	VANDAL RESISTANT
WG	WIRE GUARD
WP	WEATHER PROOF
XFMR	TRANSFORMER

ELECTRICAL LEGEND	
NOTE: ALL ITEMS MAY NOT APPEAR ON DRAWINGS	
LINEAR SUSPENDED PENDANT FIXTURE	QUADRAPLEX RECEPTACLE, PEDESTAL MOUNTED
LINEAR SUSPENDED PENDANT FIXTURE (EMERGENCY POWER)	JUNCTION BOX
RECESSED DOWN LIGHT	JUNCTION BOX, FLUSH IN FLOOR
RECESSED DOWN LIGHT (EMERGENCY POWER)	MAGNETIC STARTER
RECESSED LIGHT FIXTURE	MANUAL STARTER
RECESSED LIGHT FIXTURE (EMERGENCY POWER)	MOTOR CONNECTION
RECESSED WALL MOUNTED LIGHT FIXTURE	THERMAL SWITCH
RECESSED WALL MOUNTED LIGHT FIXTURE (EMERGENCY POWER)	COMBINATION STARTER/FUSED DISCONNECT SWITCH
CEILING SURFACE / PENDANT SUSPENDED FIXTURE	COMBINATION STARTER/NON-FUSED DISCONNECT SWITCH
LIGHT TRACK WITH LIGHT FIXTURE	FUSED DISCONNECT SWITCH
STRIP LIGHT FIXTURE	NONFUSE DISCONNECT SWITCH
SURFACE LIGHT FIXTURE	RECESSED ELECTRICAL PANELBOARD
SURFACE LIGHT FIXTURE (EMERGENCY POWER)	RECESSED EQUIPMENT CABINET AS NOTED
WALL MOUNTED LIGHT FIXTURE	SURFACE ELECTRICAL PANEL
WALL MOUNTED LIGHT FIXTURE	SURFACE EQUIPMENT CABINET
WALL MOUNTED LIGHT FIXTURE (EMERGENCY POWER)	DATA OUTLET-ABOVE COUNTER: # INDICATES QTY.; NO DESIGNATION = (2) DATA OUTLET
3-WAY KEY SWITCH	DATA OUTLET-FLUSH IN FLOOR# INDICATES QTY.; NO DESIGNATION = (2) DATA OUTLET
3-WAY SWITCH	DATA OUTLET: # INDICATES QTY.; NO DESIGNATION = (2) DATA OUTLET
4-WAY SWITCH	FIRE ALARM CONTROL MODULE
EXPLOSION PROOF	FIRE ALARM FSD CONTROL RELAY
KEY SWITCH	FIRE ALARM MONITOR MODULE
LOW VOLTAGE MASTER	FIRE SMOKE DAMPER
LOW VOLTAGE SWITCH	DUCT SMOKE DETECTOR
MOMENTARY CONTACT SWITCH	FIRE ALARM MANUAL PULL STATION
PILOT LIGHT	FIRE ALARM PRESSURE SWITCH
PUSHBUTTON SWITCH	FLOW SWITCH
REMOTE CONTROL	HEAT DETECTOR
SINGLE POLE SWITCH	O.S. & Y. VALVE TAMPER SWITCH
SWITCH WITH VANDAL RESISTANT COVER PLATE	PHOTO ELECTRIC SMOKE DETECTOR
DIMMER SWITCH, WALL MOUNT	FIRE ALARM HORN
OCCUPANCY SENSOR, CEILING MOUNT	FIRE ALARM VISUAL SIGNAL
OCCUPANCY SENSOR, WALL MOUNT	FIRE ALARM VISUAL SIGNAL WITH HORN
PHOTO CELL	FIRE ALARM ANNUNCIATOR
POWER PACK	FIRE ALARM CONTROL PANEL
SLAVE POWER PACK	FIRE ALARM VOICE EVACUATION PANEL
DIGITAL TIME SWITCH	NOTIFICATION APPLIANCE CIRCUIT EXTENDER
COMBO FLOORBOX WITH DUPLEX RECEPTACLE AND DATA	REMOTE FIRE COMMAND CENTER
COMBO FLOORBOX WITH QUADRAPLEX RECEPTACLE AND DATA	DRAWING NOTE DESIGNATOR
DUPLEX RECEPTACLE	LIGHT FIXTURE DESIGNATION
DUPLEX RECEPTACLE (EMERGENCY POWER)	MECHANICAL EQUIPMENT DESIGNATION
DUPLEX RECEPTACLE GFI	CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDER FLOOR
DUPLEX RECEPTACLE ISOLATED GROUND	CONDUIT CONCEALED IN WALLS, CEILING OR FLOOR
DUPLEX RECEPTACLE, FLUSH CEILING	EQUIPMENT GROUND CONDUCTOR
DUPLEX RECEPTACLE, FLUSH CEILING ISOLATED GROUND	EXISTING CONDUIT
DUPLEX RECEPTACLE, FLUSH IN FLOOR	FLEXIBLE CONDUIT
DUPLEX RECEPTACLE, PEDESTAL MOUNTED	STUB DOWN
POKE-THRU DEVICE	STUB OUT
QUADRAPLEX RECEPTACLE	STUB UP
QUADRAPLEX RECEPTACLE GFI	BREAKER
QUADRAPLEX RECEPTACLE ISOLATED GROUND	TRANSFORMER (ONE-LINES)

DRAWING INDEX	
EG1.1	SYMBOLS, ABBREVIATIONS, & DRAWING INDEX & DETAILS
ED1.1	1ST LEVEL ELECTRICAL DEMO PLAN
ED1.2	2ND LEVEL ELECTRICAL DEMO PLAN
ED2.1	1ST LEVEL LIGHTING DEMO PLAN
EL1.1	1ST LEVEL LIGHTING PLAN
EL1.2	2ND LEVEL LIGHTING PLAN
EP1.1	1ST LEVEL POWER PLAN
EP1.2	2ND LEVEL POWER PLAN
EY1.1	1ST LEVEL SYSTEM PLAN
EY1.2	2ND LEVEL SYSTEM PLAN
EY2.1	FIRE ALARM RISER DIAGRAM
EX1.1	ONE-LINE DIAGRAM
EX1.2	LUMINAIRE AND MECHANICAL SCHEDULES
EX1.3	PANEL SCHEDULES




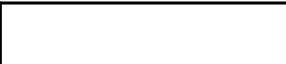
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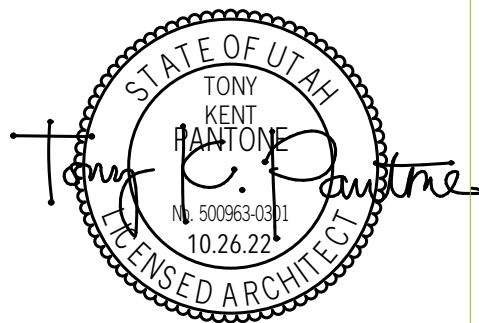
LUMINAIRE SCHEDULE							
TYPE	DESCRIPTION		LAMP(S)(BALLAST(S))	INPUT (VA)	VOLTAGE	MANUFACTURER	CATALOG #
A1	DESCRIPTION:	2' X 4' RECESSED FLAT PANEL	LED	41.5	UNV	COOPER	24FP4740C
	SIZE:	23-3/4" X 47-3/4" X 2"	4556 LUMENS			LITHONIA	CPX 2X4 AL08 S1W17 M2
	HOUSING:	ALUMINUM BEZEL, STEEL BACK PLATE	4000 KELVIN			ILP	PAN24-30WLED-J40
	FINISH:	WHITE POWDER COAT BEZEL	80 CRI				
	LENS:	WHITE FROST ACRYLIC					
	ACCESSORIES:						
	MOUNTING:	RECESSED					
A1E	DESCRIPTION:	2' X 4' RECESSED FLAT PANEL	LED	41.5	UNV	COOPER	24FP4740C-EL14W
	SIZE:	23-3/4" X 47-3/4" X 2"	4556 LUMENS			LITHONIA	CPX 2X4 AL08 S1W17 E110WCP
	HOUSING:	ALUMINUM BEZEL, STEEL BACK PLATE	4000 KELVIN			ILP	PAN24-30WLED-J40-EM12
	FINISH:	WHITE POWDER COAT BEZEL	80 CRI				
	LENS:	WHITE FROST ACRYLIC					
	ACCESSORIES:	14 WATT EM PACK					
	MOUNTING:	RECESSED					
C1	DESCRIPTION:	RECESSED CAN LIGHT	LED	20.9	UNV	COOPER	HC6 20 HMB 0525 840 61 MD W
	SIZE:	26.4" X 8.6" X 6.7"	2000 LUMENS			LITHONIA	LDM6 4020 L06WR MVOLT G210
	HOUSING:	GALVANIZED STEEL PLASTER FRAME	4000 KELVIN			RAYON	RB04-LL20-CT40-UNV-HW-FN-C
	FINISH:	WHITE FLANGE	80 CRI				
	DISTRIBUTION:	MEDIUM 60 DEGREE BEAM ANGLE					
	ACCESSORIES:						
	MOUNTING:	RECESSED					
C1E	DESCRIPTION:	RECESSED CAN LIGHT	LED	20.9	UNV	COOPER	HC6 20 REM14 HMB 0525 840 61 MD W
	SIZE:	26.4" X 8.6" X 6.7"	2000 LUMENS			LITHONIA	LDM6 4020 L06WR MVOLT G210 EL
	HOUSING:	GALVANIZED STEEL PLASTER FRAME	4000 KELVIN			RAYON	RB04-LL20-CT40-UNV-HW-FN-C-EL17
	FINISH:	WHITE FLANGE	80 CRI				
	DISTRIBUTION:	MEDIUM 60 DEGREE BEAM ANGLE					
	ACCESSORIES:	14 WATT EM PACK					
	MOUNTING:	RECESSED					
NOTES:							
1	ALL LIGHT FIXTURES SHALL HAVE A MINIMUM 5 YEAR WARRANTY.						
2	ALL LED LIGHT FIXTURES SHALL HAVE REPLACEABLE AND UPGRADABLE LED MODULES, LM79 AND LM80 LISTED, WITH 50,000 HR MIN. L70 RATING.						
3	LIGHT FIXTURE DESCRIPTION TAKES PRECEDENCE OVER CATALOG NUMBER. LIGHT FIXTURES SHALL MEET DESCRIPTION REQUIREMENTS.						

MECHANICAL EQUIPMENT SCHEDULE																									
DESCRIPTION		VOLT	PH	HP		WATTS		MCA	FLA	AMPS	DISCONNECT			STARTER			WIRING REQUIREMENTS					NOTES			
ID #	NAME			RATING	AMPS	RATING	AMPS				MANUAL STARTER	SIZE	FUSE SIZE	FURN. BY	TYPE	SIZE	FURN. BY	WIRES	GROUND	CONDUIT	BREAKER				
RT-1	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-2	ROOFTOP UNIT	208	3					28.0				60	35	w/ Unit				3	#	8	1 #10	3/4"	40		
RT-3	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-4	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-5	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-6	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-7	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-8	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-9	ROOFTOP UNIT	208	3					26.0				60	35	w/ Unit				3	#	8	1 #10	3/4"	35		
RT-10	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-11	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-12	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	10	1 #10	3/4"	30		
RT-13	ROOFTOP UNIT	208	3					88.6				200	125	w/ Unit				3	#	1	1 #6	1-1/2"	125		
RT-14	ROOFTOP UNIT	208	3					28.0				60	35	w/ Unit				3	#	8	1 #10	3/4"	35		
RT-15	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	8	1 #10	3/4"	30	1.	
RT-16	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	6	1 #8	3/4"	30	1.	
RT-17	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	6	1 #8	3/4"	30	1.	
RT-18	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	6	1 #8	3/4"	30	1.	
RT-19	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	6	1 #8	3/4"	30	1.	
RT-20	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	6	1 #8	3/4"	30	1.	
RT-21	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	4	1 #8	1"	30	1.	
RT-22	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	4	1 #8	1"	30	1.	
RT-23	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	4	1 #8	1"	30	1.	
RT-24	ROOFTOP UNIT	208	3					21.1				30	30	w/ Unit				3	#	4	1 #8	1"	30	1.	
RT-25	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	4	1 #8	1"	30	1.	
RT-26	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	4	1 #8	1"	30	1.	
RT-27	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	4	1 #8	1"	30	1.	
RT-28	ROOFTOP UNIT	208	3					20.0				30	25	w/ Unit				3	#	4	1 #8	1"	30	1.	
EF-1	EXHAUST FAN	120	1	1/8	4.4						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-2	EXHAUST FAN	120	1	1/4	5.8						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-3	EXHAUST FAN	120	1	1/8	4.4						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-4	EXHAUST FAN	120	1	1/4	5.8						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-5	EXHAUST FAN	120	1	1/8	4.4						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-6	EXHAUST FAN	120	1	1/8	4.4						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-7	EXHAUST FAN	120	1	1/8	4.4						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-8	EXHAUST FAN	120	1	1/8	4.4						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-9	EXHAUST FAN	120	1	1/4	5.8						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-10	EXHAUST FAN	120	1	1/8	4.4						YES			DN 26				2	#	12	1 #12	3/4"	20		
EF-11	EXHAUST FAN	120	1	1/4	5.8						YES			DN 26				2	#	12	1 #12	3/4"	20		
EK-1	RECESSED WALL ELECT HEATER	120	1					15.0			YES			DN 26				2	#	12	1 #12	3/4"	20		
EK-2	RECESSED WALL ELECT HEATER	120	1					15.0			YES			DN 26				2	#	12	1 #12	3/4"	20		
EK-3	RECESSED WALL ELECT HEATER	120	1					15.0			YES			DN 26				2	#	3	1 #8	1"	20	1.	
EK-4	RECESSED WALL ELECT HEATER	120	1					15.0			YES			DN 26				2	#	3	1 #8	1"	20	1.	
CC-1	INDOOR CASSETTE CEILING	208	1					0.2			YES			DN 26				2	#	12	1 #12	3/4"	20		
CC-2	INDOOR CASSETTE CEILING	208	1					1.7			YES			DN 26				2	#	12	1 #12	3/4"	20		
WC-1	INDOOR CASSETTE WALL	208	1					0.3			YES			DN 26				2	#	12	1 #12	3/4"	20		
WC-2	INDOOR CASSETTE WALL	208	1					0.3			YES			DN 26				2	#	12	1 #12	3/4"	20		
WC-3	INDOOR CASSETTE WALL	208	1					0.3			YES			DN 26				2	#	12	1 #12	3/4"	20		
WC-4	INDOOR CASSETTE WALL	208	1					0.5			YES			DN 26				2	#	12	1 #12	3/4"	20		
WC-5	INDOOR CASSETTE WALL	208	1					0.5			YES			DN 26				2	#	12	1 #12	3/4"	20		
BC-1	INDOOR BRANCH CONTROLLER	208	1					0.2			YES			DN 26				2	#	12	1 #12	3/4"	20		
BC-2	INDOOR BRANCH CONTROLLER	208	1					0.1			YES			DN 26				2	#	12	1 #12	3/4"	20		
BC-3	INDOOR BRANCH CONTROLLER	208	1					0.1			YES			DN 26				2	#	12	1 #12	3/4"	20		
BC-4	INDOOR BRANCH CONTROLLER	208	1					0.2			YES			DN 26				2	#	12	1 #12	3/4"	20		
BC-5	INDOOR BRANCH CONTROLLER	208	1					0.2			YES			DN 26				2	#	12	1 #12	3/4"	20		
HP-1	OUTDOOR HEAT PUMP	208	1					30.0				60	40	w/ Unit				2	#	8	1 #10	3/4"	40		
HP-2	OUTDOOR HEAT PUMP	208	1					23.5				30	30	w/ Unit				2	#	10	1 #10	3/4"	30		
HP-3	OUTDOOR HEAT PUMP	208	1					26.1				30	30	w/ Unit				2	#	10	1 #10	3/4"	30		
HP-4	OUTDOOR HEAT PUMP	208	1					30.0				60	40	w/ Unit				2	#	6	1 #8	3/4"	40	1.	
HP-5	OUTDOOR HEAT PUMP	208	1					30.0				60	40	w/ Unit				2	#	6	1 #8	3/4"	40	1.	
AC-1	AC UNIT OUTDOOR	208	1					13.0				30	20	w/ Unit				2	#	12	1 #12	3/4"	20		
AC-1	AC UNIT INDOOR	208	1					1.0				30	3	w/ Unit				2	#	12	1 #12	3/4"	20		
AC-2	AC UNIT OUTDOOR	208	1					13.0				30	20	w/ Unit				2	#	12	1 #12	3/4"	20		
AC-2	AC UNIT INDOOR	208	1					1.0				30	3	w/ Unit				2	#	12	1 #12	3/4"	20		
WH-1	WATER HEATER	120	1								YES			DN 26				2	#	12	1 #12	3/4"	20		
CP-1	CIRCULATION PUMP	120	1	1/8	4.4						YES			DN 26				2	#	12	1 #12	3/4"	20		
																		3	#	12	1 #12	3/4"	20		
NOTES																									
1	FEEDER HAS BEEN UPSETS FOR VOLTAGE DROP.																								
2																									

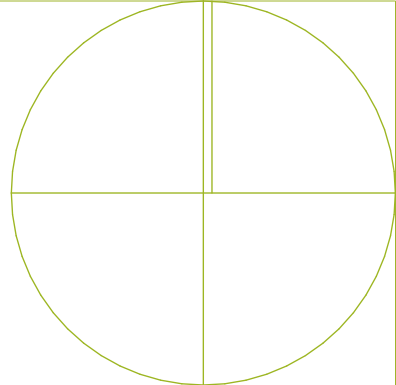
- GENERAL DEMOLITION NOTES:
- A. The Contractor shall field verify all dimensions and existing conditions including existing utilities prior to bidding as the locations shown in the construction documents are approximate. All variances not shown in the construction documents shall be brought to the attention of the Architect prior to bid.
 - B. Prior to beginning demolition work the Contractor shall coordinate with the Owner on items that shall be demolished, remain or be salvaged.
 - C. All bearing walls and columns to remain, unless indicated otherwise. Contractor shall field verify these conditions prior to demolition.
 - D. Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the work within the limitations of governing regulations and as indicated.
 - E. Provide miscellaneous demolition required for new construction, whether specifically defined, or not.
 - F. Protect existing construction indicated to remain during the process of demolition. All existing interior finishes, materials, structure, systems, landscaping, site features, etc. not identified to be demolished that are damaged during construction shall be restored to their original condition or replaced to match at the Contractor's expense.
 - G. Except for items indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain, remove demolished materials from project site and legally recycle or dispose of them in an EPA approved landfill.
 - H. Reference engineering sheets for additional demolition requirements.
 - I. Provide temporary bracing and shoring as required for removal of existing walls.
 - J. Reference demolition reflected ceiling plans for ceiling demolition requirements not shown on this sheet.
 - K. Where a wall is removed, cut back plaster/gypsum board to adjoining wall and ceiling surfaces and patch as required for smooth and even finish.
 - L. All existing finished surfaces damaged due to work under this contract shall be patched & finished to match existing adjacent surfaces.
 - M. All noted materials are new, unless indicated otherwise.
 - N. Contractor shall install flexboard over all floor material to remain to protect surfaces from construction debris and demolition work. 45 mil. minimum thickness. Tape all joints. Clean carpet if necessary at completion of construction.
 - O. Patch and level existing concrete floor slabs as required for new finishes with floor leveling compound as approved by the Architect.
 - P. Owner shall remove all existing wall mounted artwork, display boards, clocks, speakers, etc. from walls prior to construction start.

- KEYED NOTES:
- 02.04 Remove existing millwork including countertops (where occurs). Protect existing adjacent plaster wall surfaces from damage.
 - 02.05 Remove existing plumbing fixture, complete - re: plumbing
 - 02.06 Remove existing steam radiator system, complete, including piping, controls, etc. - re: mechanical/plumbing. Protect existing adjacent plaster wall surfaces to remain from damage.
 - 02.07 Remove existing wood door and door hardware from existing wood door frame. Protect existing wood door frame to remain.
 - 02.09 Remove existing window mounted evaporative cooler system, complete - re: mechanical/plumbing. Protect existing window system to remain.
 - 02.16 Remove existing abandoned steam and condensate piping, complete - re: mechanical/plumbing. Protect existing adjacent plaster wall surfaces to remain from damage.
 - 02.17 Remove existing foundation vent - re: mechanical
 - 02.18 Carefully cut existing wood floor for new register - re: mechanical. Coordinate location of register opening to avoid cutting or damage to existing floor joists.
 - 02.19 Remove existing drinking fountain, complete - re: plumbing
 - 02.20 Remove existing wood door wood door frame. Protect existing adjacent wall surfaces to remain.
 - 02.21 Existing IT/data rack to remain - protect from damage
 - 02.22 Remove existing hollow metal door, hollow metal door frame and sidelites/transoms (where occurs). Protect existing adjacent wall surfaces to remain.
 - 02.23 Remove existing flooring system in this room, complete. Protect existing wall base to remain.
 - 02.24 Carefully remove existing cast window sill. Protect existing wall finishes to remain.
 - 02.25 Carefully remove existing tectum wall panel system, complete, from all walls in this room. Protect existing wall finishes to remain.
 - 02.26 Remove existing tile flooring system in this room, complete, including wall base
 - 02.27 Remove existing obscure glazing from existing window sashes at this window. Protect existing window system to remain.
 - 02.28 Remove existing wall-mounted shelving system, complete. Protect existing adjacent plaster wall surfaces from damage.
 - 02.29 Remove existing wall sconce/light fixtures, complete - re: electrical
 - 02.32 Remove existing wood access door complete, including frame, casings, etc.
 - 05.02 Remove existing chain link fencing/guardrail system, complete. Install new 42" high vinyl coated chain link guardrail system. Install vertical posts at same location of previous guardrail system and grout in place.

- DEMOLITION LEGEND:
-  : Building element to be demolished.
 -  : Existing building element to remain (protect from damage).



NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01



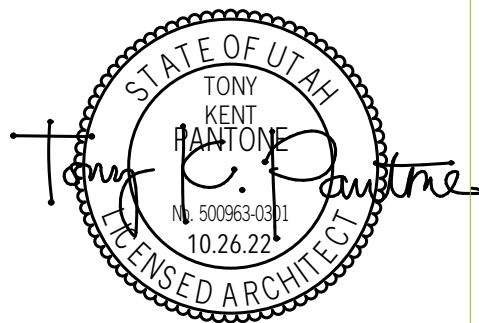
GENERAL PARTITION NOTES:

- FRAMED WALL PARTITIONS
- Partition type indications are independent of applied finishes. See the finish sheets and interior elevations for wall finishes including tile coursing and layout and/or the designations on the plans for additional information regarding applied finishes.
 - Where partition type designation on floor plans is interrupted by door opening, glazed partitions, etc., construction above interruption (and where applicable below) is to be the same as that designated for the partition in which the interruption occurred.
 - The minimum requirements for construction of each partition type as expressed by the indicated reference are incorporated by reference and are applicable to the work of this project. However, additional and/or more restrictive requirements may be indicated by the specifications and drawings. Such requirements also apply and shall govern such requirements including but are not limited to:
 - Use 5/8" thick gypsum board throughout, unless noted otherwise.
 - Use 16" o.c. max. stud spacing, unless noted otherwise in these documents. The spacing stated by the referenced approval or test report is the max. spacing if allowed in these documents.
 - Use studs of gauge indicated on the drawings or in the specifications. The gauge stated by the referenced approval or test report is the minimum gauge tested. 20 ga (30 mils) is the minimum allowed in these documents.
 - Use studs of depth indicated by this set of documents. The depth stated by the referenced approval or test report is the minimum depth allowed in these documents. See structural documents for additional information pertaining to the construction of concrete, masonry and stud walls.
 - Provide fire rated construction assemblies where indicated on sheets G2's and floor plan drawings.
 - All dimensions are center of stud or face of concrete, masonry, or rough opening unless noted otherwise. Face of finished wall will be noted as FOW.
 - At all interior walls, the studs, insulation, and gypsum board are to extend to the roof deck above, unless noted otherwise. Wall types not noted are assumed to match adjacent rooms. See sheets for finishes. Notify architect of any discrepancies.
 - All metal stud partitions are considered acoustic partitions and are to receive a type 1 sound attenuation blanket. Thickness shall match stud depth unless noted otherwise.
 - Provide control joints in metal framed walls at approximately 30 feet on center. Locate at corner above doors or inside corner of pilasters or other inconspicuous locations where possible. Consult with architect prior to commencing framing.
 - At wall openings for penetration of pipes, ducts, devices, etc. gypsum board is to be cut to match the shape and dimension of the penetrating object and the gap between the object and the wall is to be sealed with acoustical or fire sealant on all sides with a 1/4" joint at all sides maximum. The opening for ducts or large penetrations shall be framed with a header. Add an angled corner brace if the gap exceeds 3" from framing to the opening.
 - Contractor to provide blocking/backing for all wall mounted equipment. See floor plans and interior elevations for cabinets, grab bars, etc. Install blocking as detailed or as required to mount such devices. All wood blocking is to be fire retardant treated. Install as per details.
 - Where there is limited water exposure: install one layer of 5/8" type X water resistant gypsum board per ASTM C1396 (where gypsum board occurs) of basic partition at the following locations:
 - Within 2 feet horizontally and 4 feet vertically of janitor sinks.
 - At other locations, i.e. toilet rooms and kitchens, and as indicated on the architectural finish plans and elevations.
 - Install one layer of 5/8" glass mat tile backer board in lieu of gypsum board (where gypsum board occurs) of basic partition where there is no fire rating and over gypsum board face layer at fire rated partitions at the following locations:
 - At wet locations such as shower stalls and tub surrounds to a height of not less than 72" above the drain inlet.
 - Where ceramic tile finishes are indicated per the finish plans and/or interior elevations.
 - At other locations as indicated by the architectural finish plans and elevations.
 - Provide fireblocking in concealed spaces of stud walls and partitions as follows: 1) vertically at the ceiling and floor levels and 2) horizontally at intervals not exceeding 10 feet.

