

BOILER SCHEDULE																
TAG NO.	NOMINAL HORSEPOWER	STEAM CAPACITY	MAX OPERATING PRESSURE	FUEL	VENT STACK.	FEEDWATER PIPE	GAS PIPE CONN. SIZE	MIN. GAS PRESSURE	STEAM OUTLET	FORCED DRAFT FAN MOTOR	ELEC.	GAS EMISSION LEVEL	OIL EMISSION LEVEL	APPR. WEIGHT	CONCRETE PAD DIMENSIONS (LXWXH)	NOTES
B-1	300	10,350 LBS/HR	150 PSIG	NATURAL GAS/ NO. 2 OIL	24"	2.0"	3"	2 PSIG	6"	10 HP	460/3/60	9 PPM	90 PPM	34,705	248"X96"X6"	1, 2, 3, 4, 5
B-2	350	12,075 LBS/HR	150 PSIG	NATURAL GAS/ NO. 2 OIL	24"	2.0"	3"	2 PSIG	6"	30 HP	460/3/60	30 PPM	90 PPM	44,765	253"X96"X6"	RELOCATED EXISTING CLEAVER BROOKS BOILER 1, 2, 3, 4, 5

1. PROVIDE SERVICES FOR FACTORY STARTUP OF EQUIPMENT.  
2. SYSTEMS ARE TO BE PROVIDED WITH FACTORY INSTALLED AND WIRED GAS TRAIN.  
3. BOILER COMBUSTION CONTROLS ARE TO BE FACTORY INSTALLED AND WIRED.  
4. PROVIDE SOLENOID VENT VALVE.  
5. CONNECT BOILER CONTROL PANEL TO FIRE ALARM SYSTEM. WIRE FOR GAS TRAIN VALVES TO CLOSE UPON FIRE ALARM SYSTEM ACTIVATION. COORDINATE WITH CLIENT AGENCY FA VENDOR -VECTOR FIRE & SECURITY- [CONTACT: JIM LORAH jlorah@vectorsecurity.com]

DEARATOR/FEEDWATER STORAGE TANK SCHEDULE												
TAG NO.	SYSTEM INFORMATION				RECIEVER TANK		FEEDWATER PUMP DATA					CONCRETE PAD DIMENSIONS (LXWXH)
	BOILER QTY.	BOILER HP	TOTAL HP	TOTAL LBS/HR	TOTAL GALLONS	MAKE-UP VALVE	PUMP QTY.	HEAD PSI	FLOW GPM	NPSH FT.	MOTOR HP	ELEC
BFU-1	2	300/350	650	22,425	1,000	1-1/2"	2	30	90	3.9	3	460/3/60

1. SELECTION IS BASED ON 2 BOILERS AT FULL LOAD AND 47°F. COLD WATER @ 15% MAKE-UP.  
2. THE DEARATOR SHALL BE A COMPLETE PACKAGED UNIT FACTORY ASSEMBLED AND TESTED WITH TANK & SKID DISASSEMBLED FOR SHIPPING AND FIELD INSTALLATION.  
3. TANK SHALL BE FACTORY INSULATED AND SHIPPED WITH PROTECTION FROM DAMAGE DURING FACTORY DISASSEMBLY, SHIPPING, RIGGING AND FIELD ASSEMBLY.  
4. FURNISH WITH SINGLE POINT ELECTRICAL POWER CONNECTION, FACTORY PREWIRED LEVEL CONTROLS, AND CONTROL INTERFACE WITH THE BOILERS AND THE SURGE/CONDENSATE TRANSFER UNIT VIA FIELD WIRING TO IDENTIFIED TERMINALS IN EACH RESPECTIVE ELECTRICAL PANEL.  
INCLUDING TANK, CONTROLS, TRIM, STAND AND PUMPS

CONDENSATE RETURN TANK SCHEDULE													
TAG NO.	SYSTEM INFORMATION				RECIEVER TANK	CONDENSATE PUMP DATA					CONCRETE PAD DIMENSIONS (LXWXH)	NOTES	
	BOILER QTY.	BOILER HP	TOTAL HP	TOTAL LBS/HR	TOTAL GALLONS	PUMP QTY.	HEAD PSI	FLOW GPM	NPSH FT.	MOTOR HP			ELEC
CRU-1	2	300/350	650	22,425	270	2	30	90	3.9	3	460/3/60	54"x42"x6"	1, 2, 3, 4

