

PLUMBING FIXTURE SCHEDULE									
FIXTURE MARK		DRAIN	VENT	CW	HW	BASIS-OF-DESIGN	FIXTURE SPECIFICATION		
WC-1 ADA WATER CLOSET FLOOR-MOUNT SOLAR FLUSH - 1.6		3"	1-1/2"	1-1/4"		AMERICAN STANDARD 3443.001	VITREOUS CHINA, FLOOR-MOUNTED, TOP SPUD, FLUSH VALVE-TYPE TOILET; SENSOR-OPERATED SLOAN SOLIS 111-1.6 FLUSH VALVE; CHURCH 2155SSCT WHITE ANTIMICROBIAL PLASTIC, OPEN-FRONT, ELONGATED TOILET SEAT WITH SELF-SUSTAINING CHECK HINGE AND STAINLESS STEEL HARDWARE; SUPPLY ANGLE STOP WITH CAP, ADJUSTABLE TAILPIECE AND ONE-PIECE WALL ESCUTHEON.		
LV-1 ADA WALL LAVATORY - HYDROPOWERED		1-1/2"	1-1/4"	1/2"	1/2"	AMERICAN STANDARD 0355.012	VITREOUS CHINA, 20"X18" WALL HUNG 4" CENTERS, WITH OVERFLOW AND GRID DRAIN. JAY R. SMITH 0700-M31 SERIES CARRIER. PROVIDE CHROME PLATED LOOSE KEY ANGLE STOPS, ESCUTCHEONS, CHROME PLATED P-TRAP, CHROME PLATED BRASS SUPPLIES AND TRUEBRO LAVGUARD2 SUPPLY AND WASTE PIPING COVERS. SOLID BRASS 4" CENTERSET 0.5 GPM FAUCET, TOTO TEL105-D10E#CP OR APPROVED EQUAL.		
MS-1 MOP SERVICE BASIN - 24" CORNER - TERRAZZO		3"	1-1/2"	3/4"	3/4"	ACORN TNC-24	ONE PIECE 24"x24"x12" NEO-CORNER PLASTIC SERVICE BASIN; CHROME PLATED CAST BRASS DELTA 28T9 FAUCET, DELTA 28T910 STAINLESS STEEL MOP HOLDER AND 28T911 HEAVY DUTY 31" LONG REINFORCED HOSE, BRASS COUPLING, STAINLESS STEEL HANGER BRACKET, W/RUBBER GRIP.		
FD-1 FLOOR DRAIN		3"	1-1/2"			JAY R. SMITH 2010	CAST IRON BODY WITH FLASHING COLLAR AND 6" ADJUSTABLE NICKEL BRONZE ROUND STRAINER HEAD; VANDLE PROOF GRATE; SEDIMENT BUCKET; AND TRAP PRIMER CONNECTION.		
FCO FLOOR CLEAN OUT		4"				JAY R. SMITH 4024S	CAST IRON CLEANOUT; NICKEL BRONZE 6" ROUND ADJUSTABLE SCORIATED VANDAL PROOF TOP; GASKET SEAL BRONZE THREADED PLUG WITH SLOT TO RECEIVE 1/2" BAR STOCK.		
GCO GRADE CLEAN OUT		4"				JAY R. SMITH 4263L	CAST IRON SPIGOT FERRULE; CAST BRONZE TAPER THREADED COUNTERSUNK PLUG WITH SLOT TO RECEIVE 1/2" BAR STOCK; VANDAL PROOF TOP.		
RD-1 ROOF DRAIN		SEE PLANS				JAY R. SMITH 1015	15" DIAMETER CAST IRON BODY (OUTLET SIZE PER DRAWINGS), ADJUSTABLE EXTENSION SLEEVE, REVERSIBLE COLLAR, COMBINED FLASHING CLAMP AND GRAVEL STOP, UNDERDECK CLAMP, GALVANIZED CAST IRON VANDAL PROOF DOME.		
OD-1 OVERFLOW DRAIN		SEE PLANS				JAY R. SMITH 1045-Y	15" DIAMETER CAST IRON BODY (OUTLET SIZE PER DRAWINGS), ADJUSTABLE EXTENSION SLEEVE, REVERSIBLE COLLAR, COMBINED FLASHING CLAMP AND WATER DAM, UNDERDECK CLAMP, GALVANIZED CAST IRON VANDAL PROOF DOME.		
OFN-1 DOWNSPOUT NOZZLE		SEE PLANS				JAY R. SMITH 1770-PB-BS	CAST POLISHED BRONZE NOZZLE AND WALL FLANGE FLANGE WITH BIRD SCREEN.		
EW-C-1 WATER COOLER, B-I-LEVEL , W/ BOTTLE FILLER, INDOOR		1-1/2"	1-1/4"	1/2"		ELKAY LZSTLGBWSSK	WALL HUNG, BARRIER FREE, B-I-LEVEL, ALL STAINLESS STEEL CABINET WITH BOTTLE FILLING STATION; 8 GPH OF 50" WATER AT 90 ° AMBIENT; FILTERED; 1/4 HP, 120V/1PH. PROVIDE QUARTER TURN ANGLE STOP, P-TRAP AND SUPPLIES. INSTALLED PER ADA REQUIREMENTS. PROVIDE FIXTURE SUPPORT WITH SUPPORT PLATES AND FIXTURE MOUNTING STUDS, J.R. SMITH 0834L, OR APPROVED EQUAL.		
NFWH-1 NON-FREEZE WALL HYDRANT				3/4"		JAY R. SMITH 5509QT	ENCASED, NON-FREEZE, FLUSH WALL HYDRANT WITH STAINLESS STEEL BOX, INTEGRAL VACUUM BREAKER, NON-TURNING OPERATING ROD WITH FREE FLOATING COMPRESSION CLOSURE VALVE, REPLACEABLE BRONZE SEAT AND SEAT WASHER; POLISHED BRONZE BOX AND HINGED COVER WITH OPERATING KEY AND "WATER" CAST ON COVER, AND ADJUSTABLE WALL CLAMP.		
WHA WATER HAMMER ARRESTOR, PISTON TYPE						JAY R. SMITH 5200 SERIES	LEAD-FREE, PISTON-TYPE WATER HAMMER ARRESTER; THREADED CONNECTION. INSTALL IN UPRIGHT POSITION AT ALL QUICK CLOSING VALVES, SOLENOIDS AND PLUMBING FIXTURES. LOCATE AND SIZE IN ACCORDANCE WITH PLUMBING & DRAINAGE INSTITUTE STANDARD NO. WH201.		
TMV-1 INDIVIDUAL FIXTURE TEMPERATURE MIXING VALVE				1/2"	1/2"	WATTS LFUSG-B-SC	TAMPER-RESISTANT, LEAD-FREE UNDERSINK THERMOSTATIC MIXING VALVE LIMITING HOT WATER TO 120 DEGREES F (0.25-2.25 GPM). LISTED TO ASSE STANDARD 1070 FOR SINGLE FIXTURE APPLICATIONS AND IAPMO cUPC. ALSO FEATURING DUAL CHECK VALVES TO PREVENT CROSS-FLOW AND INTEGRAL DEBRIS FILTER. SATIN CHROME FINISH.		
CP-1 CIRCULATION PUMP					3/4"	TACO 113.00	15 GPM @ 12FT HEAD, 1/8 HP 120V/1PH, BRONZE BODY		
SP-1 ELEVATOR PIT SUMP PUMP		2"	2"			STANCOR SE-50-ELV	COMPLETE PUMP AND OIL-MINDER CONTROL SYSTEM; STAINLESS STEEL AND CAST IRON PUMP; ALL STAINLESS STEEL FASTENERS AND BUNA N O-RINGS; IMPELLER SHALL BE NON-CLOGGING, DYNAMICALLY BALANCED VORTEX DESIGN; 1/2 HP MOTOR, 120V, 50GPM @ 10' HEAD; SIMPLEX ALARM PANEL; COORDINATE THE LOCATION OF THE PANEL WITH OWNER.		
NOTES:									
1. ALL FIXTURES, EQUIPMENT, TRIM, FITTINGS, ETC. SHALL COMPLY WITH LOCAL, STATE AND/OR FEDERAL REGULATIONS AND CODES, INCLUDING BUT NOT LIMITED TO WATER AND ENERGY CONSERVATION CODES, AND THE AMERICANS WITH DISABILITIES ACT (ADA). THE SCHEDULE REFLECTS FIXTURES AND EQUIPMENT WHICH ARE MINIMUM CRITERIA AND SHALL BE THE BASIS FOR CONTRACTORS BASE BID.									