KEYED NOTES:

- 02.21 Existing IT/data rack to remain - protect from damage
- 06.05 Patch, repair and fill existing wood sheathing as required at location of removed steam radiator system
- 06.07 Millwork - re: millwork drawings
- 07.04 Infill existing foundation wall vent opening with 2" polyisocyanurate insulation board. Cap opening with galvanized sheet metal cap and seal airtight - paint sheet metal to match existing brick veneer - re: mechanical.
- 08.03 Install existing glass pane (Furnished by Owner) in existing window sash at location of removed window mounted evaporative cooler system. Install new glazing stops and gaskets.
- 08.04 Install new wood stile and rail door leaf in existing wood door frame. Coordinate hinge locations and new door hardware with existing frame. Paint door leaf, door frame and transom panel.
- 08.05 Aluminum storefront entrance door system in existing masonry opening - re: door schedule and details
- 09.02 Skim coat all existing plaster wall surfaces in this room to provide smooth uniform wall surface - paint.
- 09.03 Patch and repair all existing wall surfaces in this room as required. Patch and repair all wall surfaces at locations of architectural, mechanical, plumbing and electrical demolition work as required - re: engineering sheets for mechanical and electrical demolition requirements. Paint as per finish schedule.
- 09.05 Install new solid surface window sill @ existing window. Patch and repair existing plaster sill and jambs as required. Re: detail 06/A9.21.
- 09.08 Prepare and paint existing wood storage closet system, including walls, doors, shelving, etc.
- 09.09 Infill existing access door opening removed during demolition with wood stud framing to match existing. Install lathe and plaster finish system to match existing texture/finish. Add wood running trim/chair rail across opening to match existing and paint. Patch, repair and paint existing wall corner to corner.
- 11.01 Refrigerator (N.I.C.)
- 11.02 Microwave (N.I.C.)
- 22.01 Sink and faucet - re: plumbing
- 26.02 Electric water cooler - re: electrical and plumbing

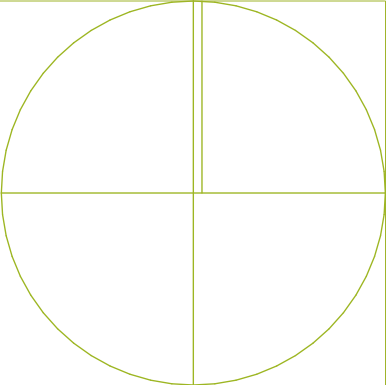
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1950 MONROE BLVD , OGDEN, UT

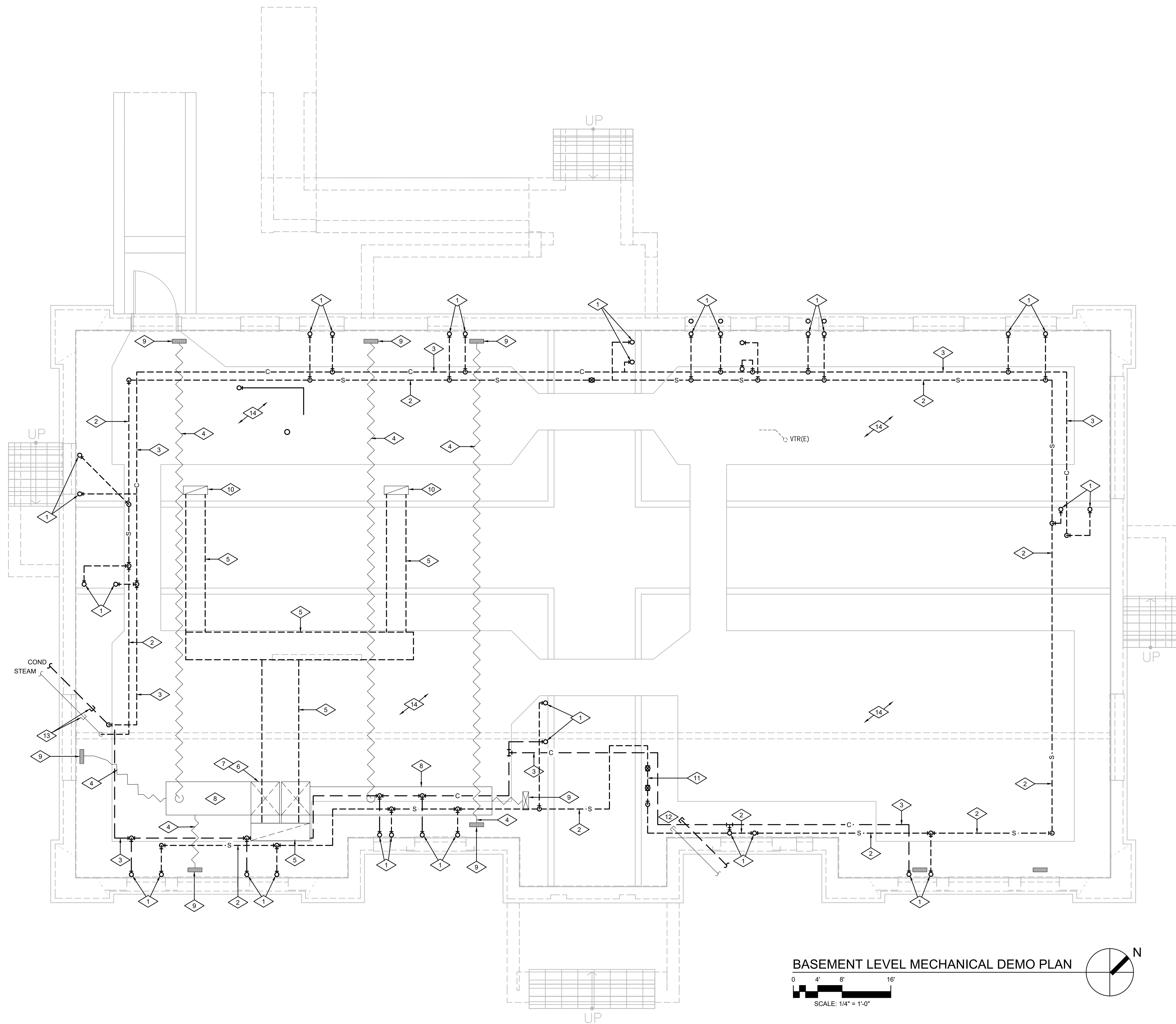
NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150
SCALE: 1/4" = 1'-0"



1ST LEVEL ANNOTATED
PLAN

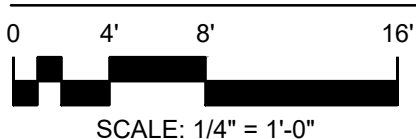
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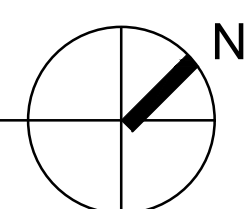
REFERENCE NOTES

- 1 REMOVE EXISTING STEAM AND CONDENSATE BRANCH PIPING TO STEAM RADIATOR COMPLETE. REMOVE ALL ASSOCIATED STEAM VALVES, CONDENSATE TRAPS AND PIPE SUPPORTS.
- 2 REMOVE EXISTING STEAM MAIN COMPLETE. REMOVE ALL ASSOCIATED PIPE SUPPORTS.
- 3 REMOVE EXISTING CONDENSATE MAIN COMPLETE. REMOVE ALL ASSOCIATED PIPE SUPPORTS.
- 4 REMOVE FLEXIBLE S.A. DUCT FROM JOIST SPACE COMPLETE.
- 5 REMOVE R.A. DUCT COMPLETE.
- 6 REMOVE EXISTING WATER COOLED AC UNIT COMPLETE. REMOVE AND SALVAGE REFRIGERANT. REMOVE ALL ASSOCIATED DUCTWORK AND SUPPORTS.
- 7 REMOVE ALL ASSOCIATED WATER AND DRAINS LINES TO AC UNIT.
- 8 REMOVE EXISTING S.A. DUCT MAIN. REMOVE ALL DUCT SUPPORTS.
- 9 REMOVE EXISTING S.A. REGISTER. SEE DWG M100 FOR NEW WORK REQUIRED.
- 10 REMOVE EXISTING R.A. BOOT. SEE DWG M100 FOR NEW WORK REQUIRED.
- 11 REMOVE EXISTING STEAM CONTROL VALVES COMPLETE. REMOVE ALL ACTUATORS AND CONTROL WIRING.
- 12 EXISTING ABANDONED STEAM MAIN AND CONDENSATE MAIN. NO WORK REQUIRED.
- 13 EXISTING STEAM AND CONDENSATE LINES. CUT AND CAP STEAM AND CONDENSATE MAINS NEAR WALL PENETRATION. REMOVE ALL STEAM AND CONDENSATE PIPING DOWNSTREAM.
- 14 REMOVE ALL ABANDONED, NON-FUNCTIONAL AND DISCONNECTED PIPING THAT IS NOT REUSED AS PART OF THE NEW WORK.

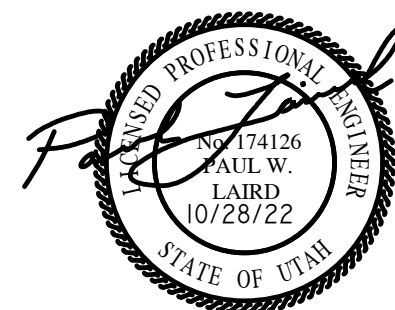
BASEMENT LEVEL MECHANICAL DEMO PLAN



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



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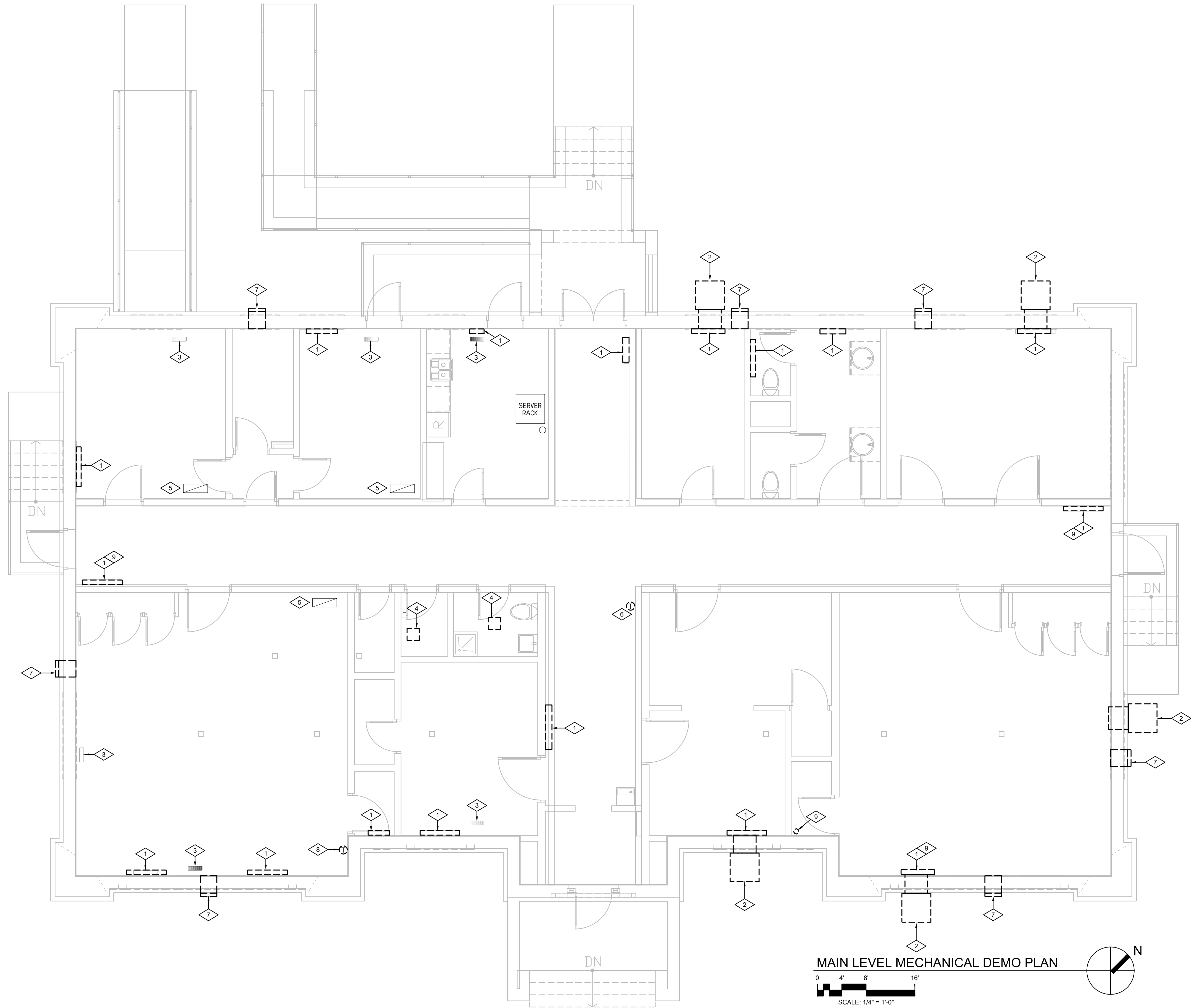
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NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01

PERMIT SET
DATE: 10.26.22
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BASEMENT LEVEL
MECHANICAL DEMOLITION
PLAN

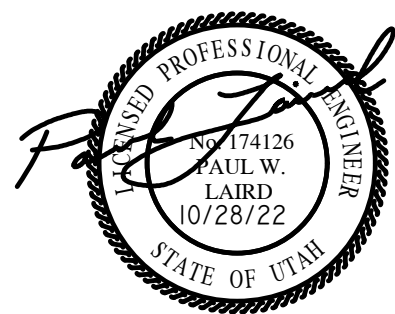
MD100



REFERENCE NOTES

- 1 REMOVE EXISTING STEAM RADIATOR COMPLETE. REMOVE ALL CONTROLS AND STEAM PIPING. PATCHING AND REPAIR OF WALL OR FLOOR BY OTHERS.
- 2 REMOVE EXISTING EVAPORATIVE COOLER COMPLETE.
- 3 EXISTING FLOOR REGISTER TO BE REMOVED AND REPLACED. SEE DRAWING M101 FOR NEW WORK.
- 4 REMOVE EXISTING CEILING VENT COMPLETE. REMOVE ALL ASSOCIATED DUCTWORK.
- 5 EXISTING FLOOR RETURN AIR GRILLE TO BE REMOVED AND REPLACED. SEE DRAWING M101 FOR NEW WORK.
- 6 REMOVE EXISTING STEAM RADIATOR THERMOSTAT. REMOVE ALL ASSOCIATED WIRING AND CONTROLS.
- 7 EXISTING FOUNDATION VENT. INFILL FOUNDATION WALL VENT OPENING WITH 2 INCH THICK WATERPROOF POLYISO INSULATION BOARD. CAP INFILLED OPENING ON INTERIOR SIDE WITH GALVANIZED SHEET METAL CAP AND SEAL AIRTIGHT. SEE DETAIL 2/M503.
- 8 REMOVE EXISTING THERMOSTAT SERVING AIR CONDITIONING UNIT IN BASEMENT. REMOVE ALL ASSOCIATED CONTROLS AND WIRING.
- 9 REMOVE EXISTING ABANDONED STEAM AND CONDENSATE PIPING COMPLETE. PATCHING AND REPAIR OF WALL OR FLOOR BY OTHERS (TYP).

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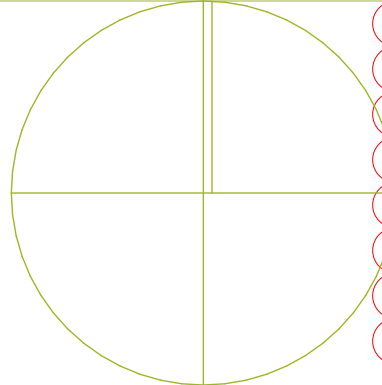
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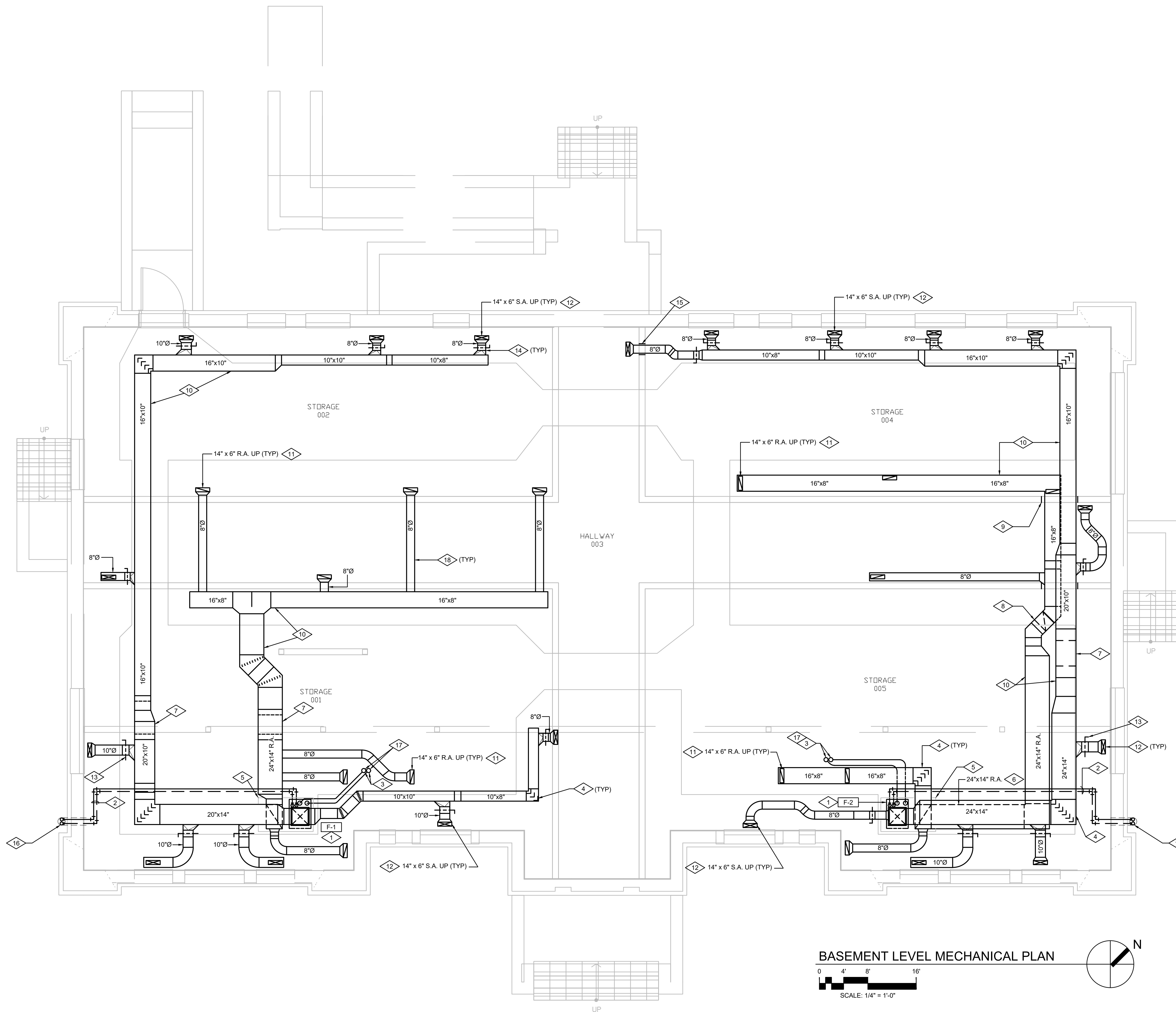
NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150



MAIN LEVEL MECHANICAL
DEMOLITION PLAN

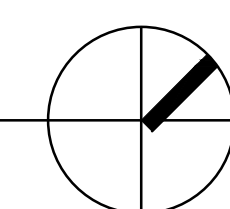
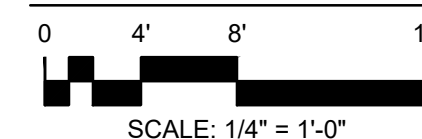
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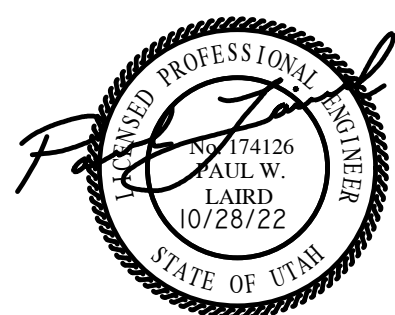
REFERENCE NOTES

- 1 INSTALL NEW FURNACE AND COOLING COIL IN THIS LOCATION. MOUNT FURNACE ON 8" HIGH PLENUM. SEE DETAIL 1/M502.
- 2 RUN NEW REFRIGERANT SUCTION AND LIQUID LINES CLOSE TO STRUCTURE. COORDINATE ROUTING WITH DUCTWORK AND LIGHTING. SEE PIPING SUPPORT DETAILS 2/M501 AND 8/M501.
- 3 EXTEND 3" SCH 40 PVC C.A. & FLUE PIPES FROM FURNACE TO ROOF. PROVIDE CONCENTRIC FLUE TERMINATION KIT AT ROOF. SEE DETAIL 6/M501.
- 4 PROVIDE TURNING VANES AT EACH DUCT ELBOW (TYP)
- 5 PROVIDE 12" HIGH LINED R.A. BASE FOR FURNACE. SEE DETAIL 8/M502.
- 6 RUN R.A. DUCT UNDER S.A. DUCT.
- 7 WHERE REQUIRED, OFFSET DUCTWORK BELOW EXISTING BEAMS AND OTHER OBSTRUCTIONS (TYP).
- 8 DROP DUCT DOWN AND RUN UNDER S.A. AIR DUCT THROUGH WALL OPENING. COORDINATE LOCATION OF DUCT WITH EXISTING WALL OPENING.
- 9 SUPPLY AND RETURN AIR DUCTS TO RUN THROUGH EXISTING WALL OPENINGS. COORDINATE LOCATION OF DUCTWORK PRIOR TO FABRICATION. MAKE ADJUSTMENTS TO DUCTWORK SIZE AS NEEDED TO ACCOMMODATE EXISTING WALL OPENINGS.
- 10 RUN DUCTWORK HIGH CLOSE TO STRUCTURE. COORDINATE LOCATION WITH ELECTRICAL AND PLUMBING TRADES.
- 11 PROVIDE RETURN AIR DUCT BOOT TO FLOOR GRILLE ABOVE. SAWCUT EXISTING FLOOR AS NEEDED (TYP).
- 12 PROVIDE SUPPLY AIR DUCT BOOT TO FLOOR REGISTER ABOVE (TYP). SAW CUT EXISTING FLOOR AS NEEDED (TYP). SEE DETAIL 1/M503.
- 13 VOLUME DAMPER (TYP).
- 14 HIGH EFFICIENCY 45 DEG TAKE-OFF (TYP)
- 15 CORE DRILL OR SAWCUT EXISTING WALL AS NEEDED TO FACILITATE DUCT INSTALLATION.
- 16 FOR CONTINUATION OF REFRIGERATION PIPING SEE DRAWING M101.
- 17 CORE DRILL EXISTING FLOOR STRUCTURE AS NEEDED FOR COMBUSTION AIR AND FLUE PIPING. FOR CONTINUATION OF FLUE PIPING SEE DRAWING M101.
- 18 RUN DUCT HIGH BETWEEN FLOOR JOISTS.

