GAS INSTANTANEOUS WATER HEATER SCHEDULE							
TAG	MFG	MODEL NUMBER	GPM	GAS INPUT	LOCATION		
WH-1, 2	INTELLIHOT	1250	5 GPM (EA.)	250,000 BTUH (EA.)	MECH ROOM		
2. STAINLE 3. PROVID 4. PROVID	E EXPANSION 1	IT TO BE DURAVENT. F FANK AMTROL ST-5, O E NEUTRALIZER, CN10	R EQUAL.	LL NOT BE INSTALLED.			

	НОТ	HOT WATER CIRCULATING PUMP SCHEDULE							
CP-1 GRUNDEOS LIP15-55SEC 4 GPM FRACTIONAL 120/1/60 MECH RC	TAG	MFG	MODEL NUMBER	GPM	HP	ELECTRICAL	LOCATION		
GI -1 GRONDI GO GI 13-3351 C 4 GI WI TIVACTIONAL 120/1/00 WEGITIKO	CP-1	GRUNDFOS	UP15-55SFC	4 GPM	FRACTIONAL	120/1/60	MECH ROOM		

TAG	MFG	MODEL NUMBER	HP	ELECTRICAL	LOCATION
VP-1	BEACON MEADES	VHV02D-060H-D_V	2 HP, DUPLEX	480/3/60	VACUUM 120

2. TOTAL SYSTEM CAPACITY TO BE 16 SCFM EA.

TAG	TYPE	GASES	LOCATION
A	WALL OUTLETS	(2) O2, (1) A, (3) V, (3) SL	RESUSCITATION
В	WALL OUTLETS	(1) O2, (1) A, (1) V, (1) SL	EXAM
(c)	WALL OUTLETS	(1) O2, (1) A, (1) V, (1) SL	CT, RAD., AND DECON.
D	WALL OUTLETS	(1) O2, (1) V, (1) SL	TRIAGE
E	LINE PRESSURE ALARM	O2, A, V	NURSE'S STATION
F	MASTER ALARM PANEL	02, A, V	NURSE'S STATION, 126 OFFICE

ABBREVIATION	DESCRIPTION
A	MEDICAL AIR LINE
ACC	ACCESSIBLE
AW	ACID WASTE
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AVTR	ACID VENT THROUGH ROOF
BPW	BED PAN WASHER
CLG	CEILING
CONT	CONTINUATION
COORD	COORDINATION
СО	CLEAN OUT
CW	COLD WATER LINE
DN	DOWN
DWG	DRAWING
EA	EACH
ECO	EXTERIOR CLEAN OUT
FM	FLOOR MOUNTED
FD	FIRE PROTECTION DRY PIPE
F	FIRE PROTECTION WET PIPE
FV	FLUSH VALVE
GN	GOOSENECK
GPM	GALLONS PER MINUTE
HW	HOT WATER LINE
HWR	HOT WATER RETURN
LAV	LAVATORY
LPA	LINE PRESSURE ALARM
MAP	MASTER ALARM PANEL
MECH	MECHANICAL
MTD	MOUNTED
O2	OXYGEN LINE
OFE	OWNER FURNISHED EQUIPMENT
PAT	PATIENT
PRV	PRESSURE REDUCING VALVE
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RWL	RAINWATER PIPING
SS	SANITARY SEWER PIPING
SD	UNDERGROUND STORM PIPING
SF	SQUARE FOOT
V	MEDICAL VACUUM PIPING
VTR	VENT THROUGH ROOF
WB	WRISTBLADE
WC	WATER CLOSET
WCO	WALL CLEAN OUT
WH	WALL HUNG
ZVB	ZONE VALVE BOX

MECHANICAL/ELECTRICAL SYSTEM COORDI	NATION SCHEDULE	<u> </u>		
SYSTEM	FURNISHED UNDER	INSTALLED UNDER	POWER WIRING UNDER	CONTROL OR SUPERVISION WIRING UNDER
EMEGENCY GENERATOR	DIV 26	DIV 26	DIV 26	DIV 26
FUEL TANK	DIV 26	DIV 26	DIV 26	DIV 26
MUFFLER - OUTDOOR	DIV 26	DIV 26		
REMOTE ANUNCIATOR	DIV 26	DIV 26	DIV 26	DIV 26
MAIN FUEL OIL SYSTEM	DIV 23	DIV 23	DIV 26	DIV 23
LIFE SAFETY SYSTEM				
SMOKE DAMPER / ACTUATOR	DIV 23	DIV 23	DIV 26	DIV 28
FIRE/SMOKE DAMPER / ACTUATOR	DIV 23	DIV 23	DIV 26	DIV 28
DUCT SMOKE DETECTOR	DIV 26	DIV 23		DIV 28
FIRE SPRINKLER SYSTEM	DIV 21	DIV 21	DIV 26	DIV 28
WATER FLOW SWITCHES	DIV 21	DIV 21		DIV 28
TAMPER SWITCHES	DIV 21	DIV 21		DIV 28
MEDICAL GAS ALARM	DIV 22	DIV 22	DIV 26	DIV 22
CHEMICAL FEED SYSTEM	DIV 22 / 23	DIV 22 / 23	DIV 26	DIV 22 / 23
HEATING WATER BOILERS	DIV 23	DIV 23	DIV 26	DIV 23
DOMESTIC WATER BOILERS	DIV 22	DIV 22	DIV 26	DIV 23
MOTOR STARTERS (INTEGRAL TO EQUIP.)	DIV 22 / 23		DIV 26	DIV 23
MOTOR STARTERS (NON-INTEGRAL TO EQUIP.)	DIV 26	DIV 26	DIV 26	DIV 23
COMBI MOTOR STARTER/DISCONNECT (INTEGRAL TO EQUIP.)	DIV 22 / 23		DIV 26	DIV 23
COMBI MOTOR STARTER/DISCONNECT (NON-INTEGRAL TO EQUIP.)	DIV 26	DIV 26	DIV 26	DIV 23
VARIABLE FREQUENCY DRIVES (VFD'S)	DIV 22 / 23	DIV 23	DIV 26	DIV 23
DISCONNECT SWITCHES (NON-INTEGRAL TO EQUIP.)	DIV 26	DIV 26	DIV 26	
HEAT TRACE	DIV 22 / 23	DIV 22 / 23	DIV 26	DIV 23

SYMBOL	DESCRIPTION	CON	NECTION S	SIZE
		W	CW	HW
P-101	WATER CLOSET (FM, FV, ACC.)	4"	1"	-
P-107	WATER CLOSET (FM, FV, ANTI-LIGATURE, ACC.)	4"	1"	-
P-304	LAVATORY (WH, GN, WB, ACC.)	1-1/2"	1/2"	1/2
P-309	LAVATORY (WH, GN, WB, ANTI-LIGATURE, ACC.)	1-1/2"	1/2"	1/2
P-312	LAVATORY (WH, GN, WB, ACID)	1-1/2"	1/2"	1/2
P-313	BARIATRIC SINK (WH, GN, WB, BAR.)	1-1/2"	1/2"	1/2
P-402	SINK (DROP-IN, GN, WB, ACC.)	1-1/2"	1/2"	1/2
P-410	SINK (WH, GN, WB, ACID)	1-1/2"	1/2"	1/2
P-502	CLINICAL SINK	4"	1"	1/2
P-503	SCRUB SINK	1-1/2"	1/2"	1/2
P-504	SERVICE BASIN	3"	1/2"	1/2
P-601	DECON SHOWER	1-1/2"	1/2"	1/2
P-608	SHOWER (CONTROLS)	-	1/2"	1/2
P-701	FLOOR DRAIN (REGULAR)	3"	-	-
P-702	FLOOR DRAIN (MECHANICAL)	4"	-	-
P-710	ROOF DRAIN	SEE PLANS	-	-
P-711	OVERFLOW ROOF DRAIN	SEE PLANS	-	-
P-721	FLOOR DRAIN (PROCESS, A.R.E. COATED)	4"	-	-
P-724	DOWNSPOUT NOZZLE	3"	-	-
P-801	WALL HYDRANT (EXTERIOR)	-	3/4"	-
P-802	WALL HYDRANT (INTERIOR)	-	1/2"	-
P-804	ICE MAKER / WATER CONNECTION	-	1/2"	-
P-811	WATER COOLER (HI/LO)	1-1/2"	1/2"	-
P-812	EMERGENCY SHOWER / EYEWASH	-	1"	1"
P-814	WALL HYDRANT (DUAL TEMP)	-	1/2"	1/2
P-816	EMERGENCY EYEWASH (WALL MOUNTED)	1-1/2"	1/2"	1/2
P-819	ROOF HYDRANT (FREEZE-PROOF)	1-1/2"	1/2"	1/2
P-906	REDUCED PRESSURE BACKFLOW PREVENTER	2"	2"	-
P-907	REDUCED PRESSURE BACKFLOW PREVENTER	1"	1"	-
P-911	TRAP PRIMER	-	1/2"	-
P-914	SHOCK ABSORBER	-	SEE	_

1. WALL MTD. FIXTURES SHALL BE PROVIDED W/ FLOOR MOUNTED, CONCEALED ARM WALL CARRIER.

5. IN ADDITION TO SERVICE VALVES SHOWN ON PLANS, PROVIDE AND INSTALL ISOLATION VALVES ON HOT AND COLD WATER SUPPLY PIPING TO EACH PLUMBING FIXTURE, INCLUDING TRAP PRIMERS.