PLUMBING FIXTURE DEMAND TABULATION

Project Name: IKN GmbH Office Building										BUILDING TYPE: NEW			
Project No.: 201204										PREDOMINANTLY: FLUSH VALVE			
Date: February 11, 2021													
FIXTURE	DESCRIPTION	OCCUPANCY	QTY.	DRAINAGE FIXTURE UNITS	SUB- TOTAL	LOAD VALUES IN WATER (EACH)			LOAD VALUES IN WATER (TOTAL)			Remarks	
						SUPPLY FIXTURE UNITS (WSFU)			SUPPLY FIXTURE UNITS (WSFU)				
						COLD	HOT	TOTAL	COLD	HOT	TOTAL		
WC	Water Closet, Flush Valve, 1.6 GPF	Public	4	4	16	10.0	-	10.0	40	0	40		
LAV1	Lavatory, Wall Hung, HC	Public	4	1	4	1.5	1.5	2.0	6	6	8		
KS	Kitchen Sink, Two Compartment with Disposer	Private	8	2	16	1.0	1.0	1.4	8	8	11.2	(Future Tenants)	
MS	Mop (Service) Sink	Offices, etc.	1	2	2	2.3	2.3	3.0	2.25	2.25	3		
EW	Electric Water Cooler (Drinking Fountain)	Offices, etc.	2	0.5	1	0.3	-	0.3	0.5	0	0.5		
IMB	Ice Maker Valve Box - (Refrigerator / Ice Maker)	Public or Private	8	0	0	0.3	-	0.3	2	0	2	(Future Tenants)	
HB	Hose Bibb	Public or Private	4	0	0	2.0	-	2.0	8	0	8		
TOTALS						41.5	DFU		67.75	17.25	74.1	WSFU	
DFU = DRAINAGE FIXTURE UNITS						EIGHTH	INCH SLOPE PER FOOT		57.1	32.8	59.3	GPM	
WSFU = WATER SUPPLY FIXTURE UNITS						4	DIAMETER OF PIPE (INCHES)		2	1	2	INCHES REQ'D.	

COMMERCIAL WATER HEATER SCHEDULE - ELECTRIC STORAGE TYPE

		BASIS OF DESIGN		NOMINAL CAPACITY (GALLONS)	GPH RECOVERY @100 DEG RISE	# OF ELEMENTS	ELECTRICAL		NOTES
MARK	TYPE	MFR	MODEL				KW	FLA	V/PH/Hz
WH-1	LOWBOY	A.O. SMITH	DEL-6	6	12	1	3	14.4	208/1/60
NOTES:									
1. PROVIDE ARMSTRONG LST-12 EXP TANK AND T&P SET AT 150 PSI DISCHARGE TO HUB DRAIN, FLOOR DRAIN, OR JANITOR'S SINK. DO NOT ROUTE INTO DRAIN PAN.									
2. PROVIDE 2" DEEP DRAIN PAN BENEATH STORAGE TYPE WATER HEATER TO ENCASE ENTIRE WATER HEATER FOOTPRINT.									
3. PROVIDE CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE.									
4. WATER HEATER SHALL BE UL LISTED AND CERTIFIED AT 300 PSI TEST PRESSURE AND 150 PSI WORKING PRESSURE.									
5. WATER HEATER SHALL BE LISTED ACCORDING TO UL 174 STANDARDS GOVERNING STORAGE TANK-TYPE ELECTRIC WATER HEATERS									
6. PROVIDE 3-YEAR LIMITED TANK AND PARTS WARRANTY.									

ABBREVIATIONS

A/C	ABOVE CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BTU	BRITISH THERMAL UNIT
CO	CLEANOUT
CONN	CONNECTION
CW	COLD WATER
DN	DOWN
DW	DOMESTIC WATER
DWV	DRAIN WASTE VENT
DFU	DRAINAGE FIXTURE UNIT
ED	EQUIPMENT DRAIN
EX	EXISTING
FU	FIXTURE UNIT
FL	FLOOR
FCO	FLOOR CLEANOUT
GPM	GALLONS PER MINUTE
GC	GENERAL CONTRACTOR
GCO	GRADE CLEANOUT
GW	GREASE WASTE
HW	HOT WATER
HWR	HOT WATER RETURN
IE	INVERT ELEVATION
IN	INCHES
MIN	MINIMUM
OST	OVERFLOW STORM
PC	PLUMBING CONTRACTOR
SAN or S	SANITARY
ST	STORM
V	VENT
VTR	VENT TO ROOF
WCO	WALL CLEANOUT
W	WASTE
WTR	WATER
WSFU	WATER SUPPLY FIXTURE UNIT
w/	WITH
w/O	WITHOUT

GENERAL SYMBOLS

	PLAN OR DETAIL NO. SHEET NUMBER
	KEYED NOTE TO PLAN
	REVISION NUMBER
	NORTH ARROW

PLUMBING SYMBOL LEGEND

	COLD WATER PIPE
	HOT WATER PIPE
	HOT WATER RETURN PIPE
	EXISTING COLD WATER PIPE
	EXISTING HOT WATER PIPE
	EXISTING HOT WATER RETURN PIPE
	FIRE
	GREASE WASTE
	SOIL OR WASTE PIPE
	EXISTING SOIL OR WASTE PIPE
	STORM
	STORM SECONDARY
	VENT PIPE
	EXISTING VENT PIPE
	CHILLED WATER RETURN PIPE
	CHILLED WATER SUPPLY PIPE
	CONDENSER WATER PIPE
	COOLING WATER RETURN PIPE
	COOLING WATER SUPPLY PIPE
	TURNED UP
	TURNED DOWN
	TEE, OUTLET DOWN
	TEE, OUTLET UP
	TEMPERATURE AND PRESSURE RELIEF DRAIN PIPING
	EMERGENCY DRAIN PAN PIPING
	GATE VALVE
	PRESSURE RELIEF VALVE
	BALL VALVE
	PLUMBING FIXTURE DESIGNATION (UNDER LINED)
	CONNECT TO EXISTING
	DISCONNECT FROM EXISTING

PLUMBING GENERAL NOTES

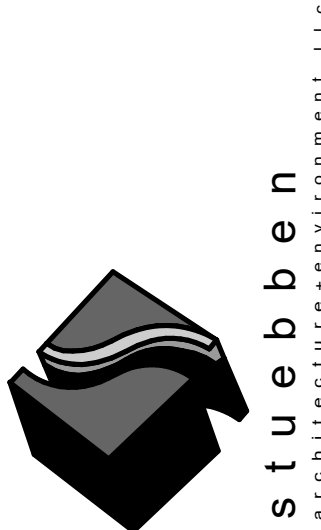
- IN THE PREPARATION OF THESE PLANS, THE ENGINEER HAS USED CERTAIN ABBREVIATIONS, CONVENTIONS, AND SYMBOLS, THE MEANING OF WHICH ARE ILLUSTRATED AND EXPLAINED WITHIN THE LEGEND.
- PLANS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO INDICATE CAPACITY, SIZE, LOCATION, DIRECTION AND GENERAL ARRANGEMENT, BUT NOT EXACT DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER FEATURES WILL NOT BE REQUIRED.
- COORDINATE WITH THE OTHER TRADES TO ENSURE THAT EACH TRADE SHALL HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT (DUCTWORK, PIPING, ELECTRICAL WORK, ETC.).
- ONCE THE PIPING HAS ENTERED EACH UNIT FROM BELOW THE FLOOR SLAB, PIPING SHALL BE RUN ABOVE THE CEILING IN EACH UNIT UNLESS NOTED OR INDICATED OTHERWISE.
- VERIFY ALL DIMENSIONS FROM ARCHITECTURAL PLANS AND FIELD DIMENSIONS.
- ALL RISES AND DROPS IN PIPING ARE NOT NECESSARILY SHOWN.
- PROVIDE STOP OR ANGLE VALVES ON EACH WATER CONNECTION TO EACH PLUMBING FIXTURE.
- PROVIDE ALL STRUCTURAL MEMBERS, SUPPORT BRACKETS, FLASHING, HARDWARE, ETC. REQUIRED TO INSTALL A COMPLETE SYSTEM.
- PROVIDE CHROME PLATED ESCUTCHEON PLATES AT ALL EXPOSED WALL PENETRATIONS AND CEILING PENETRATIONS.
- PROVIDE CLEANOUTS ON SANITARY LINES AND CONDENSATE DRAIN LINES AS REQUIRED BY CODE.
- PROVIDE ACCESS PANELS FOR ALL SHUT-OFF VALVES LOCATED ABOVE GYPSUM BOARD CEILINGS. COORDINATE WITH GENERAL CONTRACTOR.