BASEMENT LEVEL MECHANICAL PLAN



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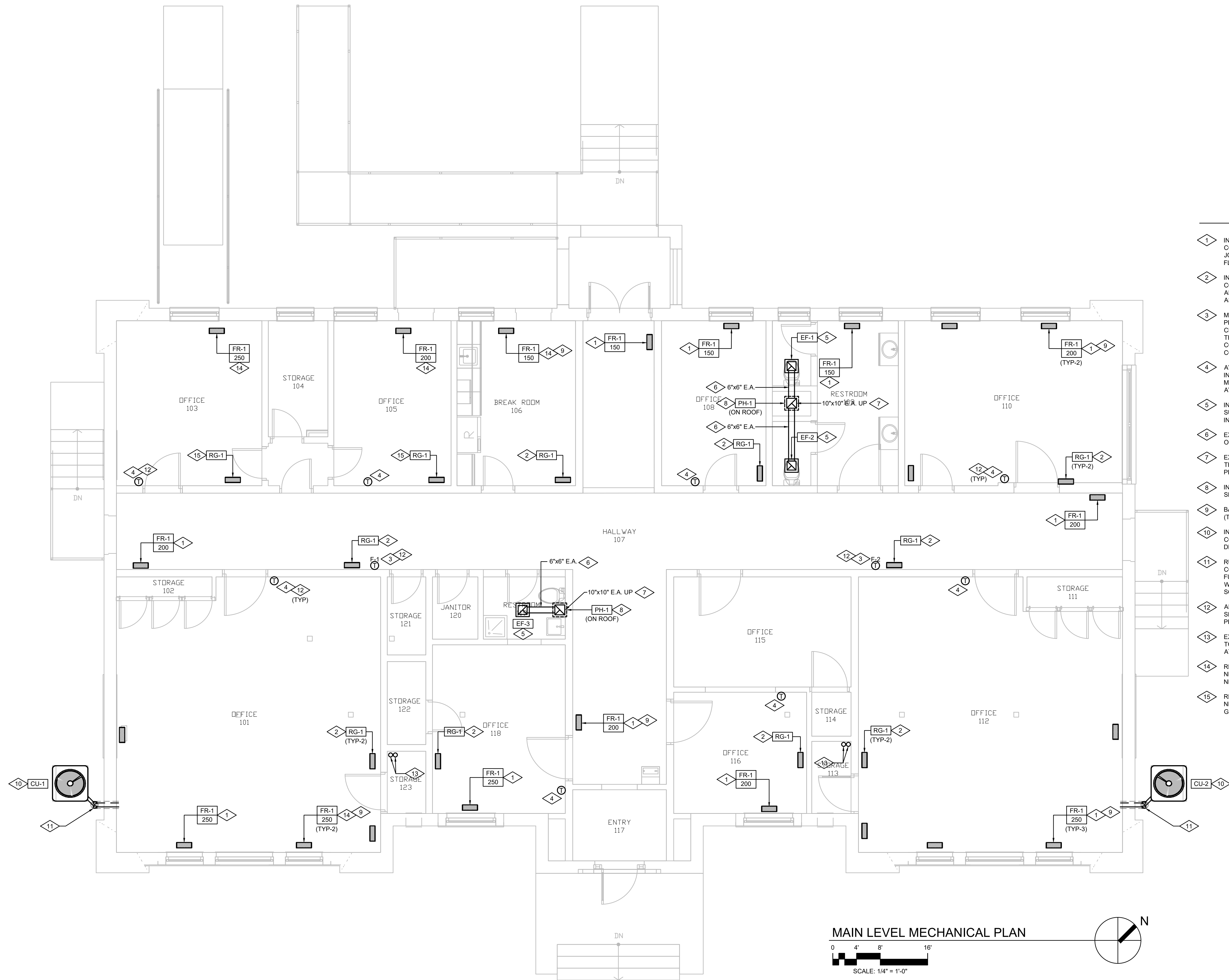
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01	11.09.22	ADDENDUM 01

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150

BASEMENT LEVEL
MECHANICAL PLAN

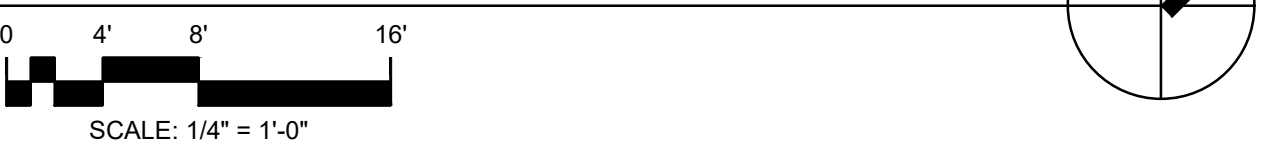
M100



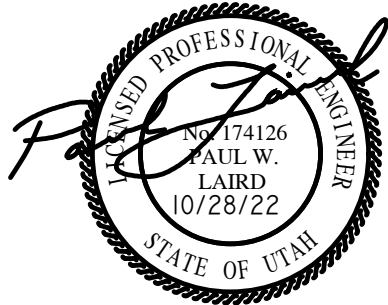
REFERENCE NOTES

- 1 INSTALL NEW S.A. FLOOR REGISTER WHERE INDICATED. COORDINATE LOCATION OF REGISTER WITH FLOOR JOISTS AND FURNITURE LOCATIONS. SAWCUT EXISTING FLOOR AS NEEDED. SEE DETAIL 1/M503 (TYP).
- 2 INSTALL NEW R.A. FLOOR GRILLE WHERE INDICATED. COORDINATE LOCATION OF GRILLE WITH FLOOR JOISTS AND FURNITURE LOCATIONS. SAWCUT EXISTING FLOOR AS NEEDED (TYP).
- 3 MASTER THERMOSTAT WITH OVERRIDE. INSTALL PROGRAMMABLE DIGITAL THERMOSTAT WITH AUTOMATIC CHANGE OVER BETWEEN HEATING AND COOLING. MOUNT THERMOSTAT 48 INCHES A.F.F. MAKE ALL REQUIRED CONNECTIONS TO AVERAGING THERMOSTATS FOR A COMPLETE AND FUNCTIONAL CONTROL SYSTEM.
- 4 AVERAGING THERMOSTAT. MOUNT THERMOSTAT 48 INCHES A.F.F. MAKE ALL REQUIRED CONNECTIONS TO MASTER THERMOSTAT TO PROVIDE FOR TEMPERATURE AVERAGING IN SPACES SERVED.
- 5 INSTALL CEILING EXHAUST FAN IN THIS LOCATION. SUPPORT FROM OVERHEAD STRUCTURE. PROVIDE INTEGRAL BACKDRAFT DAMPER. SEE DETAIL 4/M502.
- 6 EXTEND E.A. DUCT OF SIZE INDICATED THROUGH WALL OPENING INTO EXISTING DUCT CHASE.
- 7 EXTEND EXHAUST AIR DUCT OF SIZE INDICATED UP THROUGH EXISTING DUCT CHASE TO ROOF TOP PENTHOUSE.
- 8 INSTALL ROOF TOP PENTHOUSE ON 12" HIGH ROOF CURB. SEE DETAIL 2/M502.
- 9 BALANCE NEW FLOOR REGISTERS TO CFM INDICATED (TYP).
- 10 INSTALL CONDENSING UNIT IN THIS LOCATION. MOUNT CONDENSING UNIT ON 4 INCH HIGH CONCRETE PAD. SEE DETAIL 1/M501.
- 11 RUN REFRIGERATION LIQUID AND SUCTION LINES FROM CONDENSING UNIT THROUGH FOUNDATION WALL TO FURNACE COOLING COIL. PROVIDE CORE DRILL THROUGH WALL AS NEEDED. GROUT PIPE/WALL PENETRATION SOLID.
- 12 ALL TEMPERATURE CONTROL WIRING INSIDE WALLS SHALL BE INSTALLED IN EXISTING WALLS. WHERE NEEDED PROVIDE WIRE MOLD TO CONCEAL CONTROL WIRING.
- 13 EXTEND 3" SCH 40 PVC C.A. & FLUE PIPES FROM FURNACE TO ROOF. PROVIDE CONCENTRIC FLUE TERMINATION KIT AT ROOF. SEE DETAIL 6/M501.
- 14 REMOVE EXISTING FLOOR REGISTER AND REPLACE WITH NEW REGISTER. SAWCUT FLOOR AS NEEDED TO MATCH NEW REGISTER (TYP).
- 15 REMOVE EXISTING FLOOR GRILLE AND REPLACE WITH NEW GRILLE. SAWCUT FLOOR AS NEEDED TO MATCH NEW GRILLE (TYP).

MAIN LEVEL MECHANICAL PLAN



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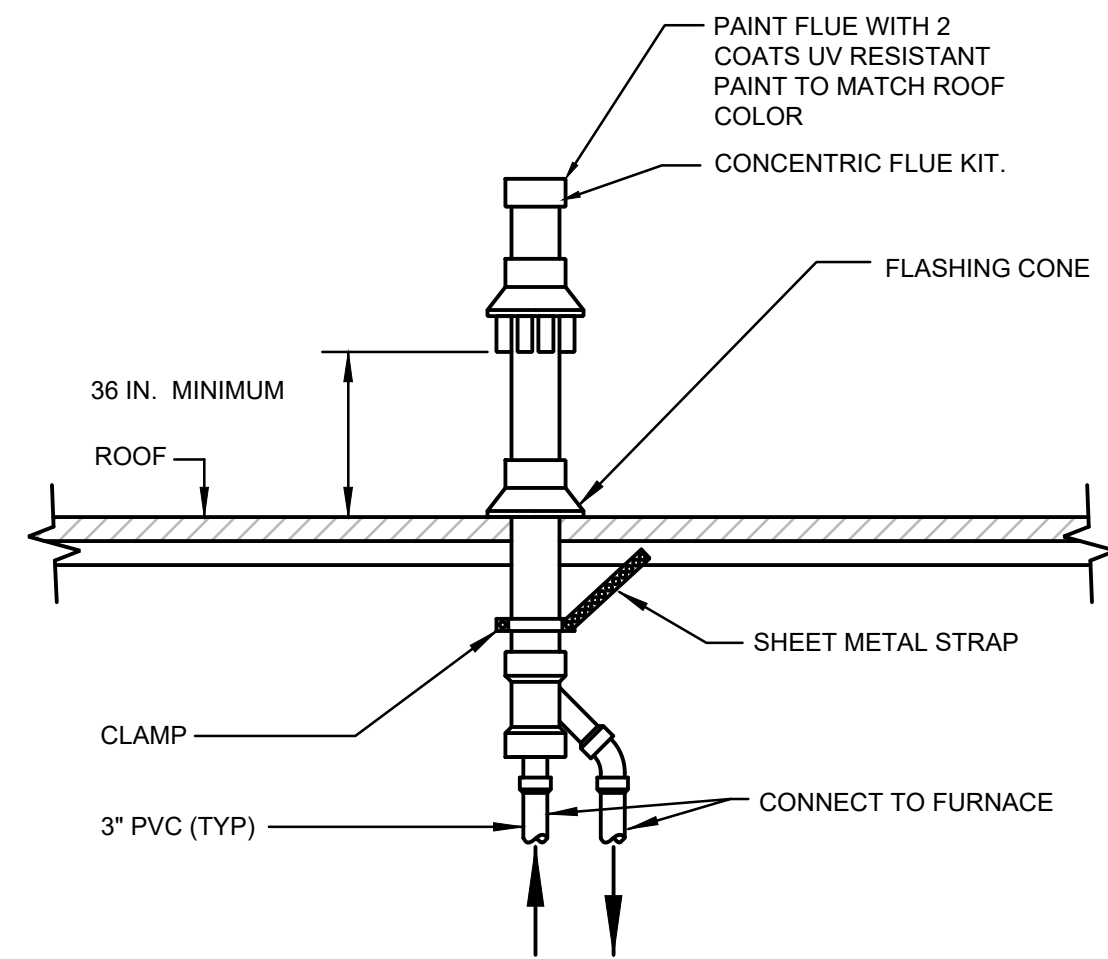
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NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01

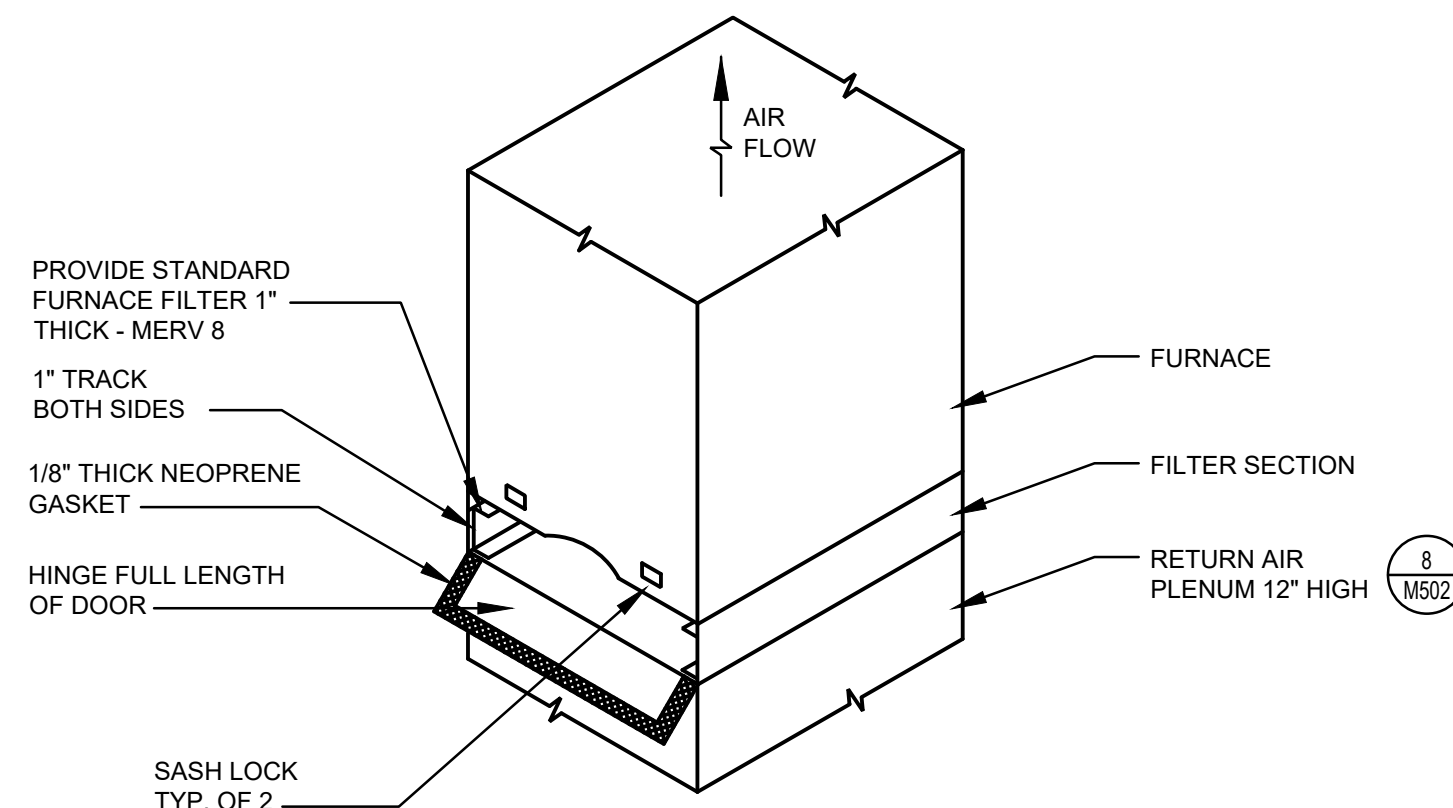
PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150

MAIN LEVEL MECHANICAL
PLAN

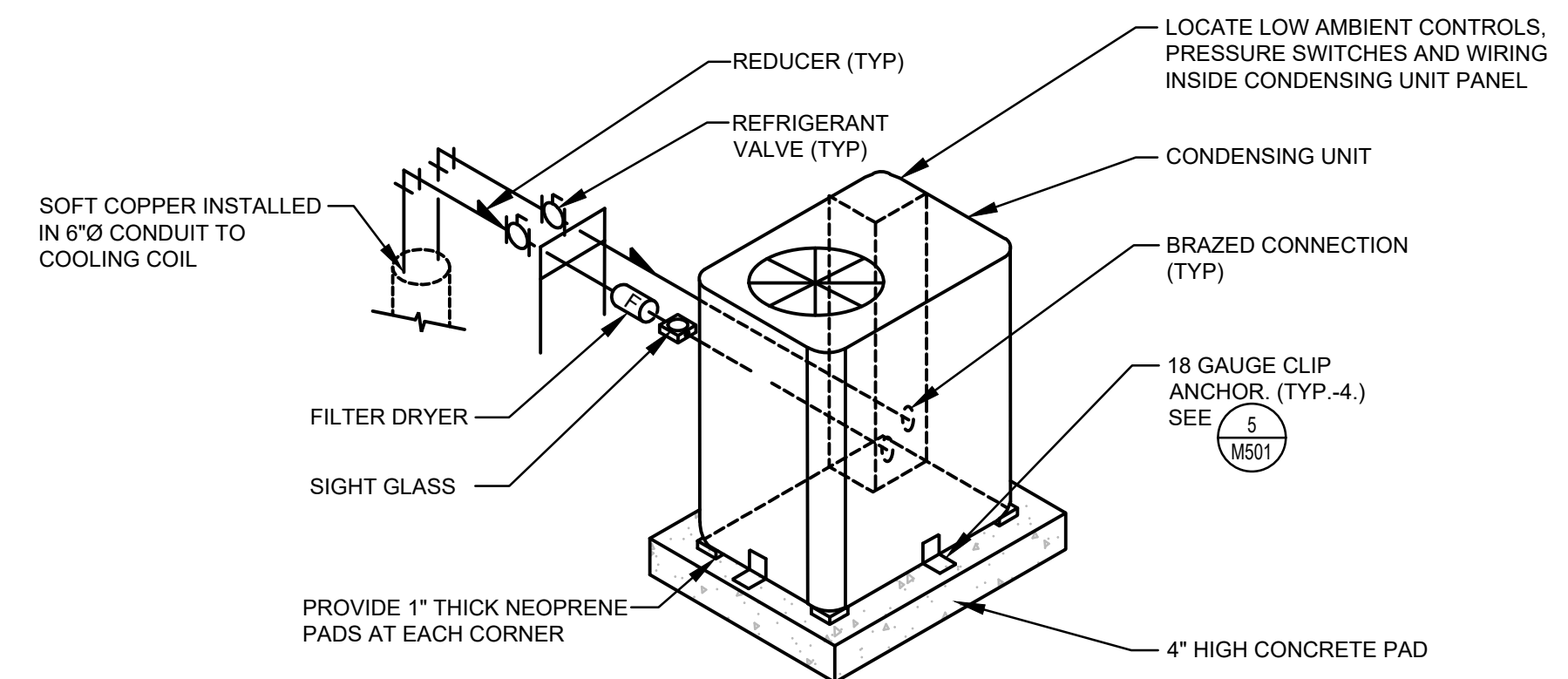
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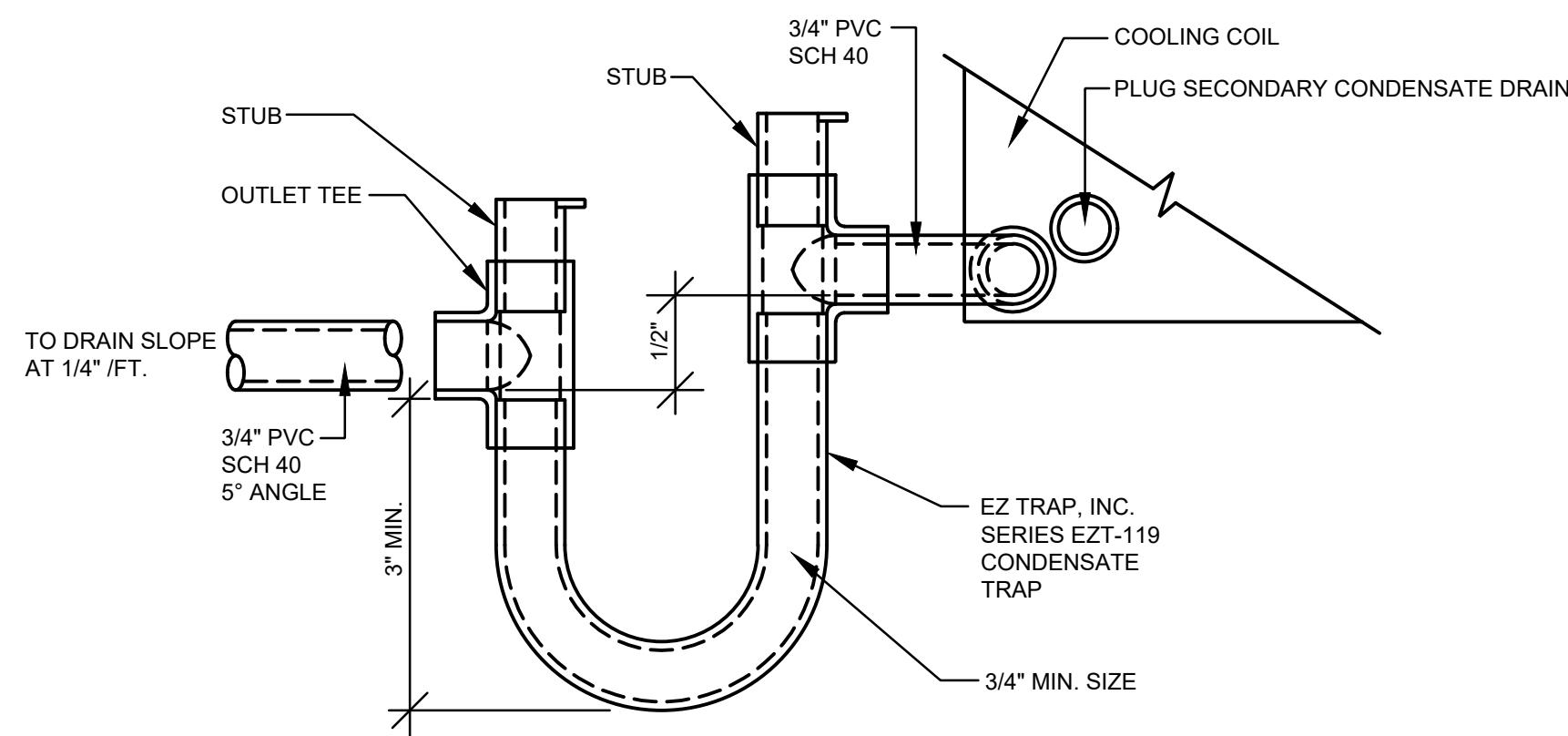
FURNACE VENTING DETAIL
NOT TO SCALE



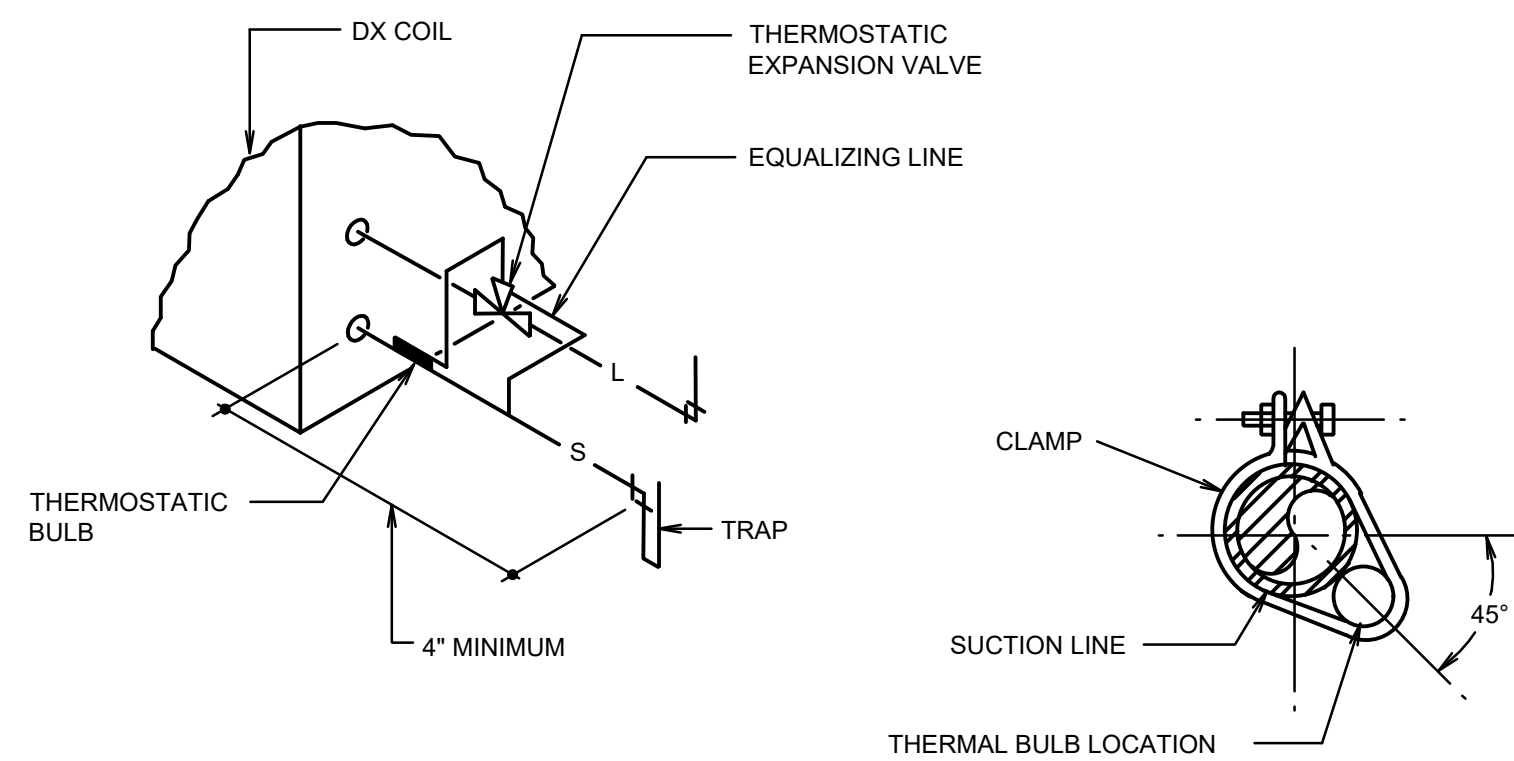
EXTERNAL FILTER SECTION DETAIL
NOT TO SCALE



