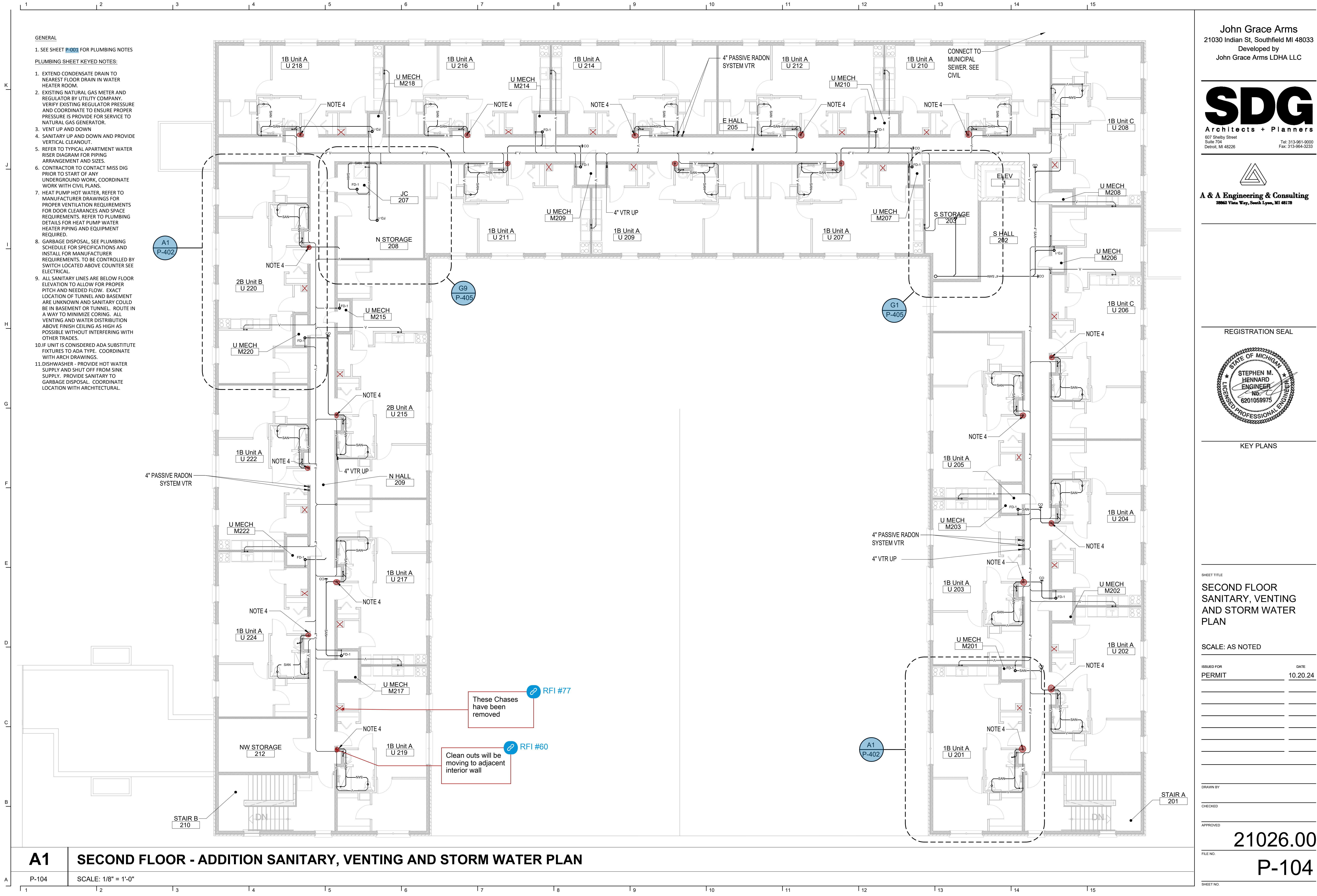


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A1 **SECOND FLOOR - ADDITION SANITARY, VENTING AND STORM WATER PLAN**

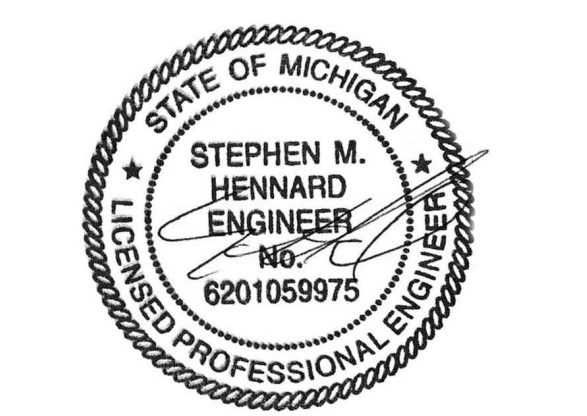
P-104 SCALE: 1/8" = 1'-0"

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28862 Vista Way, South Lyon, MI 48178

REGISTRATION SEAL



KEY PLANS

SHEET TITLE
**SECOND FLOOR
SANITARY, VENTING
AND STORM WATER
PLAN**

SCALE: AS NOTED

ISSUED FOR
PERMIT

DATE
10.20.24

DRAWN BY

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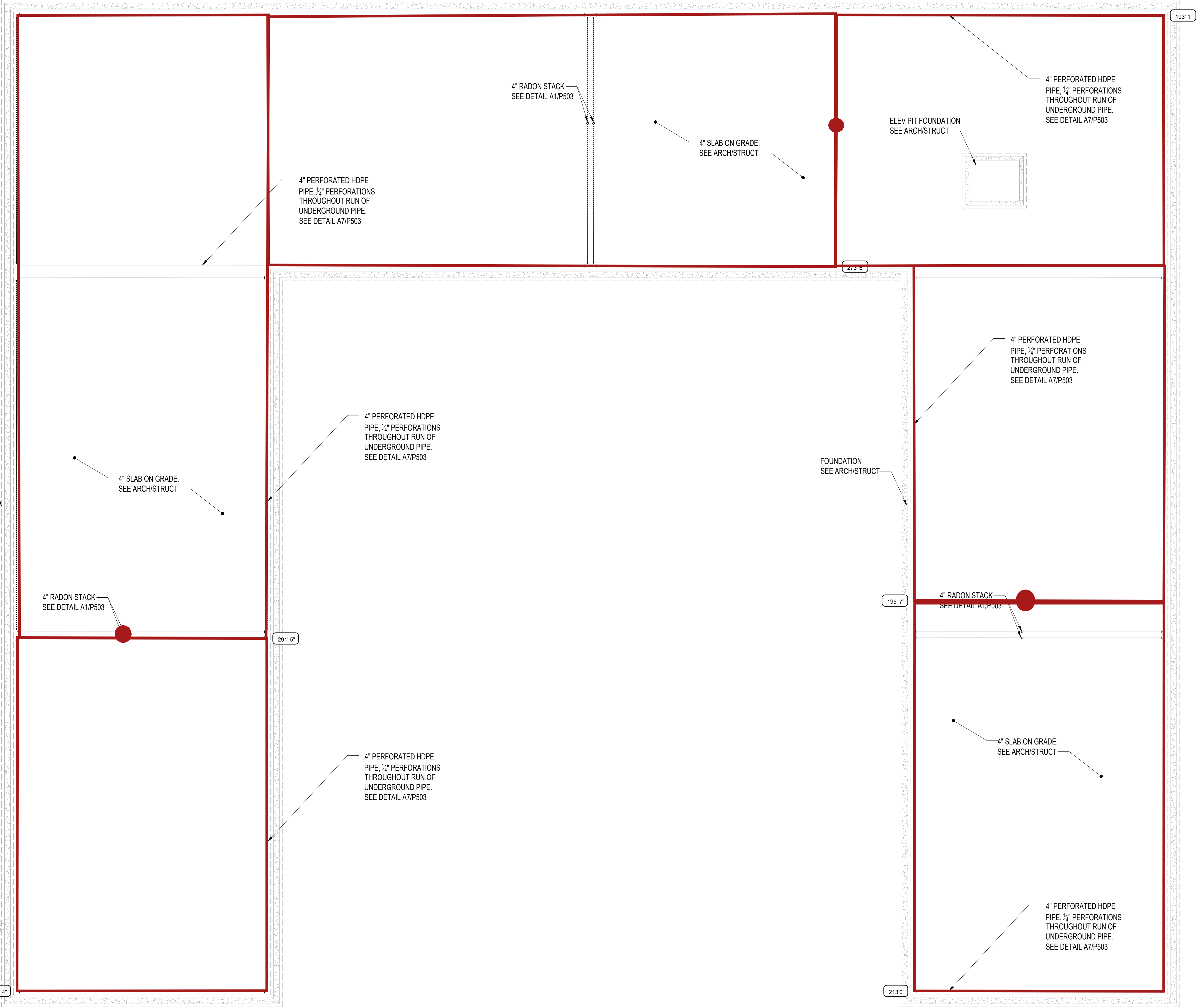
P-104

SHEET NO.