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**NOTES,
LEGENDS, &
SYMBOLS**

P-001

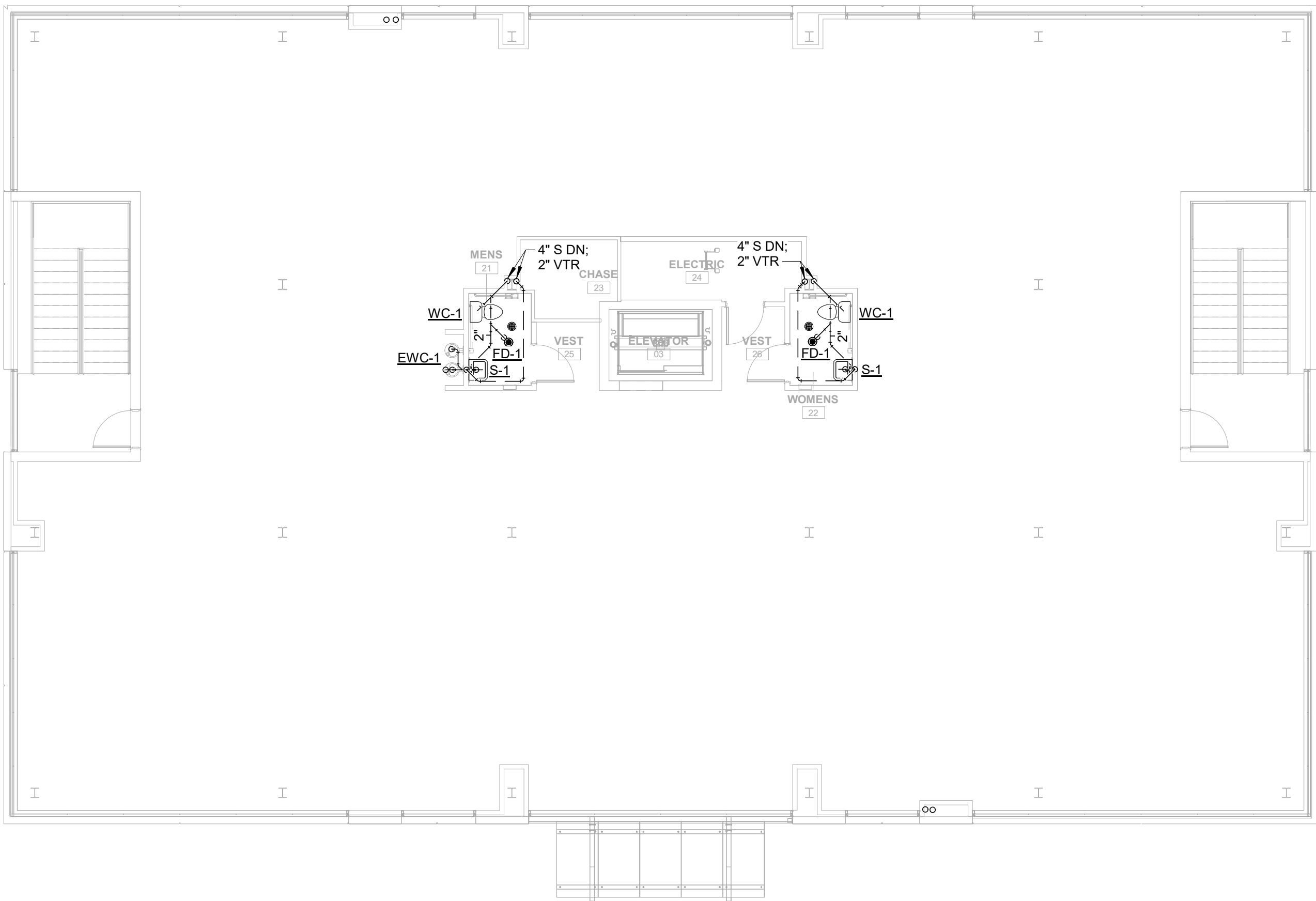


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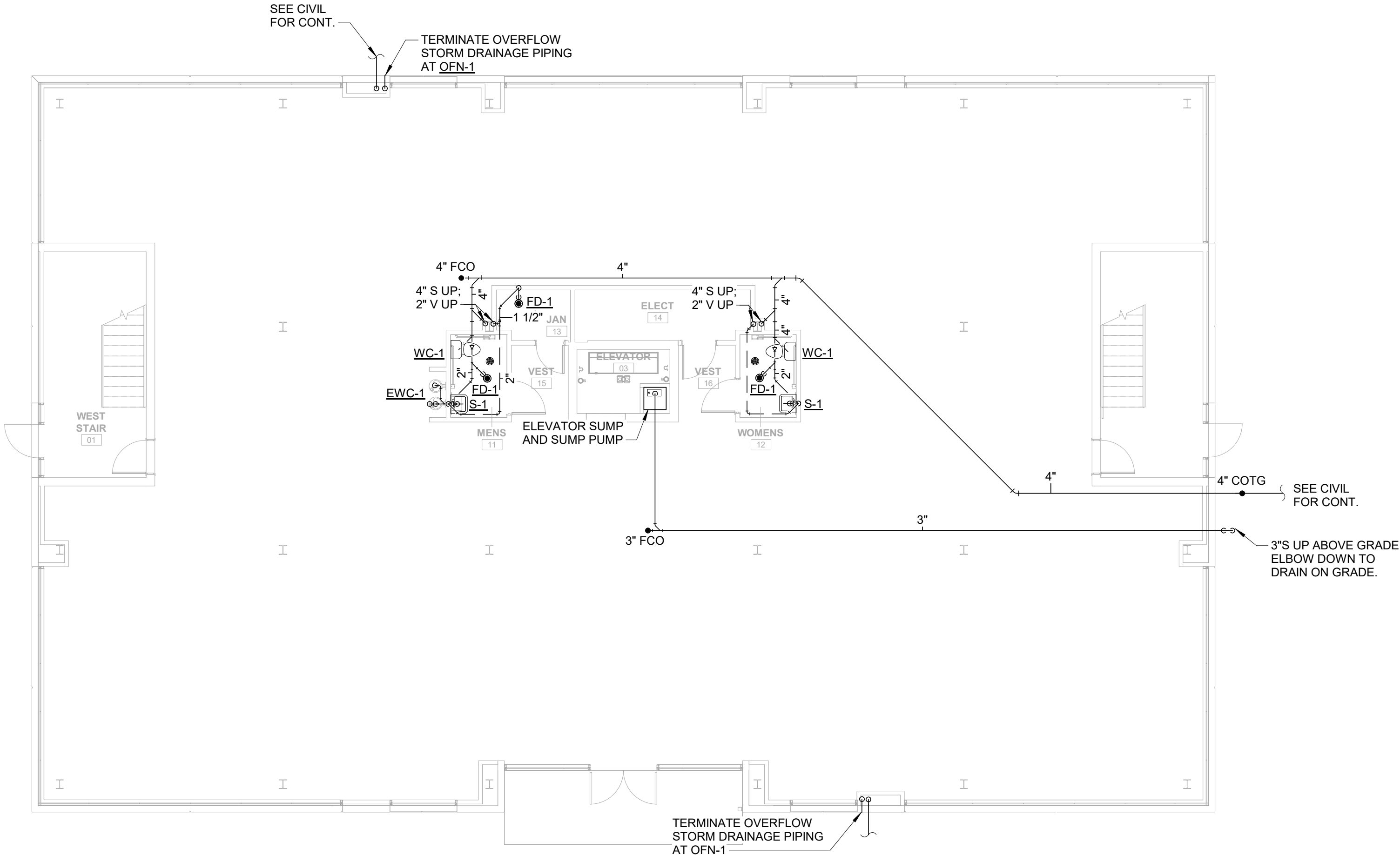
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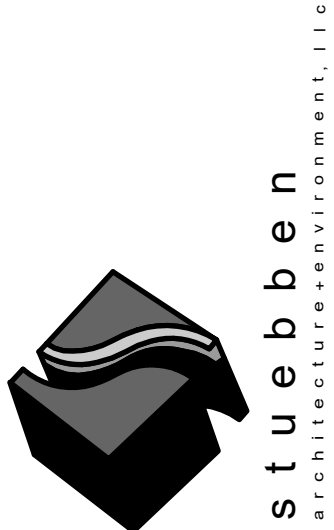
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2 SECOND FLOOR SANITARY PLAN
P-101 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR SANITARY PLAN
P-101 SCALE: 1/8" = 1'-0"