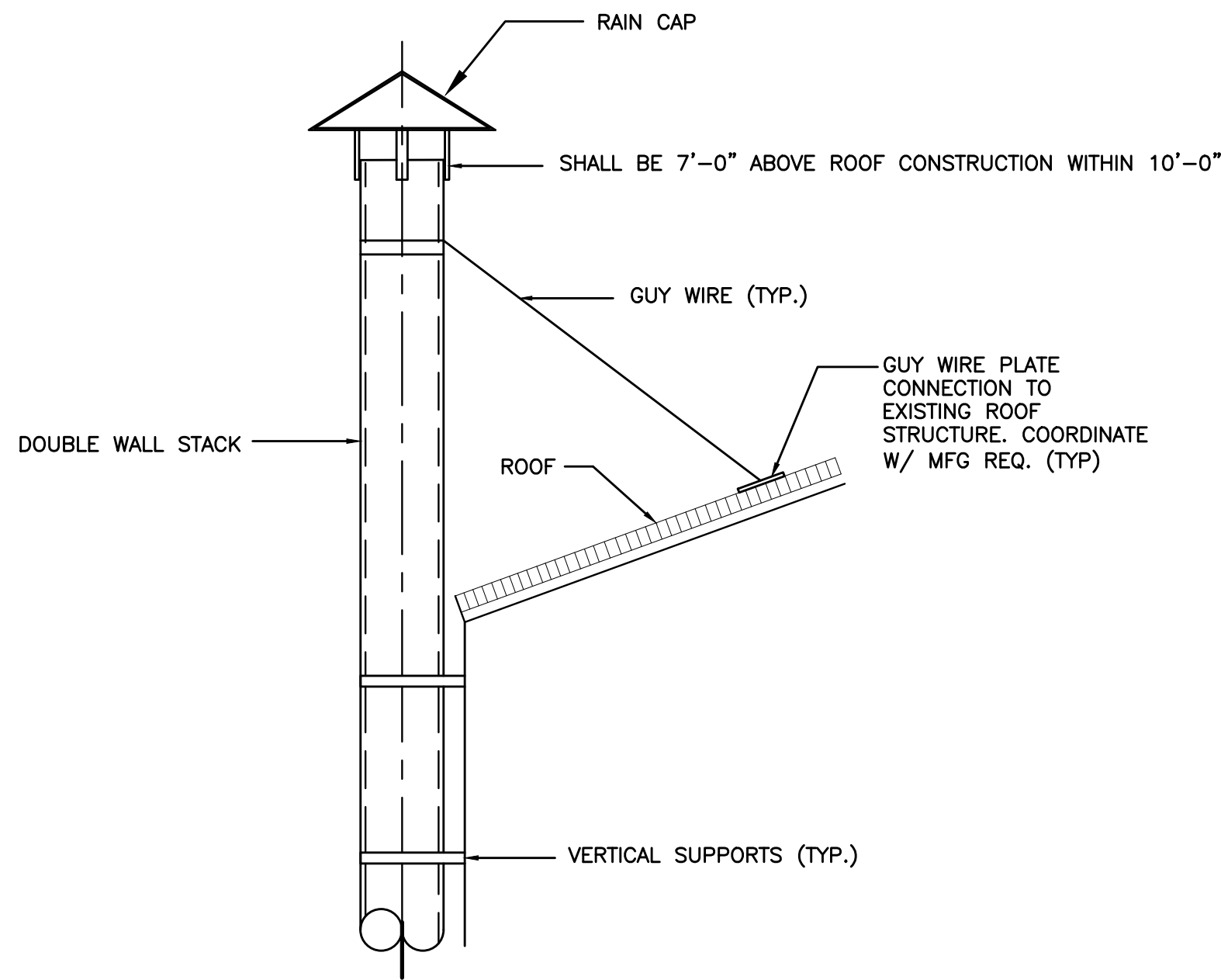
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4. FURNISH WITH SINGLE POINT ELECTRICAL POWER CONNECTION, FACTORY PREWIRED LEVEL CONTROLS, AND CONTROL INTERFACE WITH THE BOILERS AND THE SURGE/CONDENSATE TRANSFER UNIT VIA FIELD WIRING TO IDENTIFIED TERMINALS IN EACH RESPECTIVE ELECTRICAL PANEL.  
INCLUDING TANK, CONTROLS, TRIM, STAND AND PUMPS

