

GENERAL NOTES:

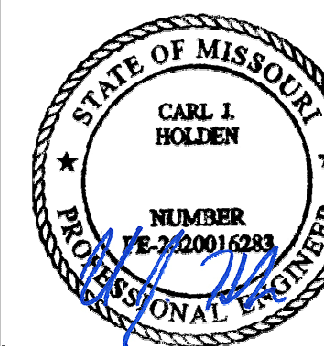
- PROVIDE A CONSTRUCTION RECORD SET OF "AS-BUILT" DOCUMENTS TO THE ARCHITECT REFLECTING ANY VARIANCES OF INSTALLED PIPING LOCATIONS OR EQUIPMENT CONTRARY TO THE CONSTRUCTION DOCUMENTS, REFER TO SPECIFICATIONS.
- DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- PROVIDE TO THE ARCHITECT A COPY OF INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS, REFER TO SPECIFICATIONS.
- INSTALLATION SHALL COMPLY WITH LEGALLY CONSTITUTED CODES AND THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND ALSO MEET ALL REQUIREMENTS OF THE LANDLORD. OBTAIN A COPY OF THE LANDLORD'S REQUIREMENTS AND REVIEW PRIOR TO SUBMITTING BID.
- PLANS AND SPECIFICATIONS GOVERN WHERE THEY EXCEED CODE REQUIREMENTS.
- VERIFY LOCATION AND DEPTH OF UTILITIES AT POINTS OF CONNECTION BEFORE START OF PIPING INSTALLATION.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.
- DO NOT SCALE FLOOR PLANS FOR EXACT HORIZONTAL LOCATION OF PIPE ROUTING.
- INSTALL CONCEALED PIPING TIGHT TO THE STRUCTURE AND AS HIGH AS POSSIBLE.
- VALVES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
- INSTALL EXPOSED PIPING, WHERE NECESSARY, IN FINISHED AREAS TIGHT TO THE STRUCTURE, WALL OR CEILING AND AS HIGH AS POSSIBLE. INSTALL PIPING PARALLEL AND / OR PERPENDICULAR TO WALLS.
- INSTALL VALVES AND APPURTENANCES A MAXIMUM OF 24" ABOVE CEILING IN ACCESSIBLE LOCATION WITHIN 24" OF ACCESS DOORS OR ACCESSIBLE CEILING TILES. PROVIDE PIPE AND FITTINGS TO INSTALL VALVES AND APPURTENANCES AT REQUIRED HEIGHT AND WITHIN 24" OF ACCESS DOORS OR ACCESSIBLE CEILING TILES.
- INSTALL NO PLASTIC PIPE OF ANY KIND ABOVE SLAB INSIDE THE BUILDING. INSTALL NO PLASTIC PIPE IN THE CEILING RETURN AIR PLENUM.
- COORDINATE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- COORDINATE PIPING INSTALLATION WITH STRUCTURAL GRADE BEAMS, FOOTINGS, COLUMN PIERS, ETC. SLEEVE PIPING THROUGH GRADE BEAMS, FOOTING, ETC. WHERE REQUIRED AND AS NOTED ON PLANS. COORDINATE SLEEVE INSTALLATIONS WITH THE ARCHITECT, STRUCTURAL ENGINEER, STRUCTURAL CONTRACTOR AND GENERAL CONTRACTOR BEFORE CONCRETE IS INSTALLED.
- CLEAN FAUCET AERATORS AND PIPE STRAINERS PRIOR TO TURNING BUILDING OVER TO THE OWNER.
- COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT INSTALL PIPING OVER ELECTRICAL PANELS.
- PAINT ALL EXPOSED GAS AND WATER PIPING USING RUST INHIBITOR PAINT. PAINT AND COLOR SHALL BE COORDINATED WITH THE ARCHITECT AND / OR OWNER.
- COORDINATE ALL ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN 10' MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 2' CLEARANCE FROM ALL OTHER EQUIPMENT.
- INSULATE PIPING ROUTED IN EXTERIOR BUILDING WALLS WITH MINIMUM 2" BATT INSULATION TO PREVENT FREEZING.
- PROVIDE "HEAVY-DUTY" NO-HUB COUPLINGS ON SANITARY PIPING 4" AND LARGER. SEE DIVISION 22 SPECIFICATION SECTION "SANITARY DRAINAGE AND VENT AND PIPING SPECIALTIES" FOR MORE INFORMATION.
- PROVIDE "HEAVY-DUTY" NO-HUB COUPLINGS ON STORM PIPING, INCLUDING CONNECTIONS TO ROOF DRAINS. SEE DIVISION 22 SPECIFICATION SECTION "STORM DRAINAGE PIPING AND SPECIALTIES" FOR MORE INFORMATION.
- PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON AT SLAB ON GRADE. SEE DIVISION 22 SPECIFICATION FOR MORE INFORMATION.
- PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON SANITARY, WASTE AND VENT PIPE AT SLAB ON GRADE. SEE DIVISION 22 SPECIFICATION SECTION "SANITARY DRAINAGE AND VENT PIPING AND SPECIALTIES" FOR MORE INFORMATION.
- PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON STORM PIPE AT SLAB ON GRADE. SEE DIVISION 22 SPECIFICATION SECTION "STORM DRAINAGE PIPING AND SPECIALTIES" FOR MORE INFORMATION.
- FLOW CONTROL VALVES SHALL BE SIZE 1/2" AND SET AT 0.5 GPM UNLESS NOTED OTHERWISE.
- WATER HAMMER ARRESTORS SHALL BE SIZE "A" UNLESS NOTED OTHERWISE.
- PROVIDE VERTICAL LIFT SPRING LOADED CHECK VALVES IN HOT AND COLD WATER SUPPLIES FOR MOP-SINK FAUCETS DOWNSTREAM OF SHUTOFF VALVES.
- PROVIDE WALL PIPES AT PIPING PENETRATIONS OF ELEVATED WATERPROOF FLOOR SLABS, REFER TO SPECIFICATIONS.
- PROVIDE SIZE AND LENGTH OF HOT WATER FIXTURE SUPPLY PIPE FROM CIRCULATED HOT WATER BRANCH OR MAIN TO TERMINATION OF HOT WATER FIXTURE SUPPLY PIPE AT EACH FIXTURE PER 2015 INTERNATIONAL ENERGY CONSERVATION CODE, TABLE C404.3.1. FOR 1/2" HOT WATER FIXTURE SUPPLY PIPE SIZE TO INDIVIDUAL LAVATORIES, PROVIDE MAXIMUM LENGTH OF TWO FEET. FOR 3/4" HOT WATER FIXTURE SUPPLY PIPE SIZE TO INDIVIDUAL SINKS, PROVIDE MAXIMUM LENGTH OF 43 FEET. FOR 3/4" HOT WATER FIXTURE SUPPLY PIPE SIZE TO INDIVIDUAL SINKS, PROVIDE MAXIMUM LENGTH OF 21 FEET.

PLUMBING SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

V2.01

STANDARD MOUNTING HEIGHTS		PIPING SYMBOLS		PIPING LINETYPES	
REFER TO THE ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHTS. UNO, INSTALL PLUMBING FIXTURES WITH THE MOUNTING HEIGHTS AS LISTED BELOW WITH FINAL APPROVAL BY THE ARCHITECT.					
LAVATORY OR SINK	STANDARD HEIGHT 31" FLOOR TO RIM ADA ACCESSIBLE 34" FLOOR TO RIM CHILD HEIGHT 24" FLOOR TO RIM	OXYGEN OUTLET NITROUS OXIDE OUTLET MEDICAL AIR OUTLET NITROGEN OUTLET MEDICAL VACUUM INLET FLOOR SINK (FS), SIZE & TYPE FLOOR DRAIN (FD), SIZE & TYPE ROOF DRAIN (RD), SIZE & TYPE BALL VALVE CONTROL VALVE SHUTOFF VALVE CHECK VALVE BALANCING VALVE WITH PRESSURE PORTS WATER METER STRAINER STRAINER WITH BLOWOFF RELIEF/SAFETY VALVE SOLENOID VALVE PRESSURE REDUCING VALVE GAS PRESSURE REGULATOR THERMOSTATIC MIXING VALVE PIPE ANCHOR EXPANSION JOINT BACKFLOW PREVENTER PRESSURE GAUGE THERMOMETER UNION FLANGE CONNECTION HOSE BIBB (HB) NON-FREEZING WALL HYDRANT (NW) MANUAL / AUTOMATIC AIR VENT OR VACUUM RELIEF VALVE PRESSURE / VACUUM SWITCH CLEANOUT CAP WALL CLEANOUT (WCO) FLOOR CLEANOUT (FCO) EXTERIOR CLEANOUT (ECO) ELBOW UP ELBOW DOWN TEE UP TEE DOWN ELBOW UP WITH SHUT-OFF VALVE (SOV) ELBOW DOWN WITH SHUT-OFF VALVE (SOV) TEE UP WITH SHUT-OFF VALVE (SOV) TEE DOWN WITH SHUT OFF VALVE (SOV) WATER HAMMER ARRESTER (WHA) WITH PDI SIZES, (A, B, C, D, & E) RECIRCULATION PUMP P-TRAP GAS COCK TRAP PRIMER TRAP PRIMER WITH DISTRIBUTION UNIT		DOMESTIC COLD WATER (CW) SOFTENED COLD WATER (SCW) DOMESTIC HOT WATER (HW) DOMESTIC HOT WATER REGR. (HWR) DOMESTIC HOT WATER (140°) TRAP PRIMER LINE (T) SOIL PIPING - ABOVE FLOOR (S) SOIL PIPING - BELOW FLOOR (S) WASTE PIPING - ABOVE FLOOR (W) WASTE PIPING - BELOW FLOOR (W) GREASE WASTE - ABOVE FLOOR (GW) GREASE WASTE - BELOW FLOOR (GW) COMBINATION GREASE WASTE AND VENT (CGWV) COMBINATION WASTE AND VENT (CWV) STORM DRAIN - ABOVE FLOOR (ST) STORM DRAIN - BELOW FLOOR (ST) OVERFLOW STORM DRAIN - ABOVE FLOOR (OST) VENT BELOW GRADE (VBG) VENT BELOW FLOOR (VBF) INDIRECT DRAIN (ID) CONDENSATE DRAIN - HIGH EFFICIENCY RTU (CDH) CONDENSATE DRAIN (CD) AUXILIARY CONDENSATE DRAIN (ACD) SUMP OR SEWAGE PUMP DISCHARGE (SPD) NATURAL GAS (G) GAS VENT (GV) MEDIUM PRESSURE NATURAL GAS (MPG) MEDIUM PRESSURE NATURAL GAS ON ROOF (MPG) NON-POTABLE WATER (NPW) LIQUEFIED PETROLEUM GAS (LPG) WATER SERVICE (WS) FIRE PROTECTION (FP) CONDENSATE PUMP DISCHARGE (PD) VENT PIPING (V) ACID WASTE - ABOVE FLOOR (AW) ACID WASTE - BELOW FLOOR (AW) ACID VENT (AV) GRAY WATER (GWS) COMPRESSED AIR (CA)	
URINAL	STANDARD HEIGHT 24" FLOOR TO RIM ADA ACCESSIBLE 17" FLOOR TO RIM CHILD HEIGHT 14" FLOOR TO RIM				
WATER CLOSET	STANDARD HEIGHT 15" FLOOR TO RIM ADA ACCESSIBLE 17" TO 19" FLOOR TO TOP OF SEAT CHILD HEIGHT 10" FLOOR TO RIM				
WATER COOLER OR DRINKING FOUNTAIN	STANDARD HEIGHT 41" FLOOR TO SPOUT ADA ACCESSIBLE 38" FLOOR TO SPOUT CHILD HEIGHT 30" FLOOR TO SPOUT				
SHOWER VALVES	STANDARD HEIGHT - MEN 48" FLOOR TO CENTERLINE STANDARD HEIGHT - WOMEN 42" FLOOR TO CENTERLINE ADA ACCESSIBLE 38" MIN TO 48" MAX FLOOR TO CENTERLINE				
SHOWER HEADS	MEN 6'-6" FLOOR TO CENTERLINE WOMEN 6'-0" FLOOR TO CENTERLINE				
TUB VALVES	STANDARD HEIGHT 32" FLOOR TO CENTERLINE ADA ACCESSIBLE CENTER BETWEEN GRAB BAR AND TUB RIM				
CLINIC SERVICE SINKS	30" FLOOR TO RIM				
SURGEON'S SCRUB-UP SINKS	35" FLOOR TO FRONT RIM				
ICE MAKER OUTLET BOXES	24" FLOOR TO CENTER OF BOX				
WASHING MACHINE OUTLET BOXES	42" FLOOR TO RIM				
JANITOR'S SINK FAUCET FITTING	42" FLOOR TO CENTERLINE				
HOSE BIBBS	38" AFF TO CENTERLINE				
NON-FREEZE WALL HYDRANTS	18" AFF TO CENTERLINE				
USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS OR ELSEWHERE. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG). ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.					
ANNOTATION					
PLUMBING PLAN NOTE CALLOUT PLUMBING EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED), REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED) MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE) CONNECTION POINT OF NEW WORK TO EXISTING DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER SECTION CUT DESIGNATION					
ABBREVIATIONS					
ADA AMERICANS WITH DISABILITIES ACT	MIN MINIMUM	N/C NORMALLY CLOSED			
AFF ABOVE FINISHED FLOOR	N/O NORMALLY OPEN	N/O NORMALLY OPEN			
AFG ABOVE FINISHED GRADE	N/C NOT IN CONTRACT	ORD OVERFLOW ROOF DRAIN			
AHU AIR HANDLING UNIT	PDI PLUMBING DRAINAGE SYSTEM	PHIØ PHASE			
AP ACCESS PANEL	PRV PRESSURE REDUCING VALVE	PVC POLYVINYL CHLORIDE			
BAS BUILDING AUTOMATION SYSTEM	RCP REINFORCED CONCRETE PIPE	RD ROOF DRAIN			
BFF BELOW FINISHED FLOOR	RM REVOLUTIONS PER MINUTE	RTU ROOFTOP UNIT			
BFG BELOW FINISHED GRADE	RTU ROOFTOP UNIT	SF SQUARE FEET			
BOP BOTTOM OF PIPE	DN DOWN	SS STAINLESS STEEL			
BOS BOTTOM OF STRUCTURE	DS DOWNSPOUT	ST SANITARY SEWER, SOIL EXISTING			
BTU BRITISH THERMAL UNIT	EMS ENERGY MANAGEMENT SYSTEM	TFA TO FLOOR ABOVE			
CP CONDENSATE PUMP	ETR EXISTING TO REMAIN	TFB TO FLOOR BELOW			
CPVC CHLORINATED POLYVINYL CHLORIDE	EWC ELECTRIC WATER COOLER	TYP TYPICAL			
CU COPPER	FFA FROM FLOOR ABOVE	UL UNDERWRITERS LABORATORIES, INC.			
DI DUCTILE IRON	FFB FROM FLOOR BELOW	UNO UNLESS NOTED OTHERWISE			
DN DOWN	FF FINISHED FLOOR	UPS UNINTERRUPTIBLE POWER SUPPLY			
DFU DRAINAGE FIXTURE UNIT	FLA FULL LOAD AMPS	VCP VITRIFIED CLAY PIPE			
DS DOWNSPOUT	FLR FLOOR	VFD VARIABLE FREQUENCY DRIVE			
(E) EXISTING	GPM GALLONS PER MINUTE	VS VENT STACK			
EMS ENERGY MANAGEMENT SYSTEM	HD HEAD, HUB DRAIN	VTR VENT THROUGH ROOF			
ETR EXISTING TO REMAIN	HZ HERTZ	W/ WITH			
EWC ELECTRIC WATER COOLER	IE INVERT ELEVATION	W/O WITHOUT			
FD FLOOR DRAIN	IN WC INCHES OF WATER COLUMN	WC WATER COLUMN			
FFA FROM FLOOR ABOVE	JB JUNCTION BOX	WS WASTE STACK			
FFB FROM FLOOR BELOW	J-BOX JUNCTION BOX	WSFU WATER SUPPLY FIXTURE UNIT			
FF FINISHED FLOOR	KW KILOWATT	WVS WASTE VENT STACK			
FL FLOW LINE	MAU MAKE-UP AIR UNIT				
FLA FULL LOAD AMPS	MAX MAXIMUM				
FLR FLOOR	MBH 1000 BTU PER HOUR				
FLR FLOOR	MH MANHOLE				
GPM GALLONS PER MINUTE					
HD HEAD, HUB DRAIN					
HZ HERTZ					
IE INVERT ELEVATION					
IN WC INCHES OF WATER COLUMN					
JB JUNCTION BOX					
J-BOX JUNCTION BOX					
KW KILOWATT					
MAU MAKE-UP AIR UNIT					
MAX MAXIMUM					
MBH 1000 BTU PER HOUR					
MH MANHOLE					
LINETYPE LEGEND					
THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.					
EXISTING _____		NEW _____			
DEMOLISH - - - - -		FUTURE - - - - -			



Oct 8 2020
LICENSE # PE-2020016283

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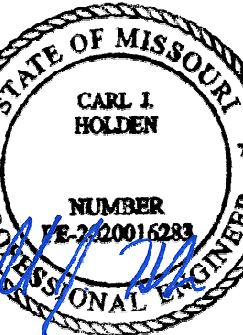
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10/08/20
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13-20102-00
PLUMBING
GENERAL NOTES
AND LEGEND

P0.1

PLUMBING PLAN NOTES:
 P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.



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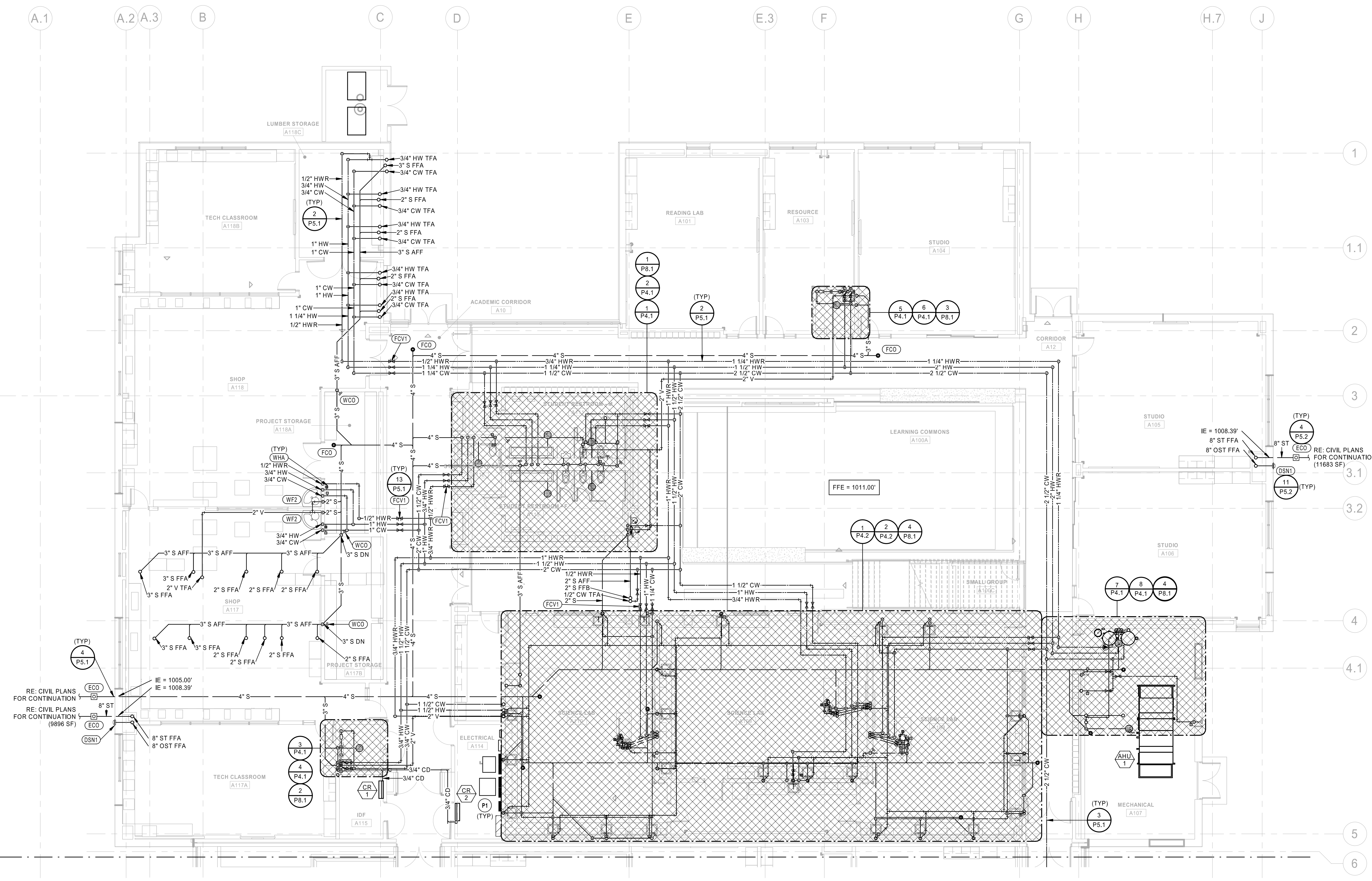
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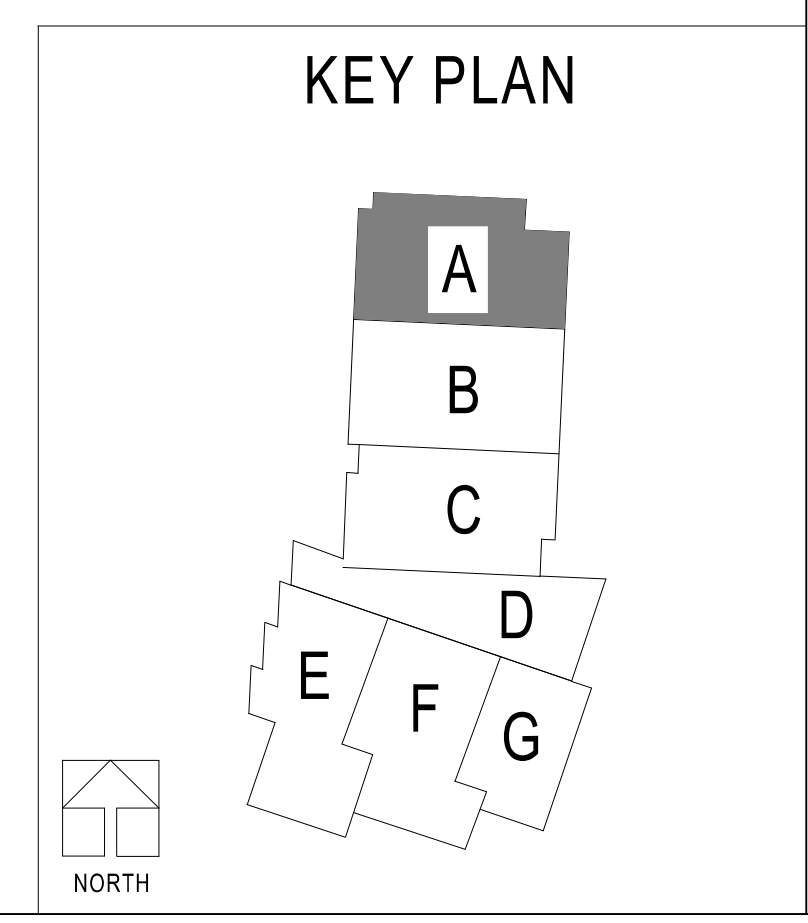
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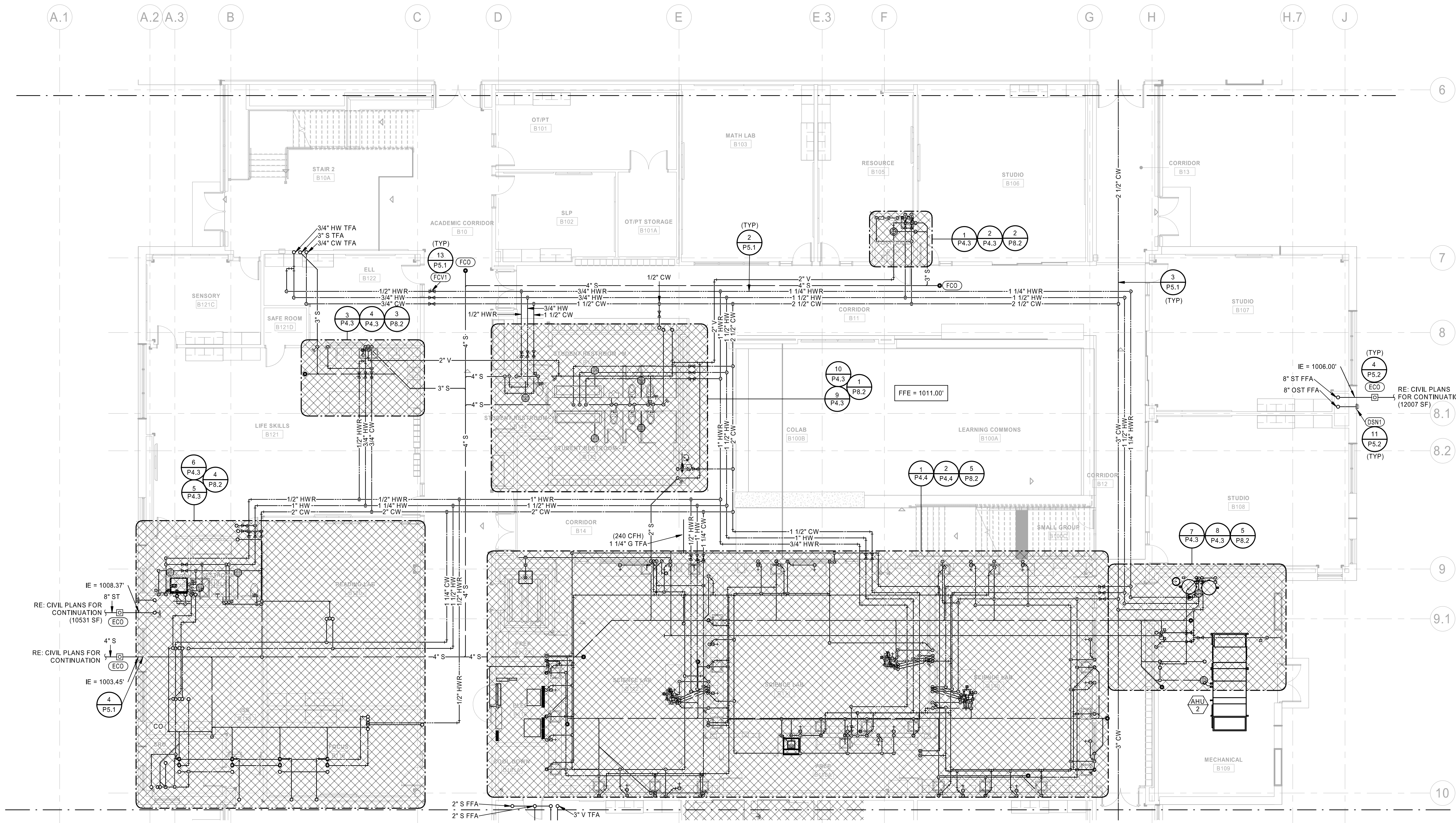
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 PLUMBING FIRST LEVEL PLAN - AREA A

P1.1A

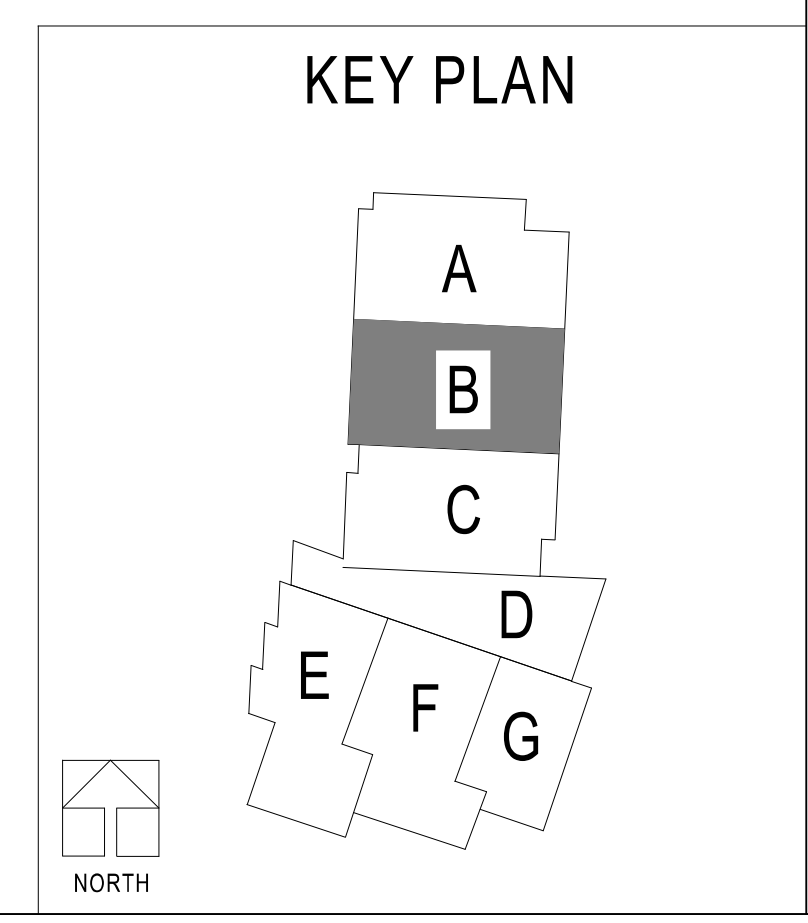


1 PLUMBING FIRST LEVEL PLAN - AREA A
 1/8" = 1'-0"





1 PLUMBING FIRST LEVEL PLAN - AREA B
1/8" = 1'-0"



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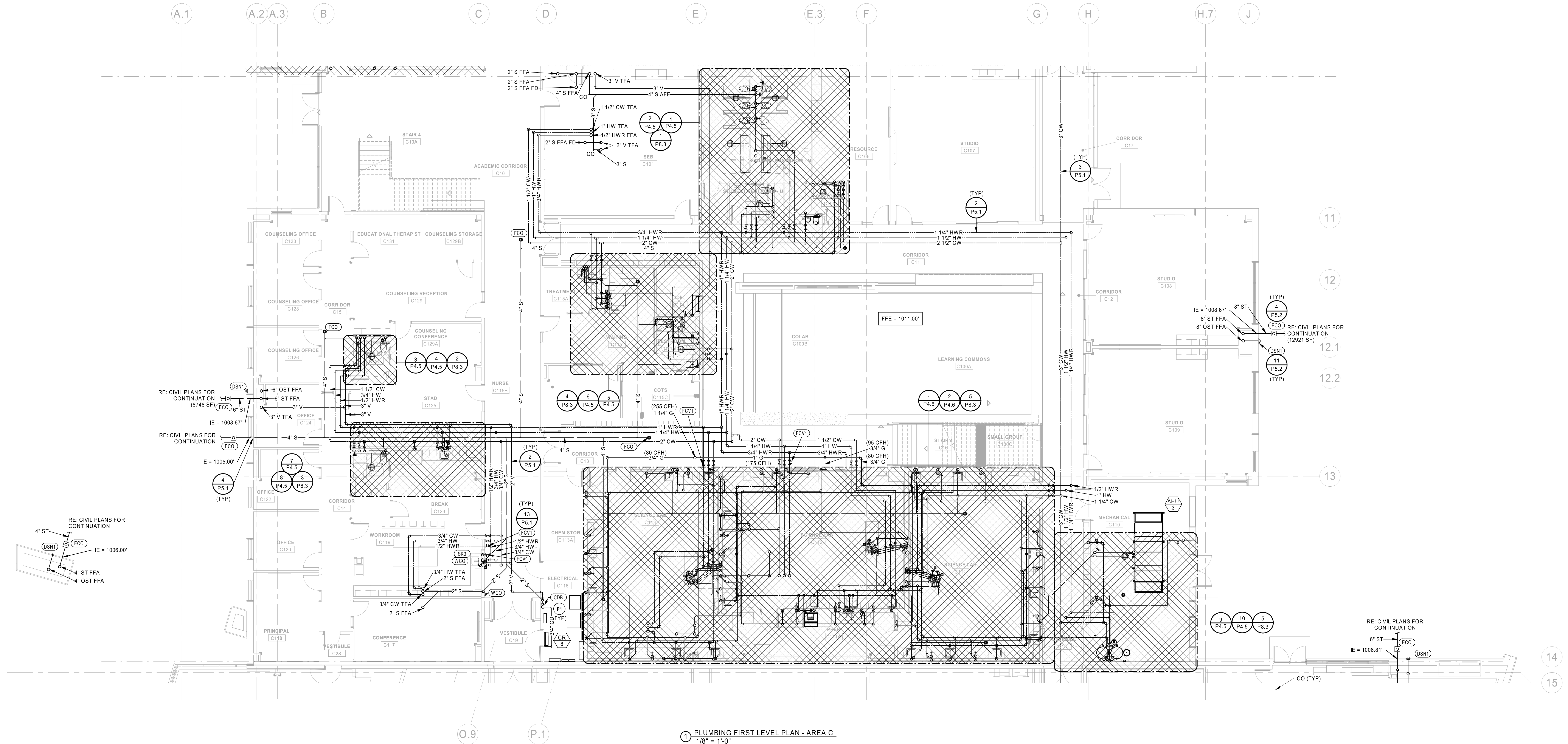
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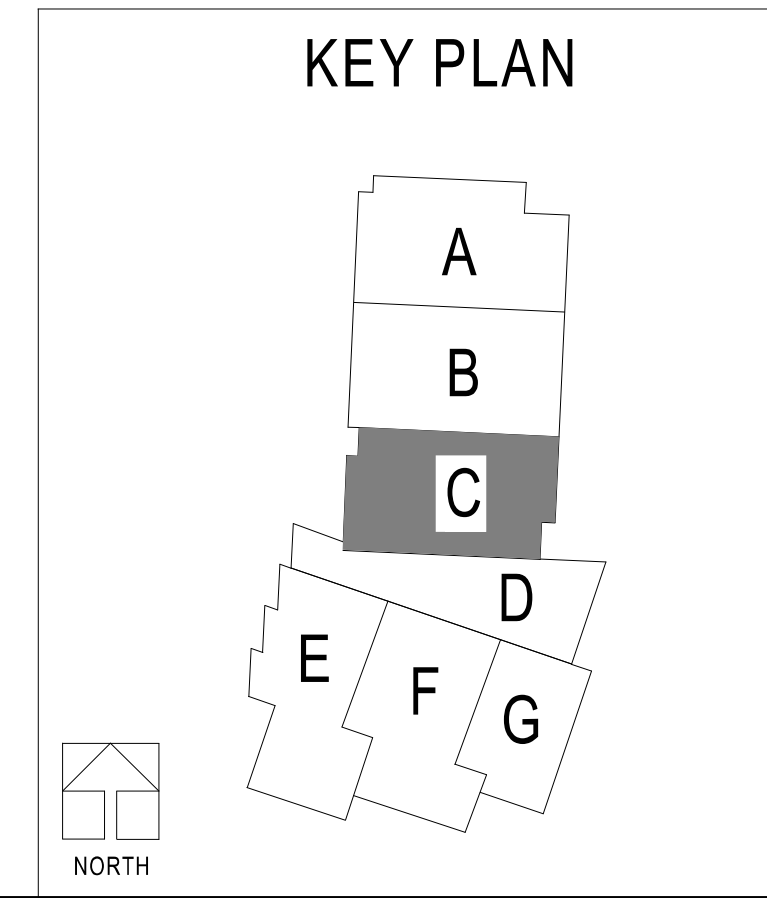
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 PLUMBING FIRST LEVEL PLAN - AREA B

P1.1B

PLUMBING PLAN NOTES:
 P1. DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.



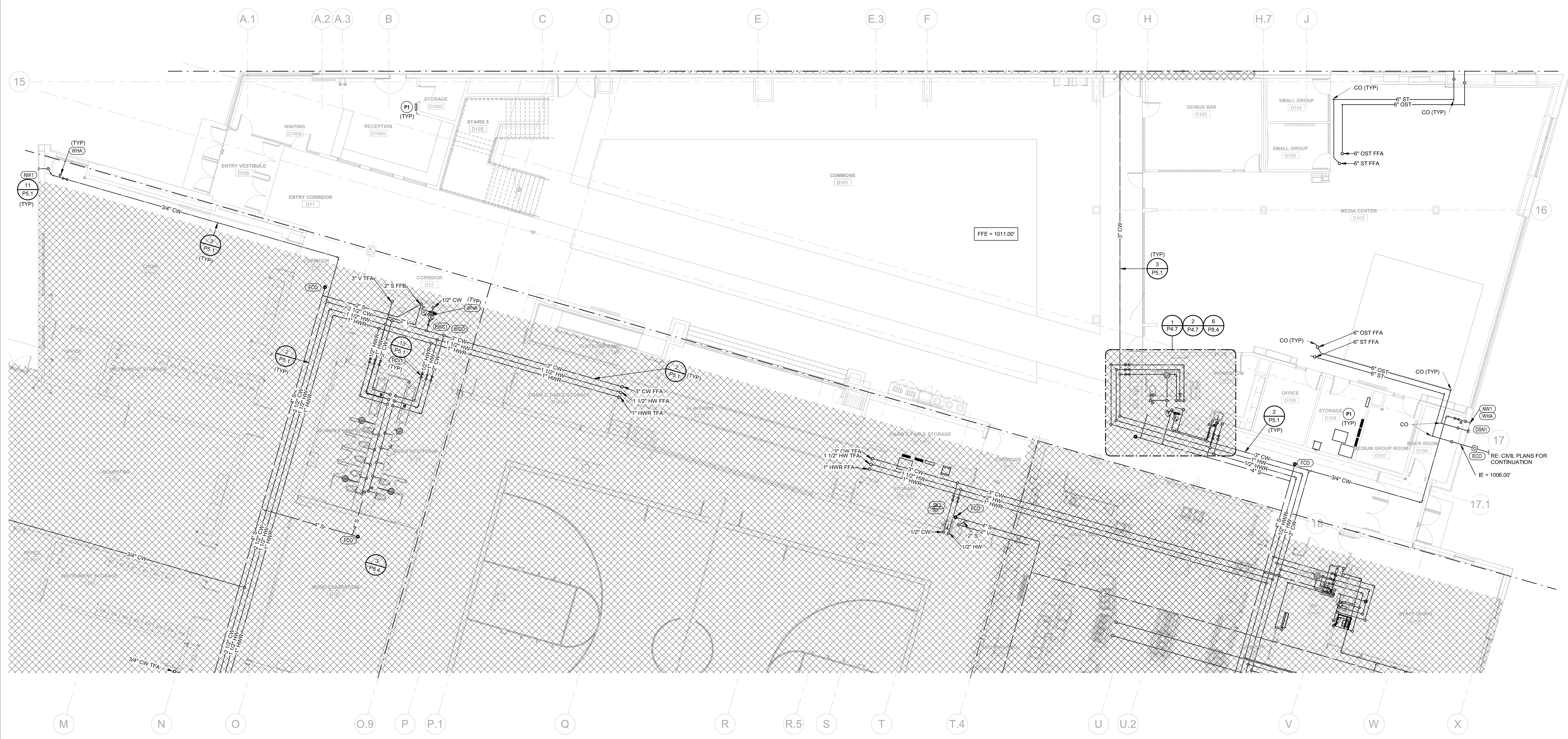
1 PLUMBING FIRST LEVEL PLAN - AREA C
 1/8" = 1'-0"



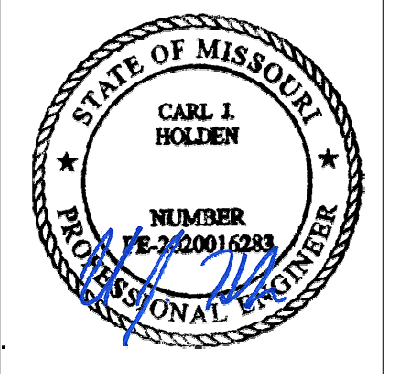
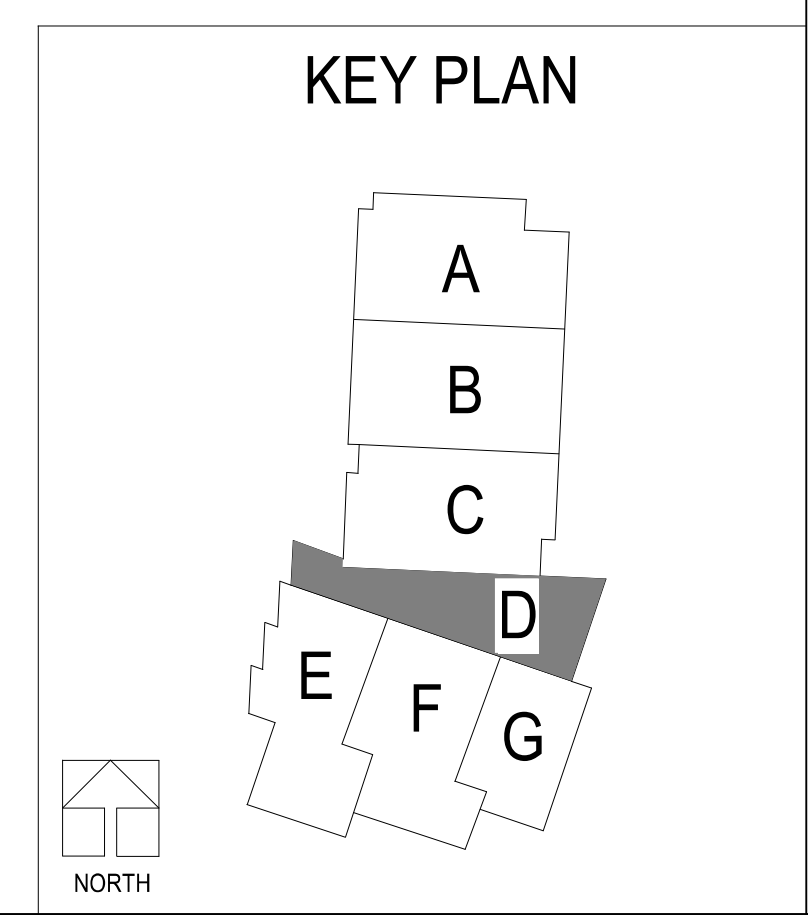
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PLUMBING PLAN NOTES:
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1 PLUMBING FIRST LEVEL PLAN - AREA D
 1/8" = 1'-0"



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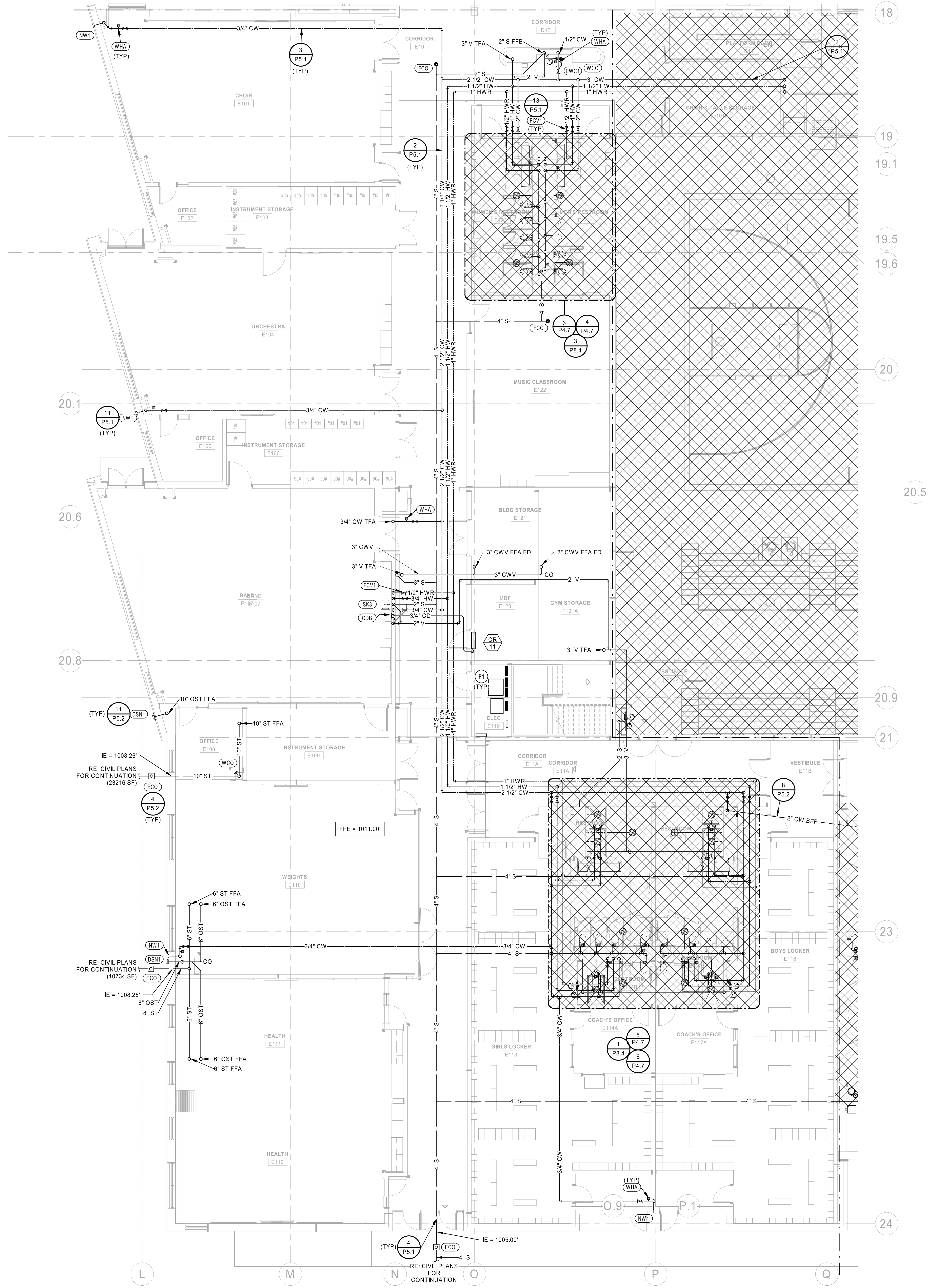
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 PLUMBING FIRST LEVEL PLAN - AREA D

P1.1D



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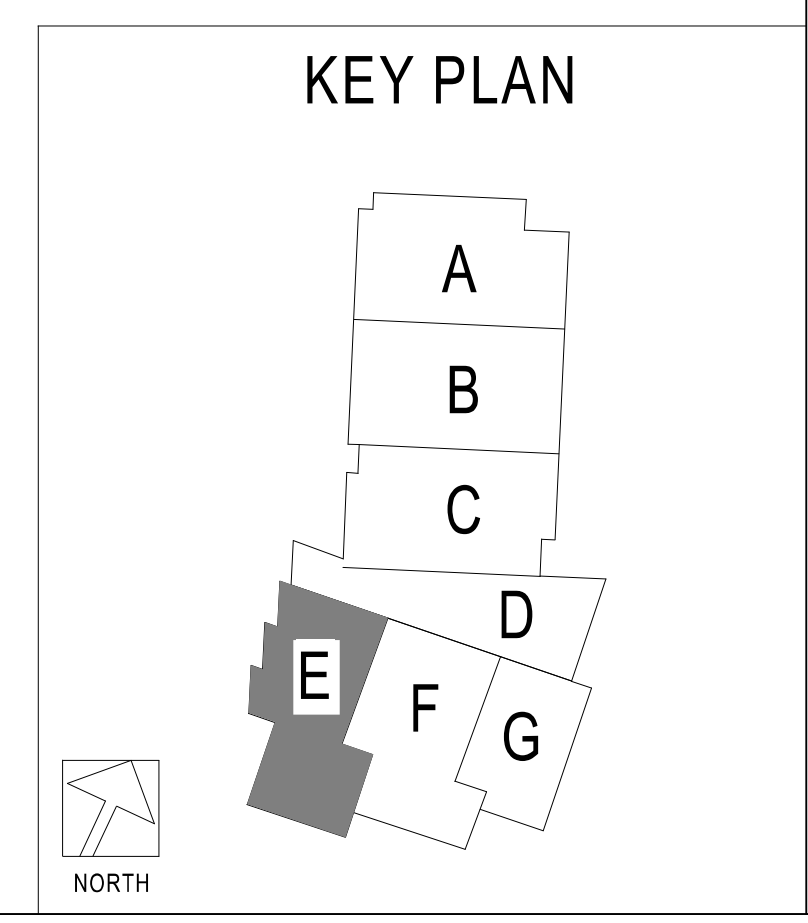
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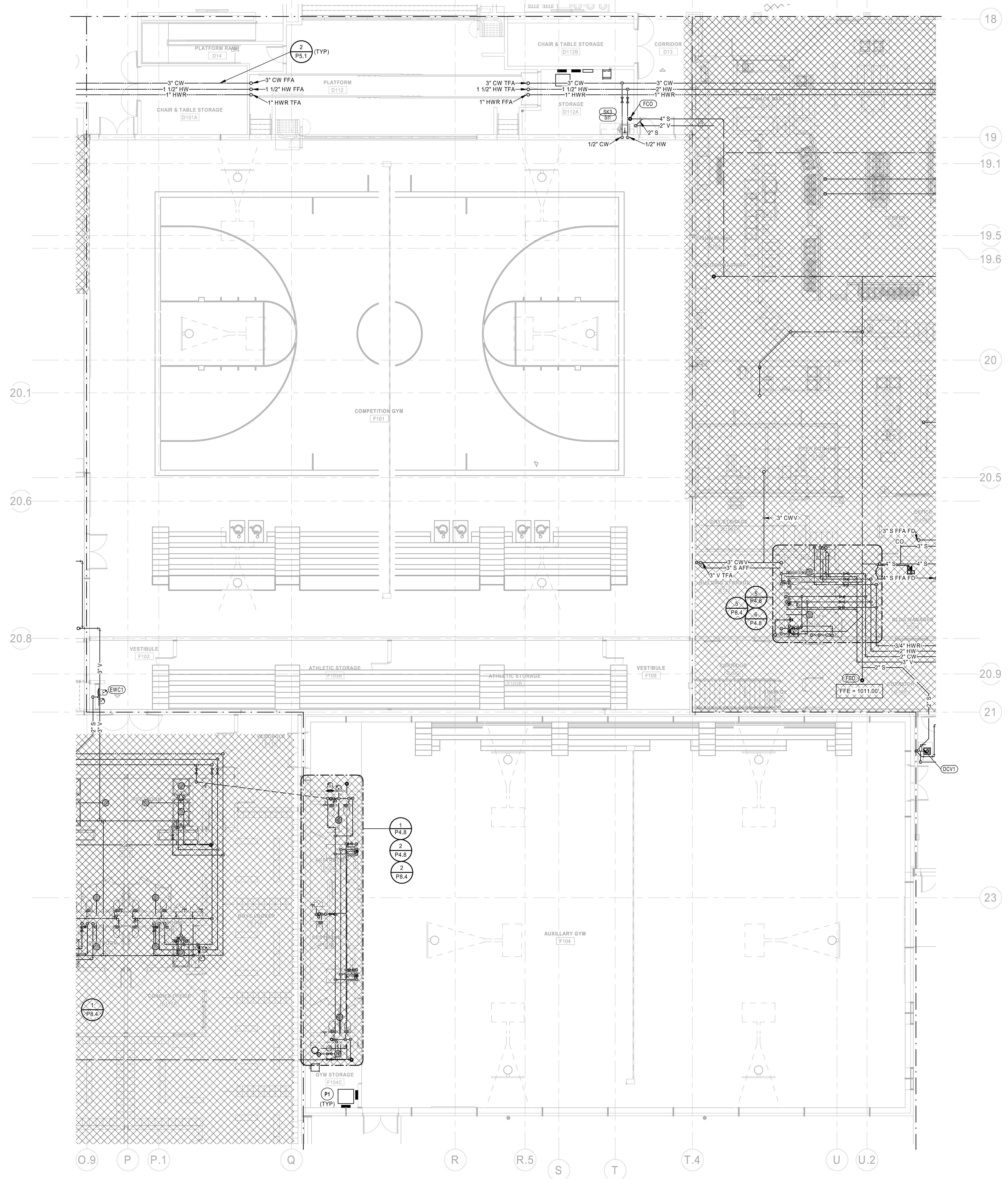
PACKAGE 3 - BUILDING & SITE
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13-20102-00
 PLUMBING FIRST LEVEL PLAN - AREA E

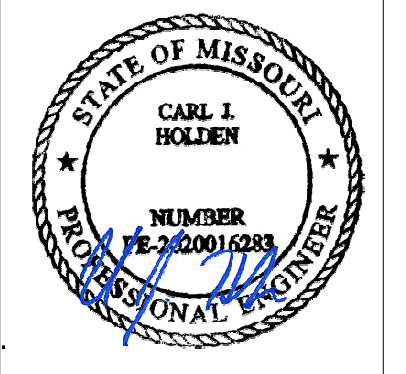
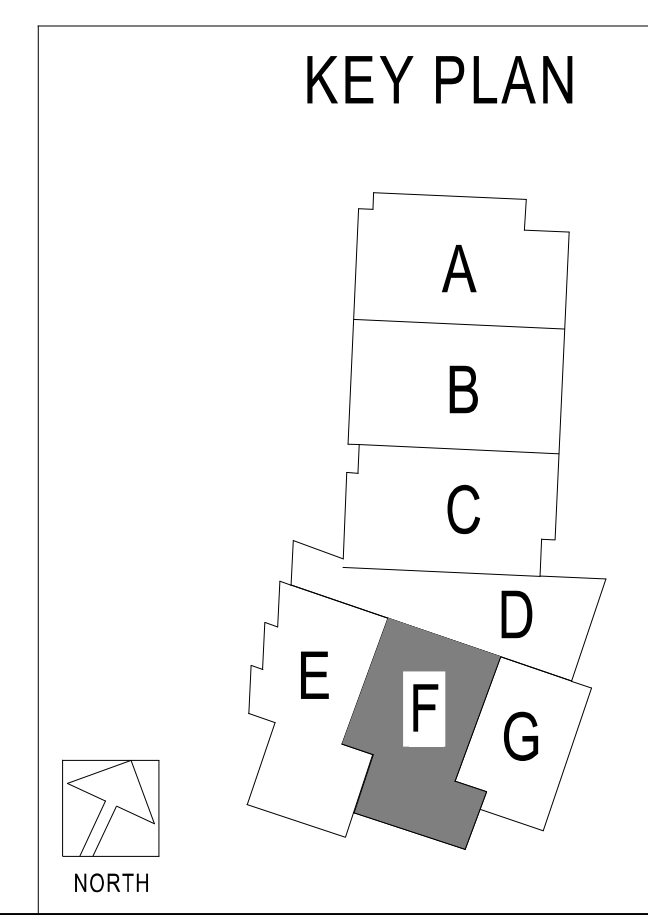
P1.1E

1 PLUMBING FIRST LEVEL PLAN - AREA E
 1/8" = 1'-0"



PLUMBING PLAN NOTES:
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1 PLUMBING FIRST LEVEL PLAN - AREA F
 1/8" = 1'-0"



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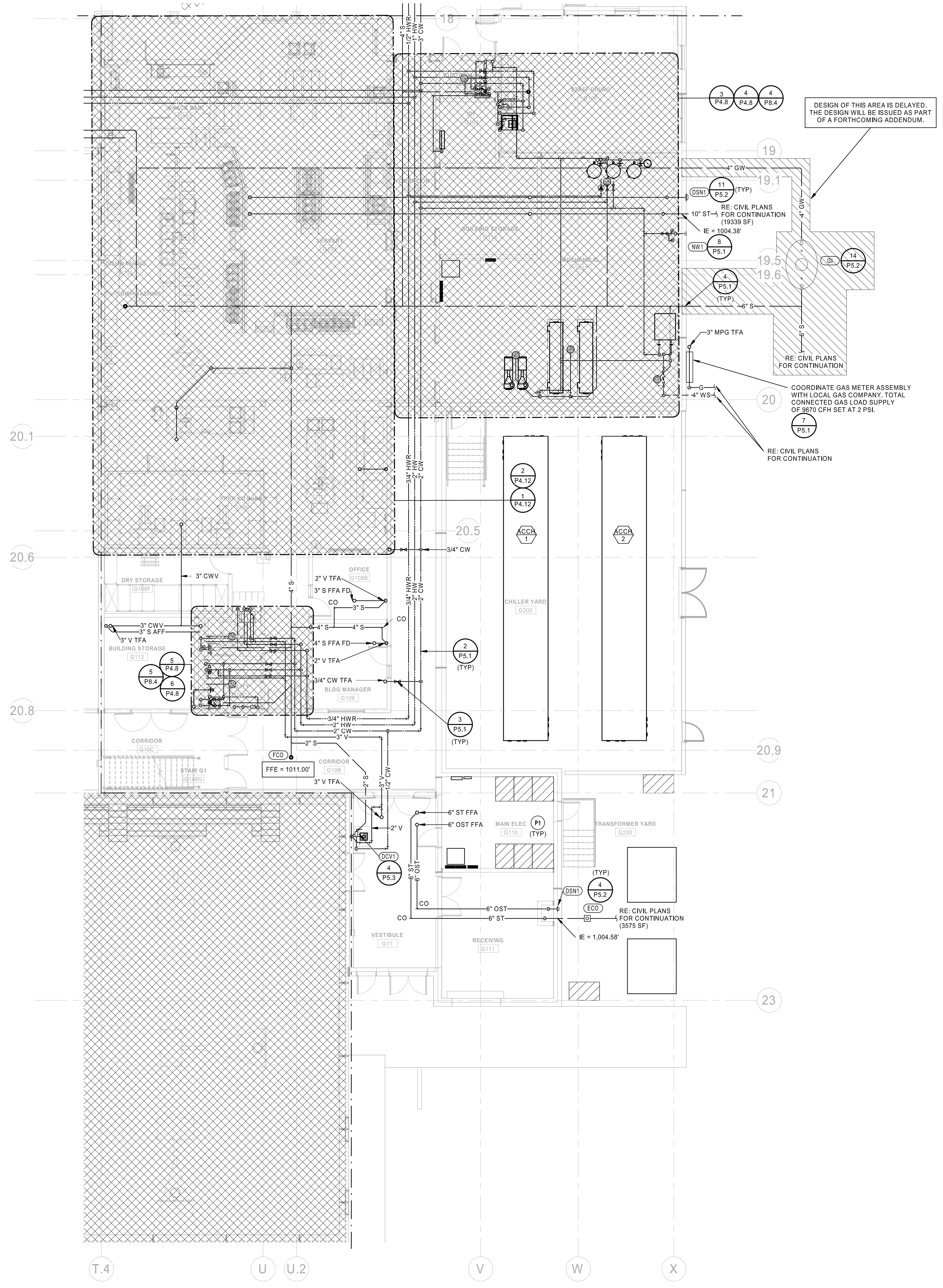
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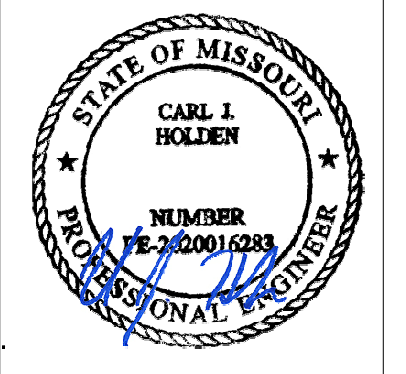
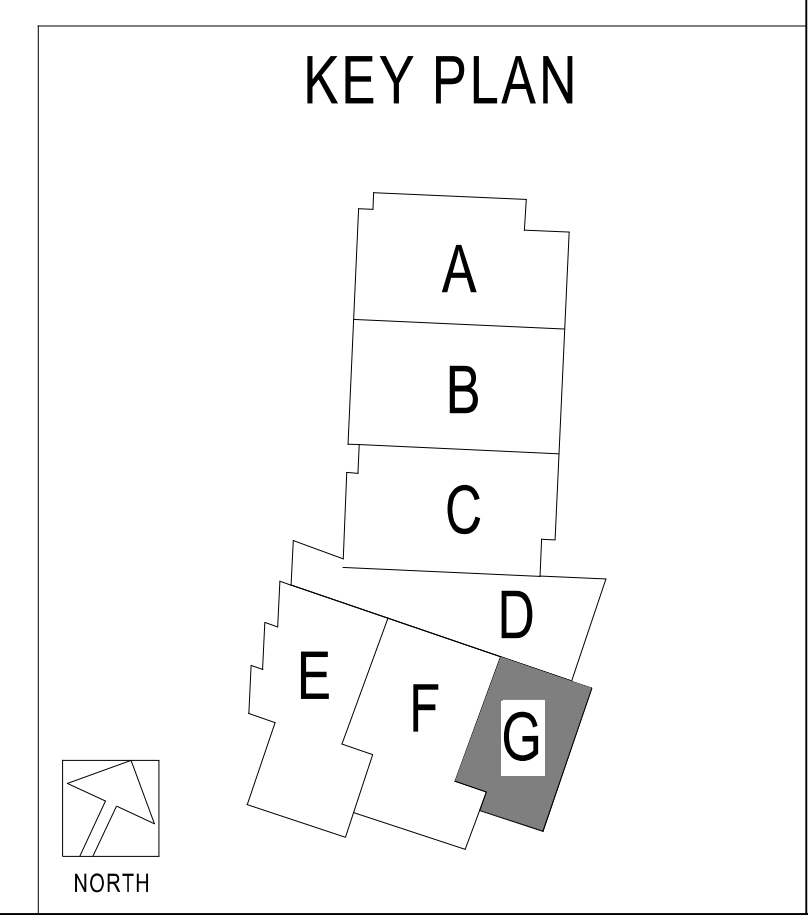
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 PLUMBING FIRST LEVEL PLAN - AREA F

P1.1F



PLUMBING PLAN NOTES:
 P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.