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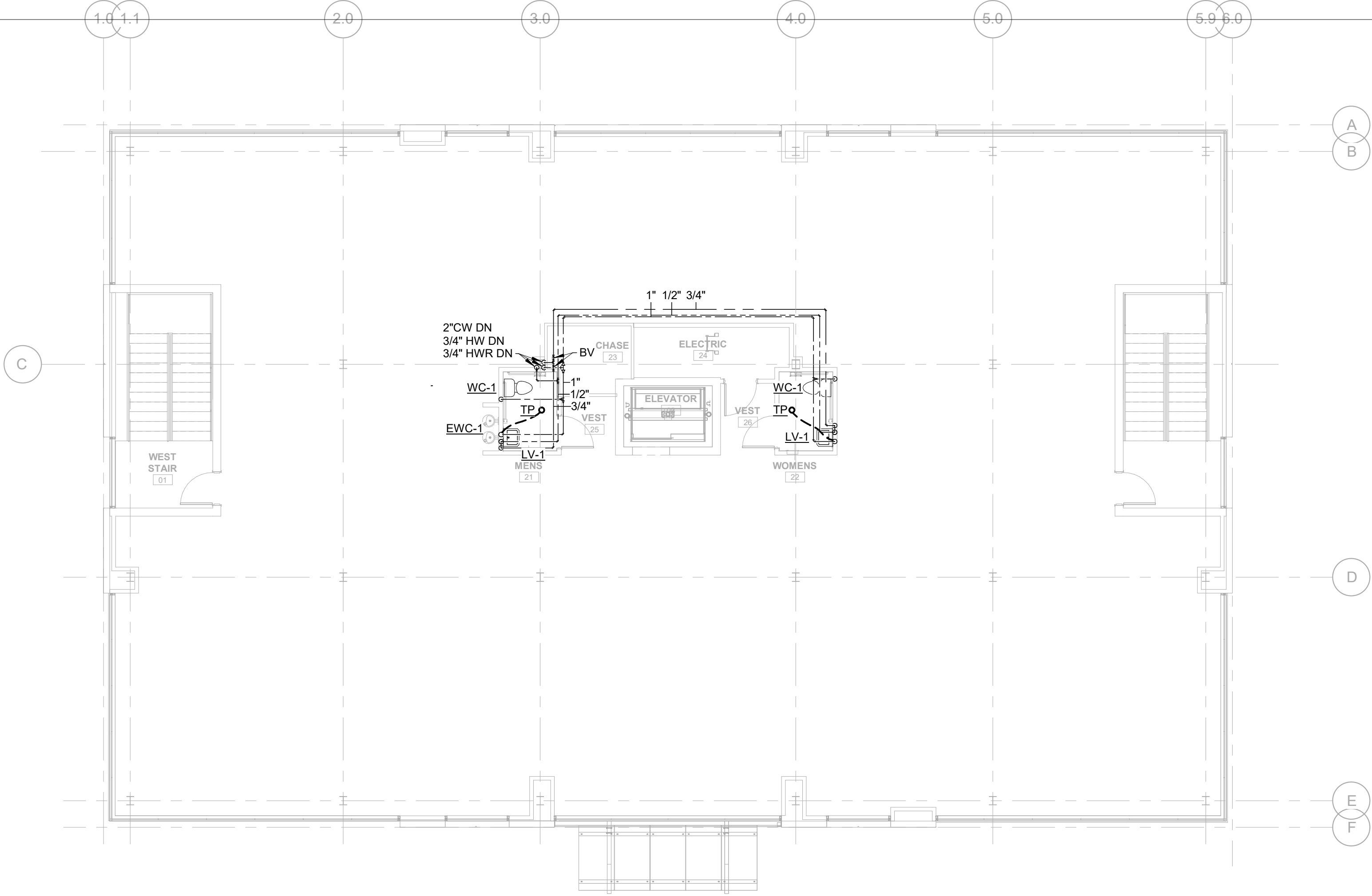
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DWV FLOOR
PLAN

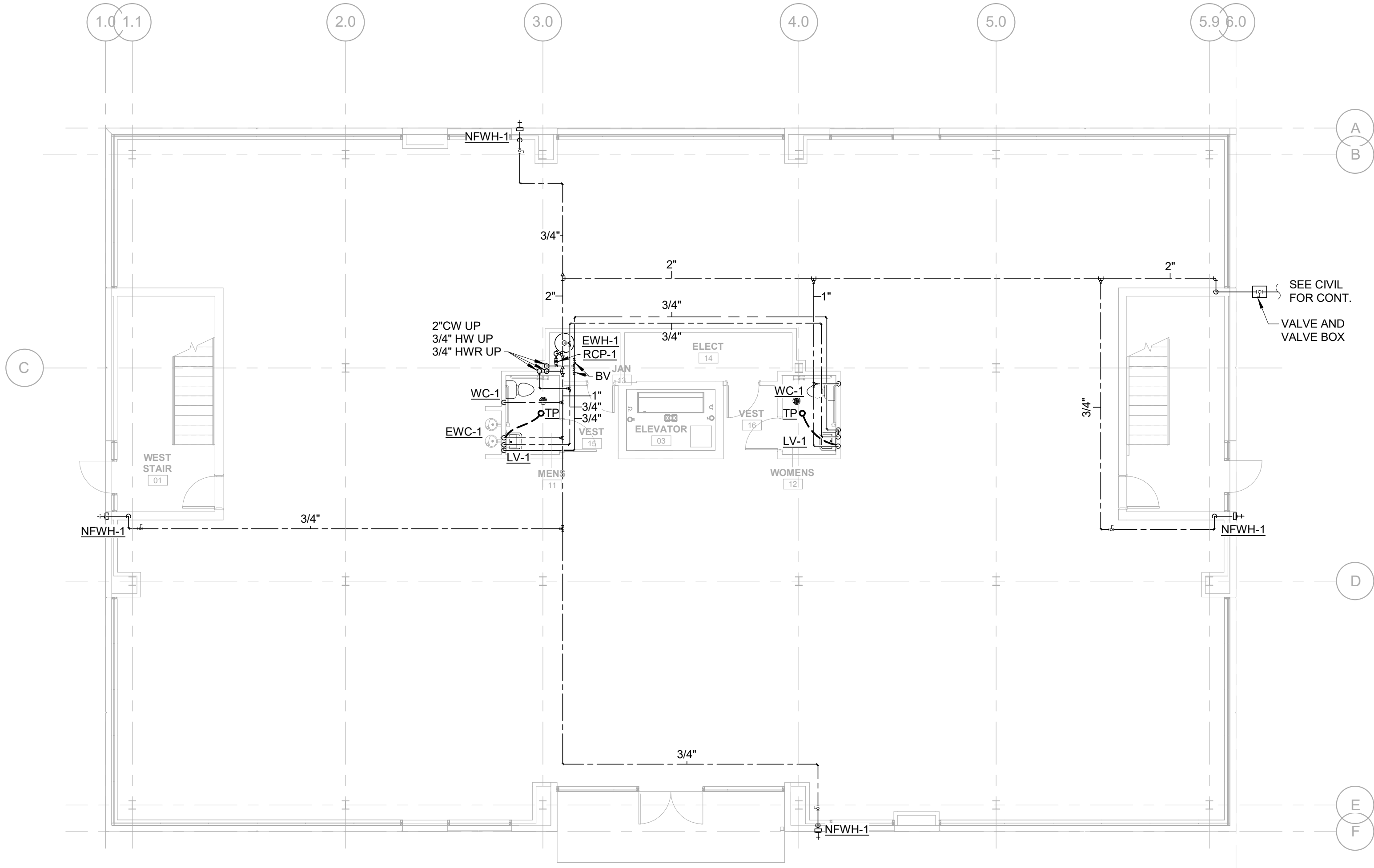
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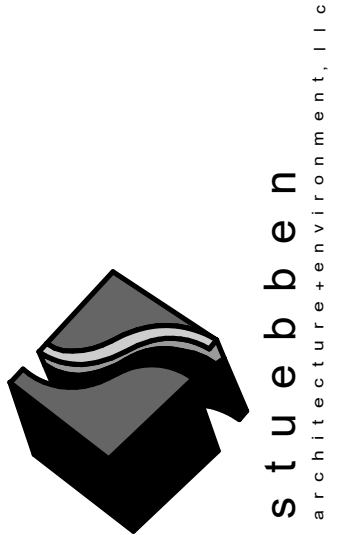
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2 SECOND FLOOR DOMESTIC WATER PLAN
P-102 SCALE: 1/8" = 1'-0" N