12/19/2024 6:28:17 PM

SHEET KEYED NOTES

- COVER ALL AREA WITHIN FOOTINGS WITH 10 MIL VAPOR BARRIER. SEE DETAILS H1 & H1 ON SHEET P-303
- OVERLAP JOINTS IN VAPOR BARRIER BY MINIM OF 12" WIDTH.
- ALL VAPOR BARRIER JOINTS TO BE CONTINUOUSLY TAPED
- RISER TO HAVE NO TRAPS OR OFFSETS
- PRIMER AND GLUE EACH CONNECTION
- LABEL RISER ON EACH FLOOR "RADON SYSTEM - DO NOT CUT"
- SECURE VERTICAL PIPE EVERY 6" W/ PVC CLAMP TO STUD OR FRAMING
- WHERE STACK PENETRATES ROOF, 10'-0" MINIMUM CLEARANCE TO ANY WINDOW, OA INTAKE OR OPENING TO THE BUILDING. SEE PLUMBING ROOF PLAN
- PROVIDE RADON EVACUATION PORTS AS REQUIRED BY CODE AND LOCAL AHJ, SEE DETAIL E1/A503



A1 PASSIVE RADON SYSTEM PLAN

P-105 SCALE: 1/8" = 1'-0"

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REGISTRATION SEAL



KEY PLANS

SHEET TITLE
**PASSIVE RADON
SYSTEM PLAN**

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P-105

SHEET NO.

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A circular professional engineer seal for the State of Michigan. The outer ring contains the text "STATE OF MICHIGAN" at the top and "LICENSED PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the name "STEPHEN M. HENNARD", the title "ENGINEER", and the license number "6201059975". A handwritten signature is written across the center of the seal.

SHEET TITLE

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FILE NO. _____

SHEET NO. _____

FIRST FLOOR - ADDITION PLUMBING PLAN

P-202

$$1/8'' = 1'-0''$$

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REGISTRATION SEAL



KEY PLANS

SHEET TITLE

SECOND FLOOR - ADDITION PLUMBING PLAN

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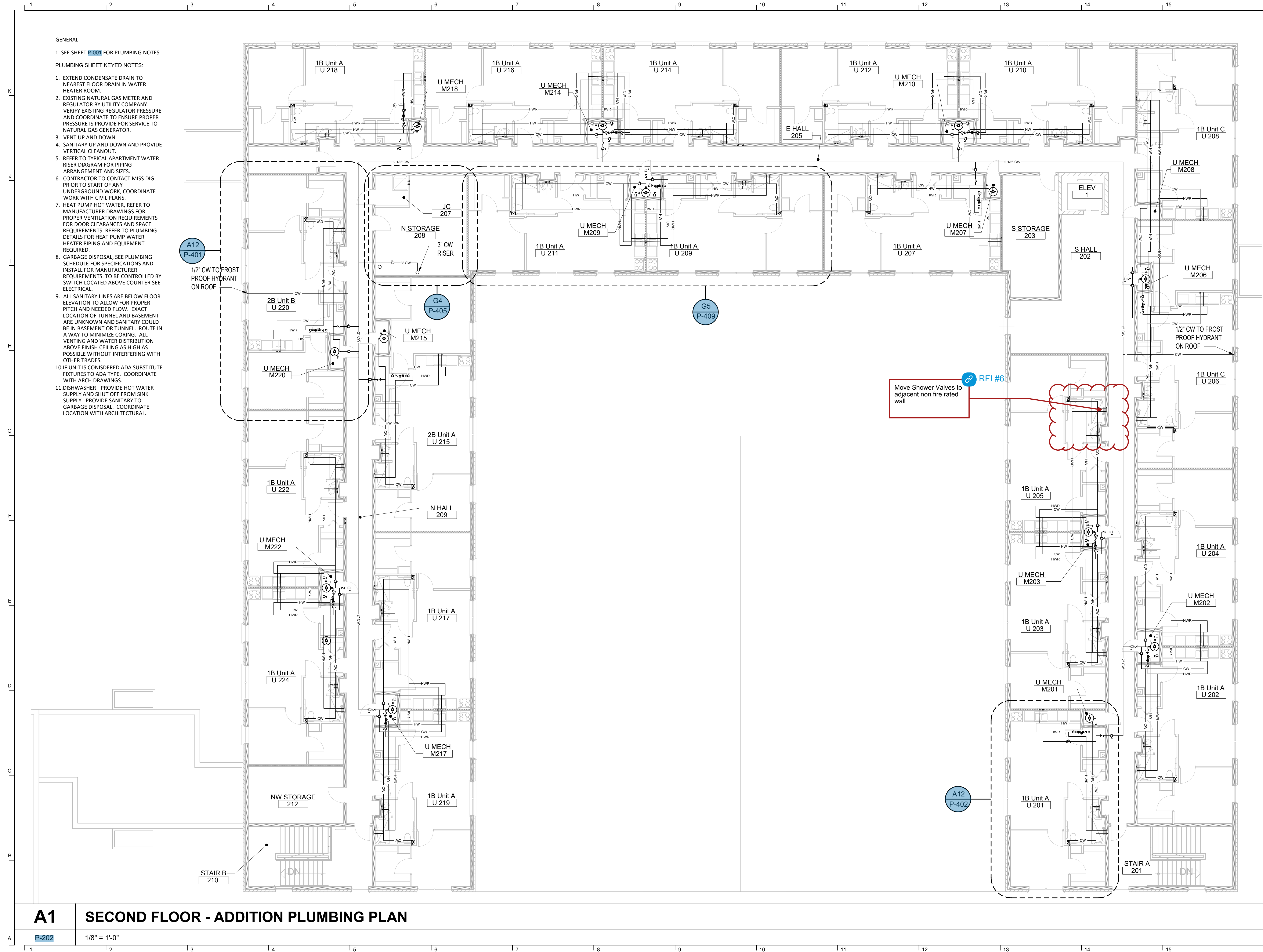
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SHEET NO.

21026.00

P-204





STATE OF MICHIGAN
STEPHEN M. HENNARD
ENGINEER
No. 6201059975
LICENSED PROFESSIONAL ENGINEER

KEY PLANS

ROOF - ADDITION PLUMBING PLAN

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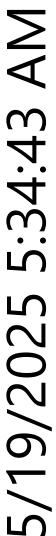
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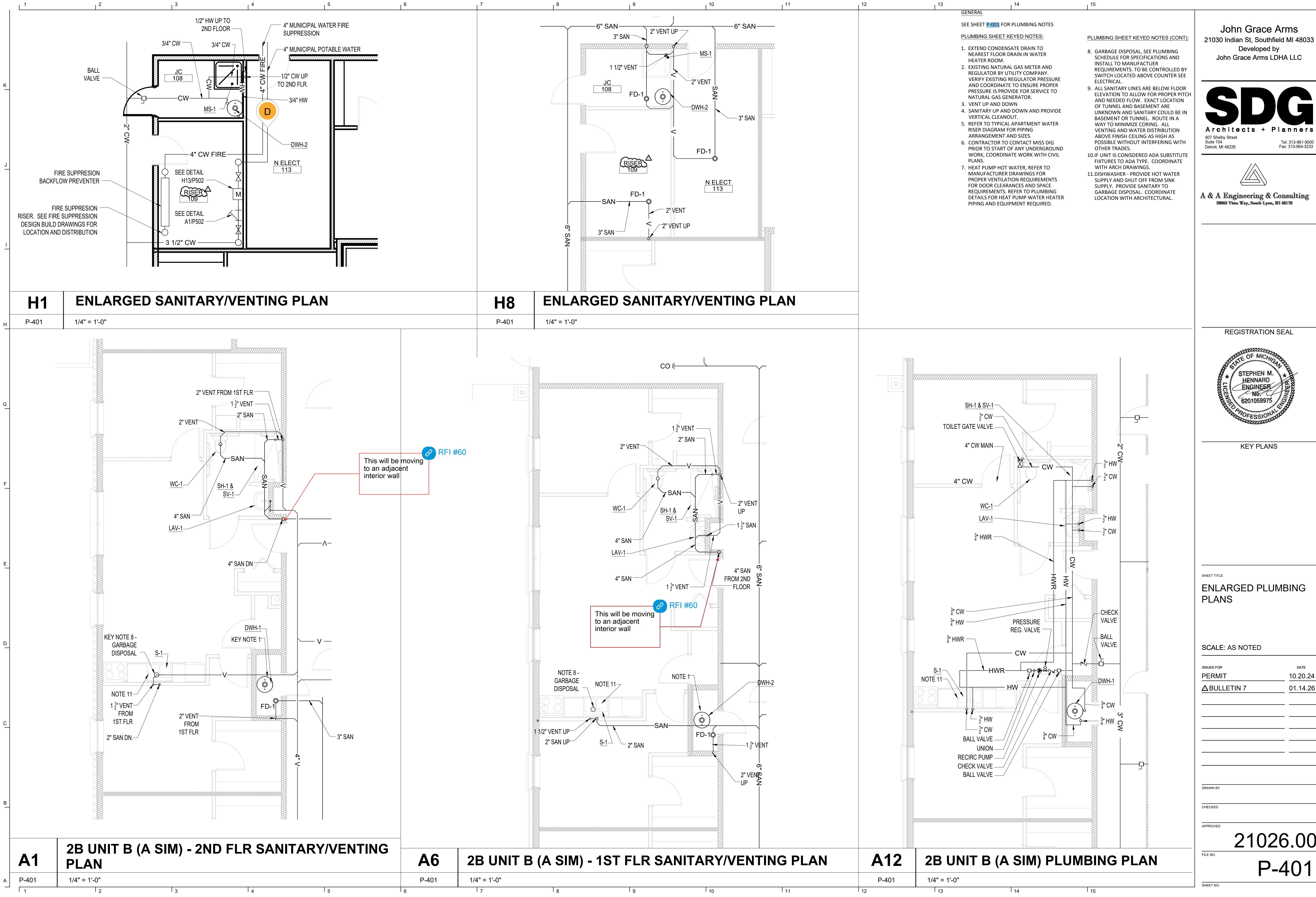
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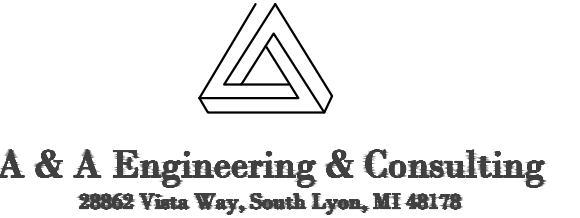
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REGISTRATION SEAL