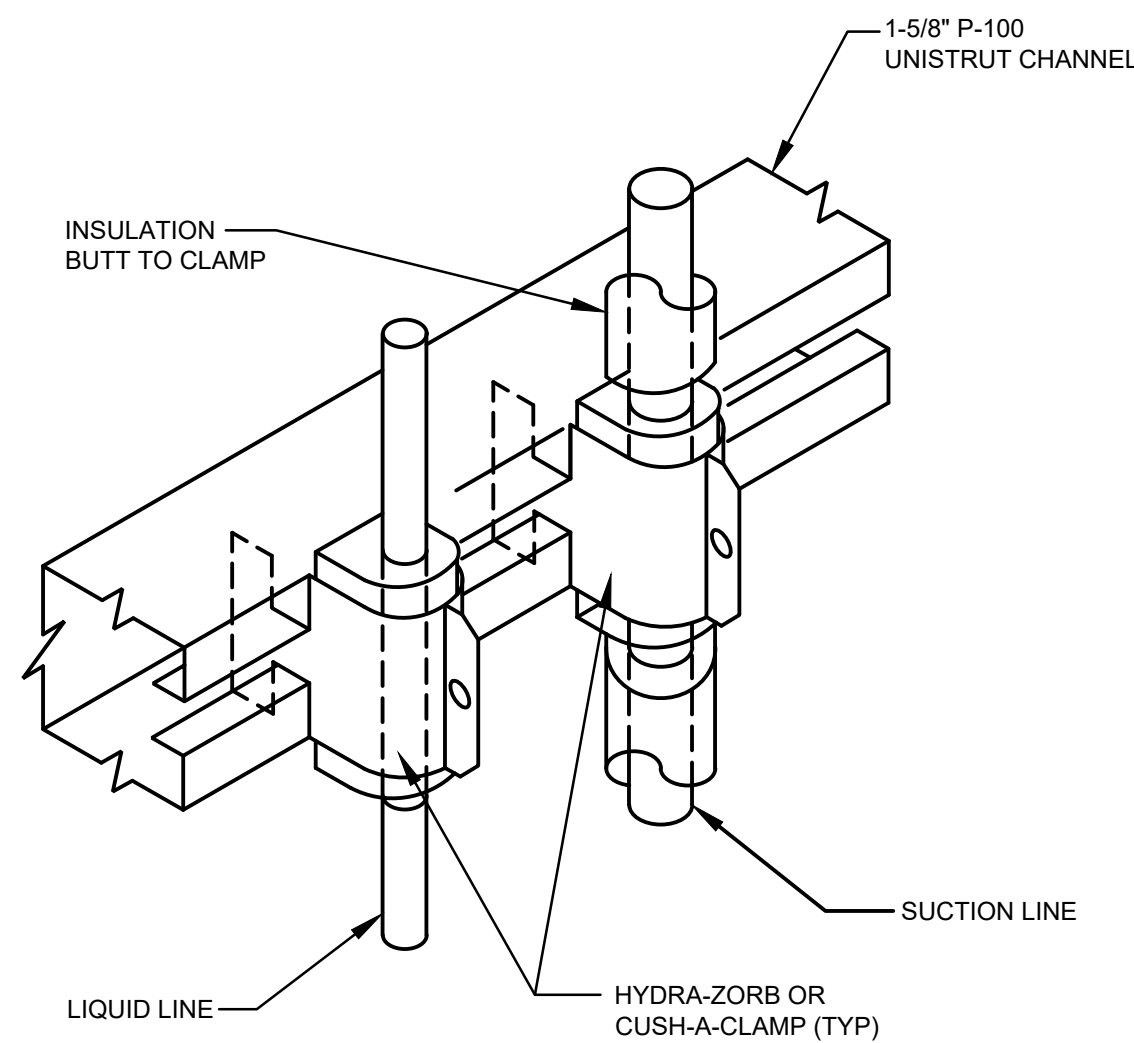
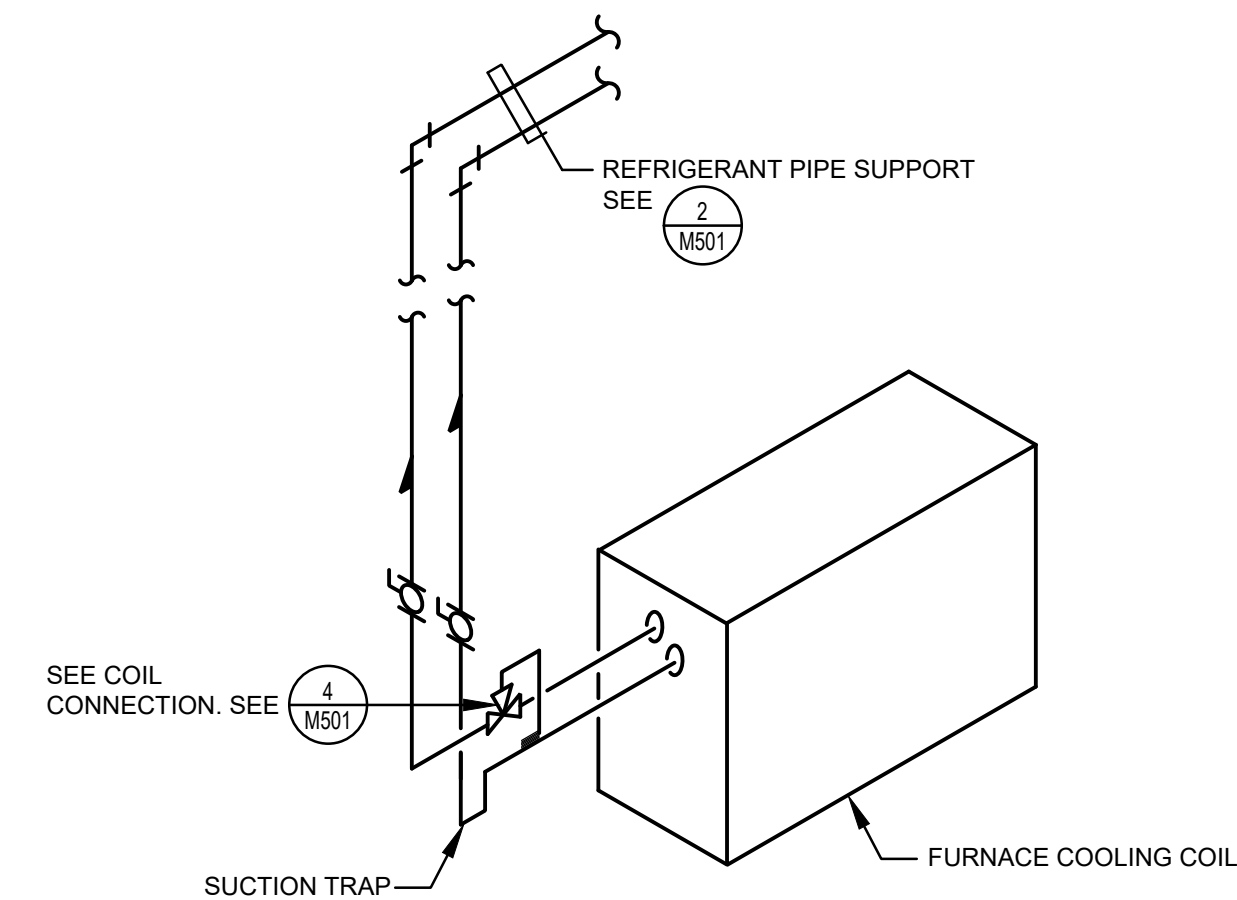
REFRIGERANT PIPING DETAIL
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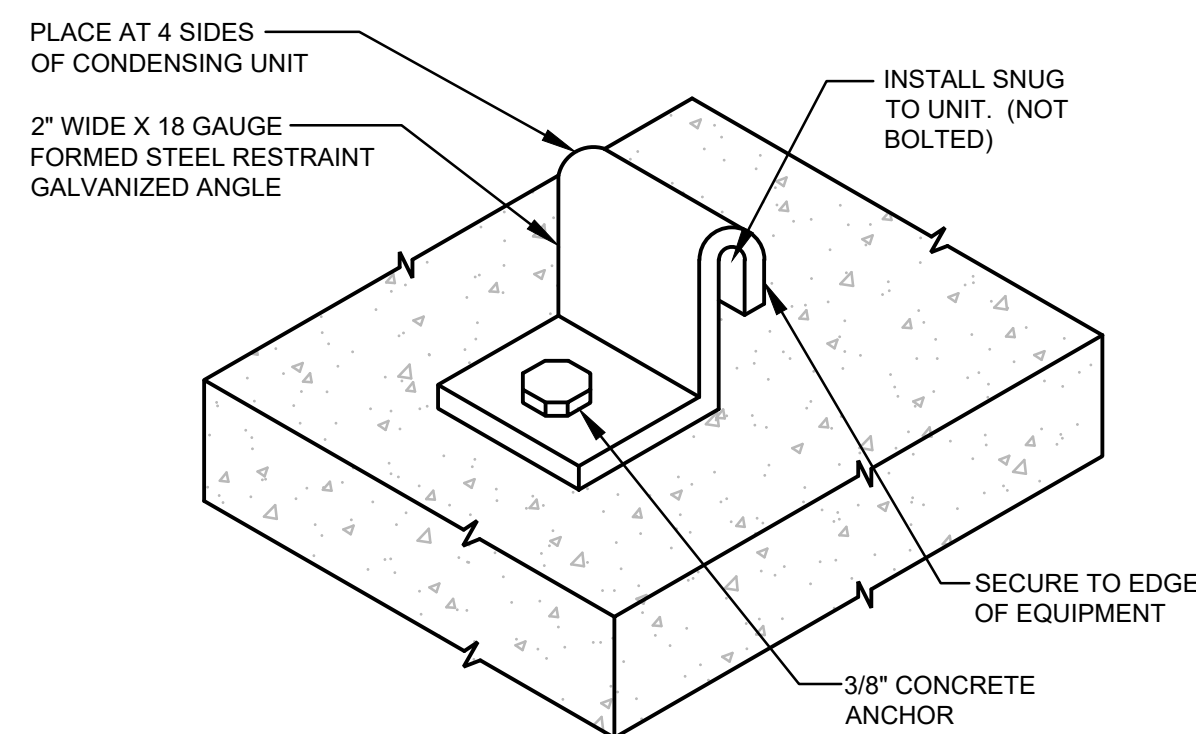
COOLING COIL CONDENSATE DRAIN DETAIL
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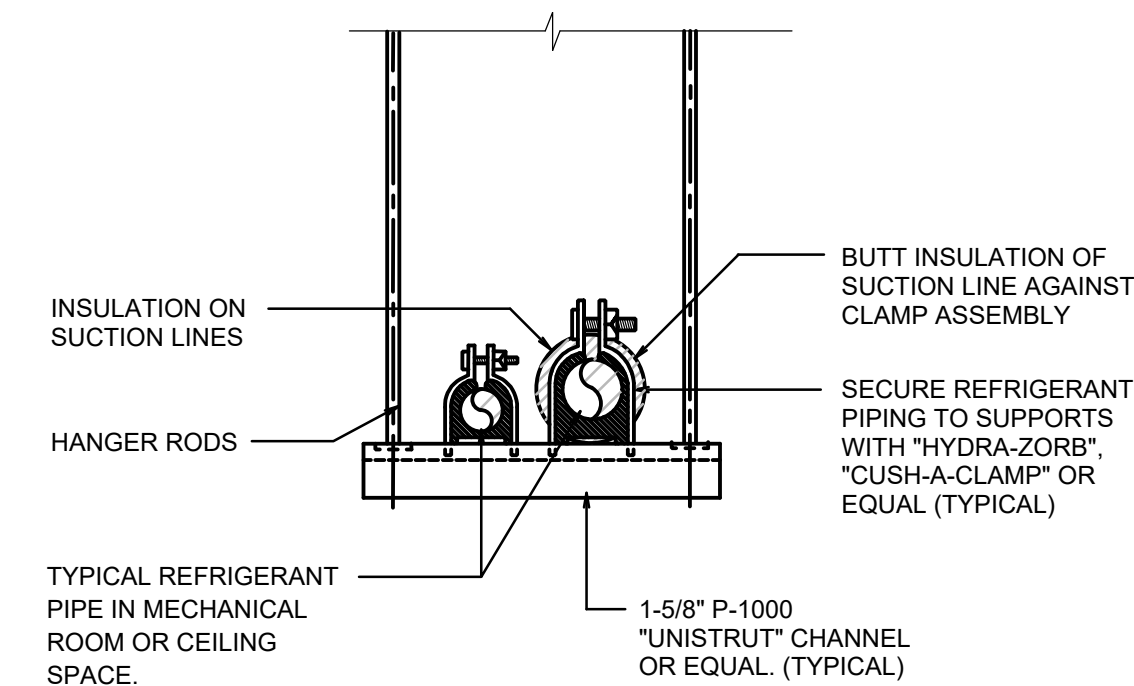
REFRIGERANT COIL CONNECTION DETAIL
SCALE: NONE



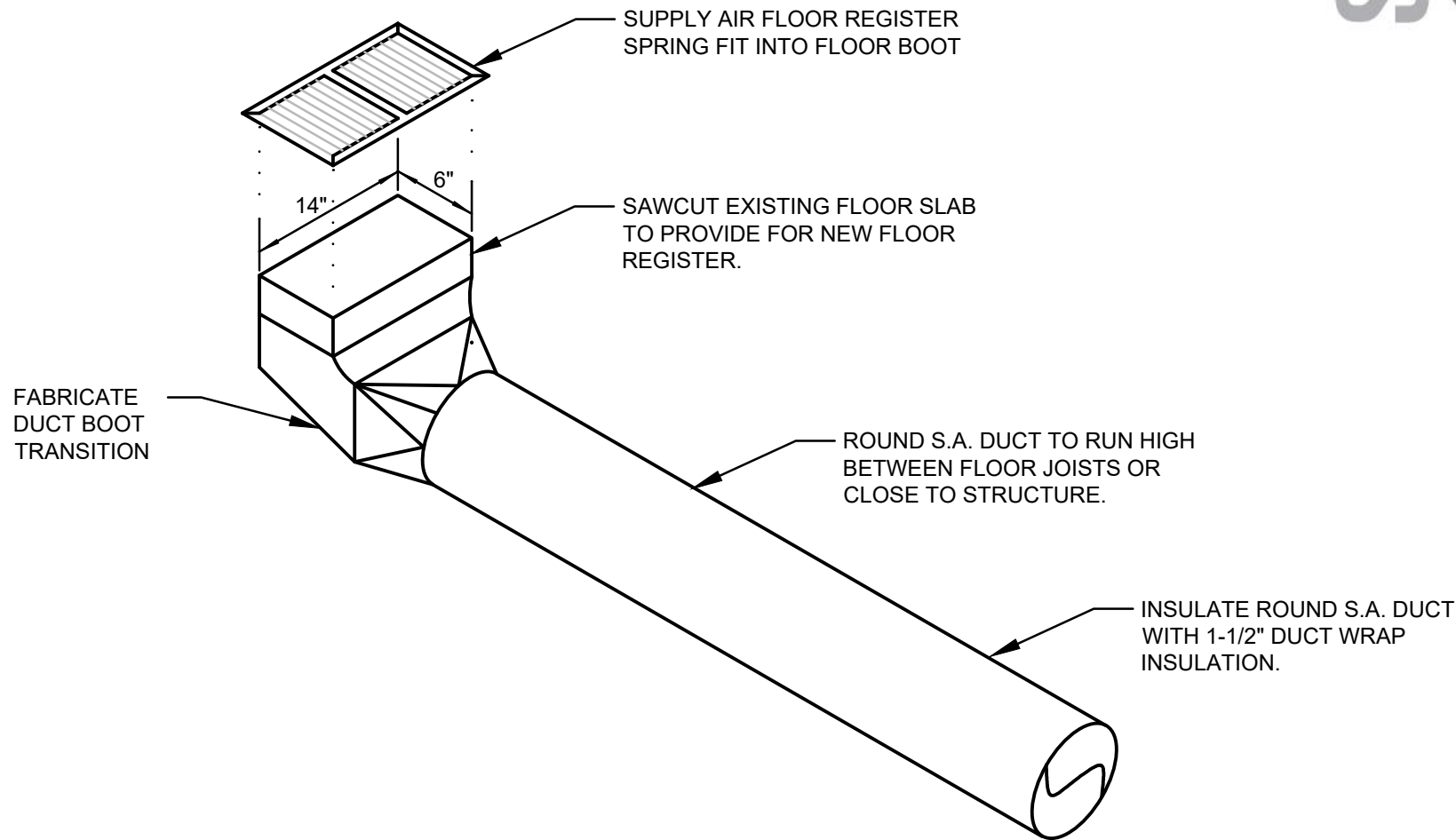
REFRIGERANT PIPE SUPPORT
SCALE: NONE



CONDENSING UNIT RESTRAINT
SCALE: NONE



REFRIGERANT PIPE SUPPORT
SCALE: NONE

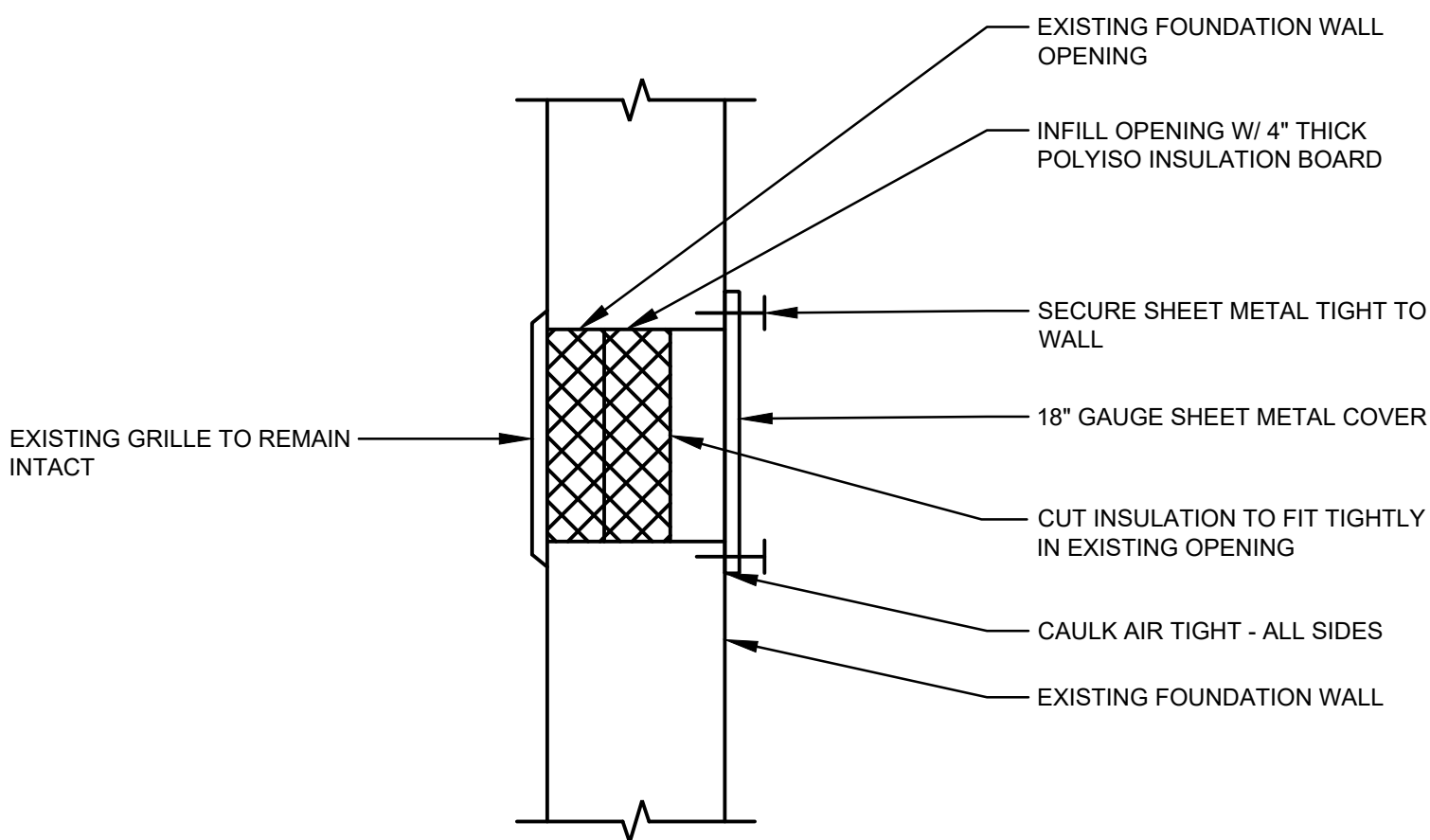


S.A. FLOOR REGISTER DETAIL

NOT TO SCALE

1

M503



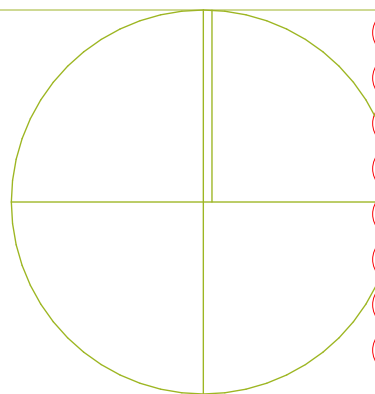
FOUNDATION VENT DETAIL





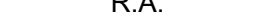

















NOT TO SCALE

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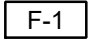
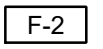
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NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01

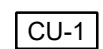
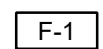
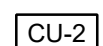
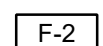


LEGEND AND ABBREVIATIONS	
	REFRIGERANT LIQUID
	REFRIGERANT SUCTION
	ACCESS DOOR
	RETURN AIR
	SUPPLY AIR
	OUTSIDE AIR
	EXHAUST AIR
	THERMOSTAT
	SWITCH
	POINT OF CONNECTION
	MOTORIZED DAMPER
	S.A. DUCT SECTION UP
	S.A. DUCT SECTION DN
	FLEXIBLE DUCT CONNECTION
	MANUAL DAMPER
	MOTORIZED DAMPER
	UNDERGROUND DUCT
	R.A., E.A. OR O.A. DUCT SECTION UP
	R.A., E.A. OR O.A. DUCT SECTION DN
	SUPPLY AND RETURN AIR DUCT TAKE-OFF
	SINGLE THICKNESS TURNING VANES
	DUCT TRANDITION

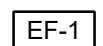
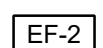
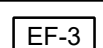
PROJECT DESIGN DATA:
LOCATION: OGDEN, UTAH
LATITUDE: 41.22°
LONGITUDE: 111.97°
ELEVATION: 4200 FT
SUMMER DESIGN DRY BULB: 97°F
SUMMER DESIGN WET BULB: 65°F
WINTER DESIGN DRY BULB: 0°F
DEFAULT SUMMER INDOOR DRY BULB: 75°F
DEFAULT WINTER INDOOR DRY BULB: 72°F

FURNACE AND COOLING COIL SCHEDULE												
SYMBOL	ARRANG.	(2) TWO STAGE HTG. CAP. (MBH)		CFM	EXT. S.P.	OUTSIDE AIR (CFM)	CLG. COIL CAP.		MOTOR			MANUFACTURER & MODEL (1)(2)(3)(4)(5)
		INPUT	OUTPUT				BTUH	COND.	H.P.	ELECT.	SPEED	
	UPFLOW	120 78	113 74	2000	0.7"	0	60,000	95°F	1.0	120/1/60	HIGH	FURNACE: CARRIER 59SC5B SERIES CASED COIL: CARRIER CNPVP6024
	UPFLOW	120 78	113 74	2000	0.7"	0	60,000	95°F	1.0	120/1/60	HIGH	FURNACE: CARRIER 59SC5B SERIES CASED COIL: CARRIER CNPVP6024

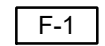
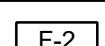
- NOTES:
- FURNACES TO BE COMPLETE WITH MATCHING CASED DX COOLING COILS, TWO SPEED BLOWER AND CONCENTRIC FLUE KITS.
 - TWO-STAGE HIGH/LOW FIRE HEATING FURNACE
 - PROVIDE EXTERNAL FILTER SECTION. SEE DETAIL 3/M501.
 - PROVIDE 12" HIGH LINED RETURN AIR PLENUM BASE FOR SIDE AND BOTTOM INLET RETURN. SEE DETAIL 8/M502.
 - HEATING CAPACITY: GAS INPUT RATINGS FOR SEA LEVEL. REDUCE RATING 2% FOR EVERY 1000 FT OF ALTITUDE.

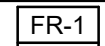


CONDENSING UNIT SCHEDULE														
SYMBOL	SERVES	COOLING CAPACITY				ELECTRICAL								(1)(2)(3) MANUFACTURER & MODEL
		MIN SEER	CAPACITY	E.A.T.	REF	COMP	NO.	FAN	NO.	VOLTS	PH	HZ	MCA	
		21.0	60,000	105° F	R-410A	26.4	1	1.2	1	208/230	1	60	35	CARRIER 24 ACC 660
		21.0	60,000	105° F	R-410A	26.4	1	1.2	1	208/230	1	60	35	CARRIER 24 ACC 660

- NOTES:
- MOUNT CONDENSING UNIT ON 4" HIGH CONCRETE PAD WITH 1" THICK NEOPRENE VIBRATION ISOLATORS.
 - 15 SEER MINIMAL ACCEPTABLE. 2 STAGE SCROLL COMPRESSOR.
 - PROVIDE SEISMIC HOLD DOWN CLIPS- 4 PER CONDENSING UNIT.

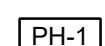
EXHAUST FAN SCHEDULE									
SYMBOL	SERVES	TYPE	C.F.M	S.P.	R.P.M.	MOTOR	DRIVE	MAKE & MODEL	NOTES
	RESTROOM	CEILING TYPE	100	.25	640	0.125 H.P. 120/1/60	DIRECT	BROAN L100	(1)
	RESTROOM	CEILING TYPE	100	.25	640	0.125 H.P. 120/1/60	DIRECT	BROAN L100	(1)
	CUST/RESTROOM	CEILING TYPE	125	.25	660	0.125 H.P. 120/1/60	DIRECT	BROAN L100	(1)

- NOTES:
- FAN TO BE COMPLETE WITH SPRING VIBRATION ISOLATION KIT, BACK-DRAFT DAMPER, INTEGRAL WIRED FAN SPEED CONTROLLER AND WIRED TO WALL MOUNTED DIVISION 26 0000 TIMER. LEVITON LTB-30.

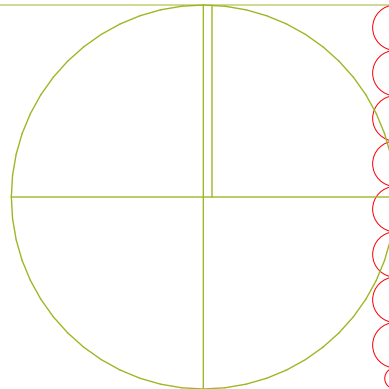
REFRIGERANT PIPING SCHEDULE		
SYMBOL	LIQUID LINE	SUCTION LINE
	3/8"	7/8"
	3/8"	7/8"

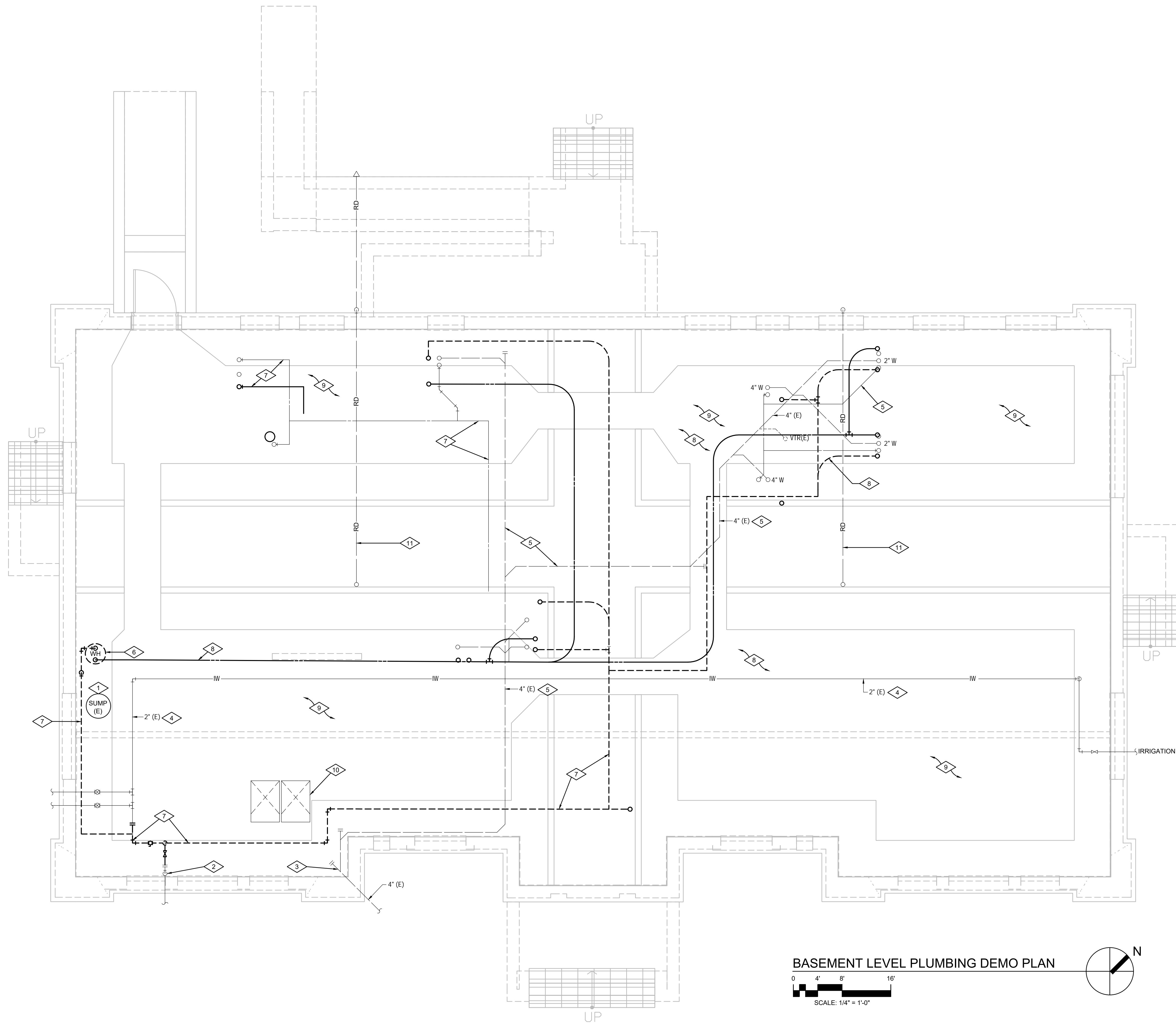
REGISTER AND GRILLE SCHEDULE					
SYMBOL	TYPE	NECK SIZE (1)	LOCATION	AIR PATTERN	MAKE & MODEL
 	SUPPLY AIR	14" X 6"	FLOOR	2-WAY	HART & COOLEY 411 HEAVY GAUGE STEEL, 3-BLADE DAMPER (1)
	RETURN AIR	14" x 6"	FLOOR	1-WAY	PRICE LBMH-75 FLANGED FRAME (1)

- NOTES:
- ALL REGISTERS AND GRILLES TO BE POWDER COATED BRIGHT WHITE FINISH.