6. SHOCKTROL TO BE ZURN SERIES Z-1700 OR EQUAL. SIZE AS INDICATED ON WATER RISER DIAGRAM. PROVIDE ACCESS TO ALL SHOCKTROLS THRU ACCESS PANELS, LAY-IN CEILINGS, WALL IN CHASE

OWNER FURNISHED FILTER TO BE INSTALLED IN CASEWORK. ROUTE DRAIN PIPING FROM ICEMAKERS

7. P-804 TO BE LOCATED IN WALL AT OFE ICE MAKERS AND MOUNTED 4" ABOVE COUNTERTOP.

8. PROVIDE ASSE 1070 POINT OF USE MIXING VALVES AT ALL PUBLIC HANDWASHING LAVATORIES,

3. PROVIDE BACKFLOW PREVENTER AT CONNECTION TO OWNER FURNISHED EQUIPMENT PER IPC.

2. ALL EXPOSED P-TRAPS SHALL BE PROVIDED W/LAV SHIELDS.

TO FLOOR DRAIN AS INDICATED ON PLAN.

EXAM SINKS, LAB SINKS, AND PROCEDURE SINKS.

4. PROVIDE AND INSTALL TRAP PRIMERS FOR ALL FLOOR DRAINS.

SYMBOL	DESCRIPTION
⋈ –	REDUCED PRESSURE BACKFLOW PREVENTER
₹ -	P-TRAP
<u>ιςι –</u>	BALL VALVE
⊕	FLOOR DRAIN
•	CONNECT TO EXISTING
P-No.	PLUMBING FIXTURE DESIGNATION
	END CAP
<u></u>	FIRE EXTINGUISHER
	MEDICAL GAS ZONE VALVE BOX (ZVB)
	MEDICAL GAS ALARM PANEL
A	MEDICAL GAS DESIGNATION
CW=	COLD WATER SUPPLY
HW=====	HOT WATER SUPPLY
HWR=	HOT WATER RETURN
SV	SANITARY VENT
SS	SANITARY WASTE
AV=	ACID VENT
AW	ACID WASTE
RWL	RAINWATER LEADER
ORD	OVERFLOW RAINWATER DRAIN
SD=	STORM DRAIN
NG====	NATURAL GAS
LP====	LIQUID PROPANE

GAS CONNECTION SCHEDULE				
IDENTIFICATION	TOTAL GAS LOAD	LP CONNECTION SIZE	NG CONNECTION SIZE	
B-1	750 MBH	1"	1-1/4"	
B-2 (STANDBY)	750 MBH	1"	1-1/4"	
WH-1	250 MBH	3/4"	3/4"	
WH-2	250 MBH	3/4"	3/4"	
L				

NASHVILLE, TN 37203 www.powermgmt.com 615.383.6949

PROJECT #: 23113

DESIGNER: JMG ENGINEER: GHA

NOTES FOR SEISMIC ANCHORAGE AND BRACING

3/4"

LIQUID PROPANE PIPING SIZED FOR 2 PSI AND 1 PSI PRESSURE DROP AT 70' IN LENGTH.

TOTAL

1,250 MBH

ALL HVAC EQUIPMENT REQUIRING GAS OR PROPANE.

Ducts, pipes, and conduits shall be braced in accordance with the 2018 International Building Code(IBC), Occupancy Category III, or IV. Refer to structural drawings for site class, short and long period acceleration parameters and seismic design category. Component importance factor shall be 1.5 for all systems. Bracing calculations and system design to be completed by a registered engineer within the state, refer to specification sections 220547 for additional requirements.

NATURAL GAS PIPING SIZED FOR 2 PSI AND 1 PSI PRESSURE DROP AT 70' IN LENGTH. VERIFY PRESSURES AND EQUIPMENT BTU'S, ADJUST SIZED ACCORDINGLY. FURNISH AND INSTALL GAS PRESSURE REGULATORS AT

- Unless otherwise permitted by the Code or applicable bracing standards, in-line equipment shall be braced independently of the ducts or pipes and in conformance with applicable building codes.
- Pipe, duct, and conduit hangers shall be positively attached to the supporting structure above. The use of Cclamps or other friction-type anchors to hang pipe, duct, and conduit is prohibited. Friction-type anchors such as C-clamps with properly attached retaining straps may be used if approved by the Structural Engineer-of-
- Refer to the Structural Drawings for acceptable expansion anchor types and test loads where required.
- Appropriate expansion/contraction capability shall be provided in ducts, conduits, pipes, etc. which cross building expansion direction on each side of the joint centerline. As a minimum, the total relative movement in any horizontal directions shall be equal to the size of the building expansion joint. For example, at a 3-inch building expansion joint, a pipe, duct, or conduit shall be permitted to move a minimum of three inches (1 1/2 inches in each of 2 opposite horizontal directions) on each side of the joint centerline.

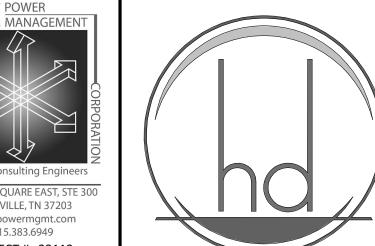
REQUIREMENTS FOR BRACING OF PIPES

- 1. Provide bracing details, schedules, and notes for all types of pipe, conduit and joints.
- Seismic support shall not be required for other piping systems where one of the following conditions are met:
- Piping is supported by rod hangers, hangers in the pipe run are 12 in or less in length from the top of the pipe to the supporting structure, hangers are detailed to avoid bending of the hangers and their attachments, and provisions are made for piping to accommodate expected deflections.
- High-deformability piping is used; provisions are made to avoid impact with larger piping or mechanical components or to protect the piping in the event of such impact; and the following size
 - a. For Seismic Design Categories D, E, or F, the nominal pipe size shall be 1 in. or less.
 - For Seismic Design Category C, the nominal pipe size shall be 2 in or less.
 - Transverse bracing shall be at 40 feet maximum, except where a lesser spacing is indicated in the tables for bracing of pipes.
 - Longitudinal bracing shall be at 80 feet maximum, except where a lesser spacing is indicated in the tables. In pipes where thermal expansion is a consideration, an anchor point may be used as the specified longitudinal brace provided it has a capacity equal to or greater than a longitudinal brace. The longitudinal braces and connections must be capable of resisting the additional force induced by expansion and contraction.
 - e. Brace fuel-oil, medical gas, and natural gas piping, as required for flammable piping.
 - Provide flexibility in joints where pipes pass through building seismic joints or expansion joints or where rigidly supported pipes connect to equipment with vibration isolators.
 - Branch lines may not be used to brace main lines.
 - A rigid piping system shall not be braced to dissimilar parts of the building or to two dissimilar building systems that may respond differently during an earthquake.
 - Cast-iron pipe of all types, glass pipe, and any other pipe joined with a shield and clamp assembly, where the top of the pipe is 12 inches or more from the supporting structure, shall be braced on each side of a change in a direction of 90 degrees or more. Riser joints shall be braced or stabilized between floors.
- Vertical risers shall be laterally supported with a riser clamp at each floor. For buildings greater than six stories high, risers shall be engineered individually.

EQUIPMENT

- 1. Floor- or pad-mounted equipment without vibration isolators shall be bolted to the floor (slab) with 3/8-inch diameter expansion bolts (see Structural Drawings for acceptable bolt type and required embedment) unless noted or shown otherwise on the MPE Drawings. Provide expansion anchors at the four corners and at 4'-0" center-to-center maximum along each side unless noted otherwise.
- Vibration isolators, snubbers, isolation rails, etc. and the anchorage of these assemblies for floor -or roofmounted or suspended equipment shall be designed for the appropriate seismic forces (Fp) as found in the Chapter 13 if ASCE 7-10 and as required by the IBC. The design seismic forces shall be determined considering the amplification effects of non-rigid or flexible supports. Refer to the specifications for additional information and submittal requirements.
- Contractor shall submit a letter from each equipment manufacturer stating that active mechanical and electrical equipment that must remain operable following the design level earthquake for the project site shall be certified as operable based on shake table testing as specified in Section 13.2.5 of ASCE 7-10, or experience and historical data as outlined in Section 13.2.6 of ASCE 7-10 while meeting the scheduled and detailed requirements of the project.