1 PLUMBING FIRST LEVEL PLAN - AREA G
 1/8" = 1'-0"



Oct 8 2020
 CARL J. HOLDEN
 LICENSE # PE-2020016283

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 1845 LINDEN DRIVE SUITE 300
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 M.O. CORPORATE NO. E-5680
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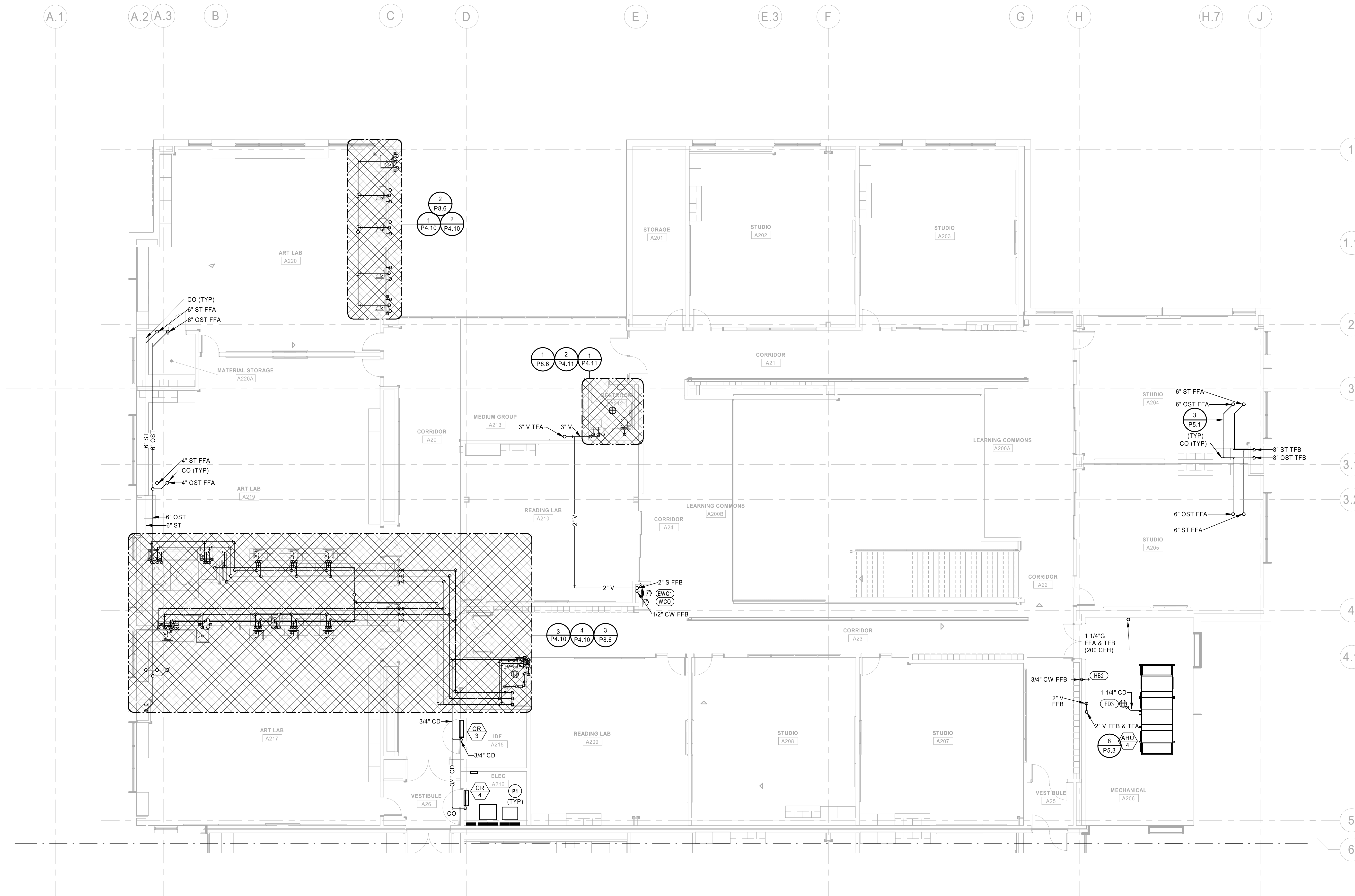
LEE'S SUMMIT MIDDLE SCHOOL #4
 LEE'S SUMMIT R-7 SCHOOL DISTRICT
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PACKAGE 3 - BUILDING & SITE
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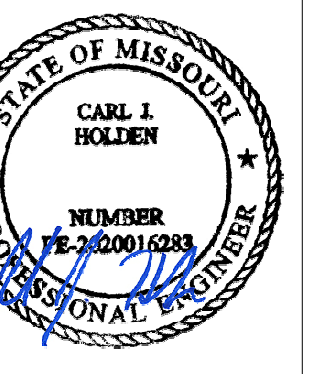
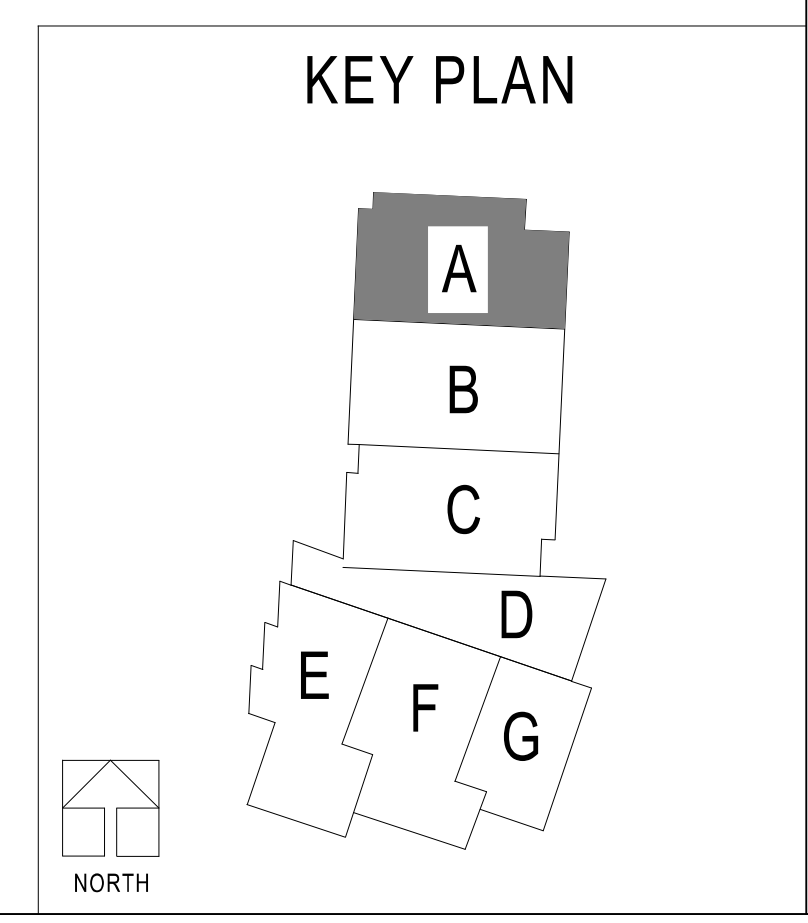
13-20102-00
 PLUMBING FIRST LEVEL PLAN - AREA G

P1.1G

PLUMBING PLAN NOTES:
 P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.



1 PLUMBING SECOND LEVEL PLAN - AREA A
 1/8" = 1'-0"



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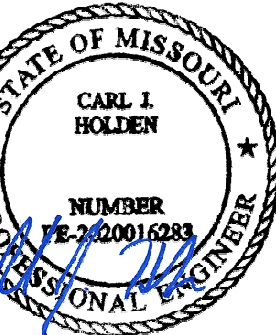
LEE'S SUMMIT MIDDLE SCHOOL #4
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PACKAGE 3 - BUILDING & SITE
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13-20102-00
 PLUMBING
 SECOND LEVEL
 PLAN - AREA A

P1.2A

PLUMBING PLAN NOTES:
 P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.



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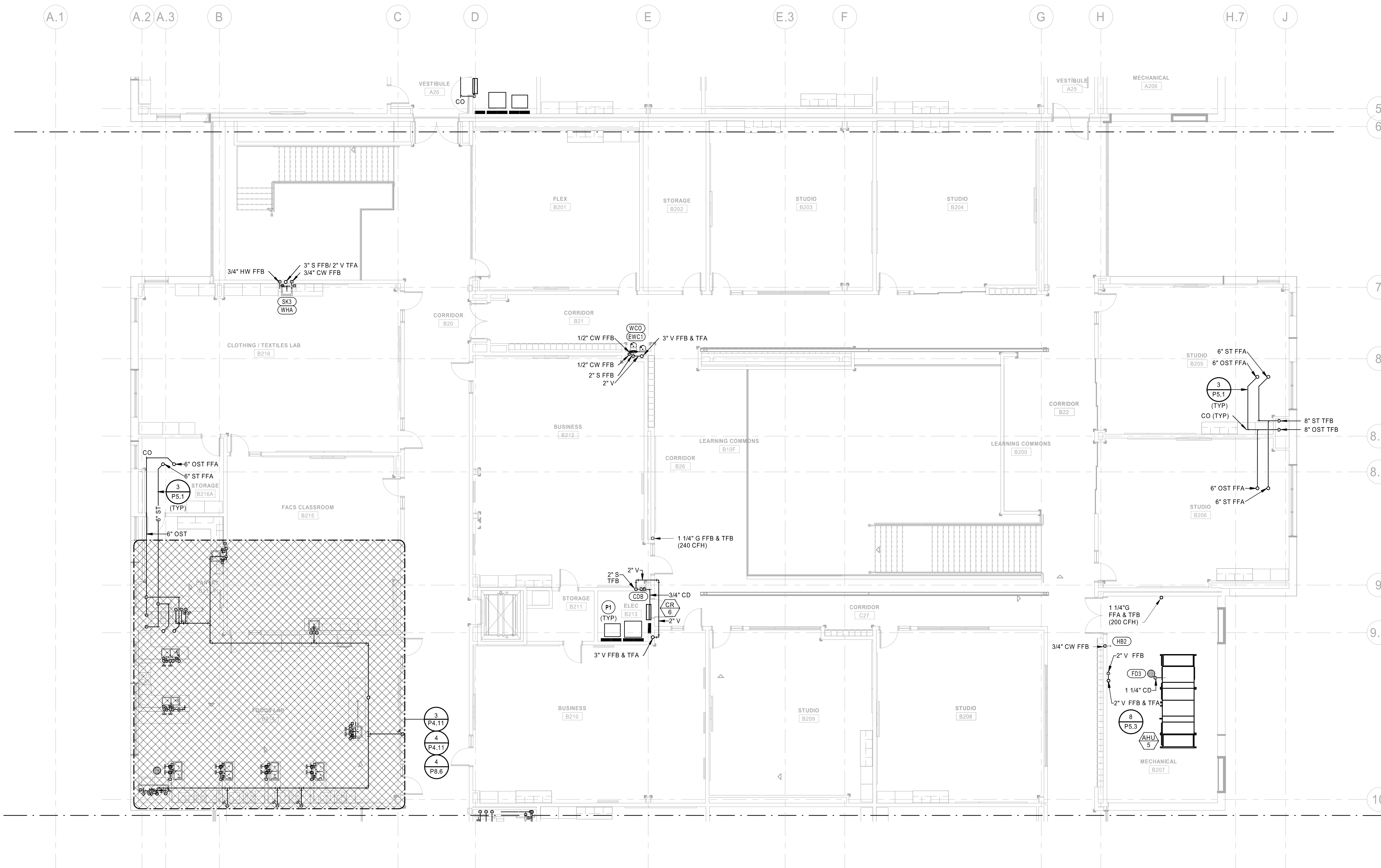
LEE'S SUMMIT MIDDLE SCHOOL #4
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 1001 SE BAILEY ROAD
 LEE'S SUMMIT, MO 64081

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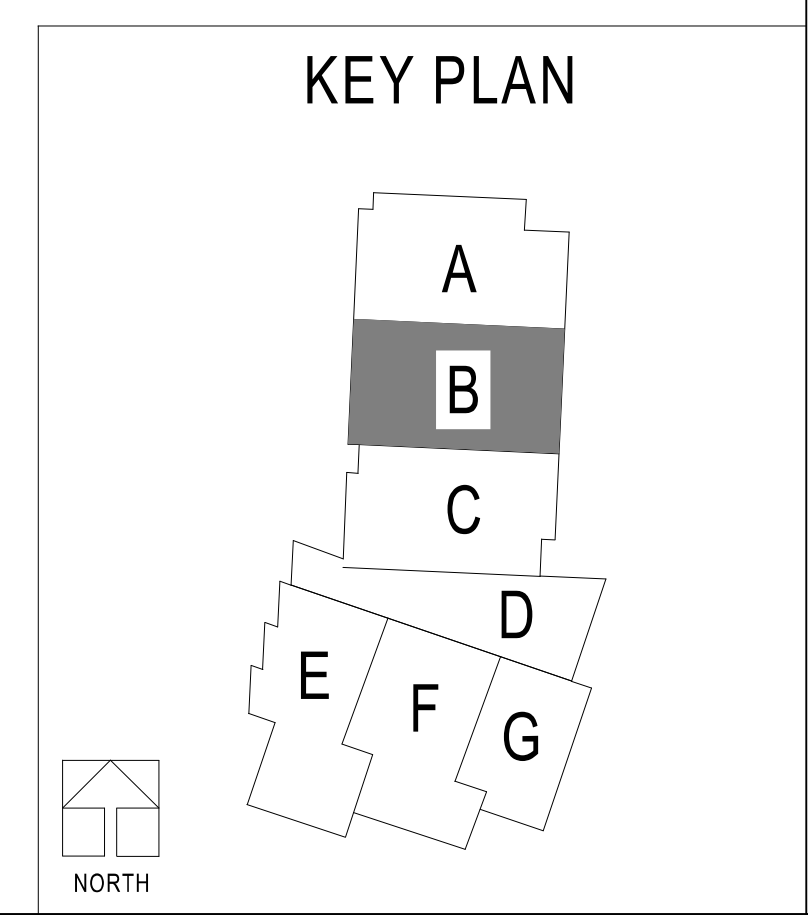
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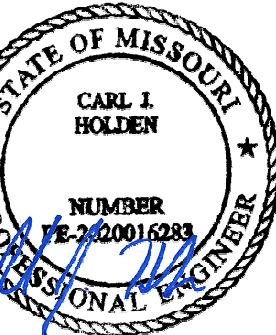
PLUMBING
 SECOND LEVEL
 PLAN - AREA B

P1.2B



1 PLUMBING SECOND LEVEL PLAN - AREA B
 1/8" = 1'-0"





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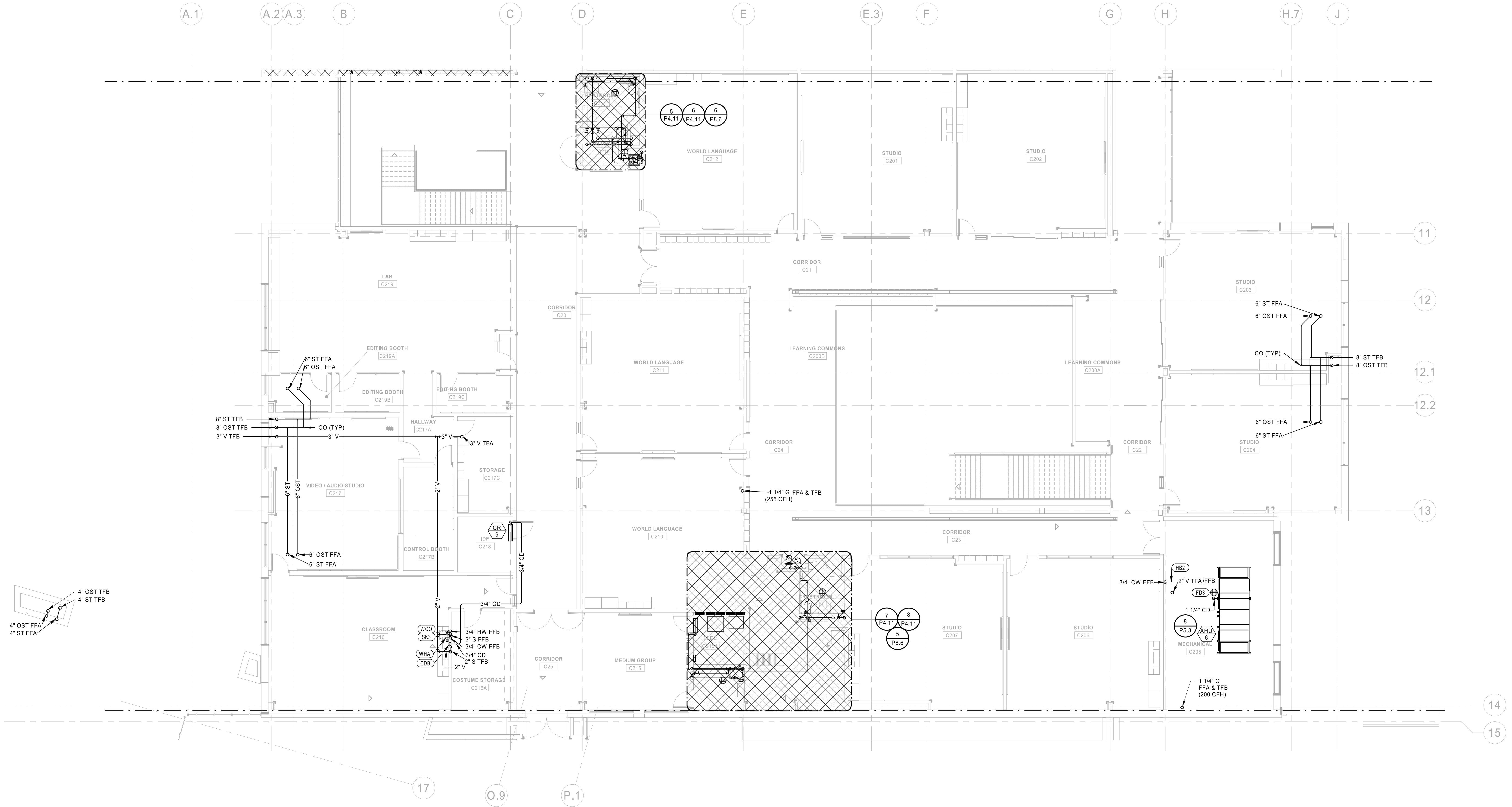
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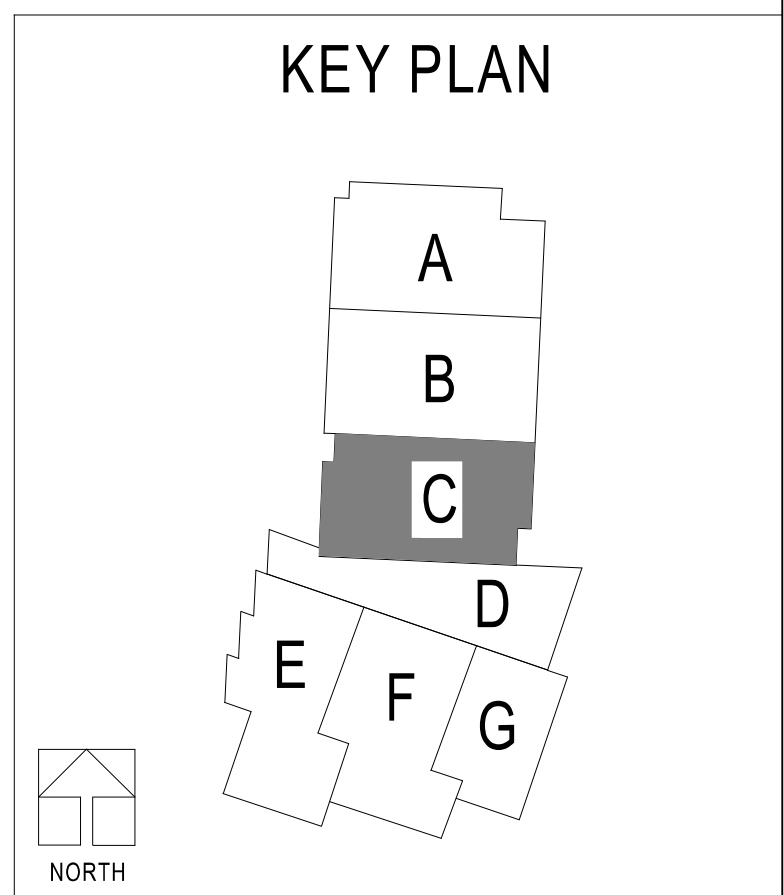
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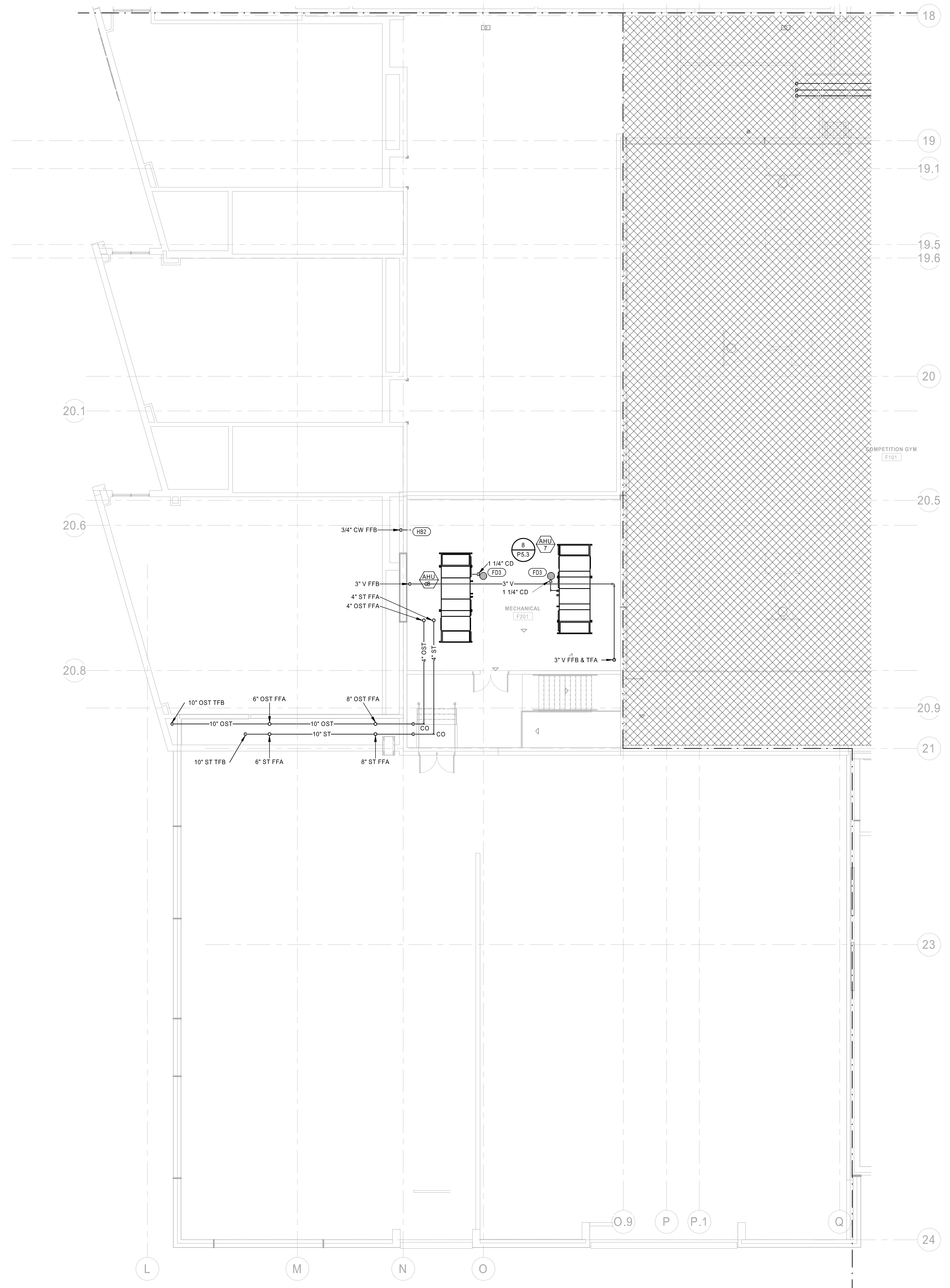
PLUMBING
 SECOND LEVEL
 PLAN - AREA C

P1.2C

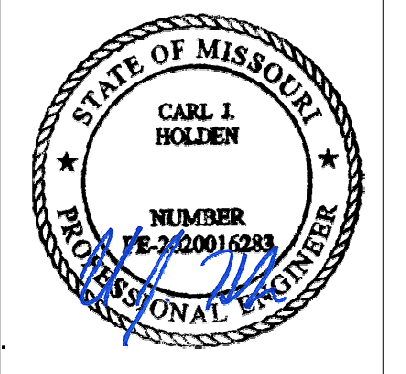
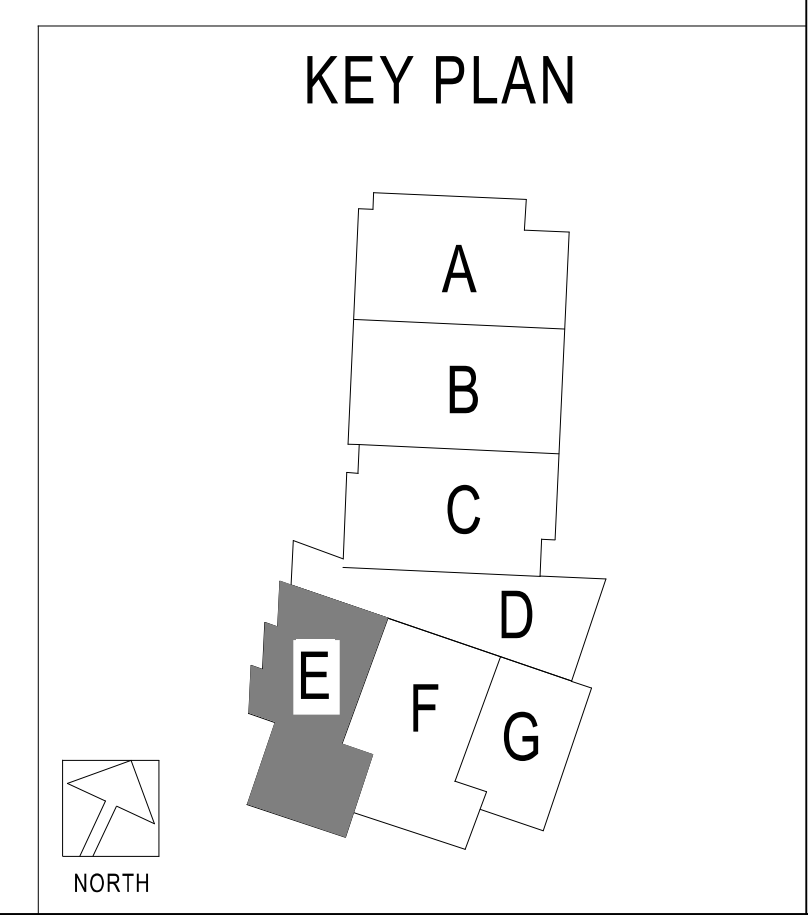


1 PLUMBING SECOND LEVEL PLAN - AREA C
 1/8" = 1'-0"





1 PLUMBING SECOND LEVEL PLAN - AREA E
1/8" = 1'-0"



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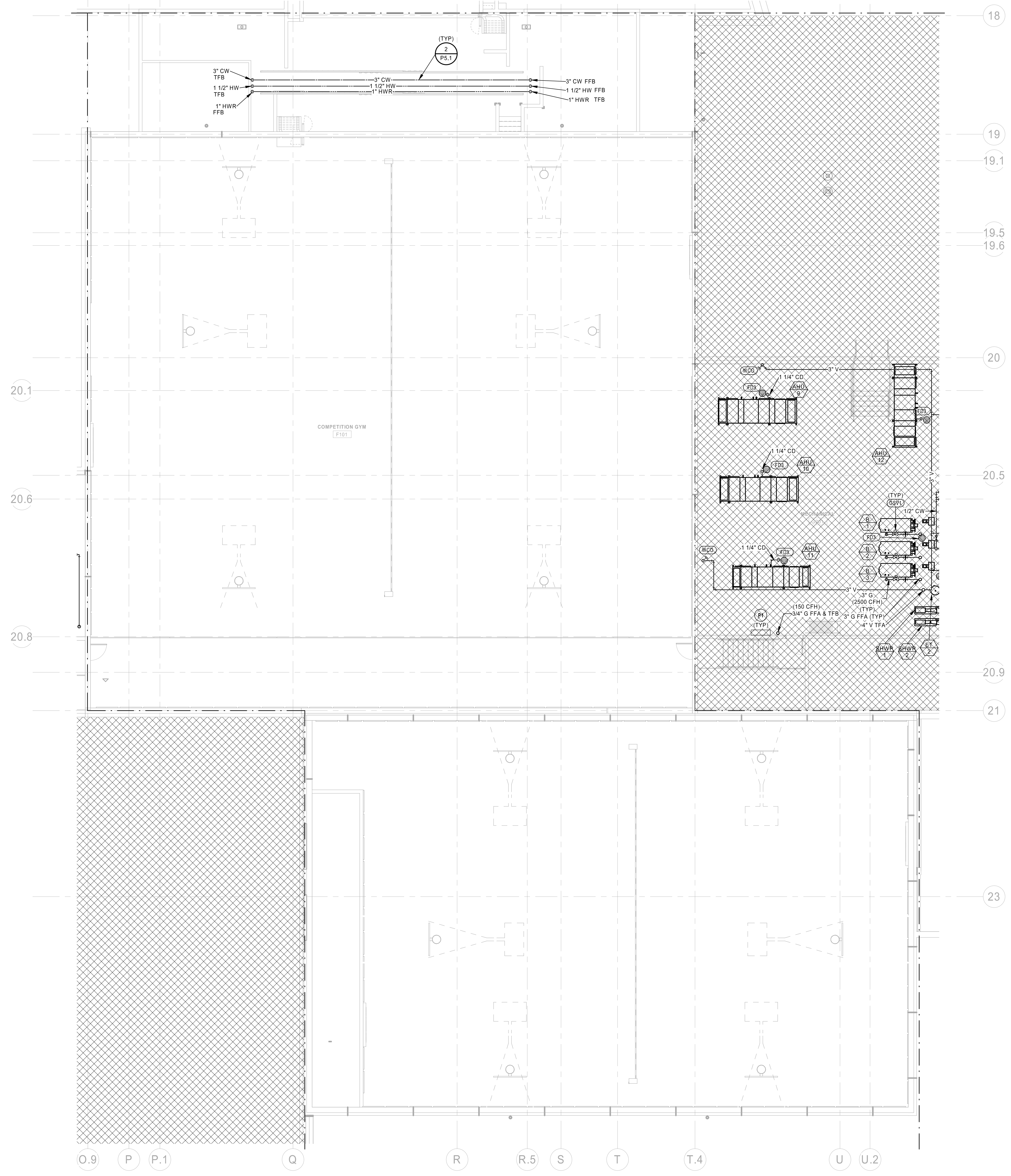
LEE'S SUMMIT MIDDLE SCHOOL #4
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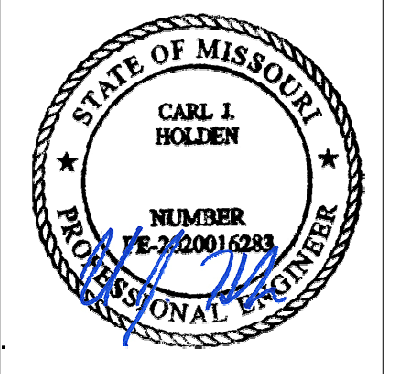
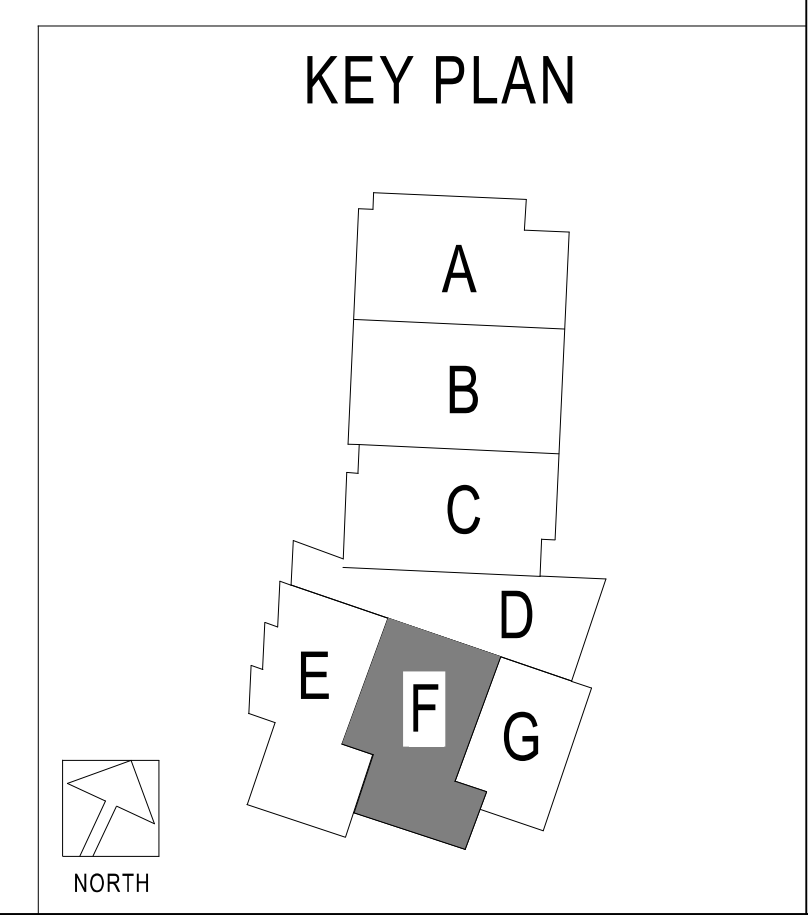
13-20102-00
 PLUMBING SECOND LEVEL PLAN - AREA E

P1.2E

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1 PLUMBING SECOND LEVEL PLAN - AREA F
1/8" = 1'-0"



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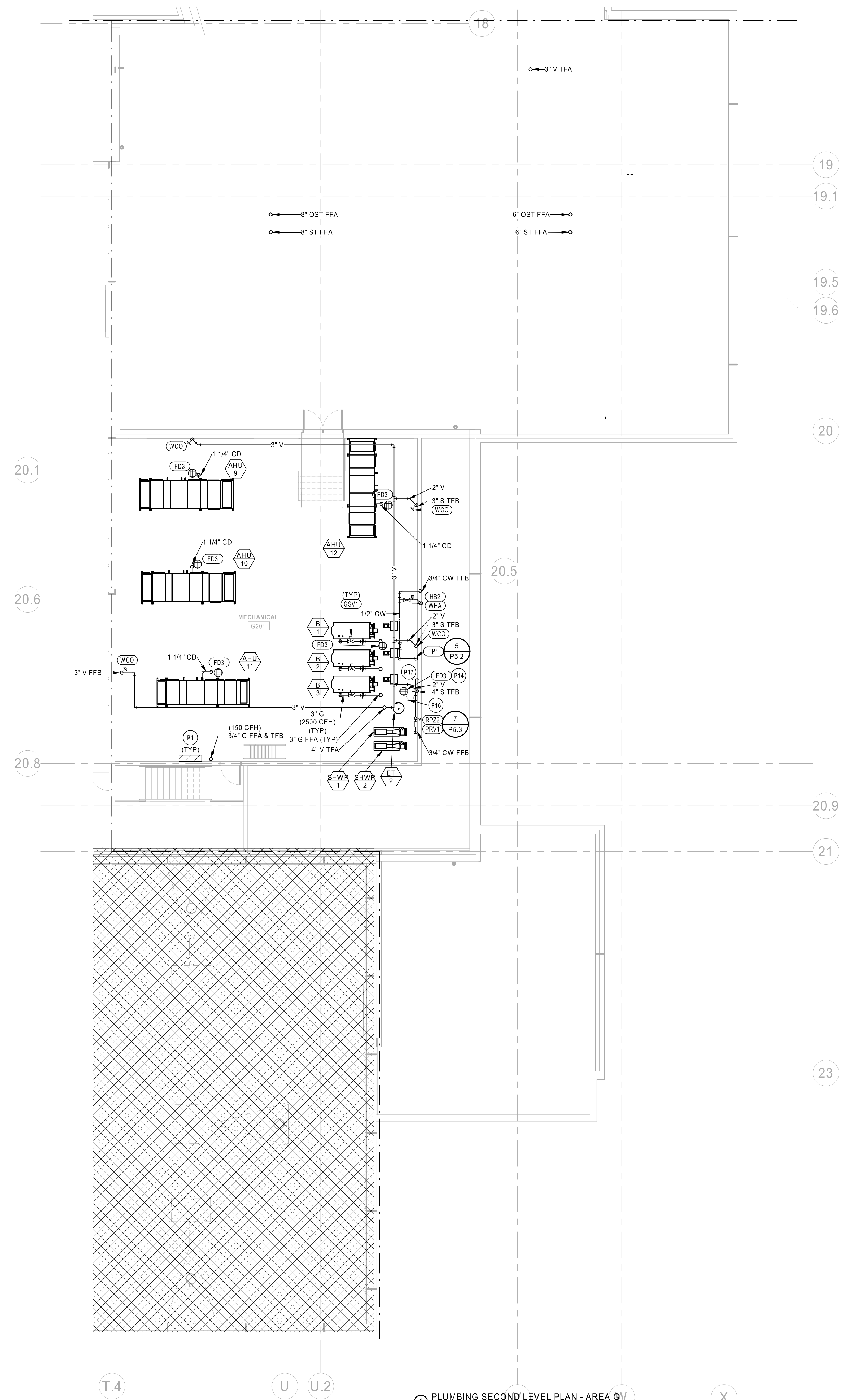
HENDERSON
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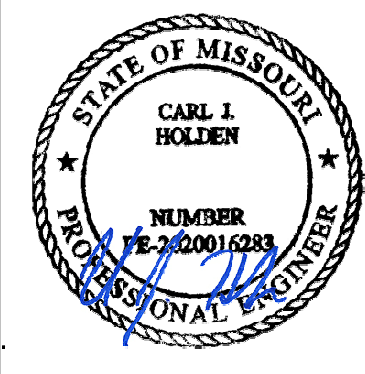
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 PLUMBING
 SECOND LEVEL
 PLAN - AREA F

P1.2F



1 PLUMBING SECOND LEVEL PLAN - AREA Q
1/8" = 1'-0"



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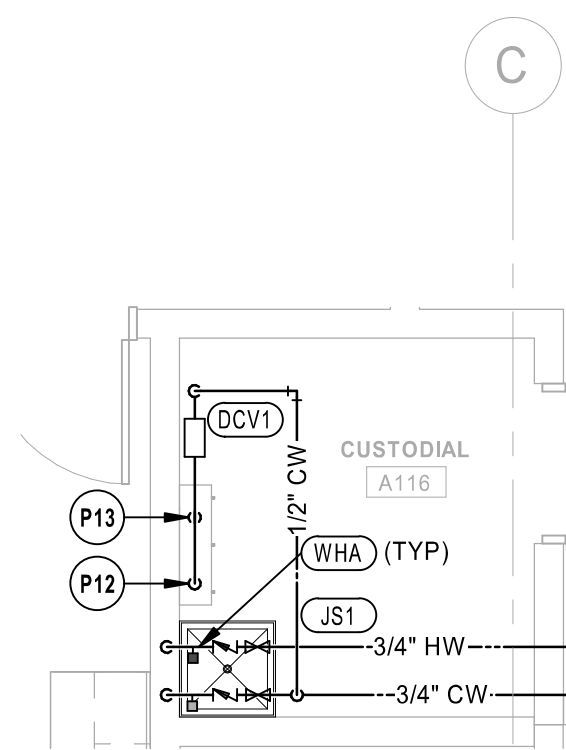
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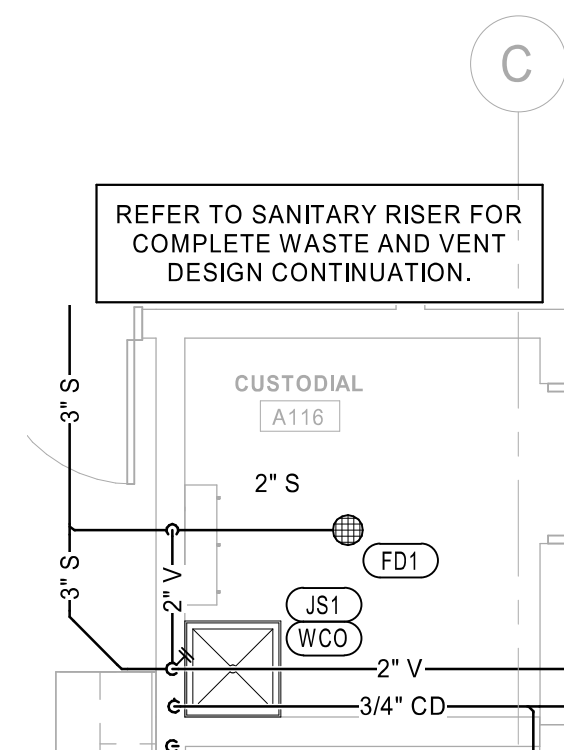
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 PLUMBING
 SECOND LEVEL
 PLAN - AREA Q

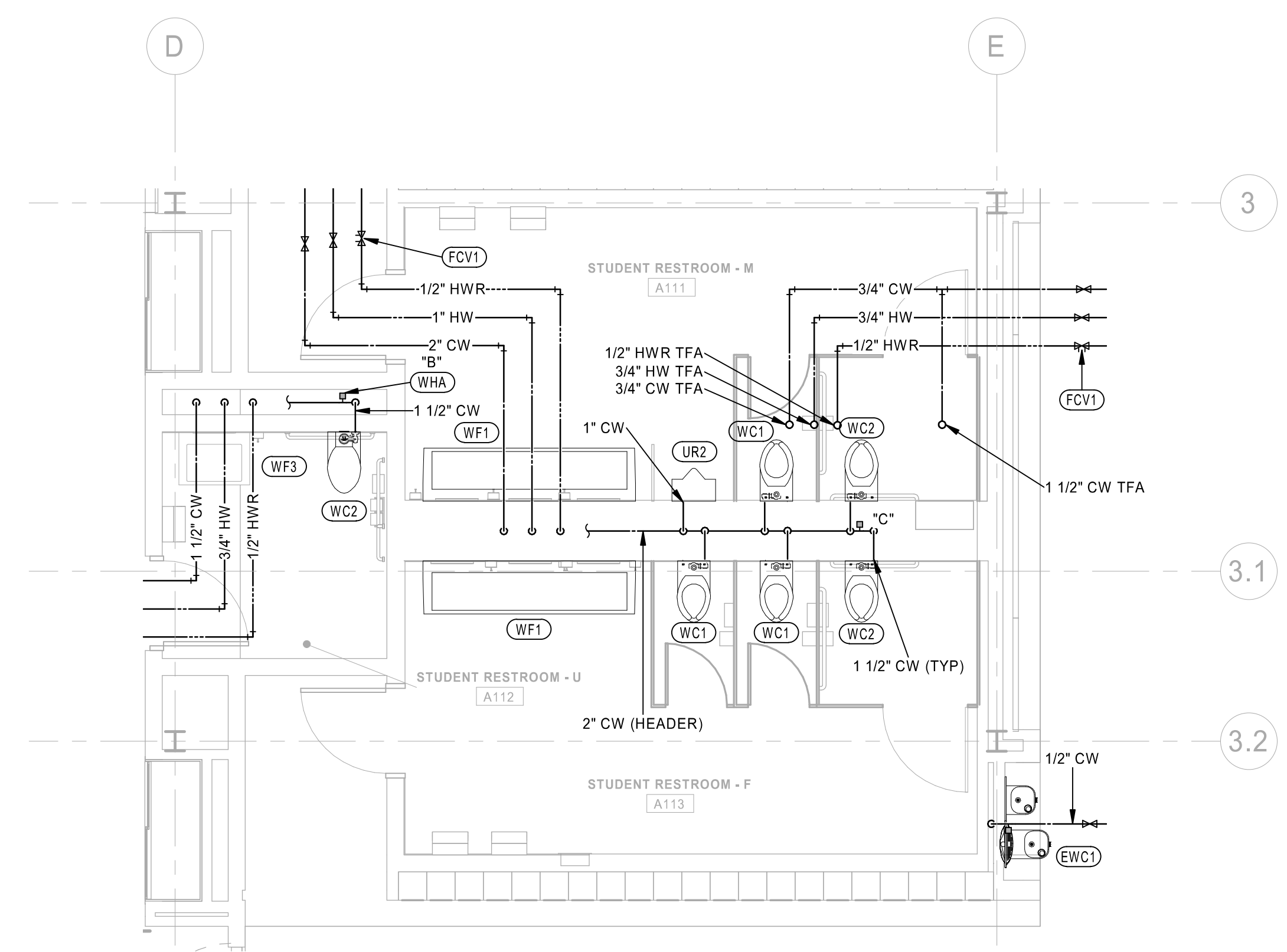
P1.2G



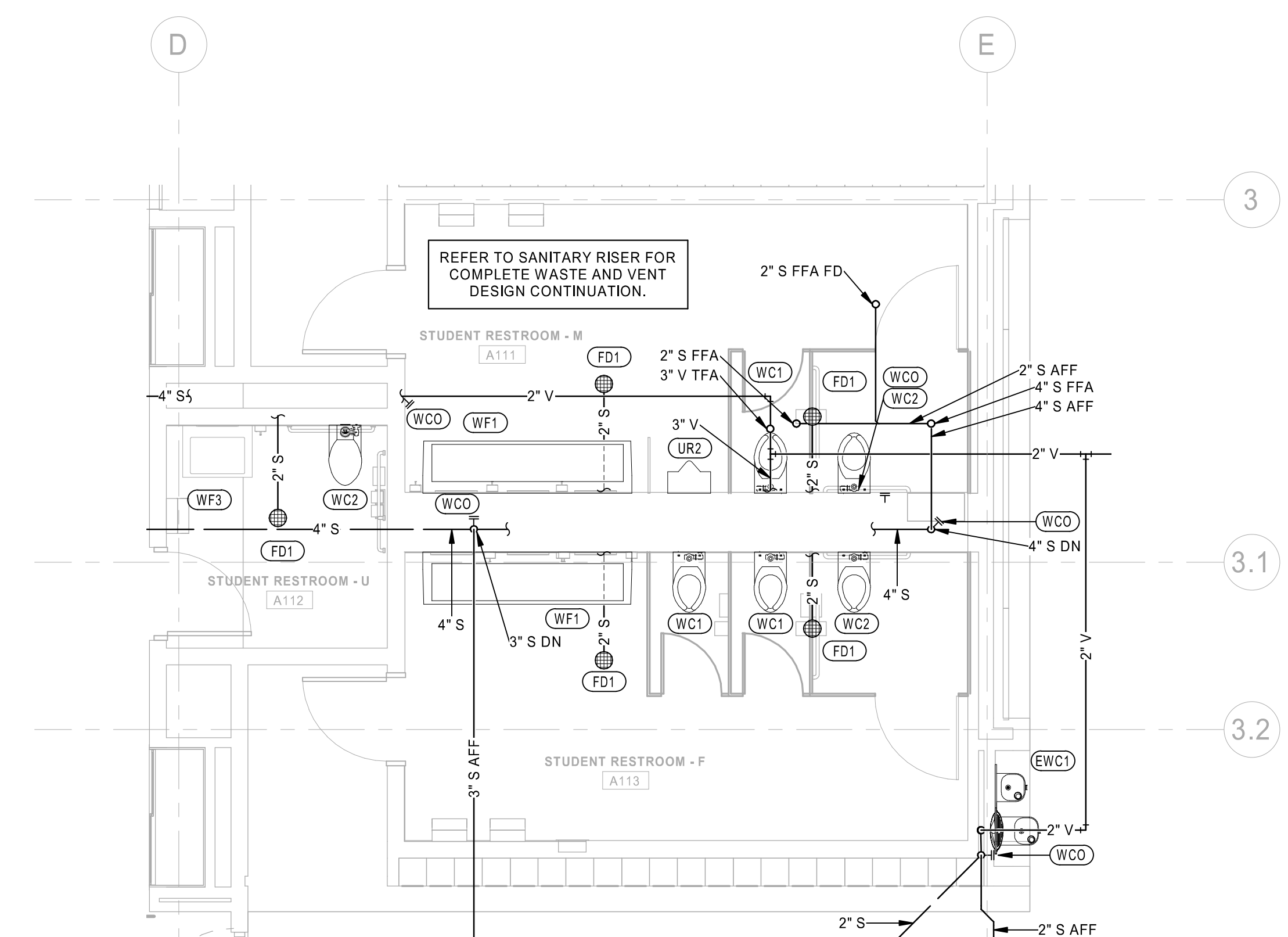
4 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



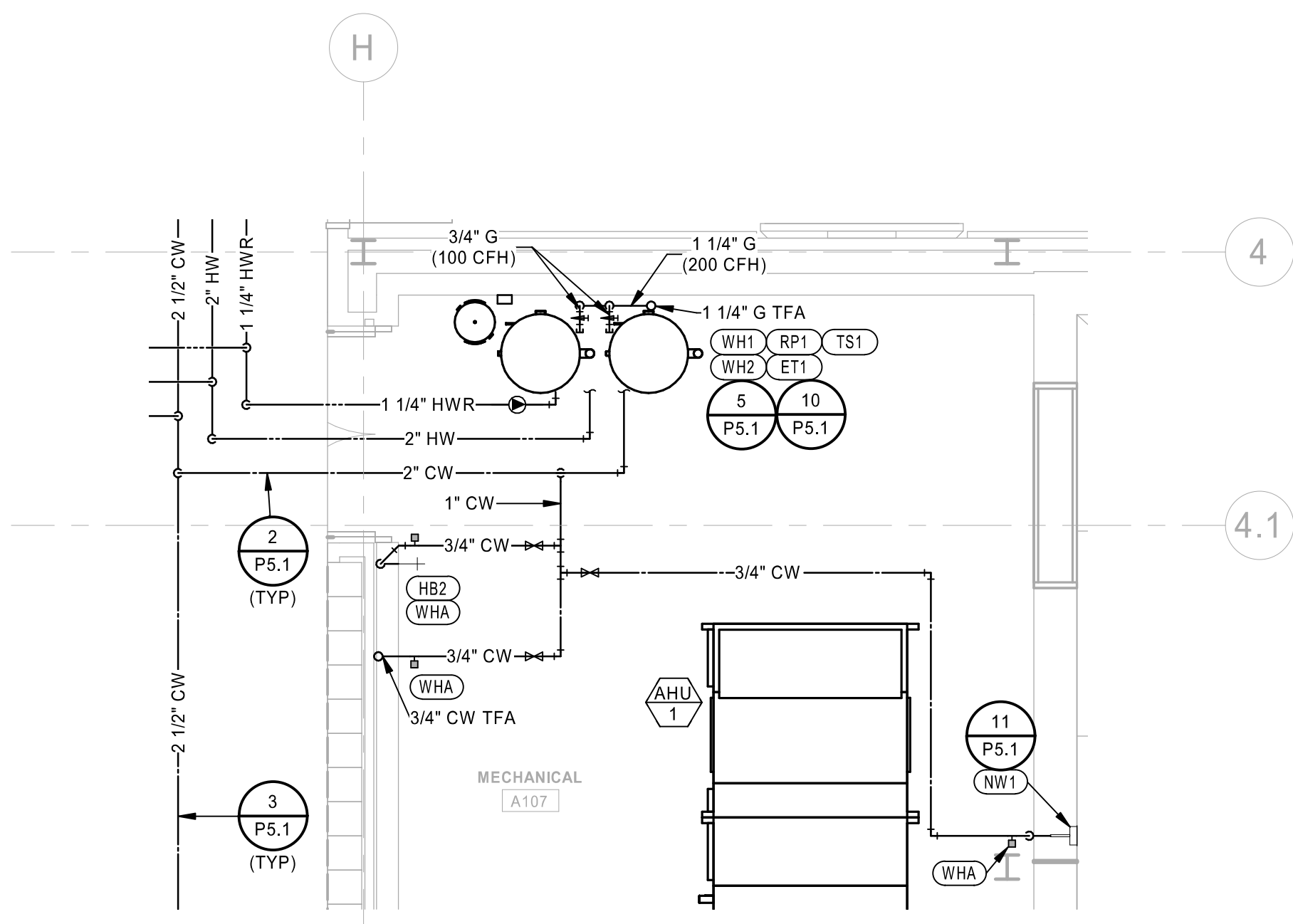
3 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



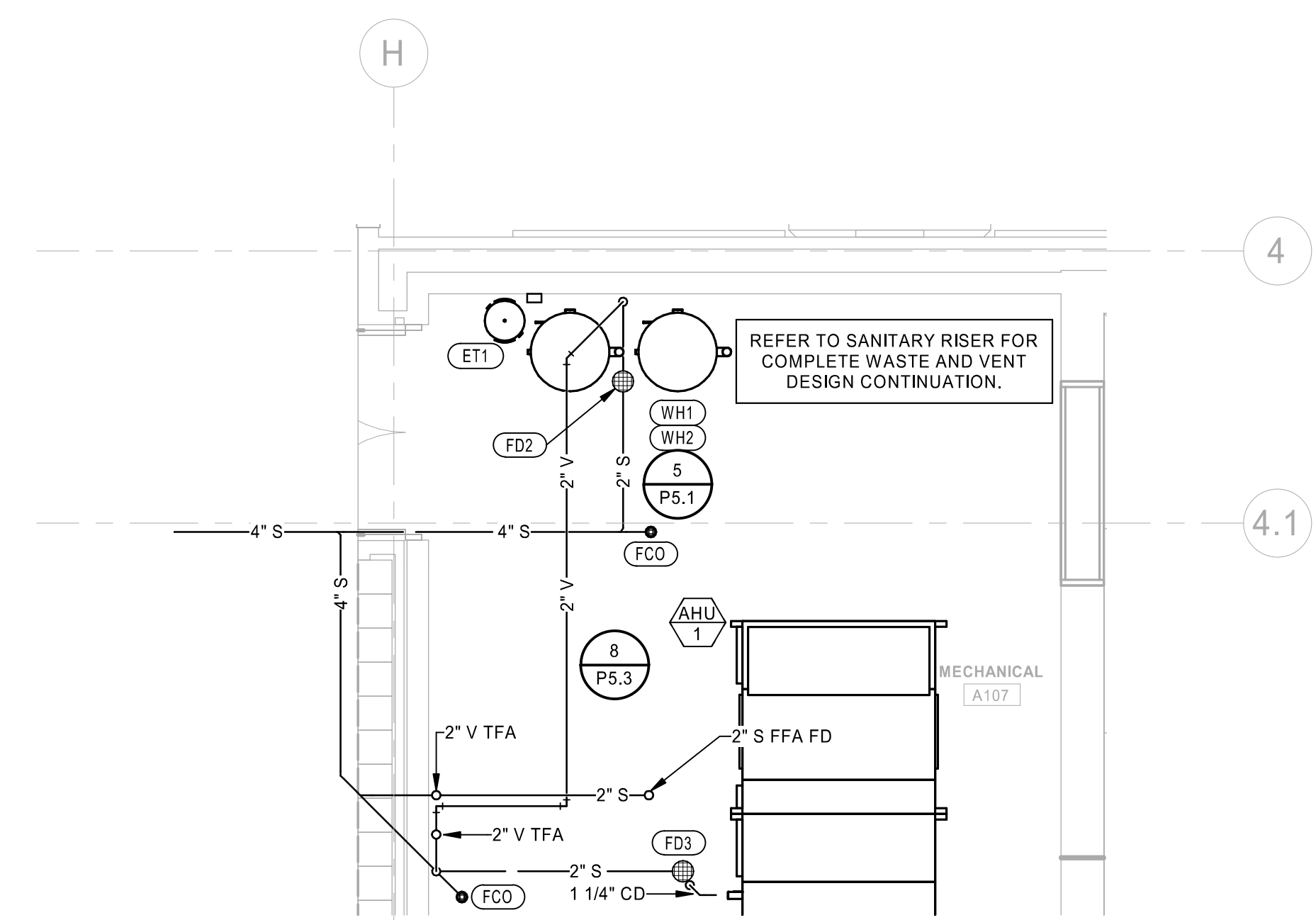
2 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



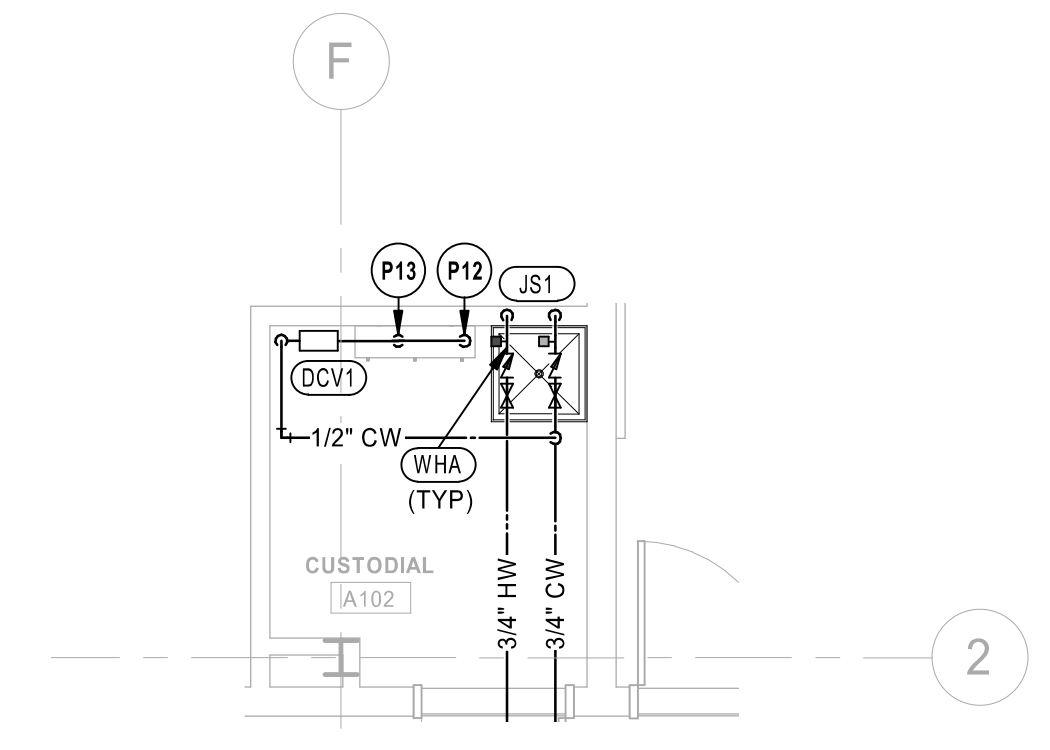
1 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



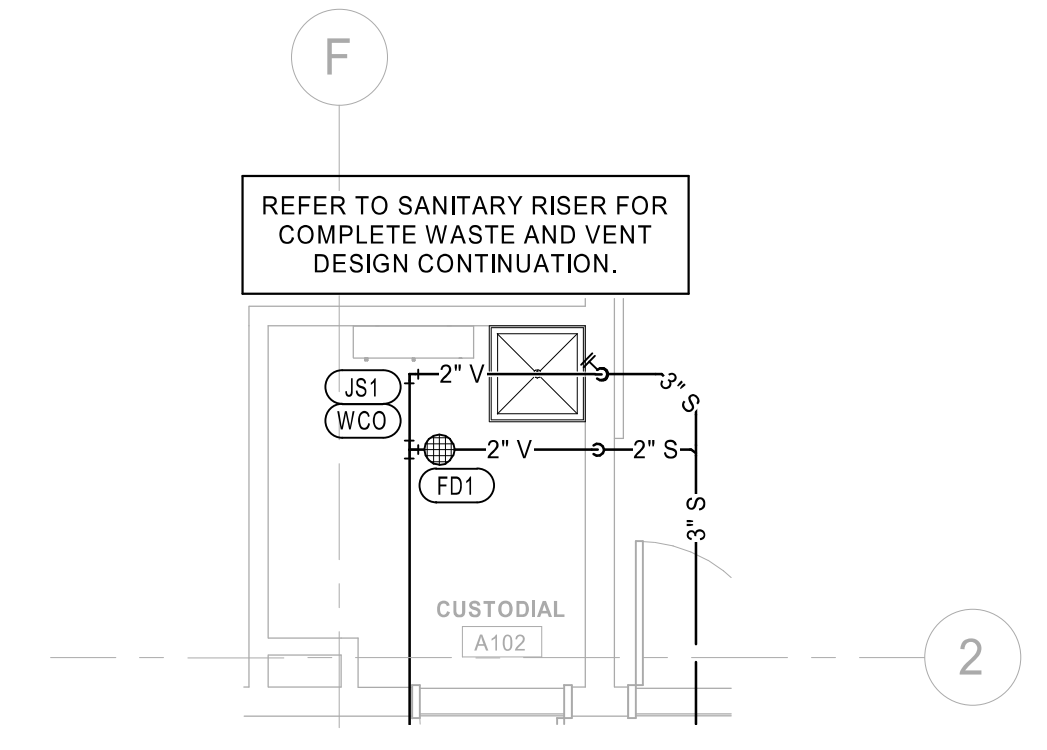
8 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



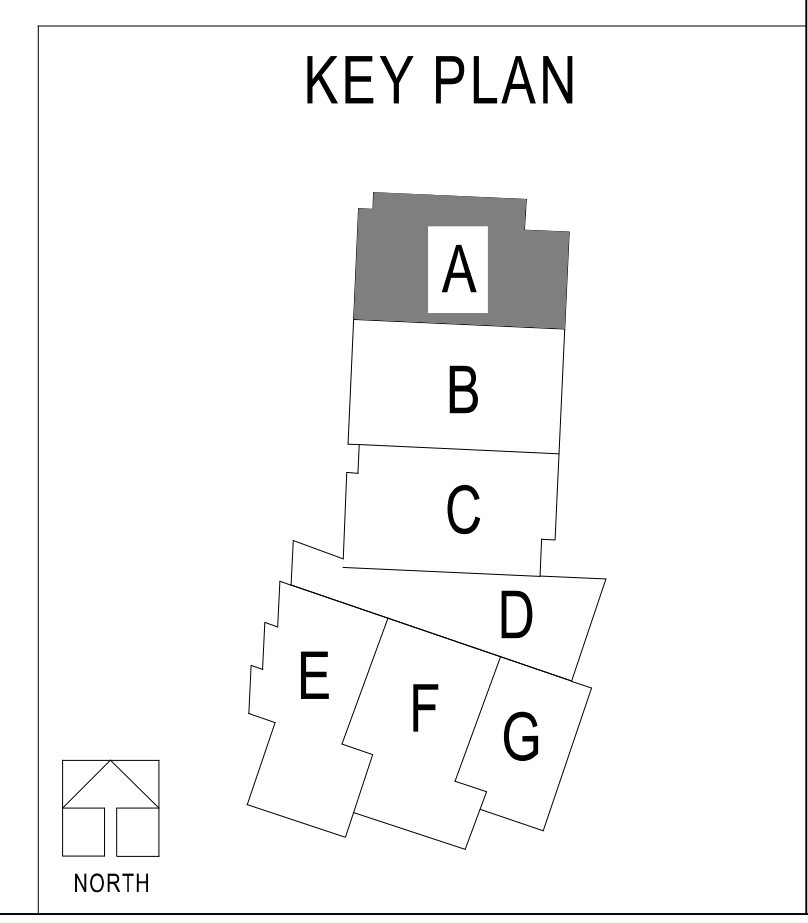
7 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"