PENTHOUSE SCHEDULE					
SYMBOL	TYPE	THROAT SIZE	HEIGHT	CFM	MAKE & MODEL (1)(2)(3)
	EXHAUST AIR	12" x 12"	12"	125	GREENHECK WRH-12 x12-3

- NOTES:
- FURNISH COMPLETE WITH 14" HIGH ROOF CURB.
 - UNIT TO BE COMPETE WITH BIRDSCREEN
 - PENTHOUSE SHALL BE ALUMINUM CONSTRUCTION WITH STANDARD FINISH.

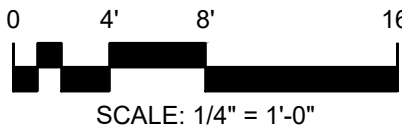




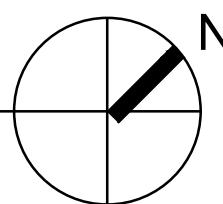
REFERENCE NOTES

- EXISTING DRY SUMP TO REMAIN INTACT.
- EXISTING 2" WATER SERVICE. VERIFY LOCATION PRIOR TO START OF NEW WORK. WATER SERVICE ENTRY TO BE PROVIDED WITH NEW ISOLATION VALVES. SEE DRAWING P100 FOR NEW WORK.
- EXISTING 4" WASTE LINE SERVING BUILDING TO REMAIN INTACT.
- EXISTING 2" IRRIGATION WATER LINE TO REMAIN. REMOVE AND RELOCATE WATER LINE AS NEEDED TO FACILITATE INSTALLATION OF NEW DUCTWORK. SEE DRAWING M100 FOR COORDINATION.
- EXISTING ABS DRAIN PIPING SERVING EXISTING PLUMBING FIXTURES TO REMAIN INTACT. REMOVE PLUMBING TAPE AND WIRE SUPPORTS AND PROVIDE NEW PIPE HANGER SUPPORTS.
- REMOVE EXISTING WATER HEATER COMPLETE. REMOVE ALL ASSOCIATED WATER PIPING AND SUPPORTS. SEE DRAWING P100 FOR NEW WATER HEATER LOCATION.
- REMOVE ALL EXISTING GALVANIZED WATER PIPING COMPLETE. LOCATE EXISTING PLUMBING FIXTURES AND REMOVE ALL GALVANIZED WATER SUPPLY OR DRAIN PIPING SERVING FIXTURES. SEE DRAWING P100 FOR NEW PIPING REQUIRED.
- WHERE EXISTING PEX TUBING HAS BEEN INSTALLED TO EXISTING PLUMBING FIXTURES. DISCONNECT AND REMOVE TUBING TO FACILITATE INSTALLATION OF NEW DUCTWORK. INSTALL NEW COLOR CODED PEX TUBING UPON COMPLETION OF MECHANICAL WORK. SEE DRAWING P100.
- REMOVE ALL ABANDONED WATER, DRAIN, WASTE AND VENT PIPING THAT IS NOT RE-USED AS PART OF THE NEW WORK. PREPARE AREA IN GENERAL FOR NEW PLUMBING WORK.
- REMOVE ALL WATER SUPPLY AND DRAIN PIPING SERVING AC UNIT COMPLETE.
- EXISTING ROOF DRAIN LINES TO REMAIN INTACT.

BASEMENT LEVEL PLUMBING DEMO PLAN



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



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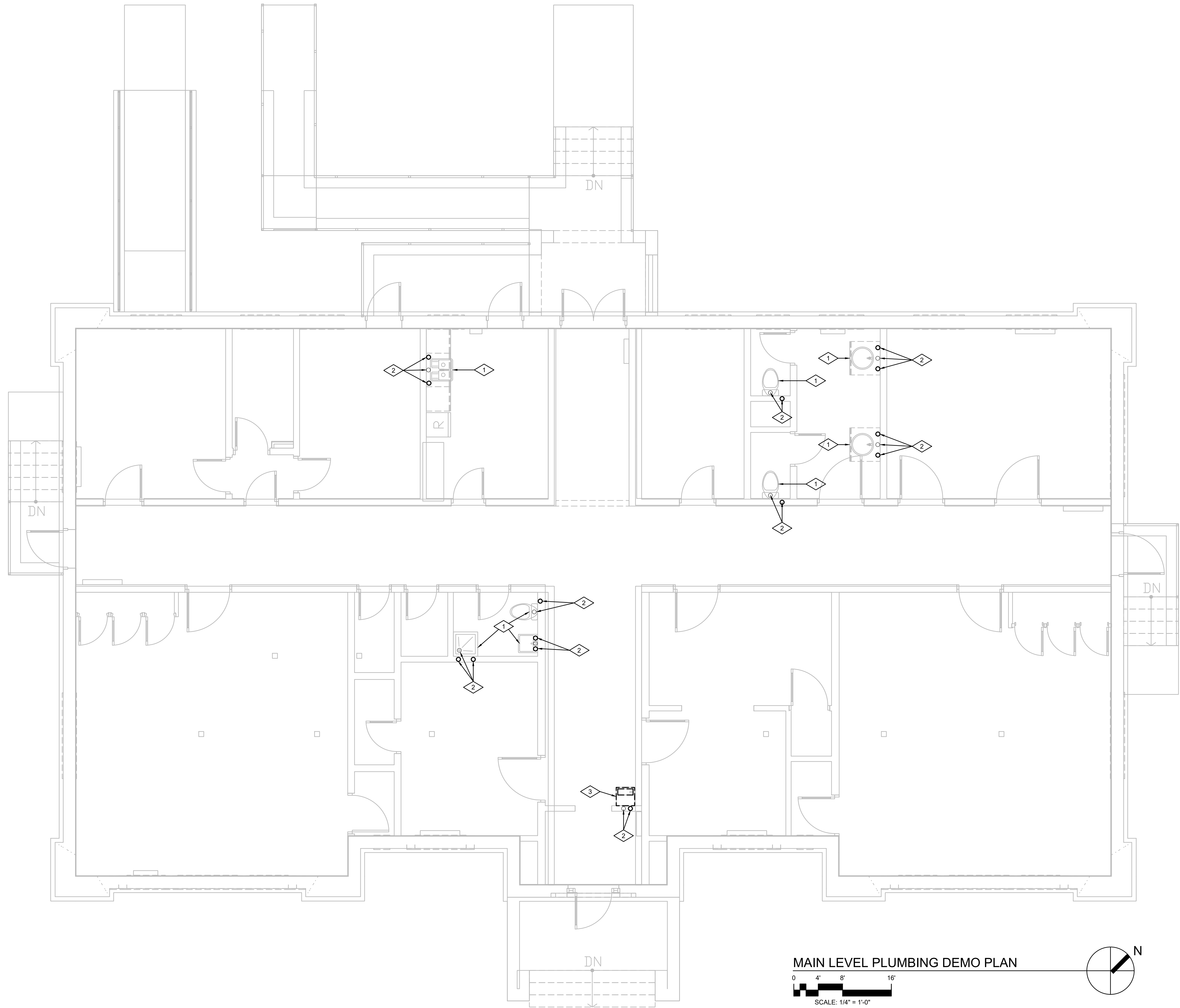
14 East 2700 South, Salt Lake City, UT 84115
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NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150

BASEMENT LEVEL
PLUMBING DEMOLITION
PLAN

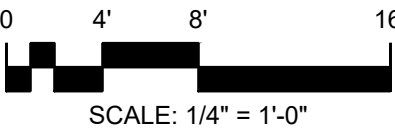
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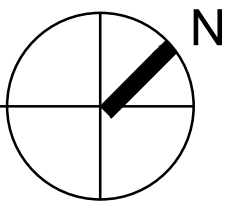
REFERENCE NOTES

- 1 EXISTING PLUMBING FIXTURE TO REMAIN INTACT.
- 2 REMOVE ANY ACCESSIBLE GALVANIZED WATER SUPPLY, WASTE OR VENT PIPING SERVING FIXTURE AND REPLACE WITH NEW COPPER OR ABS DWV PIPING.
- 3 EXISTING DRINKING FOUNTAIN TO BE REMOVED AND REPLACED WITH NEW. SEE DRAWING P101 FOR NEW WORK.

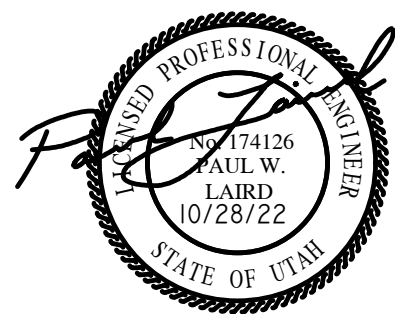
MAIN LEVEL PLUMBING DEMO PLAN



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



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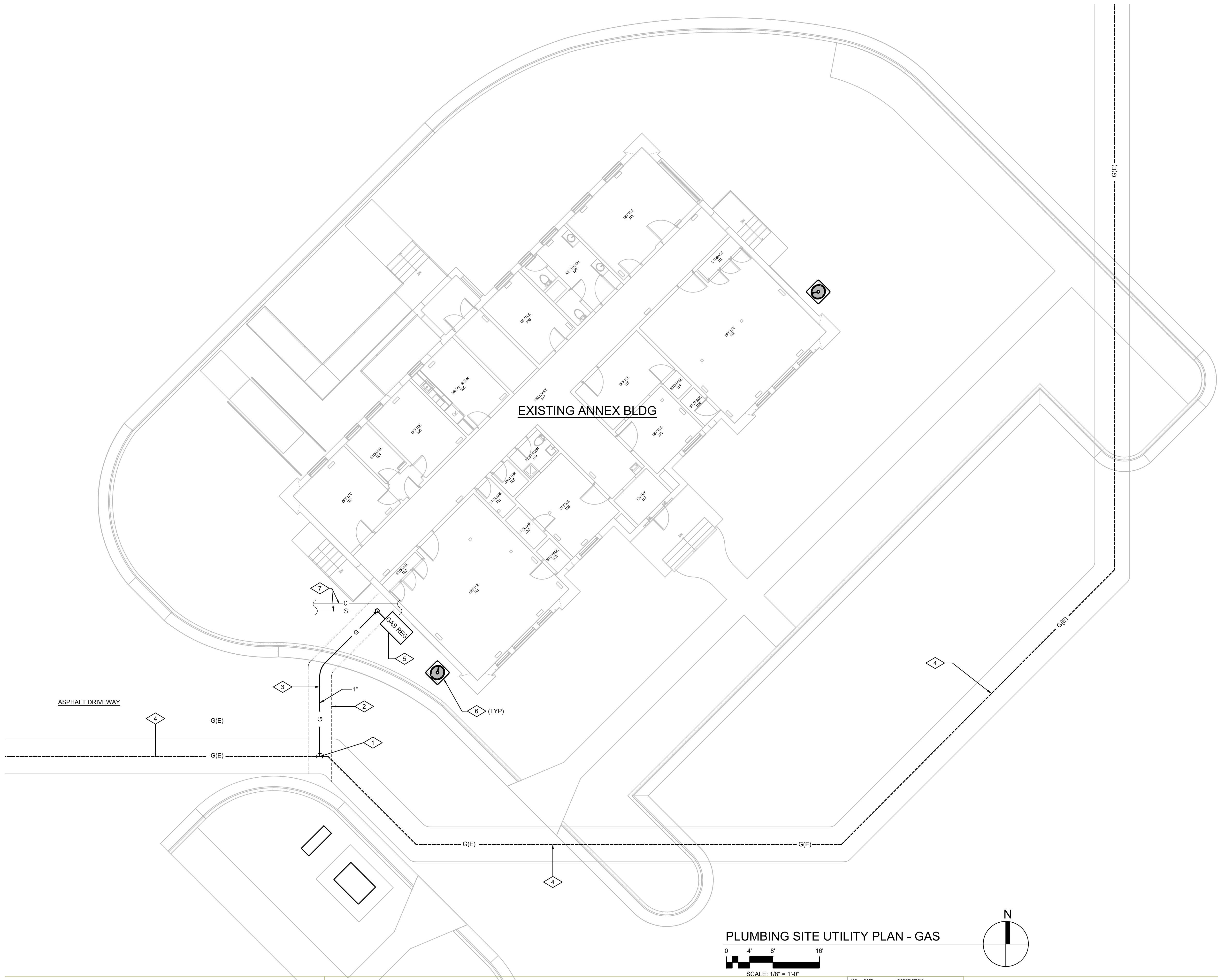
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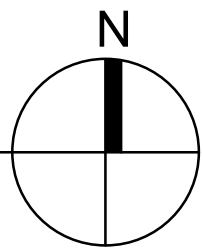
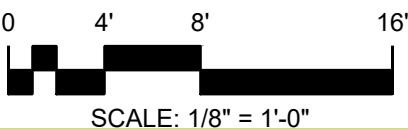
MAIN LEVEL PLUMBING
DEMOLITION PLAN

PD101

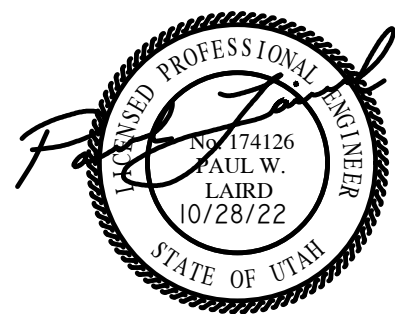
- 1 CONNECT TO EXISTING GAS LINE IN THIS LOCATION. PROVIDE COMPATIBLE FITTING TO MATCH EXISTING GAS LINE PIPE SIZE AND MATERIAL.
- 2 SAWCUT ASPHALT PAVING AND EXCAVATE AS NEEDED TO INSTALL NEW GAS LINE. REPAIR AND PATCH PAVEMENT UPON COMPLETION OF WORK.
- 3 INSTALL NEW SDR 11 POLYPROPYLENE GAS LINE COMPLETE WITH TRACER WIRE AND WARNING TAPE. EXTEND GAS LINE TO NEW GAS REGULATOR AT THE ANNEX BUILDING.
- 4 EXISTING BURIED GAS LINE. CONTRACT WITH BLUE STAKES FOR GAS LINE AND UTILITY LOCATION SERVICES PRIOR TO START OF CONSTRUCTION.
- 5 NEW GAS REGULATOR. SEE DRAWING P100 FOR CONTINUATION.
- 6 NEW MECHANICAL EQUIPMENT. COORDINATE LOCATION OF GAS LINE WITH MECHANICAL EQUIPMENT LOCATIONS.
- 7 EXISTING BURIED STEAM AND CONDENSATE PIPING BELOW GRADE. COORDINATE LOCATION OF NEW GAS LINE WITH EXISTING BURIED PIPING.



PLUMBING SITE UTILITY PLAN - GAS



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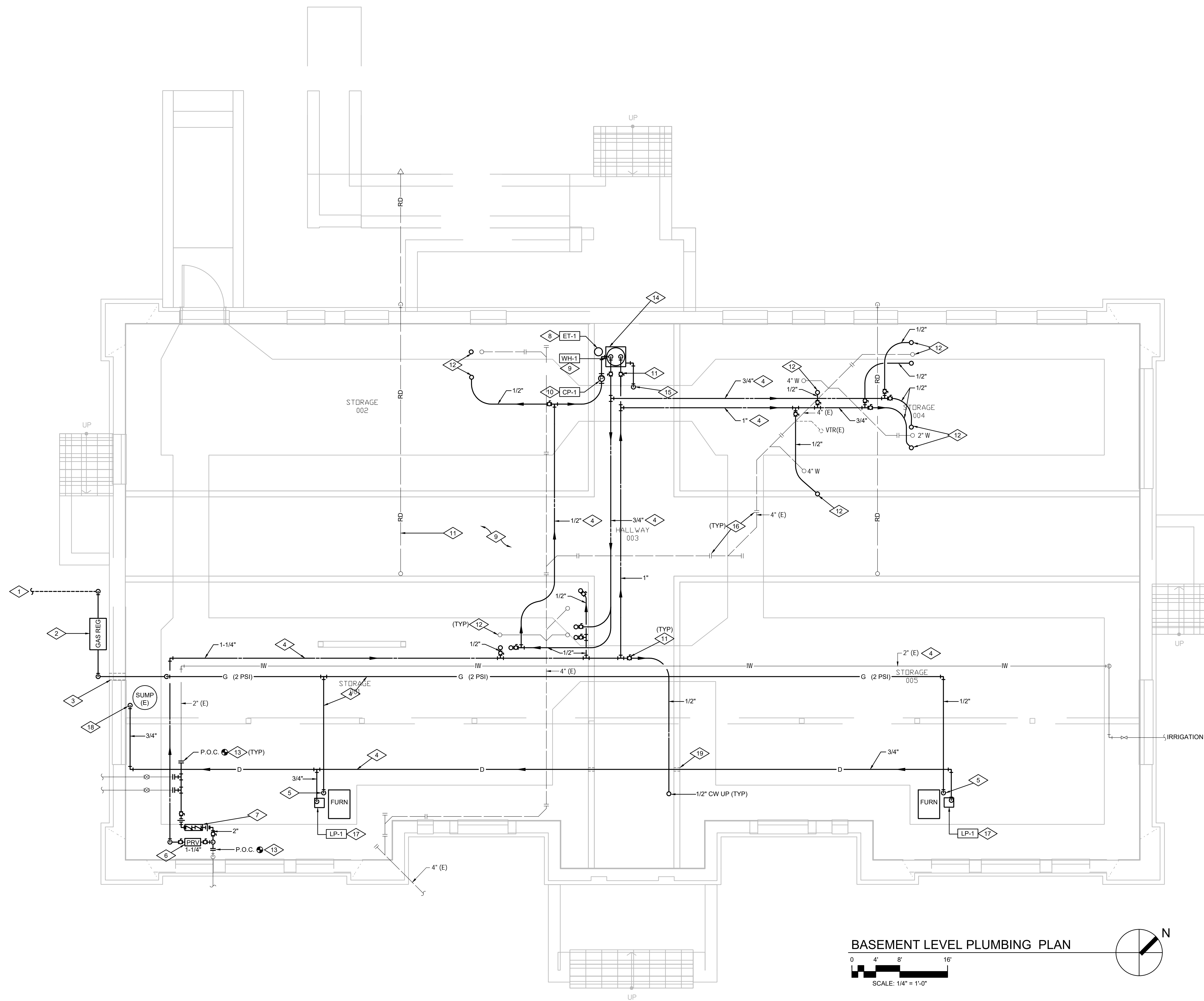
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PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150

PLUMBING SITE PLAN

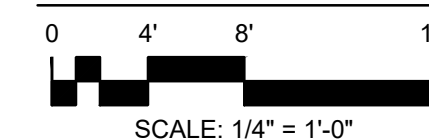
P001



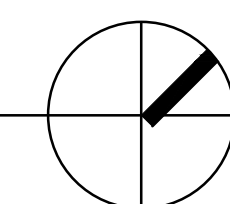
REFERENCE NOTES

- 1 NEW GAS SERVICE LINE BY PLUMBING CONTRACTOR. SEE DRAWING P001 FOR CONTINUATION.
- 2 BUILDING GAS SERVICE LOCATION. EXTEND NEW GAS LINE TO BUILDING AND PROVIDE NEW GAS REGULATOR FOR 2 PSIG SERVICE. COORDINATE REGULATOR AND NEW GAS LINE LOCATION WITH EXISTING BURIED STEAM AND CONDENSATE PIPING. SEE DETAIL 2/P501
- 3 FOUNDATION PIPE THRU WALL PENETRATION. CORE DRILL WALL PIPE PENETRATION. GROUT OPENING AROUND PIPE SOLID.
- 4 PIPING TO RUN HIGH CLOSE TO STRUCTURE. COORDINATE LOCATION WITH MECHANICAL, STRUCTURAL, AND ELECTRICAL TRADES.
- 5 PIPE 1/2" GAS LINE TO NEW FURNACE LOCATION. SEE DETAIL 1/P501
- 6 PRV STATION. SEE DETAIL 4/P501
- 7 DOUBLE CHECK VALVE ASSEMBLY. SEE DETAIL 4/P501
- 8 MOUNT DOMESTIC WATER EXPANSION TANK ON WALL IN THIS LOCATION. SEE DETAIL 6/P501
- 9 INSTALL ELECTRIC WATER HEATER IN THIS LOCATION. MOUNT WATER HEATER IN GALVANIZED DRIP PAN. SEE DETAIL 6/P501.
- 10 INSTALL DOMESTIC HOT WATER CIRCULATION PUMP IN THIS LOCATION. SEE DETAIL 6/P502
- 11 INSTALL ISOLATION BALL VALVES IN ACCESSIBLE LOCATION FOR SERVICE.
- 12 PIPE 1/2" CW OR HW LINE UP TO PLUMBING FIXTURE ABOVE. TRANSITION FROM PEX TUBING TO COPPER PIPE PRIOR TO FLOOR PENETRATION. NO PEX TUBING ALLOWED ABOVE FLOOR.
- 13 POINT OF CONNECTION (P.O.C.) CONNECT TO EXISTING PIPING IN THIS LOCATION. MATCH PIPING SIZE AND MATERIAL OR PROVIDE COMPATIBLE TRANSITION.
- 14 PIPE WATER HEATER P&T VALVE DISCHARGE FULL SIZE TO DRAIN PAN.
- 15 PIPE 3/4" DRAIN PAN LINE TO FLOOR.
- 16 PROVIDE NEW PIPE HANGER SUPPORTS FOR EXISTING DWV PIPING. SEE DETAIL 1/P502
- 17 INSTALL CONDENSATE LIFT PUMP IN THIS LOCATION. SEE DETAIL 2/P502
- 18 PIPE 3/4" CONDENSATE DRAIN LINE TO SUMP.
- 19 CORE DRILL HOLE IN WALL TO FACILITATE INSTALLATION OF PIPING THRU WALL (TYP)

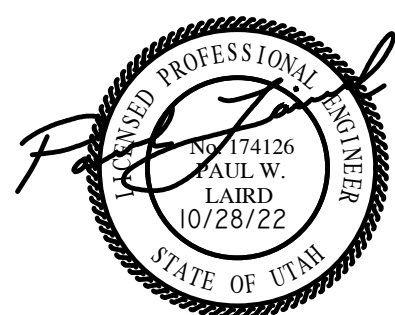
BASEMENT LEVEL PLUMBING PLAN



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



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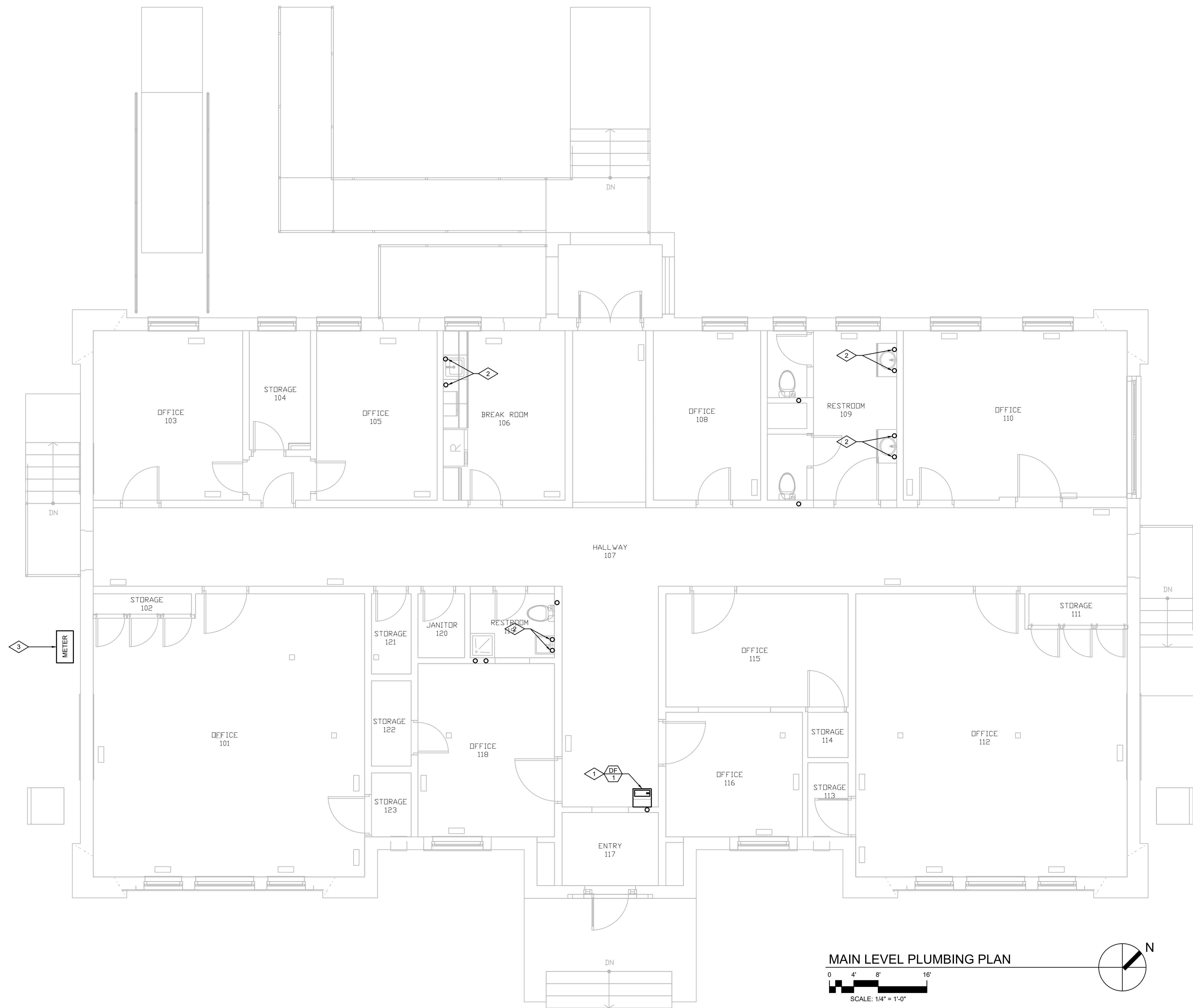
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BASEMENT LEVEL
PLUMBING PLAN

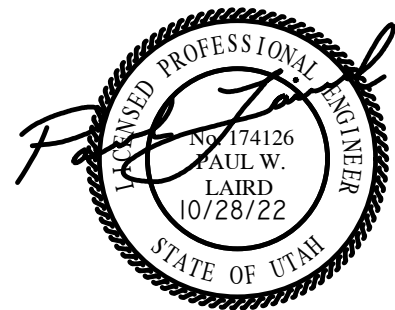
P100



REFERENCE NOTES

- 1 INSTALL NEW DRINKING FOUNTAIN WITH BOTTLE FILLER IN THIS LOCATION. MOUNT DRINKING FOUNTAIN SECURELY TO WALL. REMAKE ALL WATER AND DRAIN CONNECTIONS.
- 2 WHERE HW AND CW WATER LINES ARE EXPOSED, PROVIDE COPPER WATER TUBING WITH 1" THICK PREFORMED FIBERGLASS PIPE INSULATION AND 20 MIL THICK WHITE PVC JACKET.
- 3 NEW GAS REGULATOR. SEE DRAWING P100.