PLUMBING SHEET LIST					
Sheet Number	Sheet Name				
P001	PLUMBING - SCHEDULES & NOTES				
P002	PLUMBING - DETAILS				
P003	PLUMBING - DETAILS				
P004	PLUMBING - DETAILS				
P100	PLUMBING - UNDERGROUND PLAN				
P101	PLUMBING - FIRST FLOOR PLAN				
P201	SANITARY - FIRST FLOOR PLAN				
P202	SANITARY - ROOF PLAN				
P301	MED GAS - FIRST FLOOR PLAN				
P401	DOMESTIC WATER RISER				
P402	SANITARY AND NATURAL GAS RISER				



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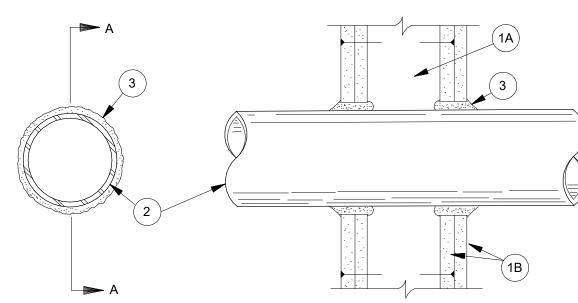




04/12/2024

PLUMBING -

SYSTEM NO. W-L-1001 JUNE 15, 2005 F RATINGS - 1, 2, 3 AND 4 HR (SEE ITEMS 2 AND 3) T RATINGS - 0, 1, 2, 3, AND 4 HR (SEE ITEM 3) L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT L RATING AT 400 F - LESS THAN 1 CFM/SQ FT



- 1. WALL ASSEMBLY THE 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION
 - A. STUDS WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 H FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.
 - B. GYPSUM BOARD* NOM OR†IN. (13 OR 16 MM) THICK, 4 FT. (122 H 1/20CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 26 IN. (660 MM).
- 2. THROUGH-PENETRANT ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN / (0 MM). (POINT CONTACT) TO MAX 2 IN. (51 MM) PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
 - A. STEEL PIPE NOM 24 IN. (610 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
 - B. IRON PIPE NOM 24 IN. (610 MM) DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOM 12 IN (305 MM) DIAM (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE.
 - C. CONDUIT NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING
 - D. COPPER TUBING NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING
 - E. COPPER PIPE NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR
 - F. THROUGH PENETRATING PRODUCT* FLEXIBLE METAL PIPING THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED: 1. NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING.
 - PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. OMEGA FLEX INC 2. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING
 - PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OFFLOOR OR WALL ASSEMBLY. GASTITE, DIV OF TITEFLEX 3. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING.

PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF

3. FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT - MIN 5/8., 1-1/4,1-7/8 AND 2-1/2 IN. (16, 32, 48 AND 64 MM) THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES. RESPECTIVELY. APPLIED WITHIN ANNULUS. FLUSH 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OFWALL. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. AS TABULATED BELOW:

Maximum Pipe or Conduit Diameter Inches	F Rating Hours	F Rating Hours
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

+WHEN COPPER PIPE IS USED, T RATING IS 0 H.3M COMPANY - CP 25WB+ OR FB-3000 WT.

FLOOR OR WALL ASSEMBLY. WARD MFG INC

*BEARING THE UL CLASSIFICATION MARK LAST UPDATED ON 2005-06-15

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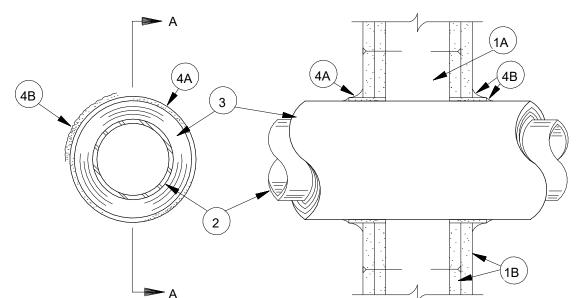
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THROUGH-PENETRATION FIRESTOP SYSTEMS W-L-1001

F RATINGS - 1 AND 2 HR (SEE ITEM 1) T RATINGS - 3/4, 1 AND 1 1/2 HR (SEE ITEM 3) L RATING AT AMBIENT - 2 CFM/SQ FT L RATING AT 400 F - LESS THAN 1 CFM/SQ FT

SYSTEM NO. W-L-5001

MAY 19, 2005



SECTION A-A

- 1. WALL ASSEMBLY THE 1 OR 2 HR FIRE-RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300, U400 OR V400 SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
- A. STUDS WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM)
- B. GYPSUM BOARD* NOM 5/8 IN. (16 MM) THICK, 4 FT (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 14-1/2 (368MM) IN FOR WOOD STUD WALLS AND 18 IN. (457 MM) FOR
- THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS 1 HR WHEN INSTALLED IN A 1 HR FIRE RATED WALL AND 2 HR WHEN INSTALLED IN A 2 HR FIRE RATED WALL.
- 2. THROUGH PENETRANTS ONE METALLIC PIPE OR TUBING TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. PIPE OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR TUBING MAY
 - A. STEEL PIPE NOM 12 IN. (305 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
 - B. COPPER TUBING NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
- C. COPPER PIPE NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
- 3. PIPE COVERING* NOM 1 OR 2 IN. (25 OR 51 MM) THICK HOLLOW CYLINDRICAL HEAVY DENSITY (MIN 3.5 PCF OR 56 KG/M3) GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH AN ALL SERVICE JACKET. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OR FACTORY-APPLIED SELF-SEALING LAP TAPE. TRANSVERSE JOINTS SEALED WITH METAL FASTENERS OR WITH BUTT STRIP TAPE SUPPLIED WITH THE PRODUCT. WHEN NOM 1 IN. (25 MM) THICK PIPE COVERING IS USED, THE ANNULAR SPACE BETWEEN THE PIPE COVERING AND THE CIRCULAR CUTOUT IN THE GYPSUM WALLBOARD LAYERS ON EACH SIDE OF THE WALL SHALL BE MIN 1/4 IN. (6 MM) TO MAX 3/8 IN. (10 MM) WHEN NOM 2 IN. (51 MM) THICK PIPE COVERING IS USED, THE ANNULAR SPACE BETWEEN THE
- PIPE COVERING AND THE CIRCULAR CUTOUT IN THE GYPSUM BOARD LAYERS ON EACH SIDE OF THE WALL SHALL BE MIN 1/2 IN. (13 MM) TO MAX 3/4 IN. (19 MM) SEE PIPE AND EQUIPMENT COVERING MATERIALS (BRGU) CATEGORY IN BUILDING MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. ANY PIPE COVERING MATERIAL MEETING THE ABOVE SPECIFICATIONS AND BEARING THE UL CLASSIFICATION MARKING WITH A FLAME SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR LESS MAY BE USED.
- THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS 3/4 HR WHEN NOM 1 IN. (25 MM) THICK PIPE COVERING IS USED. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS 1 HR AND 1-1/2 HR WHEN NOM 2 IN. (52 MM) THICK PIPE COVERING IS USED WITH 1 HR AND 2 HR FIRE RATED WALLS, RESPECTIVELY.
- 4. FIRESTOP SYSTEM INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:
- A. FILL, VOID OR CAVITY MATERIALS* WRAP STRIP NOM 1/4 IN. (6 MM) THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL, SUPPLIED IN 2 IN. (51 MM) WIDE STRIPS. NOM 2 IN. (51 MM) WIDE STRIP TIGHTLY WRAPPED AROUND PIPE COVERING (FOIL SIDE OUT) WITH SEAM BUTTED. WRAP STRIP LAYER SECURELY BOUND WITH STEEL WIRE OR ALUMINUM FOIL TAPE AND SLID INTO ANNULAR SPACE APPROX 1-1/4 IN. (32 MM) SUCH THAT APPROX 3/4 IN. (19 MM) OF THE WRAP STRIP WIDTH PROTRUDES FROM THE WALL SURFACE. ONE LAYER OF WRAP STRIP IS REQUIRED WHEN NOM 1 IN. (25 MM) THICK PIPE COVERING IS USED. TWO LAYERS OF WRAP STRIP ARE REQUIRED WHEN NOM 2 IN. (51 MM) THICK PIPE COVERING IS USED.

3M COMPANY - FS-195+

No Scale

- B. FILL, VOID OR CAVITY MATERIALS* CAULK OR SEALANT 15/32 MIN 1/4 IN. (6 MM) DIAM CONTINUOUS BEAD APPLIED TO THE WRAP STRIP/WALL INTERFACE AND TOTHE EXPOSED EDGE OF THE WRAP STRIP LAYER APPROX 3/4 IN. (19 MM) FROM THE
- 3M COMPANY CP 25WB+, IC 15WB+, FIREDAM 150+ CAULK OR FB-3000 WT SEALANT *BEARING THE UL CLASSIFICATION MARK LAST UPDATED ON 2005-05-19 UL LISTED AND CLASSIFIED PRODUCTS UL RECOGNIZED COMPONENTS PRODUCTS CERTIFIED FOR CANADA

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THROUGH-PENETRATION FIRESTOP SYSTEMS W-L-5001

THROUGH-PENETRATION FIRESTOP SYSTEMS C-AJ-5002

SYSTEM NO. C-AJ-5002 **SEPTEMBER 03, 2004**

(FORMERLY SYSTEM NO. 91-B)

F RATINGS - 2 AND 3 HR (SEE ITEMS 1A AND 4)

T RATINGS - 0, 1/2 AND 1 HR (SEE ITEMS 1A AND 4)

L RATING AT AMBIENT - 2 CFM/SQ FT

L RATING AT 400 F - LESS THAN 1 CFM/SQ FT

1. FLOOR OR WALL ASSEMBLY - MIN 2-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR

1A. STEEL SLEEVE - (OPTIONAL, NOT SHOWN) - NOM 36 IN. DIAM (OR SMALLER)

2. PIPE - NOM 4 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER PIPE, NOM

15 IN. DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE,

NOM 30 IN. DIAM (OR SMALLER) CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE

PIPE OR NOM 30 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE

3. PIPE COVERING* - NOM 1, 2 OR 3 IN. THICK HOLLOW CYLINDRICAL HEAVY DENSITY

(MIN. 3.5 PCF) GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH AN ALL SERVICE

SEE PIPE AND EQUIPMENT COVERING - MATERIALS* (BRGU) CATEGORY IN BUILDING

4. FIRESTOP SYSTEM - THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:

SUPPLIED IN 2 IN. WIDE BY 24 IN. LONG STRIPS. NOM 2 IN. WIDE STRIPS

PIPE COVERING THICKNESS, AS SHOWN IN THE FOLLOWING TABLE:

Pipe Diameter | Pipe Covering | Space

B. FILL, VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - APPLIED TO FILL

1/2 IN., FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL.