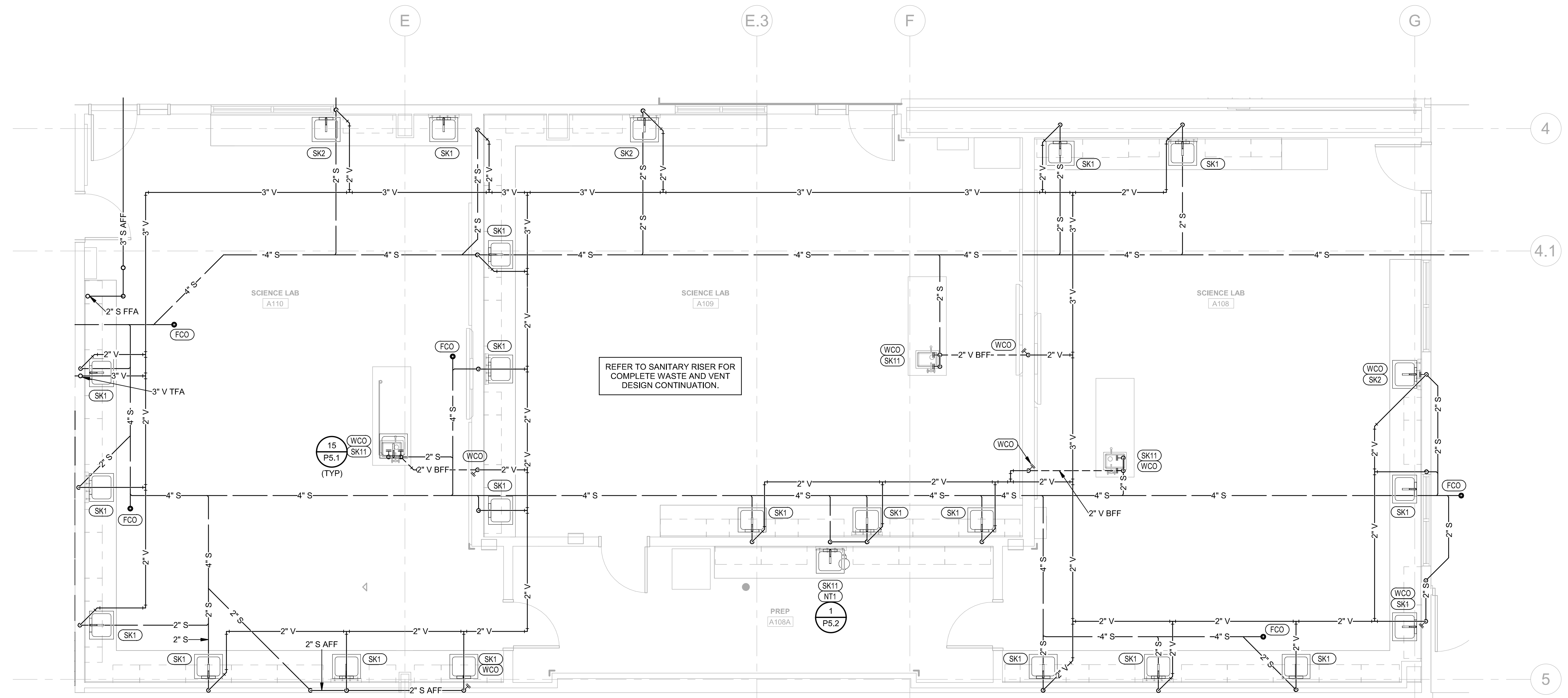


6 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"

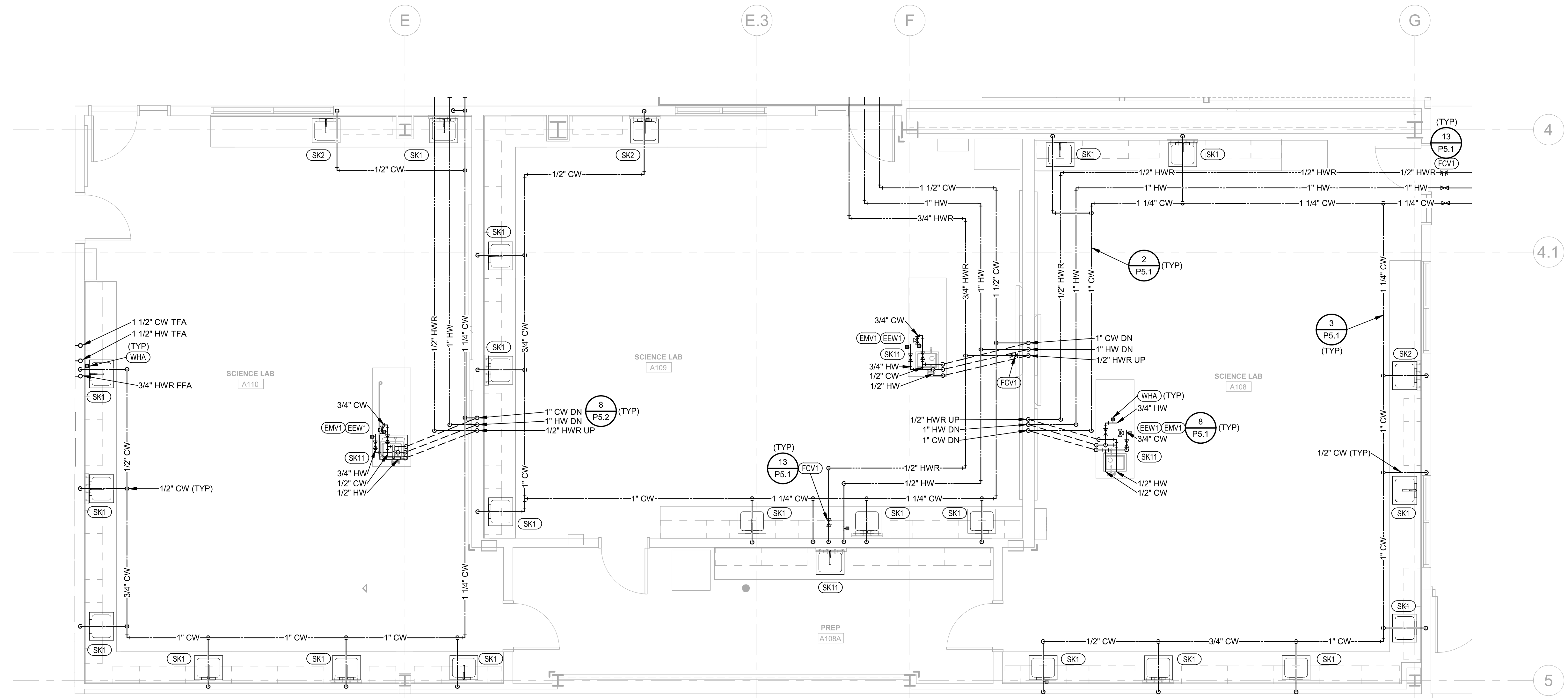


5 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"

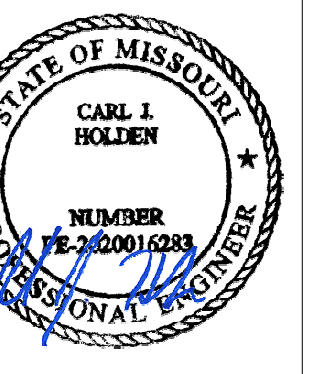
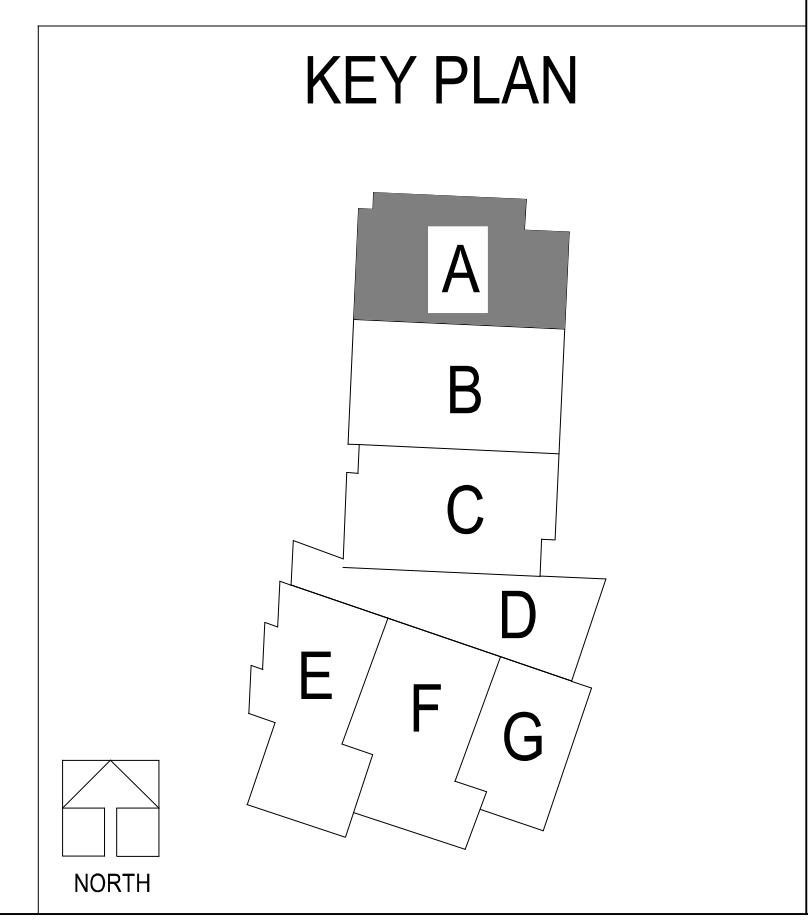




1 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



2 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"

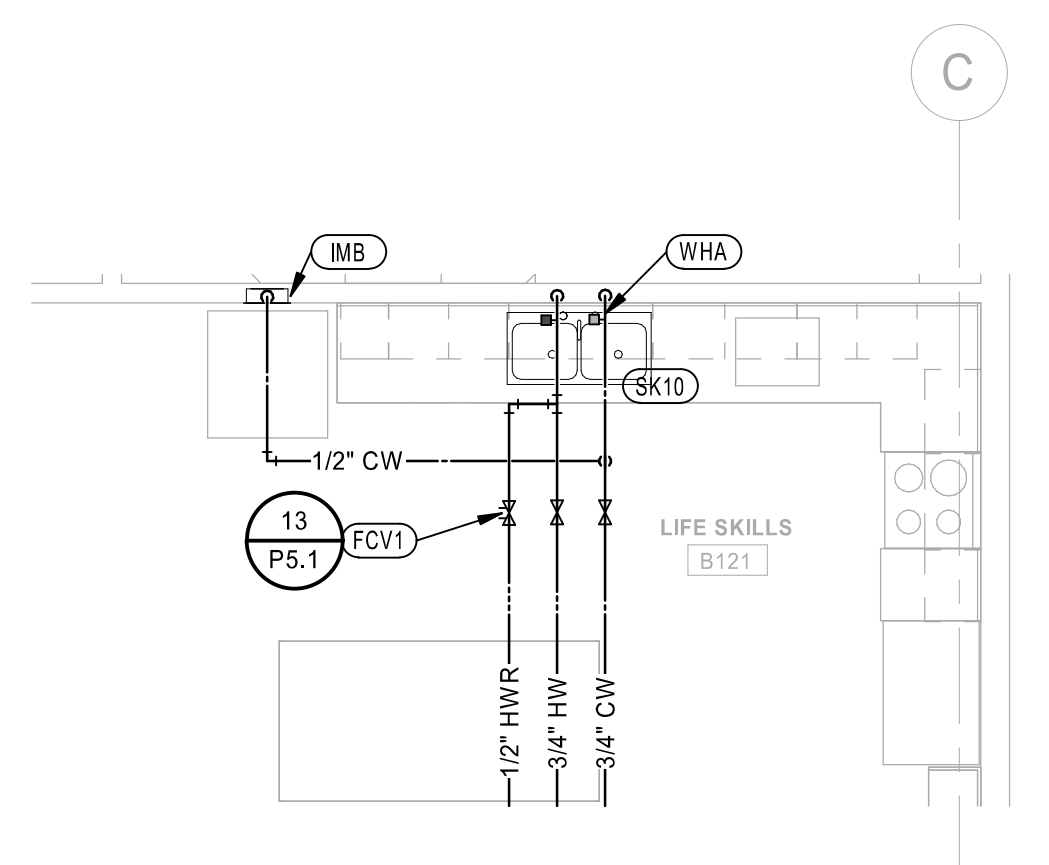


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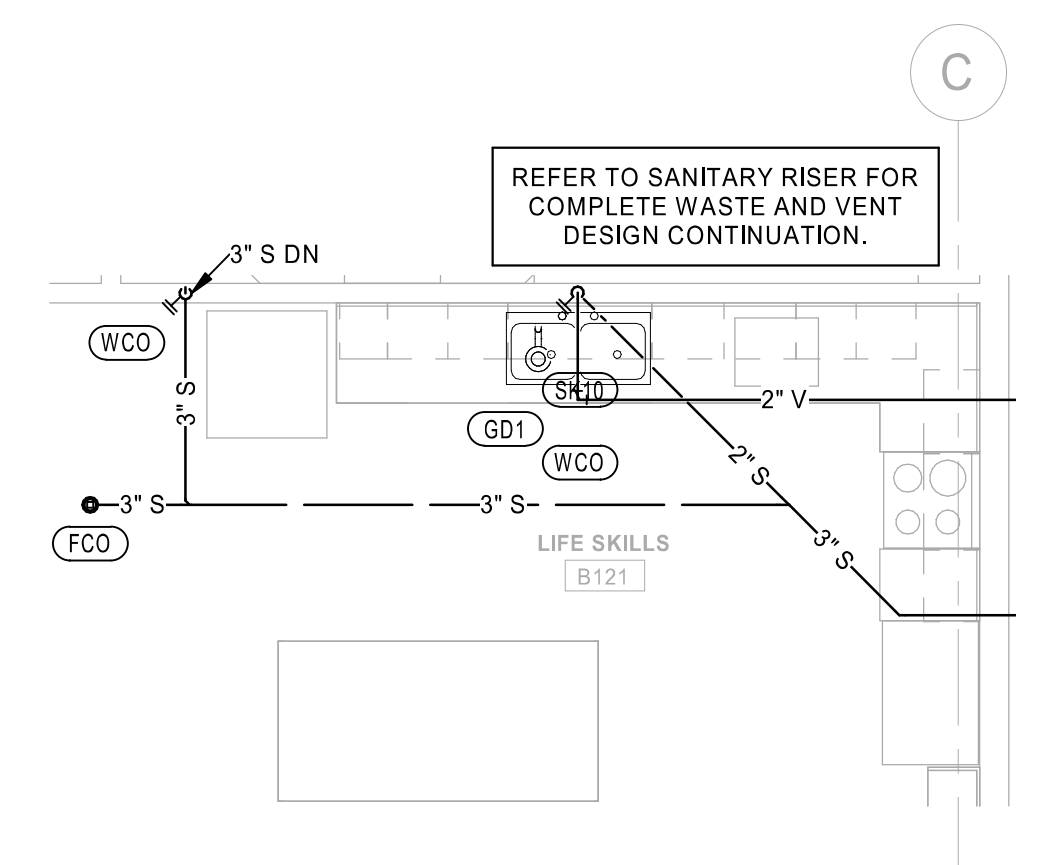
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 ENGINEERS
 8345 LINDA DRIVE SUITE 300
 LEE'S SUMMIT, MO 64081
 TEL: 816.224.0001
 WWW.HENDERSONENGINEERS.COM
 MISSOURI LICENSE NO. 000000000
 MO. CORPORATE NO. E-5680
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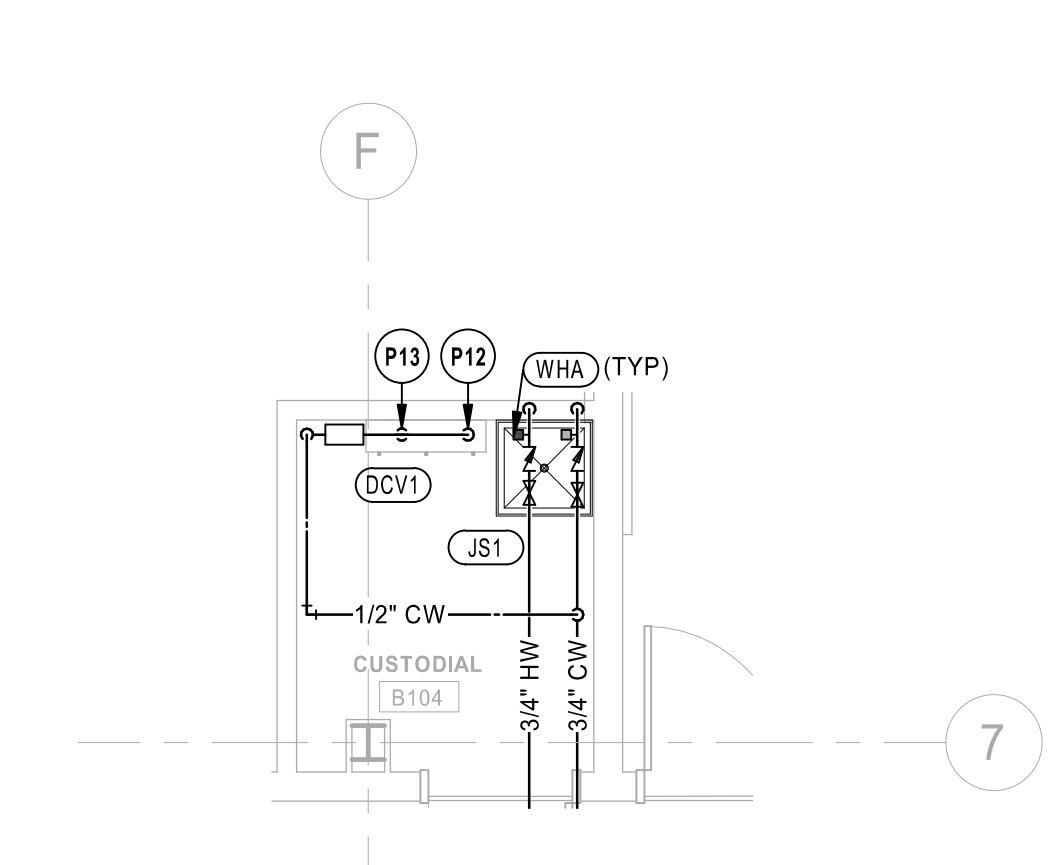
13-20102-00
 PLUMBING ENLARGED PLANS



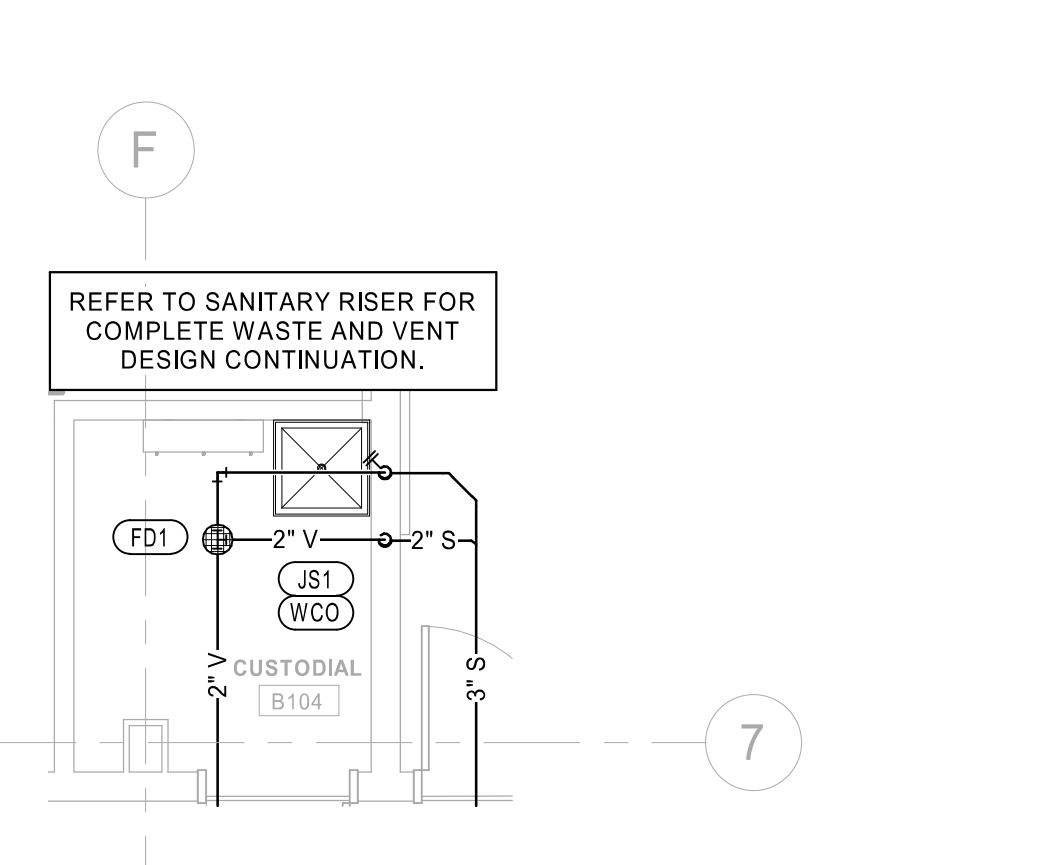
4 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



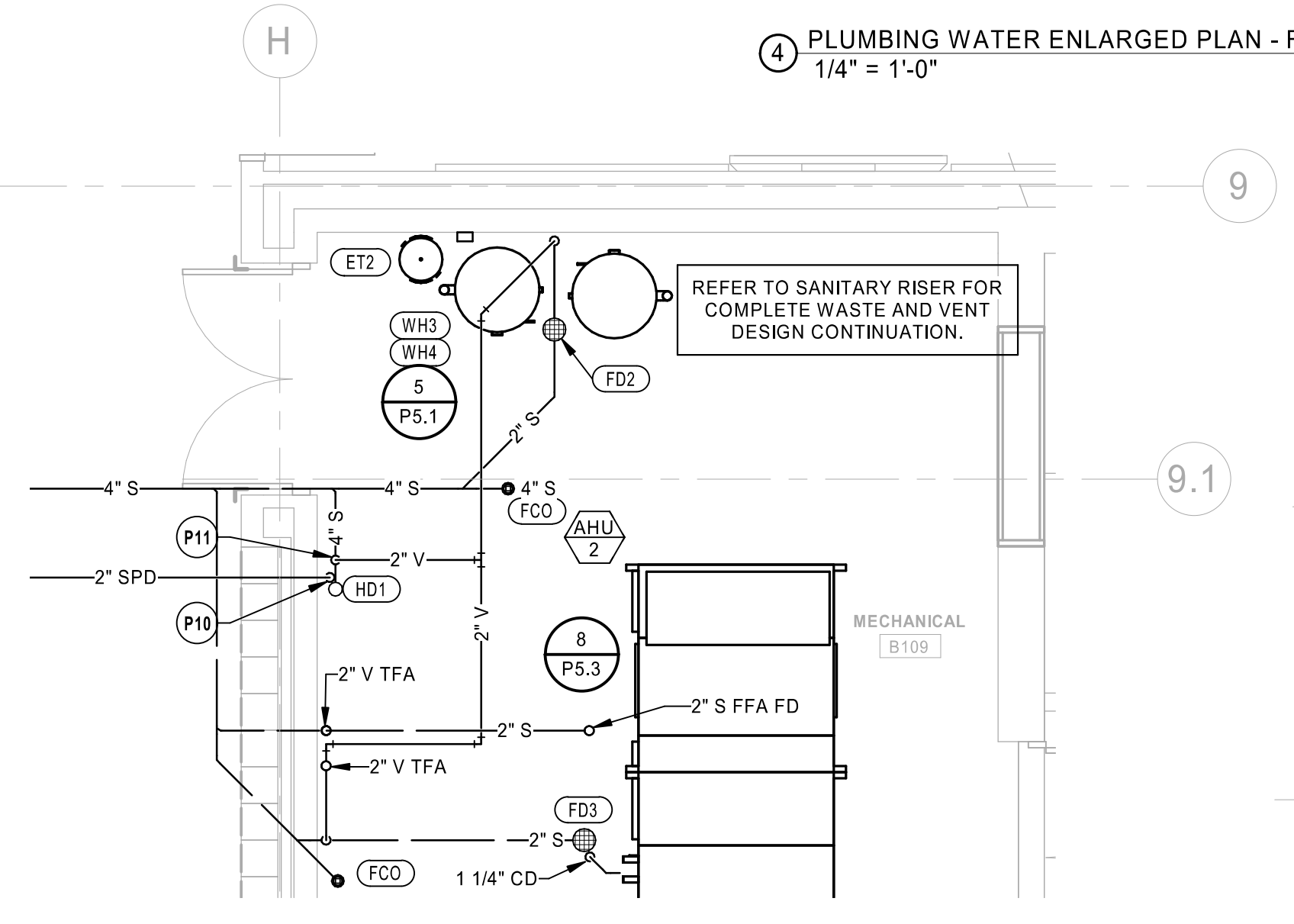
3 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



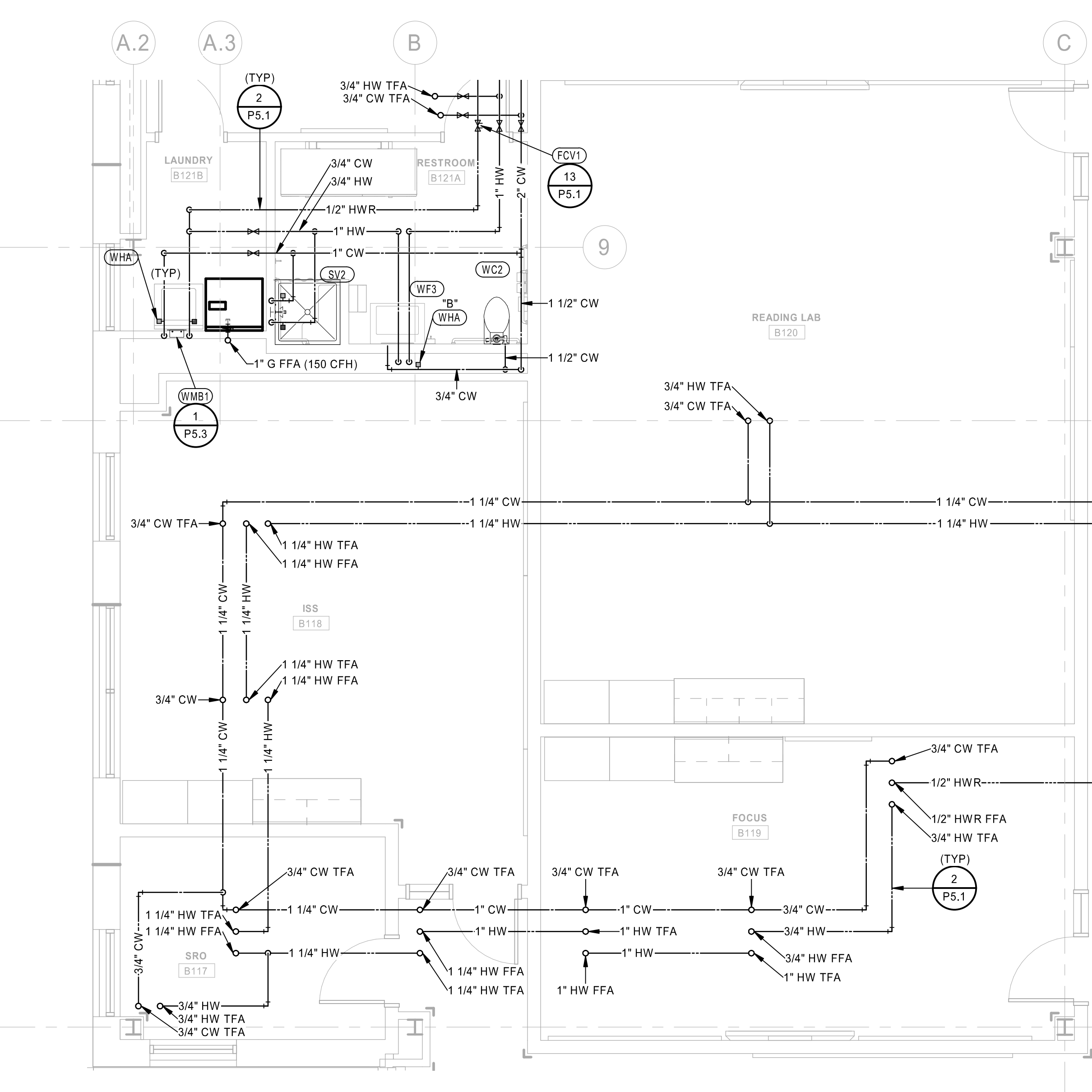
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1/4" = 1'-0"



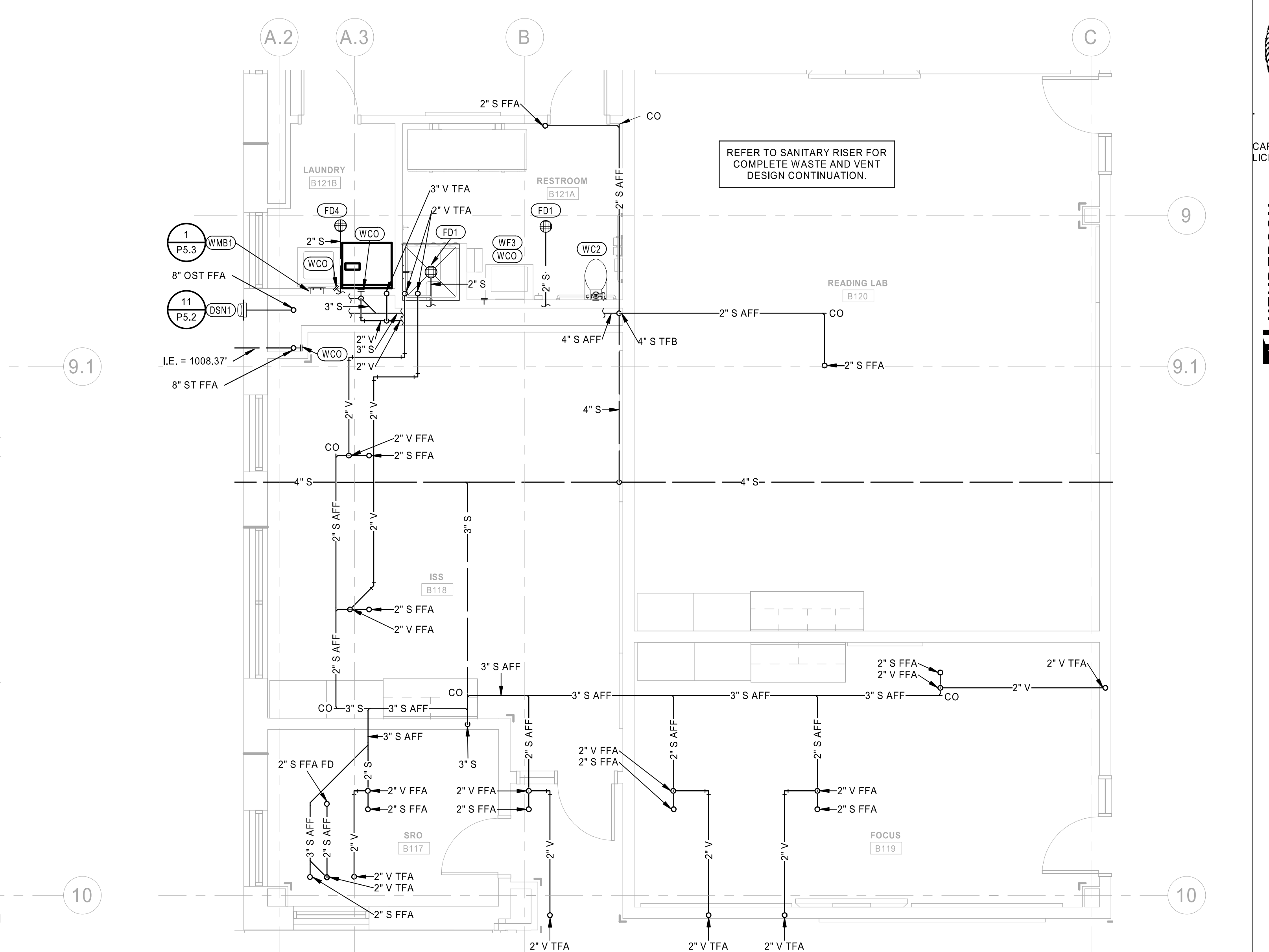
1 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



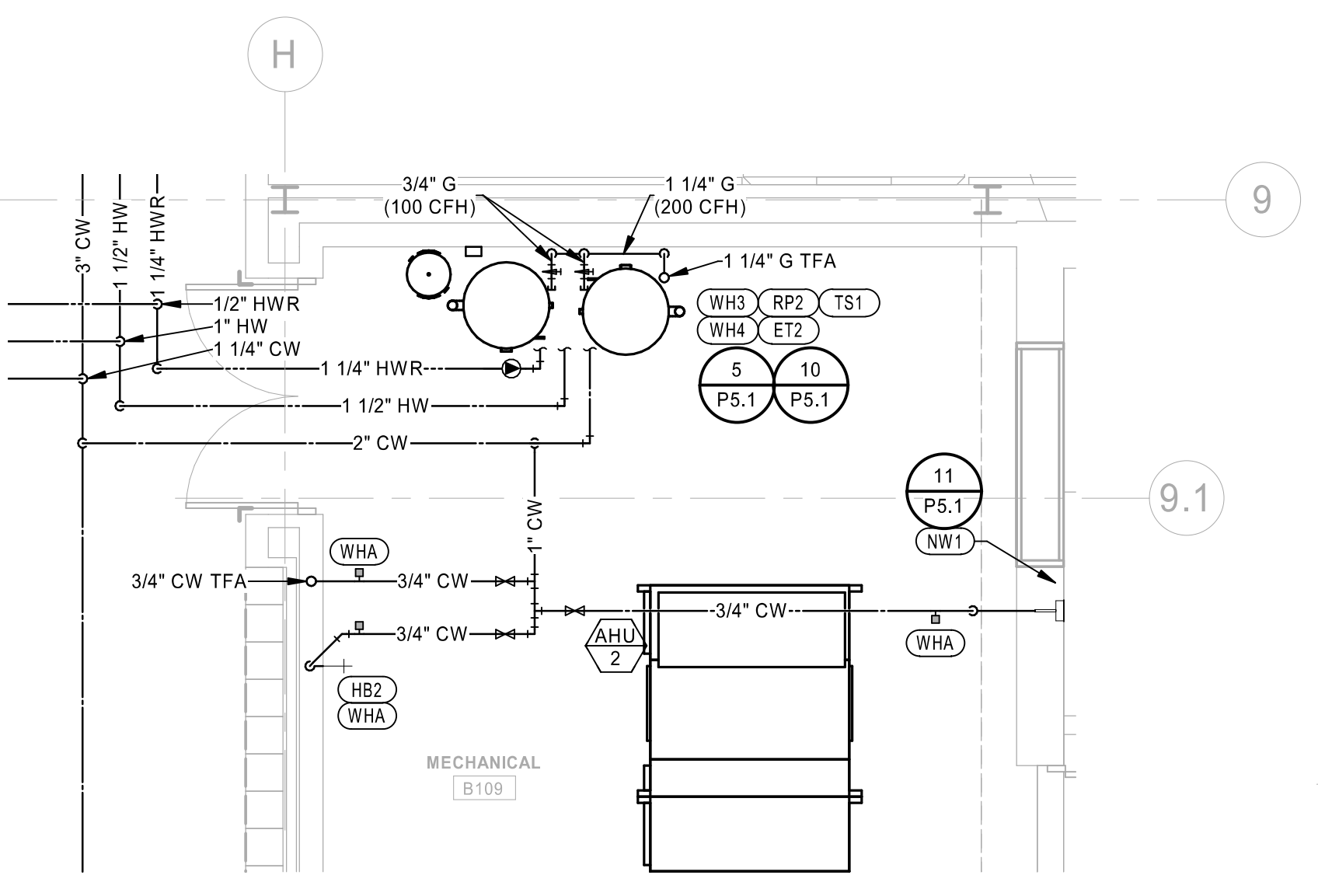
7 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



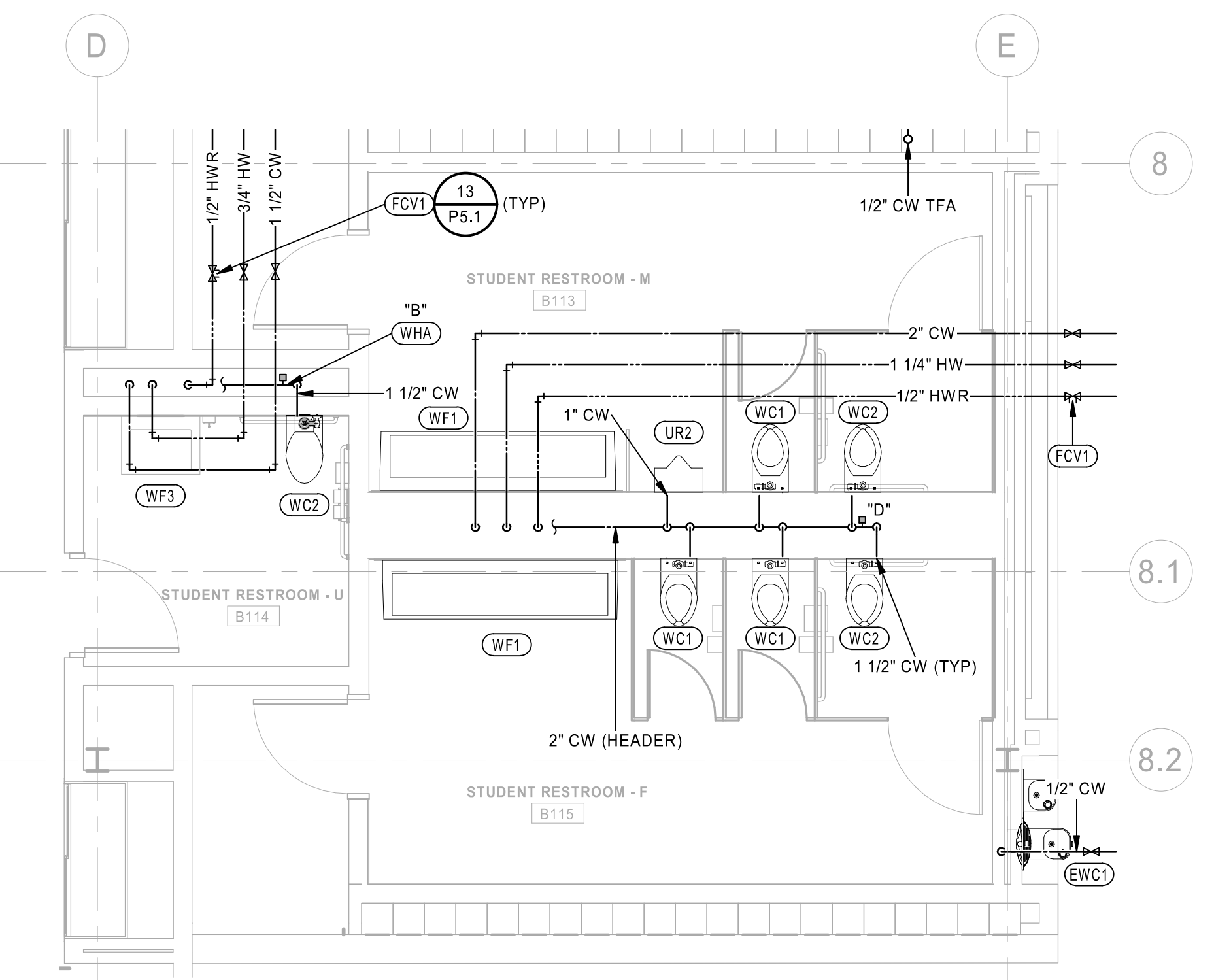
6 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



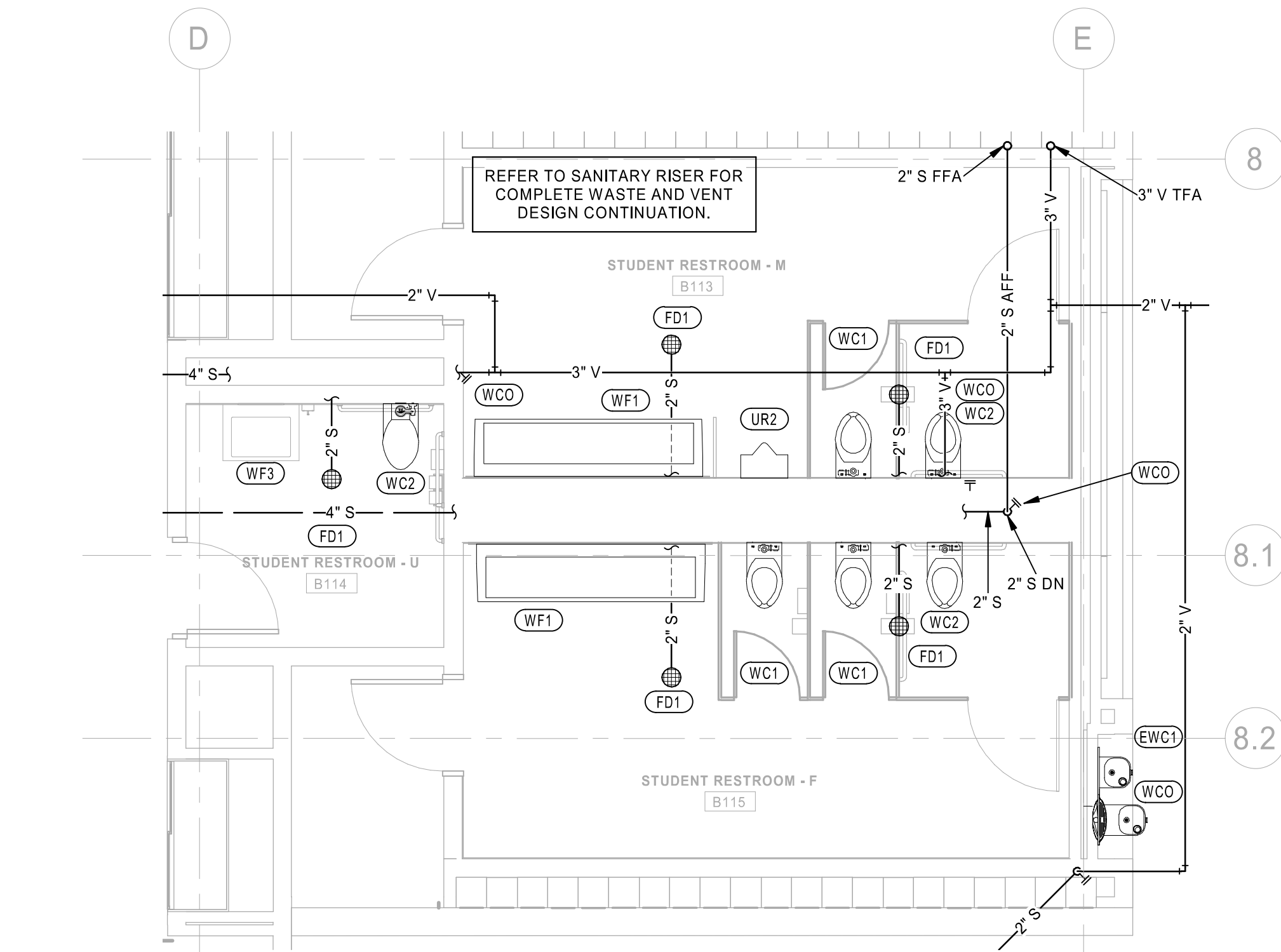
5 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



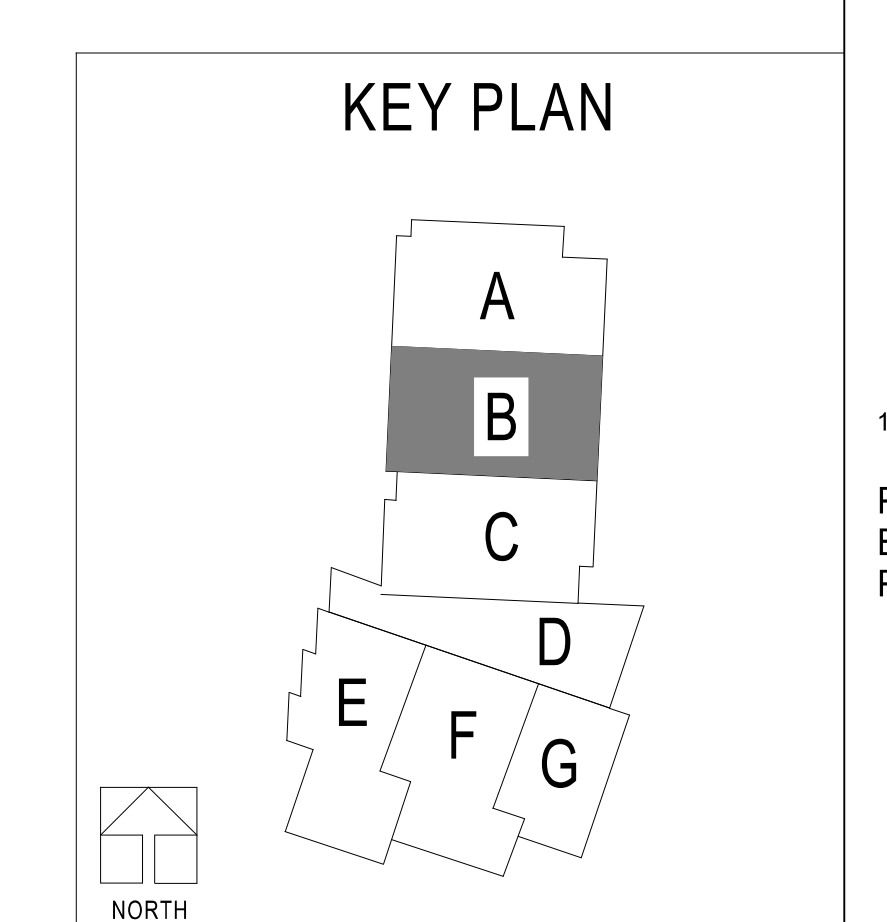
8 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"

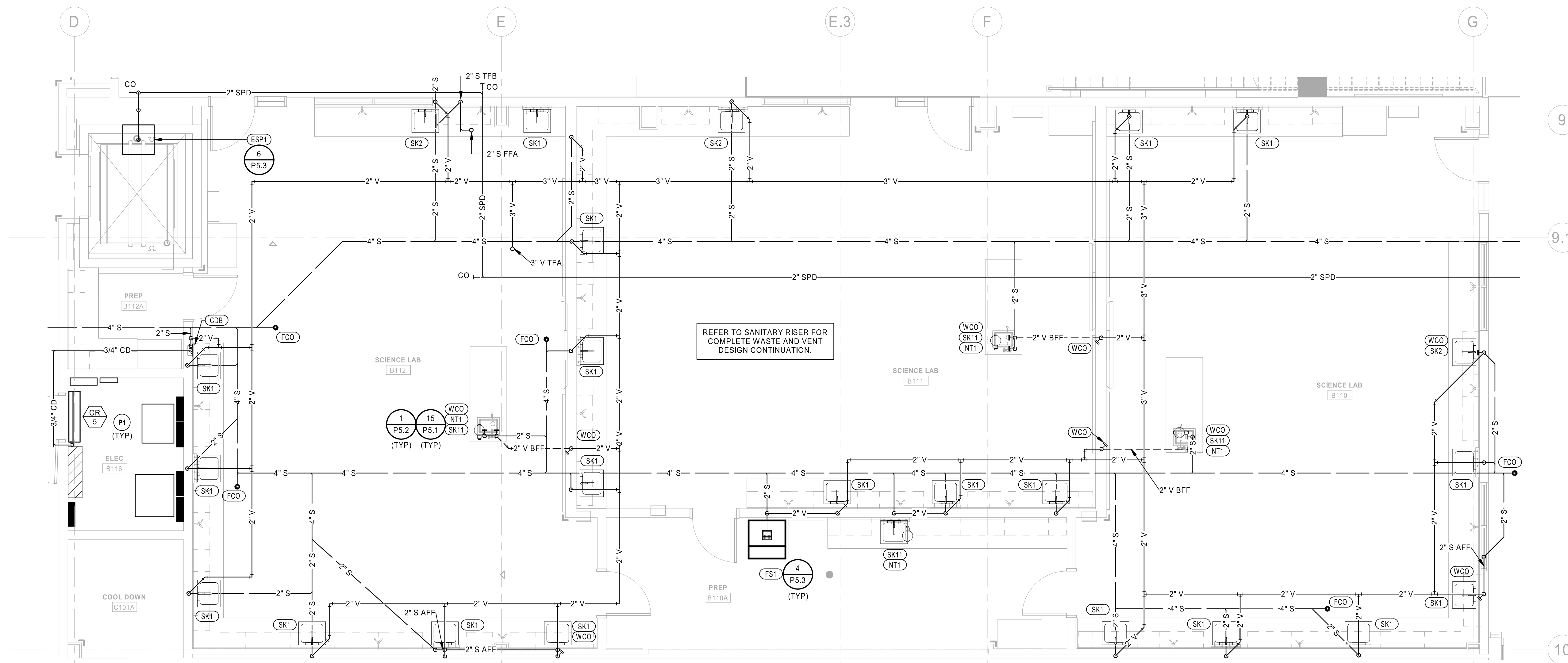


10 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"

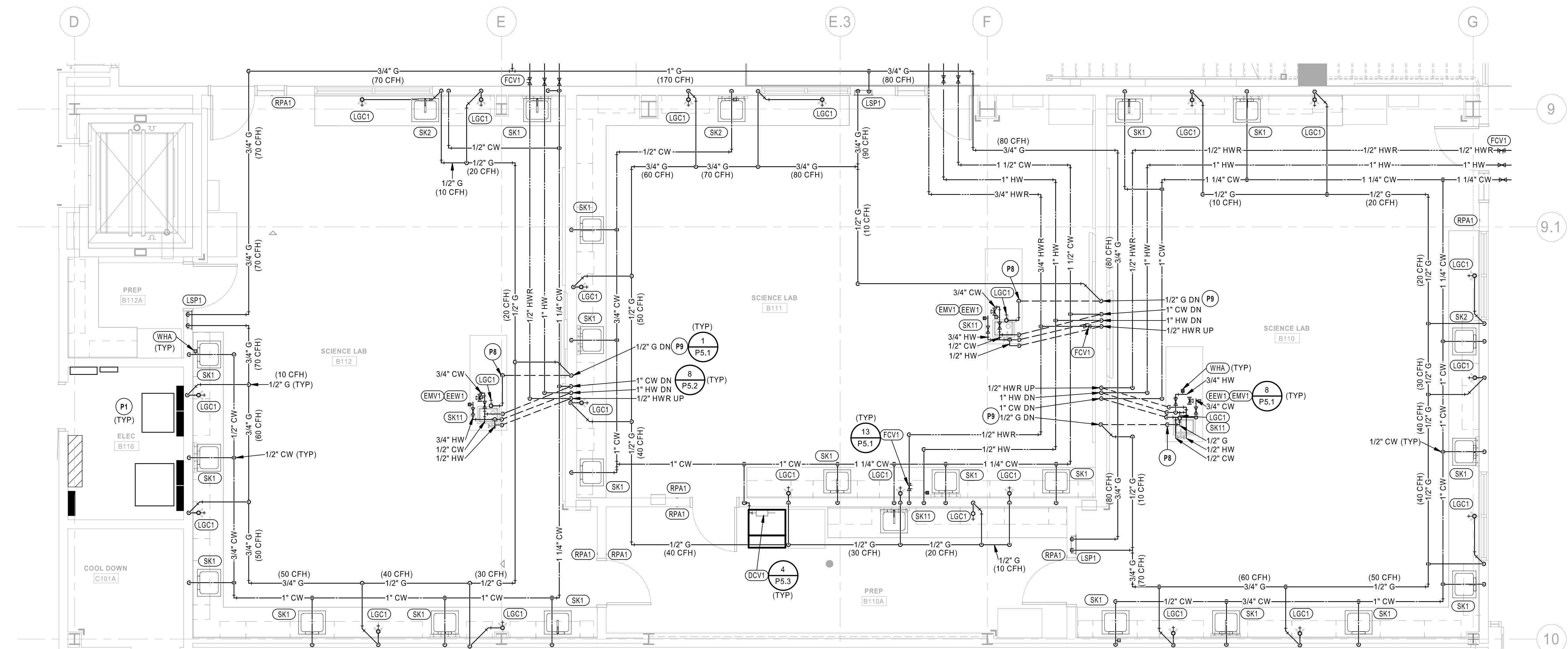


9 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"





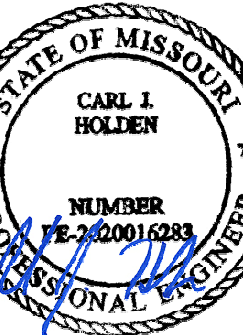
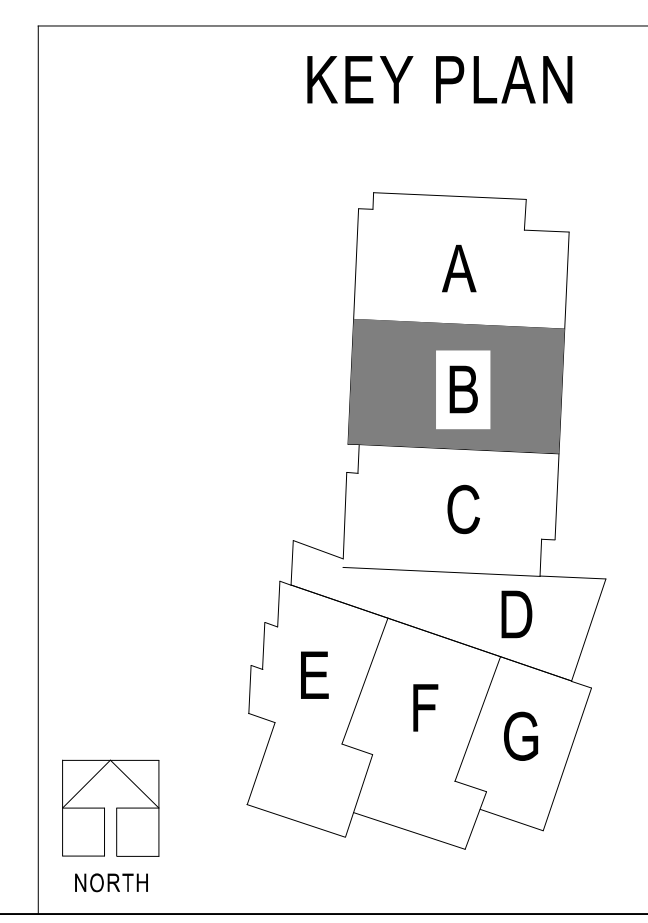
1 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



2 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"

- PLUMBING PLAN NOTES:**
- P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.
 - P8 INSTALL 1/2" GAS COCK IN VERTICAL RISE 12" ABOVE THE FINISH FLOOR.
 - P9 REFER TO DETAIL AND PROVIDE GAS VENT FROM CONDUIT SLEEVE UP TO ROOF AND VENT THRU ROOF.

REFER TO SANITARY RISER FOR COMPLETE WASTE AND VENT DESIGN CONTINUATION.



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 PLUMBING ENLARGED PLANS



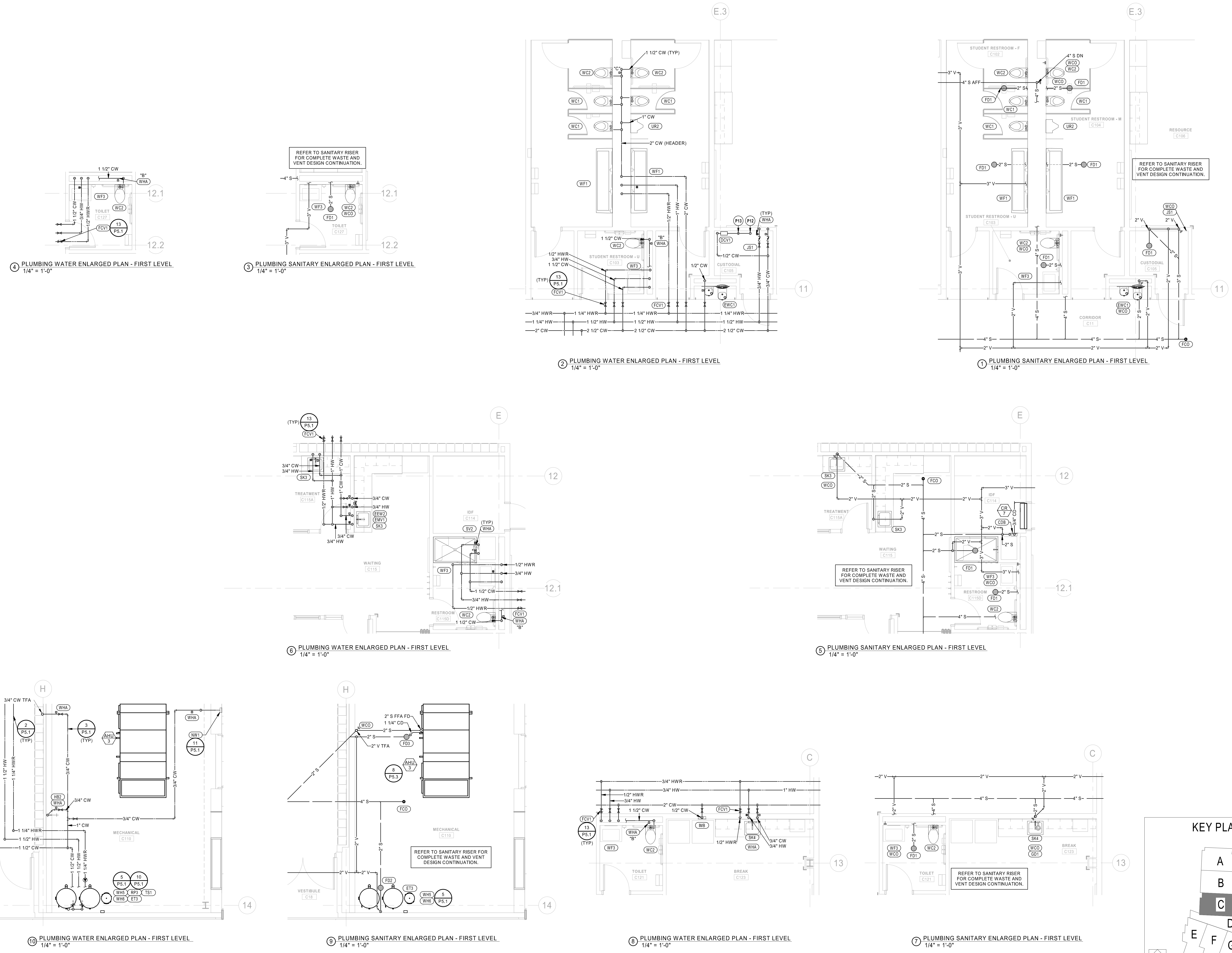
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 8045 LENOX DRIVE SUITE 300
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PLUMBING ENLARGED PLANS



4 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

3 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

2 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

1 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

6 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

5 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

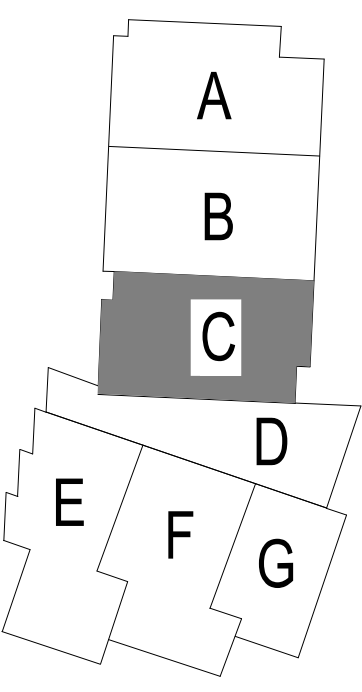
10 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

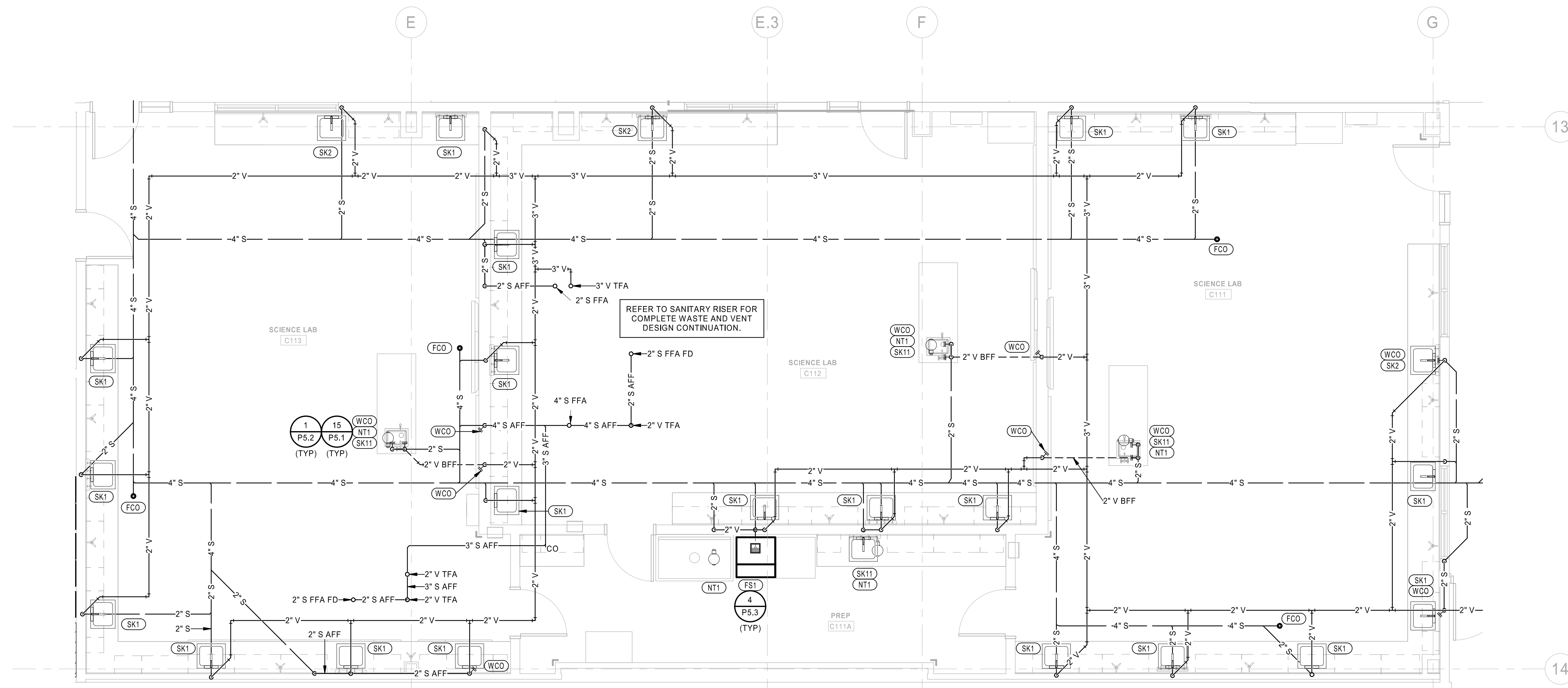
9 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

8 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

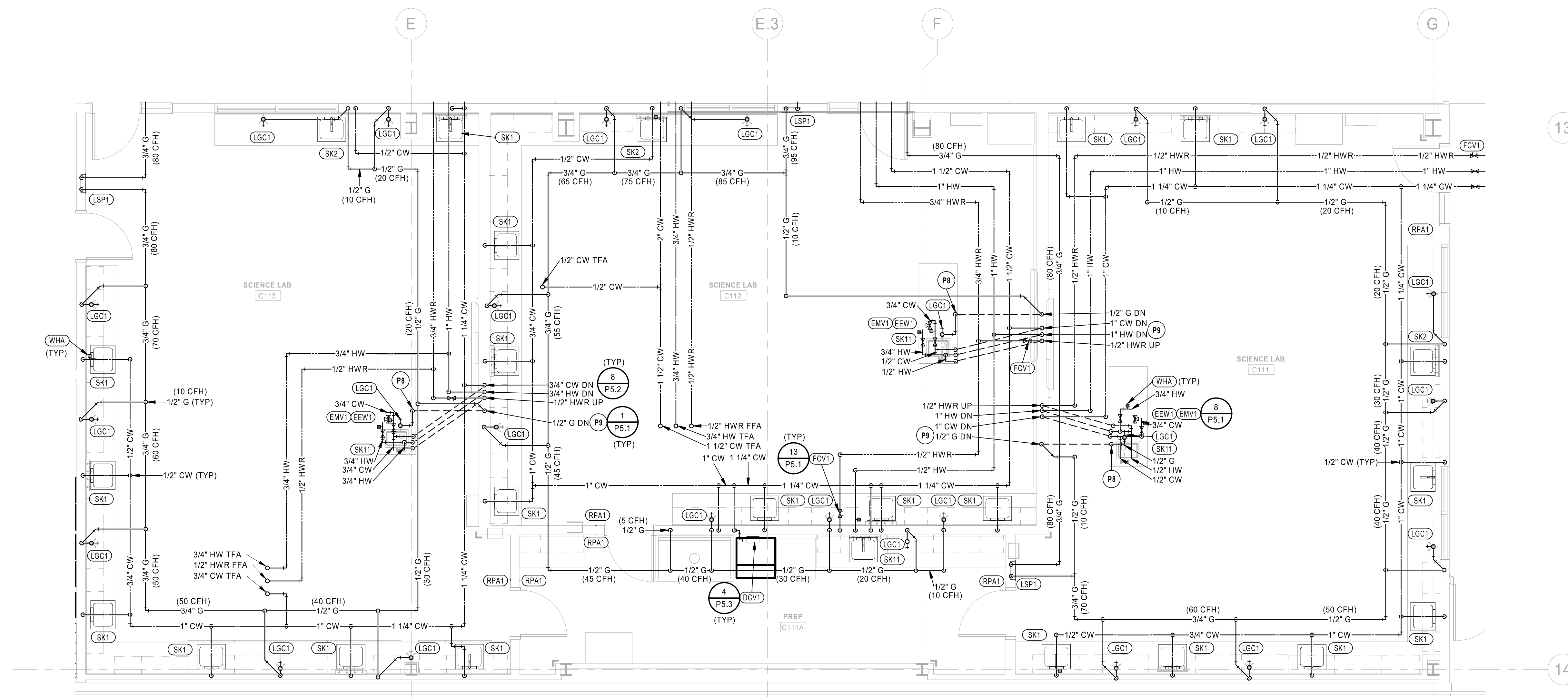
7 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

KEY PLAN



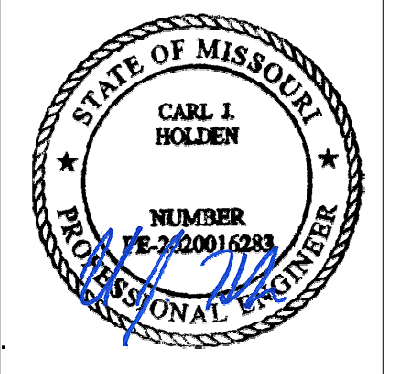
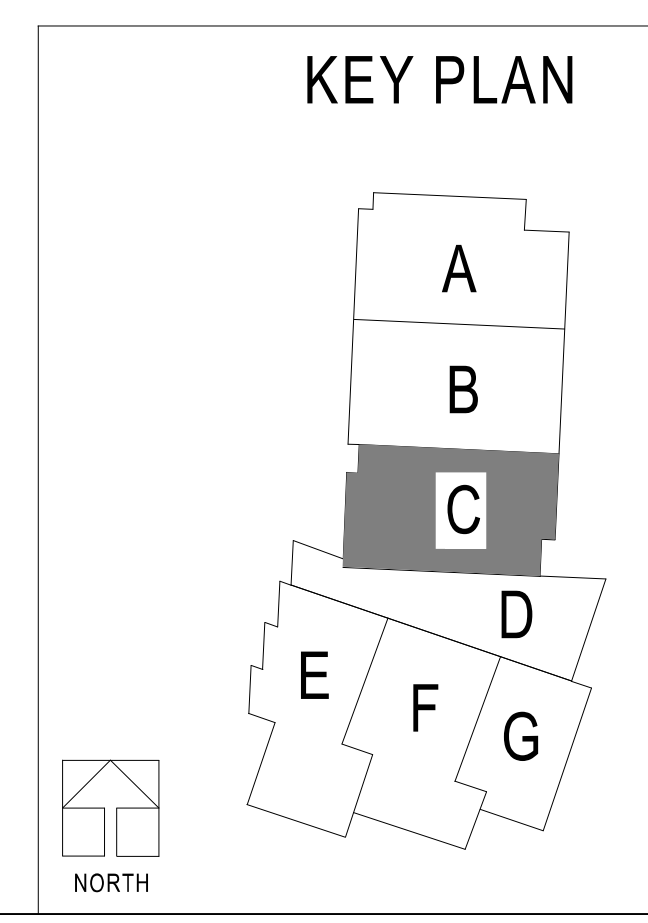


1 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"



2 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
1/4" = 1'-0"

- PLUMBING PLAN NOTES:**
- P8 INSTALL 1/2" GAS COCK IN VERTICAL RISE 12" ABOVE THE FINISH FLOOR.
 - P9 REFER TO DETAIL AND PROVIDE GAS VENT FROM CONDUIT SLEEVE UP TO ROOF AND VENT THRU ROOF.