KEY PLANS

ENLARGED PLUMBING PLANS

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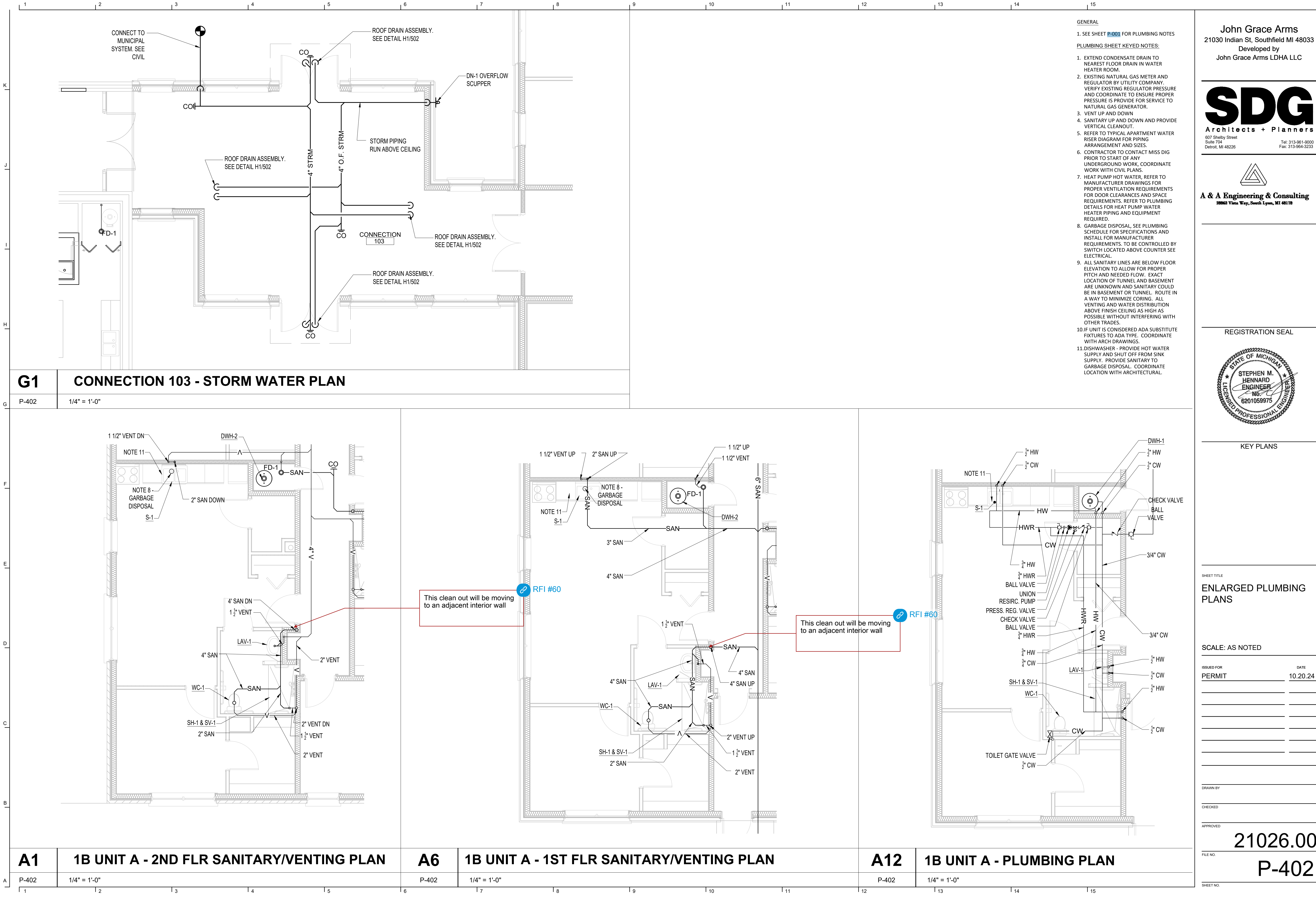
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Δ BULLETIN 7	01.14.26