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THE ANNULAR SPACE (OVER EDGES OF WRAP STRIP LAYERS) TO A MIN DEPTH OF

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Inches

12

12

12

20

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FOLLOW-UP SERVICE. ALWAYS LOOK FOR THE MARK ON THE PRODUCT.

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3M COMPANY - CP 25WB+ OR FB-3000 WT

Nominal

Thkns In.

A. FILL, VOID OR CAVITY MATERIALS* - WRAP STRIP - NOM 1/4 IN. THICK

JACKET. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OR FACTORY-APPLIED

MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. ANY PIPE COVERING MATERIAL

MEETING THE ABOVE SPECIFICATIONS AND BEARING THE UL CLASSIFICATION MARKING

WITH A FLAME SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR

INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL,

TIGHTLY-WRAPPED AROUND PIPE COVERING (FOIL SIDE EXPOSED) TO FILL ANNULAR

WITH THE BUTTED SEAMS IN SUCCESSIVE LAYERS STAGGERED. WRAP STRIP LAYERS

ANNULAR SPACE SUCH THAT THE TOP EDGES ARE RECESSED MIN 1/2 IN. FORM TOP

SPACE. EACH LAYER OF WRAP STRIP IS TO BE INSTALLED WITH A BUTTED SEAM

SECURELY BOUND WITH STEEL WIRE OR ALUMINUM FOIL TAPE AND SLIDE INTO

SURFACE OF FLOOR. IN WALL ASSEMBLIES, THE WRAP STRIP LAYERS SHALL BE

INSTALLED IN THE SAME MANNER USED FOR FLOOR ASSEMBLIES BUT SHALL BE

INSTALLED SYMMETRICALLY ON BOTH SIDES OF THE WALL. THE MIN NUMBER OF

WRAP STRIP LAYERS REQUIRED IS DEPENDENT UPON THE MAX PIPE SIZE AND THE

1/4 to 3/8

1/2 to 5/8

1/4 to 3/8

1/4 to 3/8

1/2 to 5/8

1/2 to 1

3/4 to 1 1/4

1 to 1 1/2

Min No.

Inches Strip Layers Hour Hour

of Wrap Rating Rating

2

2

2

1/2

SELF-SEALING LAP TAPE. TRANSVERSE JOINTS SECURED WITH METAL FASTENERS OR

CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS 36 IN.

USED, F RATING IS 2 HR AND T RATING IS 0 HR.

WITH BUTT STRIP TAPE SUPPLIED WITH THE PRODUCT.

NAMES OF MANUFACTURERS.

WALL ASSEMBLY.

LESS MAY BE USED.

Floor or Wall

Thickness In.

2-1/2

2-1/2

2-1/2

4-1/2

4-1/2

4-1/2

4-1/2

4-1/2

3M COMPANY - FS-195+

LABORATORIES INC."

NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL

CONCRETE FLOOR OR WALL. SLEEVE TO BE FLUSH WITH OR PROJECT MAX 2 IN. FROM

TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL. WHEN STEEL SLEEVE IS

CENTERED IN THE OPENING AND RIGIDLY SUPPORTED ON BOTH SIDES OF THE FLOOR OR

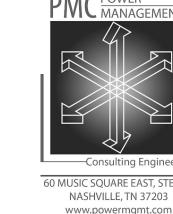
SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR

SCHEDULE 10 (OR HEAVIER) STEEL PIPE SLEEVE CAST INTO MIN 4-1/2 IN. THICK

SECTION A-A

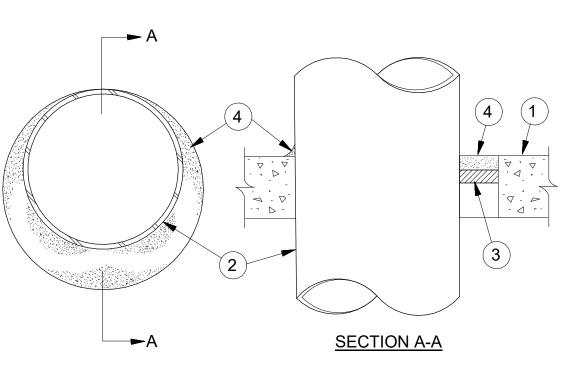
SYSTEM NO. C-AJ-1001 MARCH 05, 2007 F RATING - 3 HR T RATING - 0 HR

W RATING - CLASS 1 (SEE ITEM 4)



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DESIGNER: JMG ENGINEER: GHA



1. FLOOR OR WALL ASSEMBLY - MIN 4-1/2 IN. (114 MM) THICK LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M3) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF CIRCULAR THROUGH OPENING IS 32-1/2 IN. (826 MM). SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

1A. STEEL SLEEVE - (OPTIONAL, NOT SHOWN) - NOM 12 IN. (305 MM) DIAM (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE SLEEVE CAST INTO CONCRETE FLOOR OR WALL. SLEEVE TO BE FLUSH WITH OR PROJECT MAX 2 IN. (51 MM) FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL.

2. THROUGH - PENETRANT - ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN. (0 MM, POINT CONTACT) TO MAX 1-3/8 IN. (35 MM). PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BEUSED:

A. STEEL PIPE - NOM 30 IN. (762 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.

A1. IRON PIPE - NOM 30 IN. (762 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.

B. CONDUIT - NOM 6 IN. (152 MM) DIAM (OR SMALLER) RIGID STEEL CONDUIT. C. CONDUIT - NOM 4 IN. (152 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.

3. PACKING MATERIAL - POLYETHYLENE BACKER ROD OR NOM 1 IN. (25 MM) THICKNESS OF TIGHTLY-PACKED CERAMIC (ALUMINA SILICA) FIBER BLANKET, MINERAL WOOL BATT OR GLASS FIBER INSULATION MATERIAL USED AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF SOLID CONCRETE OR CONCRETE BLOCK WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4). AS AN ALTERNATE WHEN MAX PIPE SIZE IS 10 IN. (254 MM) DIAM AND WHEN MAX ANNULAR SPACE IS 1 IN. (25 MM), A MIN 1 IN. (25 MM) THICKNESS OF TIGHTLY-PACKED CERAMIC FIBER BLANKET OR MINERAL WOOL BATT PACKING MATERIAL MAY BE RECESSED MIN 1/2 IN. (13 MM) FROM BOTTOM SURFACE OF FLOOR OR FROM EITHER SIDE OF SOLID

4. FILL, VOID OR CAVITY MATERIALS* - CAULK - APPLIED TO FILL THE ANNULAR SPACE TO THE MIN THICKNESS SHOWN IN THE FOLLOWING TABLE:

Maximum Pipe Diameter Inches	Maximum Annular Space Inches	Packing Material Type (a)	Minimum Caulk Thickness Inches
10 (254)	1 (25)	BR, CF, GF or MW	1/2 (13) (B)
10 (254)	1 (25)	CF or MW	1/2 (13) (C)
30 (762)	2 1/2 (64)	BR, CF, GF or MW	1 (25) (B)

(A) BR=POLYETHYLENE BACKER ROD. CF=CERAMIC FIBER BLANKET.

GF=GLASS FIBER INSULATION.

MW=MINERAL-WOOL BATT.

(B) CAULK INSTALLED FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL (C) CAULK INSTALLED FLUSH WITH BOTTOM SURFACE OF FLOOR OR ONE SURFACE OF SOLID (NON-CONCRETE BLOCK) WALL

3M COMPANY - TYPE CP 25WB+ OR FB-3000 WT

(NOTE - W RATING APPLIES ONLY WHEN FB-3000 WT IS USED.)