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 PLUMBING ENLARGED PLANS



Oct 8 2020
 CARL J. HOLDEN
 LICENSE # PE-2020016283

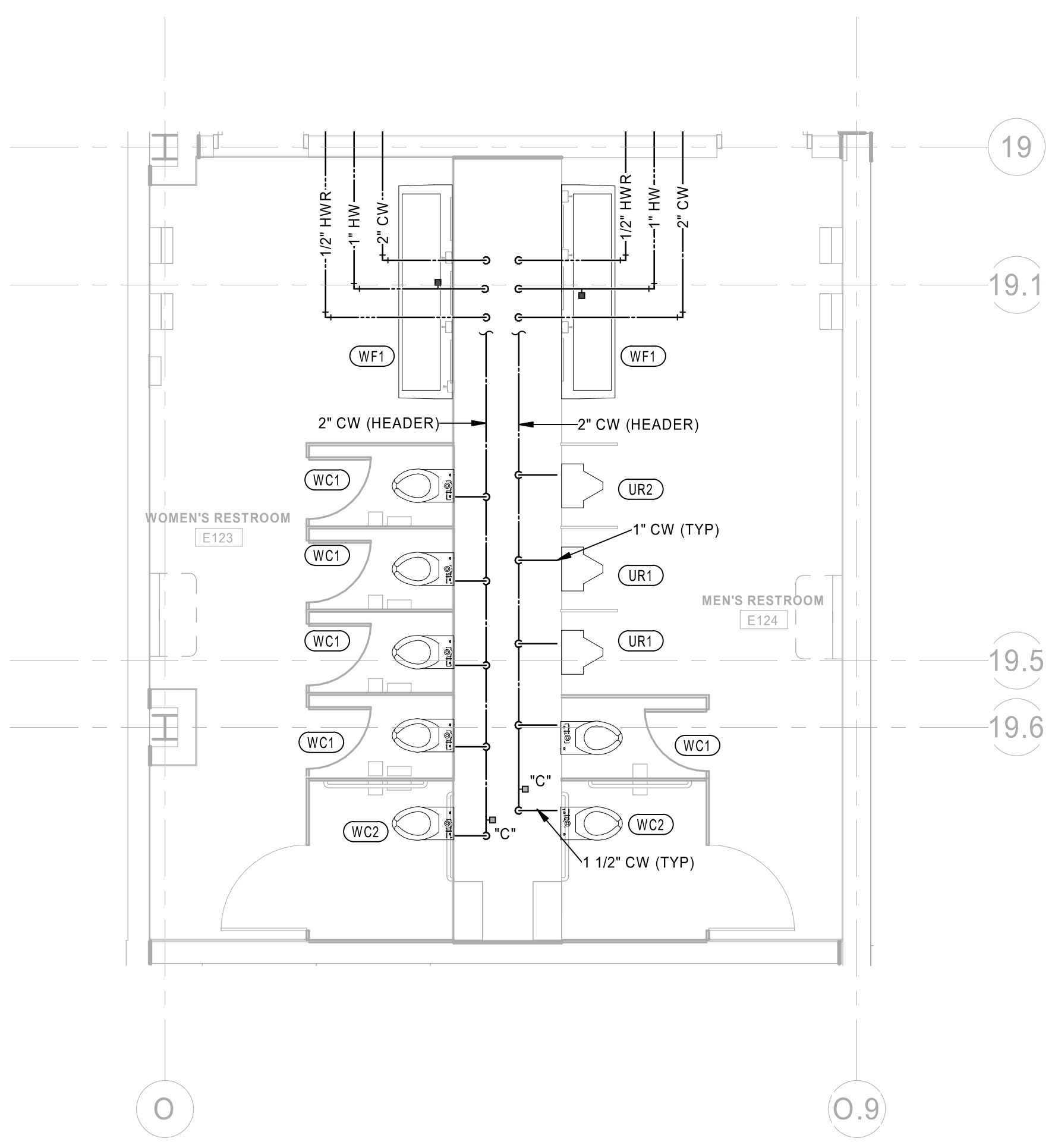
HENDERSON
 ENGINEERS
 13045 LINDEN DRIVE SUITE 300
 LITTLE ROCK, AR 72205
 TEL: 501.221.4300
 WWW.HENDERSONENGINEERS.COM
 MISSOURI PROFESSIONAL ENGINEERING LICENSE # 0000000000
 MO. CORPORATE NO. E-5680
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LEE'S SUMMIT MIDDLE SCHOOL #4
 LEE'S SUMMIT R-7 SCHOOL DISTRICT
 1001 SE BAILEY ROAD
 LEE'S SUMMIT, MO 64081

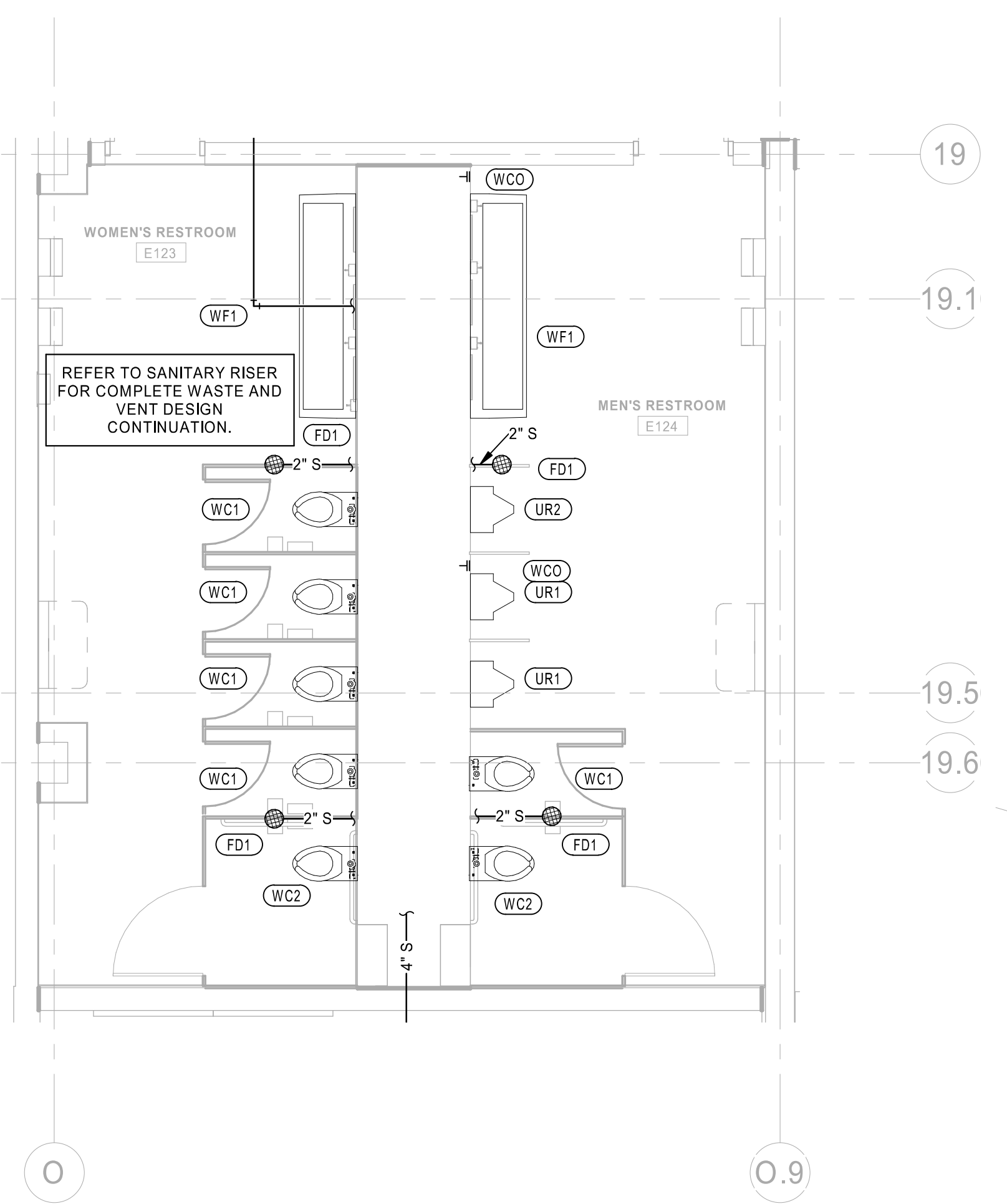
PACKAGE 3 - BUILDING & SITE
 10/08/20
 REVISIONS

13-20102-00
 PLUMBING ENLARGED PLANS

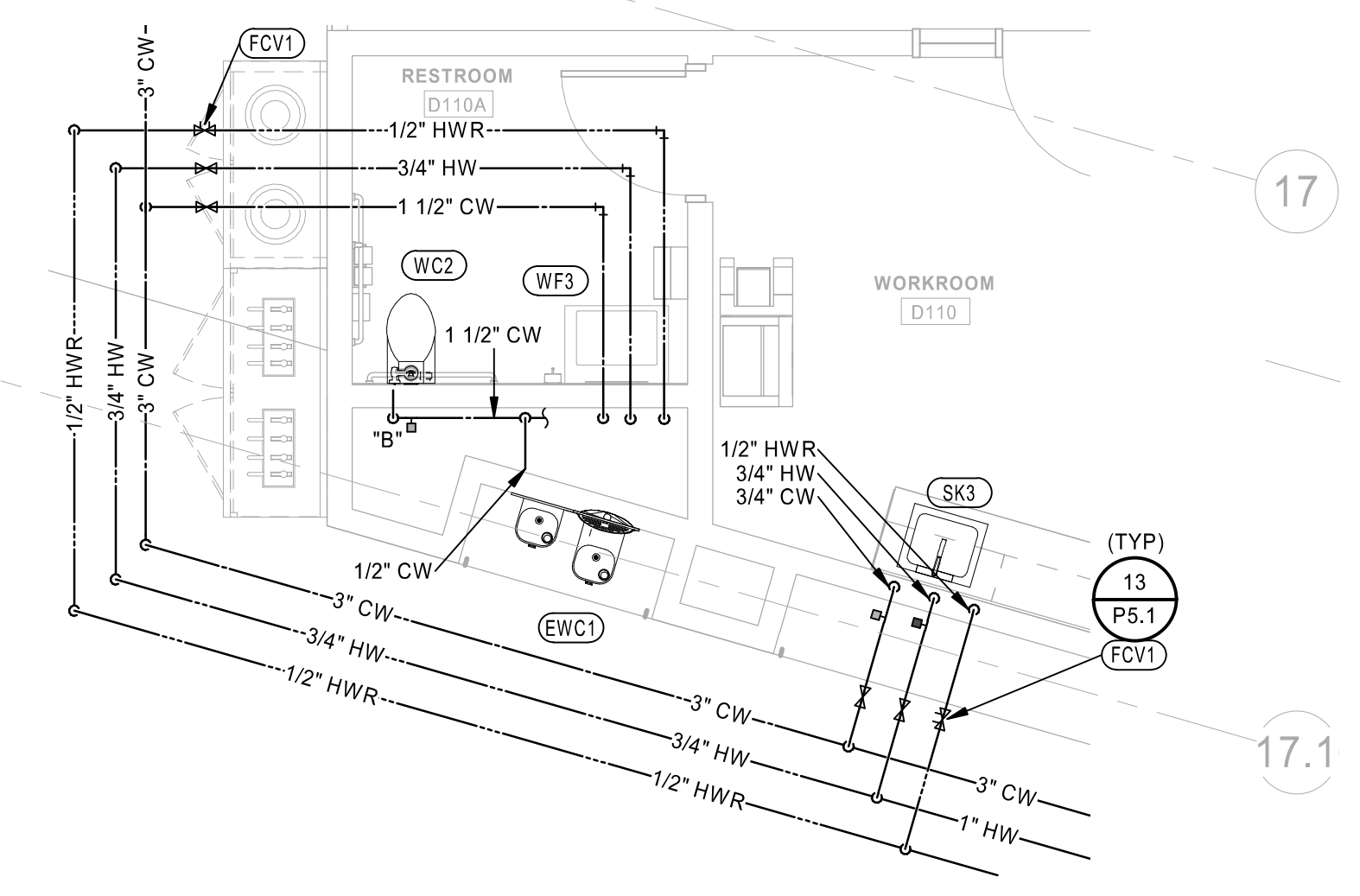
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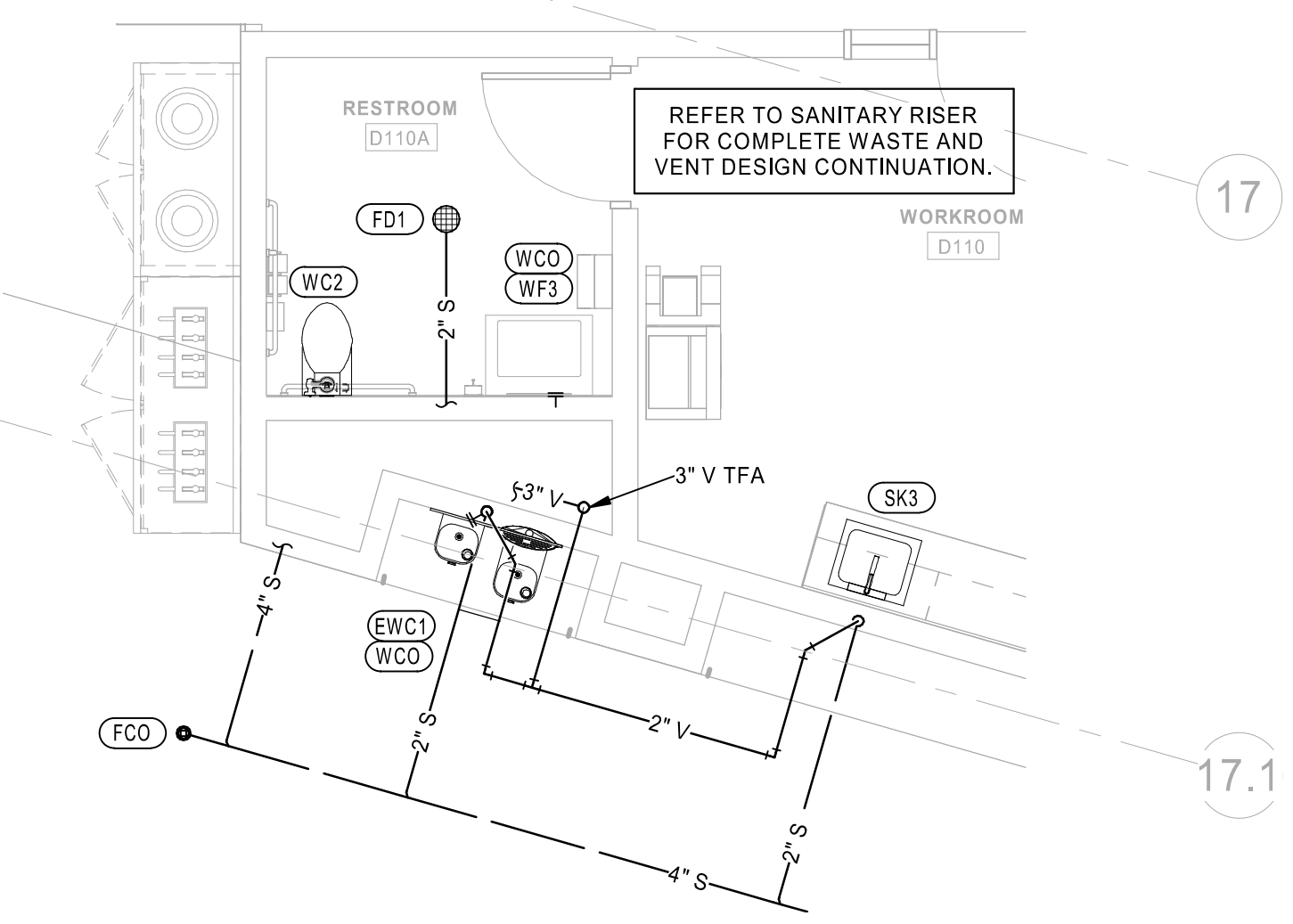
4 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"



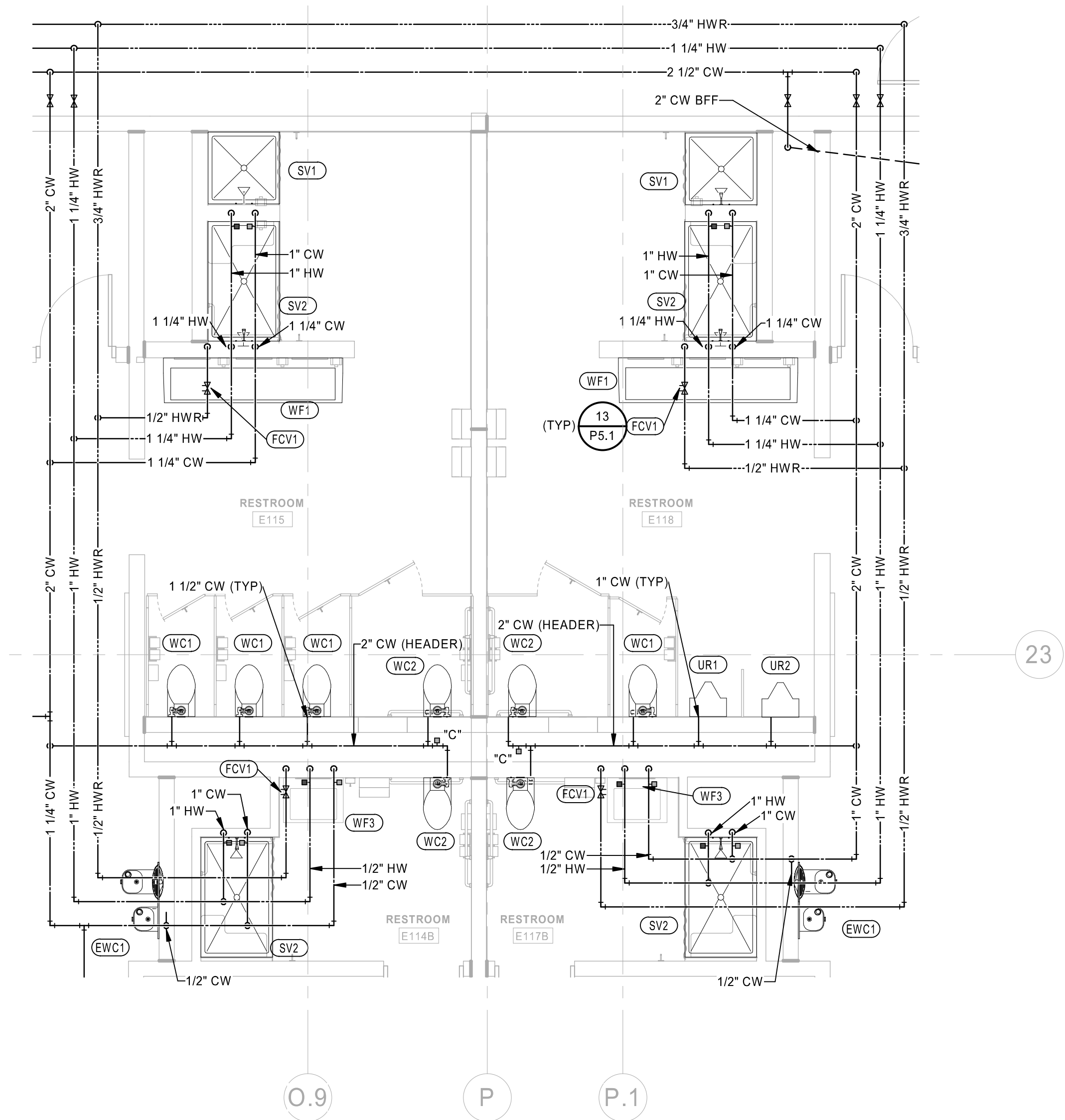
3 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"



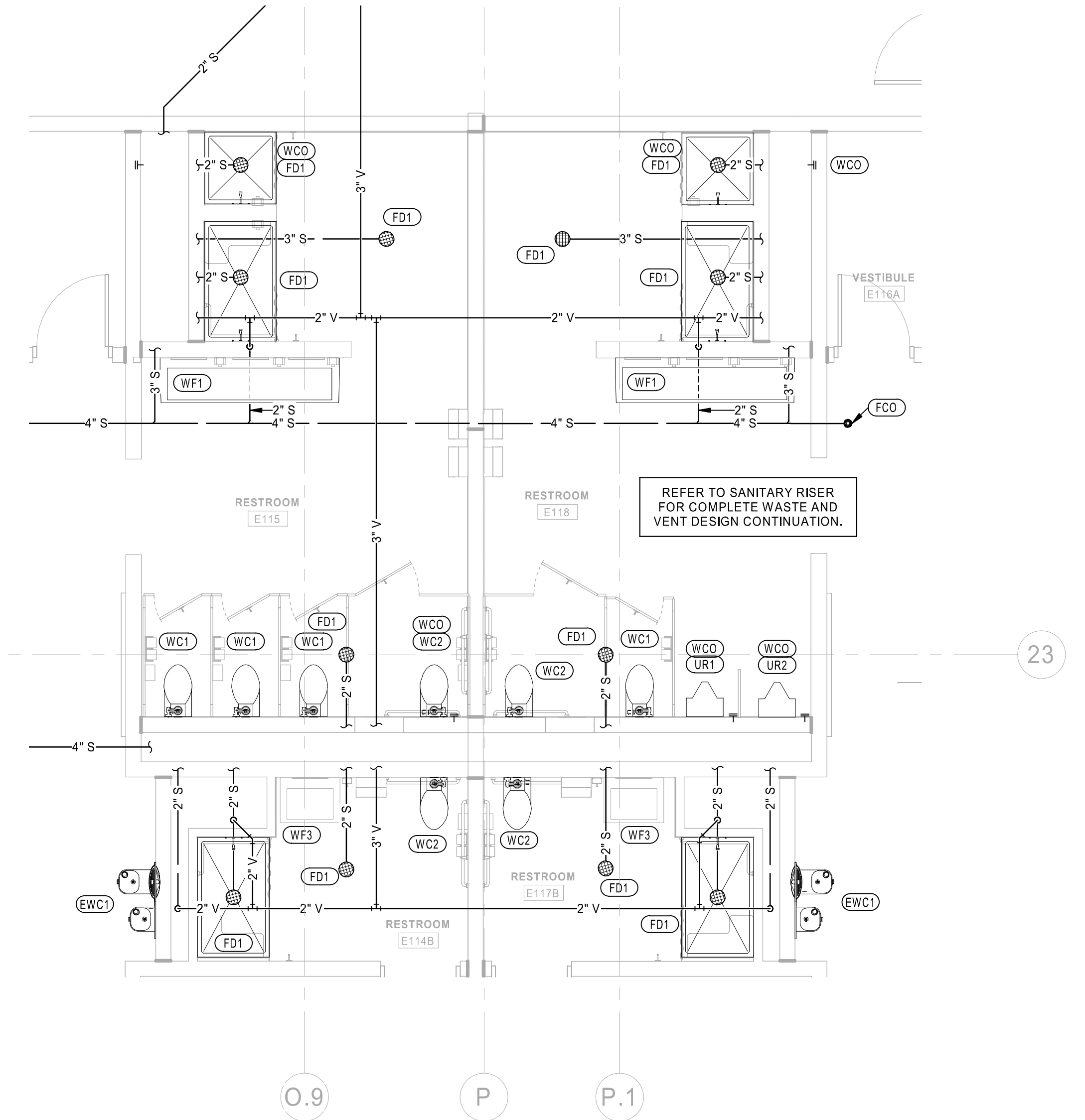
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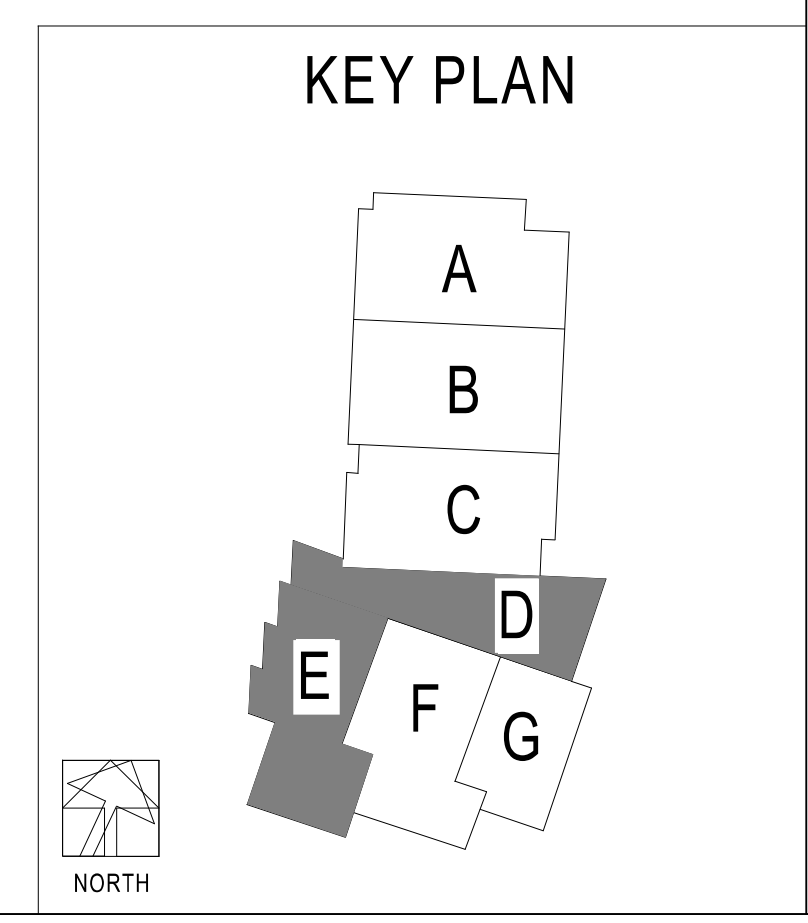
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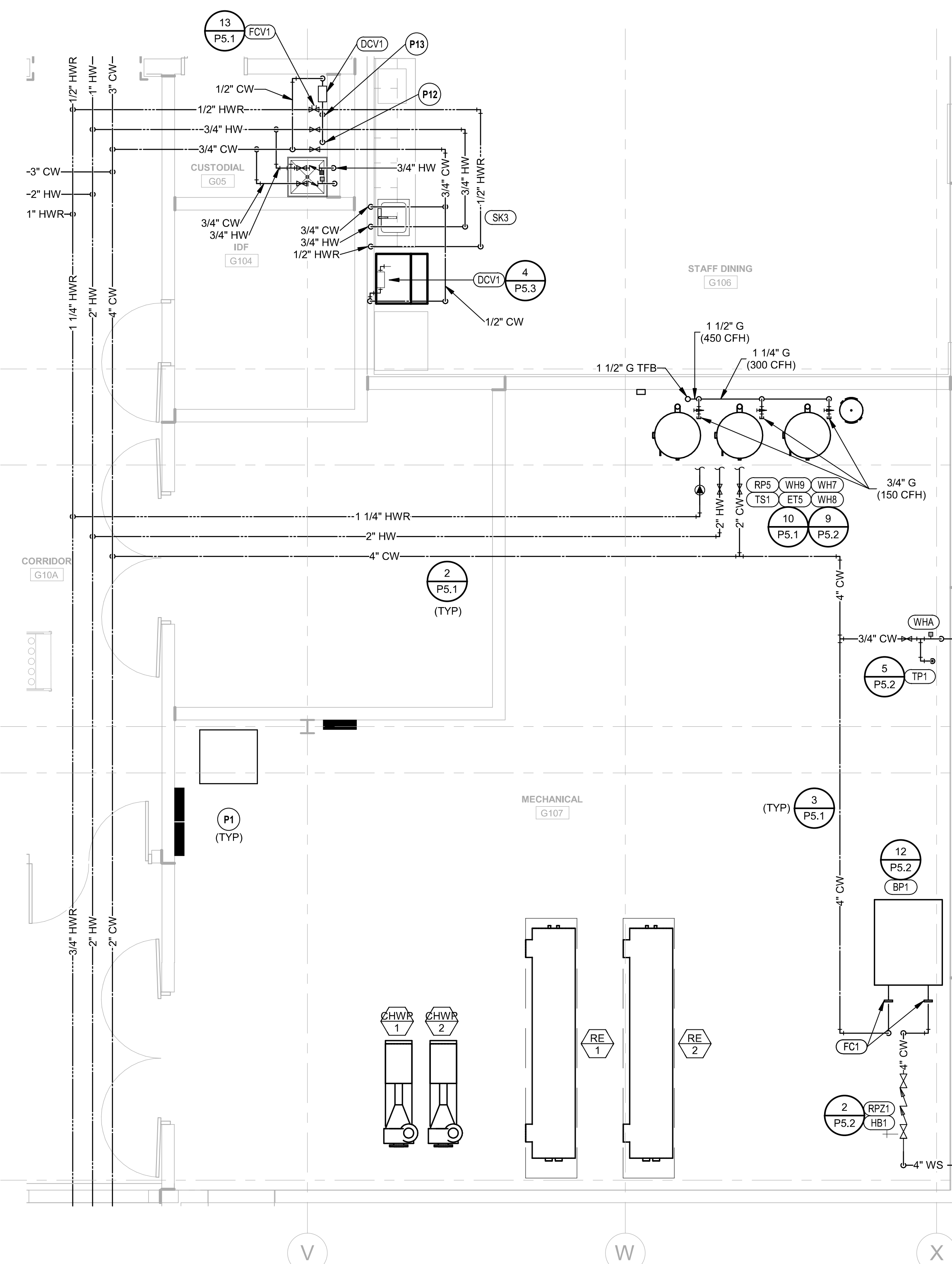


6 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
 1/4" = 1'-0"

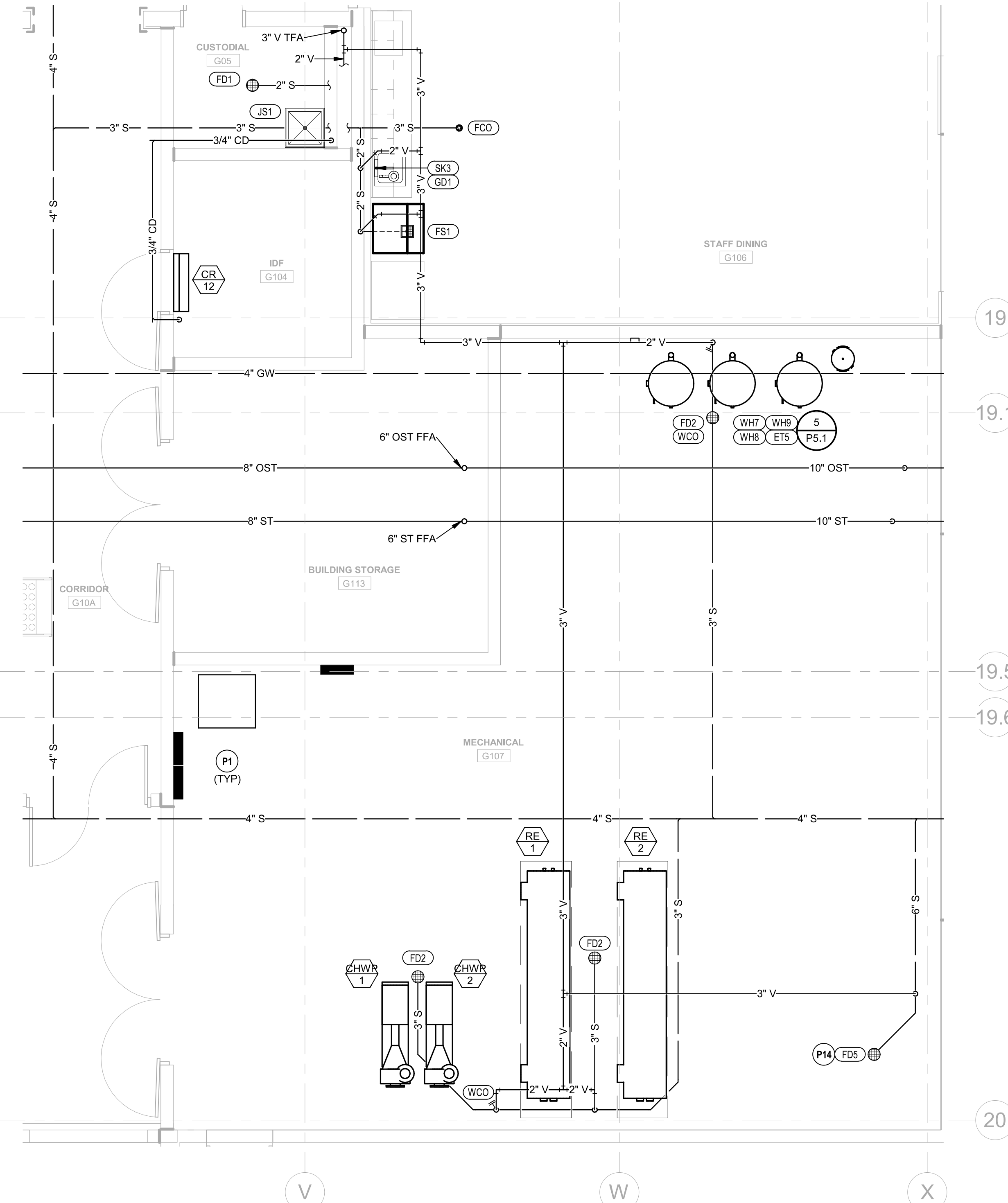


5 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL
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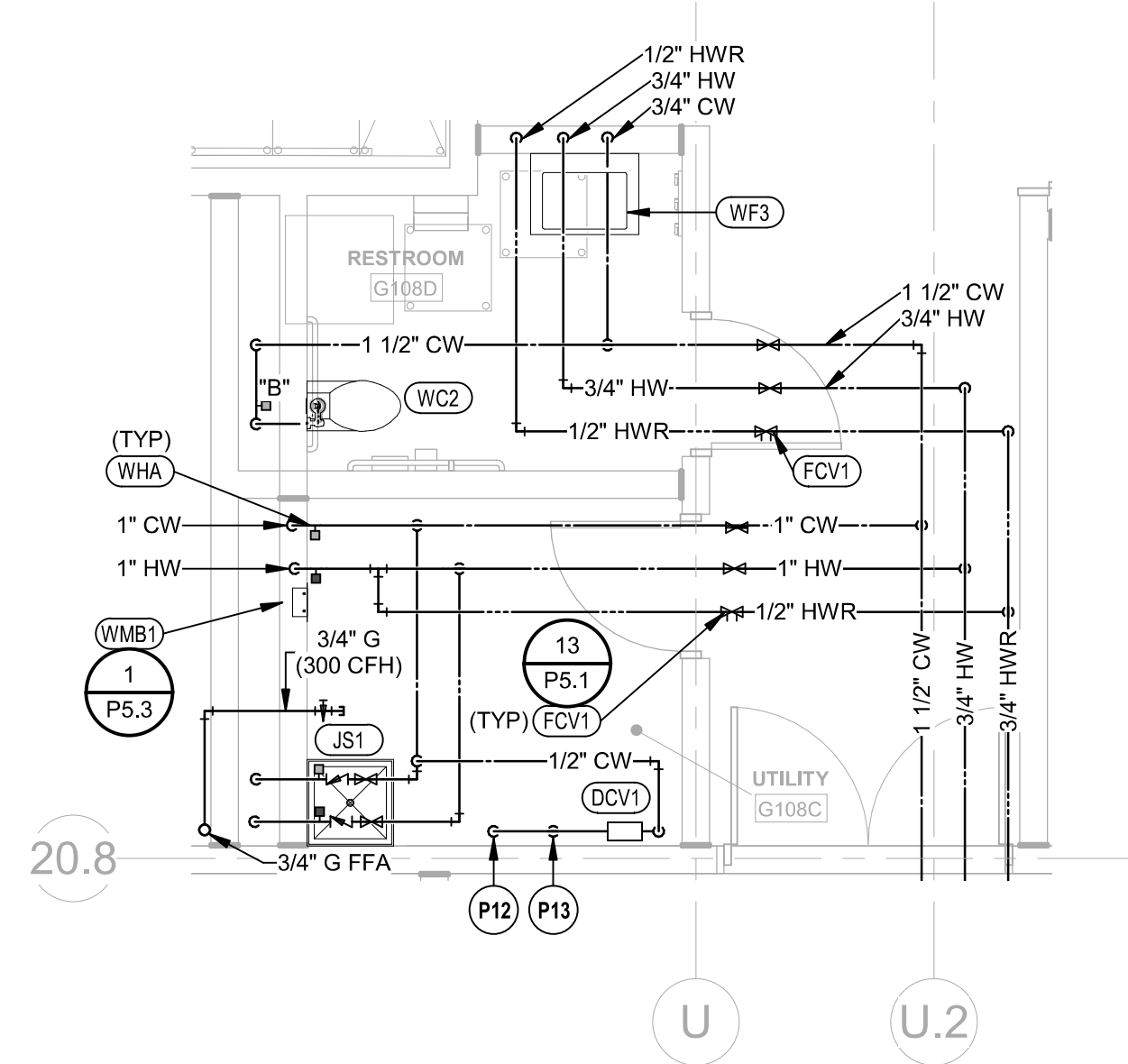




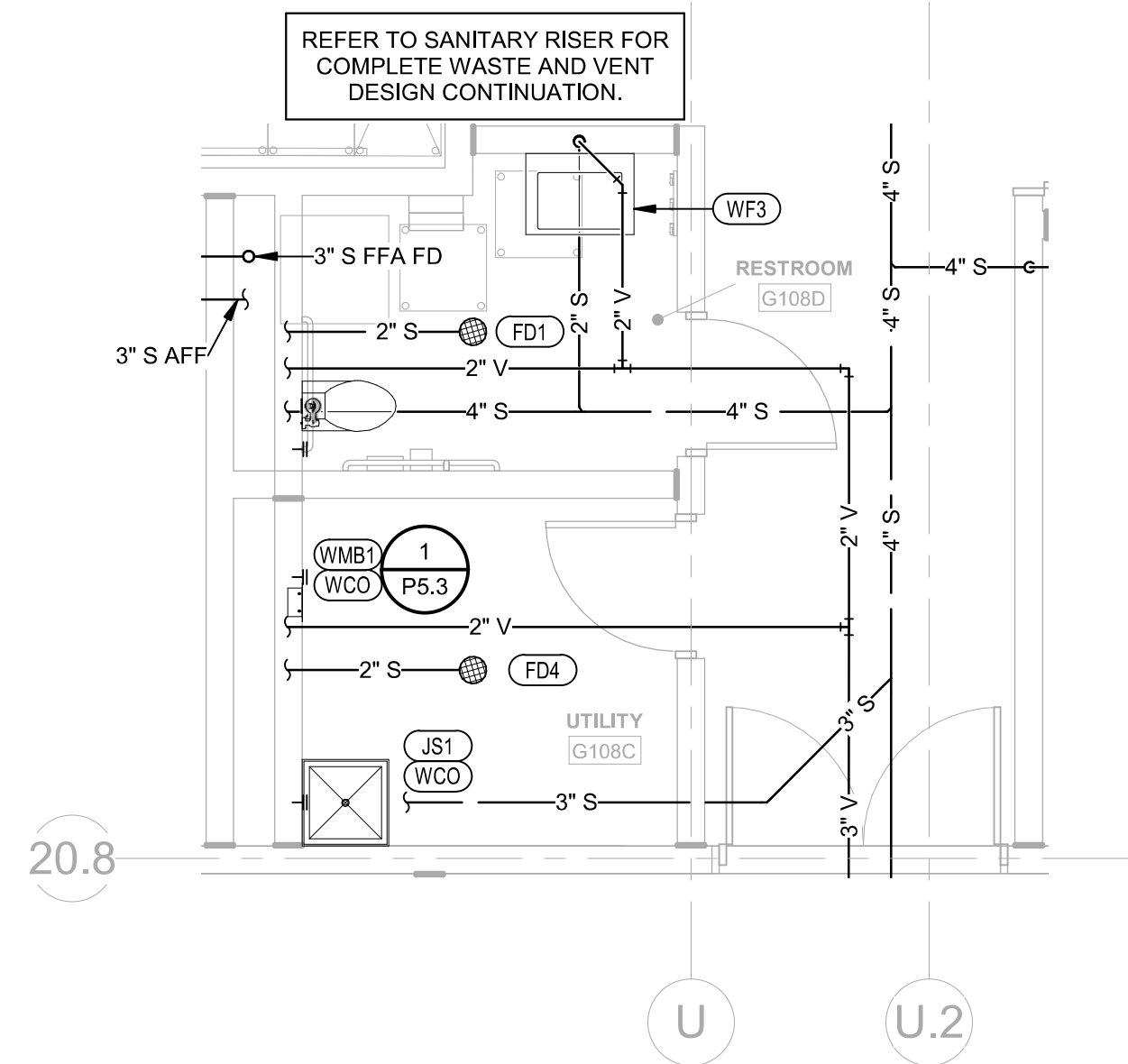
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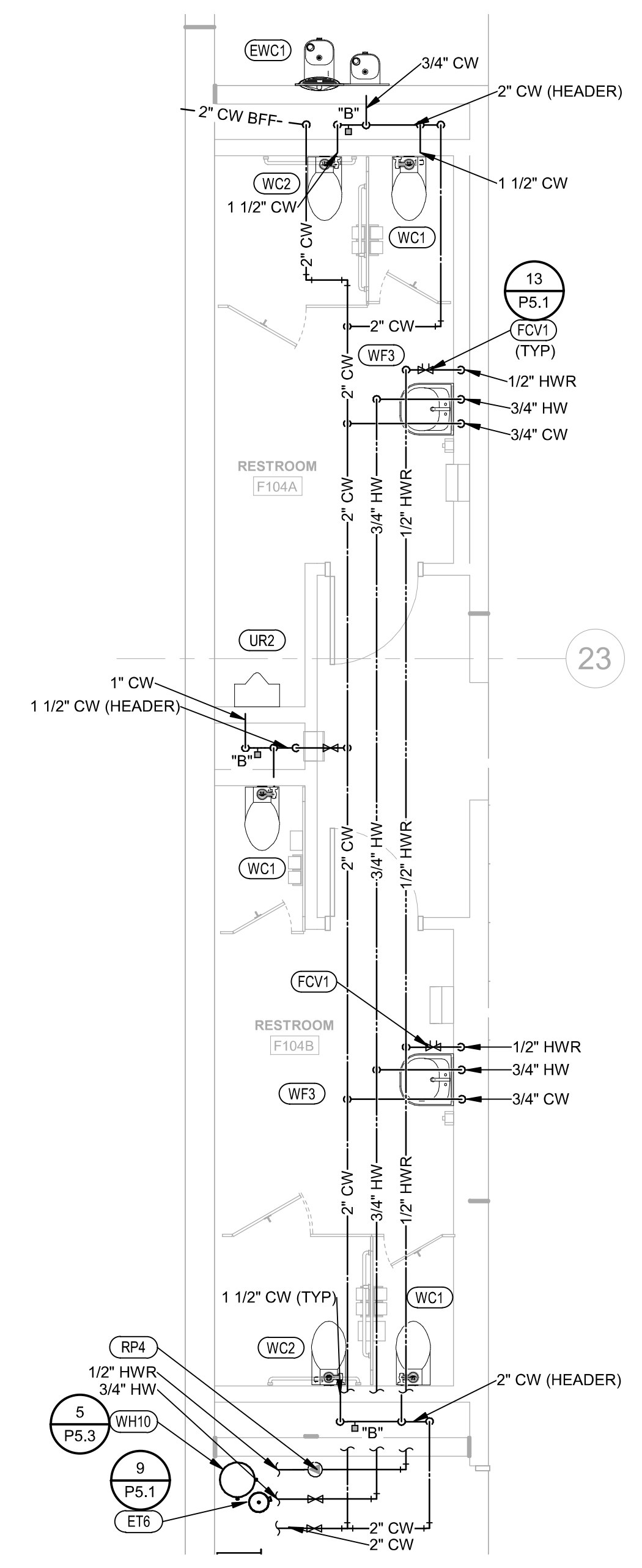
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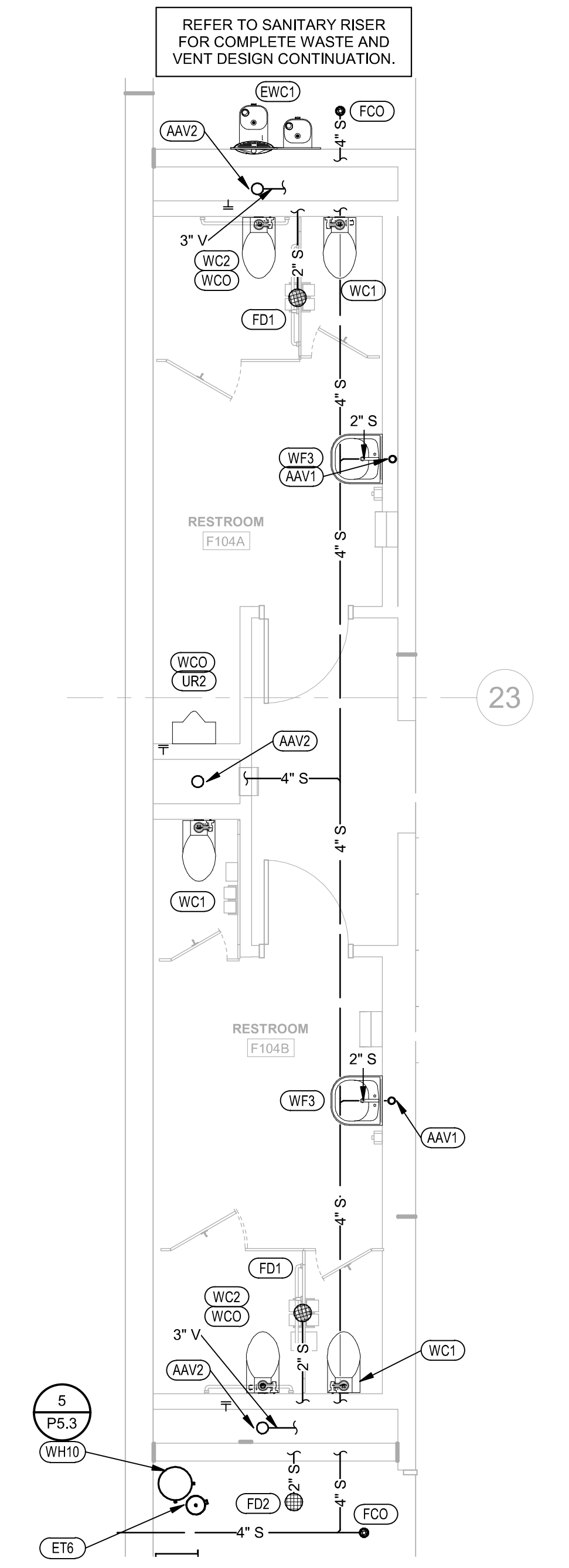
6 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL
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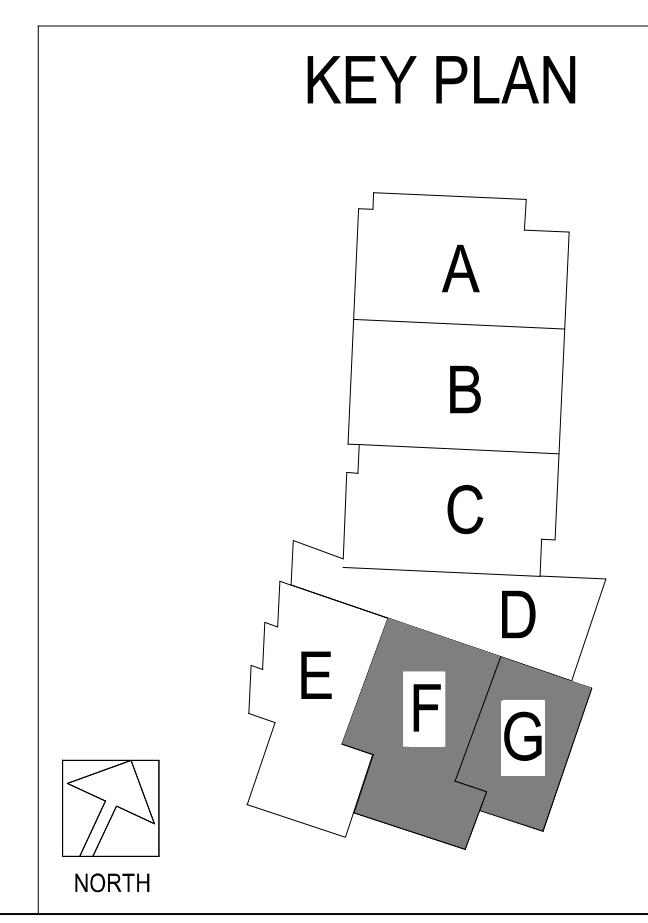


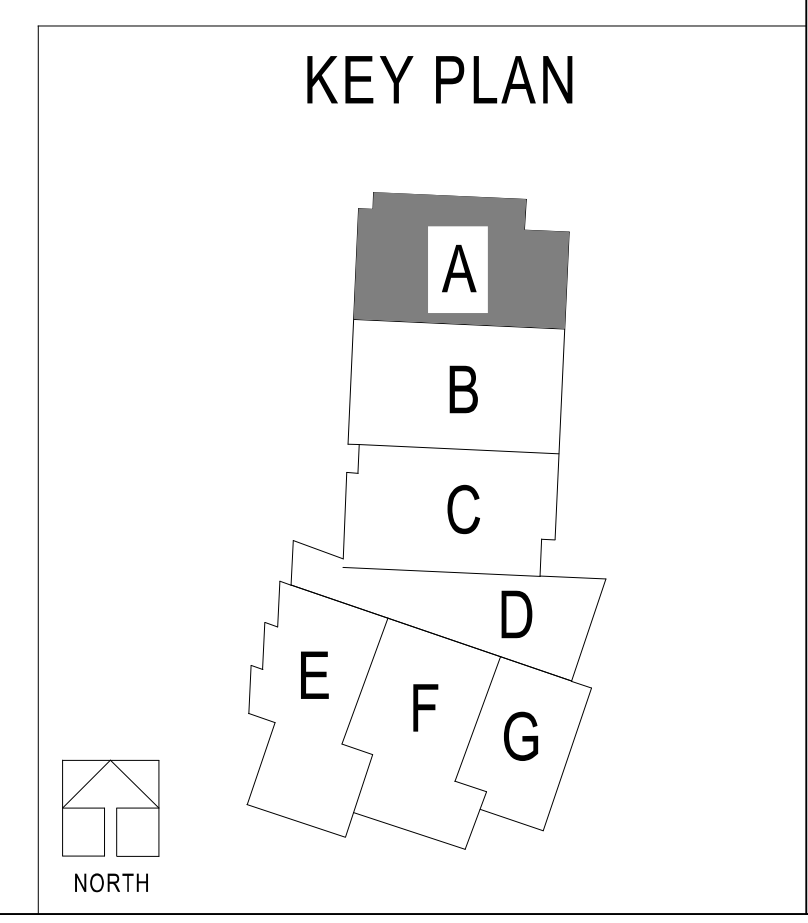
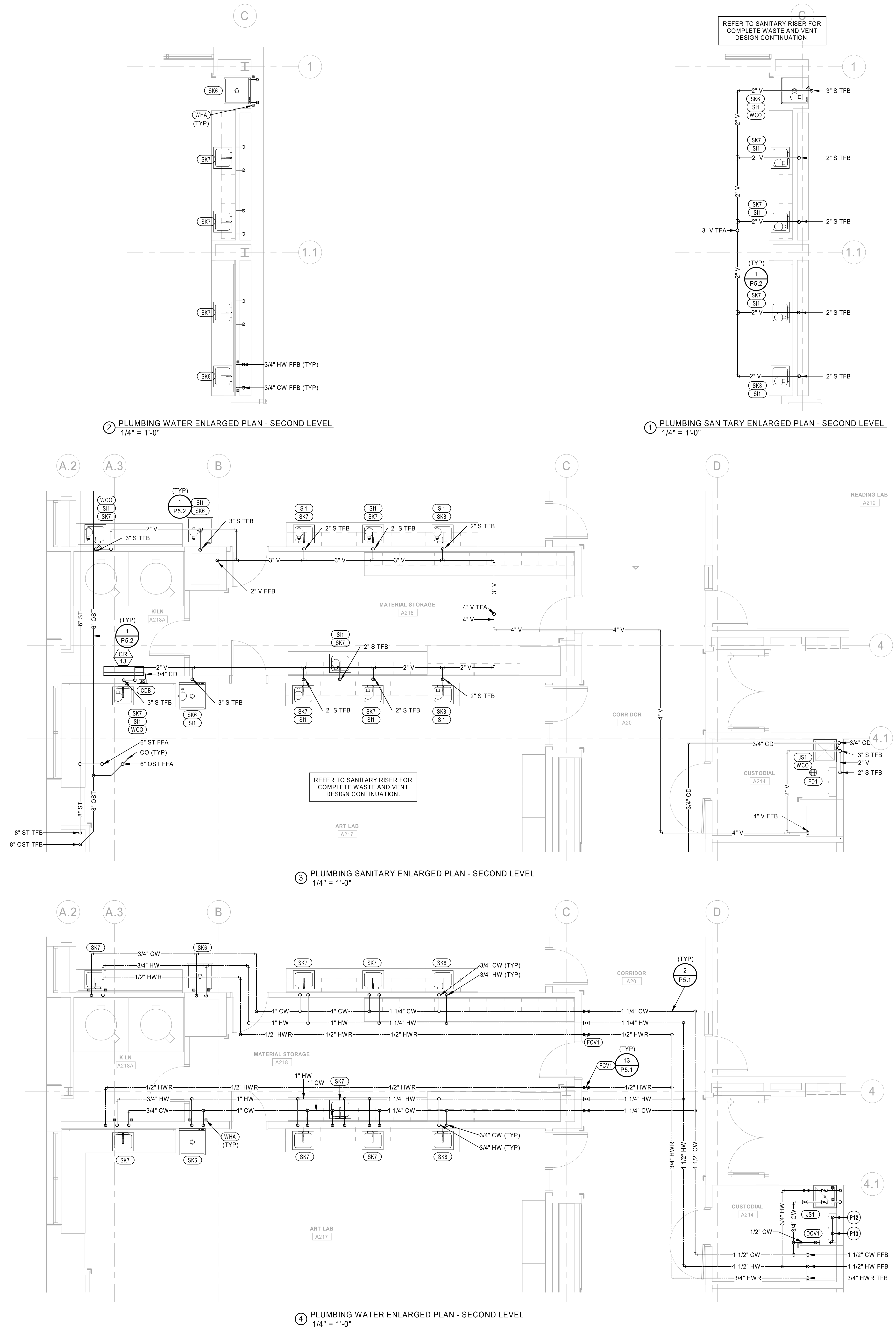
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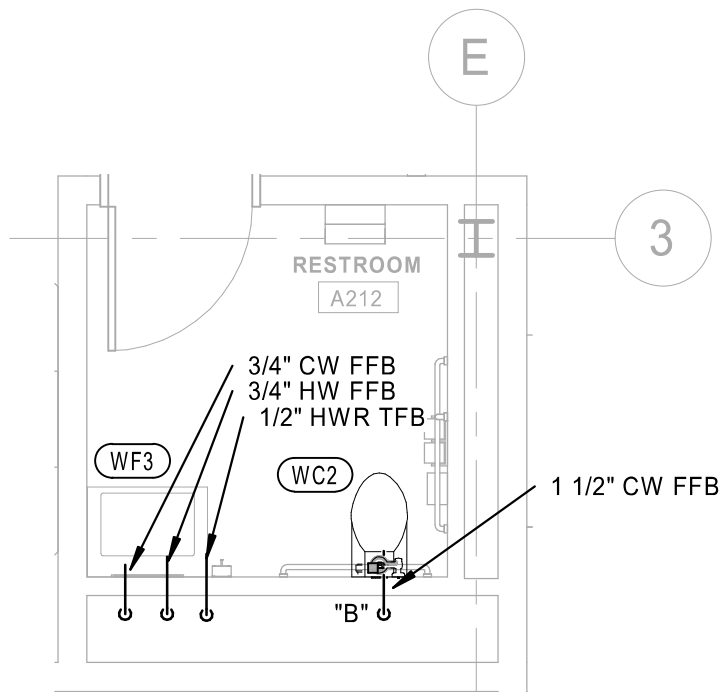


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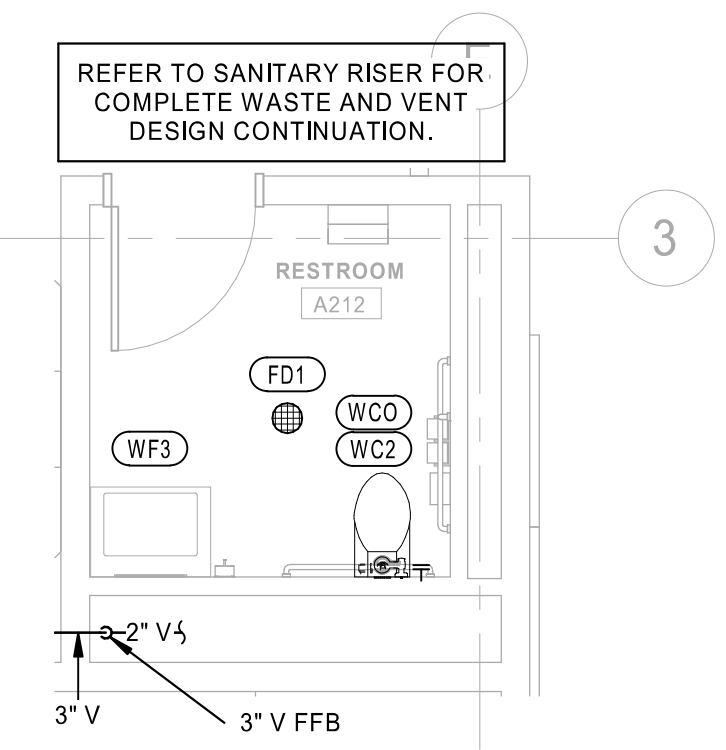
- PLUMBING PLAN NOTES:**
- P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.
 - P12 PROVIDE 1/2" COLD WATER TO OWNER PROVIDED 3M CLEANING EQUIPMENT, COORDINATE LOCATION WITH ARCHITECT.
 - P13 1/2" COLD WATER DOWN TO OWNER PROVIDED TERSANO CLEANING EQUIPMENT, COORDINATE LOCATION WITH ARCHITECT.
 - P14 PROVIDE DRAIN WITH TRAP PRIMER CONNECTION. REFER TO WATER PLANS FOR TRAP PRIMER LOCATION.