1 FIRST FLOOR DOMESTIC WATER PLAN
P-102 SCALE: 1/8" = 1'-0" N



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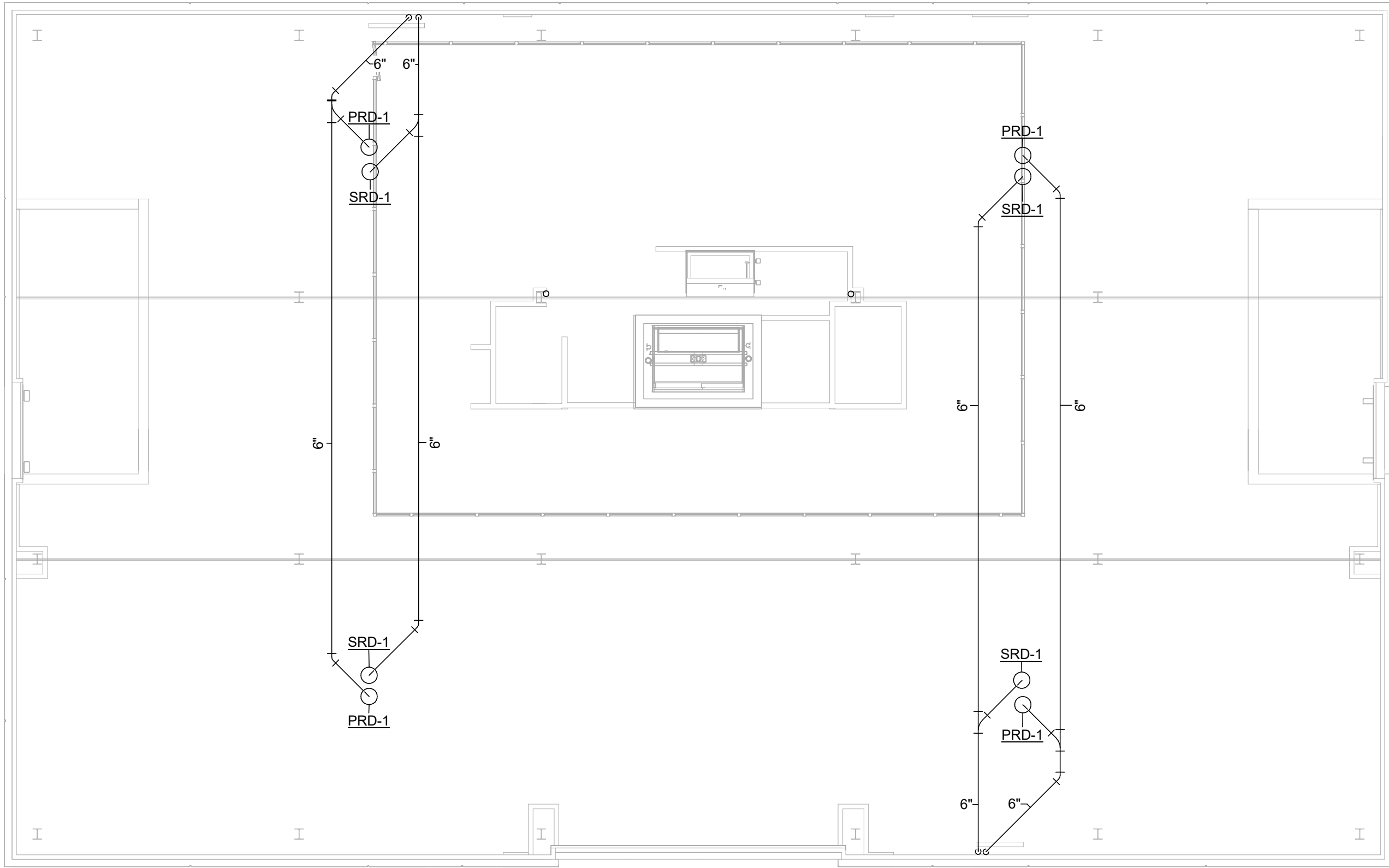
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DW FLOOR PLAN
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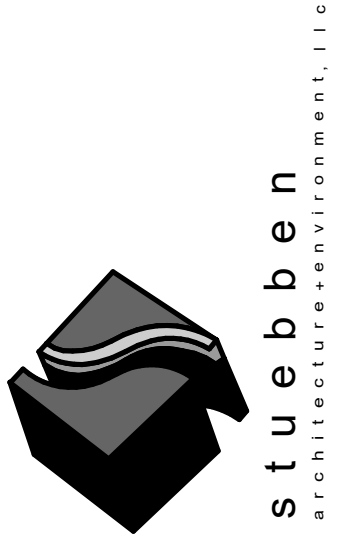