SUPPLY FAN SCHEDULE											
TAG	LOCATION	MANUFACTURER	MODEL NO.	TYPE	VOLUME (CFM)	E.S.P. (IN. W.G.)	FAN RPM	HP	ELEC (V/PH/HZ)	WEIGHT (LBS)	CONCRETE PAD DIMENSIONS (LXWXH)
SF-1	BASEMENT	GREENHECK	USF-22	UPBLAST	4,400	0.75	886	1 1/2	460/3/60	320	54"X38"X4"
SF-2	BASEMENT	GREENHECK	USF-22	UPBLAST	5,000	0.75	886	1 1/2	460/3/60	320	54"X38"X4"

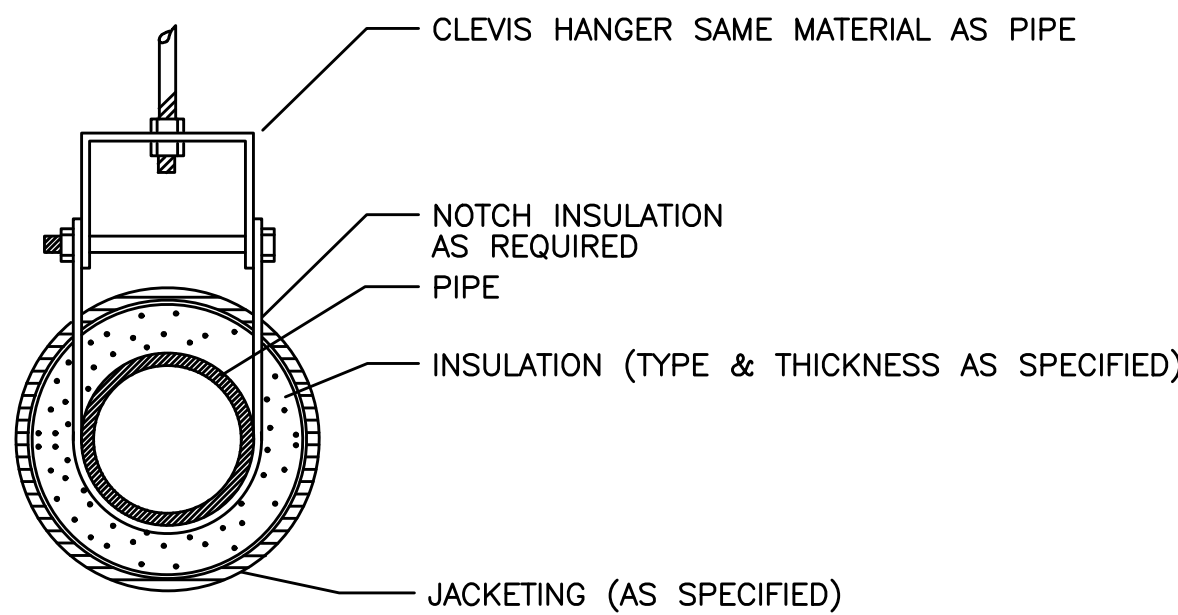
1. PROVIDE WITH FACTORY WIRED VFD CONTROLLER BOX WITH VG HOA INTERFACE.

AIR CONDITIONING UNIT SCHEDULE											
TAG	LOCATION	MANUFACTURER	MODEL NO. INDOOR	MODEL NO. OUTDOOR	TYPE	CAPACITY BTU	SEER	CFM (MAX)	MCA	ELEC (V/PH/HZ)	WEIGHT (LBS)
AC-1/CU-1	OFFICE	MITSUBISHI	PKA-A12HA	PUY-A12NHA	WALL MOUNT	12,000	15.20	425	13	208/1/60	90

