

PLUMBING GENERAL NOTES

- 1 ALL PLUMBING SYSTEMS SHALL BE INSTALLED AS PER SPECIFICATIONS AND GOVERNING CODES.
- 2 ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. CONTRACTOR SHALL NOT SCALE DRAWINGS. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE-VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH. THE CONTRACTOR SHALL SUBMIT A REQUEST FOR INFORMATION (RFI) IF INFORMATION CONFLICTS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND OTHER DRAWINGS FOR COMPLETE INFORMATION.
- 3 BY NECESSITY, THESE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS, THE SELECTION OF WHICH HAS IMPACTED THE DESIGNS OF OTHER TRADES (HVAC, ELECTRICAL, STRUCTURAL, ETC.). IF ALTERNATE MANUFACTURERS, FUEL SOURCES, SIZES, OR MODEL NUMBERS ARE SUBMITTED OR BID, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO COORDINATE ALL DIFFERENCES PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR CHANGES REQUIRED TO OTHER TRADES IF ALTERNATE EQUIPMENT IS BID OR INSTALLED AT THE CONTRACTORS OPTION.
- 4 EXCEPT WHERE MODIFIED BY SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS OR SPECIFICATIONS OR BOTH, CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION.
- 5 CONTRACTOR SHALL PAY ALL UTILITY FEES & CHARGES AS PART OF BASE BID IN THE CONTRACT.
- 6 THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THAT OF OTHER TRADES; i.e., ARCHITECTURAL, HVAC, ELECTRICAL, STRUCTURAL, FIRE PROTECTION AND CIVIL PRIOR TO CONSTRUCTION.
- 7 THE CONTRACTOR SHALL COORDINATE UTILITY LOCATIONS, SIZES AND INVERT ELEVATIONS PRIOR TO CONSTRUCTION; i.e., SANITARY SEWER, FIRE PROTECTION, DOMESTIC WATER AND NATURAL GAS. ALL SERVICES SHALL TERMINATE 5 FEET OUTSIDE THE BUILDING, EXCEPT WHERE SHOWN OTHERWISE. SEE SITE UTILITY DRAWINGS FOR CONTINUATION OF ALL SERVICE LINES.
- 8 PROVIDE ISOLATION VALVES AT EACH FIXTURE GROUP OR BATTERY OF FIXTURES IN THE DOMESTIC CW, HW, HWR AND GAS PIPING. VALVES SHALL BE EASILY ACCESSIBLE. WHERE HARD CEILINGS ARE LOCATED, VALVES SHALL BE ACCESSED THROUGH ACCESS PANELS. ACCESS PANELS SHALL BE COORDINATED WITH ARCHITECT PRIOR TO CONSTRUCTION.
- 9 PROVIDE STOP VALVES AT ALL PLUMBING FIXTURES ON BOTH HOT AND COLD WATER SUPPLY LINES. VALVES, ESCUTCHEONS, FITTINGS, ETC., SHALL BE CHROME PLATED AND INSTALLED TIGHT TO WALL. WHERE PIPING IS EXPOSED, CHROME PLATED PIPE SHALL BE USED.
- 10 ALL EXPOSED OR ACCESSIBLE P-TRAPS SHALL BE CHROME PLATED AND PROVIDED WITH BOTTOM CLEANOUT PLUGS.
- 11 SLOPE 2-1/2" AND SMALLER DRAIN WASTE AND VENT (DWV) LINES AT MIN. (2%) 1/4" FALL PER FT., 3" TO 6" DWV LINES AT MIN. (1%) 1/8" FALL PER FT. SANITARY SEWER AND WATER SHALL BE A MINIMUM OF 10' APART OR THE DOMESTIC WATER SERVICE SHALL BE 12" ABOVE THE TOP OF THE SEWER LINE, AT ITS HIGHEST POINT, IF PLACED IN SAME TRENCH.
- 12 PROVIDE ALL FITTINGS, TRANSITIONS, COUPLINGS, ADAPTERS, UNIONS, AND OTHER ACCESSORIES NEEDED TO COMPLETE CONNECTIONS AND PROPER OPERATIONS OF PLUMBING FIXTURES AND PLUMBING EQUIPMENT.
- 13 REFER TO SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS OF PLUMBING FIXTURES AND EQUIPMENT, AND PROPER APPLICATIONS OF SAME.
- 14 PROVIDE CLEANOUTS IN ALL SEWERS, WHETHER SHOWN OR NOT, AT INTERVALS NOT TO EXCEED 100 FEET, AT EACH CHANGE OF DIRECTION GREATER THAN 45°, AND ALL VERTICAL STACKS AT A HEIGHT OF 30' ABOVE FINISH FLOOR AT THE BASE OF EACH STACK.
- 15 WHERE WATER PRESSURES EXCEED 80 PSI. PROVIDE WATER PRESSURE REDUCING VALVES (PRV) CONFORMING TO ASSE 1003 WITH STRAINER IN WATER SUPPLY LINES, SETTING AT 80 PSI. SEE CODE AND MANUFACTURER INFORMATION FOR ACCEPTABLE PRESSURE REQUIREMENTS.
- 16 ALL PIPING PENETRATIONS OF THE RATED CEILING AND WALL MUST BE MADE WITH METAL PIPE OR UL LISTED APPROVED DEVICES. FIRE STOP ALL PIPE PENETRATIONS THRU RATED WALLS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS, RATINGS AND FIRE STOPPING DETAILS.
- 17 DO NOT ROUTE ANY PIPING OVER ELEC. ROOMS, COMPUTER ROOMS, OR ELEC. PANELS.
- 18 INSTALL AN AGA LISTED NATURAL GAS COCK, DIRT LEG AND UNION IMMEDIATELY UPSTREAM OF EQUIPMENT CONNECTIONS. AS NOTED ON DRAWINGS PROVIDE AN AGA LISTED VENT LIMITING GAS REGULATOR. GAS REGULATORS SHALL NOT BE INSTALLED IN AIR PLENUMS (SEE HVAC PLANS FOR AIR PLENUM LOCATIONS). PAINT ALL NATURAL GAS PIPING WITH TWO COATS OF OIL BASED YELLOW PAINT IN ALL LOCATIONS NOT SPECIFIED BY ARCHITECT.
- 19 ALL DOMESTIC WATER PIPING ROUTED IN AREAS SUBJECT TO FREEZING TEMPERATURES SHALL BE ROUTED BELOW INSULATION AND WITHIN THE HEATED ENVELOPE OF THE BUILDING. WHERE PIPING CAN NOT BE ROUTED BELOW INSULATION, PIPING SHALL HAVE 5 WATT/FT HEAT TRACING ATTACHED. SEE ARCHITECTURAL DRAWINGS FOR INSULATION PLACEMENT AND DETAILS. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR AND ENGINEER.
- 20 UNLESS OTHERWISE INDICATED, DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS. WHEN ROUTED IN EXTERIOR WALLS, CAREFULLY POSITION WATER PIPING ON THE HEATED SIDE (INTERIOR SIDE) OF THE WALL INSULATION.
- 21 MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKES, OPERABLE WINDOWS AND FLUES, PLUMBING VENTS AND GAS REGULATORS.
- 22 ALL CONDENSATE DRAIN, SEWER & VENT PIPING SHALL BE RODDED AND CLEANED AT END OF CONSTRUCTION. ALL TRAPS SHALL BE CLEANED AND PRIMED AT END OF CONSTRUCTION.
- 23 ALL PIPE DROPS FROM CEILING PLENUM TO FLOOR SHALL BE MADE IN FURROUTS AT COLUMNS, IN WEB OF BEAMS AT COLUMNS OR IN WALLS. PIPING SHALL BE CONCEALED UNLESS APPROVED BY ARCHITECT.
- 24 PROVIDE WATER HAMMER ARRESTORS IN FIXTURE BRANCHES WHERE QUICK CLOSING VALVES ARE INSTALLED; i.e., FLUSH VALVES, ICE MAKERS, DISHWASHERS, ETC.
- 25 BELOW SLAB WATER PIPE TO BE TYPE K SOFT DRAWN COPPER WITHOUT FITTINGS OR JOINTS. SLEEVE IN ENTIRETY WITH ARMAFLEX OR APPROPRIATE POLYETHYLENE SLEEVE MATERIAL.
- 26 PROVIDE APPROVED BACKFLOW PREVENTION OR ANTI-SIPHON DEVICES AT ALL FIXTURES THAT COULD CONTAMINATE THE POTABLE WATER SYSTEM.
- 27 INSULATE ALL WATER AND CONDENSATE, ABOVE FINISH FLOOR. SEE SPECIFICATIONS FOR THICKNESS SCHEDULE.
- 28 FLOOR DRAINS IN MECHANICAL ROOMS ARE SHOWN FOR GENERAL LOCATION ONLY. FLOOR DRAINS SHALL BE ACCESSIBLE AND SHALL BE VERIFIED WITH EQUIPMENT LAYOUT FOR INTERFERENCES.
- 29 AN APPROVED TRAP SEAL DEVICE CONFORMING TO ASSE 1072 SHALL BE INSTALLED AT ALL FLOOR AND HUB DRAINS. ALL DRAINS SHALL HAVE DEEP SEAL TRAPS, 4" DEEP SEAL MINIMUM. INSTALL TRAP GUARD DEVICES PER MANUFACTURER'S INSTRUCTIONS.
- 30 DOMESTIC WATER SERVICE PIPING AND FITTINGS; E.G., CHECK VALVES, RPZA, SHUT-OFF VALVES, STRAINERS, PRESSURE REGULATORS, ETC. SHALL COMPLY WITH NSF 61 CRITERIA. ALL CAST IRON EQUIPMENT IS TO BE INTERNALLY EPOXY COATED.