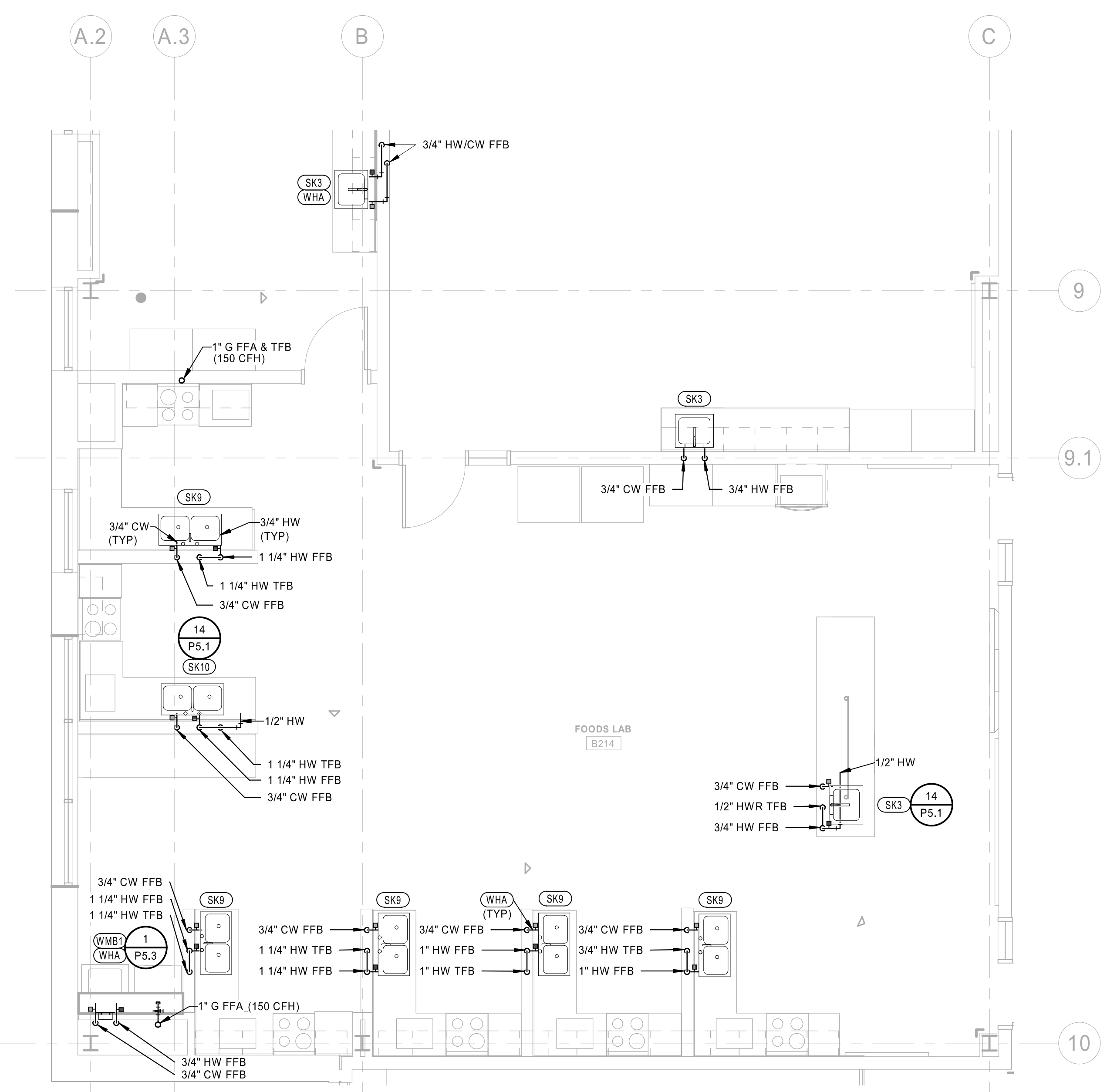


2 PLUMBING WATER ENLARGED PLAN - SECOND LEVEL
1/4" = 1'-0"

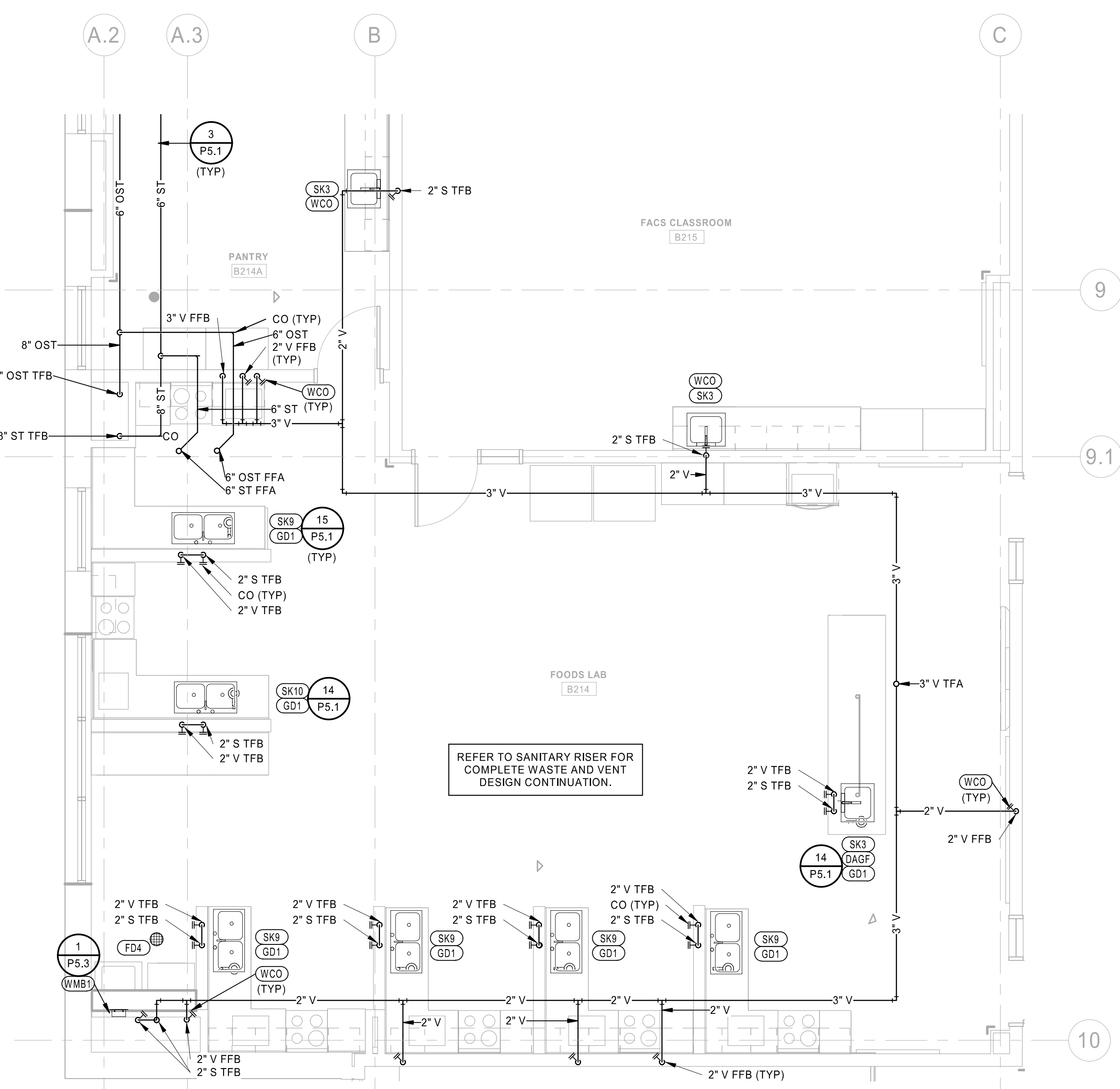


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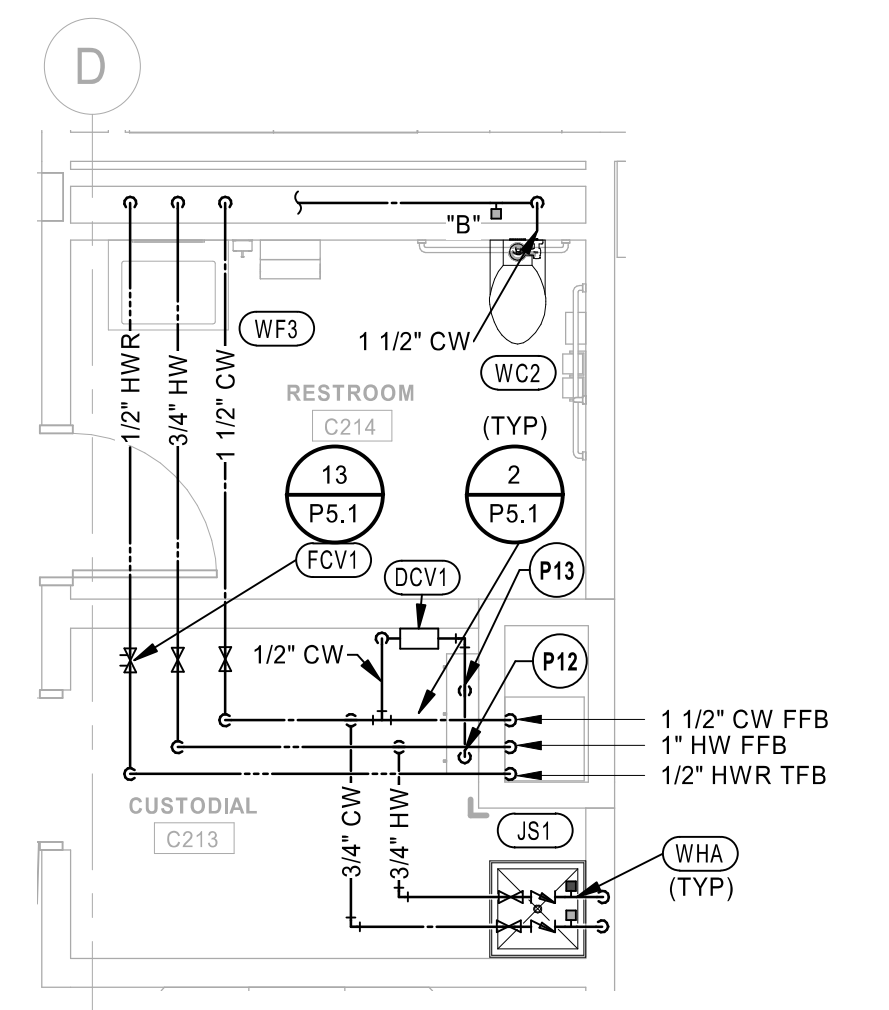
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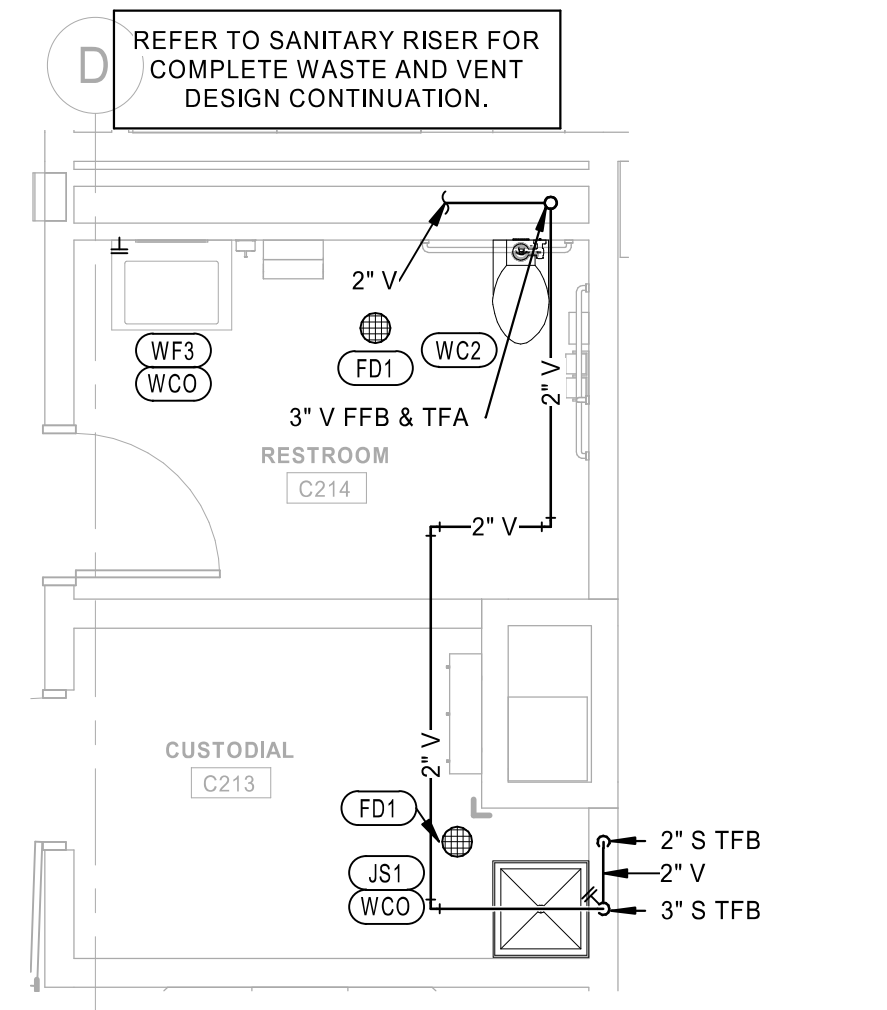
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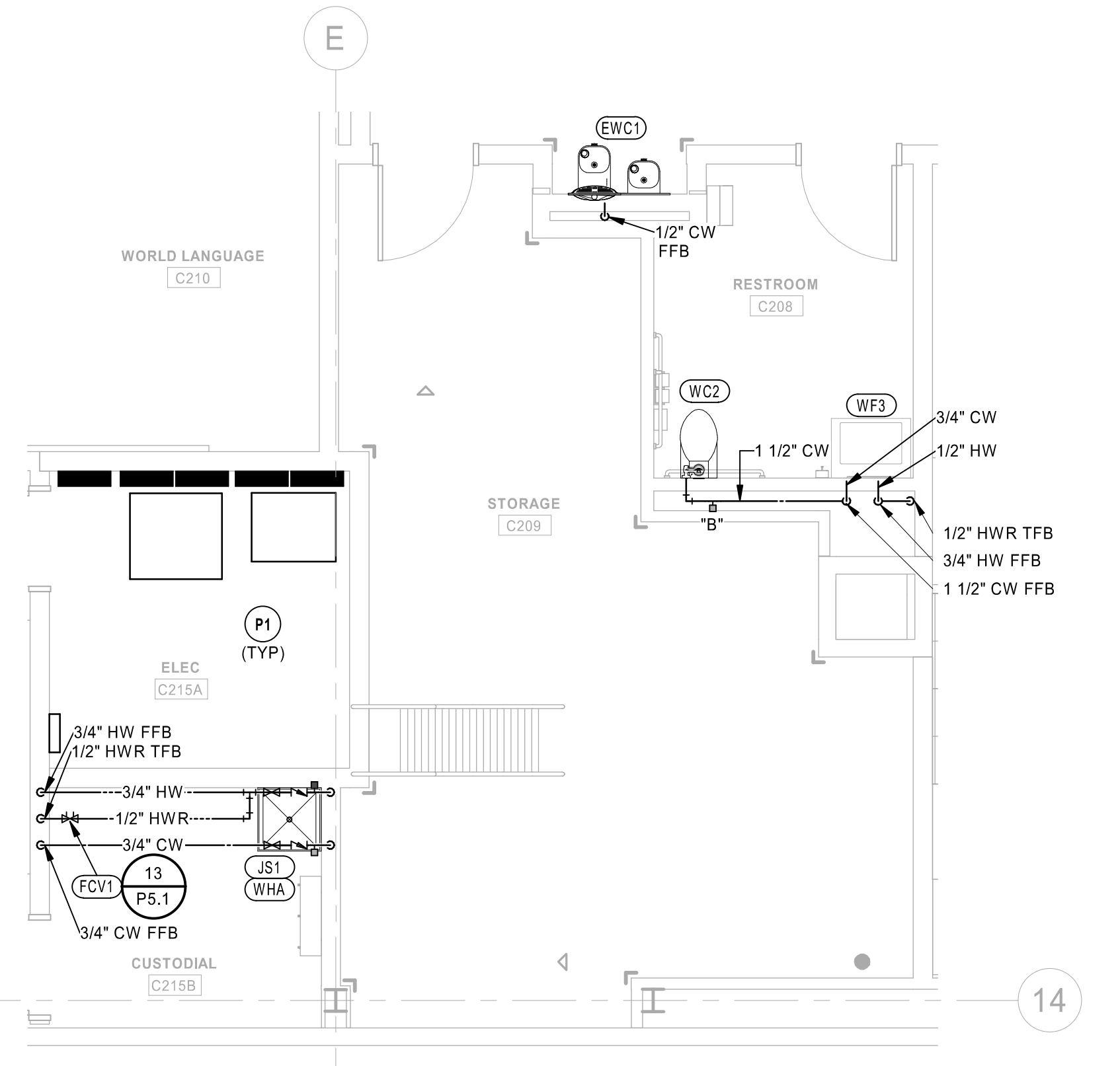
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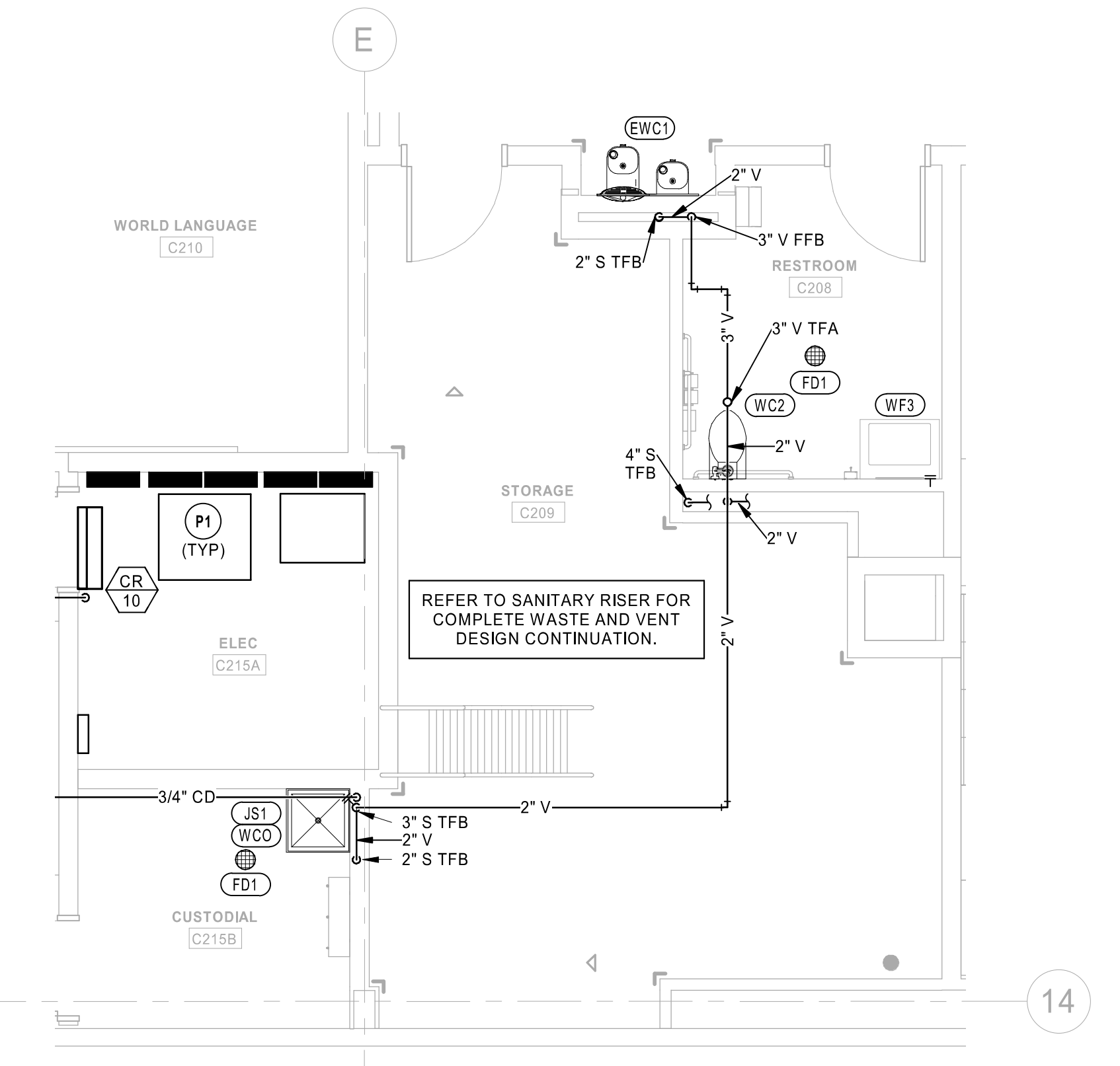
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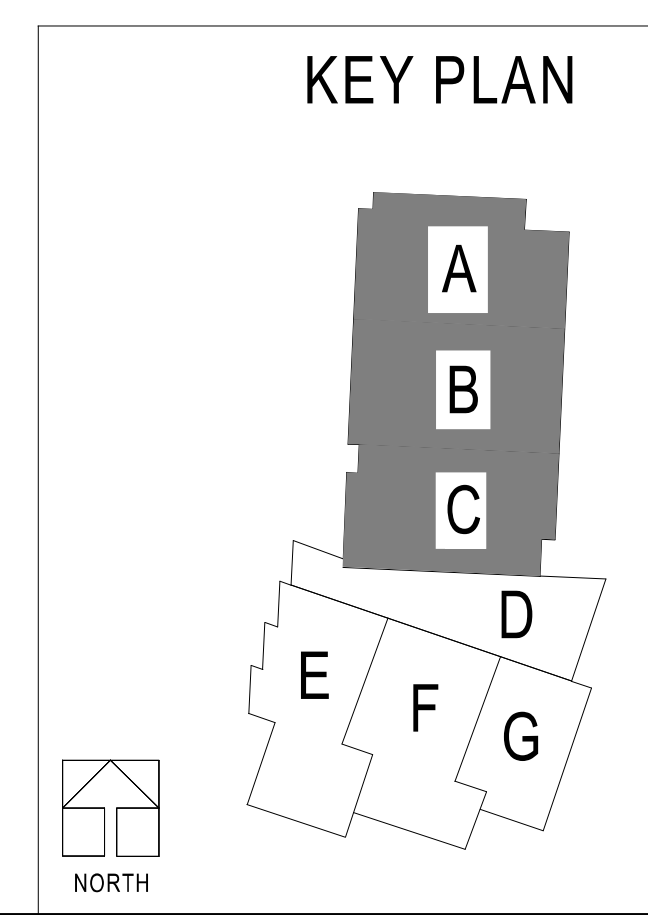
5 PLUMBING SANITARY ENLARGED PLAN - SECOND LEVEL
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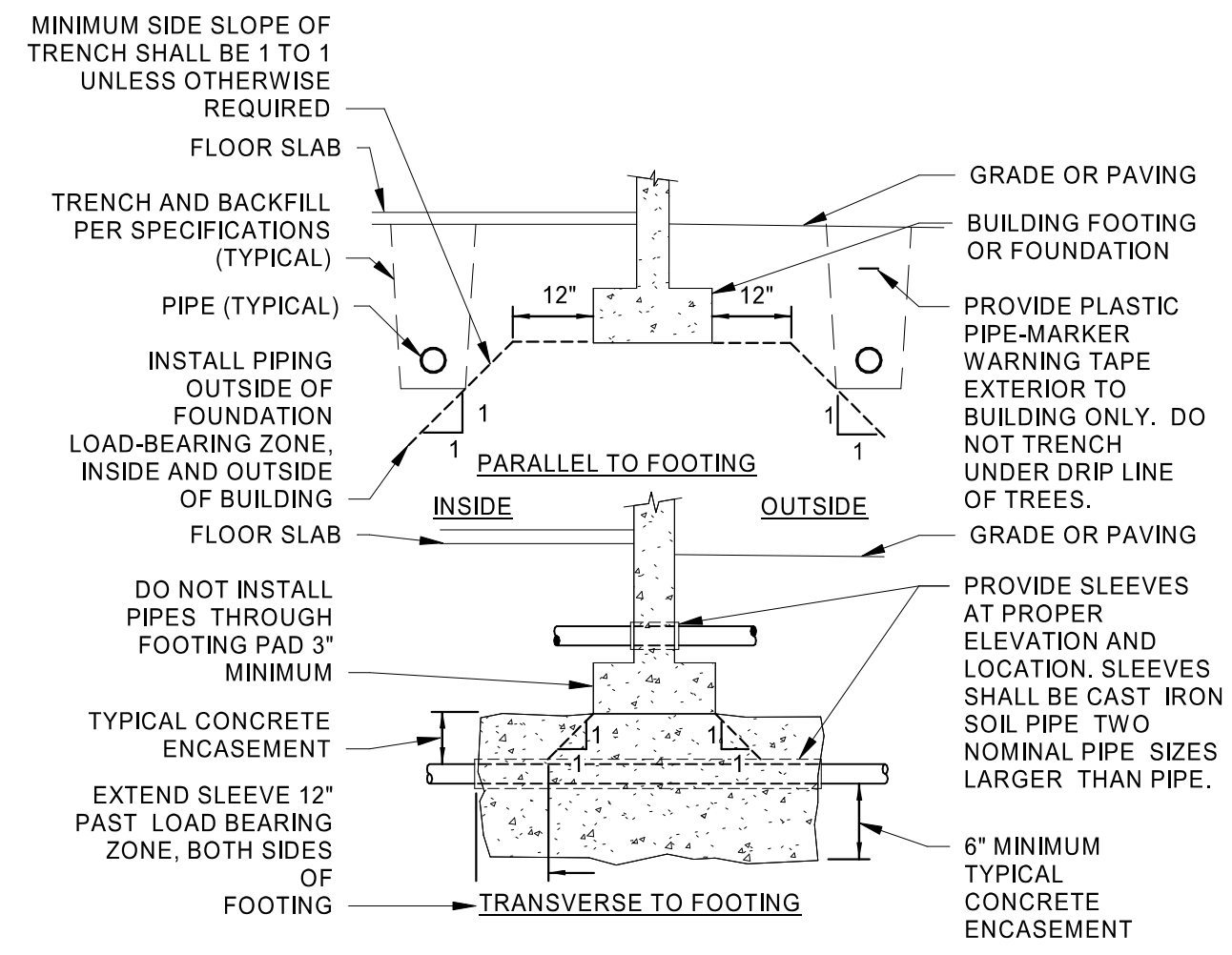


8 PLUMBING WATER ENLARGED PLAN - SECOND LEVEL
1/4" = 1'-0"



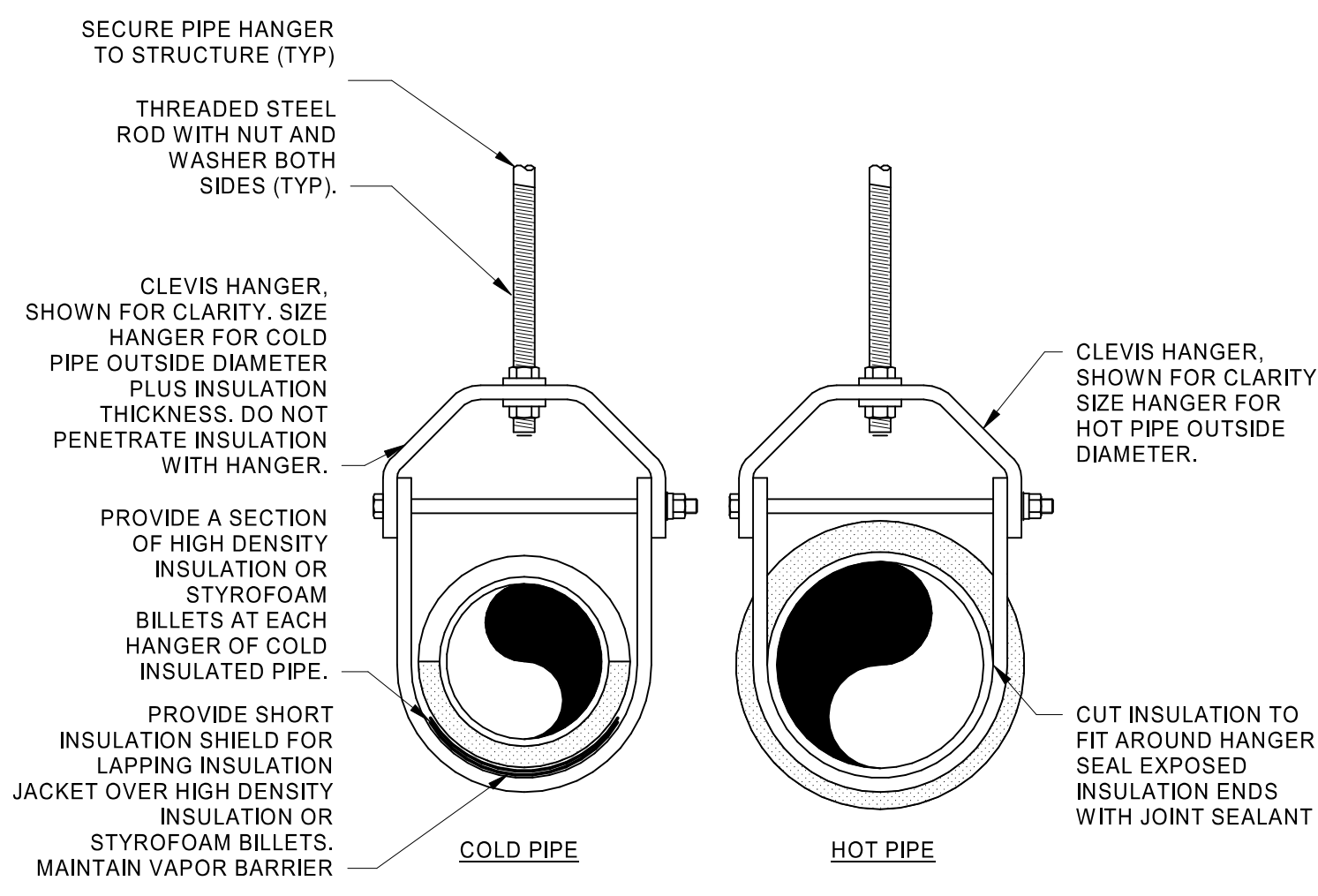
7 PLUMBING SANITARY ENLARGED PLAN - SECOND LEVEL
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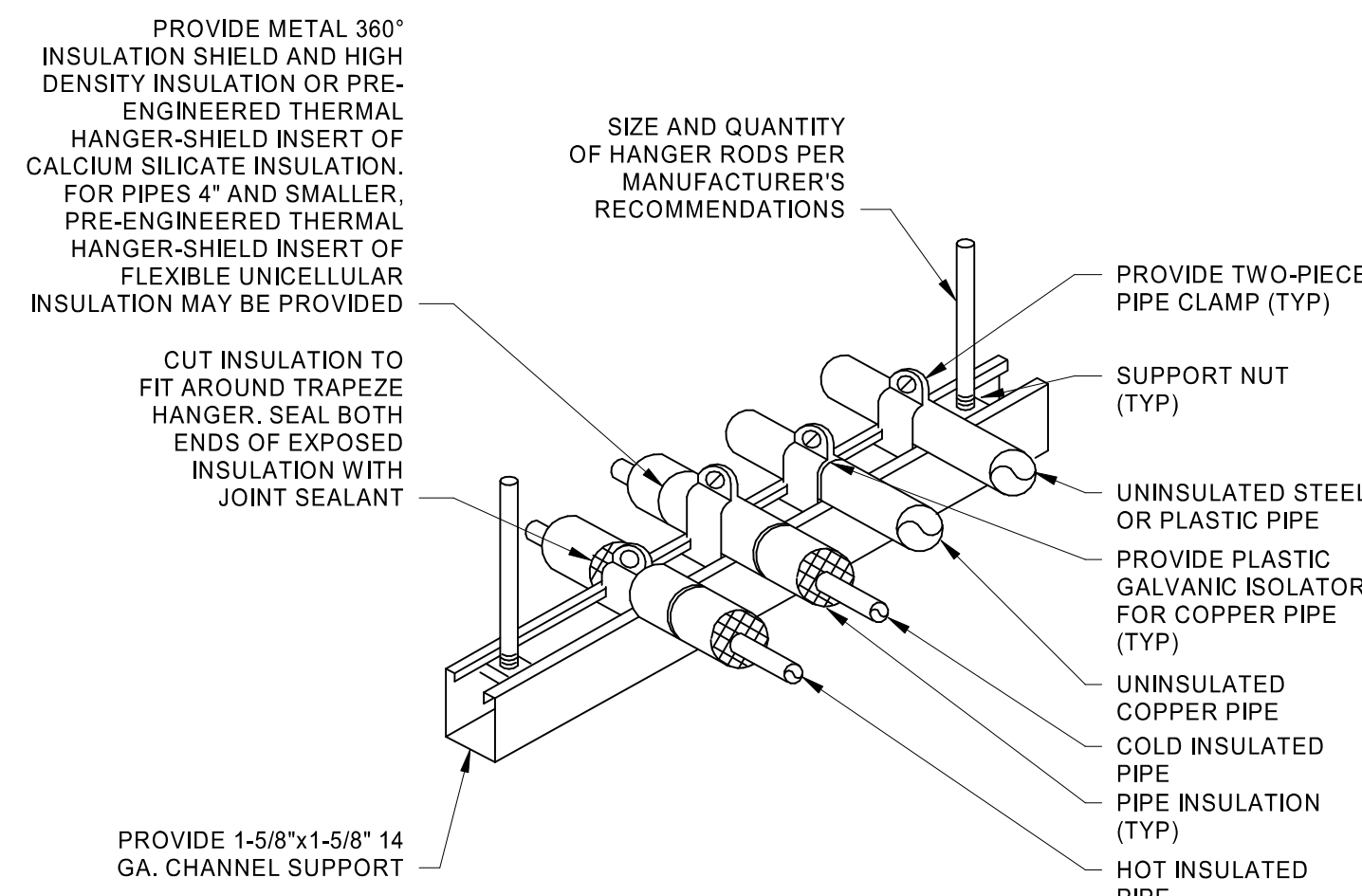
4 PIPE AND TRENCH LOCATIONS

VERIFY EXCAVATION CONDITIONS (SOIL/ROCK) WITH GEOTECHNICAL REPORT AND/OR SITE INVESTIGATIONS. REFER TO SPECIFICATIONS FOR OTHER CONDITIONS. DO NOT INSTALL PIPES UNDER INTERIOR BUILDING SPREAD FOOTINGS OR PILE CAPS. COORDINATE WITH AFFECTED CONTRACTORS PRIOR TO THE START OF WORK.



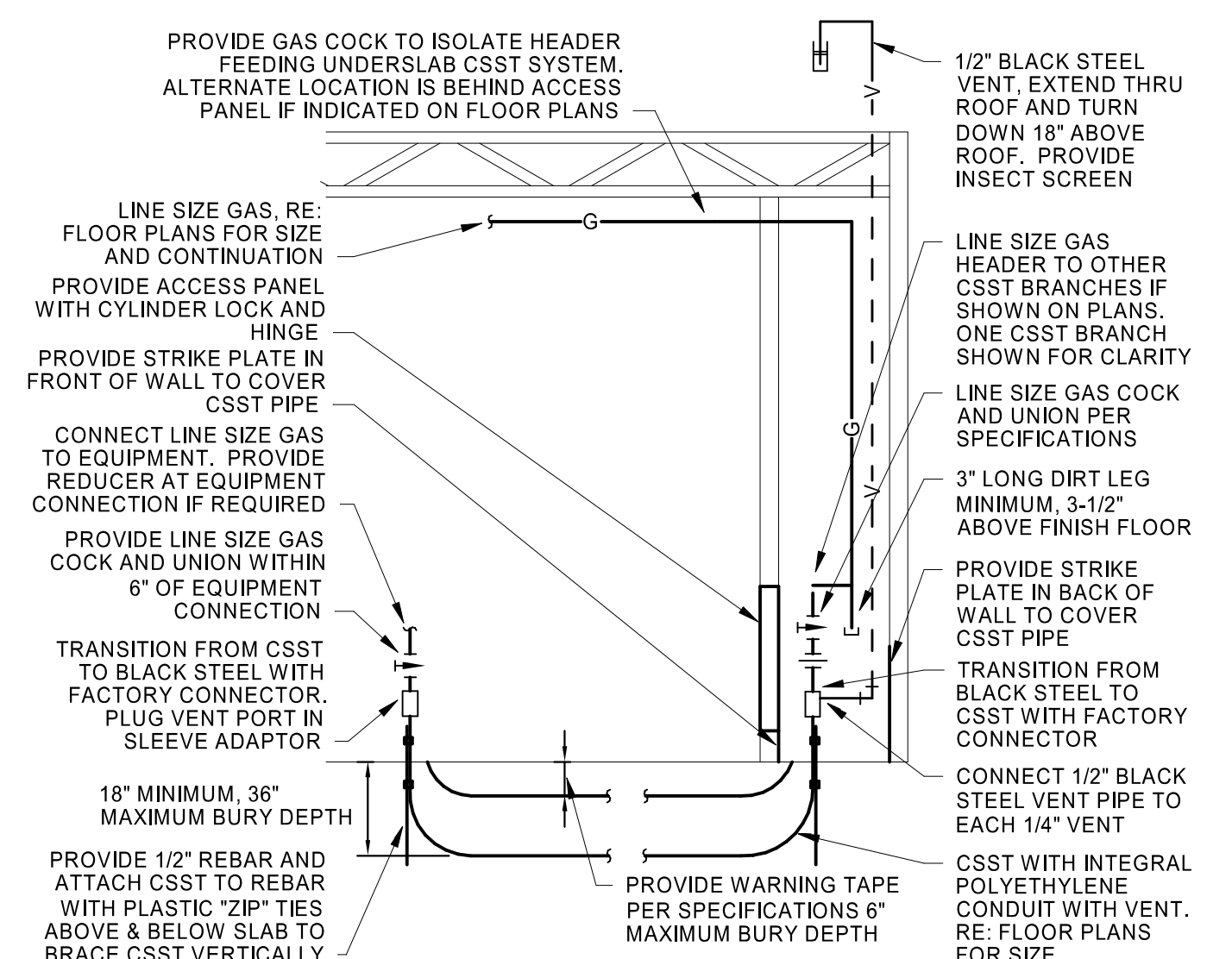
3 PIPE HANGER DETAIL

REFER TO SPECIFICATIONS FOR INSULATION TYPES, INSULATION THICKNESSES, HANGER TYPES, HANGER IF CONNECTIONS TO STRUCTURE AND HANGER SPACING.



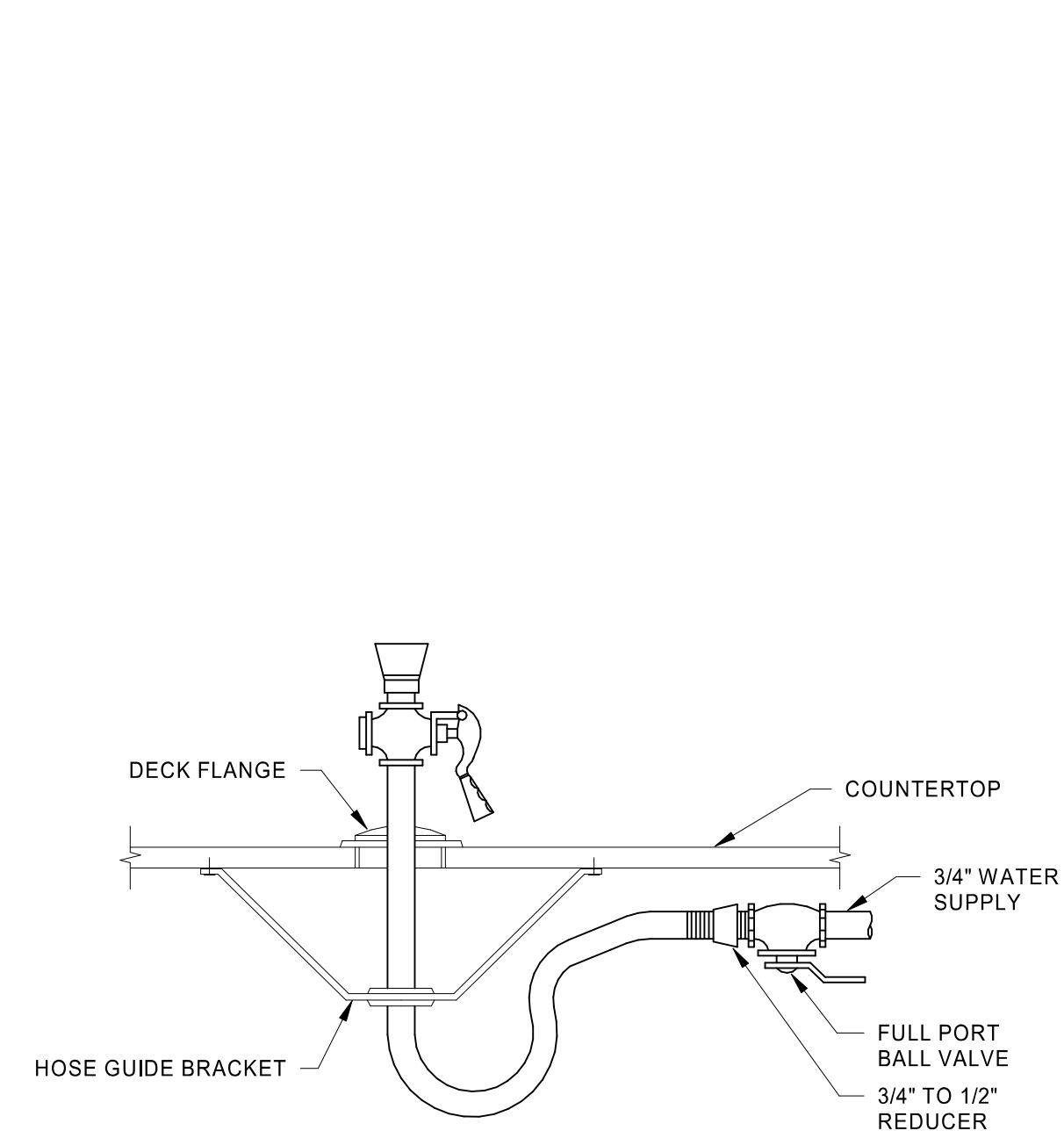
2 TRAPEZOID PIPE HANGER

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO SPECIFICATIONS FOR MORE INFORMATION. PIPE AND CONDUIT OF ALL TRADES MAY BE COMBINED ON THE SAME SUPPORT CHANNEL. COORDINATE SUPPORT CHANNEL LENGTH WITH PIPING AND CONDUIT TO BE SUPPORTED. SUPPORT CHANNEL SPACING SHALL BE DETERMINED BY SMALLEST PIPE TO BE SUPPORTED. CHANNEL SUPPORT MAY BE USED AS A WALL BRACKET, ATTACH TO WALL WITH ANCHOR BOLTS PER SPECIFICATIONS. FOR HORIZONTAL INSULATED PIPING, ATTACH CLAMPS AS INDICATED ABOVE. FOR VERTICAL, INSULATED PIPING, ATTACH CLAMPS TO THE PIPE AND SEAL INSULATION AT BOTH CLAMP ENDS.

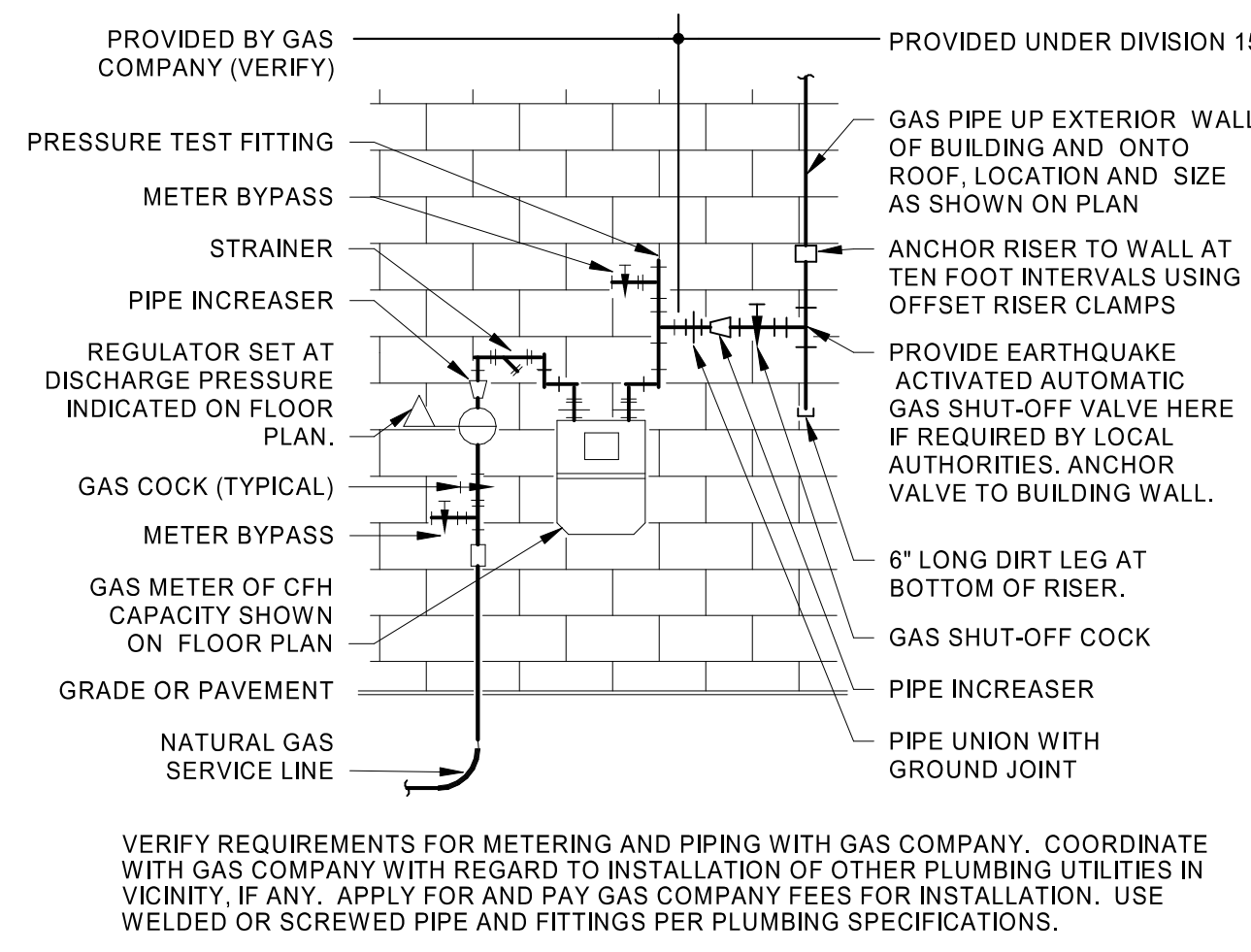


1 UNDERGROUND CSST WITH INTEGRAL CONDUIT INSTALLATION DETAIL

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

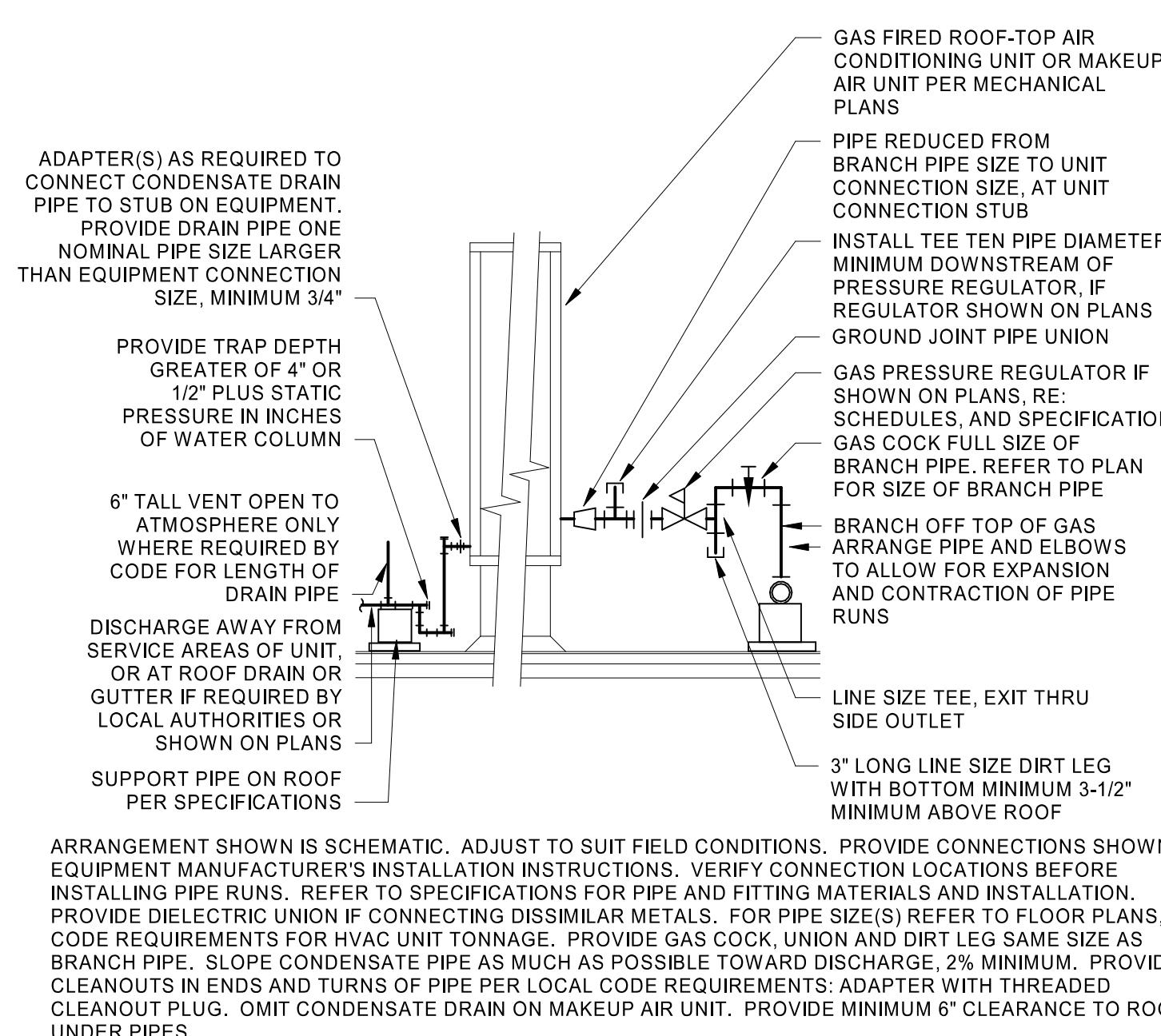


8 DECK MOUNTED EMERGENCY EYEWASH



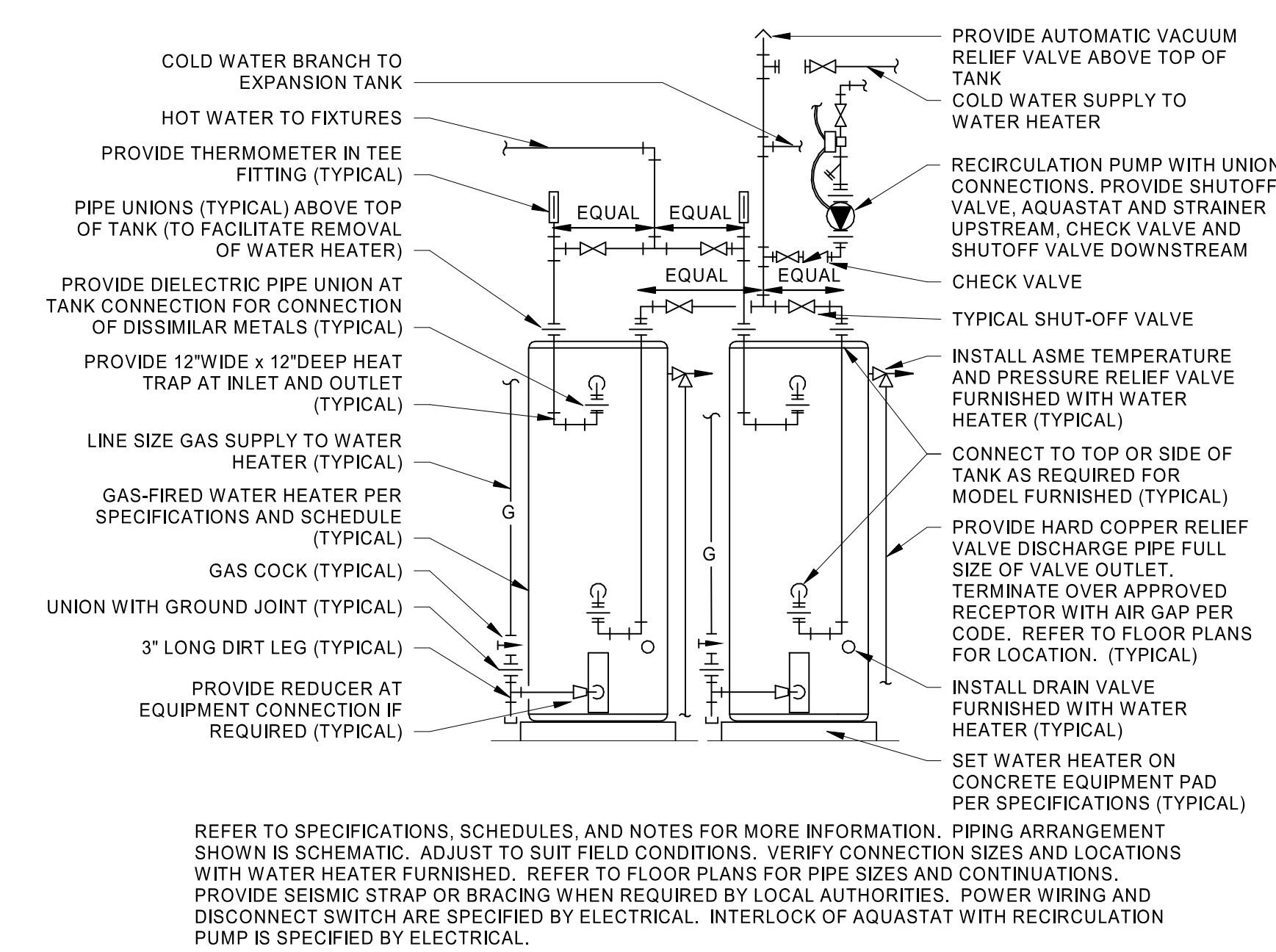
7 GAS METER SETTING

VERIFY REQUIREMENTS FOR METERING AND PIPING WITH GAS COMPANY. COORDINATE WITH GAS COMPANY WITH REGARD TO INSTALLATION OF OTHER PLUMBING UTILITIES IN VICINITY. IF ANY, APPLY FOR AND PAY GAS COMPANY FEES FOR INSTALLATION. USE WELDED OR SCREWED PIPE AND FITTINGS PER PLUMBING SPECIFICATIONS.



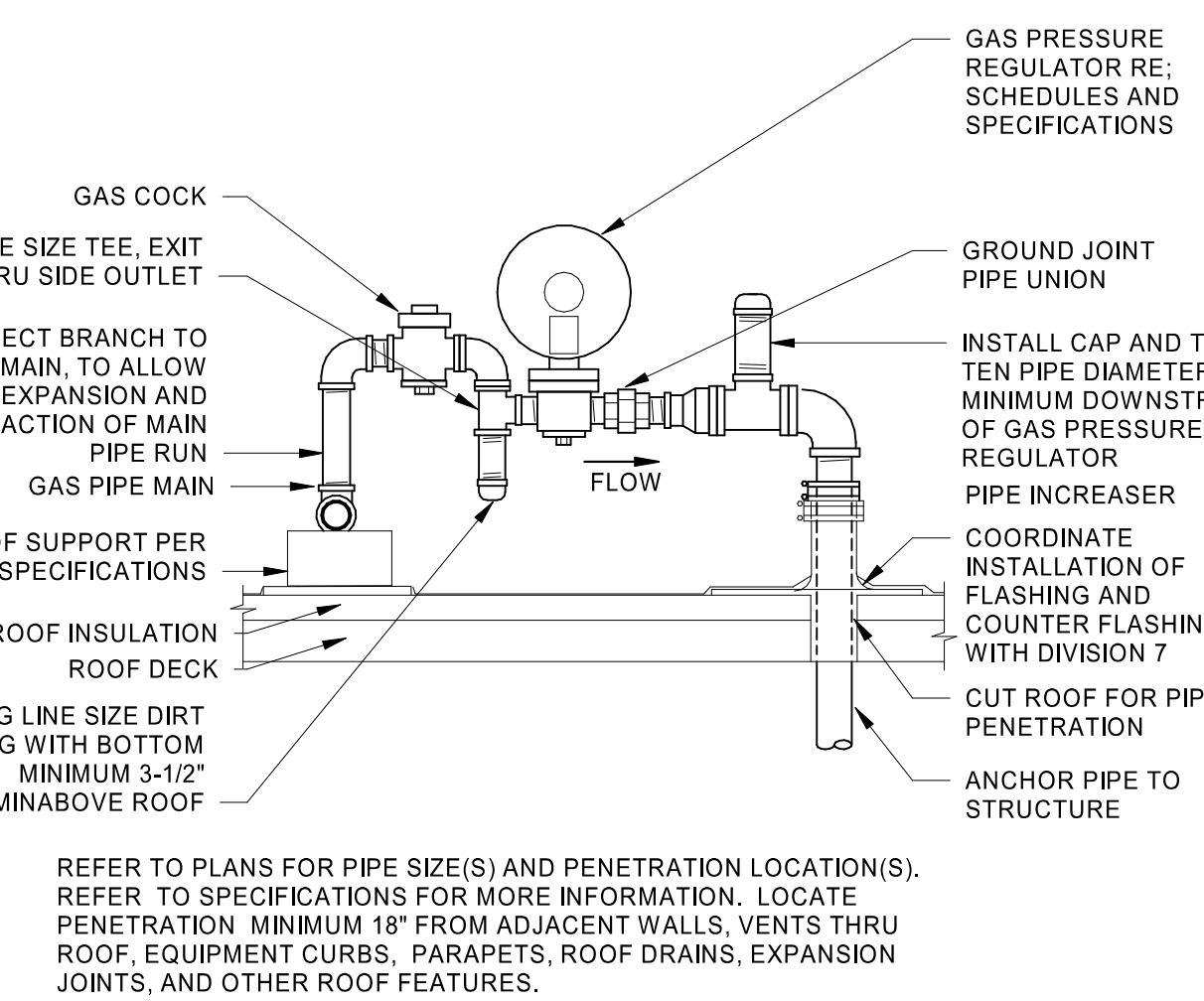
6 DRAIN CONNECTIONS TO ROOF-TOP UNIT

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. VERIFY CONNECTION LOCATIONS BEFORE INSTALLING PIPE RUNS. REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS AND INSTALLATION. PROVIDE DIELECTRIC UNION IF CONNECTING DISSIMILAR METALS. FOR PIPE SIZE(S) REFER TO FLOOR PLANS, OR CODE REQUIREMENTS FOR HVAC UNIT TONNAGE. PROVIDE GAS COCK UNION AND DIRT LEG SAME SIZE AS BRANCH PIPE. SLOPE CONDENSATE PIPE AS MUCH AS POSSIBLE TOWARD DISCHARGE. 2% MINIMUM. PROVIDE CLEANOUTS IN ENDS AND TURNS OF PIPE PER LOCAL CODE REQUIREMENTS; ADAPTER WITH THREADED CLEANOUT PLUG. OMIT CONDENSATE DRAIN ON MAKEUP AIR UNIT. PROVIDE MINIMUM 6\"/>



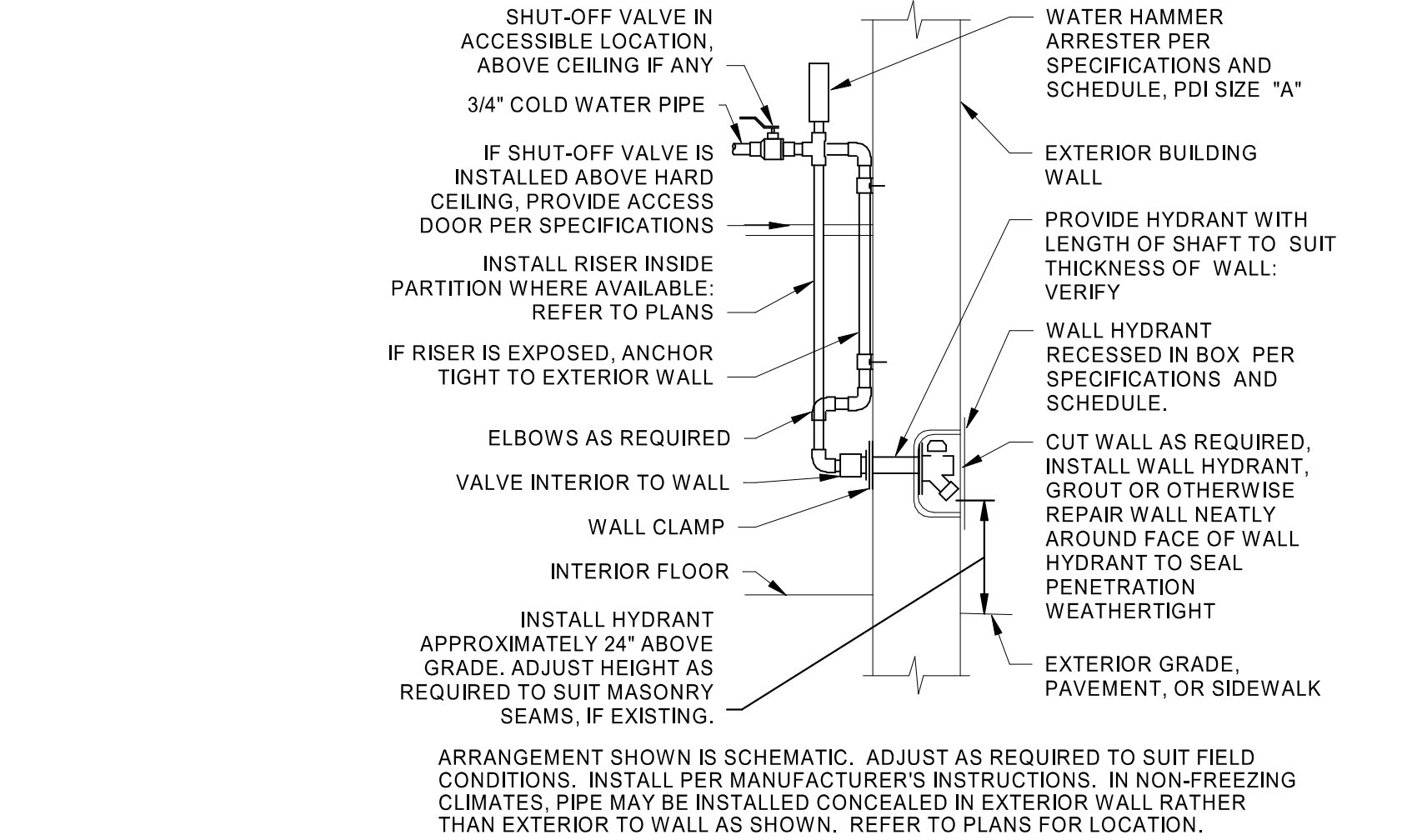
5 DUAL REVERSE RETURN GAS FIRED WATER HEATER AND PUMP

REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION. PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS WITH WATER HEATER FURNISHED. REFER TO FLOOR PLANS FOR PIPE SIZES AND CONTINUATIONS. PROVIDE SEISMIC STRAP OR BRACING WHEN REQUIRED BY LOCAL AUTHORITIES. POWER WIRING AND DISCONNECT SWITCH ARE SPECIFIED BY ELECTRICAL. INTERLOCK OF AQUASTAT WITH REGRIND PUMP IS SPECIFIED BY ELECTRICAL.