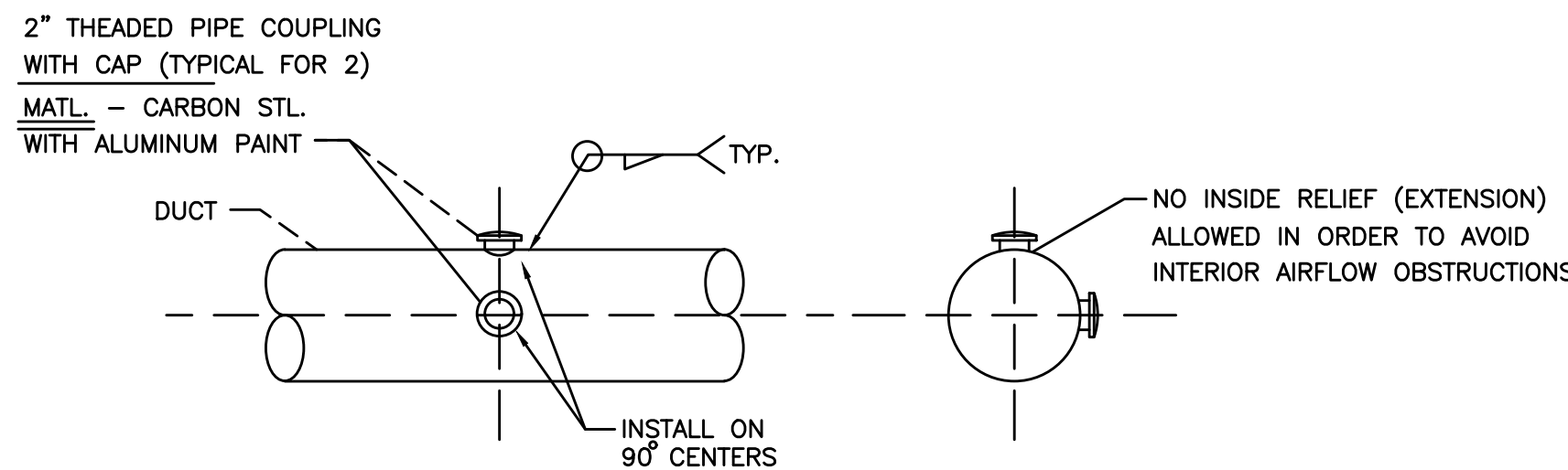
1. PROVIDE MA REMOTE CONTROLLER  
2. PROVIDE DISCONNECT SWITCH  
3. EQUIPMENT LISTED IS BASIS OF DESIGN. EQUAL EQUIPMENT MAY BE SUBMITTED TO PROFESSIONAL FOR REVIEW.  
4. PROVIDE WITH CAPABILITY TO COOL DOWN TO 23 DEGREES OUTDOOR AIR TEMP.



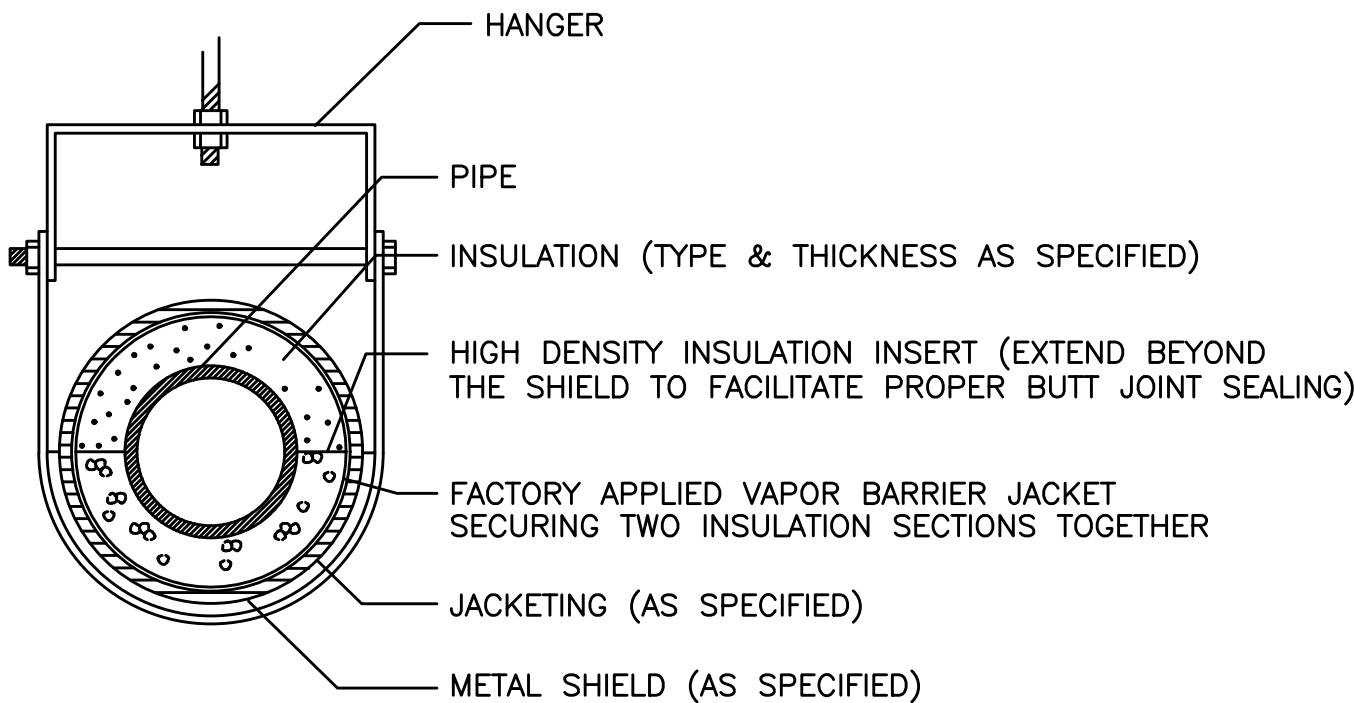
5 FLUE STACK DETAIL  
H-14 SCALE: NOT TO SCALE