Project

AEROJET BUILDING 66B
CURE OVEN BUILDING
EAST CAMDEN,
ARKANSAS

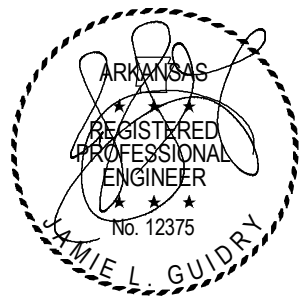
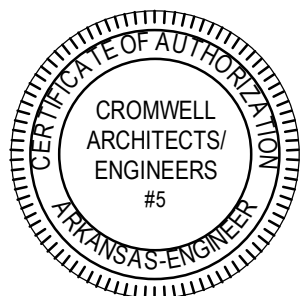
Design Phase

CONSTRUCTION DOCUMENTS

Revision

[illegible]

Stamp



07-31-2024

Notes

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Sheet Title

PLUMBING LEGEND AND NOTES

Sheet Number

P-001

ABBREVIATIONS			
AC	AIR COMPRESSOR	HS	HOSE STATION
ACU	AIR CONDITIONING UNIT	HT	HEIGHT
AD	AREA DRAIN	HTG	HEATING
AFC	ABOVE FINISH CEILING	HVAC	HEATING, VENTILATION, AIR COND.
AFF	ABOVE FINISH FLOOR	HW	HOT WATER
AFG	ABOVE FINISHED GRADE	HWG	HOT WATER GENERATOR
AHJ	AUTHORITY HAVING JURISDICTION	HWR	HOT WATER RETURN
APPROX	APPROXIMATE	HWST	HOT WATER STORAGE TANK
ARCH	ARCHITECT/ARCHITECTURAL	ID	INSIDE DIAMETER/DIMENSION
ARD	AUXILIARY ROOF DRAIN	KW	KILOWATTS
BFF	BELOW FINISH FLOOR	LAV	LAVATORY
BLDG	BUILDING	LF	LINEAR FEET
BTU	BRITISH THERMAL UNITS	LPG	LIQUID PETROLEUM GAS
BTUH	BRITISH THERMAL UNITS/HOUR	LWT	LEAVING WATER TEMPERATURE
CAP	CAPACITY	MAX	MAXIMUM
CB	CATCH BASIN	MBH	THOUSAND BTU/PER HOUR
CD	CONDENSATE DRAIN	MDL	MODEL
CFH	CUBIC FEET/HOUR	MECH	MECHANICAL
CFM	CUBIC FEET/MINUTE	MFR	MANUFACTURER
CI	CAST IRON	MH	MANHOLE
CLG	CEILING	MIN	MINIMUM
CO	CLEAN OUT	MISC	MISCELLANEOUS
COL	COLUMN	MTD	MOUNTED
CONC	CONCRETE	NA	NOT APPLICABLE
CONN	CONNECT	NFPA	NATIONAL FIRE PROTECTION ASSO.
CONST	CONSTRUCTION	NTS	NOT TO SCALE
CONT	CONTINUE	OA	OUTSIDE AIR
COTG	CLEAN OUT TO GRADE	OD	OUTSIDE DIAMETER/DIMENSION
CP	CIRCULATING PUMP	PD	PRESSURE DROP
CR	CONDENSATE RETURN	PLBG	PLUMBING
CW	COLD WATER	PRESS	PRESSURE
DCOTG	DOUBLE CLEANOUT TO GRADE	PRV	PRESSURE REDUCING VALVE
DD	DESICCANT DEHUMIDIFIER	PSI	POUNDS PER SQUARE INCH
DEG(°)	DEGREE	RA	RETURN AIR
DEMO	DEMOLITION	RD	ROOF DRAIN
DF	DRINKING FOUNTAIN	REF	REFERENCE
DIA	DIAMETER	REQD	REQUIRED
DS	DOWN SPOUT	REV	REVISION, REVISED
DTL	DETAIL	RM	ROOM
EFF	EFFICIENT	RPM	REVOLUTIONS PER MINUTE
ELEC	ELECTRICAL	SC	STEAM CONDENSATE
ELEV	ELEVATION	SCH	SCHEDULE
EQ	EQUAL	SECT	SECTION
EQUIP	EQUIPMENT	SK	SINK
EW	ELECTRIC WATER HEATER	SP	STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE	SPEC	SPECIFICATION(S)
EX, EXT	EXISTING	SS	SANITARY SEWER
EXP	EXPANSION	ST	STEAM
FCO	FLOOR CLEANOUT	STL	STEEL
FD	FLOOR DRAIN	SUCT	SUCTION
FL	FLOW LINE	TDH	TOTAL DYNAMIC HEAD
FLEX	FLEXIBLE CONNECTION	TEMP	TEMPERATURE
FLR	FLOOR	TH	TOTAL HEAD
FPM	FEET PER MINUTE	TMV	THERMOSTATIC MIXING VALVE
FPRH	FREEZE PROOF ROOF HYDRANT	TWMV	THREE WAY MODULATING VALVE
FPWH	FREEZE PROOF WALL HYDRANT	TYP	TYPICAL
FS	FLOOR SINK	UL	UNDERWRITERS LABORATORY
G	GAS	UR	URINAL
GA	GAUGE	V	VENT
GAL	GALLON	VEL	VELOCITY
GALV	GALVANIZED	VERT	VERTICAL
GI	GREASE INTERCEPTOR	VLV	VALVE
GPH	GALLONS PER HOUR	VOL	VOLUME
GPM	GALLONS PER MINUTE	VTR	VENT THROUGH ROOF
GT	GREASE TRAP	WC	WATER CLOSET
GWH	GAS WATER HEATER	WCO	WALL CLEANOUT
HB	HOSE BIBB	WP	WORKING PRESSURE
HP	HORSE POWER	WT	WEIGHT
HRWH	HEAT RECLAIM WATER HEATER	WTR	WATER

PIPING LEGEND	
	(E) EXISTING PIPE TAG
	(D) DEMOLISHED PIPE TAG
	CW DOMESTIC COLD WATER
	HW HOT WATER 120°F
	HWR HOT WATER 120°F RECIRC.
	G NATURAL GAS
	CD CONDENSATE DRAIN
	SPD PUMP DISCHARGE
	SS SANITARY SEWER
	V SANITARY VENT
	SD STORM DRAIN
	ASD STORM DRAIN OVERFLOW / AUX
PRESSURE PIPE SYMBOLS	
	PIPE TEE
	PIPE DROP
	PIPE ELBOW
	PIPE CAP
	PIPE RISE
GRAVITY PIPE SYMBOLS	
	PIPE RISE
	PIPE CAP
	PIPE WYE 8TH TEE
	PIPE TEE
	PIPE DROP
	PIPE CROSS
	PIPE PLUG
PLUMBING TAGS	
PIPE TAG	
	INVERT: -3' - 5" APPROX. INVERT ELEVATION
	6" SS (10 FU) SIZE, SYSTEM, FU FLOW
	SS SYSTEM ABBREVIATION
FIXTURE TAG	
	4" FS-9 OUTLET SIZE AND FIXTURE IDENTITY
	FS-9 FIXTURE IDENTITY
	HYD-2 3 CWFU IDENTITY AND FIXTURE UNIT
	WSB-1 3 WFU IDENTITY AND WFU FIXTURE UNIT
PIPE ACCESSORIES	
	3-WAY MOTORIZED CONTROL VALVE
	3-WAY MIXING VALVE
	BALANCING VALVE
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	ELBOW VALVE
	GATE VALVE
	GLOBE VALVE
	MOTOR CONTROL VALVE
	PRESSURE REDUCING VALVE
	PLUG VALVE
	SOLENOID VALVE
	THREE-WAY VALVE
	STRAINER-WYE
	STRAINER-WYE WITH BLOWOFF VALVE
PLUMBING PHASING	
	NEW CONSTRUCTION PLUMBING EQUIPMENT/ FIXTURES (TYPICAL TAG FOR ALL NEW CONSTRUCTION)
	EXISTING PLUMBING EQUIPMENT/ FIXTURES (TYPICAL TAG FOR ALL EXISTING)
	PLUMBING EQUIPMENT/FIXTURES FOR DEMOLITION (TYPICAL TAG FOR ALL DEMOLITION)
PLUMBING SHEET SET NOTE	
* NOTE *	
ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THE CONTAINED REFERENCE DRAWINGS.	