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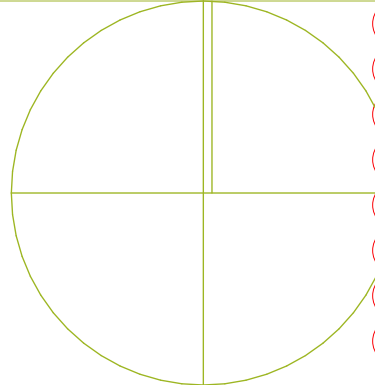
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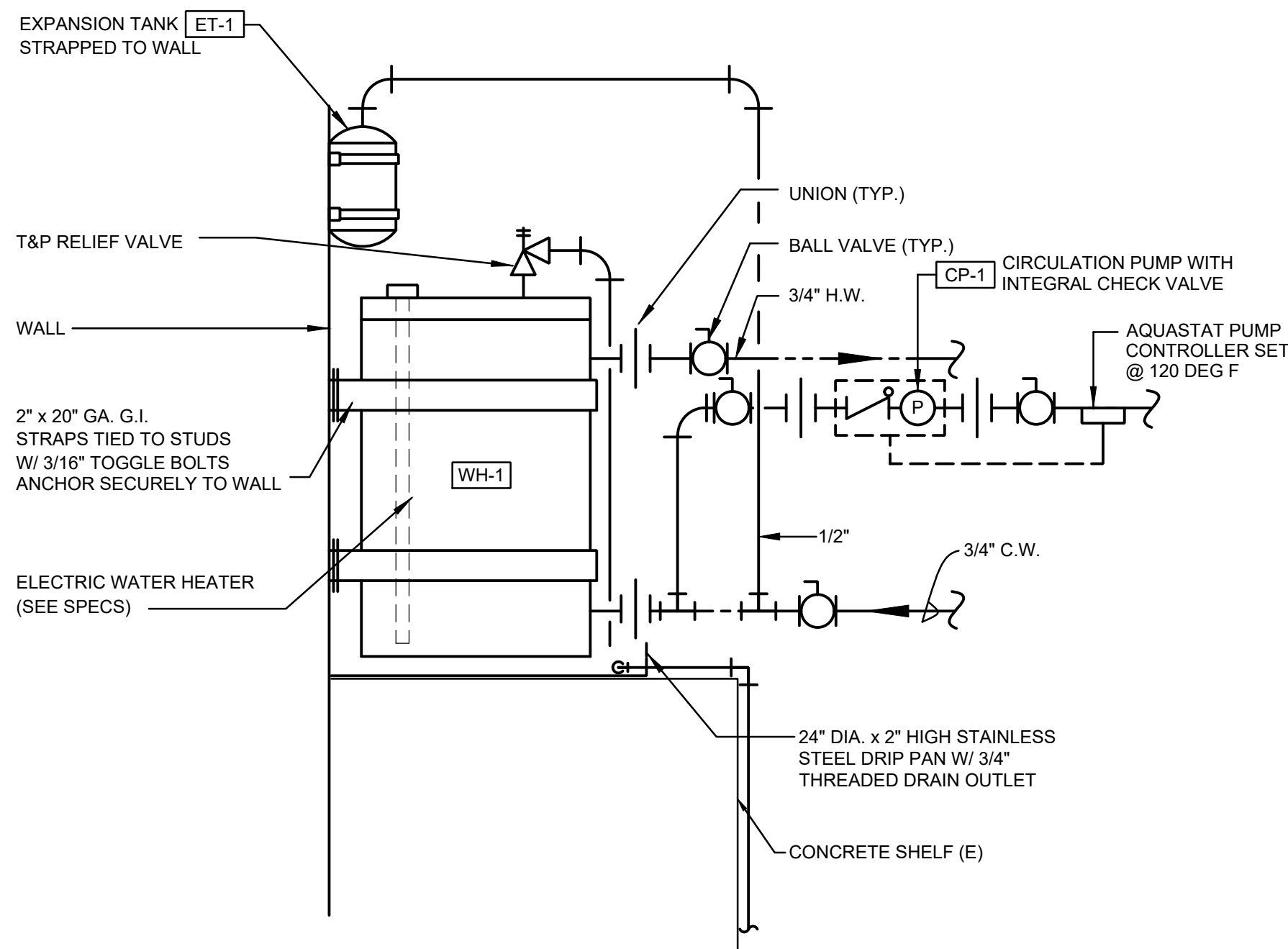
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01	11.09.22	ADDENDUM 01

PERMIT SET
DATE: 10.26.22
PROJECT NUMBER: 2150

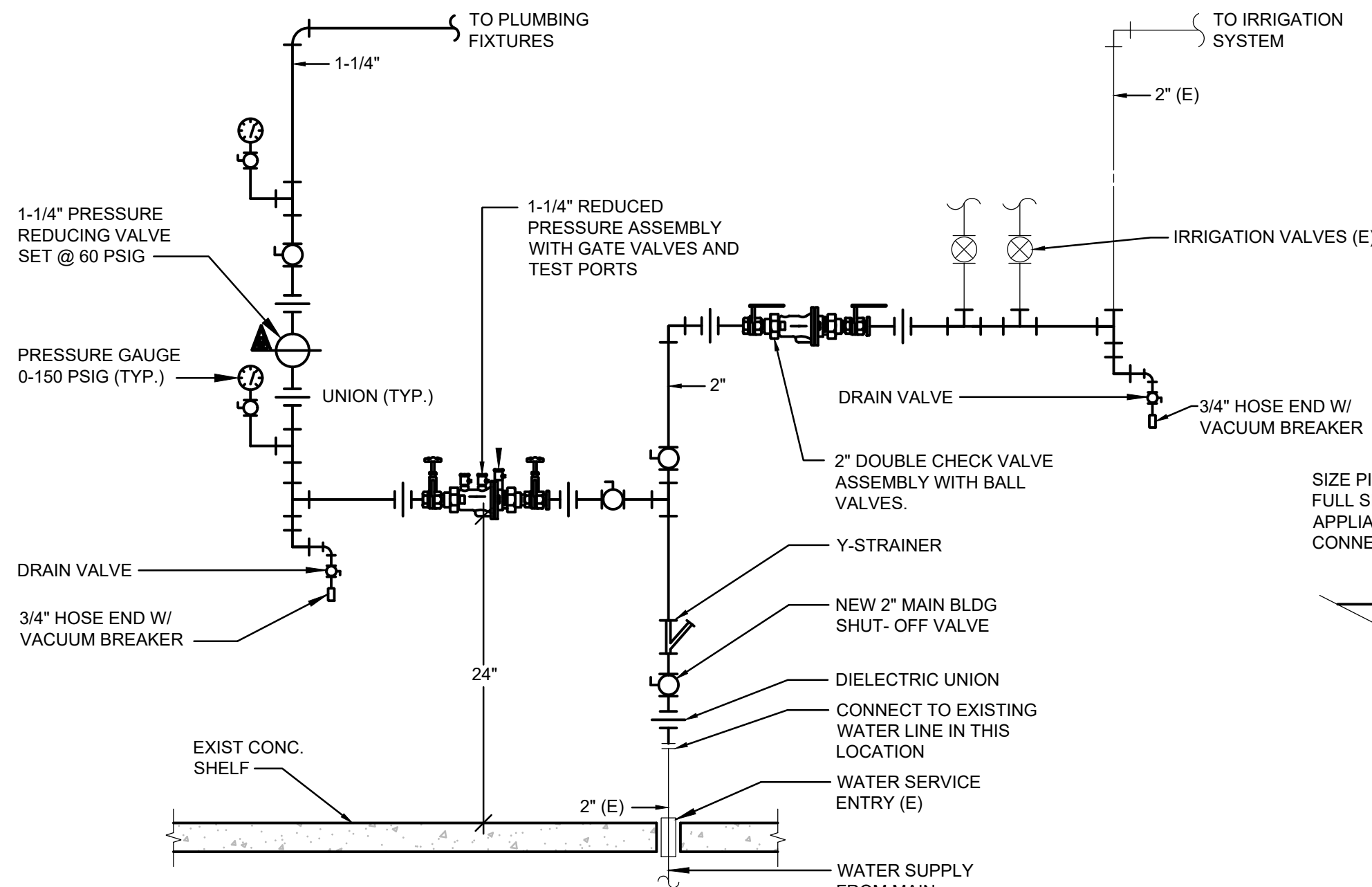


MAIN LEVEL PLUMBING
PLAN

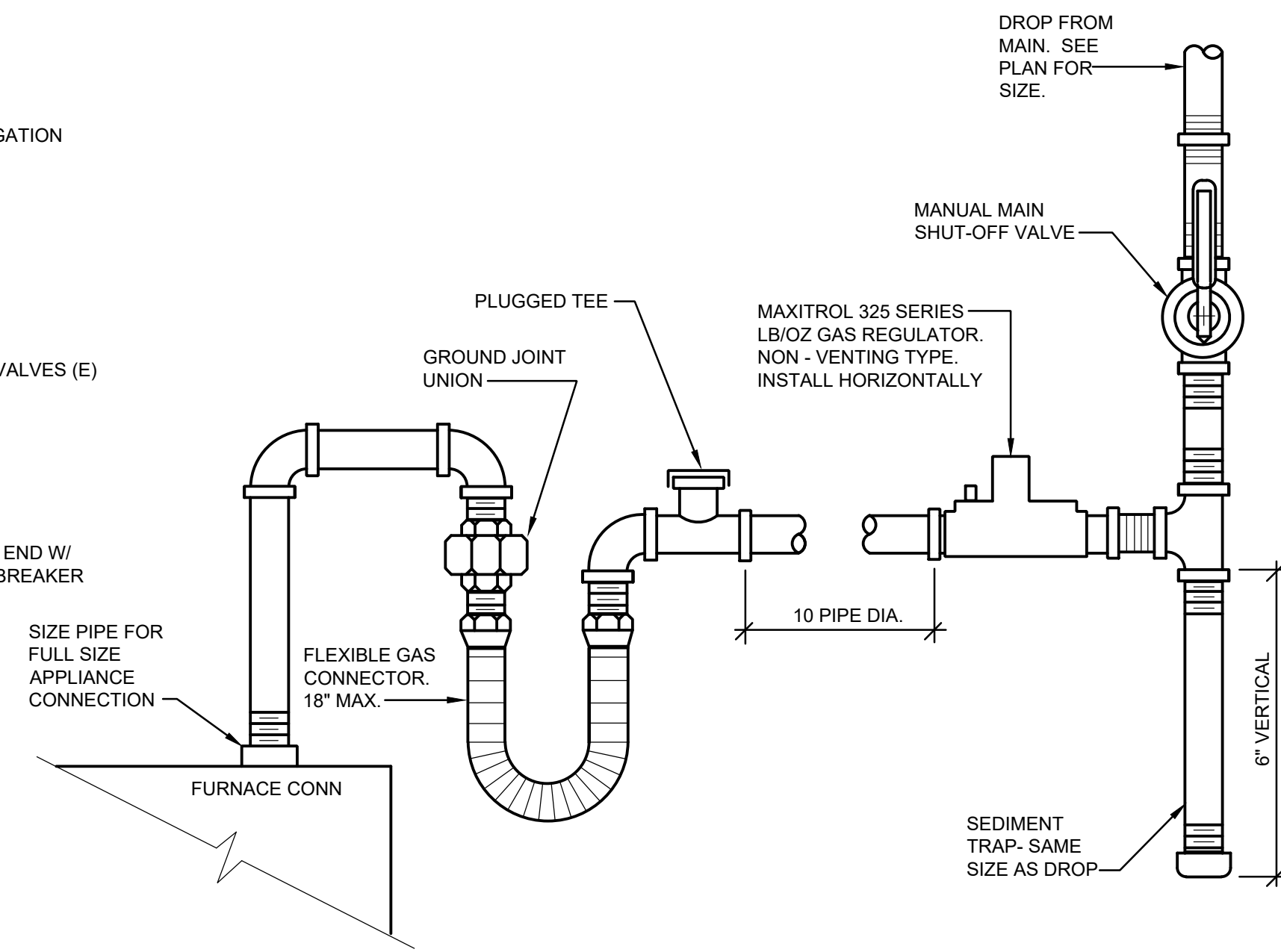
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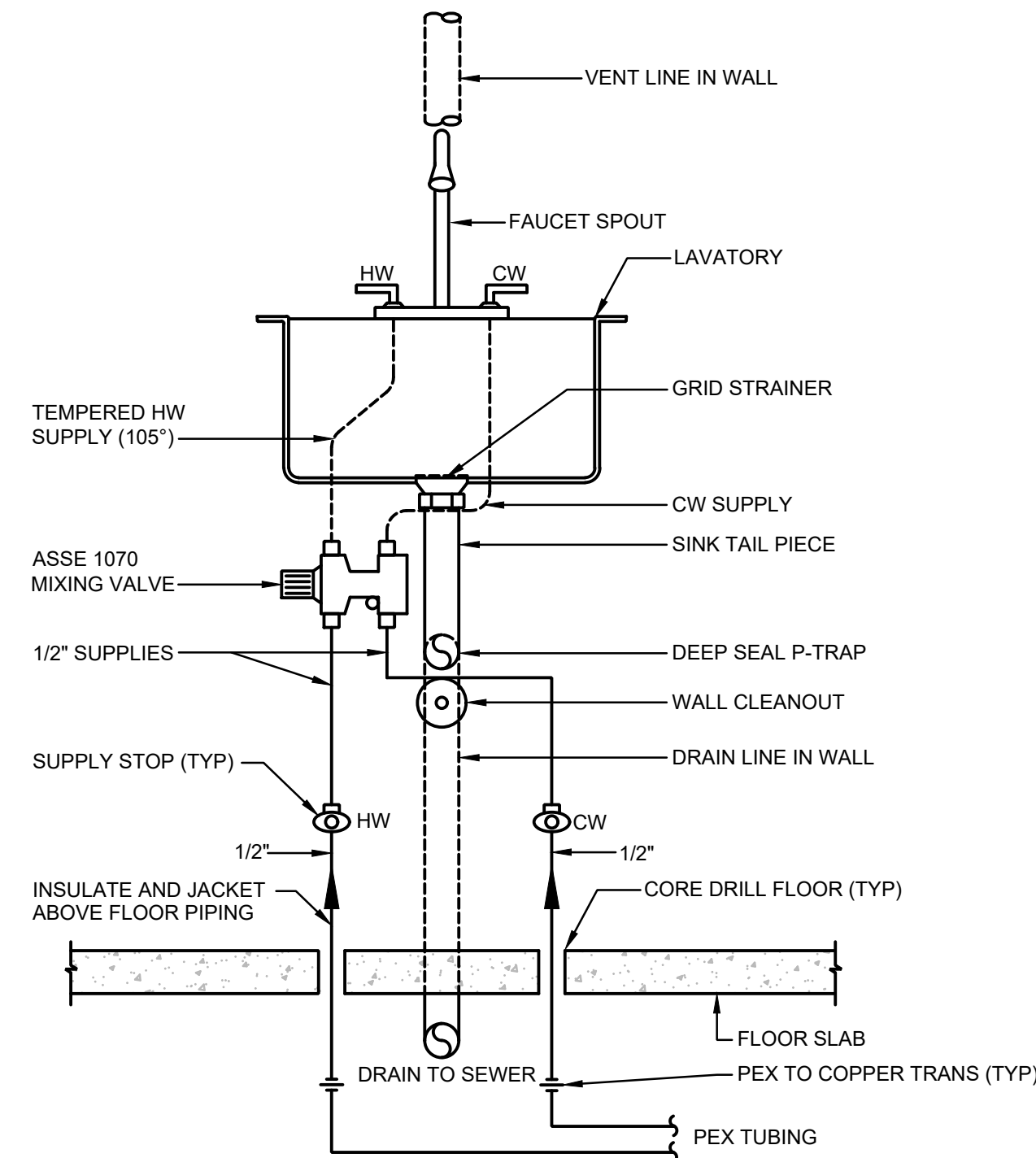
ELECTRIC WATER HEATER DETAIL
NOT TO SCALE



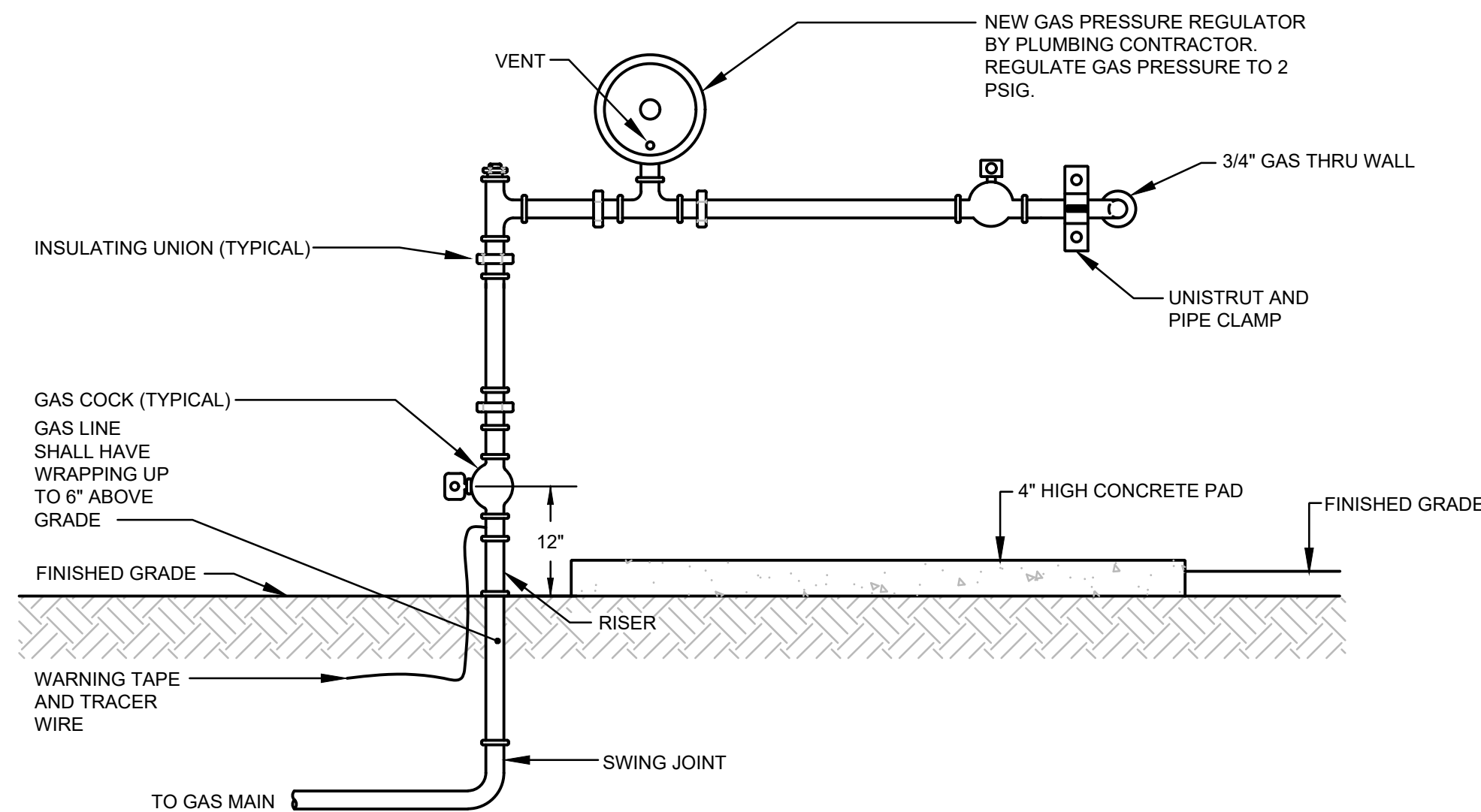
WATER PRESSURE REDUCING STATION DETAIL
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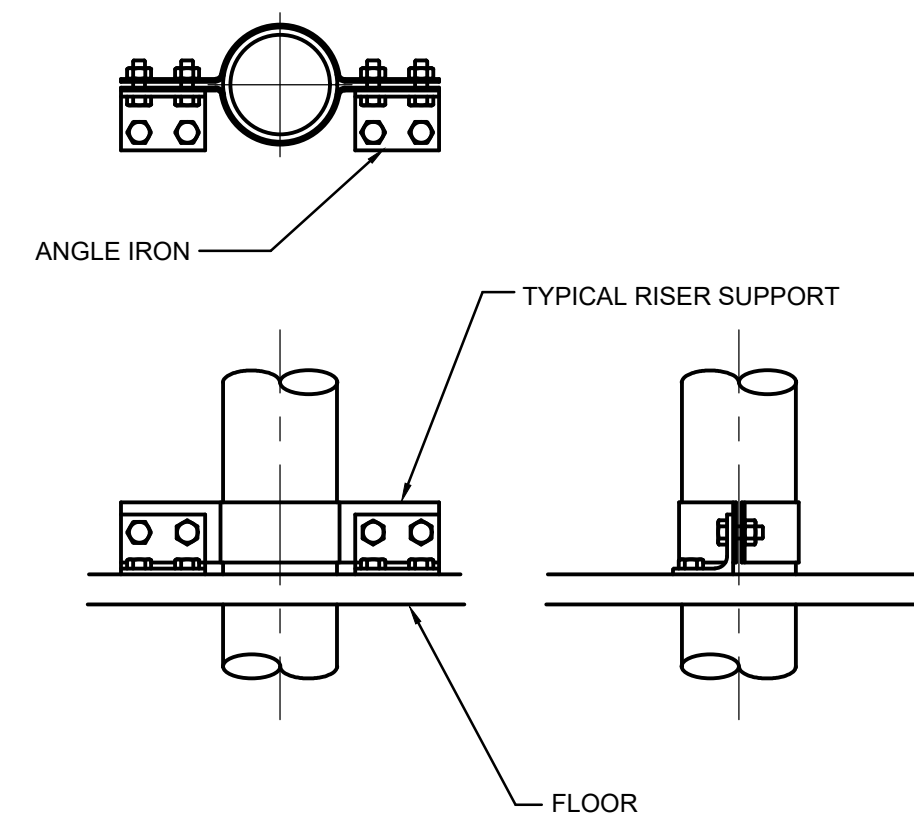
GAS LINE CONNECTION DETAIL
NOT TO SCALE