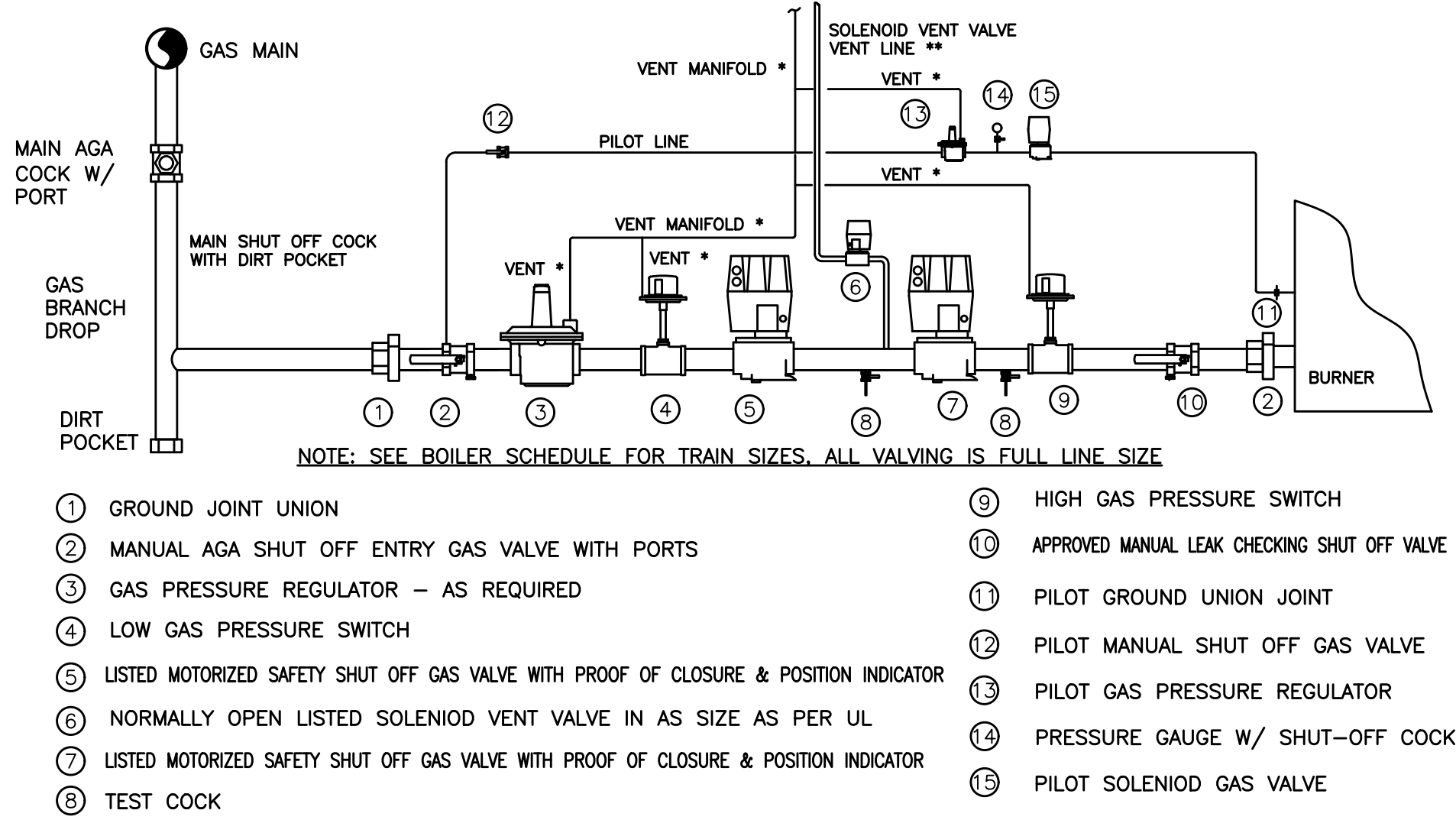
8 STEAM PIPE HANGER DETAIL  
H-14 SCALE: NOT TO SCALE