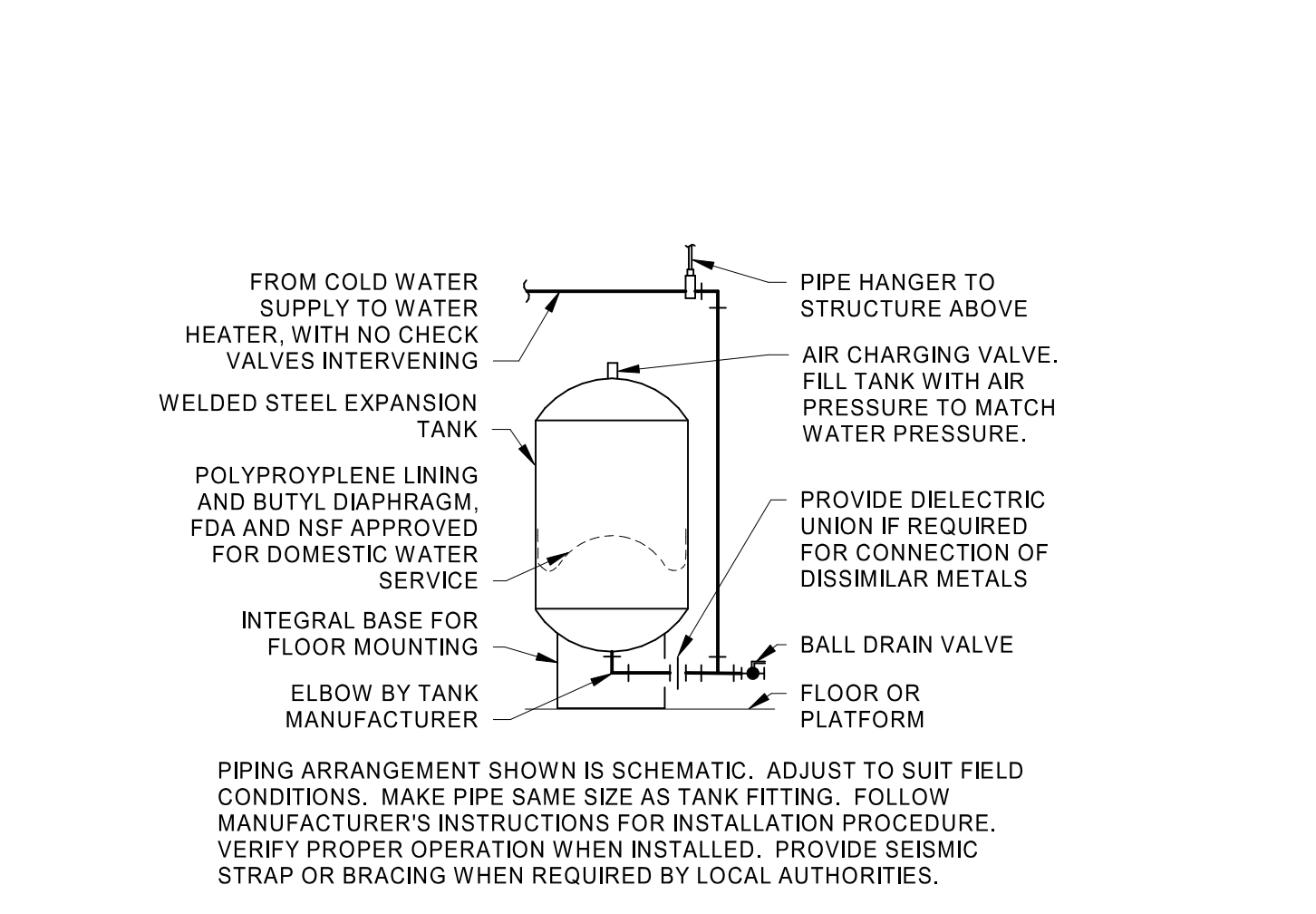
12 GAS PIPE ROOF PENETRATION

REFER TO PLANS FOR PIPE SIZE(S) AND PENETRATION LOCATION(S). REFER TO SPECIFICATIONS FOR MORE INFORMATION. LOCATE PENETRATION MINIMUM 18\"/>



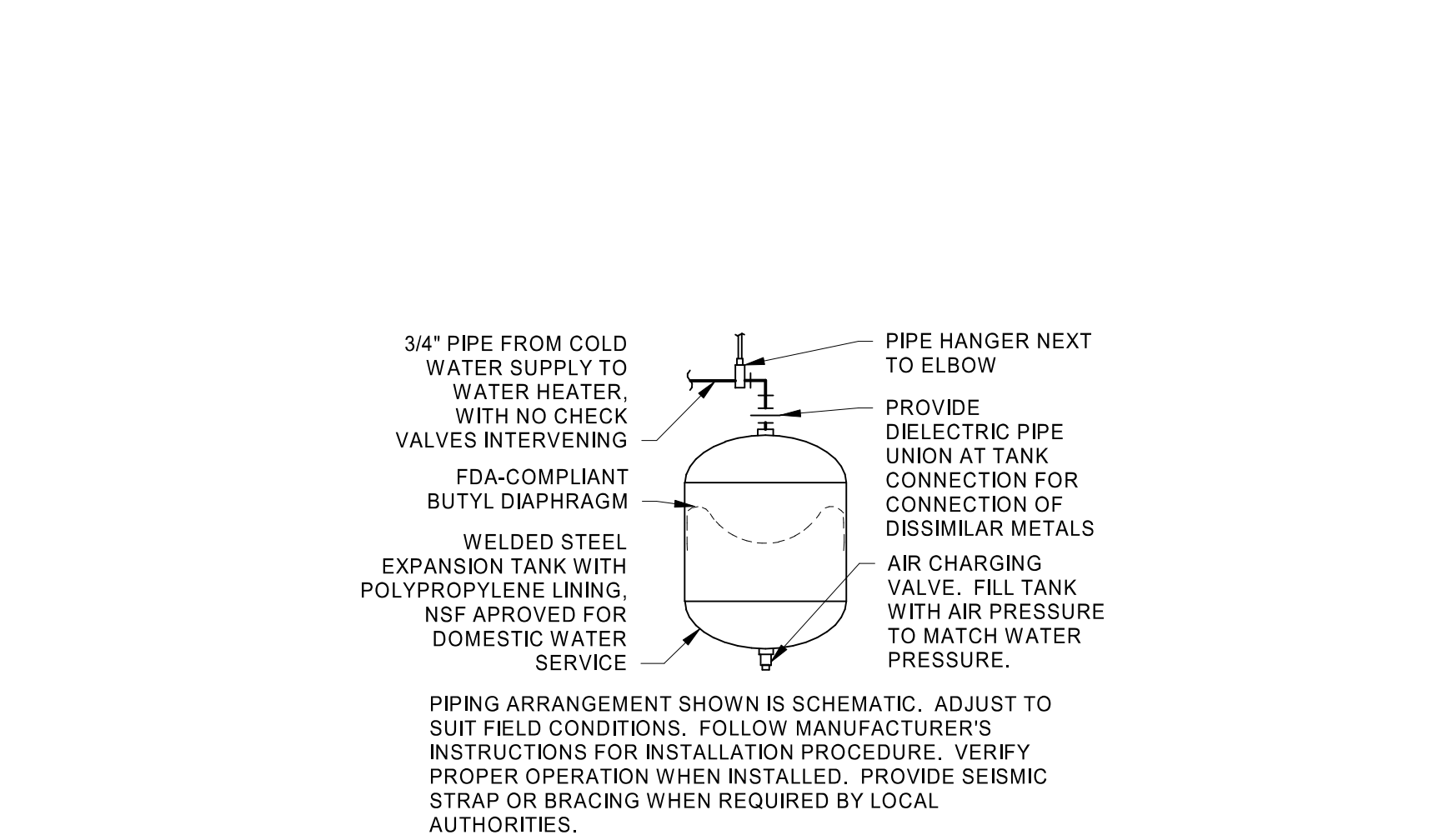
11 WALL HYDRANT INSTALLATION

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT FIELD CONDITIONS. INSTALL PER MANUFACTURER'S INSTRUCTIONS. IN NON-FREEZING CLIMATES, PIPE MAY BE INSTALLED CONCEALED IN EXTERIOR WALL RATHER THAN EXTERIOR TO WALL AS SHOWN. REFER TO PLANS FOR LOCATION.



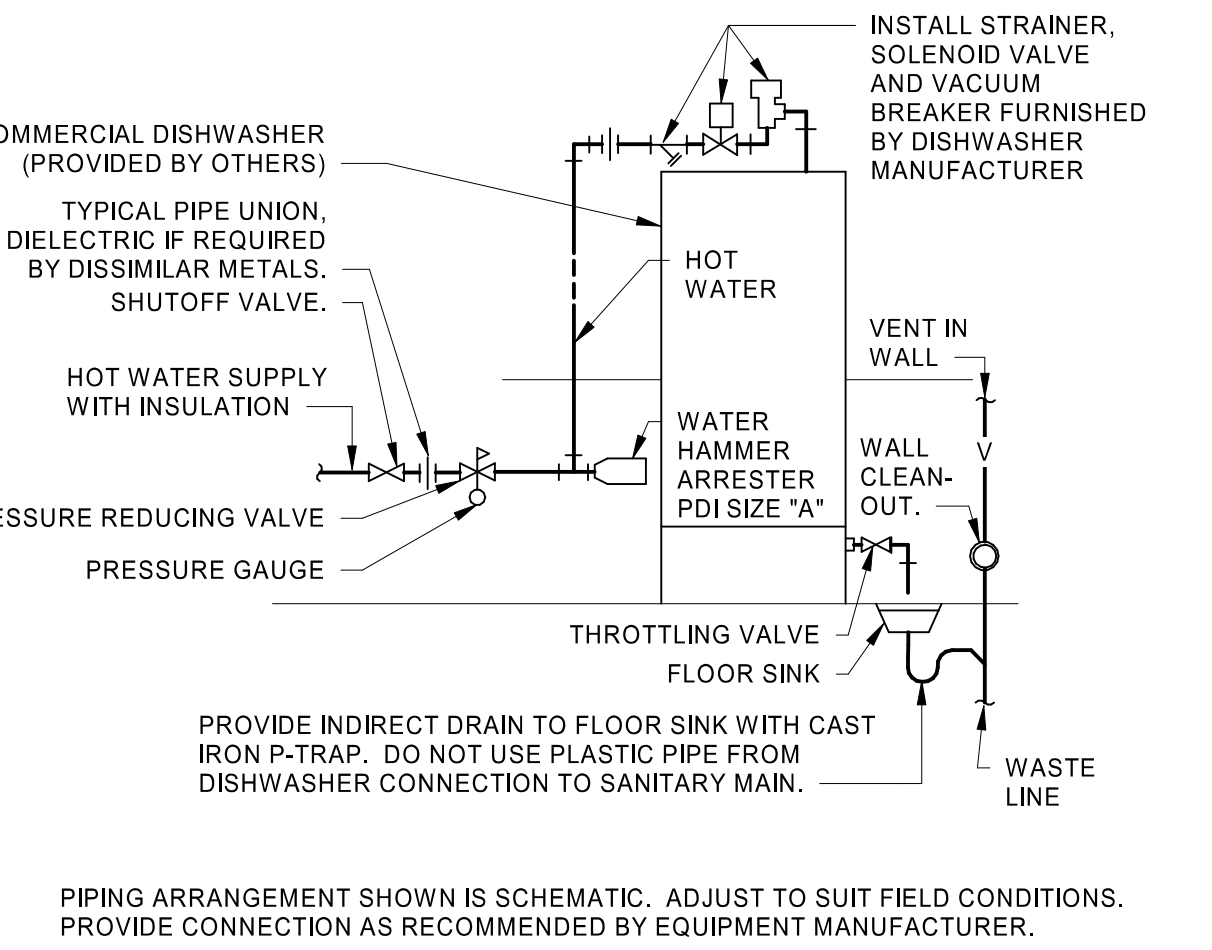
10 LARGE EXPANSION TANK

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. MAKE PIPE SAME SIZE AS TANK FITTING. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE. VERIFY PROPER OPERATION WHEN INSTALLED. PROVIDE SEISMIC STRAP OR BRACING WHEN REQUIRED BY LOCAL AUTHORITIES.



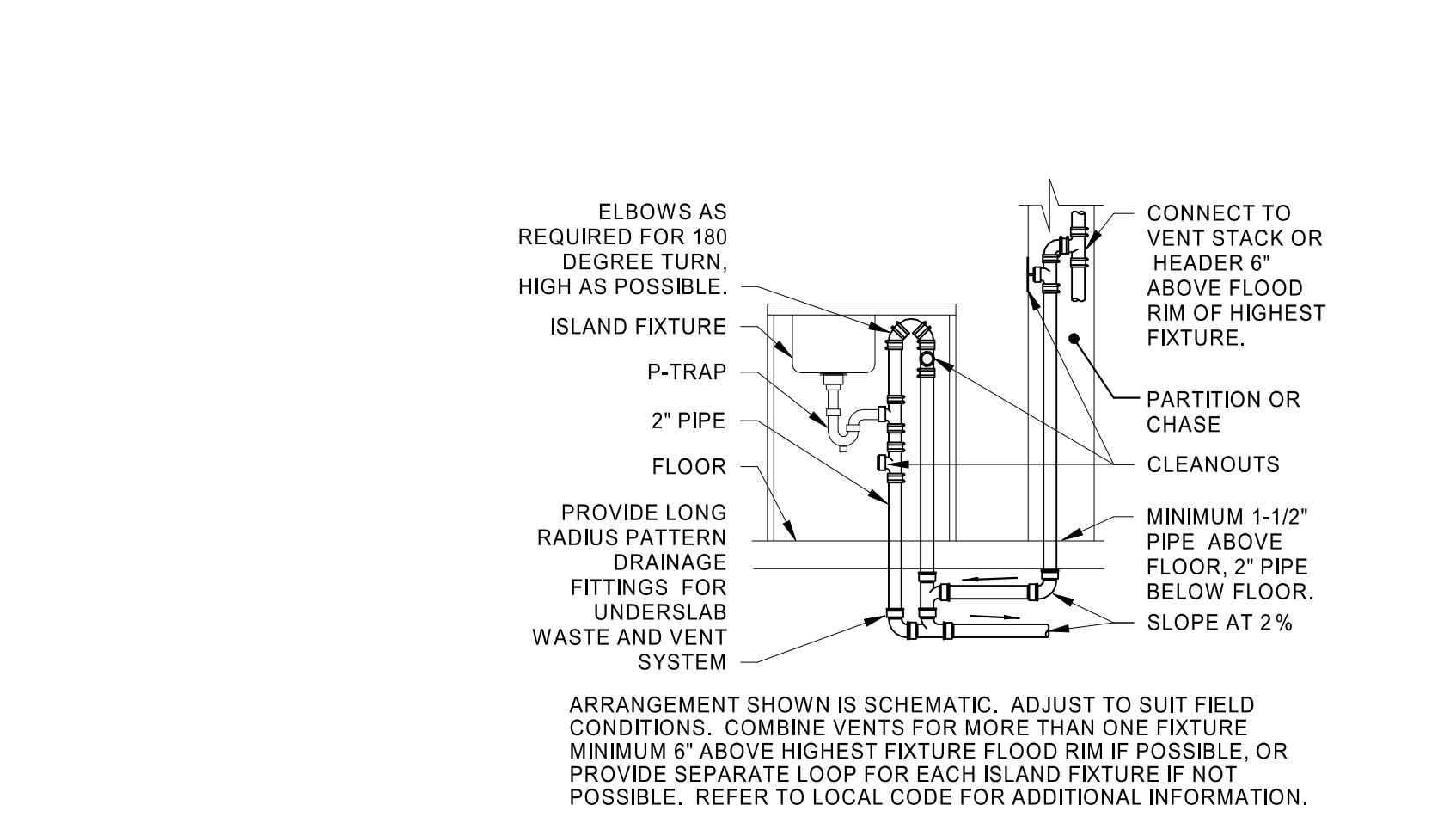
9 SMALL EXPANSION TANK

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE. VERIFY PROPER OPERATION WHEN INSTALLED. PROVIDE SEISMIC STRAP OR BRACING WHEN REQUIRED BY LOCAL AUTHORITIES.



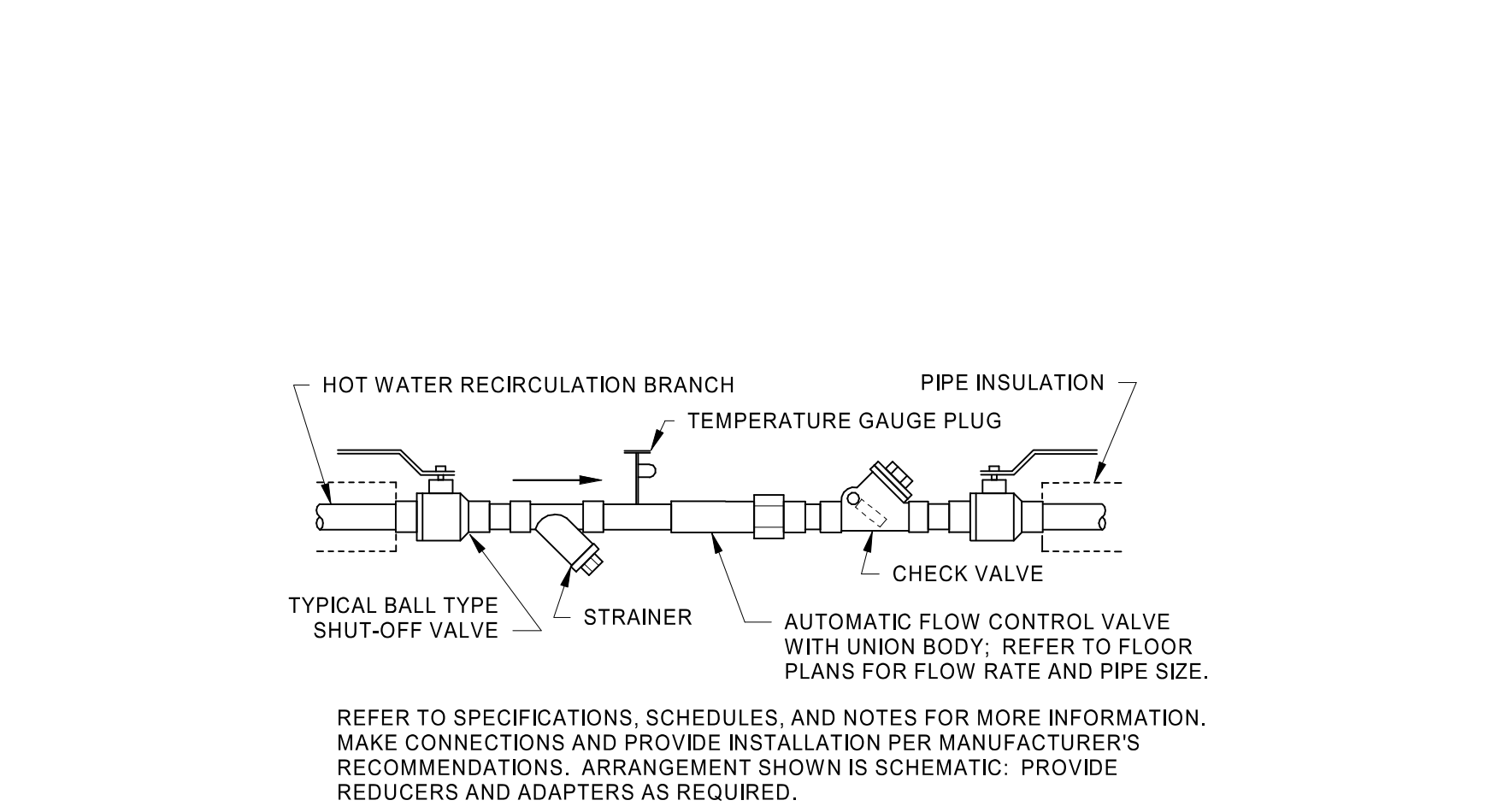
13 DISHWASHER CONNECTIONS

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTION AS RECOMMENDED BY EQUIPMENT MANUFACTURER.



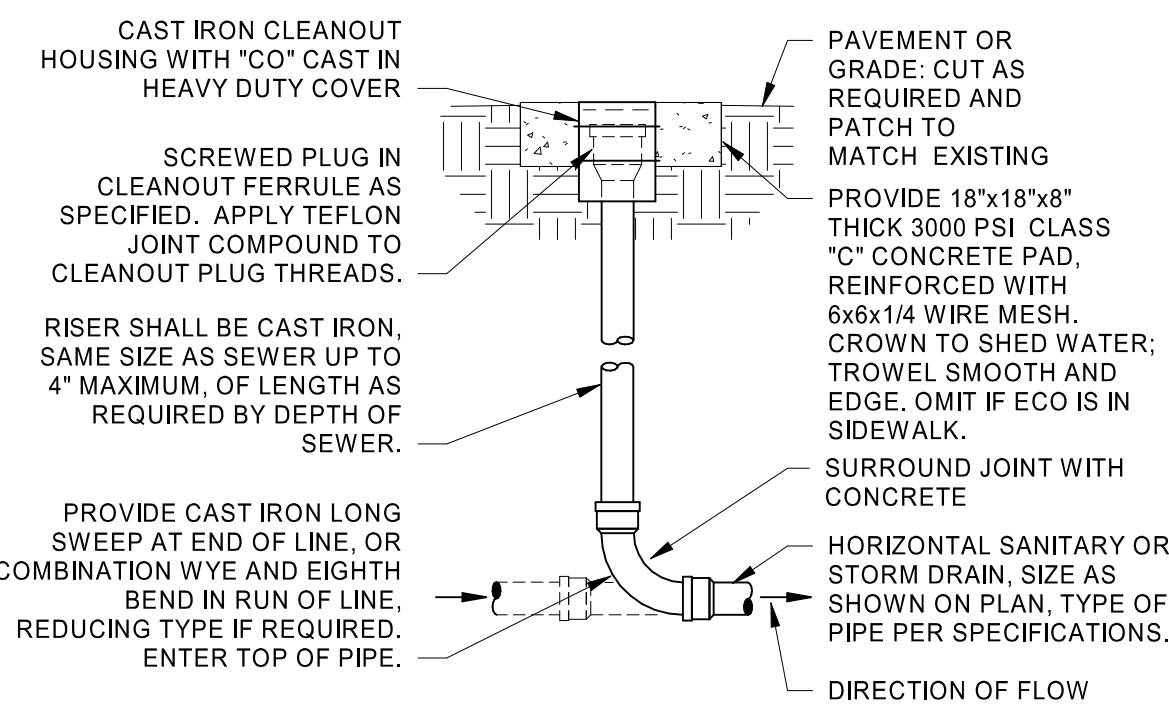
14 RESIDENTIAL DISHWASHER CONNECTION

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS AND INSTALLATION AS RECOMMENDED BY EQUIPMENT MANUFACTURER. REFER TO PLUMBING FIXTURE SCHEDULE AND SPECIFICATIONS FOR ACCESSORIES SHOWN. IF SINK IS ADA, DO NOT ENCRUMB ON ACCESSIBILITY ZONE.

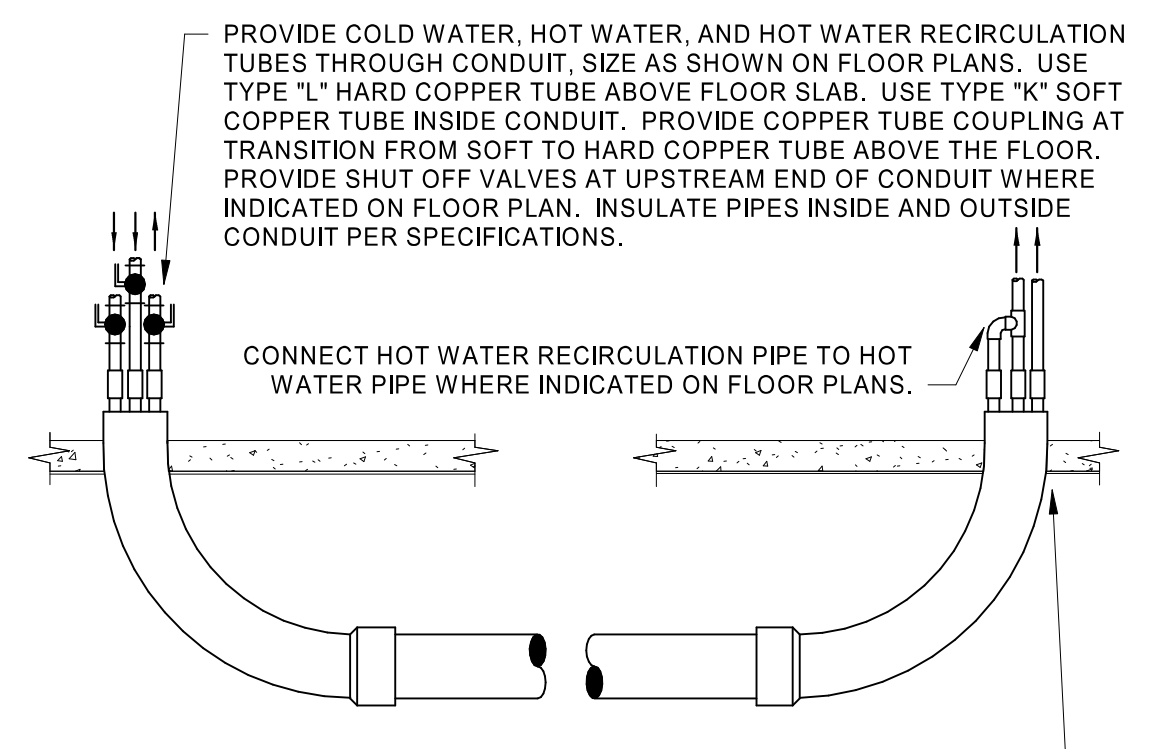


15 AUTOMATIC FLOW CONTROL VALVE TRAIN

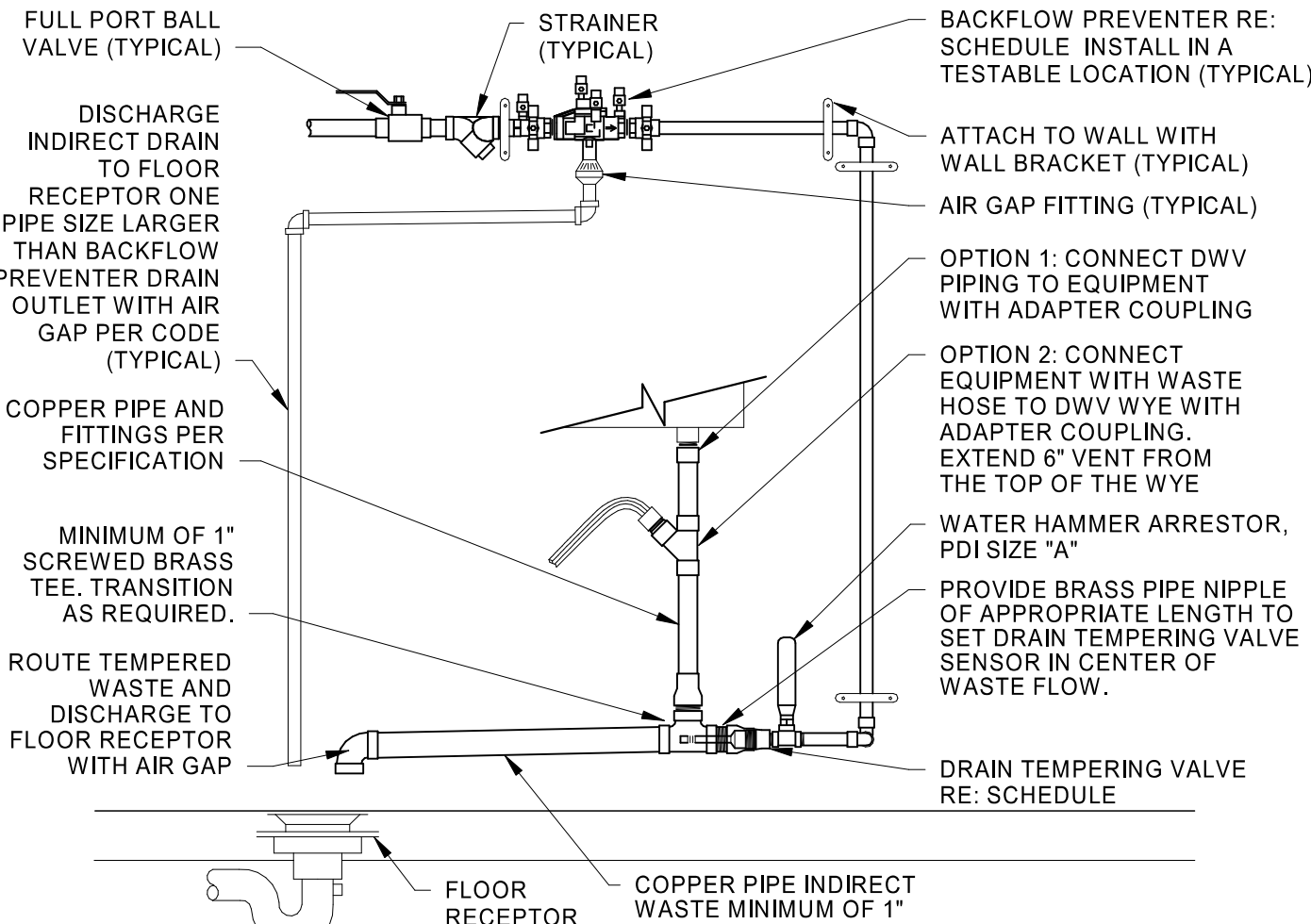
REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION. MAKE CONNECTIONS AND PROVIDE INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ARRANGEMENT SHOWN IS SCHEMATIC. PROVIDE REDUCERS AND ADAPTERS AS REQUIRED.



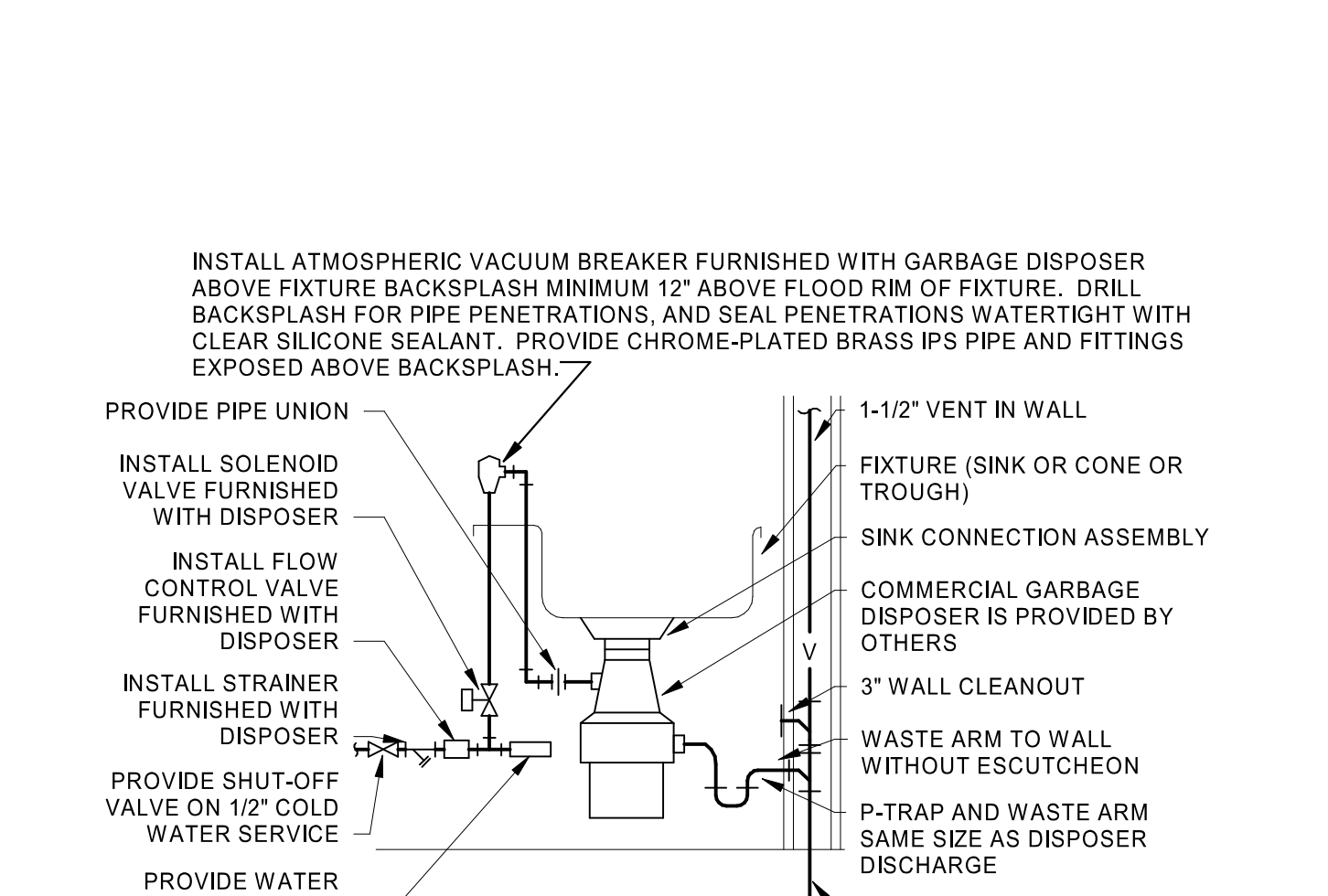
4 EXTERIOR CLEANOUT NTS



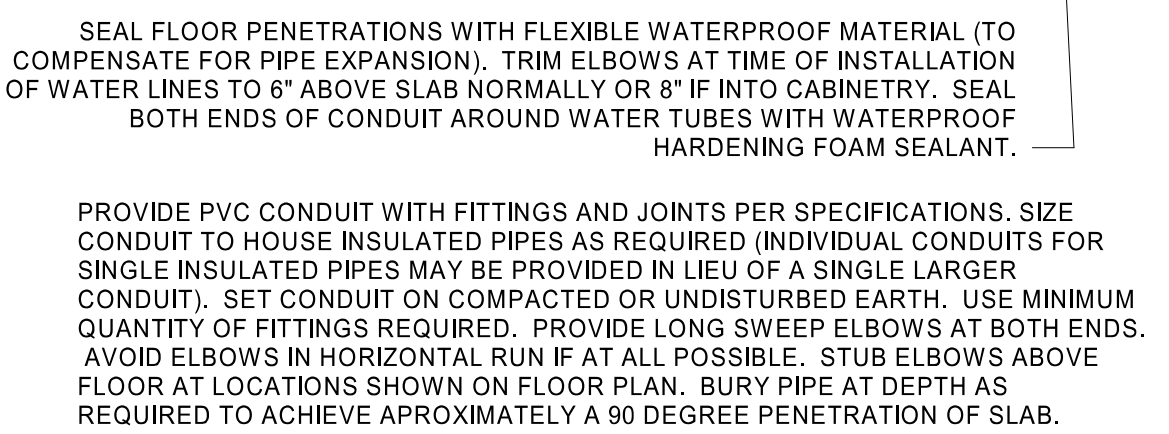
3 COOKING APPLIANCE GAS PIPE NTS



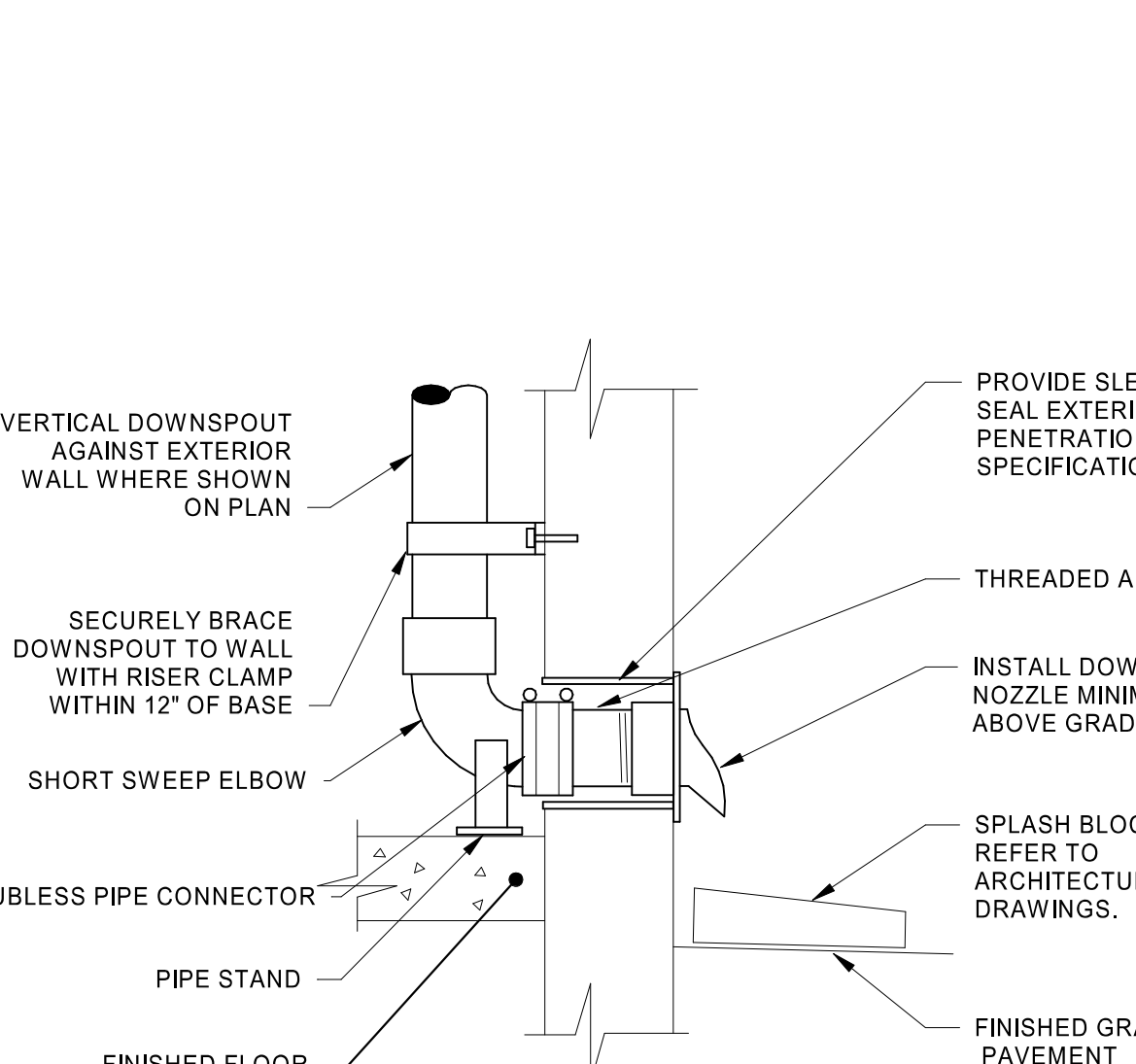
2 IRON PIPE DOMESTIC WATER SERVICE ENTRY NTS



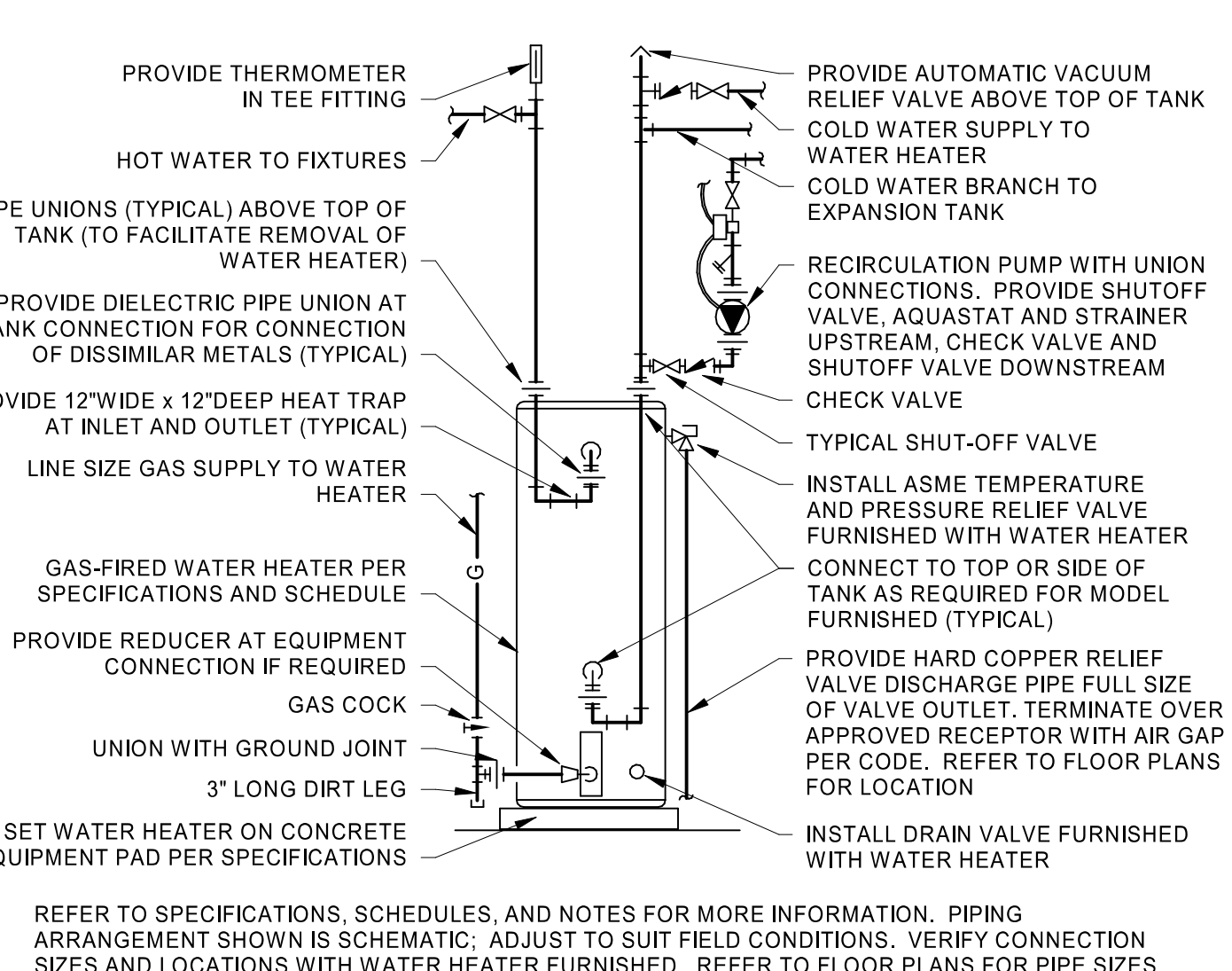
1 UNDER COUNTER ACID NEUTRALIZATION TANK NTS



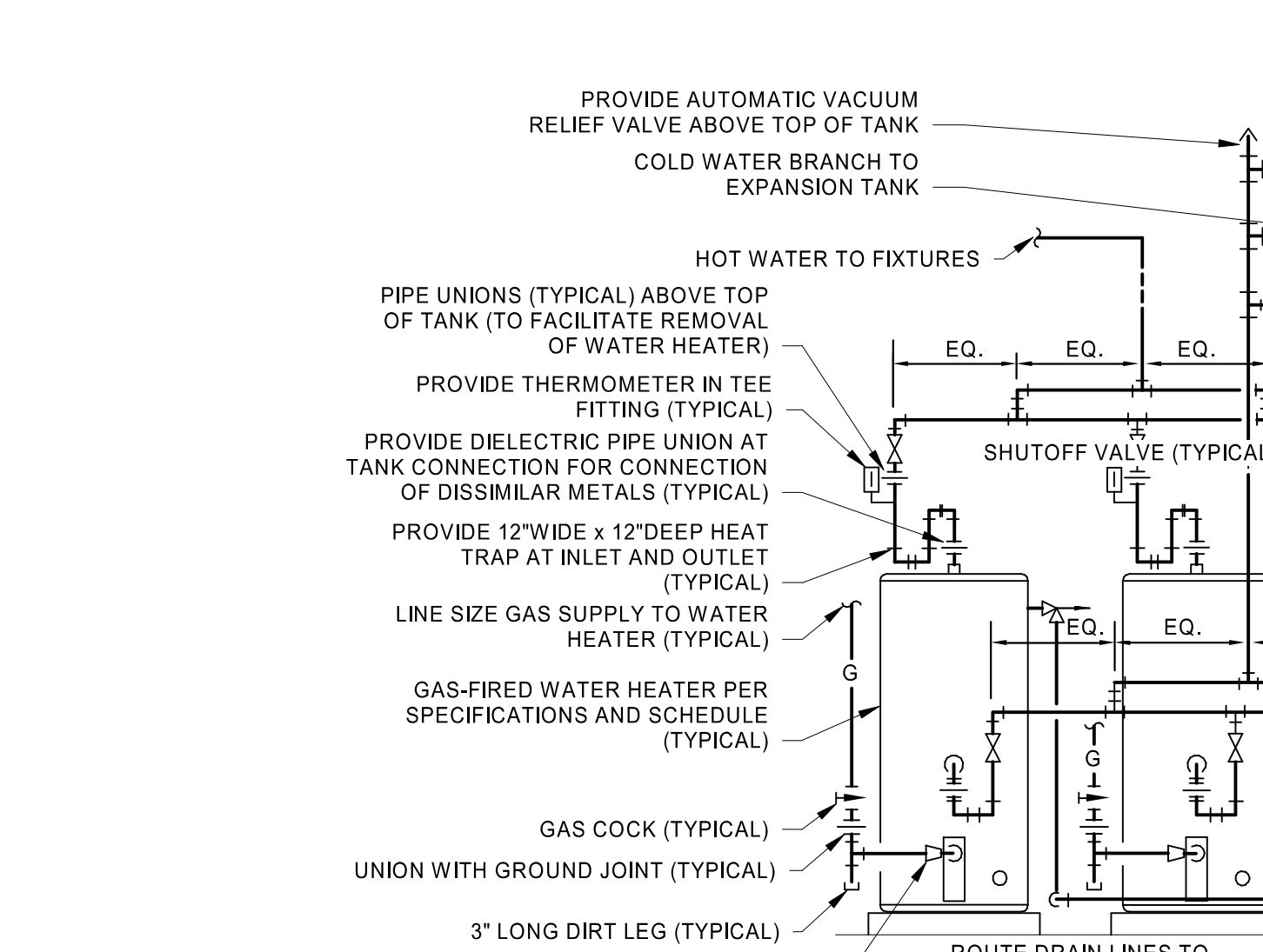
8 WATER CONDUIT BELOW SLAB NTS



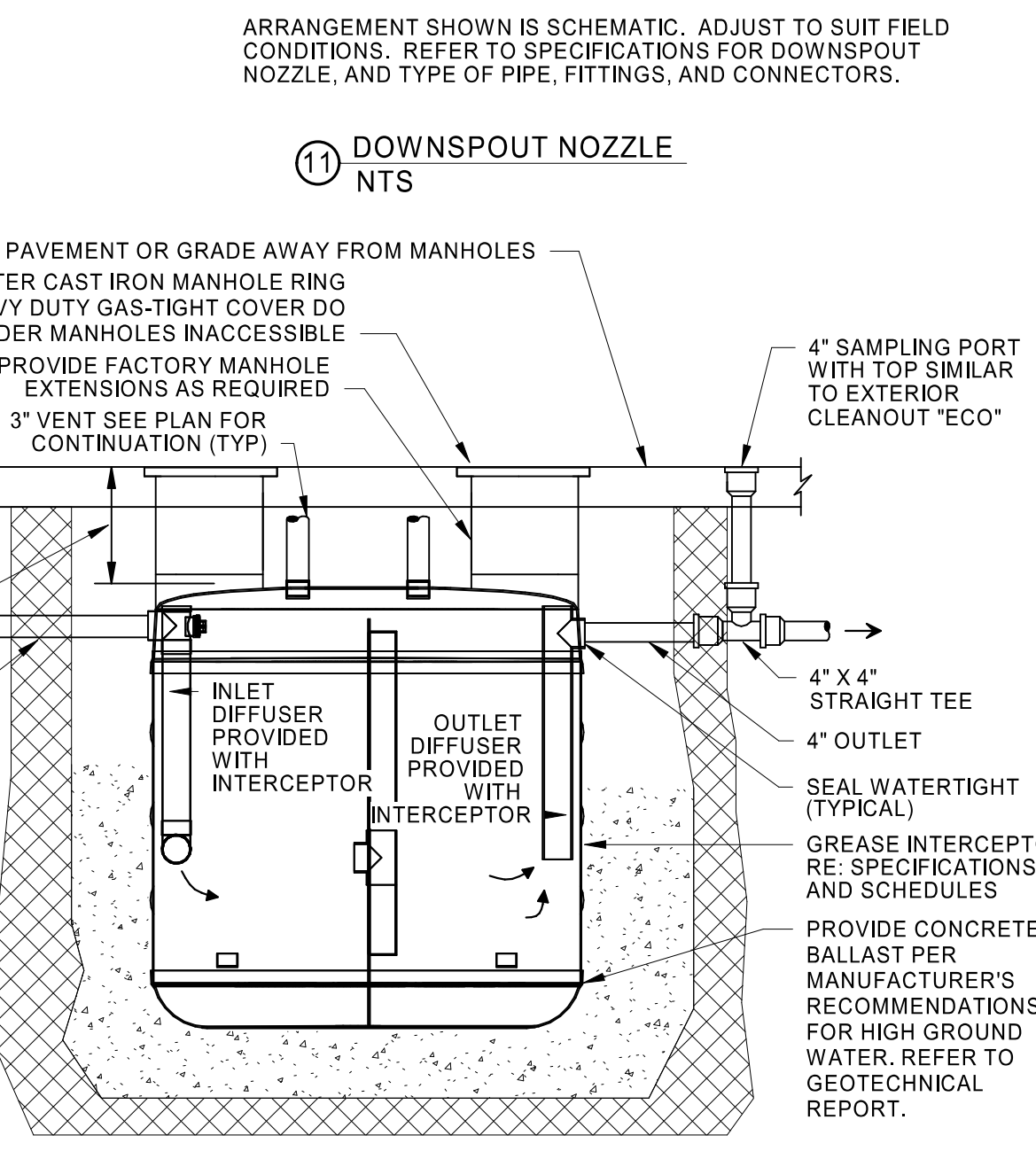
7 DRAIN TEMPERING VALVE NTS



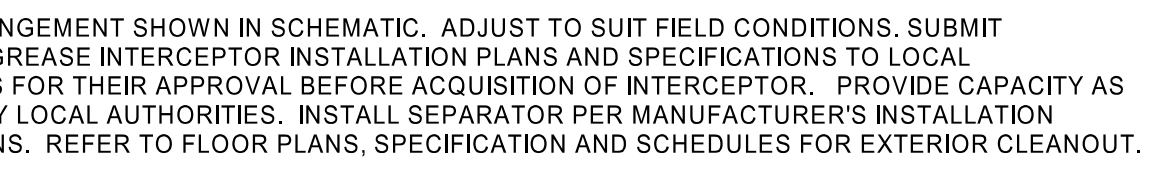
6 GARBAGE DISPOSER NTS



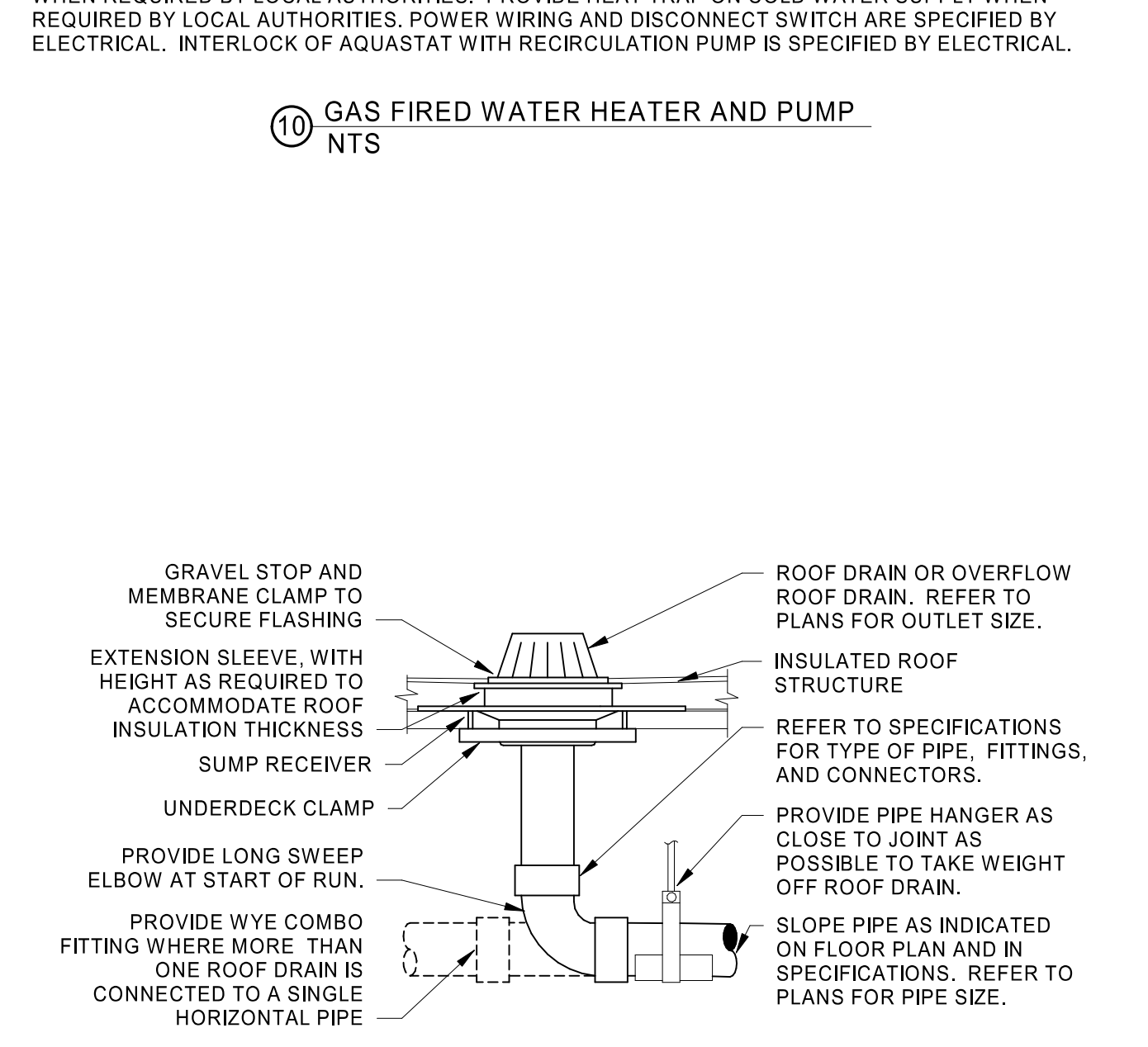
5 TRAP PRIMER OVERHEAD NTS



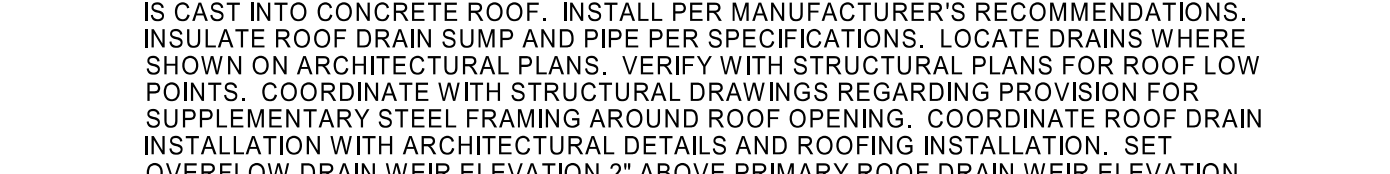
11 DOWNSPOUT NOZZLE NTS



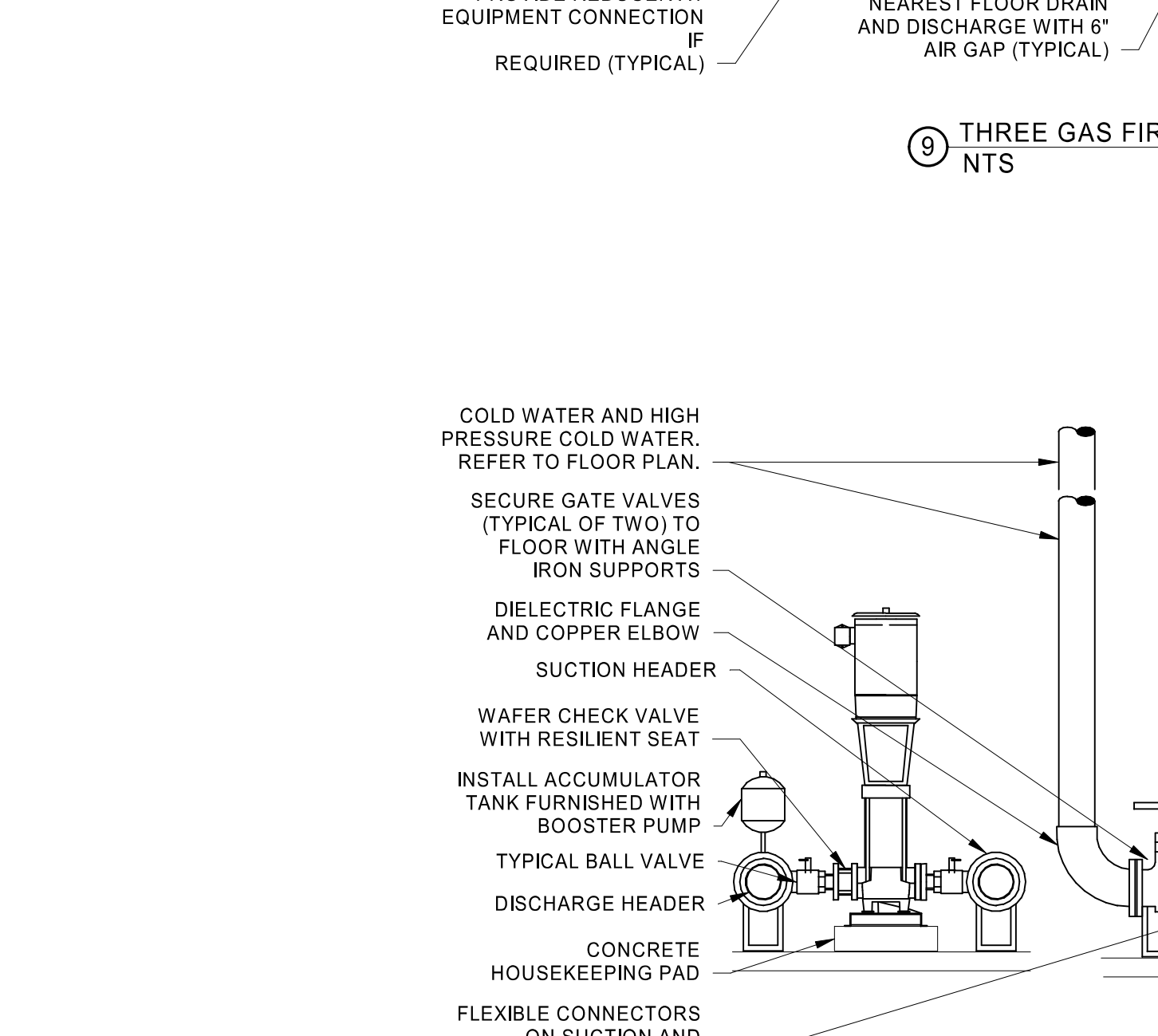
14 GREASE INTERCEPTOR PROCEPTOR 2 MANHOLE NTS