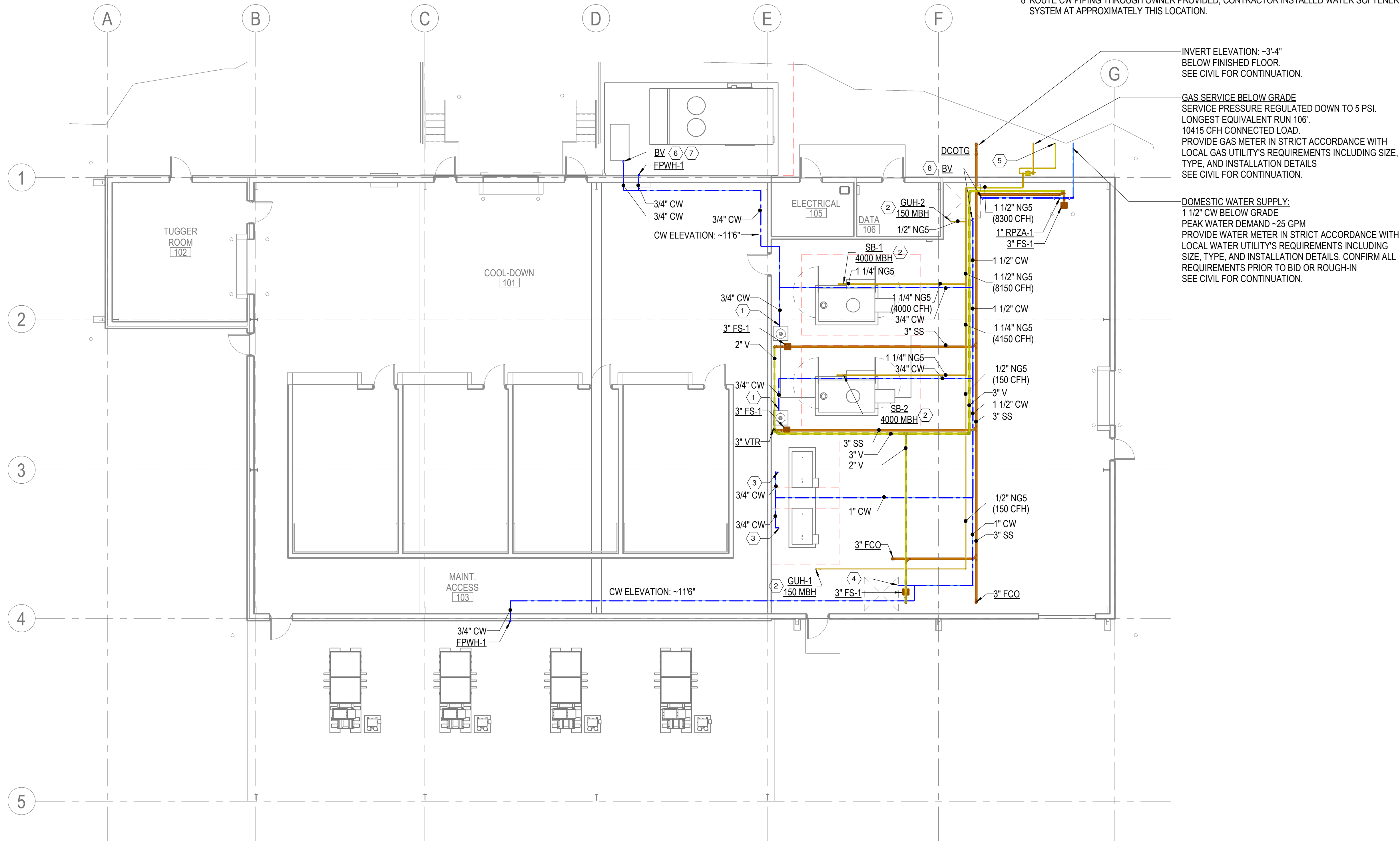
SEISMIC DESIGN CRITERIA	
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GENERAL NOTES

- 1 REFER TO SHEET P-001 FOR LEGEND AND NOTES.
- 2 ALL CW PIPING IS TO BE IDENTIFIED AS NON-POTABLE WATER (NPW)

KEYED NOTES

- 1 3/4" CW TO BLOW DOWN SEPARATOR AT APPROXIMATELY THIS LOCATION.
- 2 CONNECT GAS PIPING TO MECHANICAL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS. PROVIDE ISOLATION VALVE, DIRT LEG, AND PRESSURE REGULATOR AT POINT OF CONNECTION. REGULATE TO 11" WC. ROUTE REGULATOR VENTS TO EXTERIOR AS REQUIRED.
- 3 3/4" CW TO BOILER FEEDWATER SYSTEM AT APPROXIMATELY THIS LOCATION.
- 4 3/4" CW TO CHEMICAL TREATMENT AREA AT APPROXIMATELY THIS LOCATION.
- 5 1" NG BELOW GRADE SERVING GENERATOR ON SITE (2115 CFH). SEE CIVIL FOR CONTINUATION. PROVIDE ISOLATION VALVE, DIRT LEG, AND REGULATE TO 11" WC AT POINT OF CONNECTION TO EQUIPMENT. CONNECT PER MANUFACTURER'S INSTRUCTIONS.
- 6 3/4" CW WITH ISOLATION BALL VALVE TO OUTDOOR HUMIDIFIER AT APPROXIMATELY THIS LOCATION. COORDINATE WITH MANUFACTURER'S CUT SHEET FOR FINAL CONNECTION LOCATION AND REQUIREMENTS.
- 7 PROVIDE EXTERIOR RATED INSULATION AND 5 WATT/FT, SELF REGULATING, 120V SINGLE PHASE, HEAT TRACE CABLE ON ALL EXPOSED CW PIPING.
- 8 ROUTE CW PIPING THROUGH OWNER PROVIDED, CONTRACTOR INSTALLED WATER SOFTENER SYSTEM AT APPROXIMATELY THIS LOCATION.



INVERT ELEVATION: ~3'-4"
BELOW FINISHED FLOOR.
SEE CIVIL FOR CONTINUATION.

GAS SERVICE BELOW GRADE
SERVICE PRESSURE REGULATED DOWN TO 5 PSI.
LONGEST EQUIVALENT RUN 106'.
10415 CFH CONNECTED LOAD.
PROVIDE GAS METER IN STRICT ACCORDANCE WITH
LOCAL GAS UTILITY'S REQUIREMENTS INCLUDING SIZE,
TYPE, AND INSTALLATION DETAILS
SEE CIVIL FOR CONTINUATION.

DOMESTIC WATER SUPPLY:
1 1/2" CW BELOW GRADE
PEAK WATER DEMAND ~25 GPM
PROVIDE WATER METER IN STRICT ACCORDANCE WITH
LOCAL WATER UTILITY'S REQUIREMENTS INCLUDING
SIZE, TYPE, AND INSTALLATION DETAILS. CONFIRM ALL
REQUIREMENTS PRIOR TO BID OR ROUGH-IN
SEE CIVIL FOR CONTINUATION.

AEROJET BUILDING 66B
CURE OVEN BUILDING
EAST CAMDEN,
ARKANSAS

Project

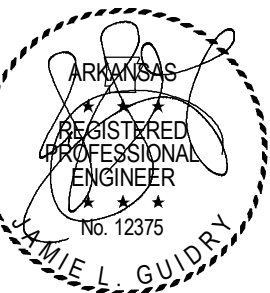
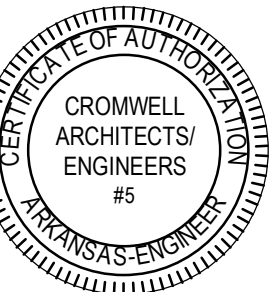
Design Phase