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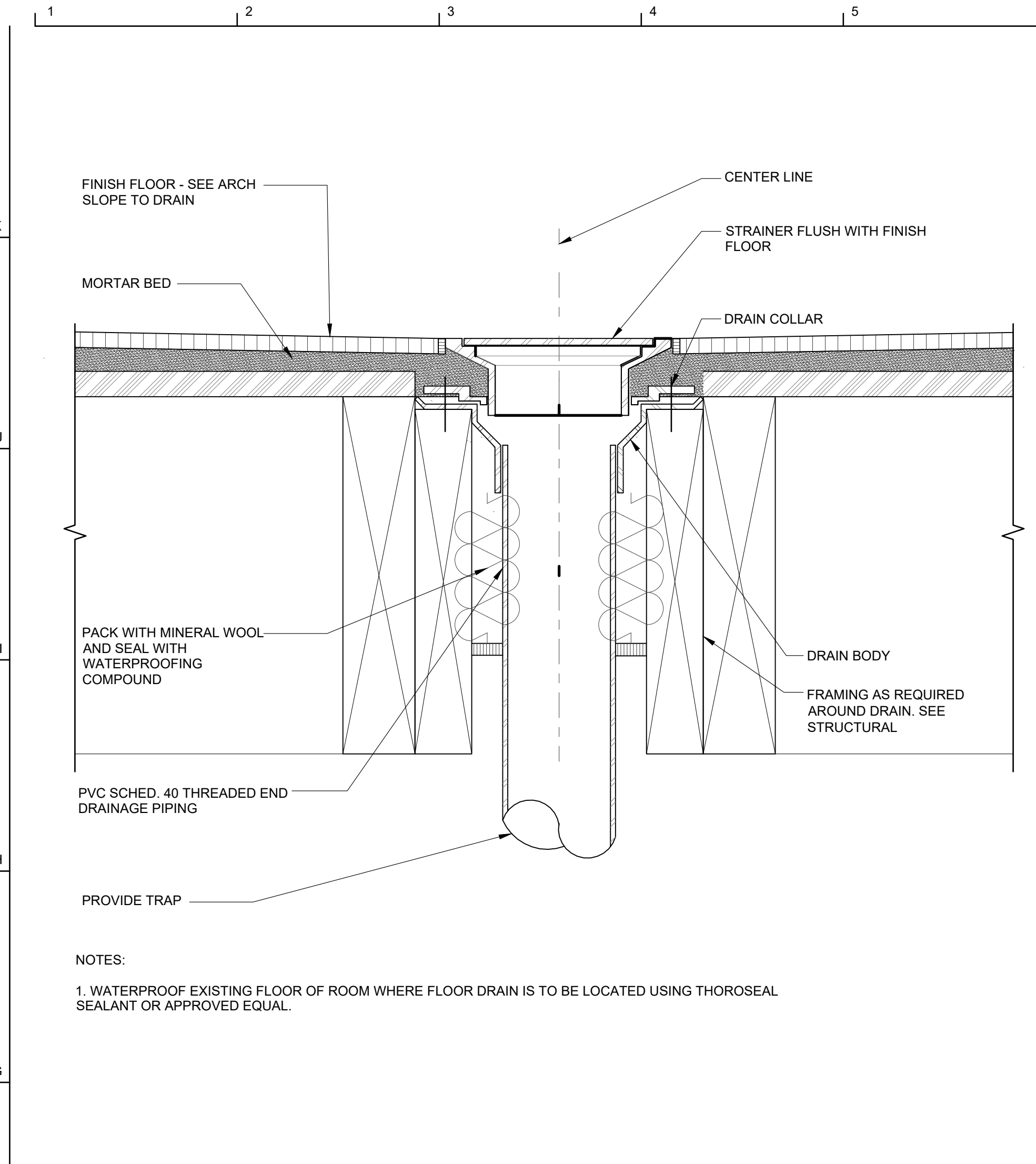
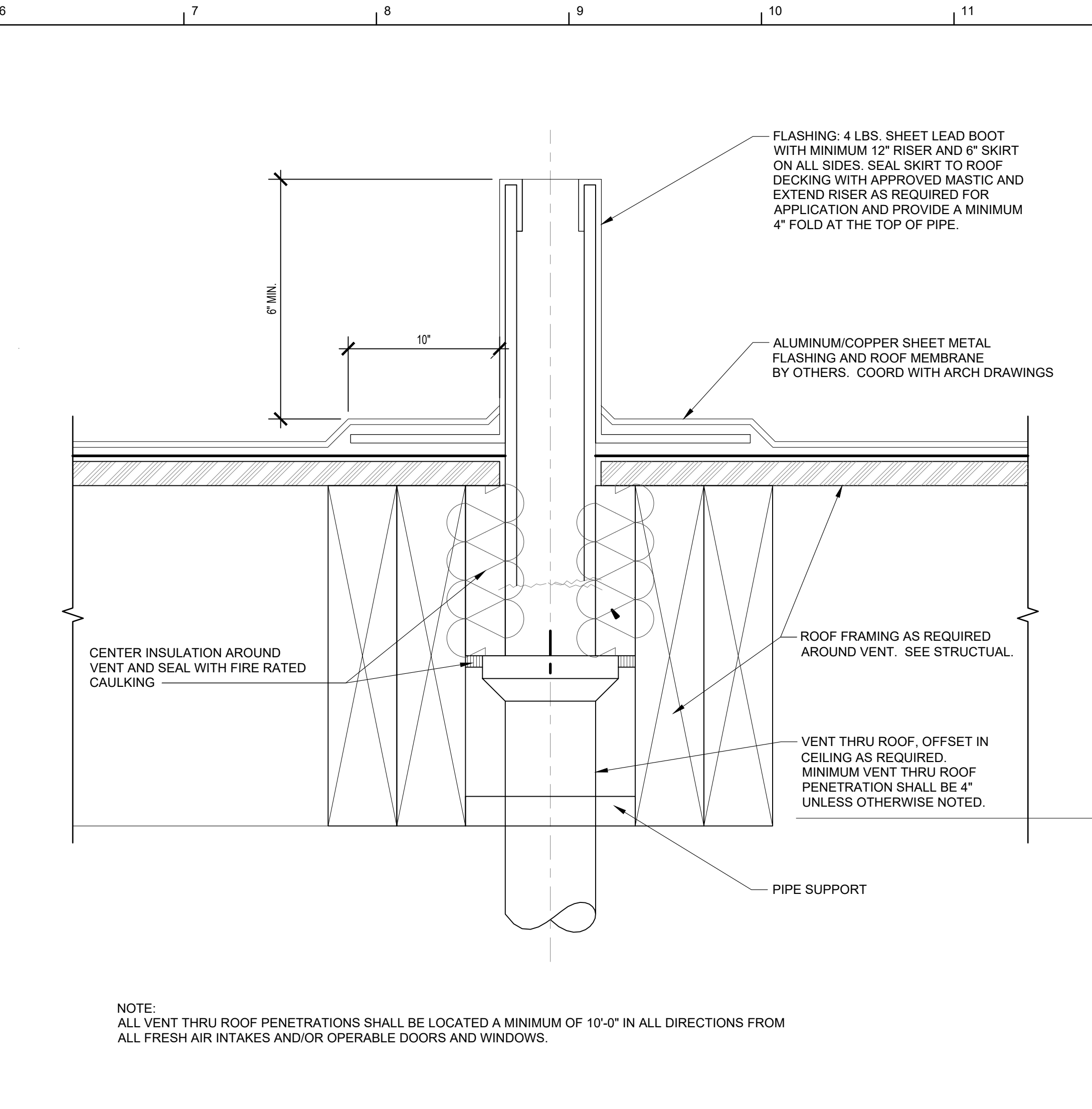
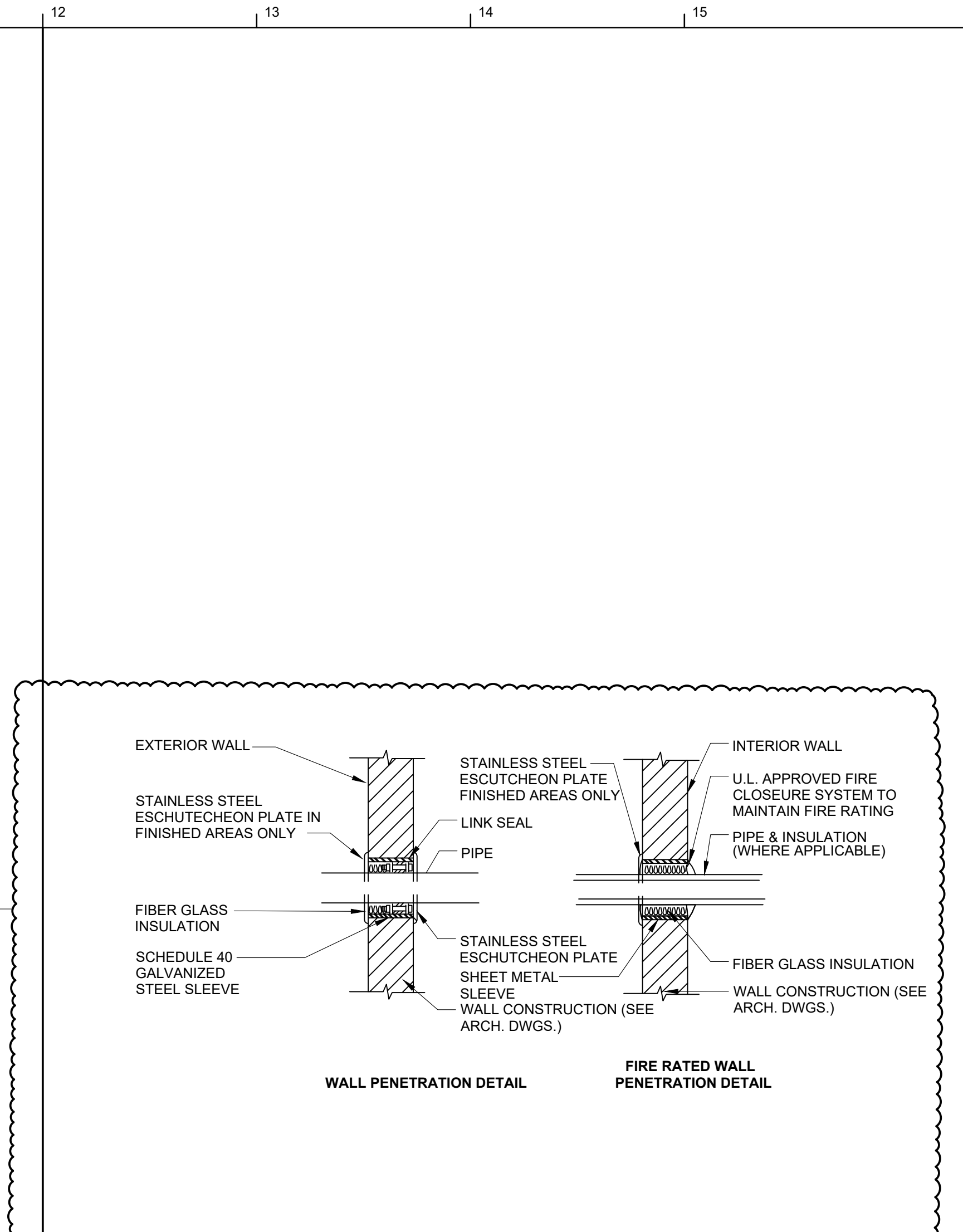