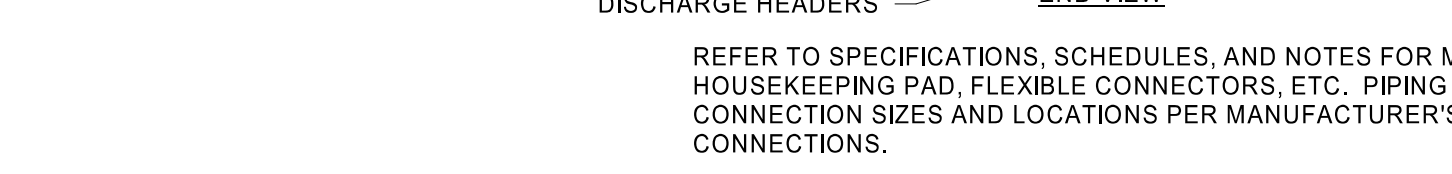
10 GAS FIRED WATER HEATER AND PUMP NTS



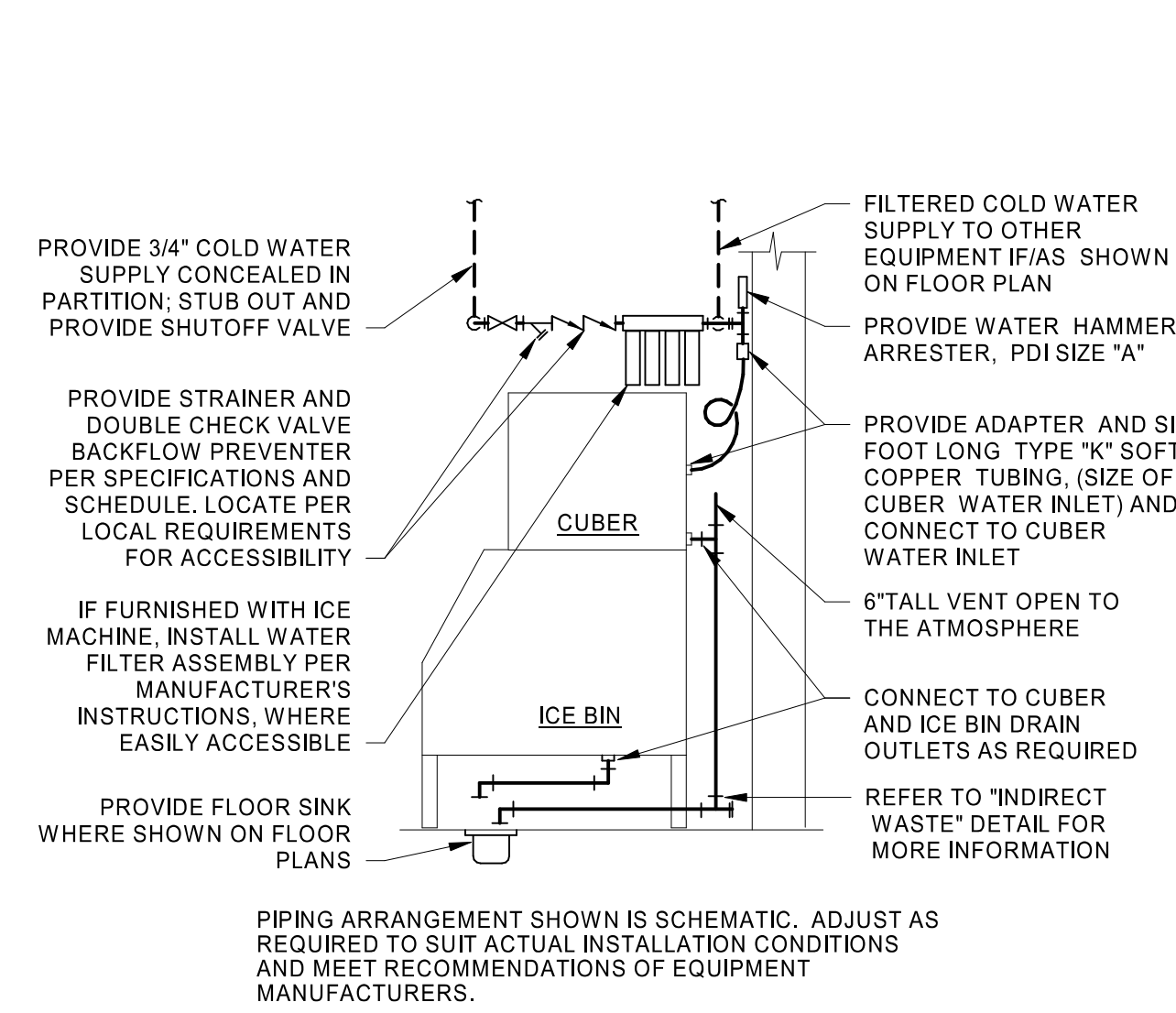
13 ROOF DRAIN INSTALLATION NTS



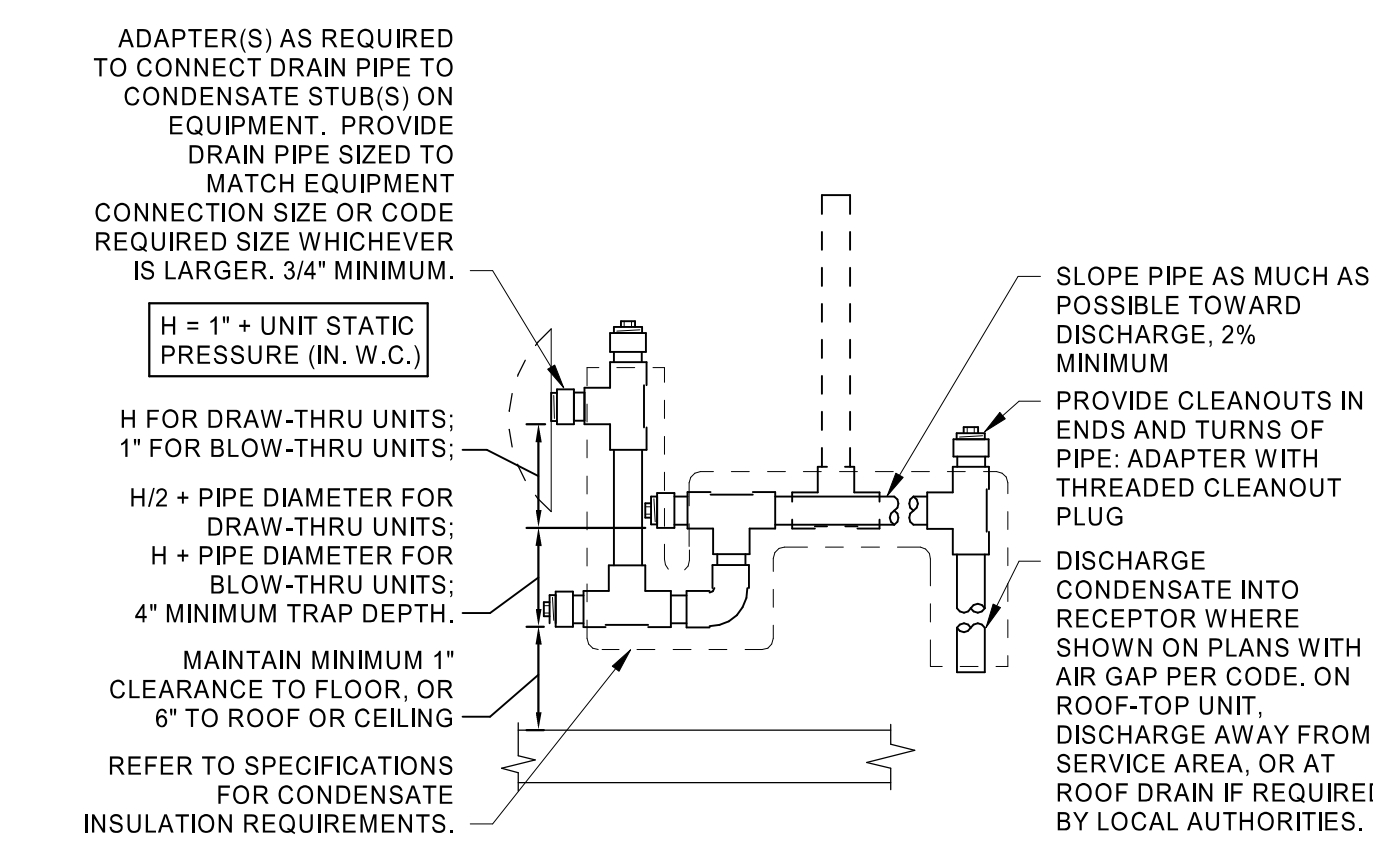
9 THREE GAS FIRED WATER HEATERS AND PUMP NTS



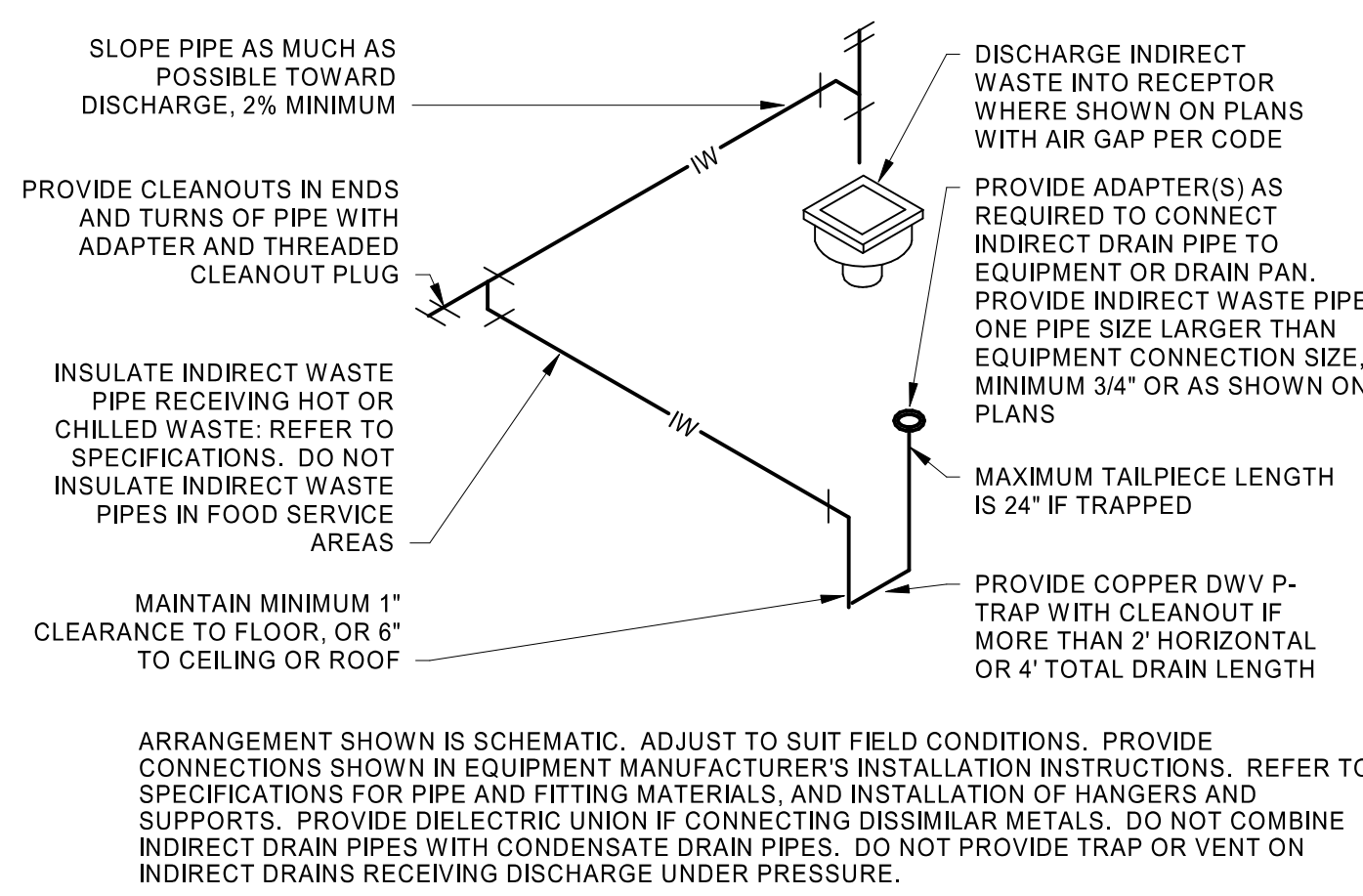
12 DOMESTIC WATER BOOSTER PUMP SYSTEM NTS



4 ICE MACHINE CONNECTIONS
NTS



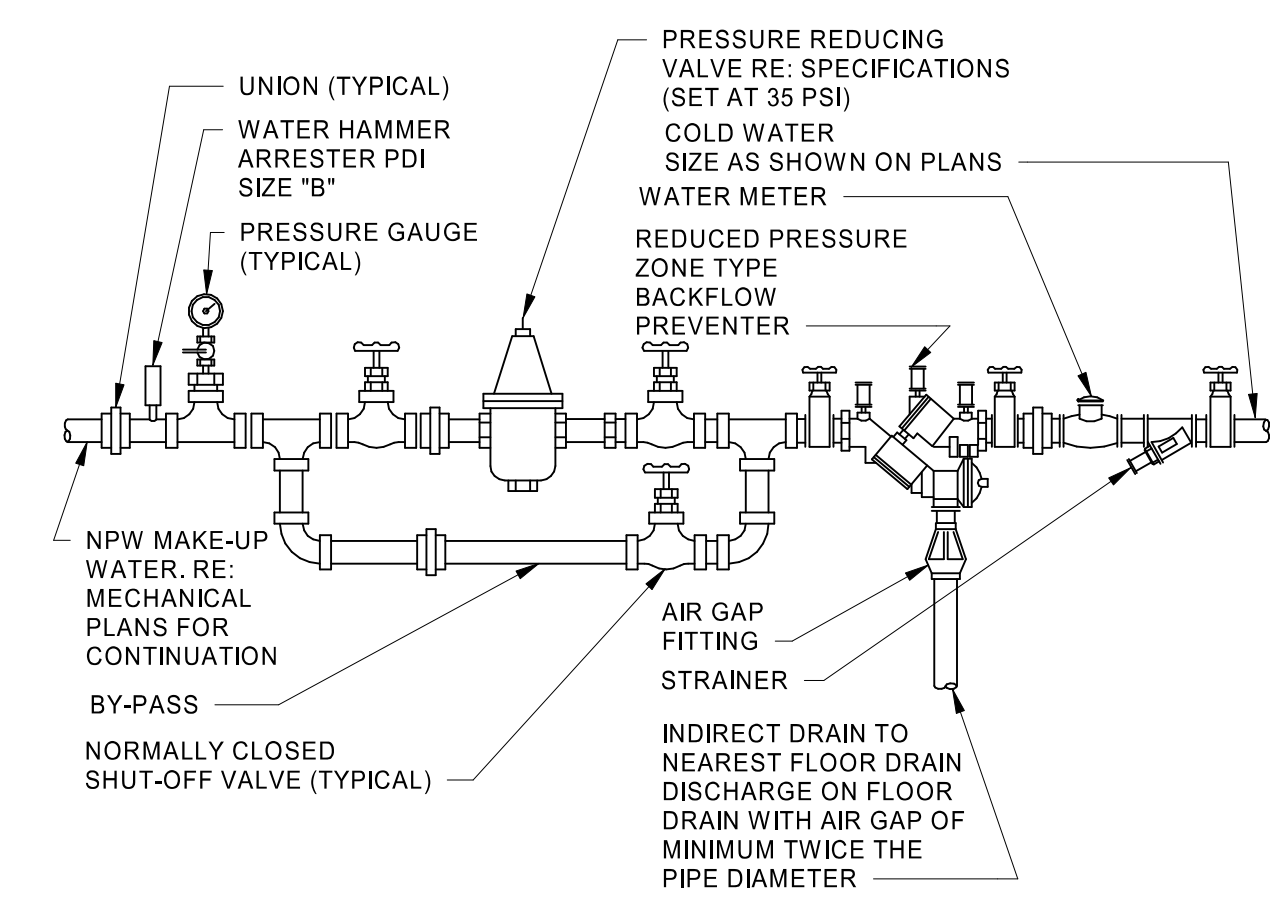
6 CONDENSATE DRAIN INSTALLATION
NTS



3 INDIRECT WASTE INSTALLATION - IPC
NTS

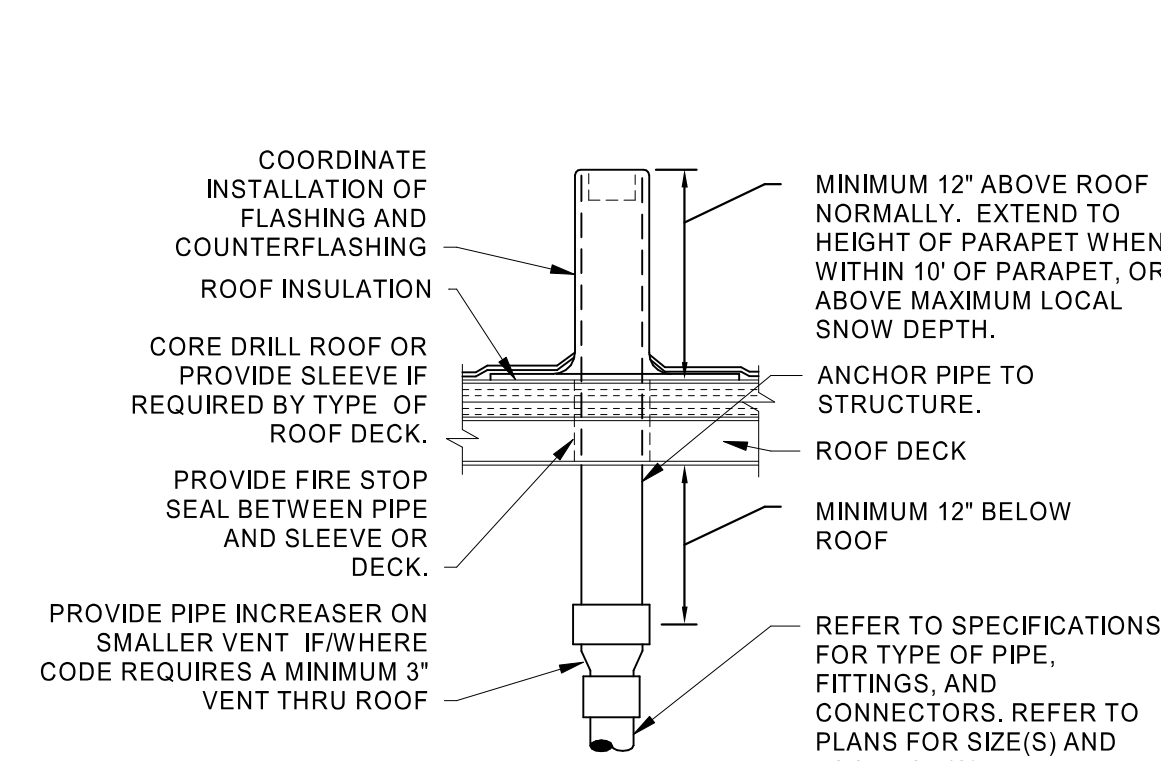
ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS, AND INSTALLATION OF HANGERS AND SUPPORTS. PROVIDE DIELECTRIC UNION IF CONNECTING DISSIMILAR METALS. DO NOT COMBINE INDIRECT DRAIN PIPES WITH CONDENSATE DRAIN PIPES. DO NOT PROVIDE TRAP OR VENT ON INDIRECT DRAINS RECEIVING DISCHARGE UNDER PRESSURE.

FOOD SERVICE EQUIPMENT INDIRECT WASTE: INSTALL SEPARATE INDIRECT WASTE FROM DIFFERENT EQUIPMENT - DO NOT COMBINE. SECURELY ATTACH INDIRECT DRAINS TO THEIR EQUIPMENT WITH BRACKETS OR SHUTTING PIPE CLAMPS - REFER TO SPECIFICATIONS. LOOSE, DANGLING, OR PIPES ON THE FLOOR SHALL NOT BE ACCEPTED. INSTALL INDIRECT DRAINS HIGH AS POSSIBLE TO FACILITATE CLEANING UNDER KITCHEN EQUIPMENT.



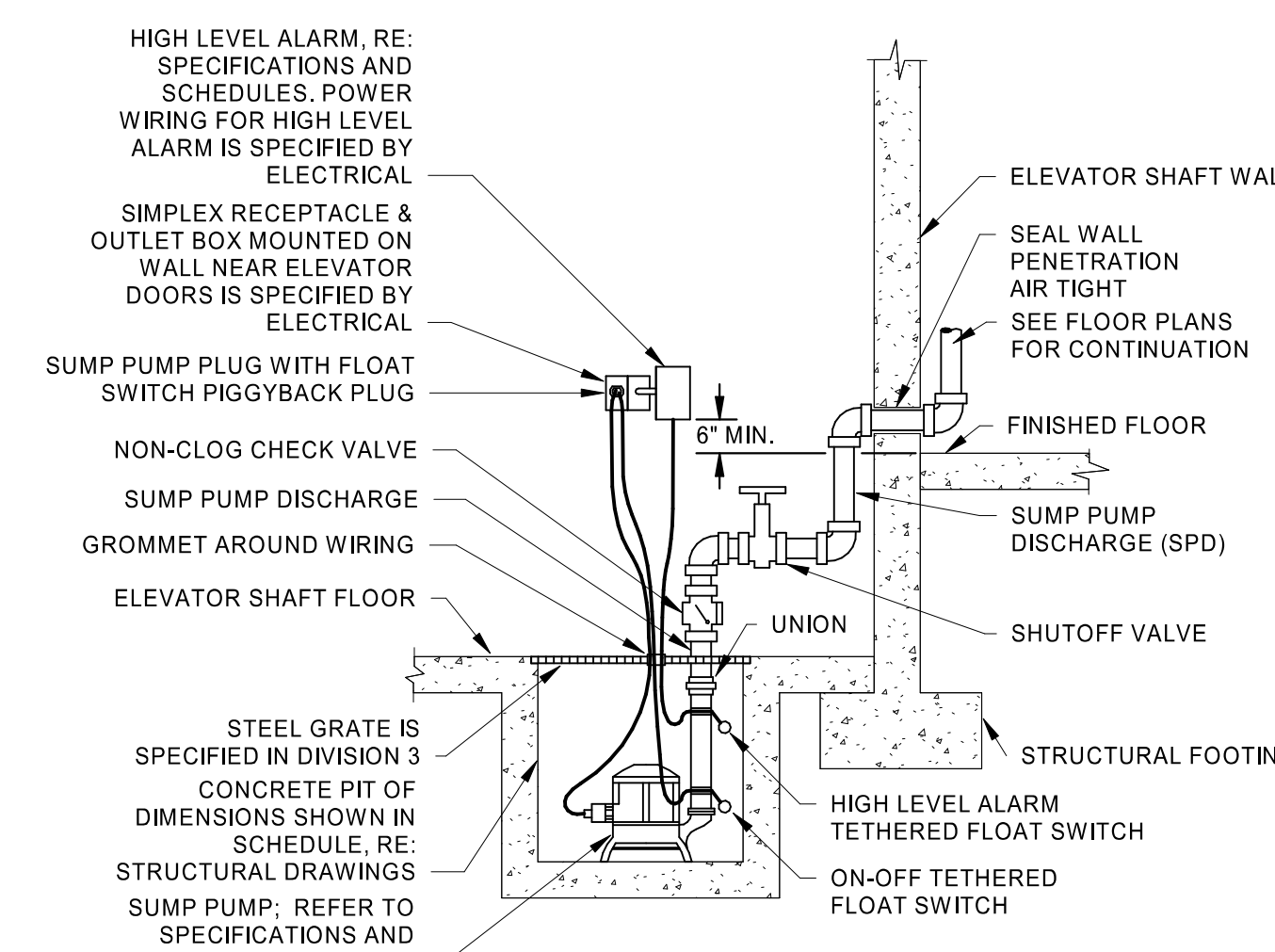
7 MECHANICAL SYSTEM MAKE-UP WATER
NTS

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. DO NOT INSTALL VALVE TRAIN ABOVE ELECTRICAL EQUIPMENT. VALVING SHALL BE SAME SIZE AS SERVICE PIPE - REFER TO PLANS FOR SERVICE LINE SIZE. VERIFY EQUIPMENT PRESSURE REQUIREMENTS BEFORE SETTING PRESSURE REDUCING VALVE. PROVIDE TEST AND CERTIFICATION OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES. INSTALL RP2 WITH ADEQUATE SPACE FOR TESTING AND SERVICE. MAXIMUM 5'-0\"/>



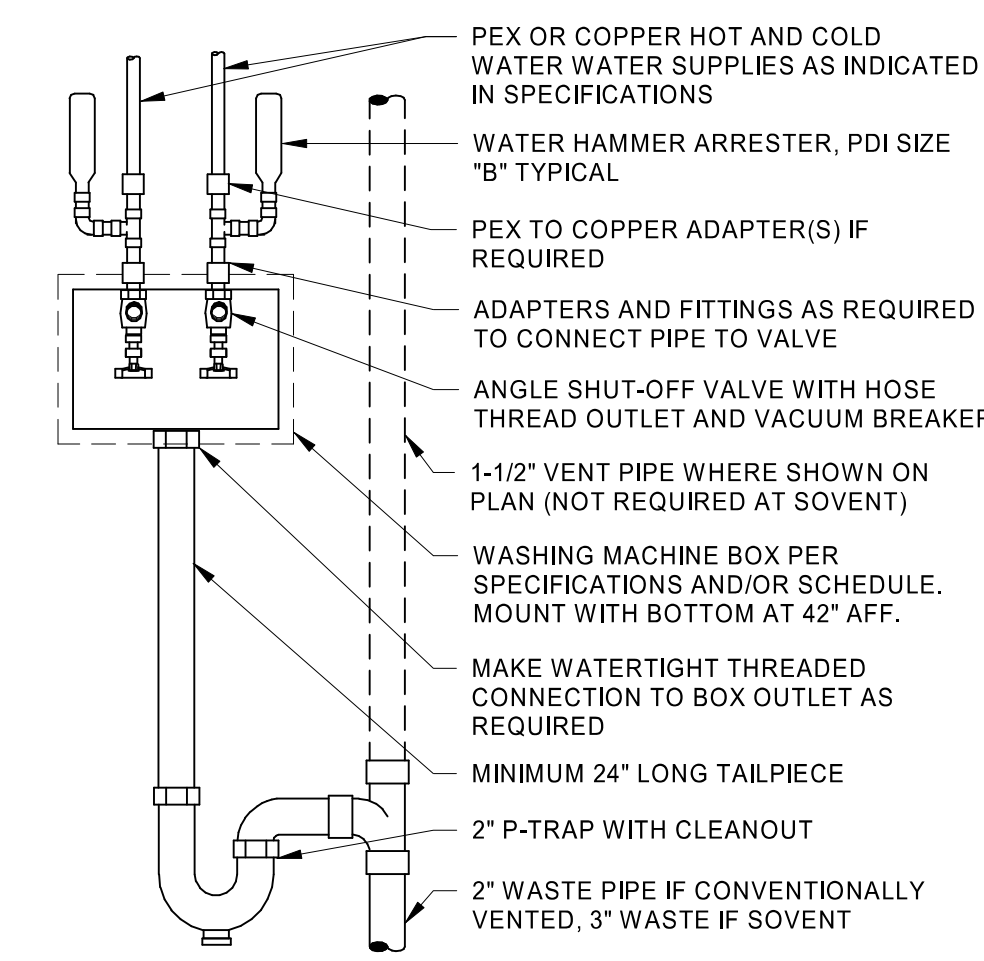
2 VENT THRU ROOF
NTS

LOCATE VTR MINIMUM THREE FEET FROM PROPERTY LINE. TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE. TWENTY FIVE FEET FROM ANY OPENING OR FRESH AIR INTAKE IN MEDICAL FACILITIES AND ONE FOOT FROM ANY VERTICAL SURFACE. REFER TO LOCAL CODES FOR OTHER VENT TERMINATION REQUIREMENTS. LOCATE VTR MINIMUM 18\"/>



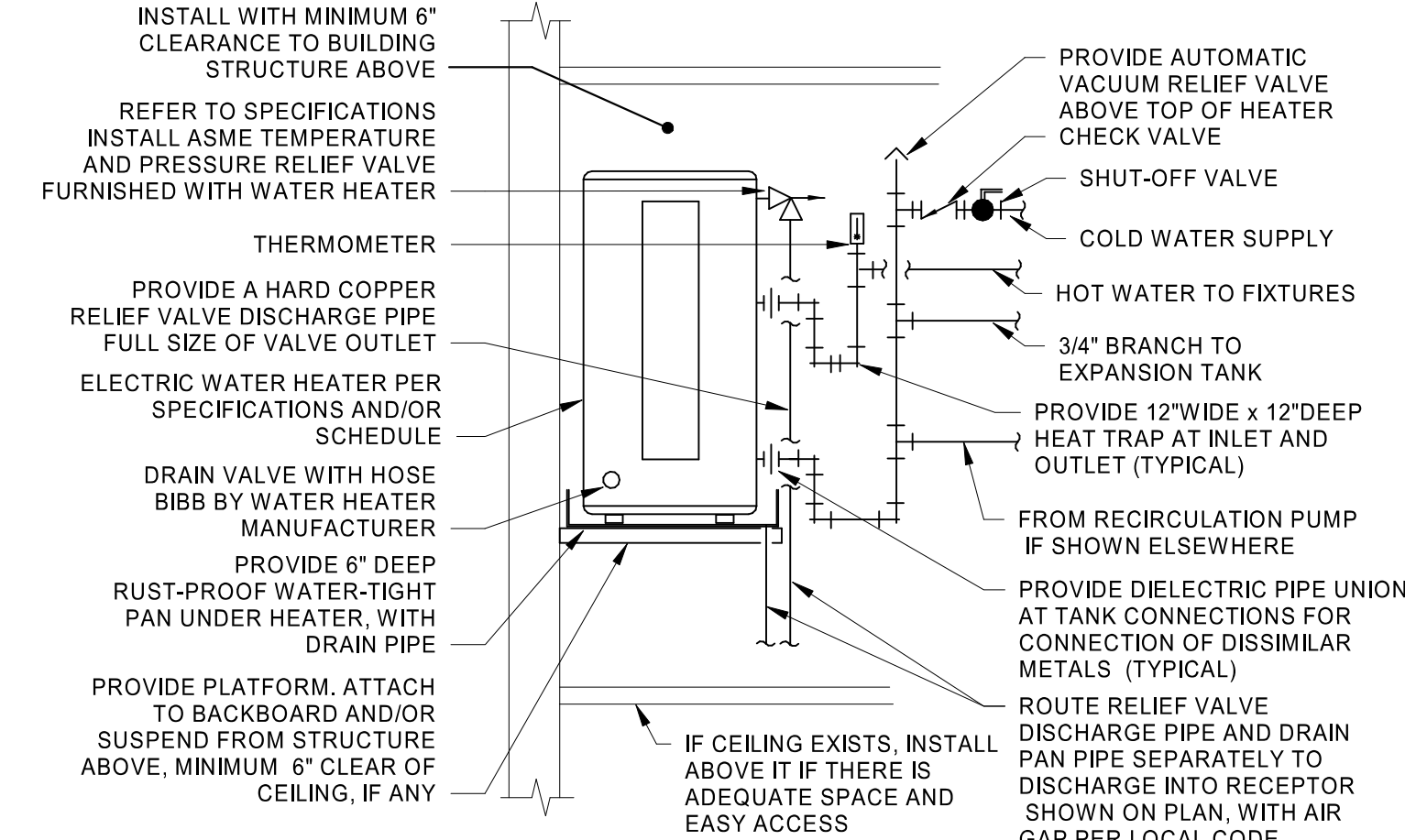
6 ELEVATOR SUMP PUMP
NTS

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. LOCATE FLOATS AT ELEVATIONS AS RECOMMENDED BY PUMP MANUFACTURER. INTERLOCK OF HIGH LEVEL ALARM WITH ALARM BELL. REFER TO FLOOR PLANS IF PROVIDED, IS SPECIFIED BY ELECTRICAL. INTERLOCK OF HIGH LEVEL ALARM WITH BUILDING AUTOMATION SYSTEM, REFER TO SPECIFICATIONS IF PROVIDED, IS SPECIFIED BY MECHANICAL.



1 WASHING MACHINE BOX
NTS

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS AS RECOMMENDED BY EQUIPMENT MANUFACTURER.



5 ELECTRIC WATER HEATER OVERHEAD
NTS

REFER TO SPECIFICATIONS, SCHEDULES AND NOTES FOR MORE INFORMATION. PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS PER MANUFACTURER'S REQUIREMENTS. REFER TO FLOOR PLANS FOR PIPE SIZES. PROVIDE SEISMIC STRAP OR BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES AND/OR SEPARATE DETAIL. INSTALL WITH BOTTOM MINIMUM 6'-0\"/>

PLUMBING FIXTURE SCHEDULE

FIXTURES IN THIS SCHEDULE OR THEIR APPROVED EQUIVALENT ARE PROVIDED BY THE PLUMBING CONTRACTOR. SUBMIT SHOP DRAWINGS ON EACH OF THESE ITEMS. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION AND INSTALLATION REQUIREMENTS. VERIFY ROUGH-IN REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE PLUMBING FIXTURE MOUNTING HEIGHTS.

PLUMBING FIXTURE SCHEDULE

Table with columns: PLUMBING PLAN MARK, DESCRIPTION. Rows include AVY1, AVZ2, AP1, AP2, CDB, DAGF, DCV1, DF1, DSN1, ECO, EEW1, EEW2, EMV1, EWC1, FC1, FCO, FCV1, FD1, FD2, FD3, FD4, FD5, FS1, GD1, G1, GSV1, HB1, HB2, HD1, MB.

PLUMBING FIXTURE SCHEDULE

Table with columns: PLUMBING PLAN MARK, DESCRIPTION. Rows include J51, LGC1, LSP1, LV1, SK5, N1, NW1, RD1, RPA1, RP2, RP22, S1, SK1, SK2, SK3, SK4, SK5, SK6, SK7, SK8, SK9, SK10.

PLUMBING FIXTURE SCHEDULE

Table with columns: PLUMBING PLAN MARK, DESCRIPTION. Rows include SK4, SK5, SK6, SK7, SK8, SK9, SK10.

PLUMBING FIXTURE SCHEDULE

Table with columns: PLUMBING PLAN MARK, DESCRIPTION. Rows include SK1, SV1, SV2, TP1, TS1, UR1, WC1, WC2, WCO, WF1, WF2, WF3, WF4, WF5, WF6, WF7, WF8, WF9, WF10, WF11, WF12, WF13, WF14, WF15, WF16, WF17, WF18, WF19, WF20, WF21, WF22, WF23, WF24, WF25, WF26, WF27, WF28, WF29, WF30, WF31, WF32, WF33, WF34, WF35, WF36, WF37, WF38, WF39, WF40, WF41, WF42, WF43, WF44, WF45, WF46, WF47, WF48, WF49, WF50, WF51, WF52, WF53, WF54, WF55, WF56, WF57, WF58, WF59, WF60, WF61, WF62, WF63, WF64, WF65, WF66, WF67, WF68, WF69, WF70, WF71, WF72, WF73, WF74, WF75, WF76, WF77, WF78, WF79, WF80, WF81, WF82, WF83, WF84, WF85, WF86, WF87, WF88, WF89, WF90, WF91, WF92, WF93, WF94, WF95, WF96, WF97, WF98, WF99, WF100.

PLUMBING FIXTURE SCHEDULE

Table with columns: PLUMBING PLAN MARK, DESCRIPTION. Rows include WHA, WMB1.

FIXTURE BRANCH CONNECTION SCHEDULE

Table with columns: FIXTURE, COLD WATER, HOT WATER, WASTE, VENT. Rows include 6" FLOOR DRAIN, DRINKING FOUNTAIN, FLOOR DRAIN, JANITORS SINK, LAVATORY/HAND SINK, SINK, URINAL, WASHFOUNTAIN, WATER CLOSET (FLUSH VALVE).

NOTE: PIPE SIZES SHOWN ARE MINIMUM.

ELECTRIC STORAGE WATER HEATER SCHEDULE

Table with columns: MARK, MANUFACTURE, MODEL#, AREA SERVED, TANK SIZE (GALLONS), VOLTS, ELECTRICAL PHASE, KW, RECOVERY, NOTES. Rows include WH10, WH11.

NOTE: 100°F TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE...

GAS STORAGE WATER HEATER SCHEDULE

Table with columns: MARK, MANUFACTURER, MODEL, AREA SERVED, TANK SIZE (GALLONS), VOLTS, ELECTRICAL PHASE, INPUT (MBH), RECOVERY (GPH), WEIGHT (LBS), NOTES. Rows include WH1, WH2, WH3, WH4, WH5, WH6, WH7, WH8, WH9.

NOTE: 100°F TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE...

PLUMBING EXPANSION TANK SCHEDULE

Table with columns: MARK, MANUFACTURER, MODEL, TANK SIZE (GALLONS), MIN. ACCEPTANCE VOLUME (GALLONS), AIR PRESSURE (PSI), SERVICE, NOTES. Rows include ET1, ET2, ET3, ET5, ET6, ET7.

NOTE: CHARGE TANK WITH AIR TO IDENTICAL PRESSURE AS STATIC DOMESTIC WATER PRESSURE.

RECIRCULATION PUMP SCHEDULE

Table with columns: MARK, MANUFACTURER, MODEL, LOCATION, GPM, HEAD (FT.), CONNECTION SIZE, ELECTRICAL DATA, NOTES. Rows include RP1, RP2, RP3, RP4, RP5, RP6.

NOTE: ALL LEAD FREE CAST BRONZE BOOSTER.

ELEVATOR SUMP PUMP SCHEDULE (3/4 HP AND SMALLER)

Table with columns: MARK, MANUFACTURER, MODEL, GPM, HEAD (FT.), DISCHARGE SIZE, VOLTS, PH, HP, NOTES. Row includes ESP1.

NOTE: PROVIDE WEIL 88245 FLOAT SWITCH WITH POWER CORD AND PIGGYBACK PLUG.

GAS PRESSURE REGULATOR SCHEDULE FOR 2 PSI SYSTEMS

Table with columns: MARK, MANUFACTURER / MODEL, VALVE TYPE, VALVE BODY TYPE, MAX. FLOW RATE (GPH), INLET PRESSURE (INCHES WATER COLUMN), OUTLET PRESSURE (INCHES WATER COLUMN), NOTES. Rows include GPR1, GPR2.

NOTE: C - SELF CONTAINED "DIRECT ACTING" DIAPHRAGM TYPE WITH INTERNAL VENT LIMITER...

RECIRCULATION PUMP SCHEDULE

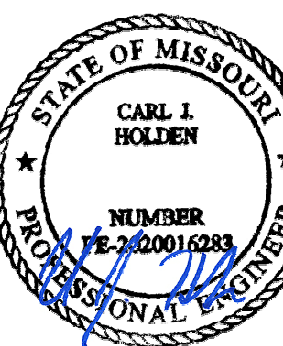
Table with columns: MARK, MANUFACTURER, MODEL, LOCATION, GPM, HEAD (FT.), CONNECTION SIZE, ELECTRICAL DATA, NOTES. Rows include RP1, RP2, RP3, RP4, RP5, RP6.

NOTE: ALL LEAD FREE CAST BRONZE BOOSTER.

DOMESTIC BOOSTER PUMP SCHEDULE

Table with columns: MARK, SERVICE, MANUFACTURER, MODEL, TYPE (NOTE A), DISCHARGE PRESSURE (PSI), SUCTION PRESSURE (PSI), NUMBER OF PUMPS, SYSTEM FLOW RATE (GPM), INDIVIDUAL PUMP CAPACITY (%), SUCTION HEAD SIZE (IN.), DISCHARGE HEAD SIZE (IN.), ELECTRICAL (NOTE B), ACCUMULATOR TANK SIZE (GAL.), NOTES. Row includes BPF1.

NOTE: BOOSTER PUMP CONFIGURATION TYPES: T-VFD = TRIPLEX W/ VARIABLE FREQUENCY DRIVE...



Oct 8 2020



LEE'S SUMMIT MIDDLE SCHOOL #4

LEE'S SUMMIT R-7 SCHOOL DISTRICT

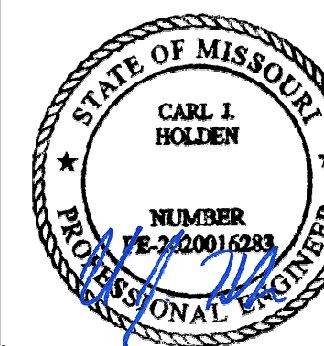
1001 SE BAILEY ROAD, LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE

10/8/2020 REVISIONS

13-20102-00

P6.1



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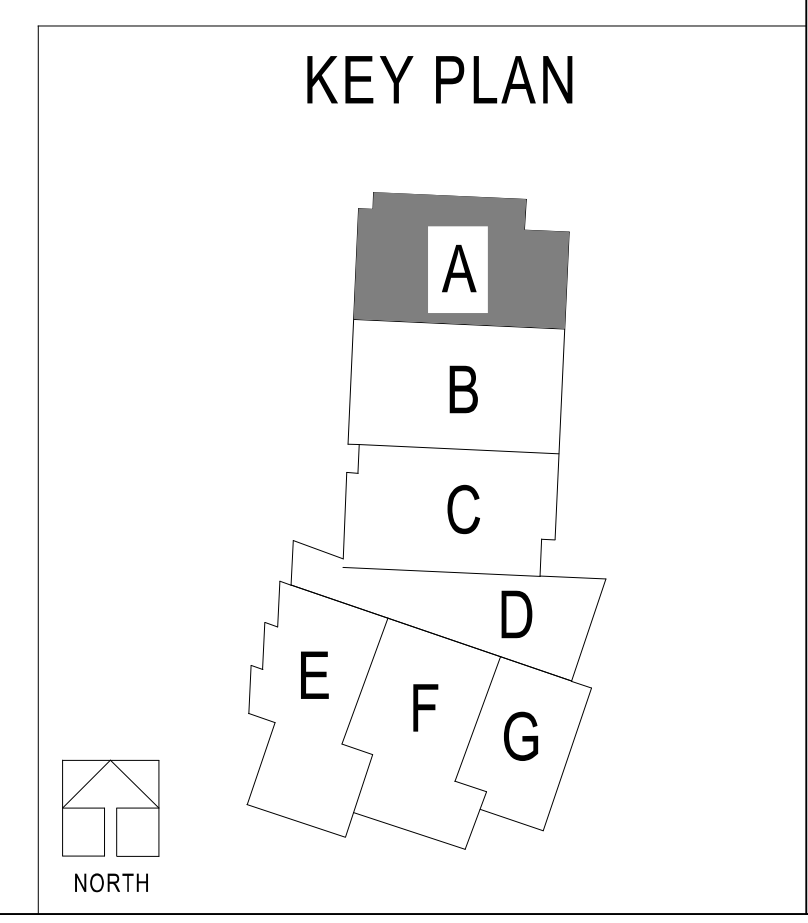
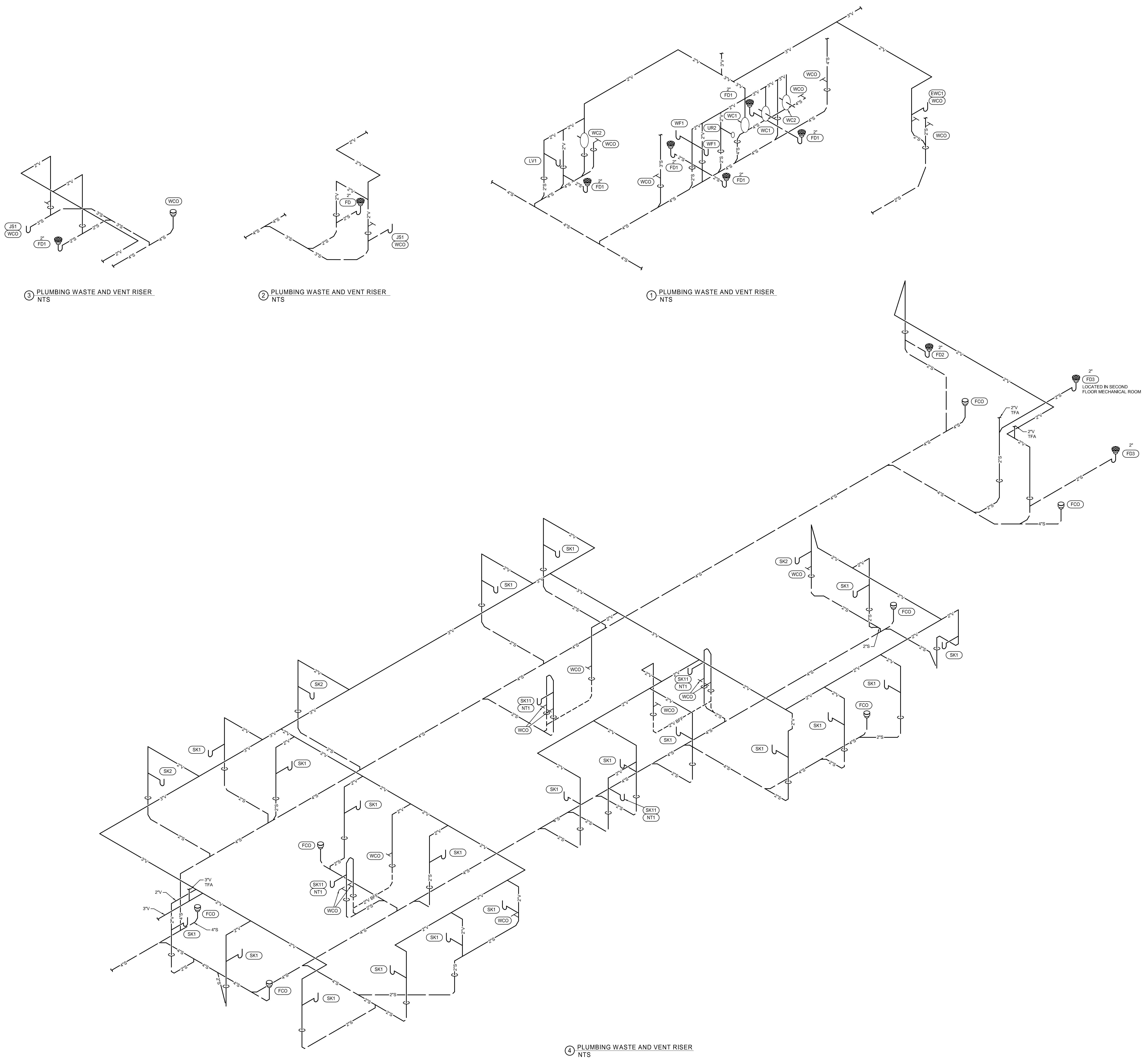
HENDERSON
 ENGINEERS
 1845 LINDA DRIVE SUITE 300
 LENOIR, MS 39211-4300
 TEL: 662.727.4300
 WWW.HENDERSONENGINEERS.COM
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 EXPIRES 12/31/2020

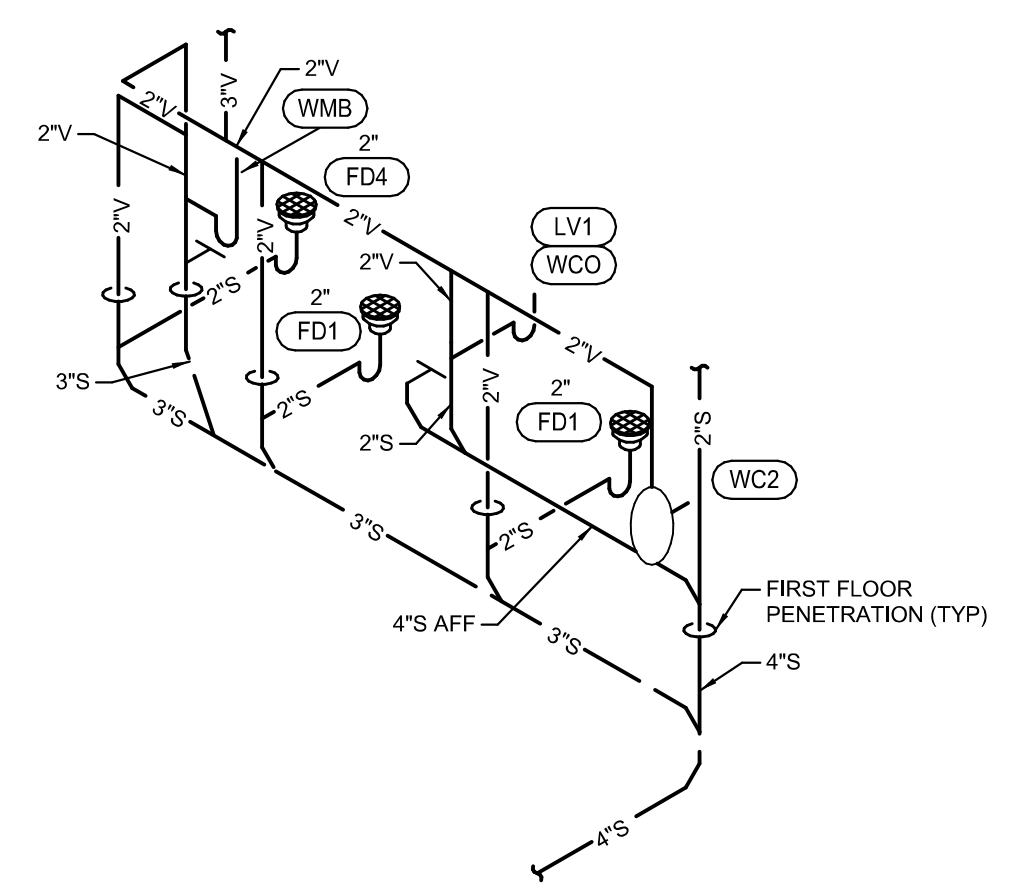
LEE'S SUMMIT MIDDLE SCHOOL #4
 LEE'S SUMMIT R-7 SCHOOL DISTRICT
 1001 SE BAILEY ROAD
 LEE'S SUMMIT, MS 39211

PACKAGE 3 - BUILDING & SITE
 10/08/20
 REVISIONS

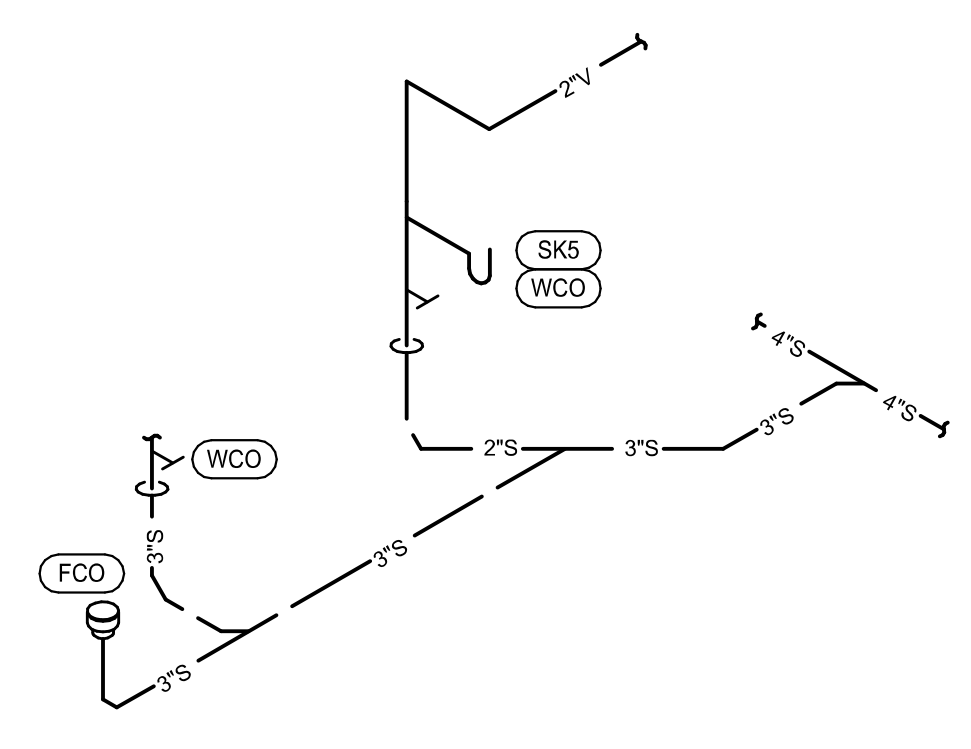
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 PLUMBING RISER DIAGRAMS

P8.1

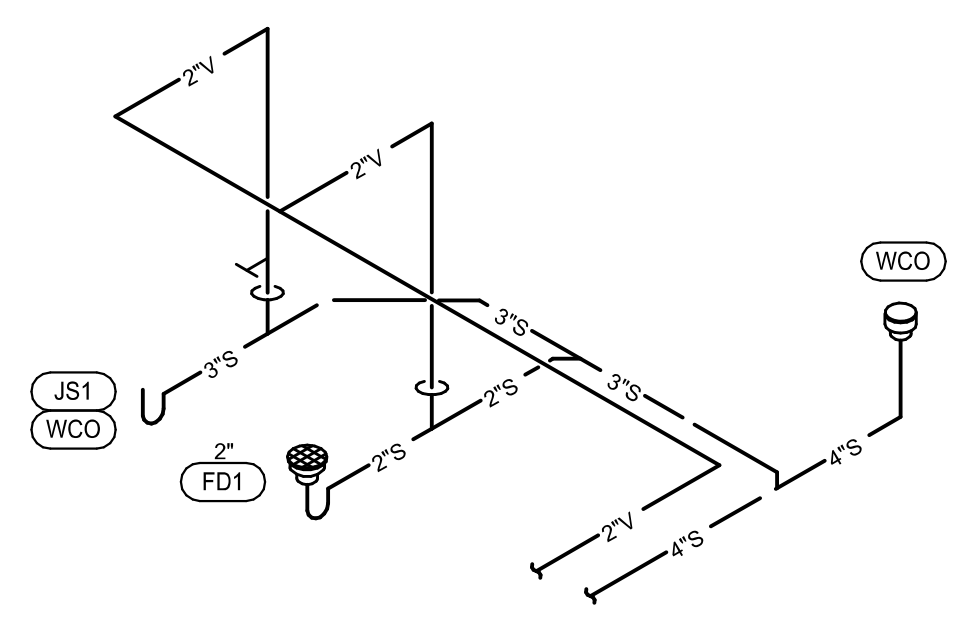




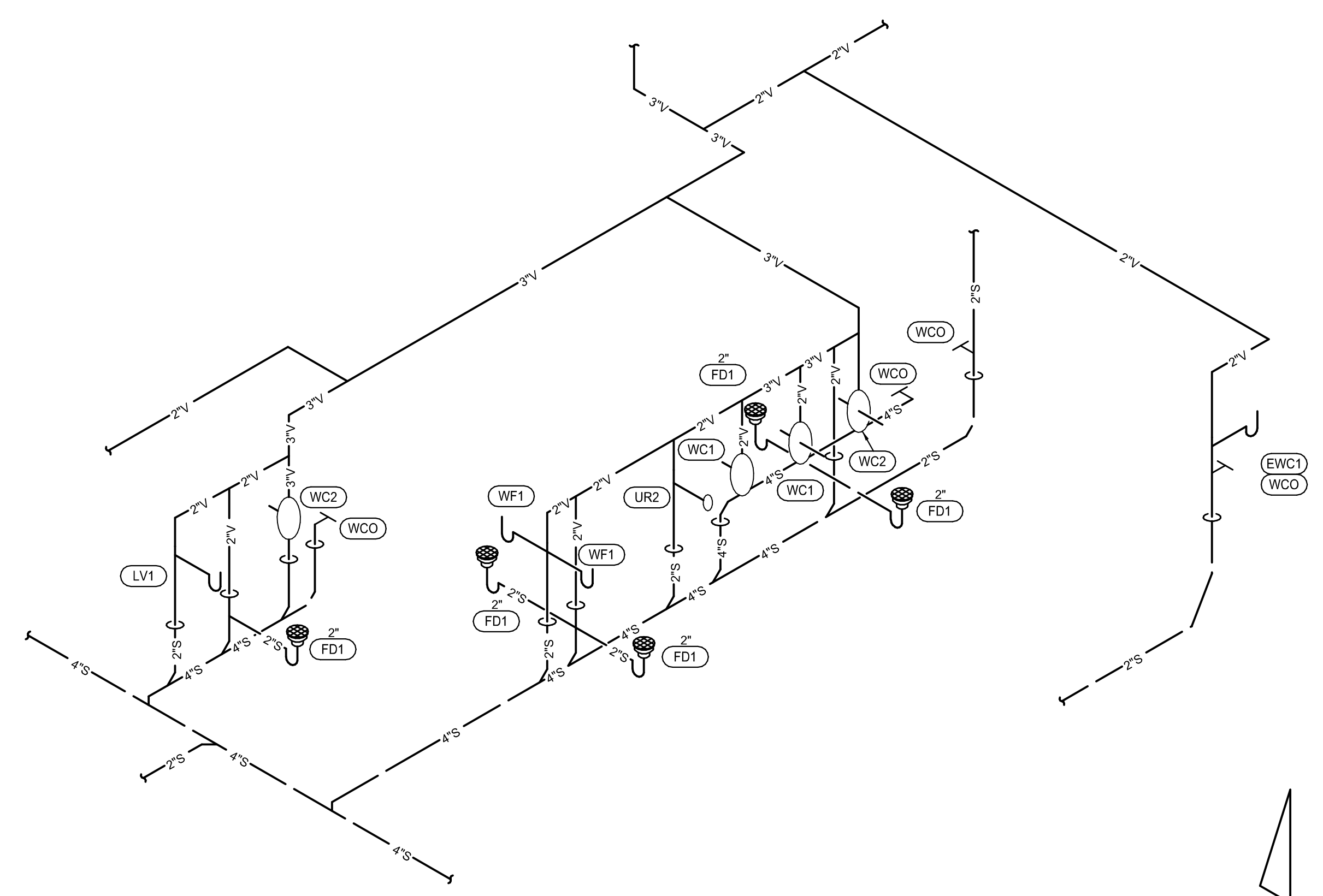
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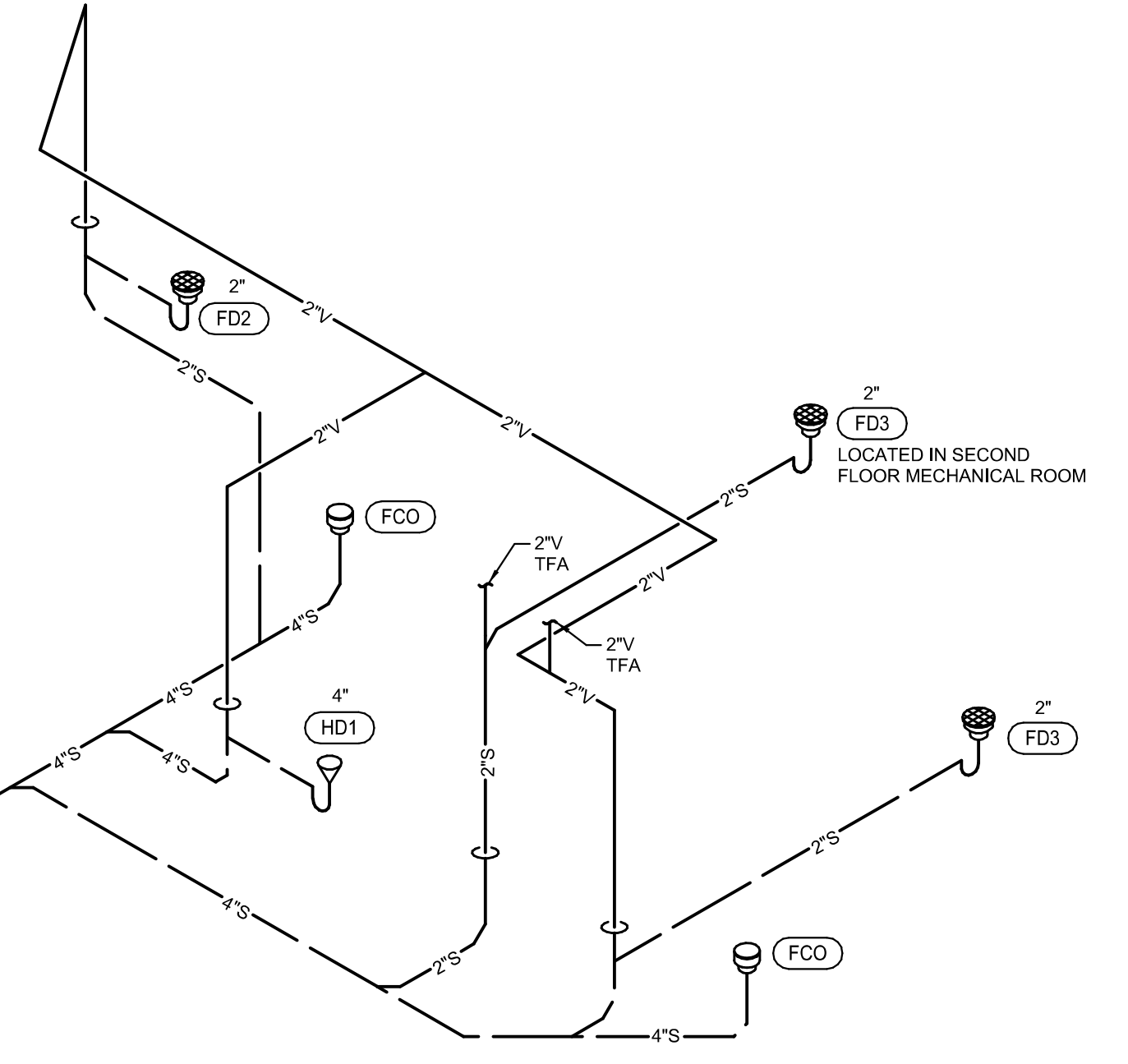
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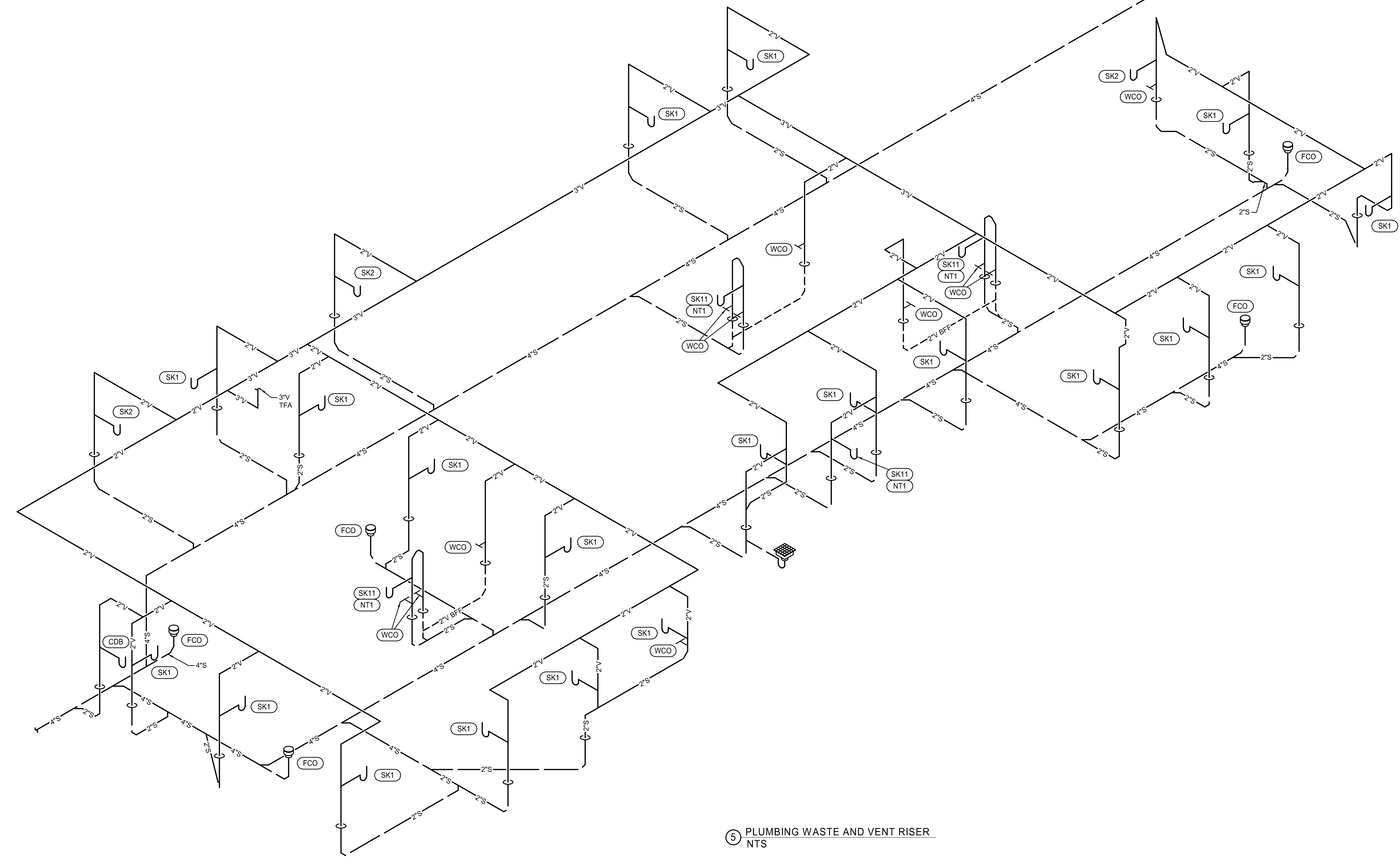
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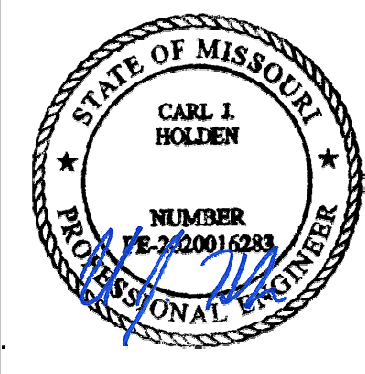
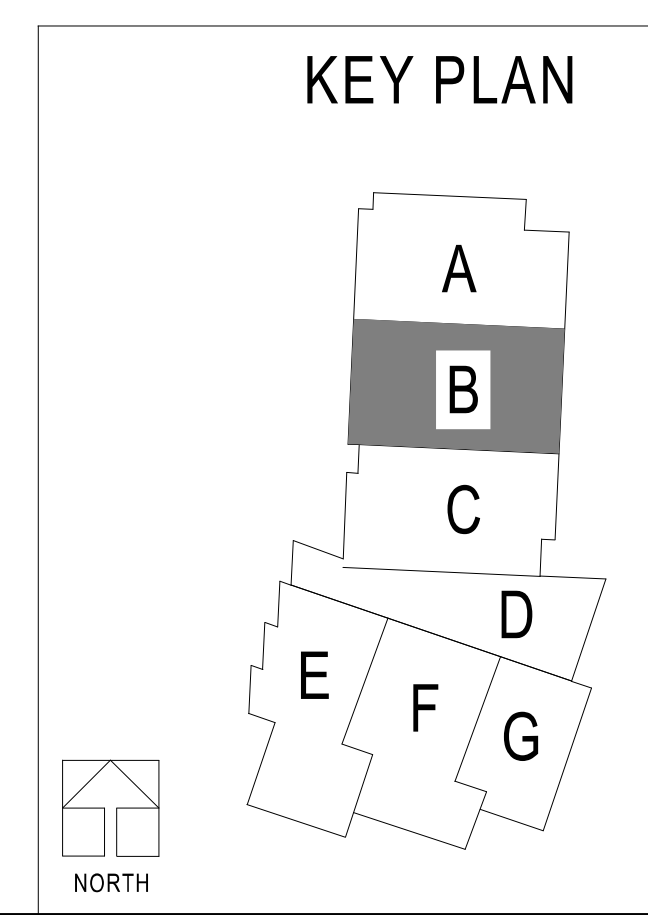
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5 PLUMBING WASTE AND VENT RISER NTS