*BEARING THE UL CLASSIFICATION MARK LAST UPDATED ON 2007-03-05

UL LISTED AND CLASSIFIED PRODUCTS UL RECOGNIZED COMPONENTS PRODUCTS CERTIFIED FOR CANADA

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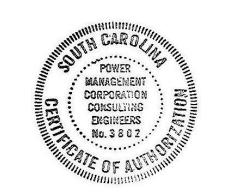
THROUGH-PENETRATION FIRESTOP SYSTEMS C-AJ-1001

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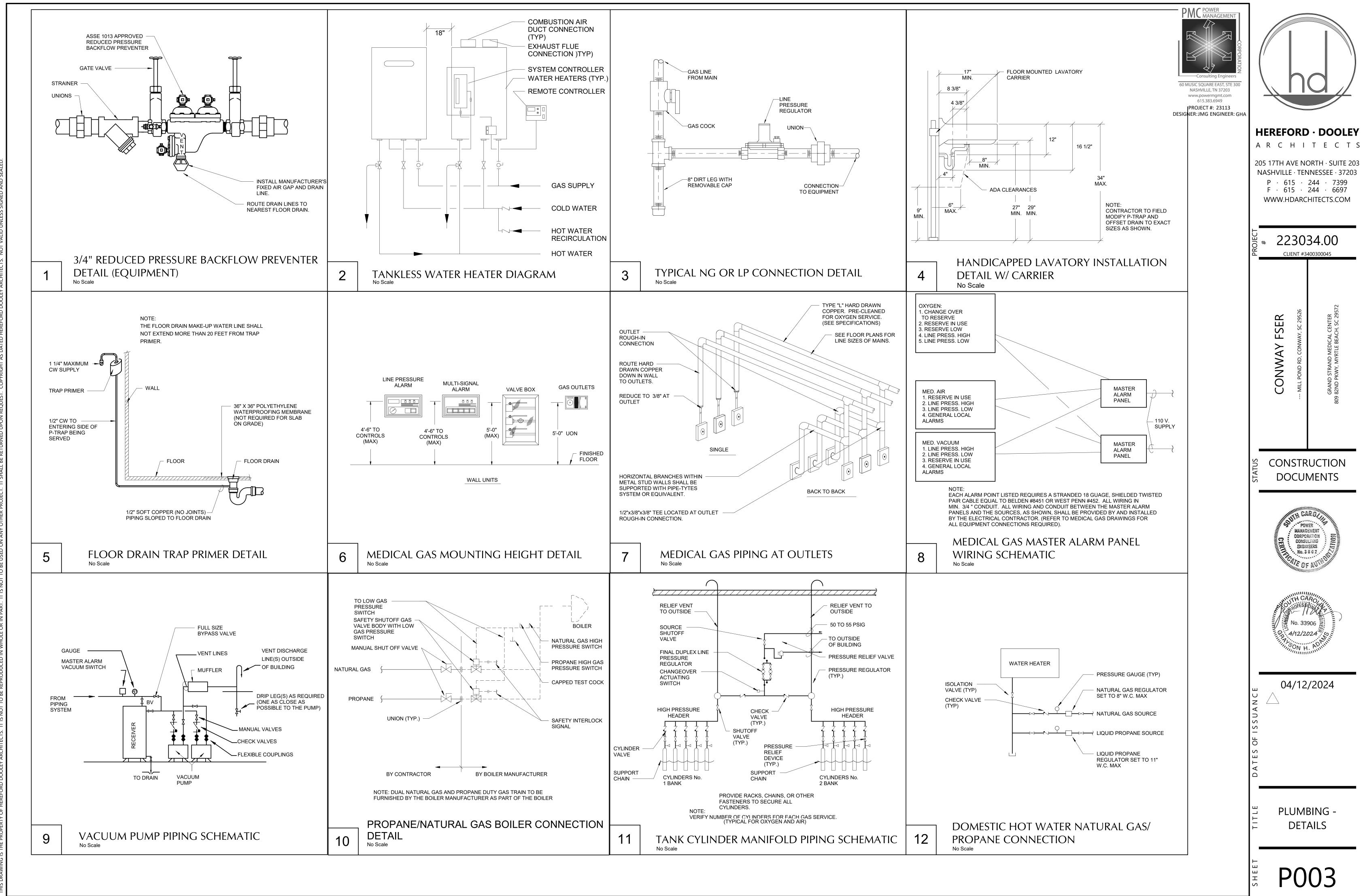
CONSTRUCTION **DOCUMENTS**

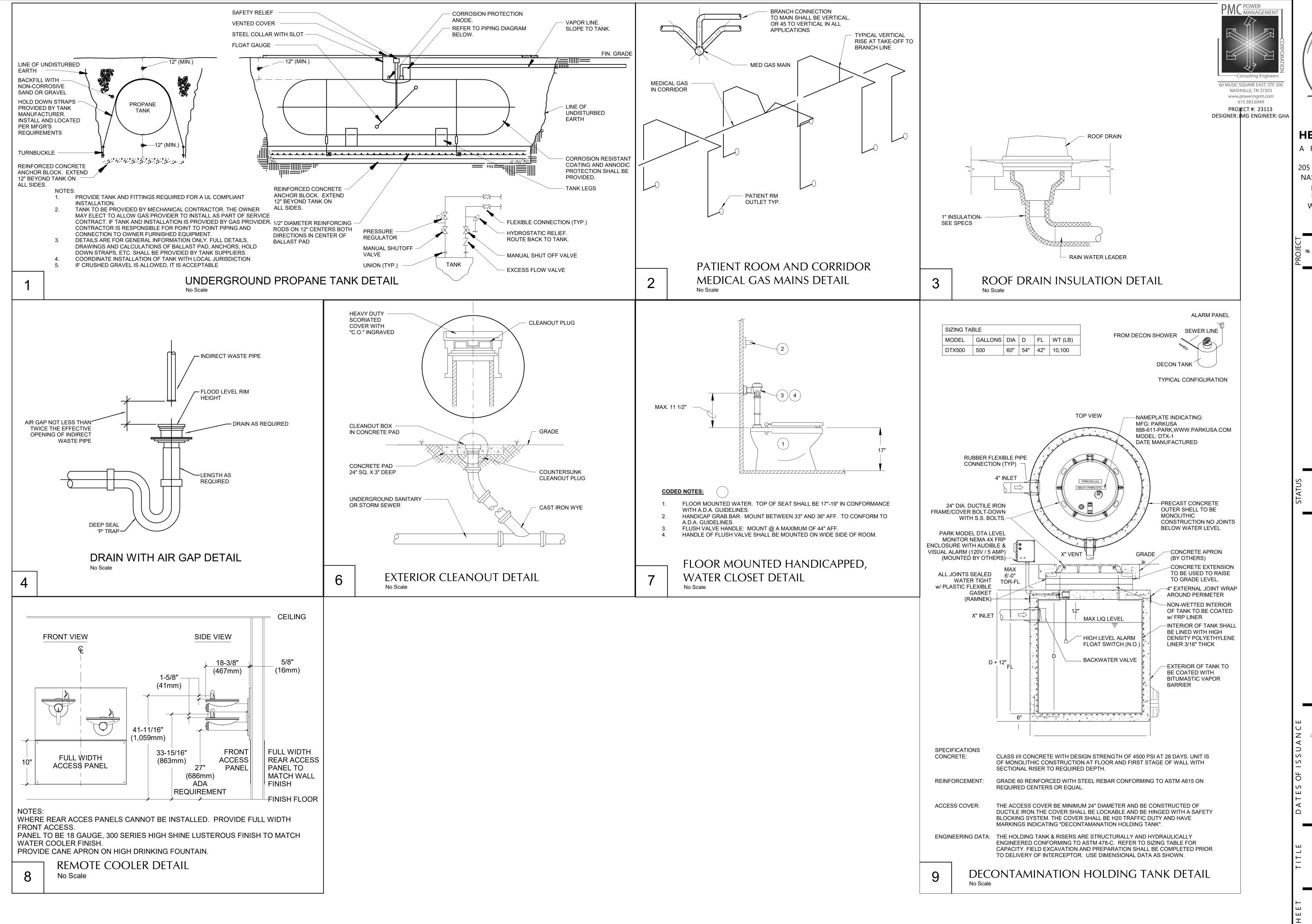




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PLUMBING -





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CONWAY FSER
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S CONSTRUCTION DOCUMENTS