CONSTRUCTION
DOCUMENTS

Revisions

No.	Date	Description

Stamp



07-31-2024

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Sheet Title

PLUMBING PLAN

Sheet Number

P-101

NORTH



Project

AEROJET BUILDING 66B
CURE OVEN BUILDING
EAST CAMDEN,
ARKANSAS

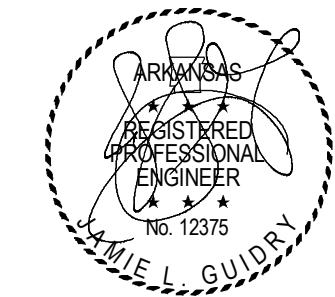
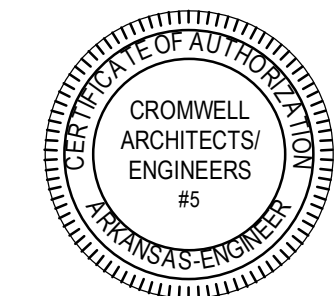
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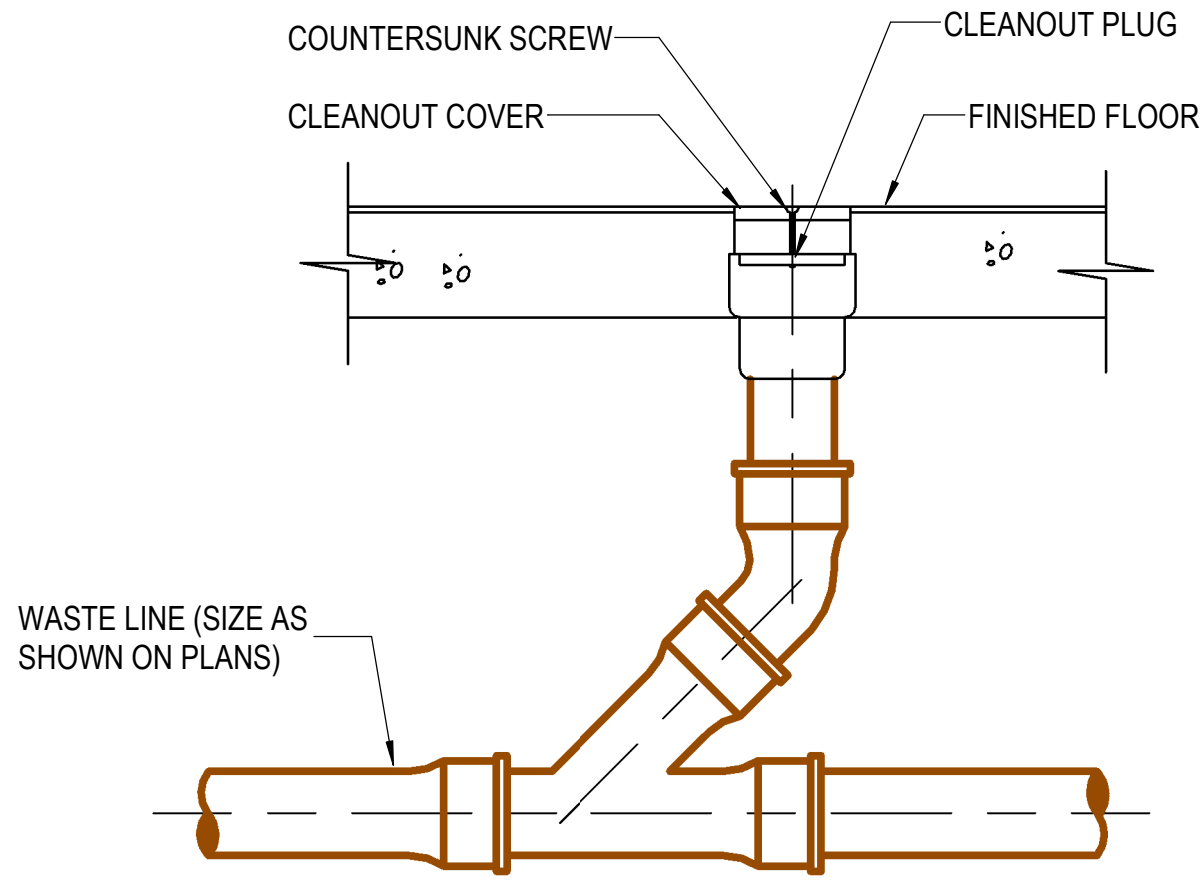
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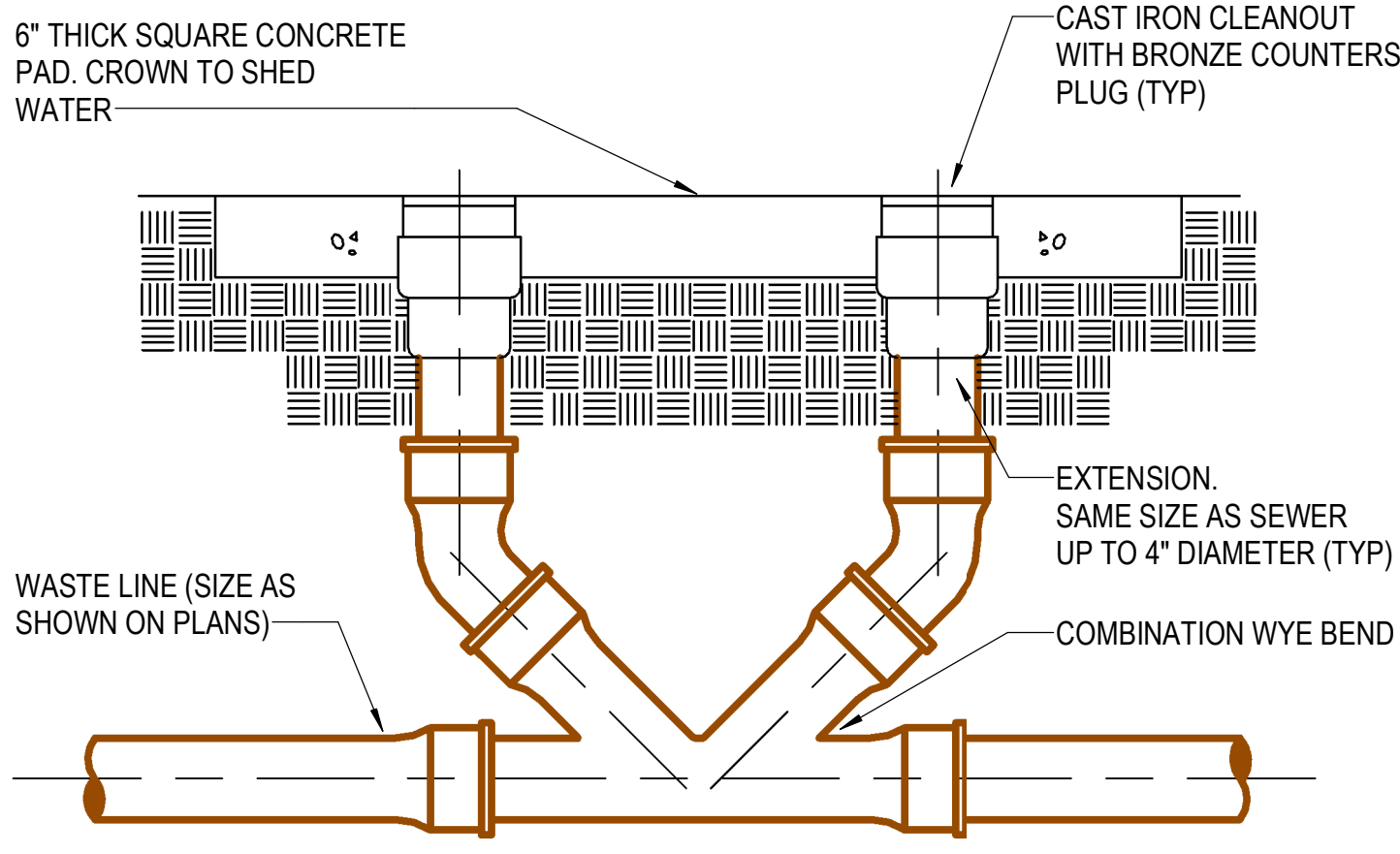
PLUMBING DETAILS