PIPING INSTALLATION DETAIL
NOT TO SCALE

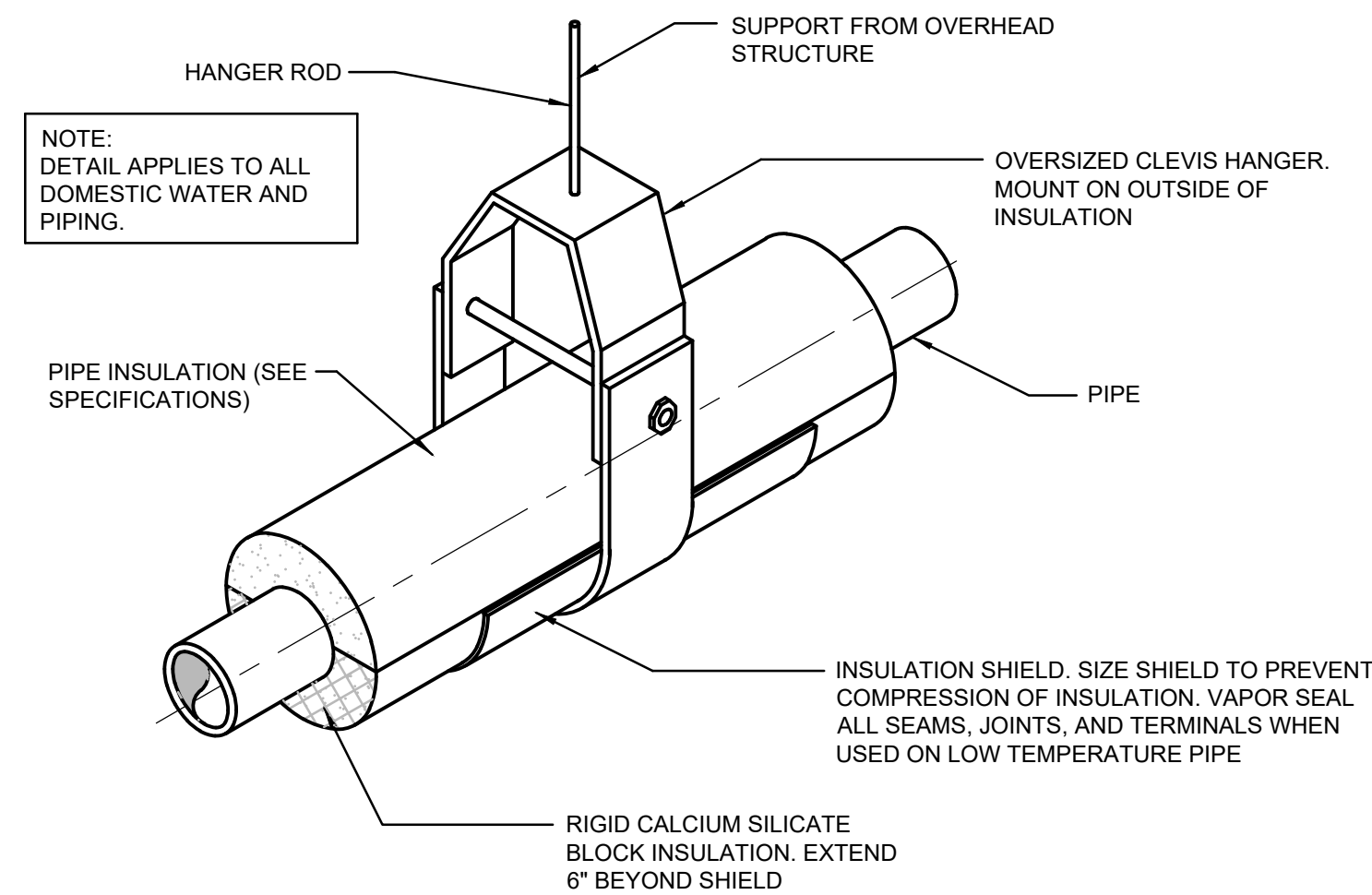


GAS REGULATOR SERVICE DETAIL
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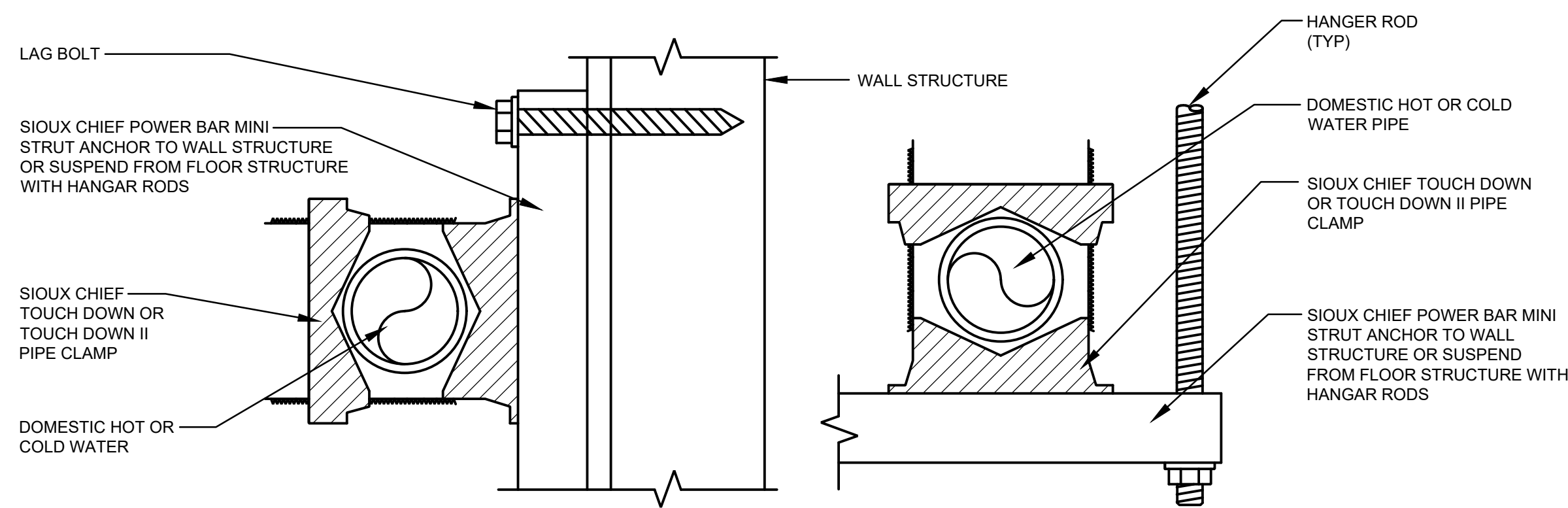


PIPE BRACE VERTICAL FLOOR MOUNT DETAIL
NOT TO SCALE

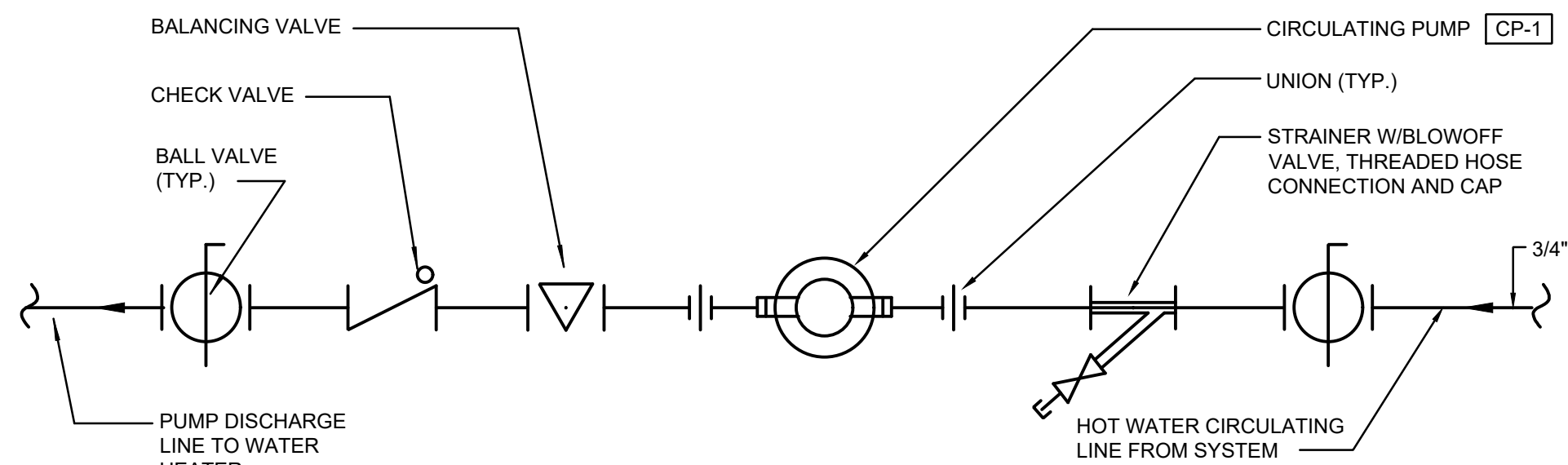
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01	11.09.22	ADDENDUM 01



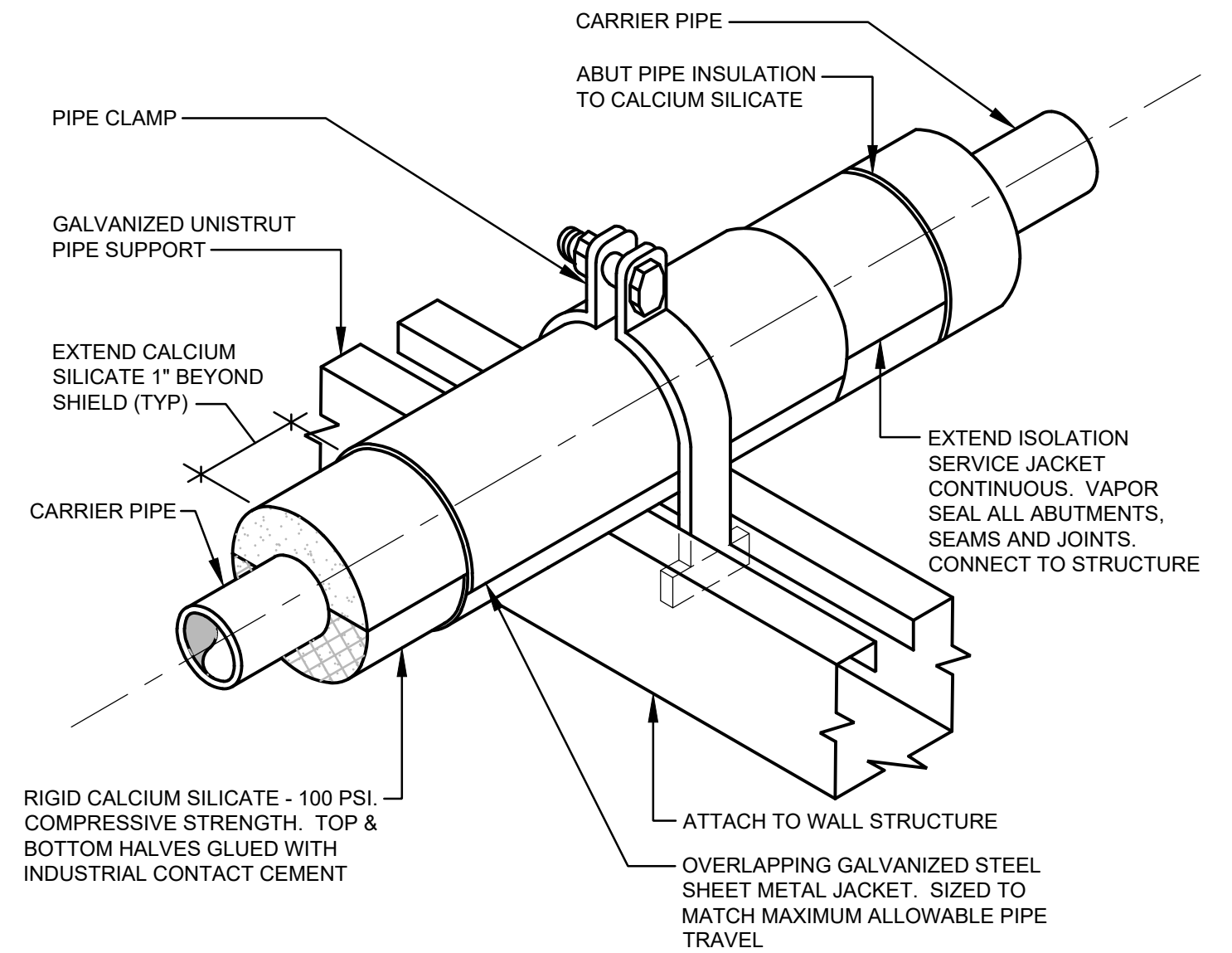
PIPE SUPPORT DETAIL 3
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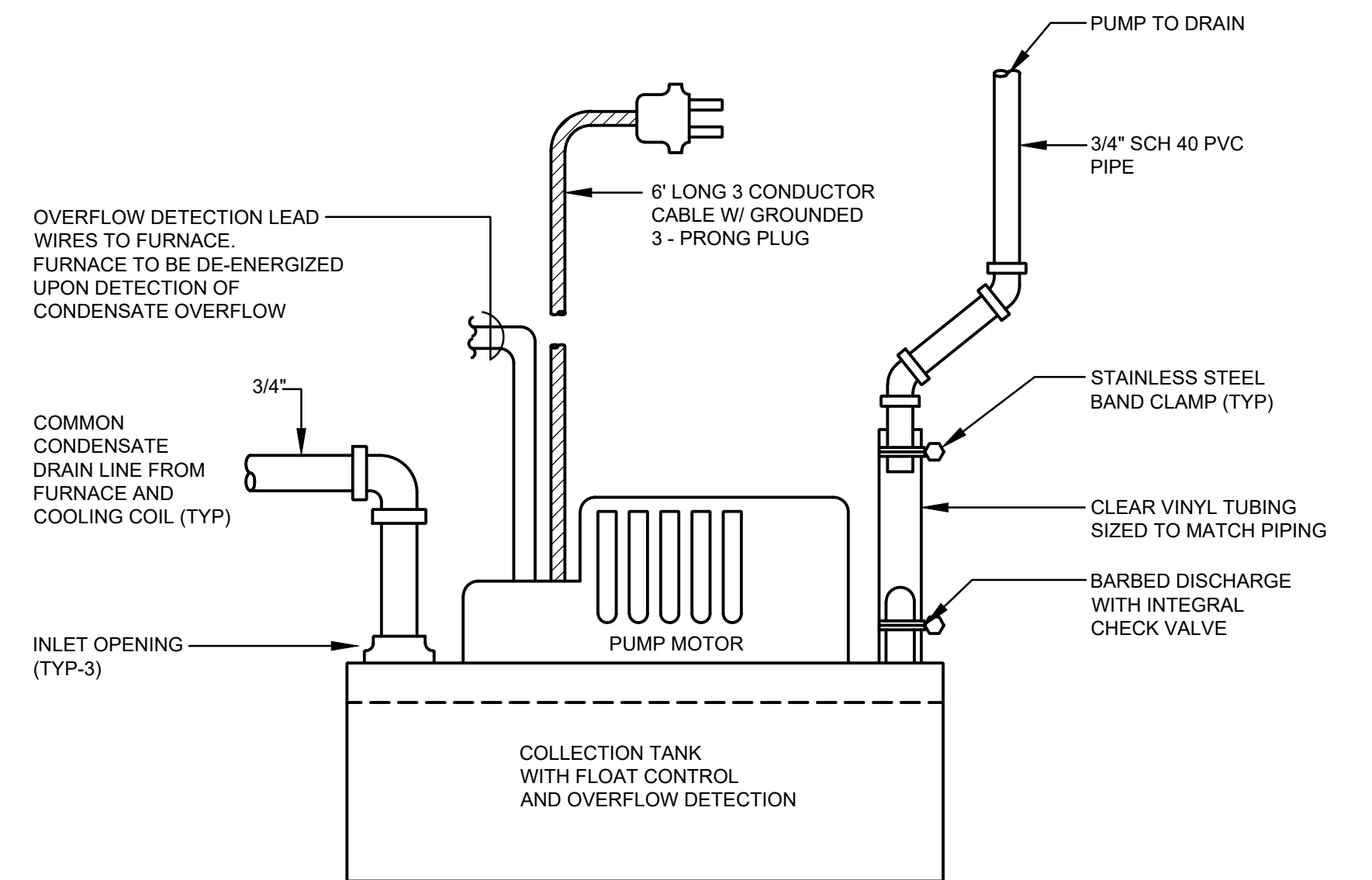
DOMESTIC WATER PIPE SUPPORT DETAIL 4
NOT TO SCALE



CIRCULATING PUMP DETAIL 6
NOT TO SCALE

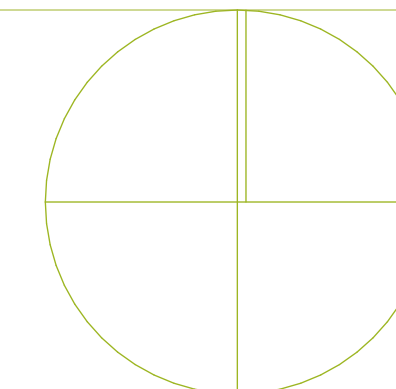


PIPE SUPPORT DETAIL 1
NOT TO SCALE



CONDENSATE PUMP DETAIL 2
NOT TO SCALE

NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01



PLUMBING EQUIPMENT SCHEDULE	
SYMBOL	EQUIPMENT DESCRIPTION
WH-1	WATER HEATER: ELECTRIC STORAGE TANK TYPE, 19 GALLON STORAGE CAPACITY, 3 KW INPUT, 14 GALLON/HR RECOVERY RATE @ 90 DEG F TEMP RISE, FURNISH COMPLETE WITH TEMPERATURE AND PRESSURE RELIEF VALVE AND THREADED HOSE DRAIN CONNECTION. PROVIDE PLATFORM FOR WALL MOUNTING WITH INSULATED BASE AND SEISMIC WALL STRAP MANUFACTURER: BRADFORD WHITE MODEL: RE120U6 ELECTRICAL: 208 VOLT, 1 PHASE, 3 KW ELEMENT SIZE: 18" DIA X 24.75" HIGH OPER WEIGHT: 225 LBS
ET-1	EXPANSION TANK: NON-ASME TYPE, 2.0 GALLON TOTAL VOLUME, 0.45 ACCEPTANCE FACTOR, 1/2" NPT CONNECTION, MAXIMUM WORKING PRESSURE = 150 PSIG, NSF 61 LISTED, MAX ALLOWABLE WORKING TEMP = 200 DEG F MANUFACTURER: AMTROL MODEL: ST-5 ELECTRICAL: NONE SIZE: 8" DIA X 12.75" HIGH OPER WEIGHT: 25 LBS
CP-1	CIRCULATION PUMP: DOMESTIC WATER, BRONZE CONSTRUCTION, STAINLESS STEEL SHAFT, INTEGRAL CHECK VALVE, 2 GPM @ 5 FT HEAD, 1/2" CONNECTIONS, FURNISH COMPLETE WITH AQUASTAT PUMP CONTROLLER SET AT 120 DEG. F. MANUFACTURER: TACO MODEL: 006-IFC ELECTRICAL: 1/25 HP 120 VOLT, 1PHASE SIZE: 2" x 8" x 7" WEIGHT: 10 LBS
LP-1	LIFT PUMP: CONDENSATE LIFT PUMP, 1/2 GALLON STORAGE TANK WITH THREE INLET OPENINGS AND CAP PLUGS, 20 GPH @ 15 FT HEAD, 20 FT MAX HEAD, FLOAT ACTIVATED SWITCH WITH HIGH LEVEL WATER DETECTION AND OVERFLOW DETECTION SWITCH, 3/8" BARBED DISCHARGE ADAPTER WITH INTEGRAL CHECK VALVE. EQUIPPED WITH 6 FT LONG CONDUCTOR AND 3-PRONG GROUNDED PLUG. MANUFACTURER: LITTLE GIANT MODEL: VCMA-20ULST ELECTRICAL: 1/50 HP 120 VOLT, 1PHASE SIZE: 5" x 11" x 7" HIGH WEIGHT: 7 LBS

BUILDING SERVICES PIPING MATERIALS LISTING AND IDENTIFICATION
Potable Water Piping Systems: Above-Grade - Copper pipe and tubing meeting requirements of ASTM B 88, Type L with wrought copper sweat fittings with 95/5 or 96/4 Tin-Antimony solder. Identification: Cold Water (CW): Blue Lettering on White Background. Hot Water (HW): Red Lettering on White Background. Above-Grade - Cross-Linked Polyethylene (PEX) tubing meeting requirements of ASTM F876 and ASTM F877 CSA International B137.5, with mechanical flare or crimp fittings> Sanitary Waste and Vent Piping Systems: Above Grade - ABS Schedule 40 solid-wall ASTM D 2661, plastic pipe and socket type fittings, made to ASTM D 3311, drain, waste, and vent patterns. Joined using pipe cement meeting requirements of ASTM 2235. Identification: Green Lettering on White Background. Refrigerant Piping Systems: Hard copper tubing meeting requirements of ASTM B 280, hard drawn straight lengths with wrought copper brazed fittings with AWS Classification BCuP-4 Copper Phosphorus or AWS Classification BCuP-5 Copper Phosphorus rods and white brazing or high quality silver solder flux. Identification: Black Lettering on Yellow Background Natural Gas Piping Systems: Above Grade - Schedule 40 black carbon steel pipe meeting requirements of ASTM A 53 with standard weight butt welded steel forged welding type fittings. Identification: Black Lettering on Yellow Background. Painting: All exposed gas piping on roof shall be painted with two coats of yellow enamel grade paint and stenciled "GAS". Below Grade - Polyethylene pipe and fittings meeting requirements of ASTM D 2513 with No. 14 coated copper trace wire and warning tape.

PLUMBING FIXTURE SCHEDULE						
SYMBOL	FIXTURE	WASTE	VENT	C.W.	H.W.	NOTES (1)
DF 1	DRINKING FOUNTAIN	1-1/2"	1-1/2"	1/2"	--	SINGLE LEVEL - ELECTRIC W/ BOTTLE FILLER - (ADA) 120V /1/60 POWER

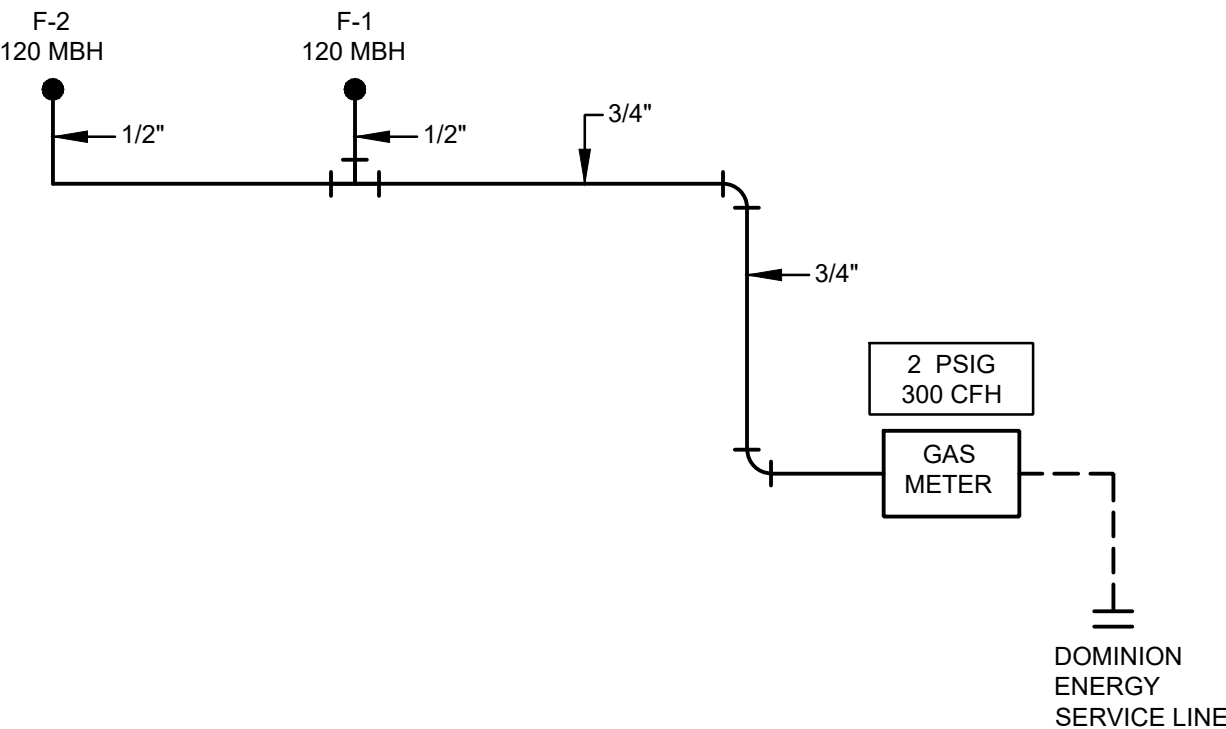
NOTES:
(1) CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN OR INSTALLATION.

PIPING INSULATION SCHEDULE							
FLUID OPERATING TEMPERATURE RANGE (°F) AND USAGE	INSULATION CONDUCTIVITY		≥ NOMINAL PIPE OR TUBE SIZE, IN.				
	CONDUCTIVITY, BTU IN/ FT ² °F	MEAN RATING TEMPERATURE, °F	< 1	1 TO < 1-1/2	1-1/2 TO < 4	4 TO < 8	≥ 8
			INSULATION THICKNESS, IN.				
> 350	0.32 TO 0.34	250	4.5	5.0	5.0	5.0	5.0
251 TO 350	0.29 TO 0.32	200	3.0	4.0	4.5	4.5	4.5
201 TO 250	0.27 TO 0.30	150	2.5	2.5	2.5	3.0	3.0
141 TO 200	0.25 TO 0.29	125	1.5	1.5	2.0	2.0	2.0
105 TO 140	0.22 TO 0.28	100	1.0	1.0	1.5	1.5	1.5
400 TO 60	0.21 TO 0.27	75	0.5	0.5	1	1.5	1.5
< 40	0.20 TO 0.29	50	0.5	1.0	1.5	2.0	2.0

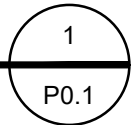
TABLE APPLIES TO ALL DOMESTIC HOT AND COLD WATER SYSTEMS, STORM DRAIN AND REFRIGERANT PIPING SYSTEMS.