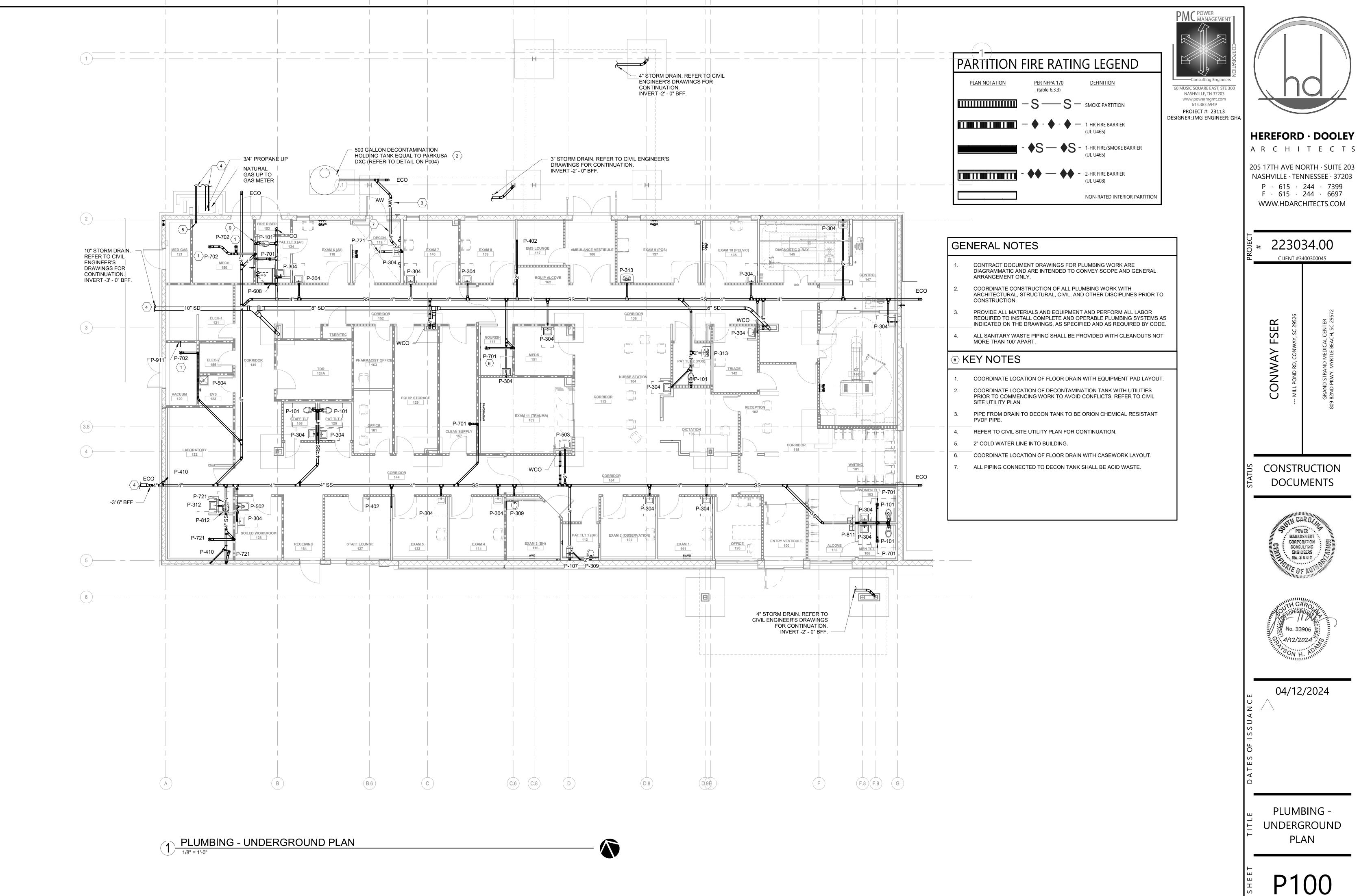




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PLUMBING -DETAILS

P004



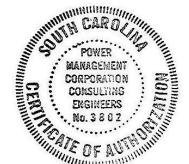
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PLUMBING -UNDERGROUND PLAN

PARTITION FIRE RATING LEGEND

(table 6.3.3)

- **\$** - **\$** - 1-HR FIRE/SMOKE BARRIER (UL U465)

- 2-HR FIRE BARRIER (UL U408)

NON-RATED INTERIOR PARTITION

Consulting Engineers

50 MUSIC SQUARE EAST, STE 300
NASHVILLE, TN 37203

Consulting Engineers

60 MUSIC SQUARE EAST, STE 300

NASHVILLE, TN 37203

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CONWAY FSER
--- MILL POND RD, CONWAY, SC 29526
GRAND STRAND MEDICAL CENTER
809 82ND PKWY, MYRTLE BEACH, SC 29572

CONSTRUCTION DOCUMENTS





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PLUMBING - FIRST
FLOOR PLAN

P101

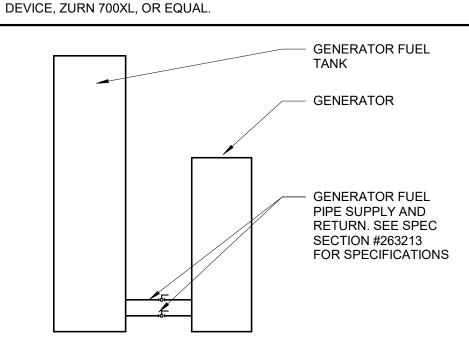
GENERAL NOTES

- . CONTRACT DOCUMENT DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY.
- 2. COORDINATE CONSTRUCTION OF ALL PLUMBING WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND OTHER DISCIPLINES PRIOR TO CONSTRUCTION.
- 3. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- 4. PROVIDE SHUT-OFF VALVES IN ALL DOMESTIC WATER PIPING SYSTEM BRANCHES IN WHICH BRANCH PIPING SERVES TWO OR MORE FIXTURES NEAR MAIN LINE CONNECTION.
- 5. UNLESS OTHERWISE NOTED, ALL DOMESTIC COLD AND HOT WATER PIPING SHALL BE 1/2" SIZE.
- 6. UNLESS OTHERWISE NOTED, ALL DOMESTIC COLD WATER PIPING TO FLUSH VALVE FIXTURES SHALL BE A MINIMUM OF 1" SIZE.