Sheet Number

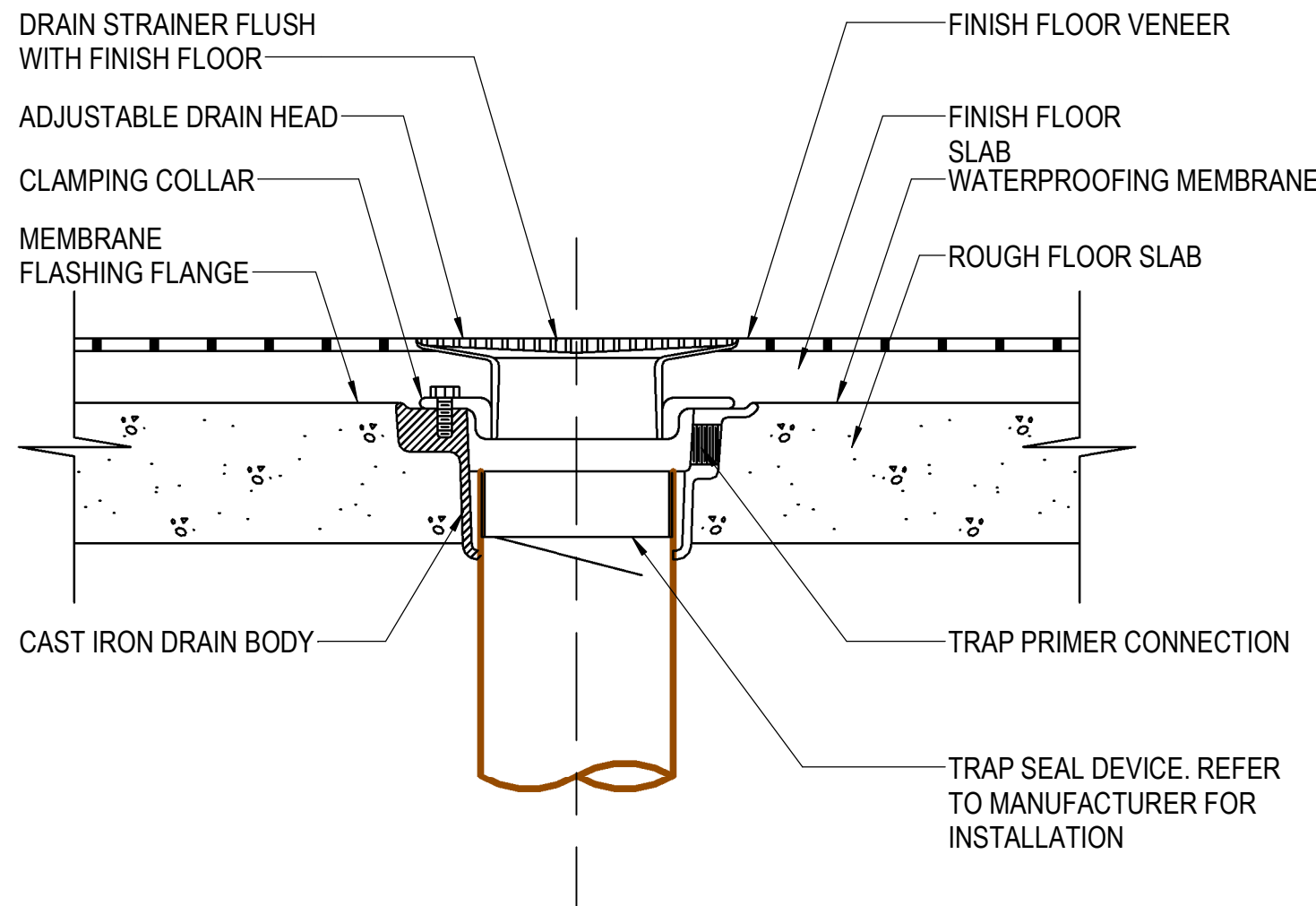
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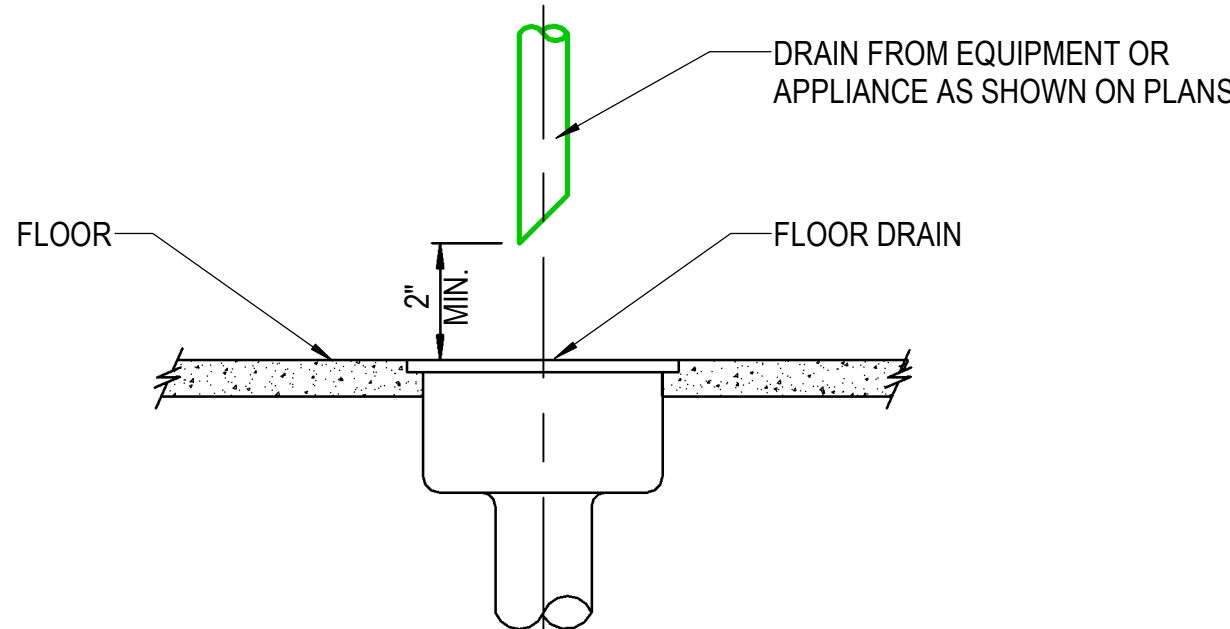
A FLOOR CLEANOUT
NOTE: SEE SPECIFICATIONS FOR MATERIALS