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P-201

PLUMBING ROOF PLAN

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

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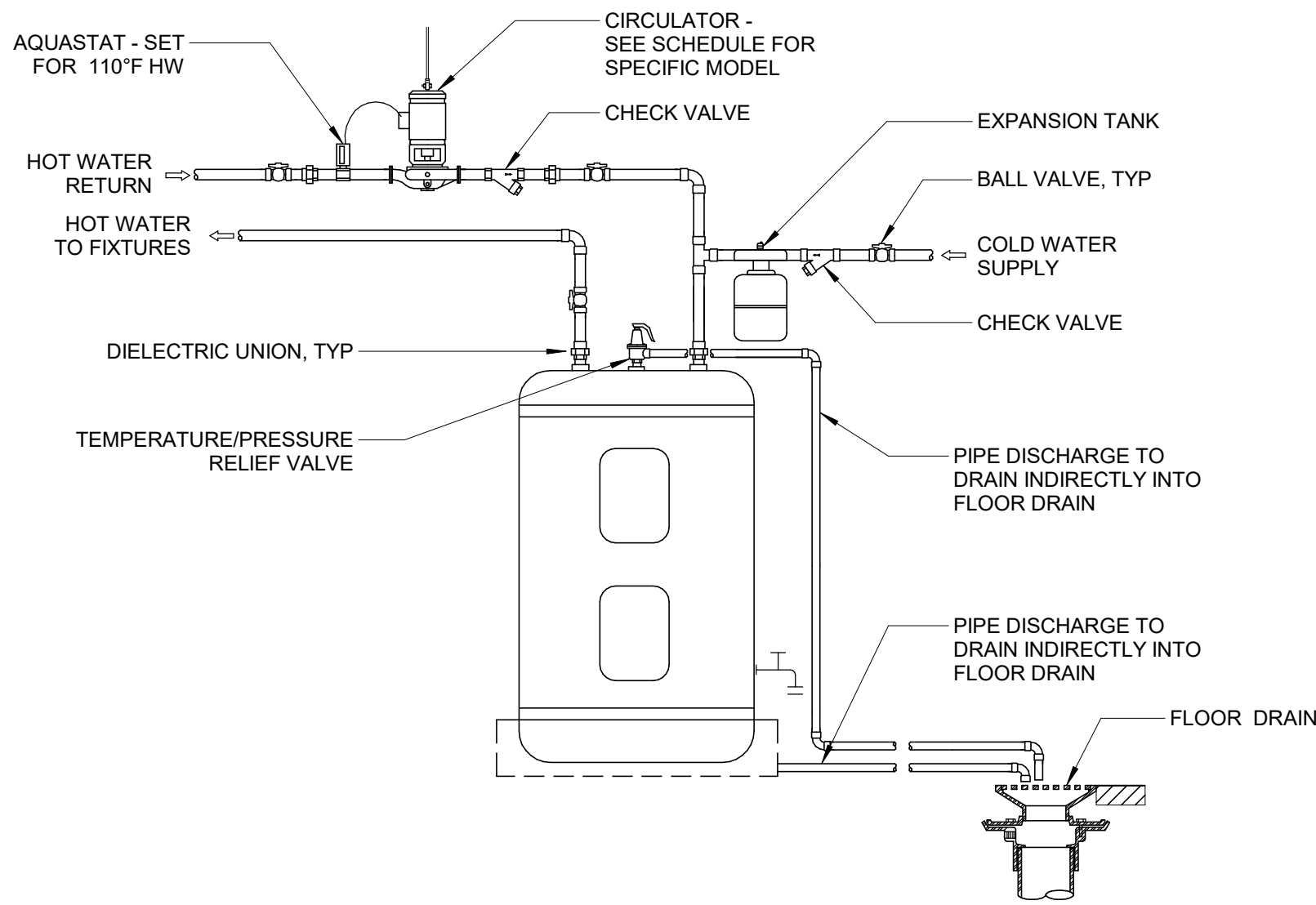
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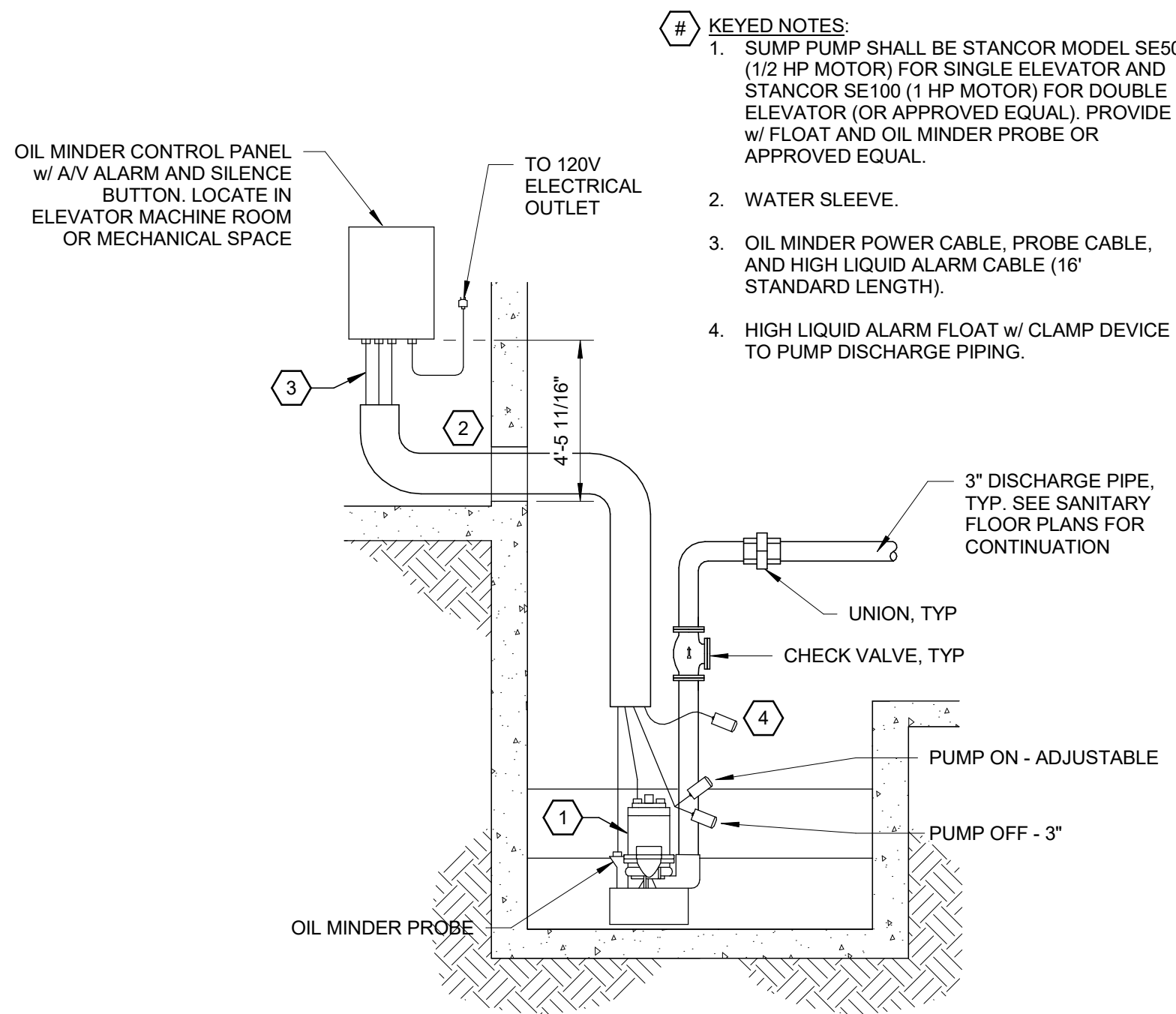
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**PLUMBING ROOF
PLAN**