5 PLUMBING WASTE AND VENT RISER NTS



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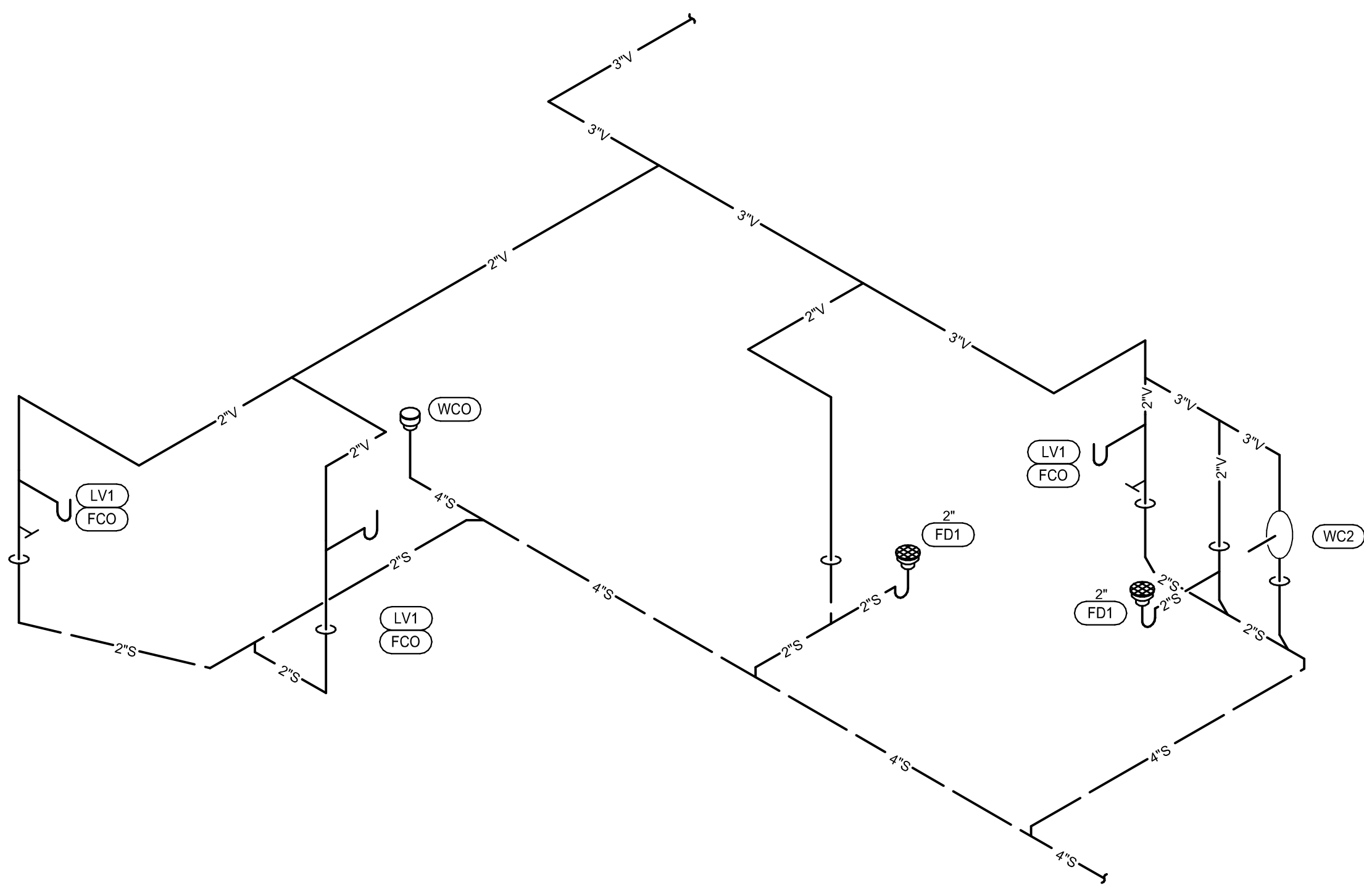
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 8045 LINDA DRIVE SUITE 300
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 WWW.HENDERSONENGINEERS.COM
 MISSOURI LICENSE # 0000000000
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 EXPIRES 12/31/2020

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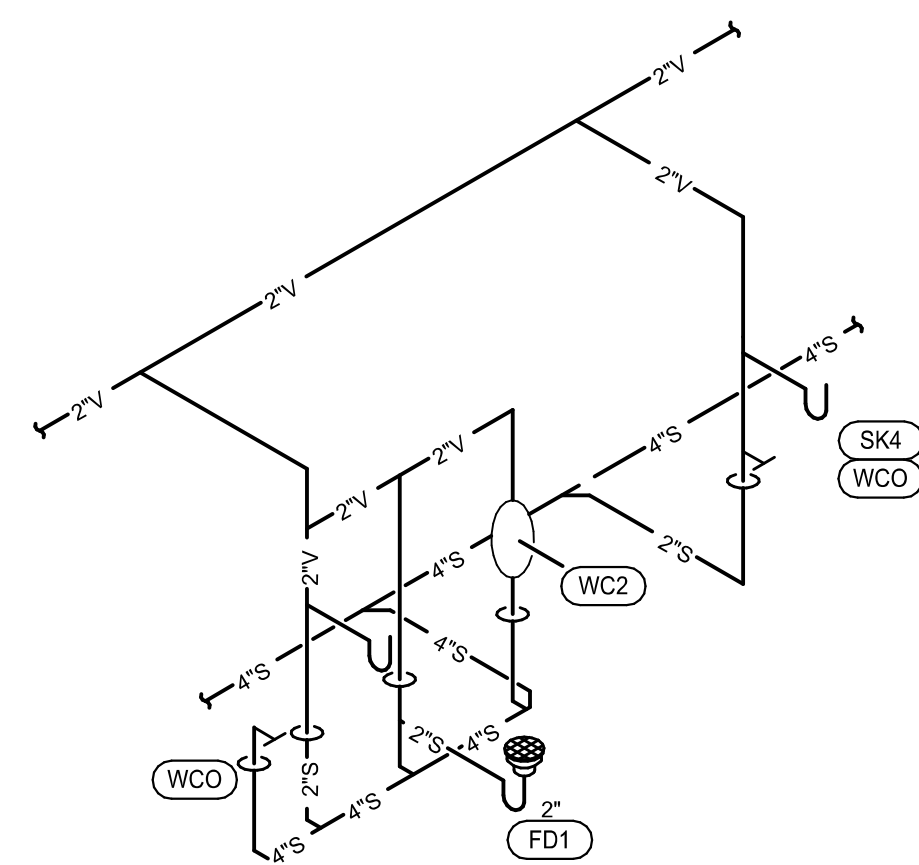
PACKAGE 3 - BUILDING & SITE
 10/08/20
 REVISIONS

13-20102-00
 PLUMBING RISER DIAGRAMS

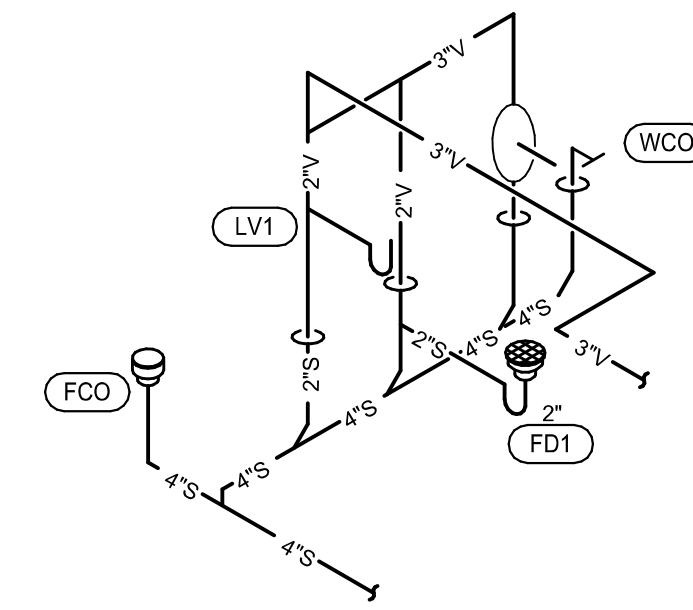
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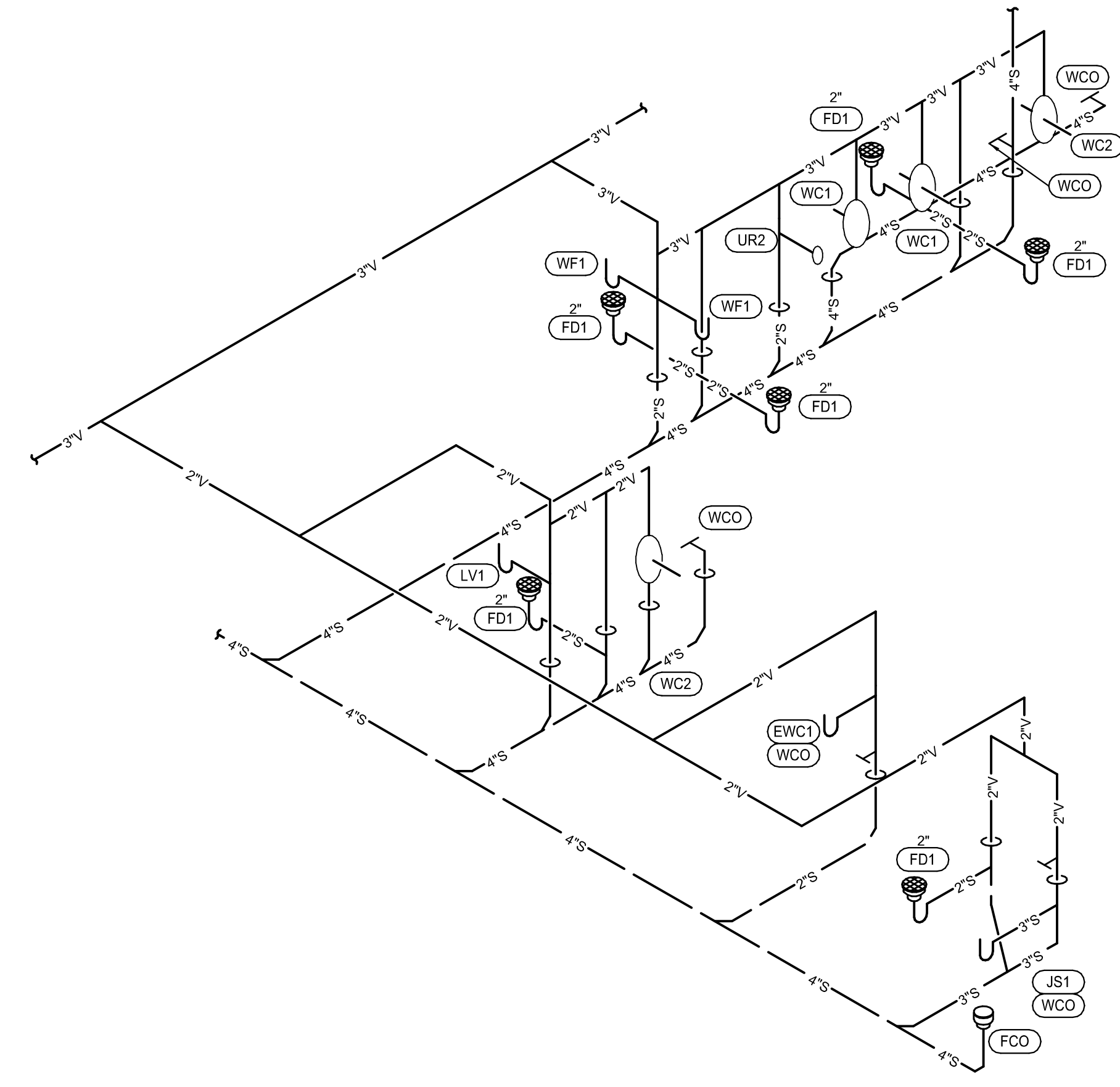
4 PLUMBING WASTE AND VENT RISER
NTS



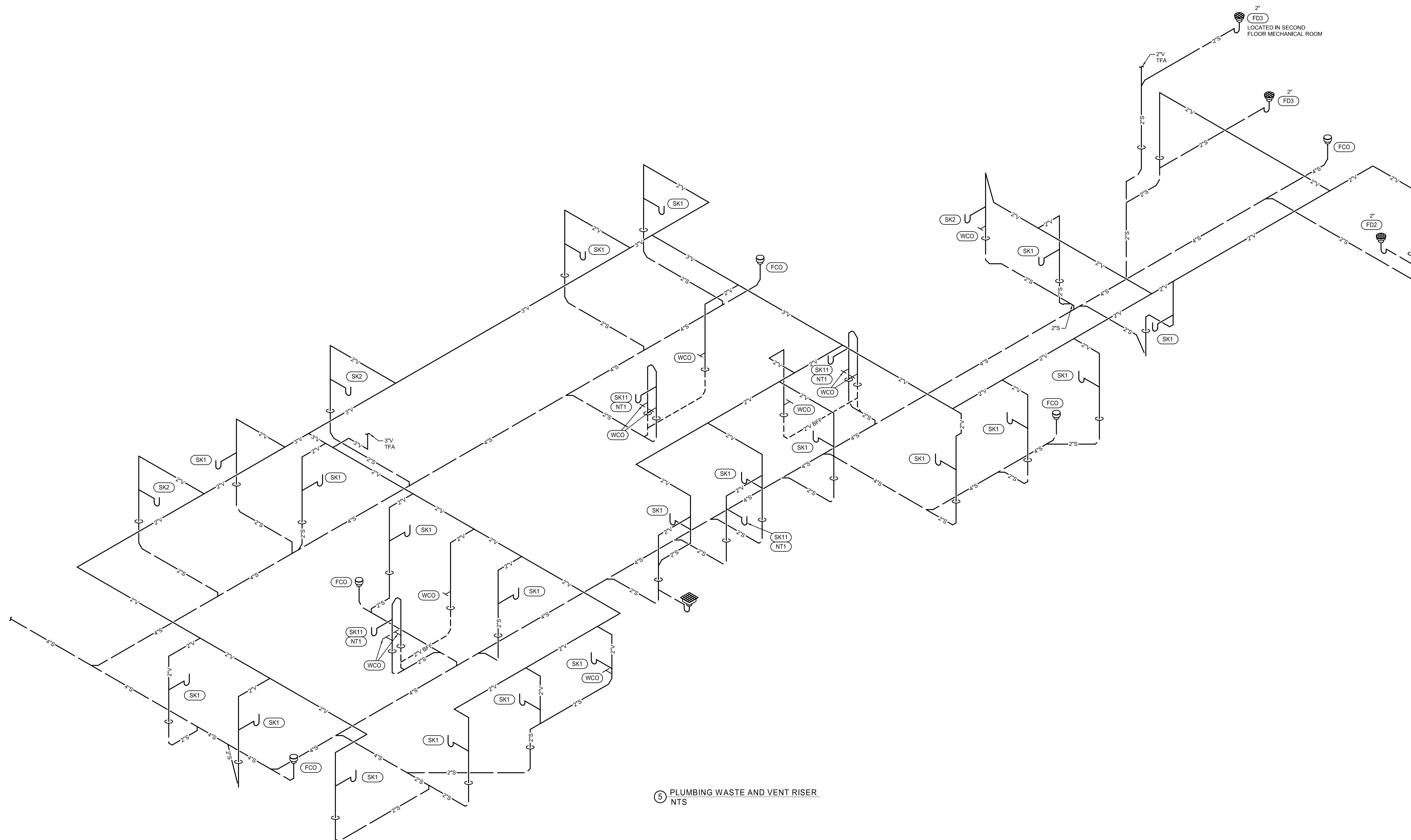
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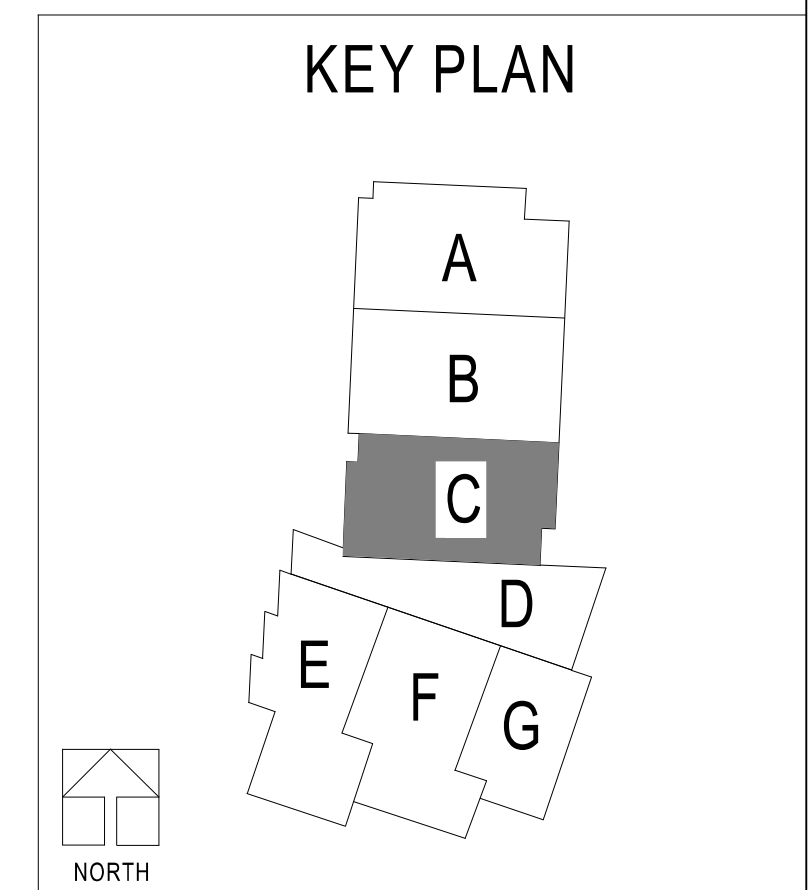
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1 PLUMBING WASTE AND VENT RISER
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5 PLUMBING WASTE AND VENT RISER
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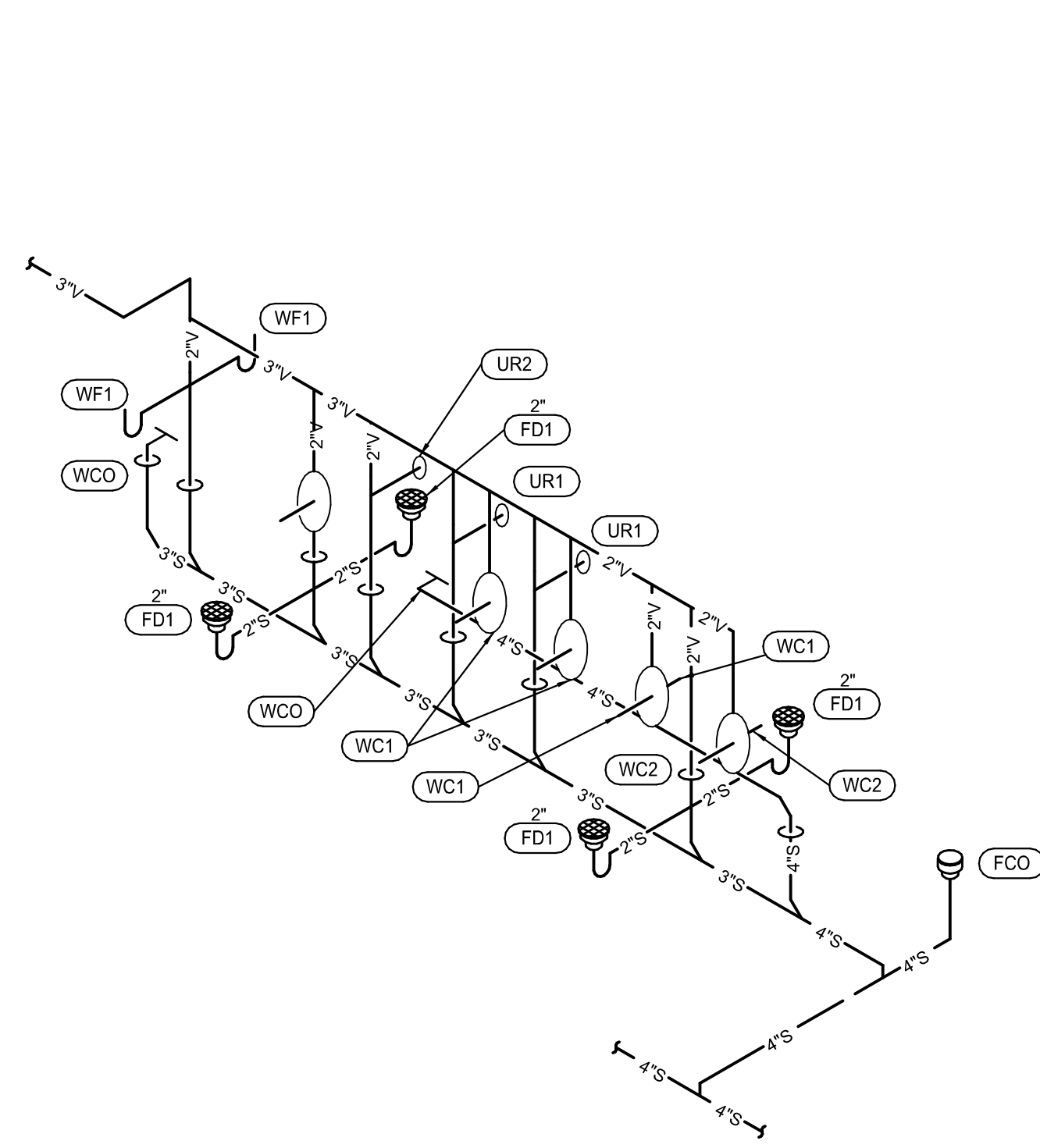


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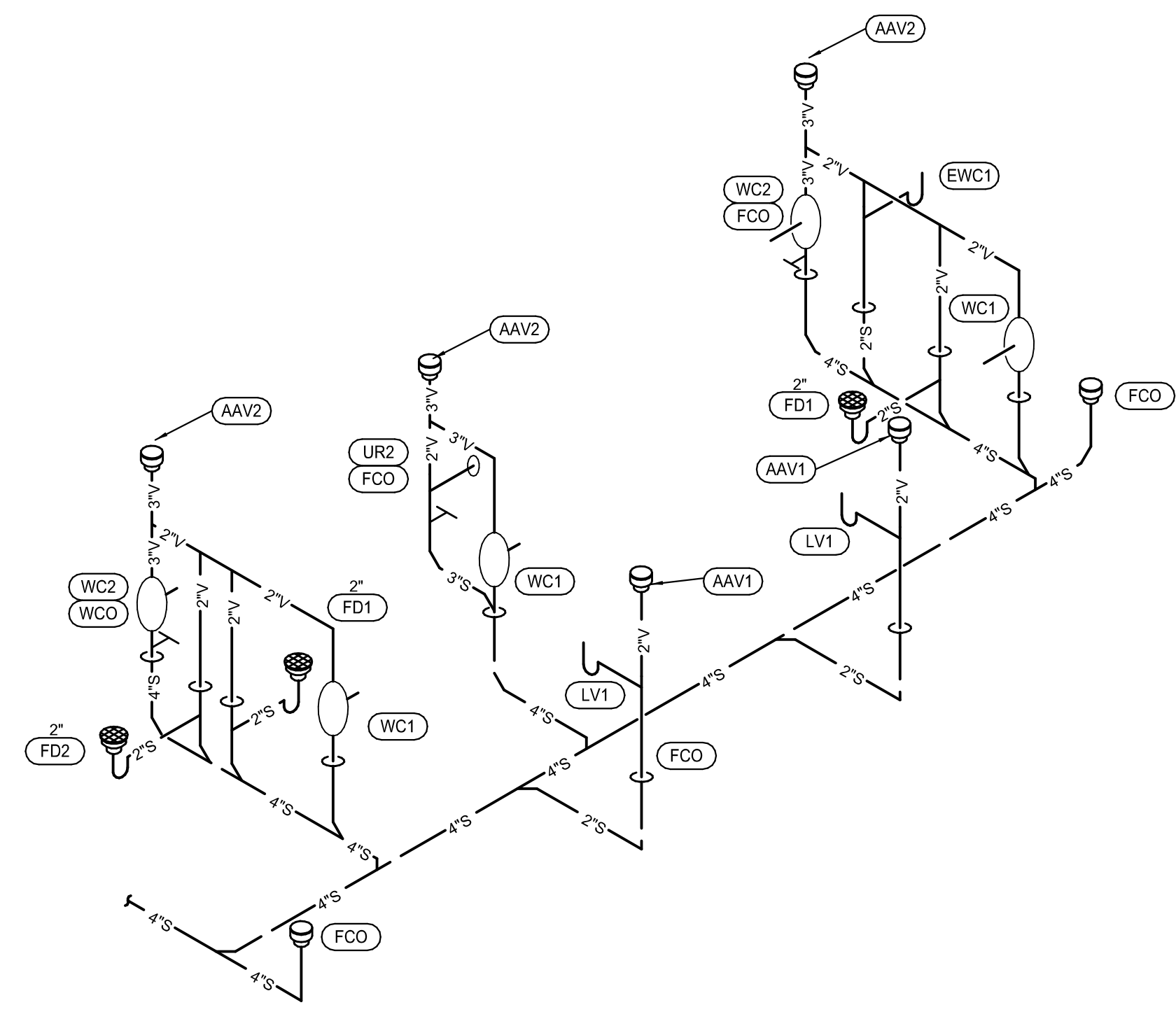
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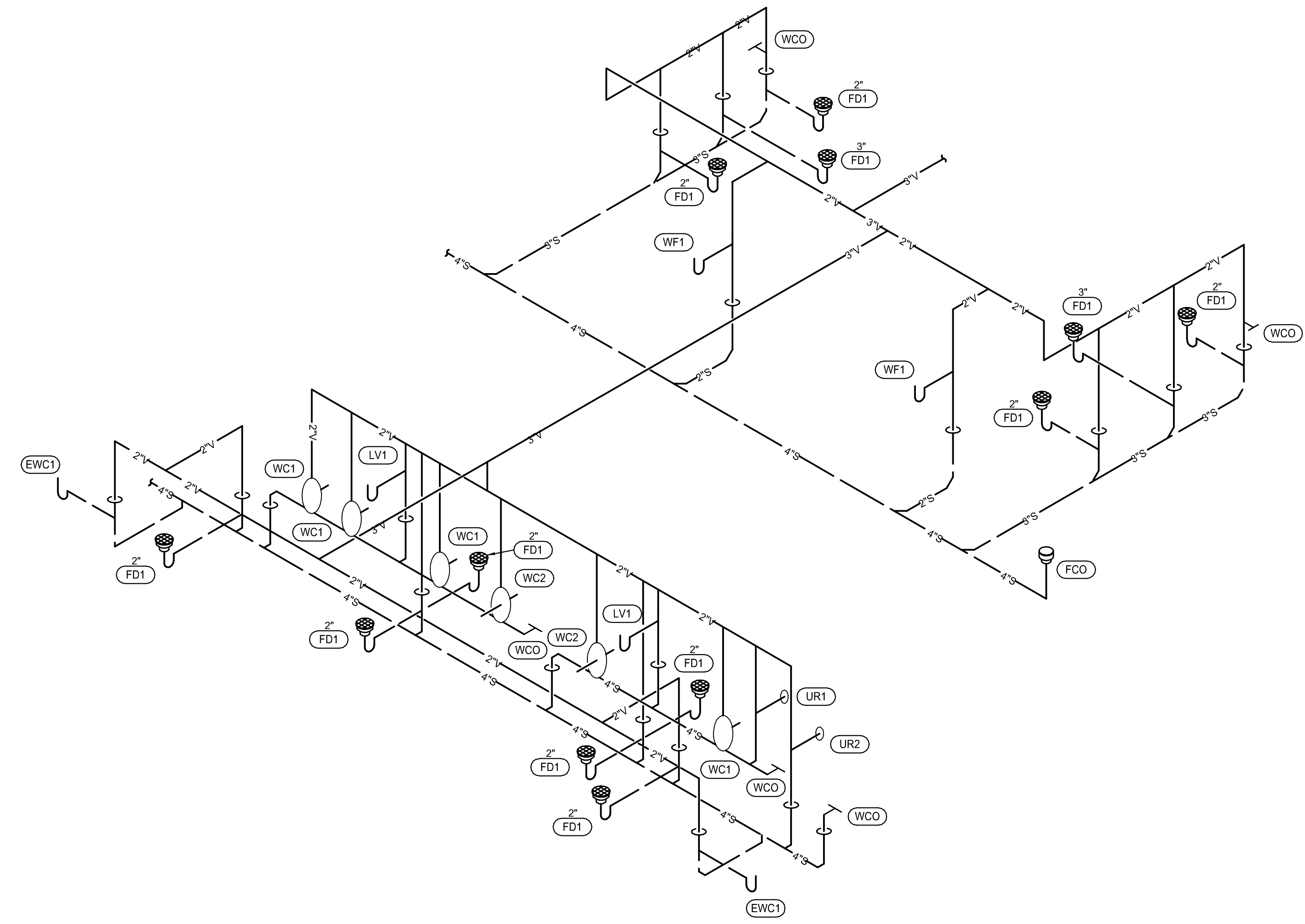
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PLUMBING RISER
DIAGRAMS



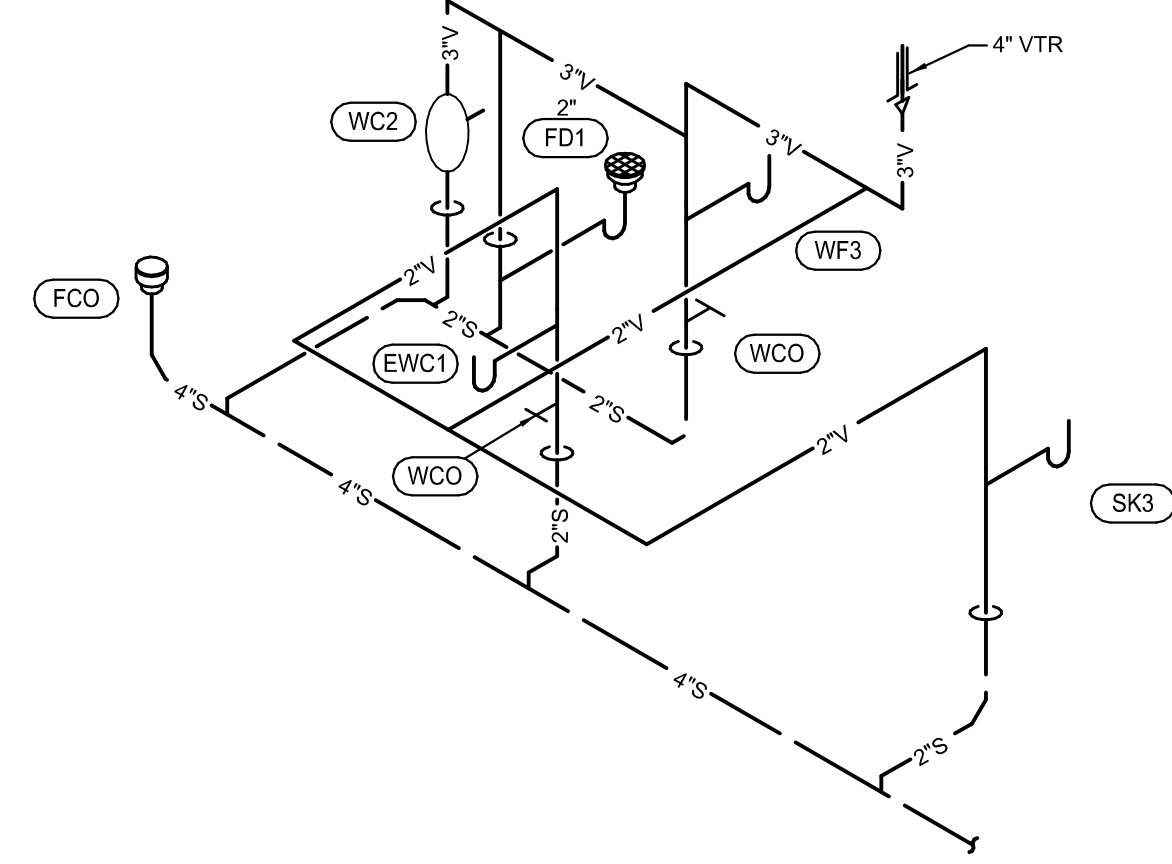
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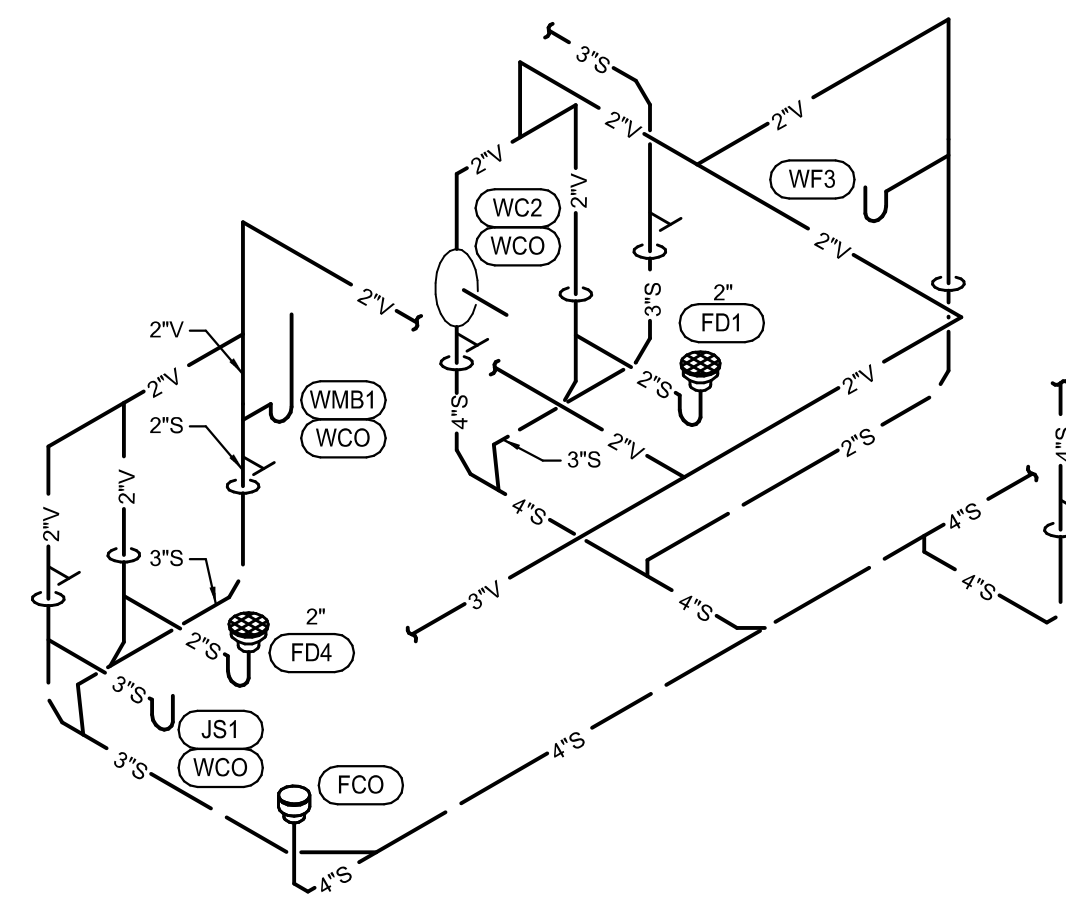
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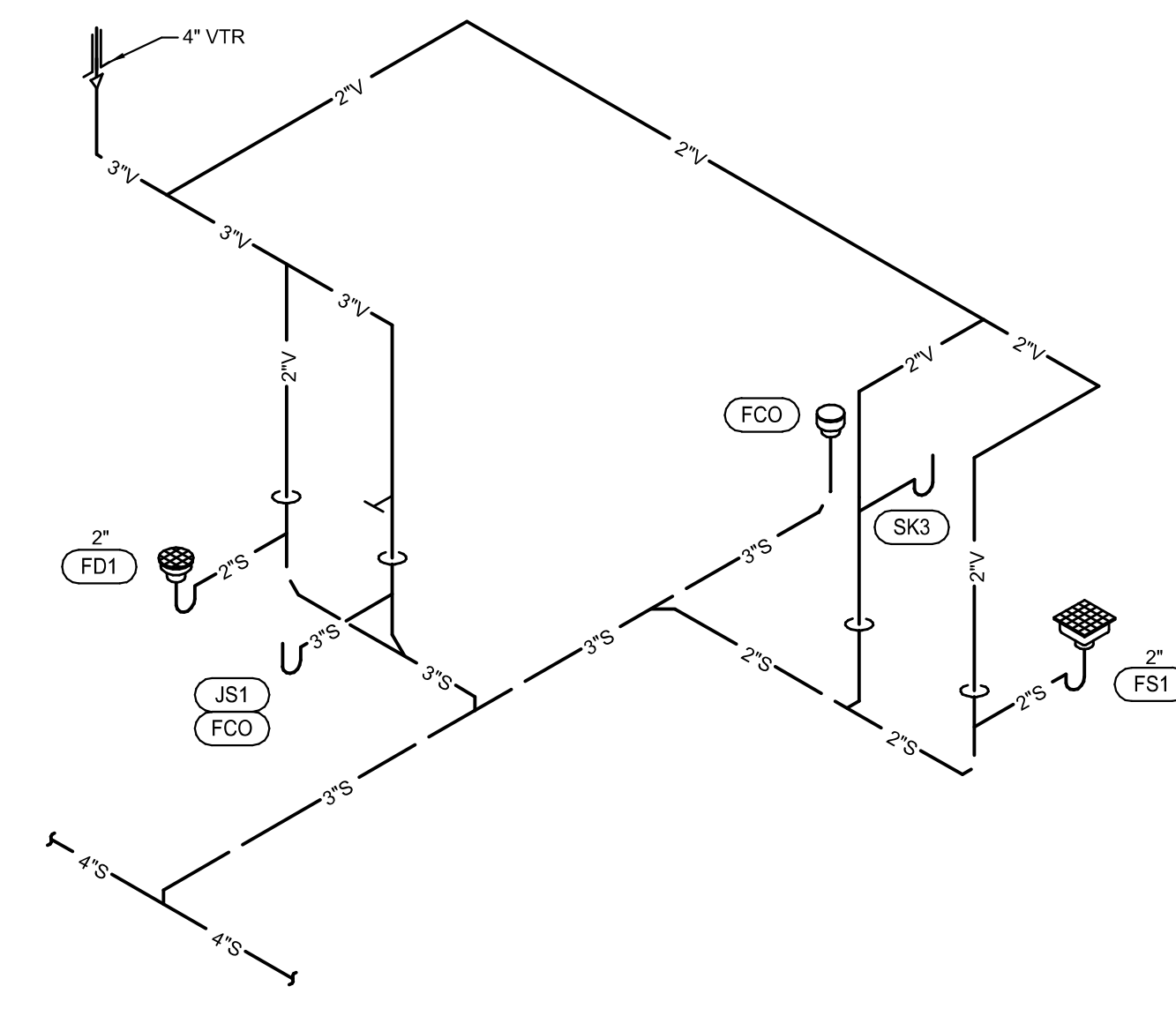
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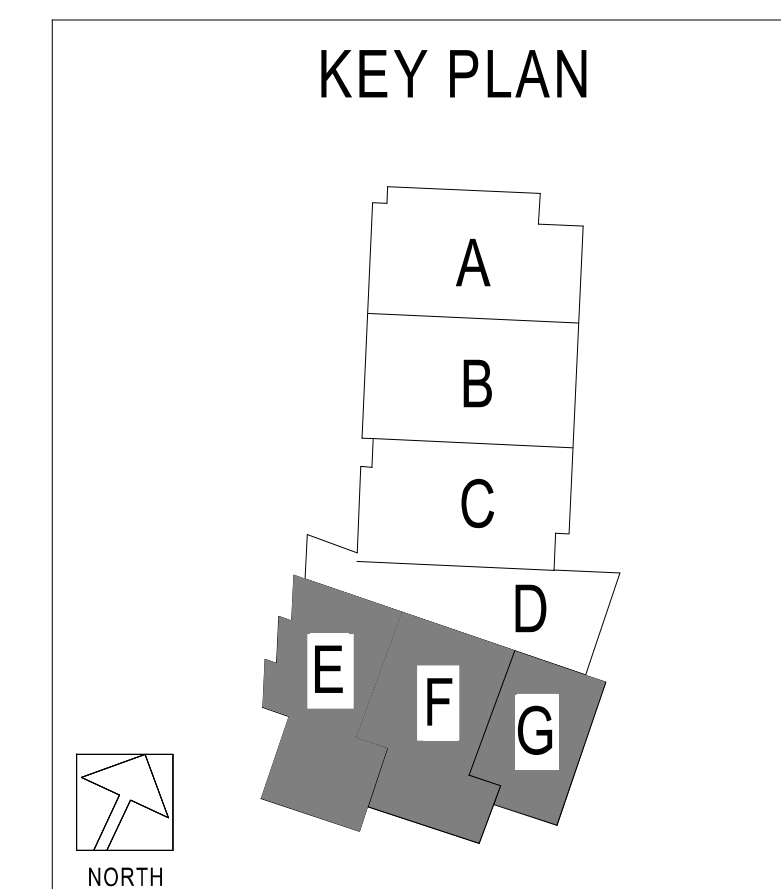
6 PLUMBING WASTE AND VENT RISER
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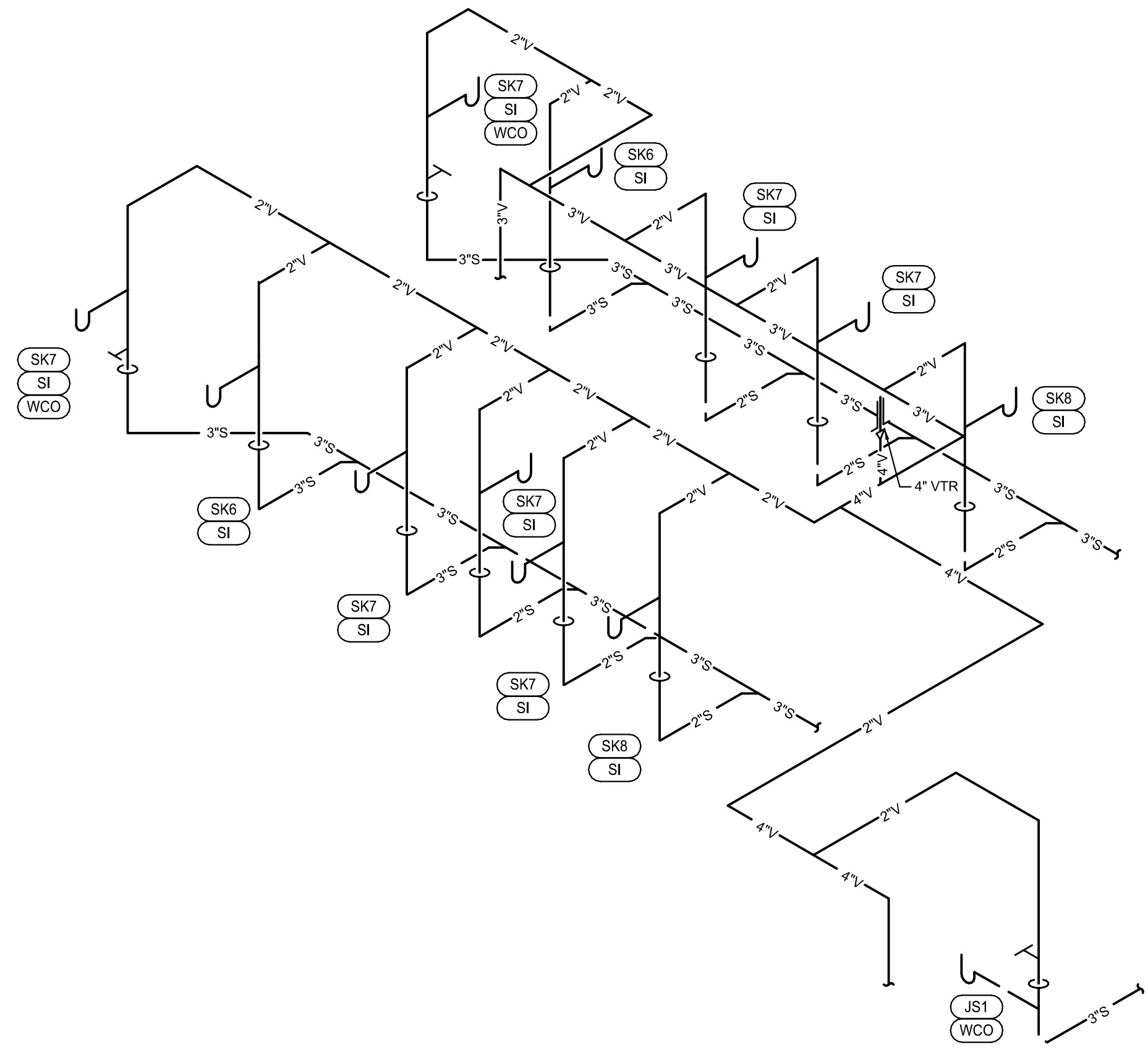


5 PLUMBING WASTE AND VENT RISER
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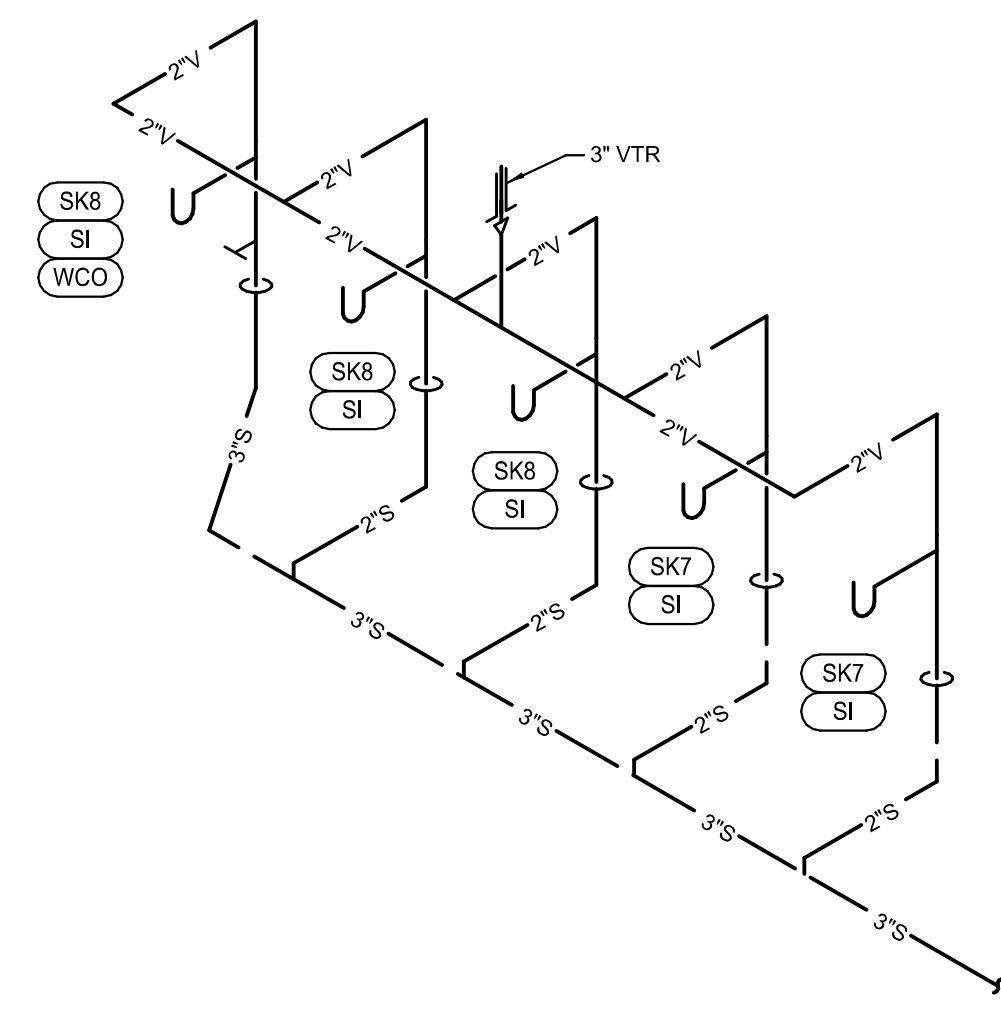


4 PLUMBING WASTE AND VENT RISER
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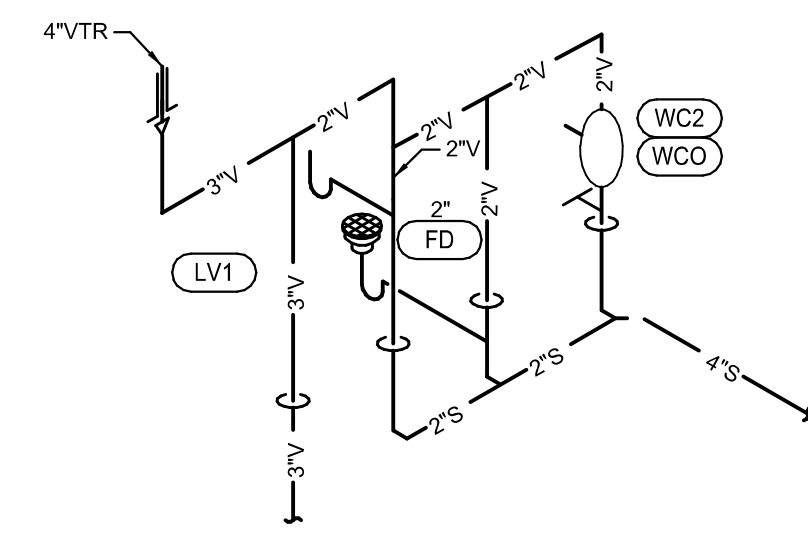




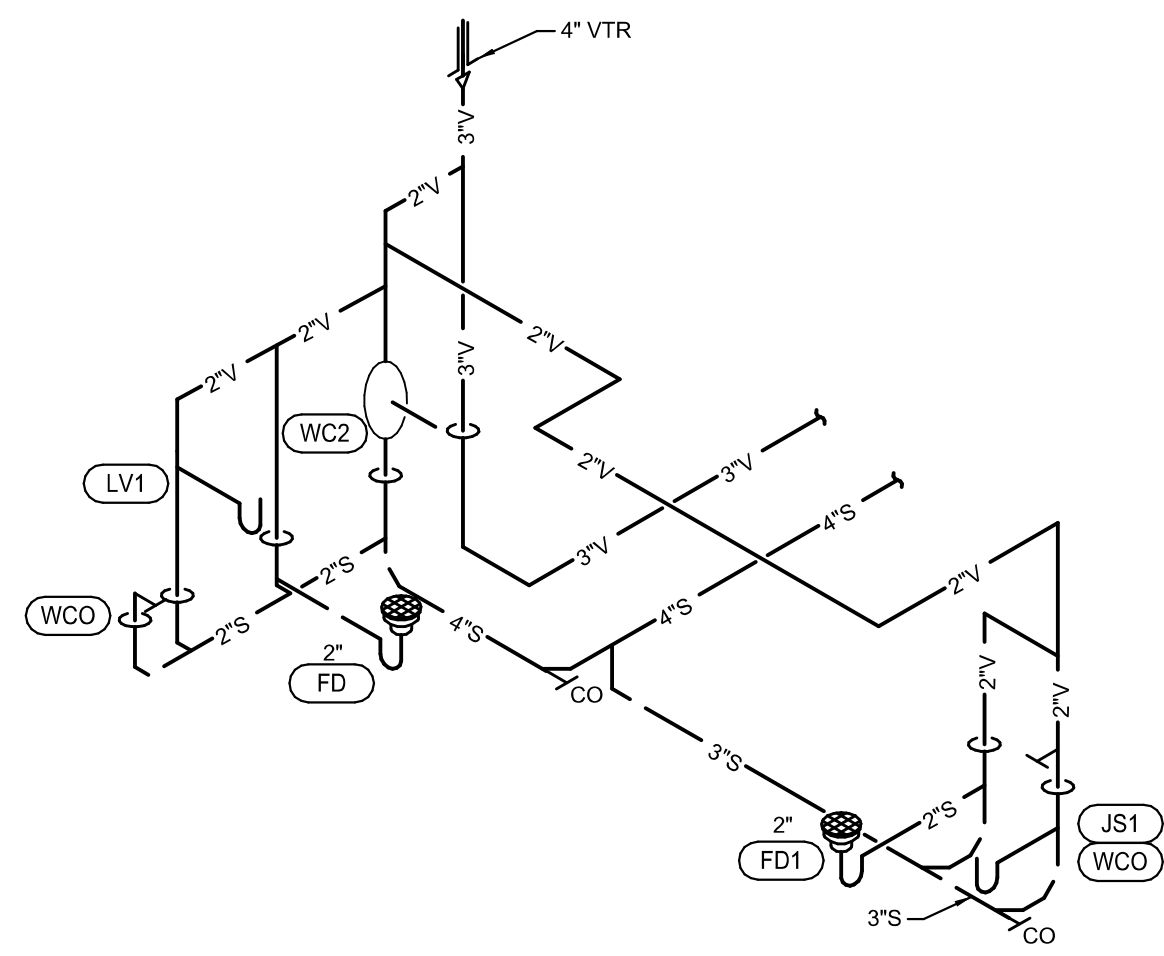
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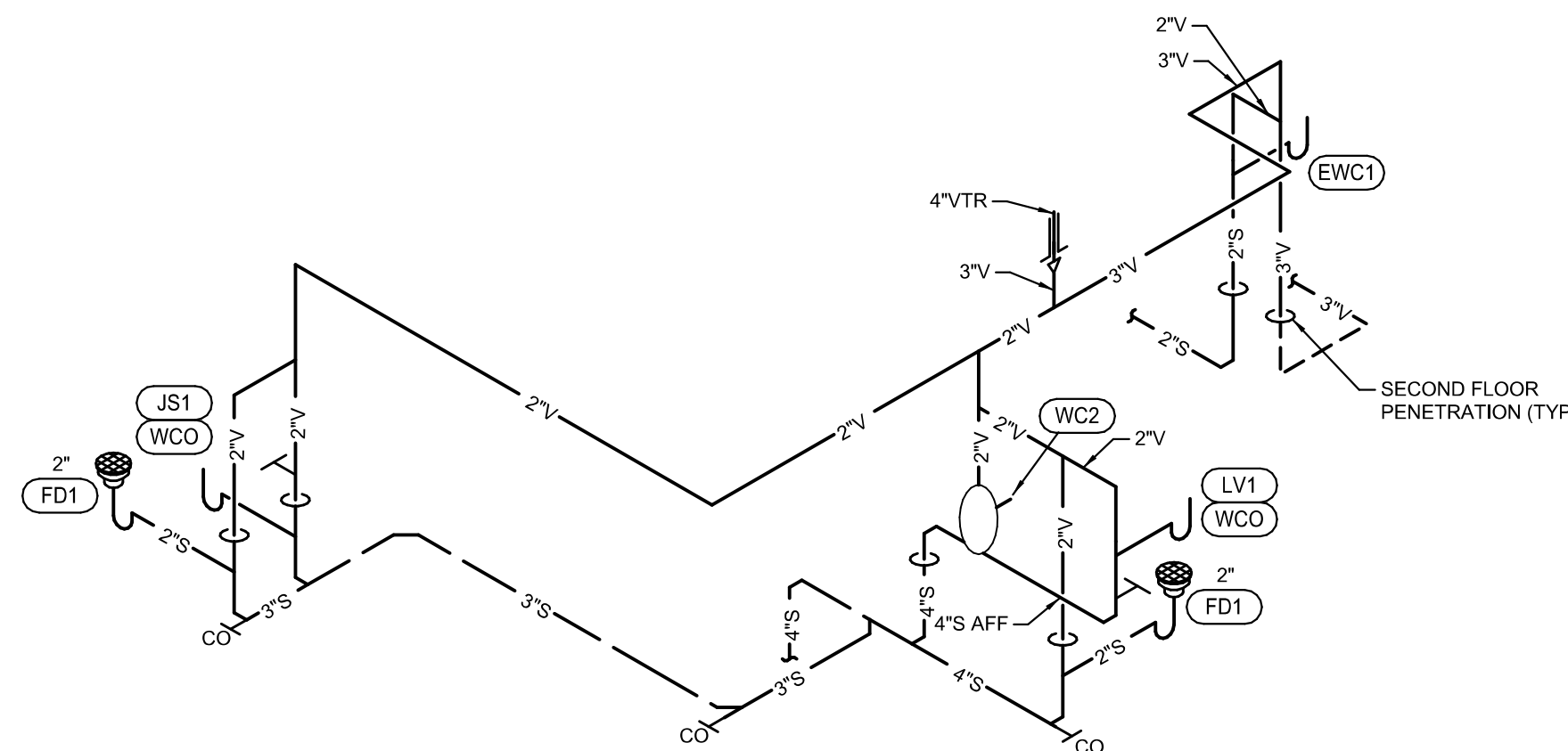
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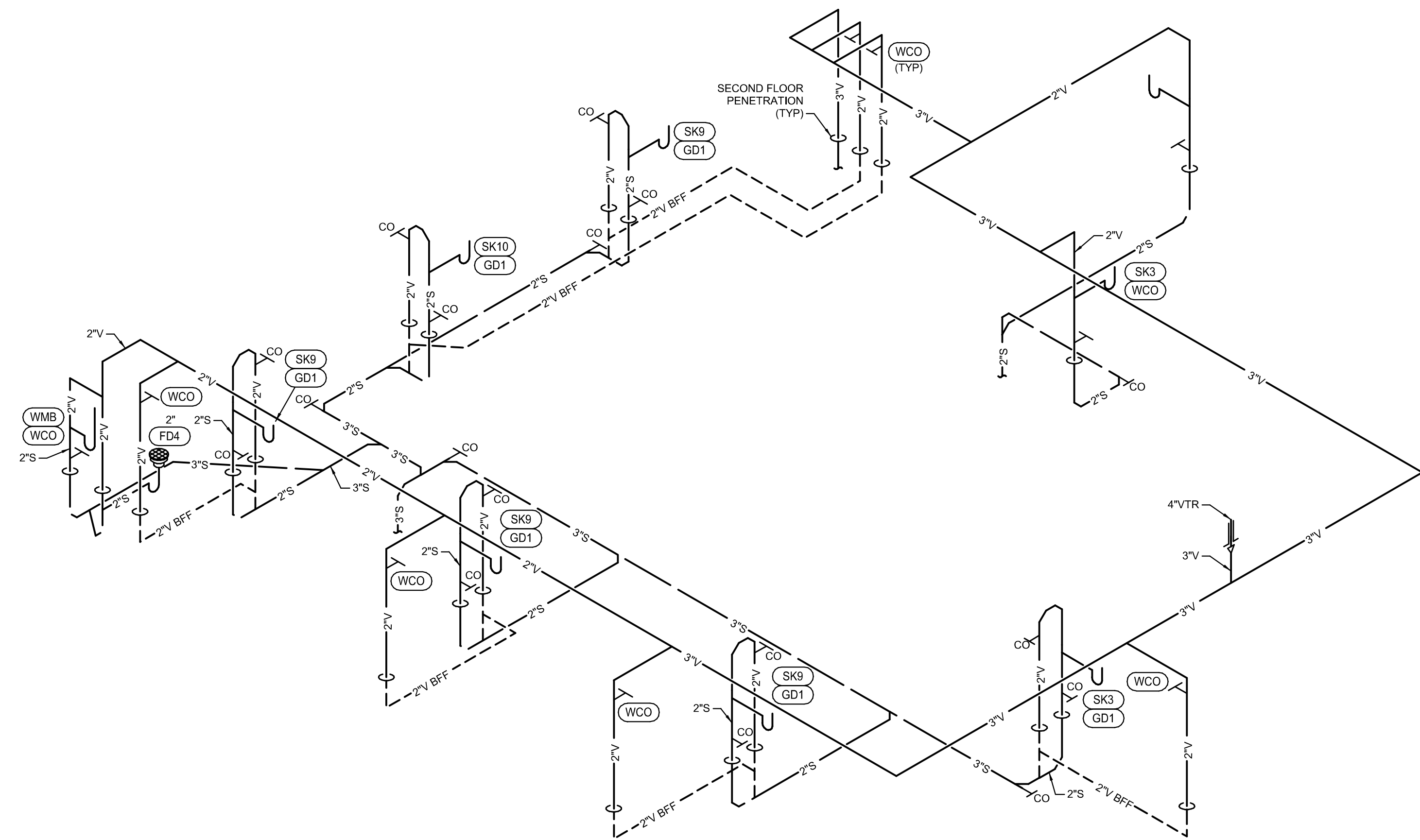
① PLUMBING WASTE AND VENT RISER
NTS



⑥ PLUMBING WASTE AND VENT RISER
NTS



⑤ PLUMBING WASTE AND VENT RISER
NTS



④ PLUMBING WASTE AND VENT RISER
NTS