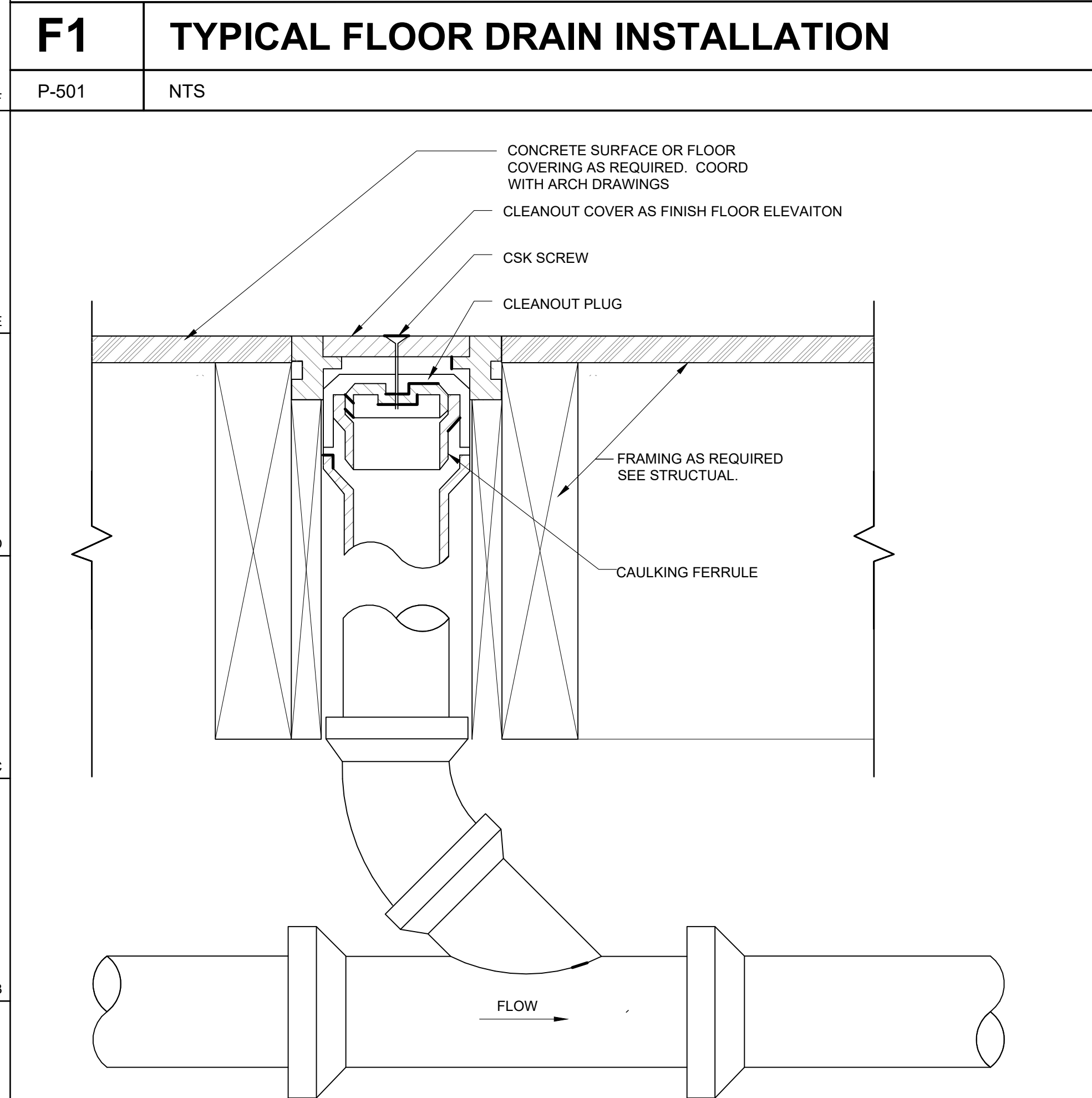
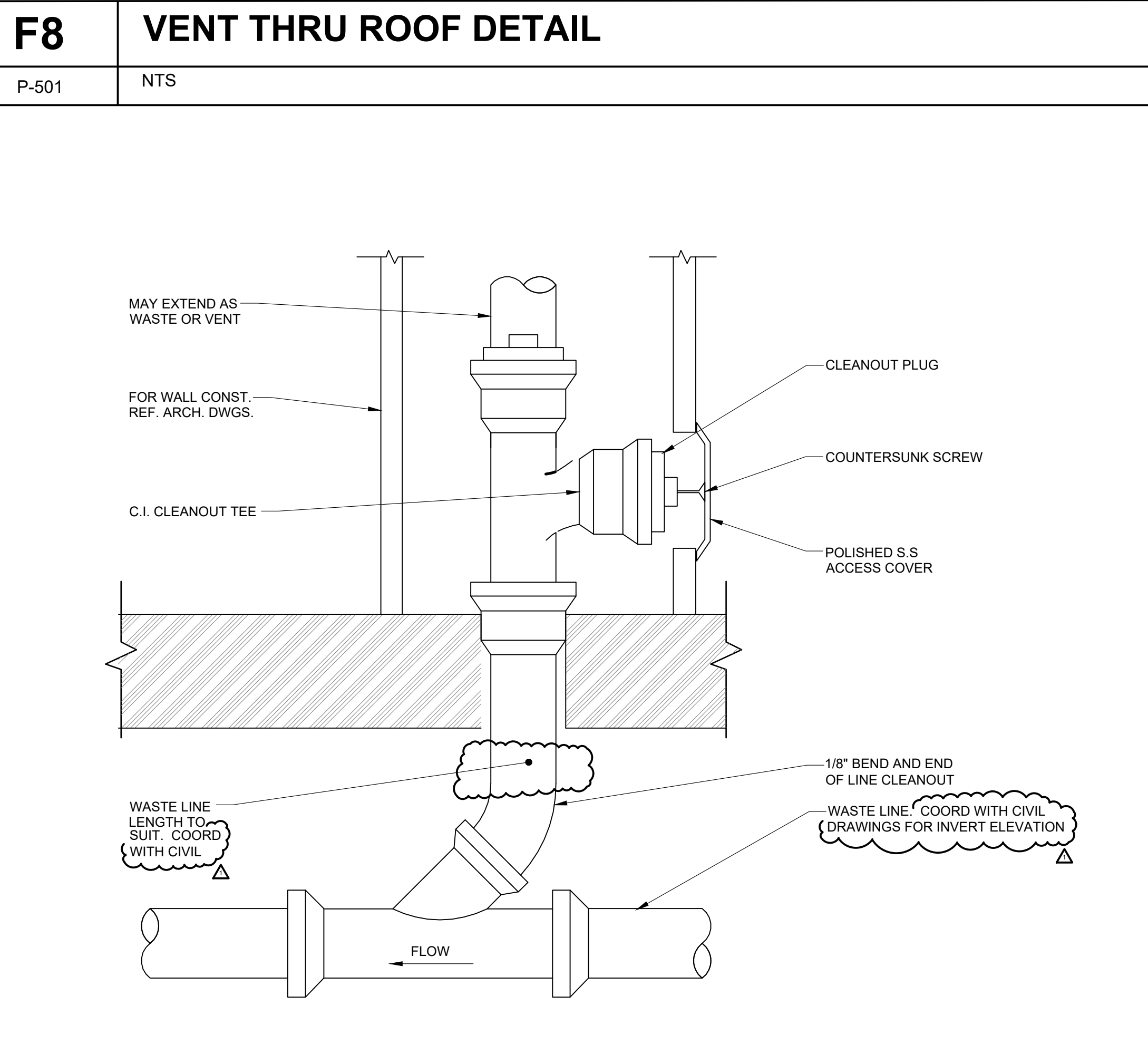
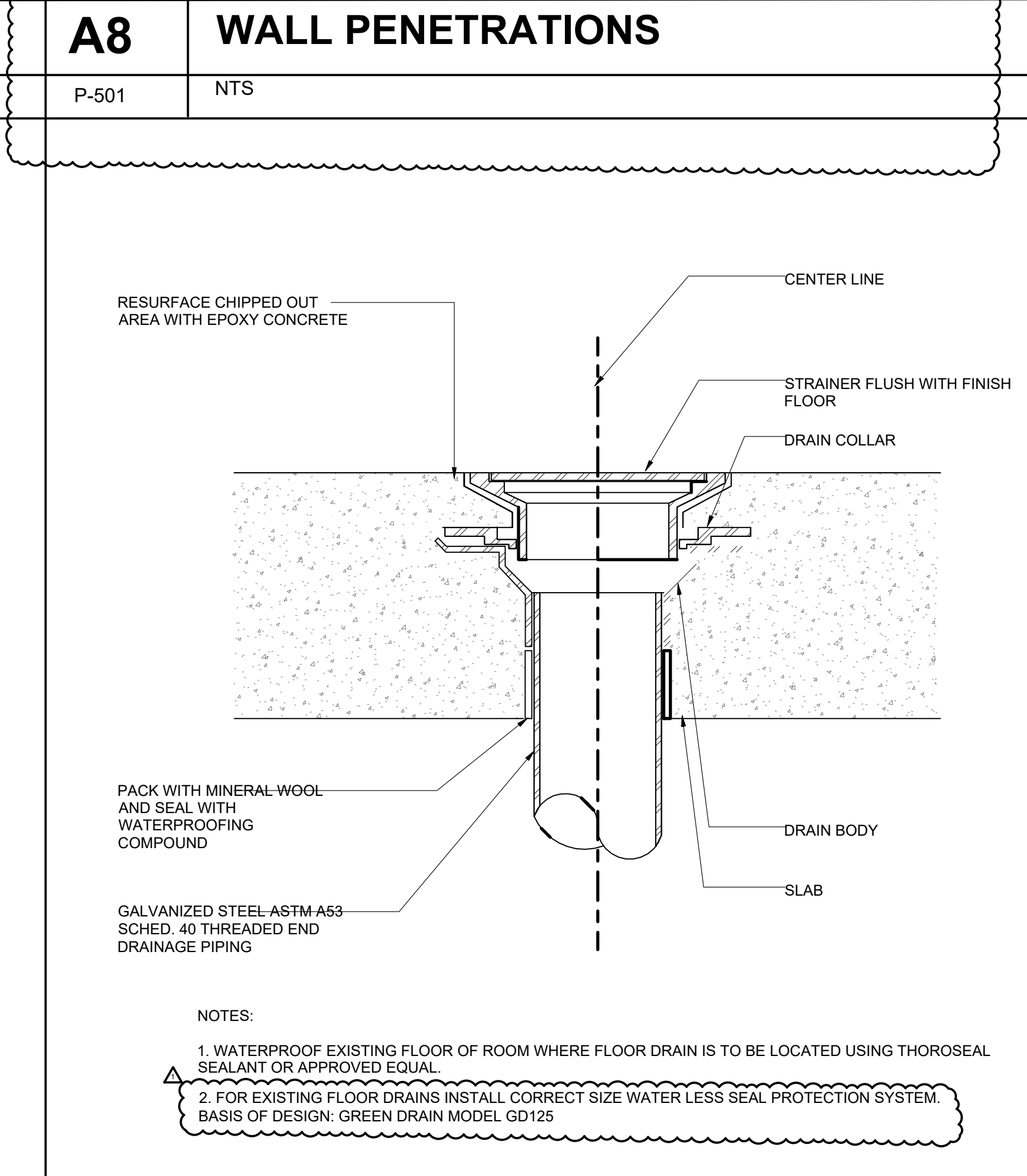
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SHEET NO.