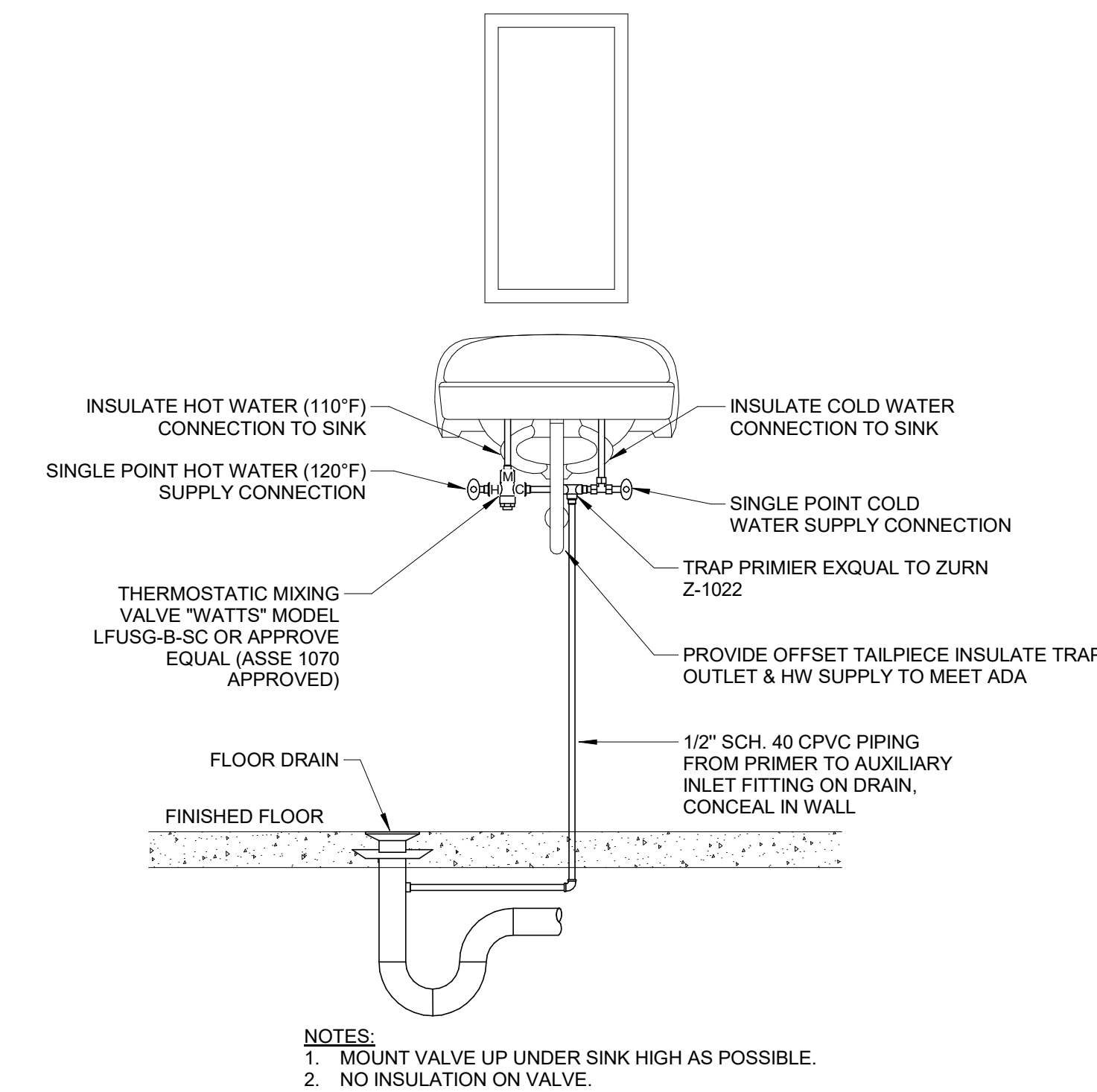
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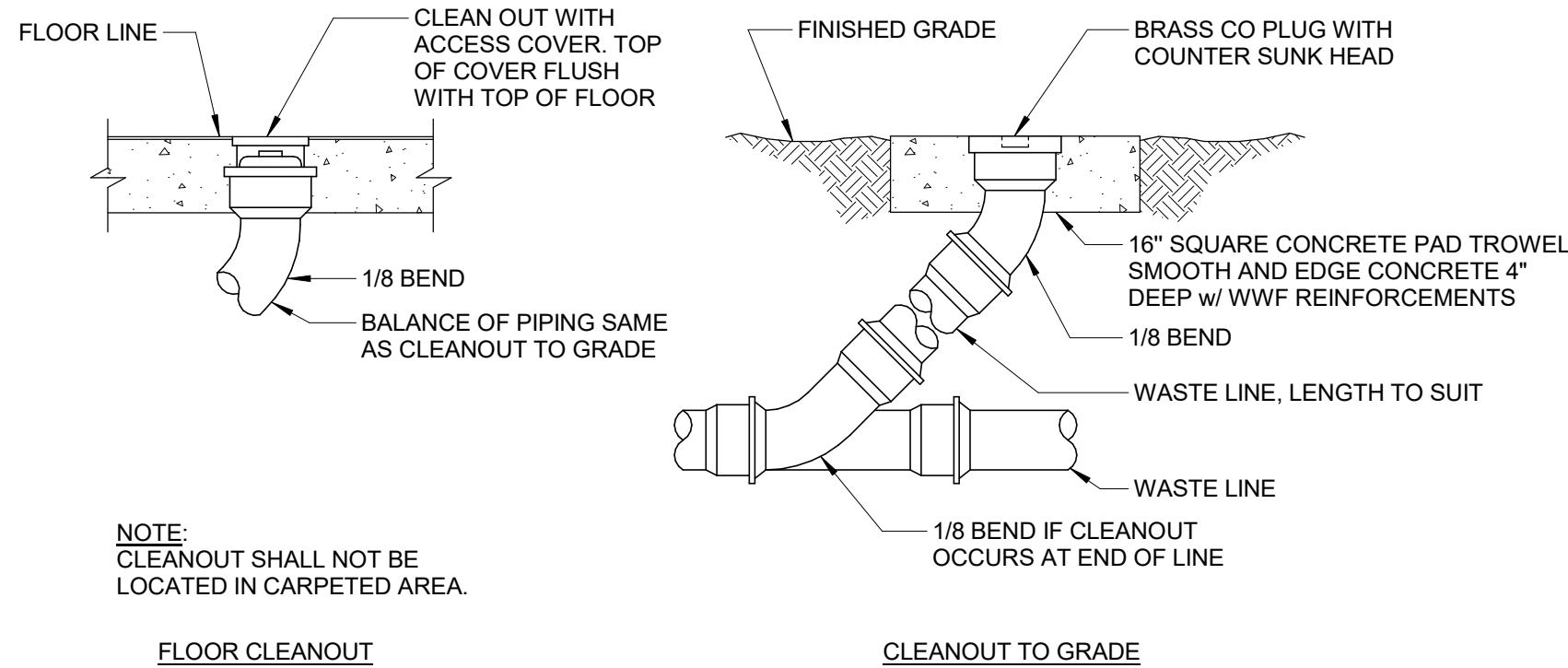
1 ELECTRIC WH PIPING DIA w/ RECIRC PUMP
P-301 SCALE: NTS



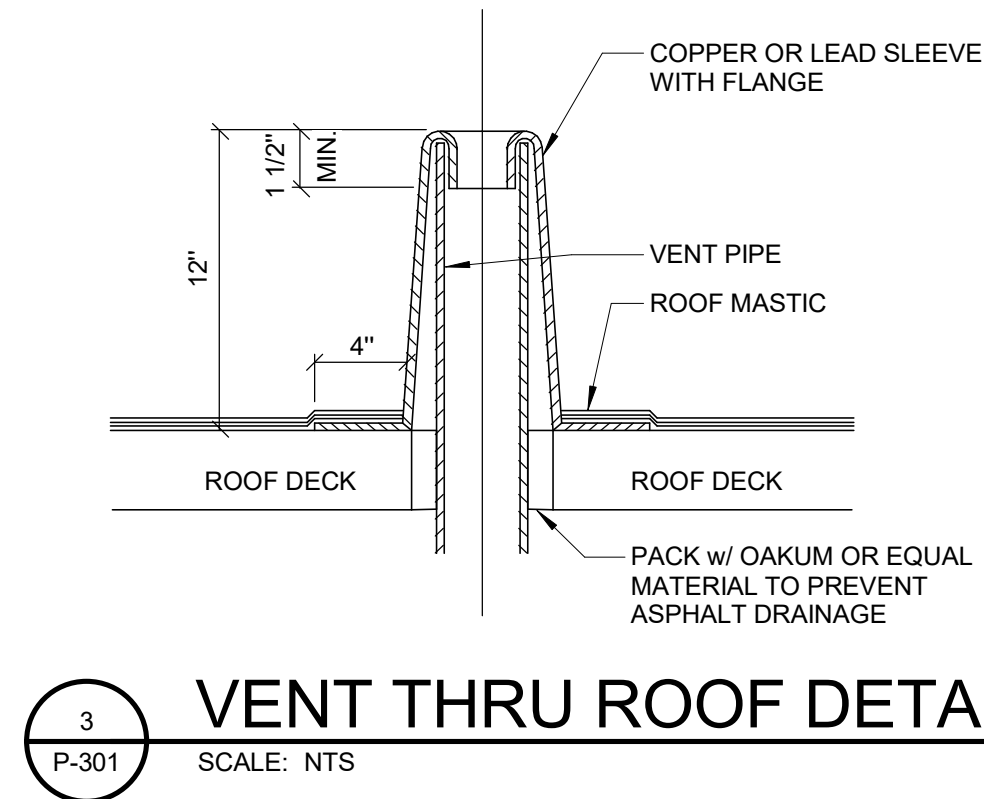
4 ELEVATOR PIT SUMP PUMP DIAGRAM
P-301 SCALE: NTS



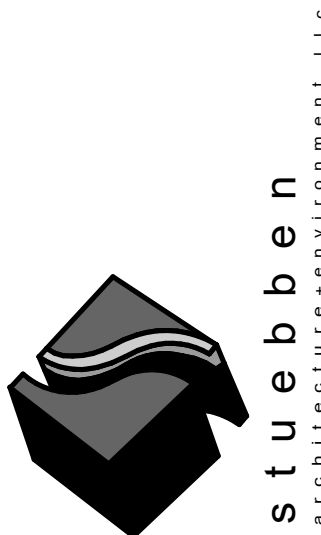
2 TRAP PRIMER & MIXING VALVE DETAIL
P-301 SCALE: 1/4" = 1'-0"