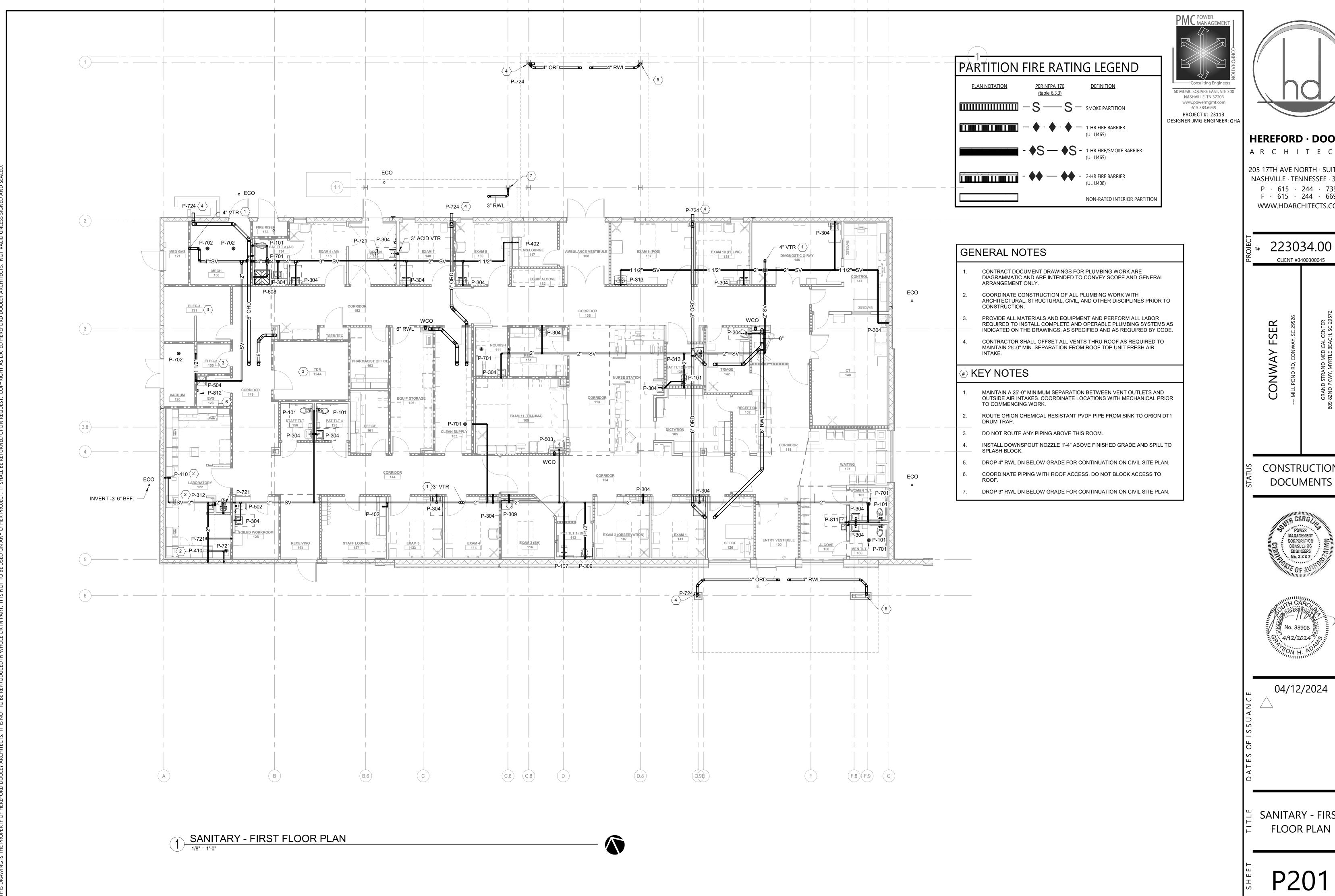
KEY NOTES

- 1. PROVIDE AND INSTALL HOT WATER RECIRCULATION BALANCE VALVE AT THIS LOCATION. SET TO 2 GPM.
- 3/4" UP TO ROOF HYDRANT P-819. PROVIDE SHUT-OFF VALVE IN VERTICAL. ROUTE DRAIN PORT PIPING TO FLOOR DRAIN IN MECHANICAL ROOM.
- COORDINATE PIPING WITH ROOF ACCESS. DO NOT BLOCK ACCESS TO
- 6. CONNECT ANALYZER WATER AND DRAIN LINE TO P-410. CONNECT DRAIN TO TAILPIECE ABOVE P-410 P-TRAP.
- 5. 3/4" 10 PSI PROPANE LINE UP FROM BELOW WITH EMERGENCY SHUT OFF VALVE TO REGULATOR. LINE PRESSURE SHALL BE 2 PSI DOWNSTREAM OF REGULATOR. ROUTE PROPANE LINE TO BOILER CONNECTION.
- WH-1 AND WH-2. PROVIDE 18" CLEAR ON ALL SIDES OF ASSEMBLY. MOUNT MINIMUM 5'-0" AFF. REFER TO DETAILS AND SCHEDULE FOR CLARIFICATION.
- CONNECT 3/4" NON-POTABLE WATER TO BOILER MAKE UP WATER CONNECTION. SEE MECHANICAL DETAILS FOR BOILER MAKE UP WATER
- 8. CONNECT WATER TO ANALYZER FROM MILLIPORE UNIT AND ROUTE DRAIN TO DRAIN WITH AIR GAP PER MANUFACTURERS RECOMMENDATION.
- 9. PROVIDE TRUEBRO SHROUD, OR EQUAL, TO CONCEAL P-TRAP, SUPPLIES, AND STOPS.
- 10. GAS METER. CONTRACTOR SHALL ARRANGE AND COORDINATE WITH LOCAL GAS UTILITY FOR METER AND SERVICE AT THIS LOCATION. CONTRACTOR TO PAY ALL CHARGES, IF ANY, FOR THE GAS LOAD.
- DO NOT ROUTE ANY PIPING ABOVE TDR 124A OR ELEC.
- 2" CW FROM BELOW. PROVIDE PRESSURE REDUCING VALVE NOT TO EXCEED 80 PSI AND BUILDING SHUT-OFF VALVE IN VERTICAL RISE.
- 13. PROVIDE BACKFLOW PREVENTION DEVICE, ZURN 700XL, OR EQUAL.
- CONNECT 3/4" CW WITH SHOCK ABSORBER TO HUMIDIFIER. VERIFY FINAL LOCATION WITH HVAC DRAWINGS.
- 5. 3/8" CW LINE TO DRAIN COOLER. PROVIDE BACKFLOW PREVENTION

ENLARGED GENERATOR ENCLOSURE



PLUMBING - FIRST FLOOR PLAN



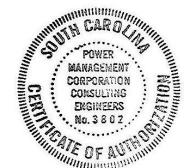


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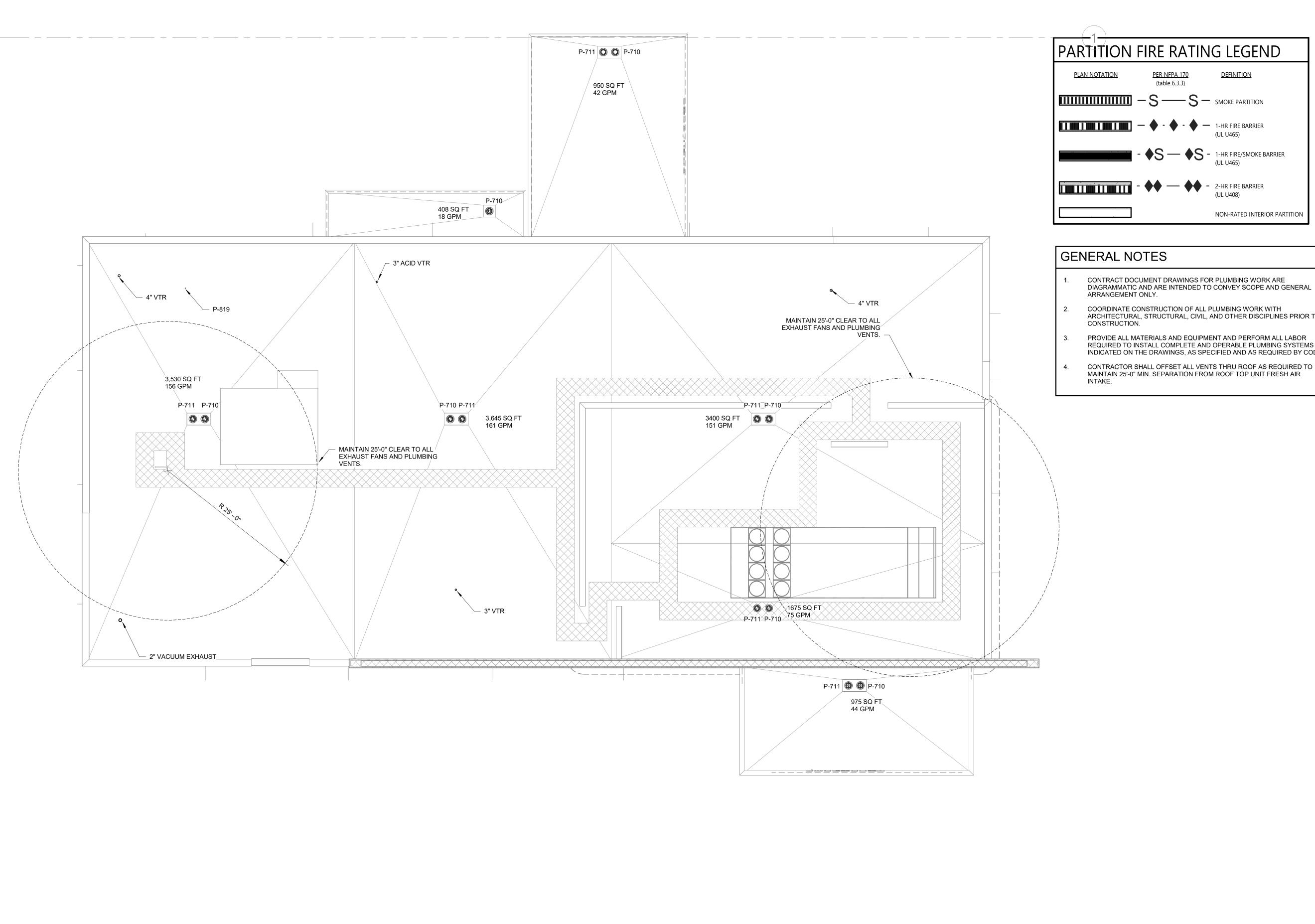
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≝ SANITARY - FIRST



SANITARY - ROOF PLAN

1/8" = 1'-0"



<u>DEFINITION</u>

-S-S-SMOKE PARTITION

NON-RATED INTERIOR PARTITION

- CONTRACT DOCUMENT DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL
- COORDINATE CONSTRUCTION OF ALL PLUMBING WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND OTHER DISCIPLINES PRIOR TO CONSTRUCTION.
- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.