12/19/2024 6:26:25 PM



5/19/2025 6:04:00 PM

 FINISH FLOOR - SEE ARCH SLOPE TO DRAIN CENTER LINE MORTAR BED STRAINER FLUSH WITH FINISH FLOOR DRAIN COLLAR PACK WITH MINERAL WOOL AND SEAL WITH WATERPROOFING COMPOUND DRAIN BODY FRAMING AS REQUIRED AROUND DRAIN. SEE STRUCTURAL PVC SCHED. 40 THREADED END DRAINAGE PIPING PROVIDE TRAP NOTES: 1. WATERPROOF EXISTING FLOOR OF ROOM WHERE FLOOR DRAIN IS TO BE LOCATED USING THOROSEAL SEALANT OR APPROVED EQUAL.			 FLASHING: 4 LBS. SHEET LEAD BOOT WITH MINIMUM 12" RISER AND 6" SKIRT ON ALL SIDES. SEAL SKIRT TO ROOF DECKING WITH APPROVED MASTIC AND EXTEND RISER AS REQUIRED FOR APPLICATION AND PROVIDE A MINIMUM 4" FOLD AT THE TOP OF PIPE. ALUMINUM/COPPER SHEET METAL FLASHING AND ROOF MEMBRANE BY OTHERS. COORD WITH ARCH DRAWINGS ROOF FRAMING AS REQUIRED AROUND VENT. SEE STRUCTUAL. VENT THRU ROOF. OFFSET IN CEILING AS REQUIRED. MINIMUM VENT THRU ROOF PENETRATION SHALL BE 4" UNLESS OTHERWISE NOTED. PIPE SUPPORT CENTER INSULATION AROUND VENT AND SEAL WITH FIRE RATED CAULKING NOTE: ALL VENT THRU ROOF PENETRATIONS SHALL BE LOCATED A MINIMUM OF 10'-0" IN ALL DIRECTIONS FROM ALL FRESH AIR INTAKES AND/OR OPERABLE DOORS AND WINDOWS.			 WALL PENETRATION DETAIL FIRE RATED WALL PENETRATION DETAIL		
F1 TYPICAL FLOOR DRAIN INSTALLATION			F8 VENT THRU ROOF DETAIL			A8 WALL PENETRATIONS		
P-501 NTS			P-501 NTS			P-501 NTS		
 CONCRETE SURFACE OR FLOOR COVERING AS REQUIRED. COORD WITH ARCH DRAWINGS CLEANOUT COVER AS FINISH FLOOR ELEVATION CSK SCREW CLEANOUT PLUG FRAMING AS REQUIRED SEE STRUCTUAL. CAULKING FERRULE FLOW			 MAY EXTEND AS WASTE OR VENT FOR WALL CONST. REF. ARCH. DWGS. C.I. CLEANOUT TEE CLEANOUT PLUG COUNTERSUNK SCREW POLISHED S.S. ACCESS COVER 1/8" BEND AND END OF LINE CLEANOUT WASTE LINE LENGTH TO SUIT. COORD WITH CIVIL WASTE LINE COORD WITH CIVIL DRAWINGS FOR INVERT ELEVATION FLOW			 RESURFACE CHIPPED OUT AREA WITH EPOXY CONCRETE CENTER LINE STRAINER FLUSH WITH FINISH FLOOR DRAIN COLLAR PACK WITH MINERAL-WOOL AND SEAL WITH WATERPROOFING COMPOUND DRAIN BODY SLAB GALVANIZED STEEL-ASTM A53 SCHED. 40 THREADED END DRAINAGE PIPING NOTES: 1. WATERPROOF EXISTING FLOOR OF ROOM WHERE FLOOR DRAIN IS TO BE LOCATED USING THOROSEAL SEALANT OR APPROVED EQUAL 2. FOR EXISTING FLOOR DRAINS INSTALL CORRECT SIZE WATER LESS SEAL PROTECTION SYSTEM. BASIS OF DESIGN: GREEN DRAIN MODEL GD125		
A1 FLOOR CLEANOUT - FINISHED ROOMS			A8 WALL CLEANOUT - FINISHED ROOMS			A13 FLOOR DRAIN IN CONCRETE		
P-501 NTS			P-501 NTS			P-501 NTS		

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REGISTRATION SEAL



KEY PLANS

SHEET TITLE
**PLUBMING
TYPICAL DETAILS**

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JOHN GRACE ARMS - VESTIBULE STORM DRAINS CALCULATIONS DESIGN LOCATION - SOUTHFIELD, MI MPC 2021 FIGURE 1106.1(2) - 100-YEAR 1-HOUR RAIN FALL =2.75IN TOTAL ROOF SF = 1237 SF ROOF SLOPE 1/16 TO CONDUCTOR & SINGLE STORY VERITCAL ELEVATION (11FT) GPM=R * A * 0.0104 GPM= 2.75 * 1237 * .0104 GPM=35.4 BASED ON TABLE 1106.2 IN 2021 MICHIGAN PLUMBING CODE RIGHT UNDER SIZE REQUIREMENTS FOR 3IN CONDUCTOR UPSIZING TO 4 IN PRIMARY AND OVERFLOW CONDUCTOR.														
H1 ROOF AND OVERFLOW DRAIN DETAIL					H8 ELEVATOR SUMP DETAIL					H13 WATER METER DETAIL				
P-502 NTS					P-502 NTS					P-502 NTS				
E1 CONDENSATE DRAIN DETAIL					E8 WATER HEATER WITH RECIRCULATION PUMP					E13 WALL PENETRATIONS				
P-502 NTS					P-502 NTS					P-502 NTS				
A1 BACK FLOW PREVENTOR DETAIL					A8 OPEN ENDED DRAIN (OED)					A13 WALL HYDRANT DETAIL				
P-502 NTS					P-502 NTS					P-502 NTS				