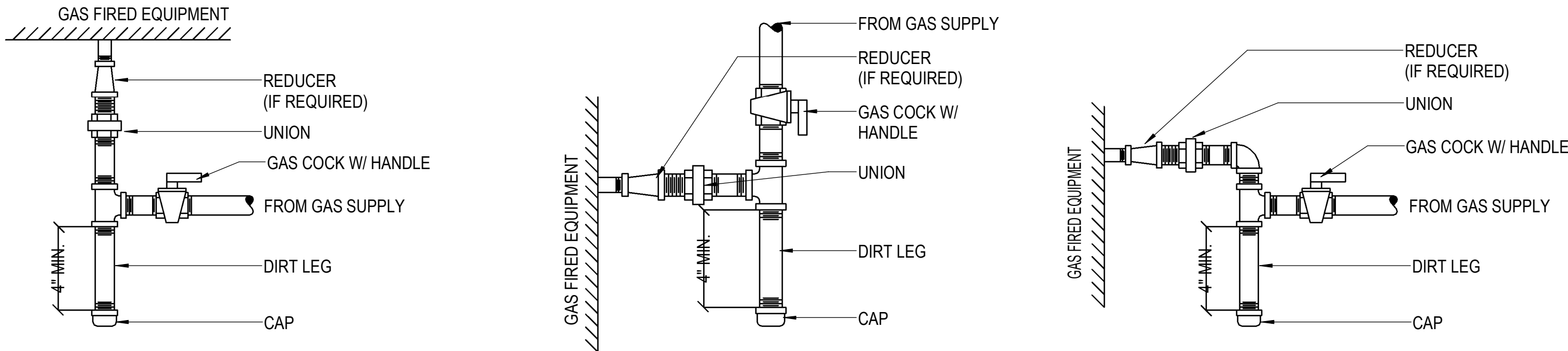
B DOUBLE CLEANOUT-TO-GRADE
NOTE: SEE SPECIFICATIONS FOR MATERIALS



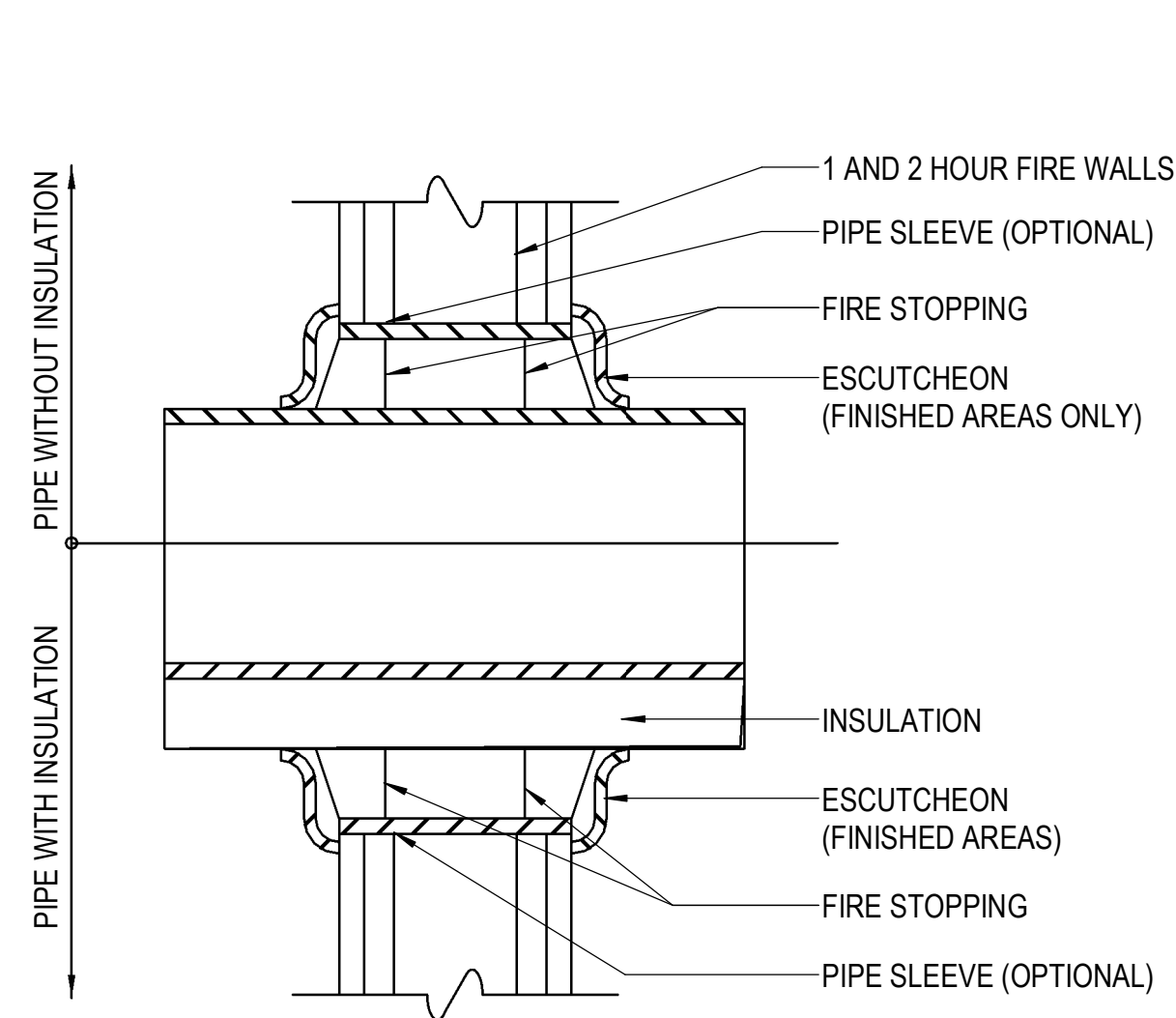
2 TRAP SEAL DEVICE INSTALLATION
NOT TO SCALE



3 INDIRECT WASTE DRAIN
NOT TO SCALE

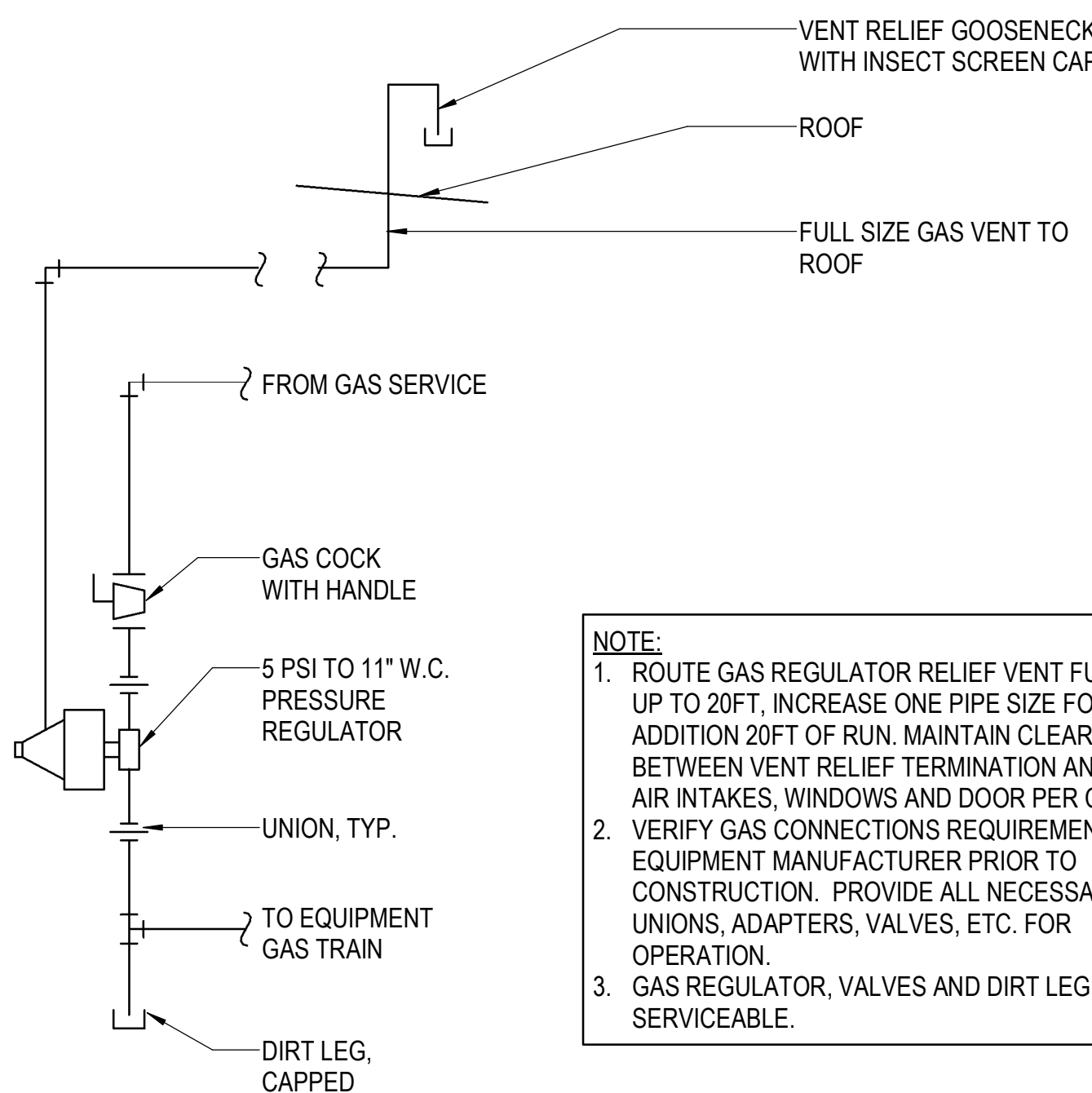


4 TYPICAL GAS PIPING CONNECTIONS
NOT TO SCALE



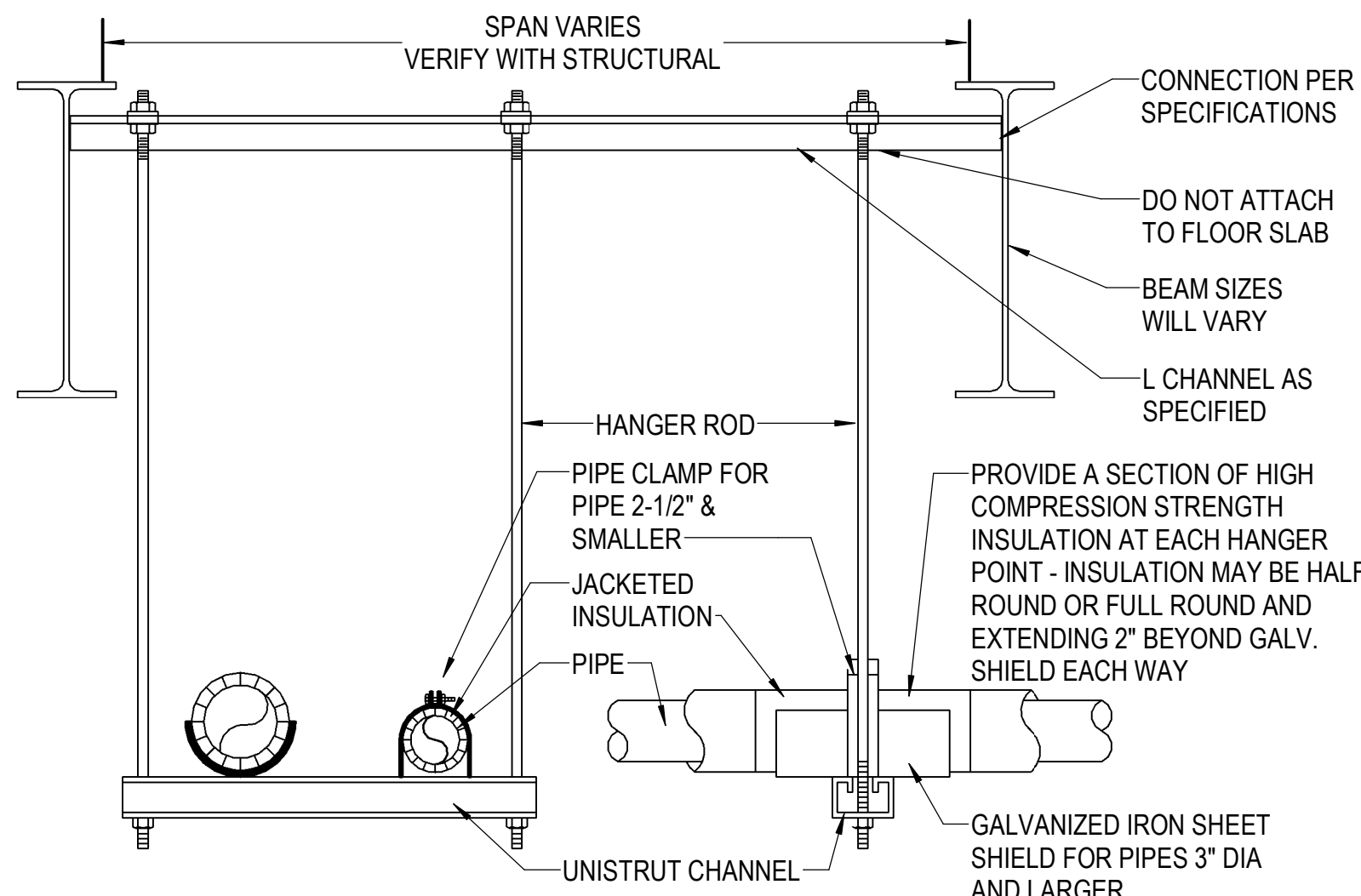
- NOTE:
1. FIRE STOPPING MATERIAL SHALL COMPLY WITH SECTION 07 84 00 OF THE SPECIFICATIONS.
 2. THIS DETAIL REPRESENTS ONE MANUFACTURER'S RECOMMENDATION FOR A WALL TYPE. THE CONTRACTOR SHALL CONSULT THE FIRE STOPPING MATERIALS MANUFACTURER FOR SPECIFIC INFORMATION AND SPECIFIC INSTALLATION INSTRUCTIONS FOR THE WALLS AND PARTITIONS APPLICABLE TO THIS PROJECT.