NATURAL GAS PIPING SCHEDULE			
EQUIPMENT	INPUT (BTU)	INPUT (CFH)	GAS CONN (IN.)
F-1	120,000	140	1/2"
F-2	120,000	140	1/2"
TOTAL	240,000	280	

TOTAL DEVELOPED PIPE LENGTH = 90 FT
GAS DELIVERY PRESSURE = 2 PSIG
METER CAPACITY = 300 CFH



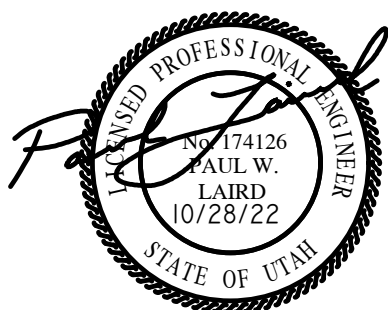
GAS PIPING SCHEMATIC
NOT TO SCALE



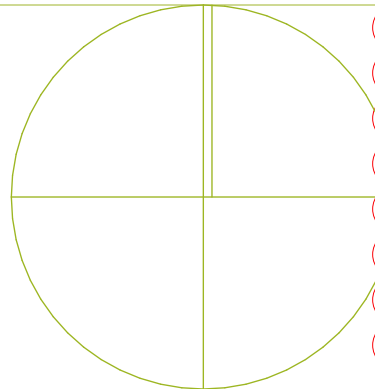
- GENERAL PLUMBING NOTES:
- A. CODE COMPLIANCE: ALL PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL PLUMBING CODE (IPC), INTERNATIONAL FUEL GAS CODE (IFGC) AND NATIONAL ELECTRICAL CODE (NEC) INCLUDING ALL STATE AND LOCAL AMENDMENTS AND LIFE SAFETY CODES ENFORCED OR CURRENTLY IMPLEMENTED BY THE BUILDING AUTHORITY HAVING JURISDICTION IN WHICH THE PROJECT RESIDES.
- B. COORDINATION PROCEDURES: CONTRACTOR SHALL COORDINATE ALL PLUMBING (PL) WORK WITH THE ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL (M), FIRE PROTECTION (FP) AND ELECTRICAL TRADES OF THIS PROJECT. REFER TO DRAWINGS, SPECIFICATIONS, SUBMITTALS AND SHOP DRAWINGS OF THE VARIOUS TRADES FOR PROJECT SPECIFIC REQUIREMENTS FOR COORDINATION PURPOSES.
- C. DRAWINGS: DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT TO BE SCALED. PIPE ROUTING, PLUMBING EQUIPMENT AND FIXTURE LOCATIONS INDICATED ON THE DRAWINGS IS APPROXIMATE. NO ATTEMPT HAS BEEN MADE TO SHOW ALL PLUMBING OFFSETS, EQUIPMENT AND DEVICES. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL PLUMBING EQUIPMENT AND FIXTURES REQUIRED PRIOR TO BIDDING. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND TRANSITIONS AS NEEDED TO FACILITATE INSTALLATION OF THE PLUMBING SYSTEMS IN HARMONY WITH THE OTHER RESPECTIVE TRADES OF THE PROJECT.
- D. EQUIPMENT SELECTIONS: ALL PROJECT EQUIPMENT PROVIDED BY THE CONTRACTOR SHALL BE SELECTED TO MEET AND OPERATE AT THE CAPACITIES INDICATED IN THE CONTRACT DOCUMENTS AT THE JOB SITE CONDITIONS. JOB SITE CONDITIONS INCLUDE ELEVATION ABOVE SEA LEVEL, AMBIENT SUMMER AND WINTER DRY BUL/WET BULB TEMPERATURES, WIND DIRECTION AND PROPERTY LINES.
- E. SUBMITTALS: PRODUCT DATA FOR ALL PLUMBING EQUIPMENT AND MATERIALS TO BE PROVIDED BY THE PLUMBING CONTRACTOR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AS PART OF THE SUBMITTAL PROCESS IN ACCORDANCE WITH THE SPECIFICATIONS PRIOR TO ORDERING, PURCHASING OR INSTALLATION.
- F. WORKMANSHIP: ALL PLUMBING WORK TO BE INSTALLED IN A PROFESSIONAL AND WORKMANLIKE MANNER. INSTALL ALL PRODUCTS AND MATERIALS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND CONSTRUCTION INDUSTRY STANDARDS.
- G. INVERTS: ALL INVERT PIPE ELEVATIONS SHOWN ON THE DRAWINGS ARE BASED OFF OF A FINISHED FLOOR ELEVATION OF 100'-0". THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GENERAL AND SITE CIVIL CONTRACTOR FOR PIPE CONNECTION LOCATIONS. PLUMBING CONTRACTOR SHALL CONNECT TO THE SITE UTILITY PIPING; MATCHING PIPING SIZE AND MATERIAL OR PROVIDING COMPATIBLE TRANSITIONS.
- H. SEISMIC CONDITIONS: ALL PLUMBING PIPING AND EQUIPMENT INSTALLED SHALL BE SEISMICALLY BRACED OR RESTRAINED IN COMPLIANCE WITH REQUIREMENTS IN THE IBC. PROVIDE VIBRATION ISOLATION AND SEISMIC-RESTRAINT DEVICES, RESTRAINTS AND SUPPORTS AS REQUIRED. PROVIDE AND SUBMIT SEISMIC RESTRAINT CALCULATIONS, DETAILS, DESIGN CRITERIA AND ANALYSIS DATA SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.
- I. WARRANTY: THE CONTRACTOR SHALL WARRANT TO THE OWNER THAT ALL PLUMBING MATERIALS AND EQUIPMENT FURNISHED UNDER THE CONTRACT WILL BE NEW AND OF GOOD QUALITY, UNLESS OTHERWISE REQUIRED OR PERMITTED BY THE CONTRACT DOCUMENTS, AND THAT THE WORK WILL BE FREE FROM DEFECTS NOT INHERENT IN THE QUALITY REQUIRED OR PERMITTED, AND THAT THE WORK WILL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. WARRANTY PERIOD FOR THIS WORK SHALL EXTEND FOR ONE YEAR AFTER DATE OF SUBSTANTIAL COMPLETION.
- J. CHANGES: IF CONCEALED OR UNKNOWN PHYSICAL CONDITIONS ARE ENCOUNTERED AT THE SITE THAT DIFFER MATERIALLY FROM THOSE INDICATED IN THE CONTRACT DOCUMENTS OR FROM THOSE CONDITIONS ORDINARILY FOUND TO EXIST, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE OWNER OR ARCHITECT OF THOSE CONDITIONS. THE CONTRACTOR SHALL BE INSTRUCTED AND DIRECTED ON HOW TO PROCEED WITH ANY REQUIRED CHANGES. THE CONTRACT SUM AND CONTRACT TIME SHALL BE SUBJECT TO EQUITABLE ADJUSTMENT FOR CHANGES TO THE CONTRACT DOCUMENTS FOR SUCH CHANGES. SHOULD THE CONTRACTOR PROCEED WITH THE WORK WITHOUT INSTRUCTION, NOTIFICATION OF CHANGE OR AN APPROVED CHANGE ORDER; HE DOES SO AT HIS OWN FINANCIAL RISK.
- K. EXISTING CONDITIONS: PRIOR TO BIDDING OR BEGINNING THE WORK THE CONTRACTOR SHALL CAREFULLY EXAMINE THE BUILDING SITE AND COMPARE THE CONTRACT DOCUMENTS WITH EXISTING CONDITIONS. ACCEPTANCE OF THE CONTRACT IS ACKNOWLEDGMENT BY THE CONTRACTOR THAT HE HAS VISITED THE SITE AND IS AWARE AND ACCEPTING OF THE EXISTING CONDITIONS.
- L. CLEANUP: DURING THE CONSTRUCTION AND UPON COMPLETION OF THE WORK, THE PLUMBING CONTRACTOR SHALL REMOVE FROM THE PROJECT SITE ALL UNUSED MATERIALS, EQUIPMENT, PACKAGING AND DEBRIS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. ALL UNUSED MATERIALS, EQUIPMENT, PACKAGING AND DEBRIS NOT ECONOMICALLY RECOVERABLE SHALL BE REMOVED, TRANSPORTED AND LEGALLY DISPOSED OF OFF-SITE.
- M. UTILITY INTERRUPTIONS: EXISTING PLUMBING UTILITIES SHALL REMAIN IN SERVICE EXCEPT AS REQUIRED FOR SCHEDULED INTERRUPTIONS. INTERRUPTIONS OF SERVICE OR UTILITIES SHALL BE SCHEDULED WITH THE OWNER AND ARCHITECT AT LEAST TWO WEEKS IN ADVANCE.
- N. TIME IS OF THE ESSENCE: THE CONTRACTOR SHALL COMMENCE WORK UNDER THIS CONTRACT UPON RECEIPT OF THE OWNER'S WRITTEN NOTICE TO TO PROCEED. THE CONTRACTOR SHALL COMPLETE THE WORK AND HAVE IT READY FOR SUBSTANTIAL COMPLETION INSPECTION BY THE DATE NOTED IN THE CONTRACT.

PLUMBING PIPING LEGEND

DESCRIPTION	SYMBOL
WASTE	_____
VENT	-----
COLD WATER	_____
HOT WATER	-----
NATURAL GAS	_____G_____
DRAIN	_____D_____



NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01



ABBREVIATIONS

(E)	EXISTING
(F)	FUTURE
(N)	NEW
(R)	RELOCATED
(X)	DEMOLISH/DELETE
AFF	ABOVE FINISHED FLOOR
AIC	AMP INTERRUPTING CURRENT (SYMMETRICAL)
AL	ALUMINUM
BG	BELOW GRADE
C	CONDUIT
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CKT	CIRCUIT
CLG	CEILING
CO	CONDUIT ONLY
CTR	ABOVE COUNTER DEVICE
CU	COPPER
EM	EMERGENCY
EMC	DOMESTIC HOT WATER RECIRC.
EWC	ELECTRIC WATER COOLER
EVH	ELECTRIC WATER HEATER
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTOR
GND	GROUND
GRC	GALVANIZED RIGID CONDUIT
IG	ISOLATED GROUND
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MLO	MAIN LUGS ONLY
NAC	NOTIFICATION APPLIANCE CIRCUIT
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NTS	NOT TO SCALE
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
PNL	PANEL
S	SWITCHED
SPD	SURGE PROTECTIVE DEVICE
ST	SHUNT TRIP
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VR	VANDAL RESISTANT
WG	WIRE GUARD
WP	WEATHER PROOF
XFMR	TRANSFORMER

ELECTRICAL LEGEND

NOTE: ALL ITEMS MAY NOT APPEAR ON DRAWINGS

	SNOW SENSOR		SINGLE RECEPTACLE		DOOR CONTACT
	HEAT TRACE		SPECIAL OUTLET TO MATCH EQUIPMENT PLUG		ELECTRIC STRIKE
	LINEAR SUSPENDED PENDANT FIXTURE		SPECIAL OUTLET TO MATCH EQUIPMENT PLUG, FLUSH IN FLOOR		ELECTRICAL HINGE
	LINEAR SUSPENDED PENDANT FIXTURE (EMERGENCY POWER)		EMERGENCY POWER OFF BUTTON, 46" AFF		ELECTRICAL LATCH
	RECESSED DOWN LIGHT		GENERATOR ANNUNCIATOR		KEYCARD
	RECESSED DOWN LIGHT (EMERGENCY POWER)		JUNCTION BOX		MAGNETIC DOOR HOLDER (WALL OR FLOOR MOUNT)
	RECESSED LIGHT FIXTURE		JUNCTION BOX, FLUSH IN FLOOR		MAGNETIC LOCK
	RECESSED LIGHT FIXTURE (EMERGENCY POWER)		MAGNETIC STARTER		ROUND T.V./SECURITY CAMERA
	RECESSED WALL MOUNTED LIGHT FIXTURE		MANUAL STARTER		SECURITY REQUEST TO EXIT
	RECESSED WALL MOUNTED LIGHT FIXTURE (EMERGENCY POWER)		METER BASE		T.V./SECURITY CAMERA
	CEILING SURFACE / PENDANT SUSPENDED FIXTURE		MOTOR CONNECTION		FIRE ALARM CONTROL MODULE
	EMERGENCY BATTERY LIGHT FIXTURE		MULTI OUTLET ASSEMBLY		FIRE ALARM FSD CONTROL RELAY
	LIGHT TRACK WITH LIGHT FIXTURE		POWER SUPPLY		FIRE ALARM MONITOR MODULE
	STRIP LIGHT FIXTURE		PULL BOX		FIRE SMOKE DAMPER
	SURFACE LIGHT FIXTURE		RELAY		DUCT SMOKE DETECTOR
	SURFACE LIGHT FIXTURE (EMERGENCY POWER)		SPICE BOX		FIRE ALARM MANUAL PULL STATION
	WALL MOUNTED LIGHT FIXTURE		THERMAL SWITCH		FIRE ALARM PRESSURE SWITCH
	WALL MOUNTED LIGHT FIXTURE		THERMOSTAT		FLOW SWITCH
	WALL MOUNTED LIGHT FIXTURE (EMERGENCY POWER)		TRANSFORMER (FLOOR PLAN)		HEAT DETECTOR
	WALL MOUNTED LIGHT FIXTURE (EMERGENCY POWER)		COMBINATION STARTER/FUSED DISCONNECT SWITCH		O.S. & Y. VALVE TAMPER SWITCH
	EXIT LIGHT CEILING		COMBINATION STARTER/NON-FUSED DISCONNECT SWITCH		PHOTO ELECTRIC SMOKE DETECTOR
	WALL MOUNTED EXIT LIGHT		FUSED DISCONNECT SWITCH		RATE OF RISE/THERMAL DETECTOR
	DUAL POLE MOUNTED LIGHT FIXTURE		GENERATOR		FIRE ALARM BELL
	GROUND MOUNTED LIGHT FIXTURE		NONFUSE DISCONNECT SWITCH		FIRE ALARM CHIME
	POLE MOUNTED LIGHT FIXTURE		LIGHTING ARRESTOR		FIRE ALARM CHIME/VISUAL
	POLE TOP MOUNTED LIGHT FIXTURE		RECESSED ELECTRICAL PANELBOARD		FIRE ALARM HORN
	3-WAY KEY SWITCH		RECESSED EQUIPMENT CABINET AS NOTED		FIRE ALARM VISUAL SIGNAL
	3-WAY SWITCH		SURFACE ELECTRICAL PANEL		FIRE ALARM VISUAL SIGNAL WITH HORN
	4-WAY SWITCH		SURFACE EQUIPMENT CABINET		FIRE ALARM VISUAL SIGNAL WITH SPEAKER
	EXPLOSION PROOF		19" TELECOM EQUIPMENT RACK WITH VERTICAL WIRE MGMT.		FIRE ALARM ANNUNCIATOR
	KEY SWITCH		COMMUNICATIONS OUTLET - ABOVE COUNTER: D=DATA, P=TELEPHONE, F=FIBER, # INDICATES QTY. NO DESIGNATION=(2) DATA OUTLET, (1) TELEPHONE OUTLET		FIRE ALARM CONTROL PANEL
	LOW VOLTAGE MASTER		COMMUNICATIONS OUTLET - FLUSH IN FLOOR: D=DATA, P=TELEPHONE, F=FIBER, # INDICATES QTY. NO DESIGNATION=(2) DATA OUTLET, (1) TELEPHONE OUTLET		FIRE ALARM VOICE EVACUATION PANEL
	LOW VOLTAGE SWITCH		COMMUNICATIONS OUTLET: D=DATA, P=TELEPHONE, F=FIBER, # INDICATES QTY. NO DESIGNATION=(2) DATA OUTLET, (1) TELEPHONE OUTLET		NOTIFICATION APPLIANCE CIRCUIT EXTENDER
	MOMENTARY CONTACT SWITCH		DATA OUTLET-ABOVE COUNTER: # INDICATES QTY.; NO DESIGNATION =(2) DATA OUTLET		REMOTE FIRE COMMAND CENTER
	PILOT LIGHT		DATA OUTLET-FLUSH IN FLOOR-# INDICATES QTY.; NO DESIGNATION =(2) DATA OUTLET		DRAWING NOTE DESIGNATOR
	PUSHBUTTON SWITCH		DATA OUTLET: # INDICATES QTY.; NO DESIGNATION =(2) DATA OUTLET		LIGHT FIXTURE DESIGNATION
	REMOTE CONTROL		TELEPHONE OUTLET - ABOVE COUNTER: # INDICATES QTY.; NO DESIGNATION =(1) TELEPHONE OUTLET		MECHANICAL EQUIPMENT DESIGNATION
	SINGLE POLE SWITCH		TELEPHONE OUTLET - FLUSH IN FLOOR: # INDICATES QTY.; NO DESIGNATION =(1) TELEPHONE OUTLET		CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDER FLOOR
	SWITCH WITH VANDAL RESISTANT COVER PLATE		TELEPHONE OUTLET: # INDICATES QTY.; NO DESIGNATION =(1) TELEPHONE OUTLET		CONDUIT CONCEALED IN WALLS, CEILING OR FLOOR
	CONTACTOR		19" TELECOM EQUIPMENT RACK		EQUIPMENT GROUND CONDUCTOR
	DIMMER SWITCH, WALL MOUNT		CABLE TRAY FOR DATA TELEPHONE AND SOUND/PAGING ONLY (NO CONTROL WIRING)		EXISTING CONDUIT
	EMERGENCY CONTROL RELAY UNIT		CLOCK		FLEXIBLE CONDUIT
	OCCUPANCY SENSOR, CEILING MOUNT		CLOCK, WALL MOUNTED		STUB DOWN
	OCCUPANCY SENSOR, WALL MOUNT		INTERCOM STATION, SECURITY		STUB OUT
	PHOTO CELL		RESCUE ANNUNCIATOR STATION		STUB UP
	POWER PACK		RESCUE CALL STATION		200A LOADBREAK MOLDED PRODUCT TERMINATION (15KV)
	SLAVE POWER PACK		SECURITY MOTION SENSOR, CEILING MOUNTED		600A DEADBREAK MOLDED PRODUCT SPLICE (15KV)
	DIGITAL TIME SWITCH		SECURITY MOTION SENSOR, WALL MOUNTED		600A DEADBREAK MOLDED PRODUCT TERMINATION (15KV)
	COMBO FLOORBOX WITH DUPLEX RECEPTACLE AND DATA		WIRELESS TRANSMITTER		BREAKER
	COMBO FLOORBOX WITH QUADRAPLEX RECEPTACLE AND DATA		PUSH BUTTON		BREAKER ENCLOSED
	DUPLEX RECEPTACLE		START-STOP BUTTON		G&W UNIVERSAL CE SPLICE (15KV)
	DUPLEX RECEPTACLE (EMERGENCY POWER)		UP-DOWN-STOP BUTTON		G&W UNIVERSAL CE TERMINATION (15KV)
	DUPLEX RECEPTACLE GFI		BELL		MANHOLE
	DUPLEX RECEPTACLE ISOLATED GROUND		BUZZER		MEDIUM VOLTAGE SPLICE (15KV HEATSHRINK OR LOADSHRINK)
	DUPLEX RECEPTACLE, FLUSH CEILING		CHIME		TRANSFORMER (ONE-LINES)
	DUPLEX RECEPTACLE, FLUSH CEILING ISOLATED GROUND		PROGRAM HORN		AMP (ONE-LINE)
	DUPLEX RECEPTACLE, FLUSH IN FLOOR		CARD READER		CEILING SPEAKER, RECESSED
	DUPLEX RECEPTACLE, PEDESTAL MOUNTED				EQUIPMENT CABINET
	POKE-THRU DEVICE				MICROPHONE RECEPTACLE, FLUSH FLOOR
	QUADRAPLEX RECEPTACLE				MICROPHONE RECEPTACLE, WALL
	QUADRAPLEX RECEPTACLE GFI				SPLITTER
	QUADRAPLEX RECEPTACLE ISOLATED GROUND				T.V. OUTLET
	QUADRAPLEX RECEPTACLE, PEDESTAL MOUNTED				VOLUME CONTROL
	RANGE RECEPTACLE				WALL SPEAKER

DRAWING INDEX

EG1.1	SYMBOLS, ABBREVIATIONS, & DRAWING INDEX
ED1.1	BASEMENT LEVEL ELECTRICAL DEMO PLAN
ED1.2	1ST LEVEL ELECTRICAL DEMO PLAN
EL1.1	1ST LEVEL LIGHTING PLAN
EP1.1	BASEMENT LEVEL POWER PLAN
EP1.2	1ST LEVEL POWER PLAN
EY1.1	BASEMENT LEVEL SYSTEM PLAN
EY1.2	1ST LEVEL SYSTEM PLAN
EY2.1	FIRE ALARM RISER DIAGRAM
EX1.1	ELECTRICAL SCHEDULES

NO.	DATE	DESCRIPTION
01	11.09.22	ADDENDUM 01

MECHANICAL EQUIPMENT SCHEDULE																							
DESCRIPTION	VOLT	PH	HP		WATTS		MCA	FLA	AMPS	DISCONNECT				STARTER			WIRING REQUIREMENTS					NOTES	
			RATING	AMPS	RATING	AMPS				MANUAL STARTER	SIZE	FUSE SIZE	FURN. BY	TYPE	SIZE	FURN. BY	WIRES		GROUND	CONDUIT	BREAKER		
FURNACE	120	1	1	16.0						YES			DIV 26				2	#	10	1 # 10	3/4"	25	
FURNACE	120	1	1	16.0						YES			DIV 26				2	#	10	1 # 10	3/4"	25	
CONDENSING UNIT	208	1					35.0				60	45	DIV 26				2	#	8	1 # 10	3/4"	50	
CONDENSING UNIT	208	1					35.0				60	45	DIV 26				2	#	8	1 # 10	3/4"	50	
EXHAUST FAN	120	1	1/6	4.4						YES			DIV 26				2	#	12	1 # 12	3/4"	20	
EXHAUST FAN	120	1	1/6	4.4						YES			DIV 26				2	#	12	1 # 12	3/4"	20	
EXHAUST FAN	120	1	1/6	4.4						YES			DIV 26				2	#	12	1 # 12	3/4"	20	
WATER HEATER	208	1			3000.0	14.4					30	20	DIV 26				2	#	12	1 # 12	3/4"	20	
CIRCULATION PUMP	120	1				1.0				YES			DIV 26				2	#	12	1 # 12	3/4"	20	
LIFT PUMP	120	1				1.0				YES			DIV 26				2	#	12	1 # 12	3/4"	20	

LUMINAIRE SCHEDULE									
TYPE	DESCRIPTION			LAMP(S)/BALLAST(S)	INPUT (VA)	VOLTAGE	MANUFACTURER	CATALOG #	
A2	DESCRIPTION:	1'X4' RECESSED FLAT PANEL			LED	25.5	UNV	COOPER	14FP2640C
	SIZE:	47-3/4" X 11-3/4" X 2"			3017 LUMENS			LITHONIA	CPX 1'X4 AL07 SWW7 M4
	HOUSING:	ALUMINUM BEZEL WITH STEEL BACK PLATE			4000 KELVIN			ILP	PAN14-30WLED-U-40
	FINISH:	WHITE BEZEL			80 CRI				
	LENS:	WHITE FROST LENS							
	ACCESSORIES:								
	MOUNTING:	RECESSED							
A2E	DESCRIPTION:	1'X4' RECESSED FLAT PANEL			LED	25.5	UNV	COOPER	14FP2640C-EL14W
	SIZE:	47-3/4" X 11-3/4" X 2"			3017 LUMENS			LITHONIA	CPX 1'X4 AL07 SWW7 IE10WCP
	HOUSING:	ALUMINUM BEZEL WITH STEEL BACK PLATE			4000 KELVIN			ILP	PAN14-30WLED-U-40-EM12
	FINISH:	WHITE BEZEL			80 CRI				
	DISTRIBUTION:	WHITE FROST LENS							
	OPTIONS:	14 WATT EM BATTERY PACK							
	MOUNTING:	RECESSED							
C2	DESCRIPTION:	RECESSED CAN LIGHT			LED	20.9	UNV	COOPER	HC8 20 REM14 HM6 0525 940 61 MD W
	SIZE:	26.4" X 8.6" X 6.7"			2000 LUMENS			LITHONIA	LDN6 40/20 LOGWR MVOLT G210
	HOUSING:	GALVANIZED STEEL PLASTER FRAME			4000 KELVIN			RAYON	RBC8-LL20-CT40-UNV-H-W-FN-C
	FINISH:	WHITE FLANGE			80 CRI				
	DISTRIBUTION:	MEDIUM 60 DEGREE BEAM ANGLE							
	ACCESSORIES:								
	MOUNTING:	RECESSED							
NOTES:									
1	ALL LIGHT FIXTURES SHALL HAVE A MINIMUM 5 YEAR WARRANTY.								
2	ALL LED LIGHT FIXTURES SHALL HAVE REPLACEABLE AND UPGRADABLE LED MODULES, LM79 AND LM80 LISTED, WITH 50,000 HR MIN. L70 RATING.								
3	LIGHT FIXTURE DESCRIPTION TAKES PRECEDENCE OVER CATALOG NUMBER. LIGHT FIXTURES SHALL MEET DESCRIPTION REQUIREMENTS.								

PANEL: I (EX)																
120	/	240		3	W	1	PH	100			Amps	Main Breaker				KVA
DESCRIPTION		TYPE	LOAD	BKR	P	CKT		A	B	CKT	BKR	P	TYPE	LOAD	DESCRIPTION	
EXISTING LOAD				20	1	1		0		2	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	3			0	4	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	5		0		6	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	7			0	8	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	9		0		10	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	11			0	12	30	2			EXISTING LOAD	
EXISTING LOAD				20	1	13		0		14	-	-			-	
EXISTING LOAD				20	1	15			0	16	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	17		0		18	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	19			0	20	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	21		0		22	20	1			EXISTING LOAD	
EXISTING LOAD				20	1	23			0	24	50	2			EXISTING LOAD	
EXISTING LOAD				20	1	25		0		26	-	-			-	
EXHAUST FANS		M	1584	20	1	27			1584	28						
						29		0		30						
						31		0		32						
						33		0		34						
						35		0		36						
						37		0		38						
MAIN BREAKER						100			0	40						
-						-		0		42						
								0	1584							
CONNECTED LOAD			1.6	KVA					6.6	Amps						
NEC DEMAND LOAD			1.6	KVA					6.6	Amps						

PANEL: M (EX)																
120	/	208	4		W	3	PH	225			Amps	Main Lugs				KVA
DESCRIPTION		TYPE	LOAD	BKR	P	CKT		A	B	C	CKT	BKR	P	TYPE	LOAD	DESCRIPTION
PANEL I (EX)				100	2	1		528			2	20	1	M	528	CP-1
-				-	-	3			0		4	20	1			LIGHTING CONTROL (EX)
FURNACE F-1	M	1920	20	1	5					1920	6	20	1			COPY MACHINE (EX)
FURNACE F-2	M	1920	20	1	7		1920				8	20	1			FILE SERVER (EX)
RECEPTACLES (EX)			20	1	9			0			10	20	1			SPARE
LIGHTING (EX)			20	2	11				0		12	20	1			SPARE
-			-	-	13		0				14	20	2			LIGHTING (EX)
LIGHTING (EX)			20	2	15			0			16	-	-			-
-			-	-	17				0		18	30	2			LIGHTING (EX)
UNMARKED			30	2	19		0				20	-	-			-
-			-	-	21			0			22	20	2			UNMARKED
WH-1	M	1500	20	2	23					1500	24	-	-			-
-	M	1500	-	-	25		1500				26					
CU-1	M	3640	50	2	27		3640				28					
-	M	3640	-	-	29					3640	30					
CU-2	M	3640	50	2	31		3640				32					
-	M	3640	-	-	33		3640				34					
					35				0		36					
					37		0				38					
					39		0				40					
					41				0		42					
							7588	7280	7060							
CONNECTED LOAD			21.9	KVA				60.9	Amps							
NEC DEMAND LOAD			21.9	KVA				60.9	Amps							