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KEY PLANS

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DOMESTIC WATER HEATER SCHEDULE

Pipe Sizing							
Tag	Item	Make	Model Number	Description	Cold Water	Hot Water	Notes
DWH-1	Heat Pump Water Heater	Rheem	PROPH40 T2 RH375-30	40 gallon heat pump w ater heater. 3.83 UEF rating. 10 year limited parts and tank w arranty	3/4 "	3/4 "	1, 2, 3, 8, REFER TO DETAILS
DWH-2	Heat Pump Water Heater	Rheem	PROPH40 T2 RH375-15	40 gallon heat pump w ater heater. 3.88 UEF rating. 10 year limited parts and tank w arranty	3/4 "	3/4 "	1, 2, 3, 8, REFER TO DETAILS
DWH-3	Electric Water Heater	Eemax	SPEX4208T ML	Electric tankless w ater heater	3/8"	3/8"	1, 5, 8, 9, 10
DWH-4	Heat Pump Water Heater	Rheem	PROPH50 T2 RH375-30	50 gallon heat pump w ater heater. 3.88 UEF rating. 10 year limited parts and tank w arranty	1"	1"	1, 2, 3, 8, REFER TO DETAILS
CV-1	Check Valve	Zurn Wilkins	40XL2	Lead-free brass soft seated check valve with stainless steel spring. Rated for 210 degrees and 400 psi			Size and locate for incoming cold w ater line.
ET-1	Potable Expansion Tank	Calefactio	HGTE-1	Bladded type lead free thermal expansion tank w ith 100% exceptance factor. 1/2 FNPT stainless steel connection	1/2"		Total volume and acceptance .4 gallons. Precharged to 50 psi. 200 Degrees max temperature. 150 Maximum operating pressure.

- Notes
- 1

INTERNAL PRESSURE SENSOR, RELIEF PIPED TO NEAREST FLOOR DRAIN
- 2

SEE MANUFACTURER GUIDELINES FOR ROOM VENTILATION, COORDINATE WITH ARCHITECT AND GENERAL CONTRACTOR PROPER DOOR CLEARANCE OR DUCTED SYSTEM.
- 3

RECIRCULATION PUMP TO HAVE SMART CONTROL FEATURE THAT DOES NOT REQUIRE EXTERNAL AQUASTAT.
- 4

TOTAL VOLUME 21 GALLONS, PRE-CHARGED TO 12 PSI AND MAX TEMP OF 240 F.
- 5

WALL MOUNTED WITH BACKING BOARD.
- 6

INSTALL EXPANSION TANK BRACKET AND SUPPORT TO SOLID WALL- BRACKET200MM
- 7

TOTAL VOLUME 2.1 GALLONS, PRE-CHARGED TO 50 PSI AND MAX TEMP OF 200 F.
- 8

COORDINATE FINAL LOCATION WITH ELECTRICAL CONTRACTOR AND PROVIDE LOCAL DISCONNECT.
- 9

PROVIDE AND INSTALL SERVICE/ISOLATION VALVES AND PRESSURE RELIEF PART NUMBER RTG20326
- 10

LOW FLOW ACTIVATION, ADJUSTABLE THERMOSTAT, VOLTAGE 208V AND 4.1 KW

RECIRCULATION PUMP SCHEDULE

Motor										
Tag	Item	Make	Model Number	Number of Pumps	Capacity - GPM	H.P.	Amps	Voltage/Phase	Width	Notes
RC -1	Hot water return recirculation pump	Taco	006-IQBC4	1	11.5	1/40	0.52	115/1	3 3/4	1/2 Sweat connection, self learning function

- Notes
- 1

FLANGED CONNECTION, SMART MODEL WITH PROVIDED THERMOSTAT.
- 2

COORDINATE FINAL LOCATION WITH ELECTRICAL CONTRACTOR FOR ELECTRICAL OUTLET- 115V.

SUMP PUMP SCHEDULE

Tag	Item	Motor						Sump Basin			
		Make	Model Number	Number of Pumps	Capacity - GPM	H.P.	Amps	Voltage/Phase	Width	Depth	Notes
SP-1	Elevator Pit Drainage	Bell & Gossett	2WF0511	1	50	0.5	14.5	115 / 1	18 in	30 in	1,2,3
SP-2	Basement sump pump	Bell & Gossett	ST51AV	1	61	0.5	7.5	115 / 1			1,2,3

- Notes
- 1

Provide SJE pumpmaster plus pump switch. Plug and power cord connection to 120V receptacle. Provide severe durt oil & water resistant power and control cords
- 2

Provide a full flow check valve and gate valve on the discharge pipe from sump pump.
- 3

Sump cover to be open grate type.

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE	ROUGH-IN SERVICES				MANUFACTURER	MODEL	FAUCET MANUF	FAUCET MODEL	FLOW RATE	ACCESSORIES	REMARKS
		COLD WATER	HOT WATER	WASTE	VENT							
LAV -1	LAVATORY COUNTERTOP SINK	½	½	1 ½	1 ½	SLOAN	SS-3002 – DROP IN OVAL	-	-	-	1,2,4,5,7,8, 9, 10, 11	-
LAV -2	LAVATORY SINK -ADA WALL MOUNT	½	½	1 ½	1 ½	SLOAN	SS-3003	-	-	-	1, 2, 4, 5, 7, 8, 9, 10, 11	-
S-1	SINK – 2 COMP	½	½	1 ½	1 ½	ELKAY	LR-3322 – LUSTERTONE	-	-	-	1, 2, 4, 6, 10, 12, 13, 14	-
S-2	SINK – 2 COMP ADA	½	½	1 ½	1 ½	ELKAY	LRAD-332265 - LUSTERTONE	-	-	-	1, 2, 4, 6, 10, 12, 13, 14	-
SH-1	SHOWER INSERT – ONE PIECE			2	1 ½	CLARION	REB036NS-VH				1, 2, 15, 16	
SV -1	SHOWER MIXING VALVE	½	½			DELTA	T13290			2.0 GPM	1, 2,	LEVER HANDLE ONLY
SV –2	SHOWER MIXING VALVE ADA	½	½			DELTA	T13H152			2.0 GPM	1, 2,	HANDHELD ADA W/ 60" HOSE SLIDE BAR, LEVER HANDLE ONLY
WC -1	WATER CLOSET	½		4	2	PROFLO	PF1400T			1.28		1, 2, 3, 4
FD-1	FLOOR DRAIN			SEE PLANS		PROFLO	PF42873					1, 2, 18, 19
MS – 1	MOP SINK	½	½	3	1 ½	PROFLO	PFMB2424				1, 2, 20	
WB -1	WASHING MACHINE WALL BOX	½	½	2		GUY GRAY	B200				1, 2	
WH -1	WALL HYDRANT NON FREEZE	¾				WOODFORD	B67					WALL BOX, DOUBLE CHECK BACKFLOW
DN-1	DOWNSPOUT NOZZLE			SEE PLANS		MFAB	R1940				1, 2	STAINLESS STEEL SCREEN
LS-1	LAUNDRY ROOM SINK FAUCET	½	½	2	1 ½	TEHLA	LUXE 040US9000DRSS				1, 2, 4,5 6, 17	
KS-1	PREP SINK & TABLE COMBO	½	½	SEE PLANS		ULINE	H-9652L				1, 2	PROVIDE ALL NECESSARY TRAP & CONNECTIONS

1.

Verify color/finish with Architect.
2.

Provide all sleeve, templates as required for rough-in of fixtures. Coordinate with Architect and trades.
3.

Provide compatible seat, preferred PROFLO PFTSCOF2000WH with sta-tite fasteners.
4.

Provide Brasscraft commercial angle supply with riser.
5.

Provide wrap on supply and waste piping equal to Keeney trap wrap.
6.

Provide Brasscraft 1 -1/2" brass cast P trap
7.

Provide Brasscraft 1 -1/4" brass cast P trap
8.

Provide 1 – 1/4" offset drain with tailpiece
9.

Provide chair carrier with foot supports, mount per ADA requirements.
10.

Tempering valve: Powers LF6480, ASSE 1070
11.

Lavatory faucet: ProFlo PFVWSC4744CP
12.

Drain outlet with tailpiece: Jones Stephens Corp S14-014T
13.

Sink faucet: Kohler K-30615 single lever
14.

Garbage Disposer: In-sink erator Badger 5, with cord and plug, ½ hp, 120V, 1 phase, 6.9amps
15.

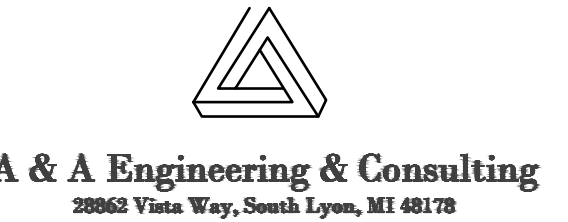
Show er drain: ProFlo PF42940 w/ deep seal trap fit to size.
16.