60 MUSIC SQUARE EAST, STE 300

NASHVILLE, TN 37203

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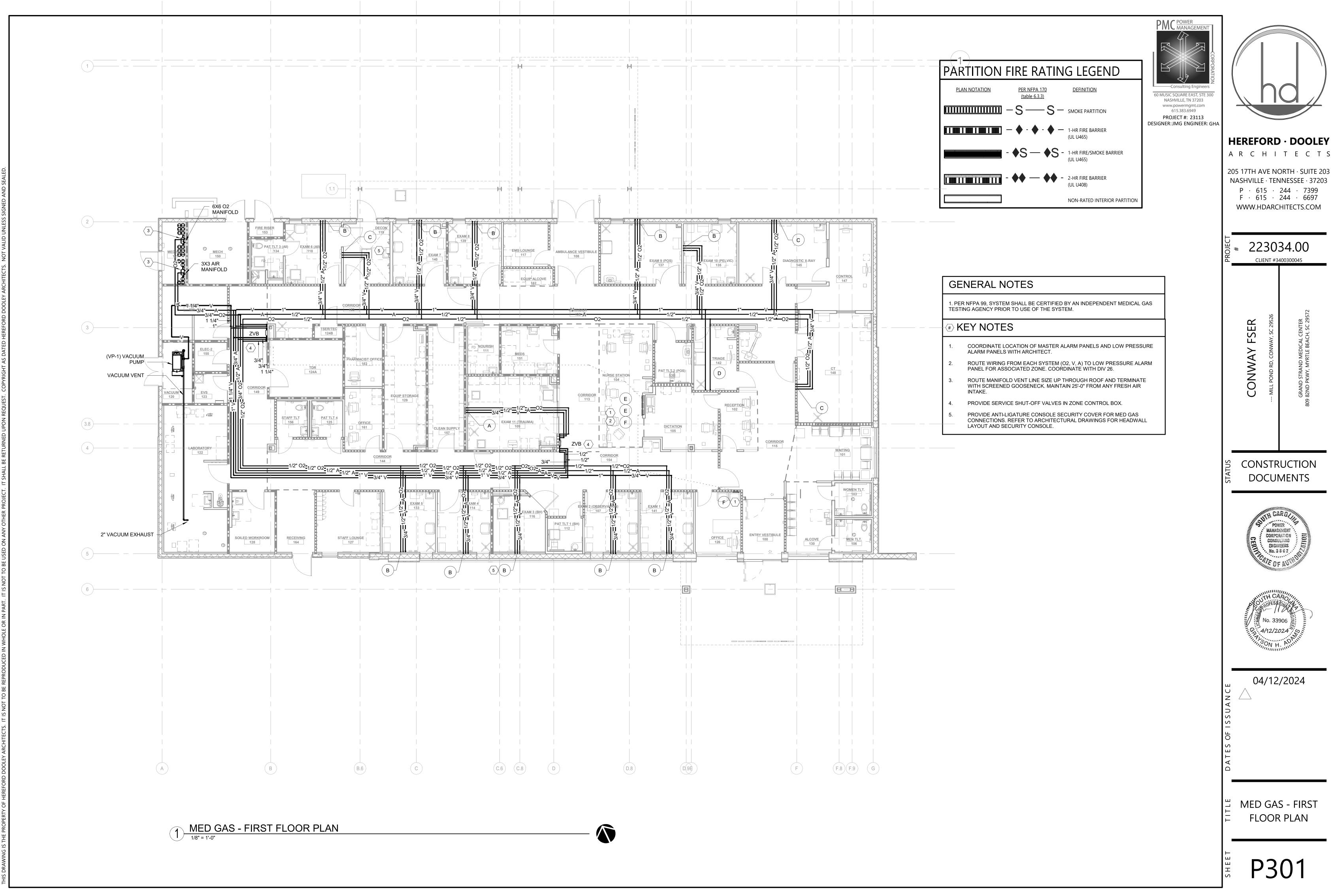
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□ SANITARY - ROOF PLAN





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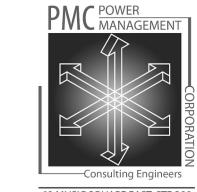


04/12/2024

MED GAS - FIRST FLOOR PLAN

NOTE:

SHOCKTROL TO BE ZURN SERIES Z-1700 OR EQUAL. SIZE AS INDICATED ON WATER RISER DIAGRAM. PROVIDE ACCESS TO ALL SHOCKTROLS THRU ACCESS PANELS, LAY-IN CEILINGS, WALL IN CHASE.

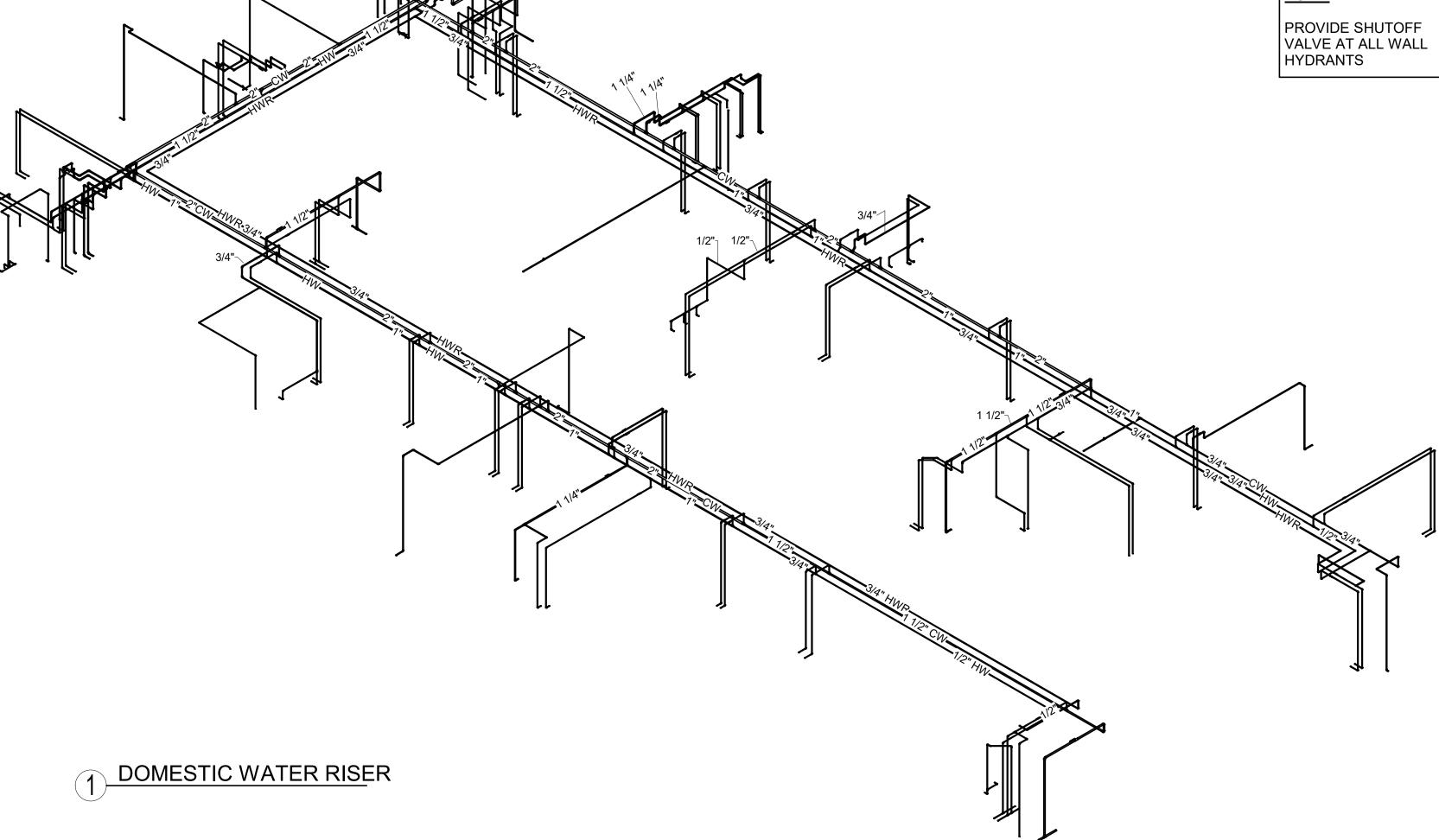


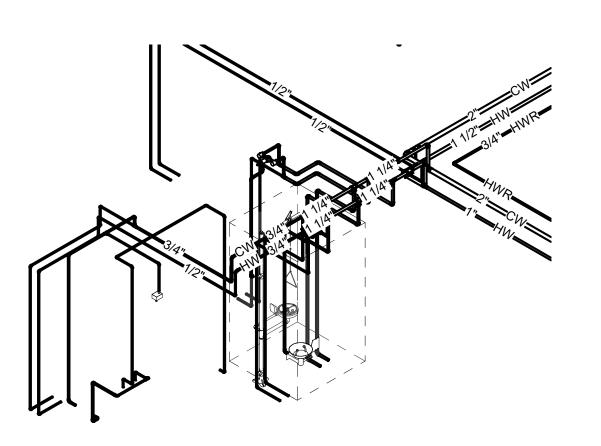
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DESIGNER: JMG ENGINEER: GHA

GENERAL NOTE:

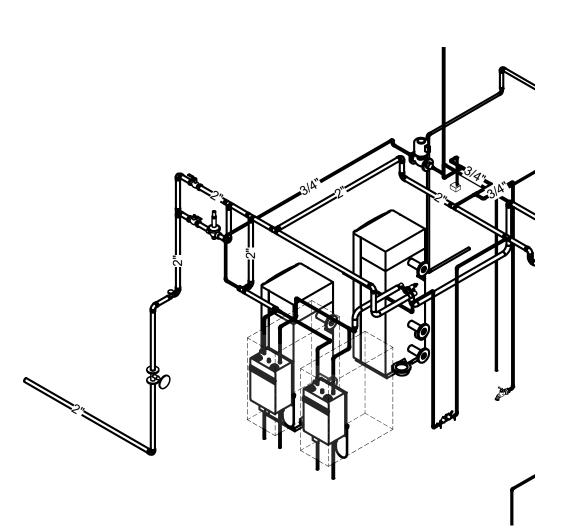
PROVIDE SHUT-OFF VALVES AT ALL BRANCH LINES NEAR MAIN LINE CONNECTION.

NOTE:





3 LABORATORY WATER RISER



2 MECH ROOM WATER RISER

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2	GF 809 82

S CONSTRUCTION DOCUMENTS





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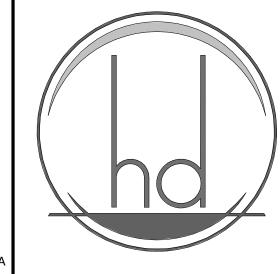


DOMESTIC WATER
RISER

P401



SEE CIVIL SITE PLAN FOR CONTINUATION



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SOLVE CONSTRUCTION DOCUMENTS





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SANITARY AND NATURAL GAS RISER

P402