5 INTERIOR PIPE THRU FIRE RATED WALL
NOT TO SCALE



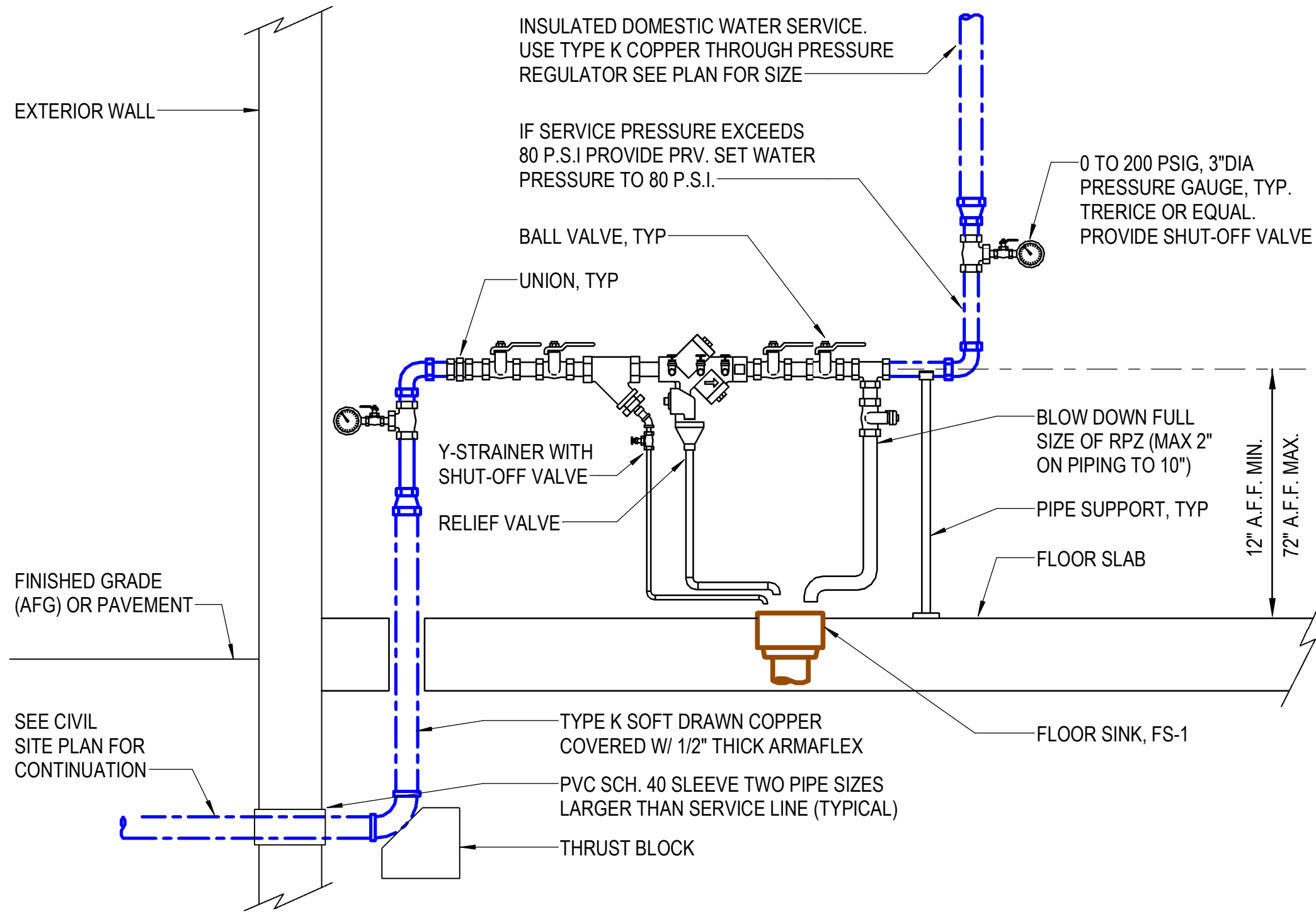
- NOTE:
1. ROUTE GAS REGULATOR RELIEF VENT FULL SIZE UP TO 20FT, INCREASE ONE PIPE SIZE FOR EACH ADDITION 20FT OF RUN. MAINTAIN CLEARANCE BETWEEN VENT RELIEF TERMINATION AND FRESH AIR INTAKES, WINDOWS AND DOOR PER CODE.
 2. VERIFY GAS CONNECTIONS REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO CONSTRUCTION. PROVIDE ALL NECESSARY UNIONS, ADAPTERS, VALVES, ETC. FOR OPERATION.
 3. GAS REGULATOR, VALVES AND DIRT LEG SHALL BE SERVICEABLE.

6 GAS REGULATOR VENTING
NOT TO SCALE



- NOTES:
1. INSULATION TO BE CONTINUOUS THROUGH HANGERS. DO NOT BREAK INSULATION AT SUPPORTS, DO NOT INSULATE AROUND HANGERS.
 2. INSULATION JACKET TO BE CONTINUOUS THROUGH PIPE SUPPORT COMPONENTS.
 3. USE CLEVIS HANGERS FOR SINGLE PIPE RUNS, USE TRAPEZE HANGERS TO GROUP AS MUCH PIPING AS POSSIBLE PER HANGER.