Install Clarion E-Z w all trim on perimeter, use mildew resistant silicone caulk to seal shower insert.

BACKFLOW SCHEDULE

TAG	SERVICE	TYPE	SIZE	LOCATION	MANUF	MODEL #	REMARKS
BF -1	DOMESTIC WATER	PRESSURE REGULATING	4 IN	MECHANICAL ROOM	ZURN	375AST	EXTEND DRAIN TO NEAREST FLOOR DRAIN
BF -2	FIRE PROTECTION	-	-	-	-	-	TO BE INCLUDED IN FIRE SUPPRESSION MODELING

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REGISTRATION SEAL



KEY PLANS

SHEET TITLE

PLUMBING SCHEDULES

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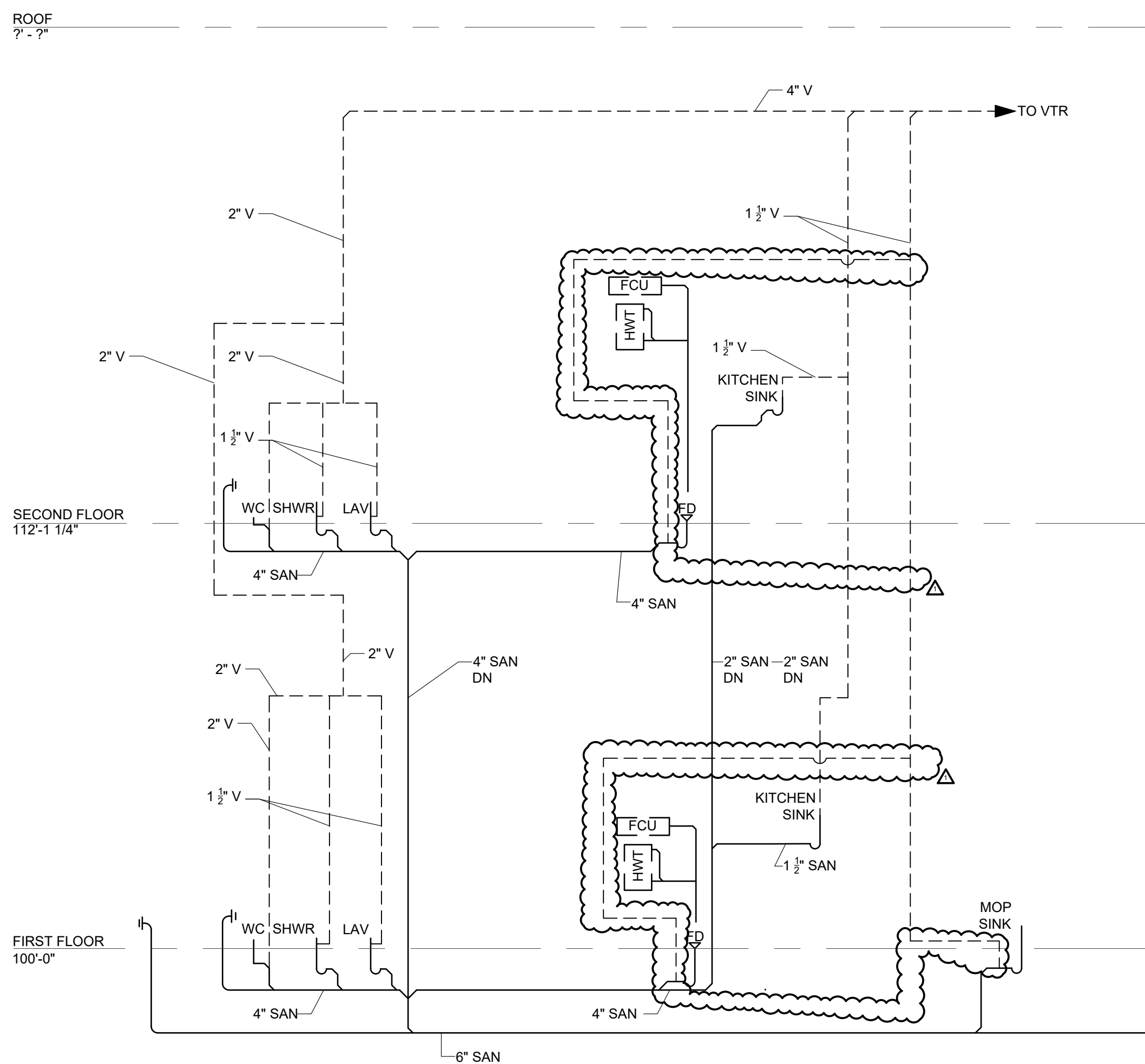
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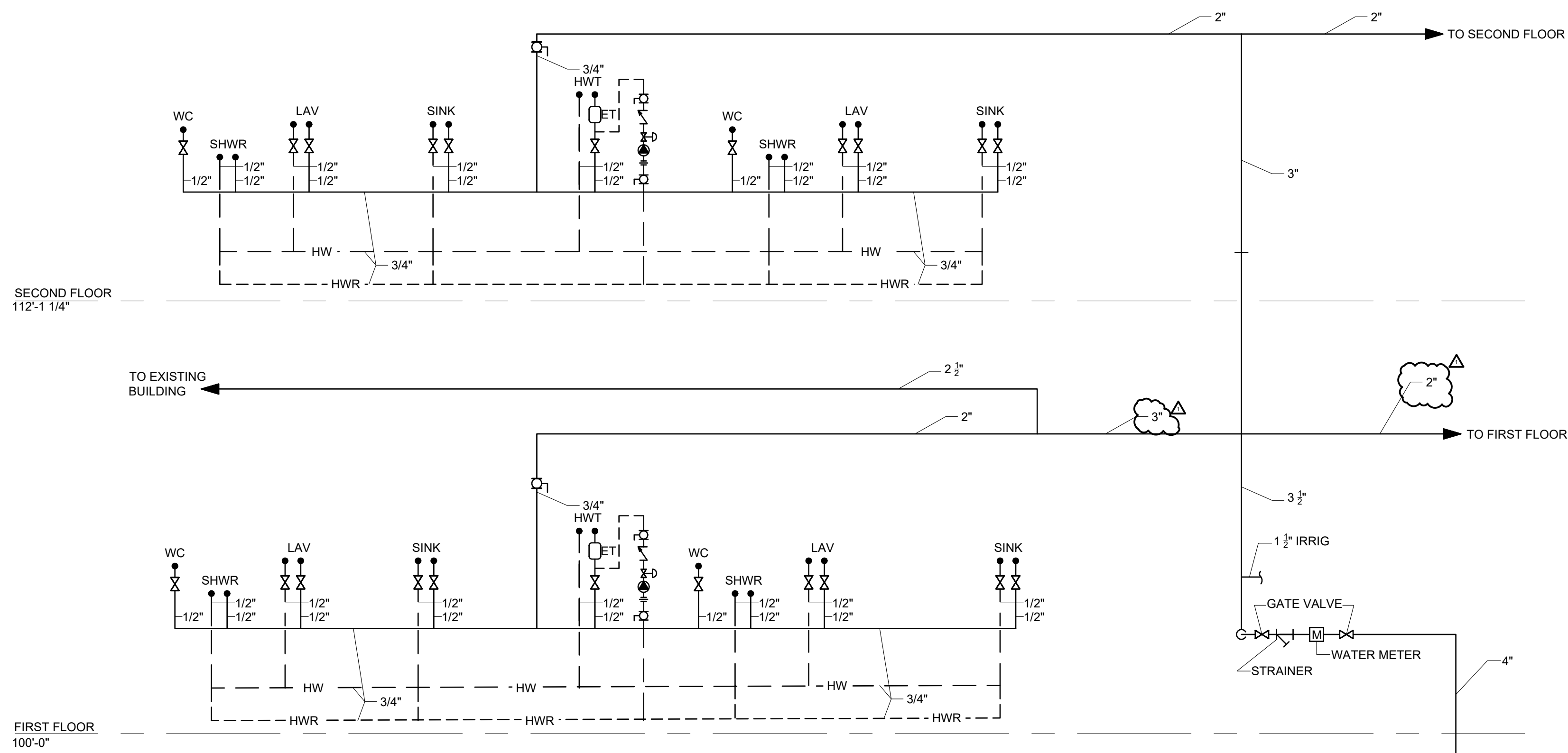
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P-601



A1 SANITARY SCHEMATIC RISER DIAGRAM



A7 DOMESTIC SCHEMATIC WATER RISER DIAGRAM

SHEET TITLE

SCHEMATIC PLUMBING
RISER DIAGRAMS

SCALE: AS NOTED

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