5 CLEANOUT DETAILS
P-301 SCALE: NTS



3 VENT THRU ROOF DETAIL
P-301 SCALE: NTS



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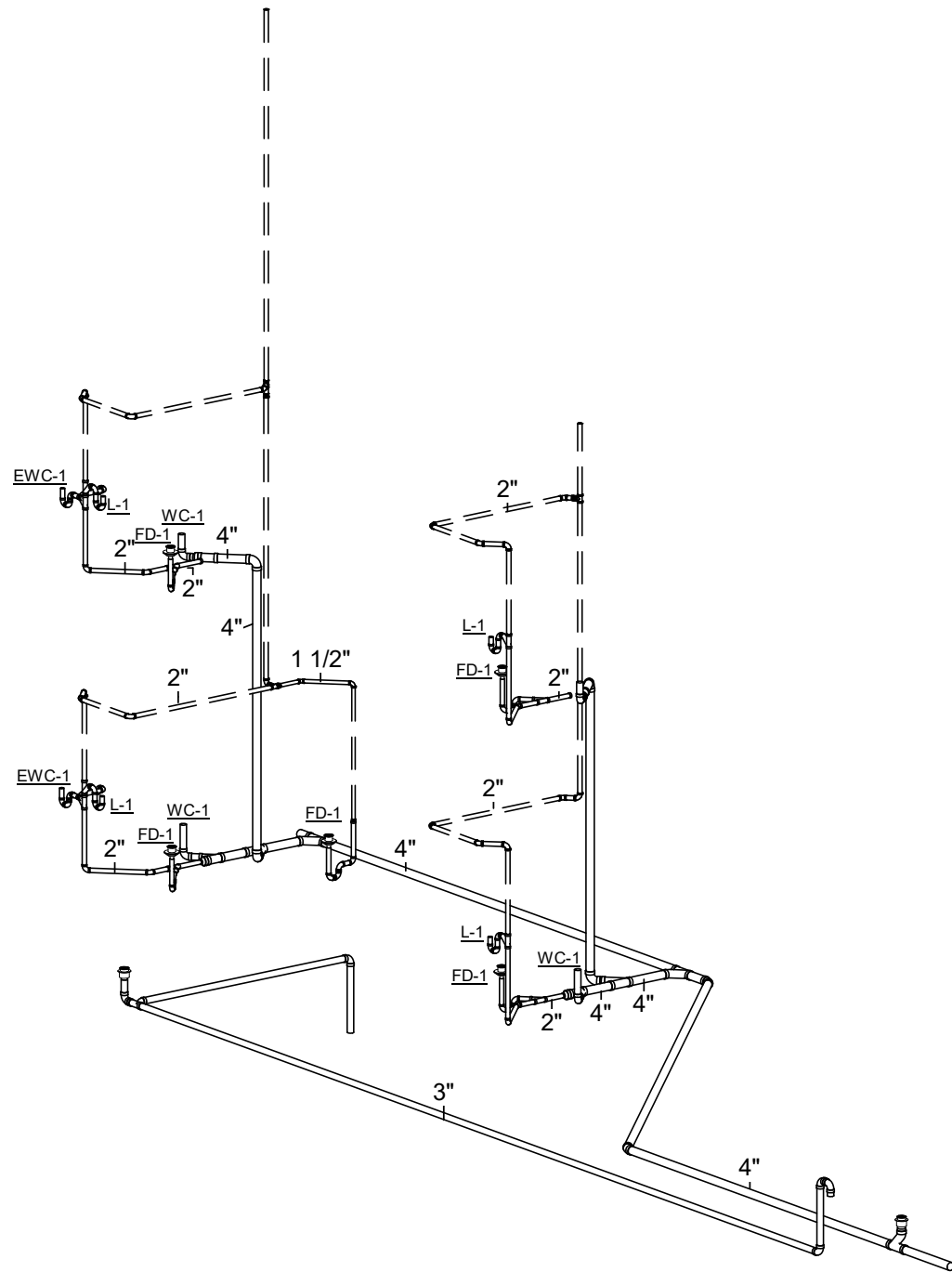
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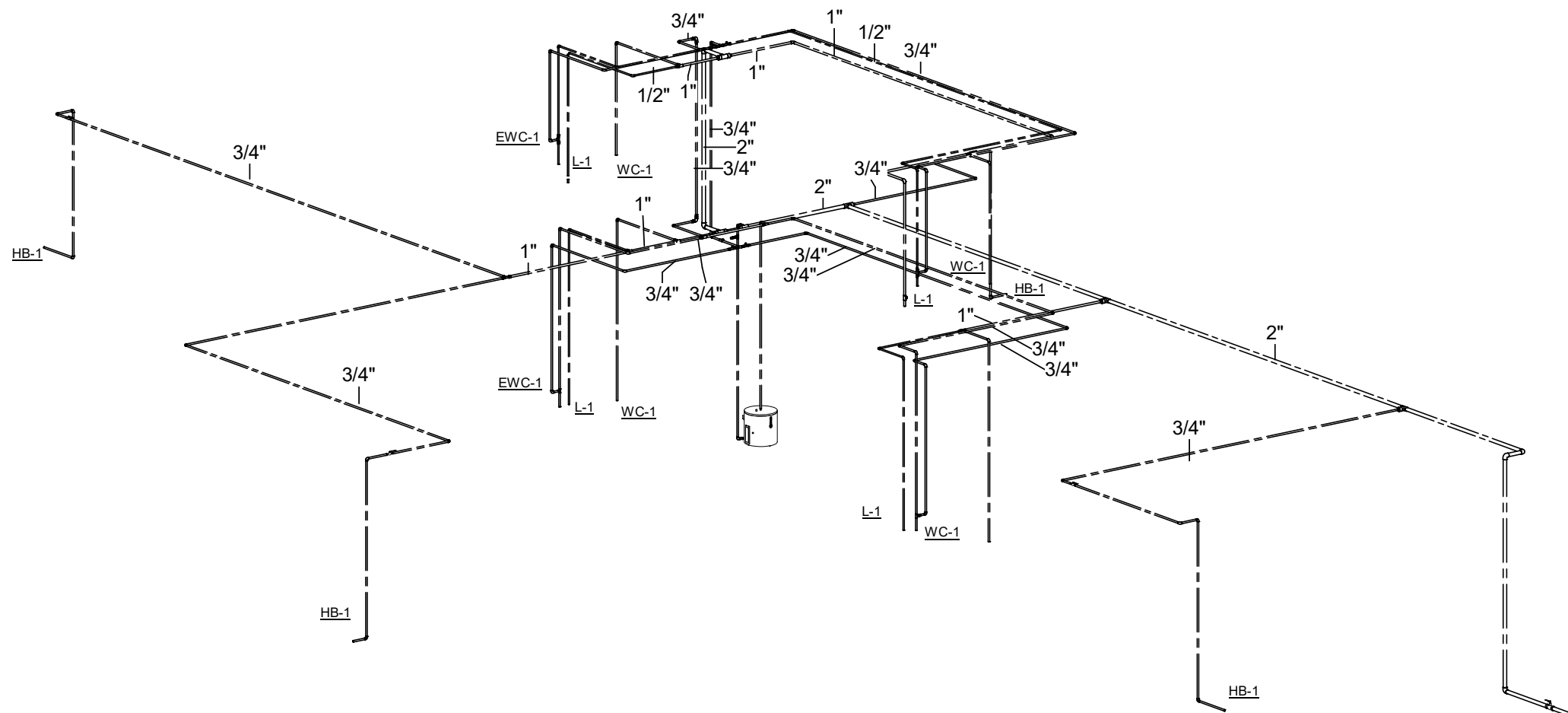
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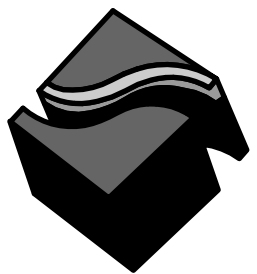
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P-401
Sanitary Sewer Riser Diagram
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2
P-401
Domestic Water Riser Diagram
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