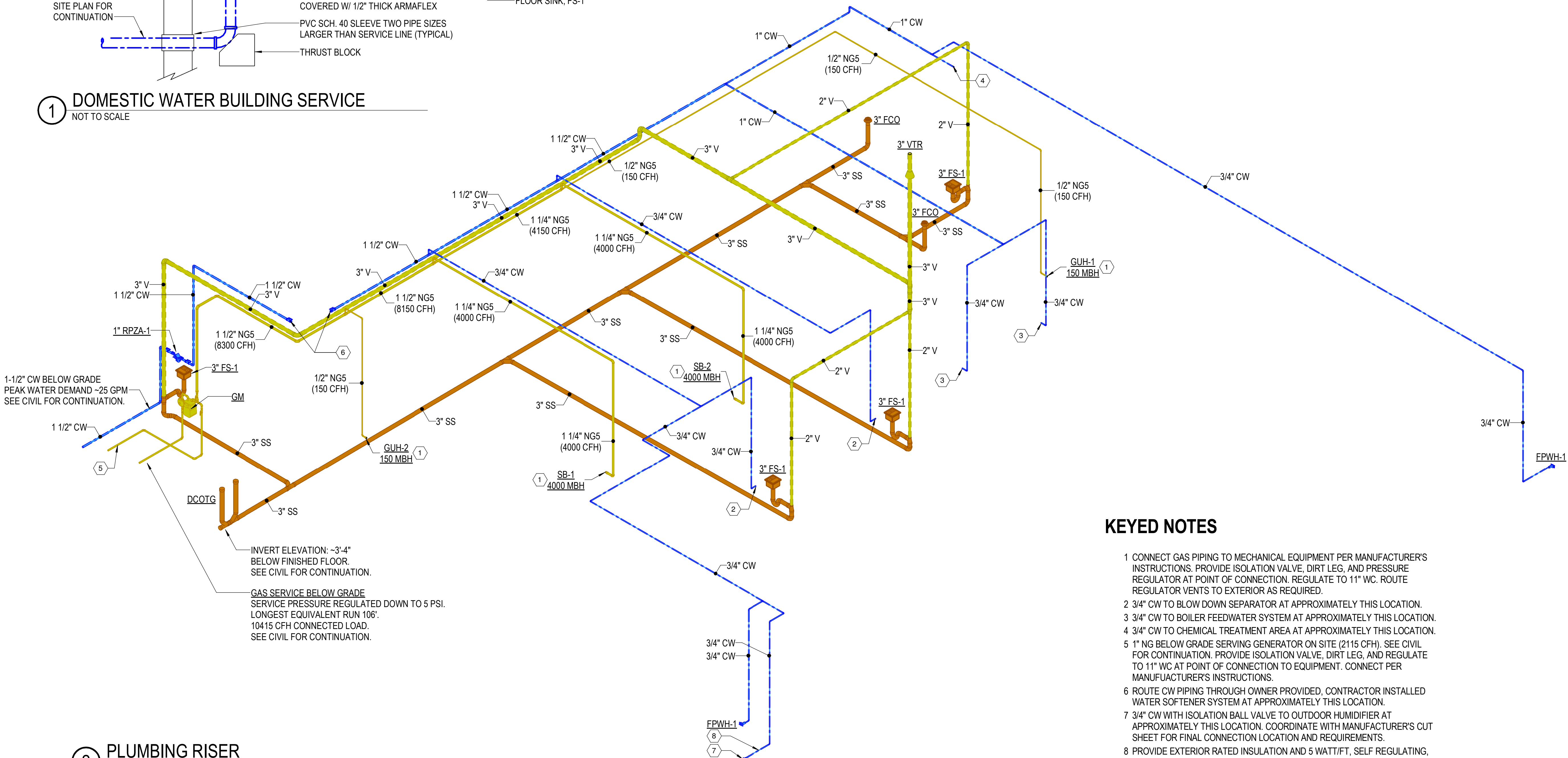
7 TRAPEZE PIPE HANGER
NOT TO SCALE



1 DOMESTIC WATER BUILDING SERVICE
NOT TO SCALE

PLUMBING FIXTURE									
ID	BASIS OF DESIGN		COLD	HOT	WASTE	INDIRECT	VENT	TRAP	SPECIFICATION
	MANUFACTURER & MODEL	ACCESSORIES							
FPWH-1	WOODFORD #B67	PROVIDE FULL PORT ISOLATION BALL VALVE FOR FIXTURE,	3/4"	---	---	---	---	---	FREEZEPROOF WALL HYDRANT - ENCLOSED IN BOX, SIZE FOR WALL THICKNESS+4", RED BRASS VALVE BODY, 3/8" SOLID BRASS OPERATING ROD, HARDENED STAINLESS STEEL STEM, ONE PIECE VALVE PLUNGER, COPPER CASTING TUBES, DRAIN PORT UNDER NOZZLE, 3/4" HOSE CONNECTION W/ HIGH FLOW DOUBLE CHECK BACKFLOW PREVENTER, ADJUSTABLE WALL CLAMP
FS-1	JR SMITH #3100Y		---	---	SEE PLAN	---	2"	SEE PLAN	FLOOR SINK - 10"x10"x6"D, MEDIUM DUTY, SQUARE TOP ACID RESISTANT COATED CAST IRON W/ FLANGE AND SEEPAGE HOLES, BOTTOM ALUMINUM DOME STRAINER, NICKEL BRONZE RIM W/ SECURED GRATE,

PLUMBING ACCESSORY			
ID	BASIS OF DESIGN	UTILITY CONNECTION	SPECIFICATION
	MANUFACTURER & MODEL		
RPZA-1	FEBCO #825YA	1"CW	REDUCED PRESSURE ZONE ASSEMBLY - 13-1/3"x8-1/2"x8", 1" ASSEMBLY, VERTICAL UP FLOW IN/HORIZONTAL FLOW OUT, MAINLINE VALVE & RELIEF VALVE BODY SHALL BE BRONZE, CHECK VALVE MOVING MEMBERS SHALL BE CENTER STEM GUIDED, RELIEF VALVE SHALL HAVE REMOVABLE SEAT RING, ALL SEAT DISCS SHALL BE REVERSIBLE, INCLUDES TWO INDEPENDENTLY OPERATING, SPRING LOADED, "Y" PATTERN CHECK VALVES, AND ONE HYDRAULICALLY DEPENDENT DIFFERENTIAL RELIEF VALVE, INCLUDE WYE-STRAINER ON VERTICAL INLET, MAX WORKING PRESSURE 175 PSI, MAX TEMPERATURE RANGE 32F-140F, 11 PSI HEAD LOSS @25 GPM, ASSE 1013 CERTIFIED, ANSI/AWWA C511 APPROVED
FCO	WADE #6000-1 SERIES	SAME SIZE AS LINE, MAX 4"	FLOOR CLEANOUT - SAME SIZE AS LINE, MAX. 4", HEAVY DUTY CAST IRON, FERRULE, THREADED ADJUSTABLE HOUSING, INTEGRAL CLAMPING COLLAR, ABS PLUG, 6-3/4"DIA ROUND SCORIATED SECURE TOP WITH SATIN NICKEL-BRONZE FINISH
DCOTG	WADE #6000-12 SERIES	SAME SIZE AS LINE, MAX 4"	CLEANOUT-TO-GRADE/DOUBLE-CLEANOUT-TO-GRADE - SAME SIZE AS LINE, MAX. 4 INCH, HEAVY DUTY CAST IRON, FERRULE, THREADED ADJUSTABLE HOUSING, INTEGRAL CLAMPING COLLAR, ABS PLUG, 7-1/8 INCH SQUARE HEAVY DUTY DUCTILE IRON TOP



KEYED NOTES

- CONNECT GAS PIPING TO MECHANICAL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS. PROVIDE ISOLATION VALVE, DIRT LEG, AND PRESSURE REGULATOR AT POINT OF CONNECTION. REGULATE TO 11" WC. ROUTE REGULATOR VENTS TO EXTERIOR AS REQUIRED.
- 3/4" CW TO BLOW DOWN SEPARATOR AT APPROXIMATELY THIS LOCATION.
- 3/4" CW TO BOILER FEEDWATER SYSTEM AT APPROXIMATELY THIS LOCATION.
- 3/4" CW TO CHEMICAL TREATMENT AREA AT APPROXIMATELY THIS LOCATION.
- 1" NG BELOW GRADE SERVING GENERATOR ON SITE (2115 CFH). SEE CIVIL FOR CONTINUATION. PROVIDE ISOLATION VALVE, DIRT LEG, AND REGULATE TO 11" WC AT POINT OF CONNECTION TO EQUIPMENT. CONNECT PER MANUFACTURER'S INSTRUCTIONS.
- ROUTE CW PIPING THROUGH OWNER PROVIDED, CONTRACTOR INSTALLED WATER SOFTENER SYSTEM AT APPROXIMATELY THIS LOCATION.
- 3/4" CW WITH ISOLATION BALL VALVE TO OUTDOOR HUMIDIFIER AT APPROXIMATELY THIS LOCATION. COORDINATE WITH MANUFACTURER'S CUT SHEET FOR FINAL CONNECTION LOCATION AND REQUIREMENTS.
- PROVIDE EXTERIOR RATED INSULATION AND 5 WATT/FT, SELF REGULATING, 120V SINGLE PHASE, HEAT TRACE CABLE ON ALL EXPOSED CW PIPING.

2 PLUMBING RISER
NOT TO SCALE

Project

AEROJET BUILDING 66B
CURE OVEN BUILDING
EAST CAMDEN,
ARKANSAS

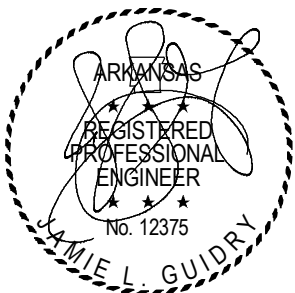
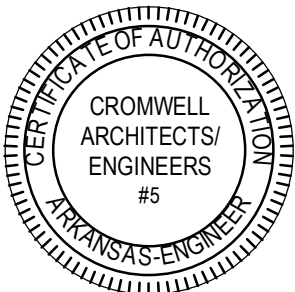
Design Phase

CONSTRUCTION
DOCUMENTS

Revisions

No.	Date	Description

Stamp



07-31-2024

Notes

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Sheet Title

PLUMBING RISER,
SCHEDULES, &
DETAILS

Sheet Number

P-901