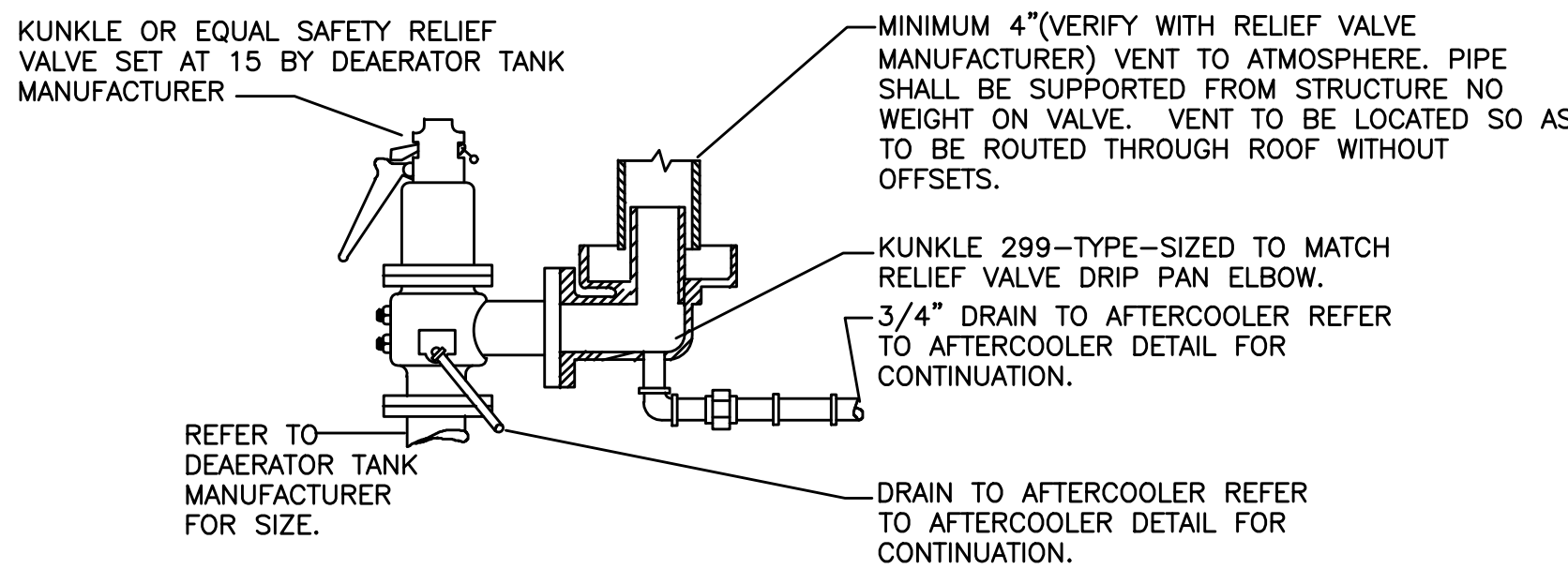
6 STACK TEST PORT DETAIL  
H-14 SCALE: NOT TO SCALE



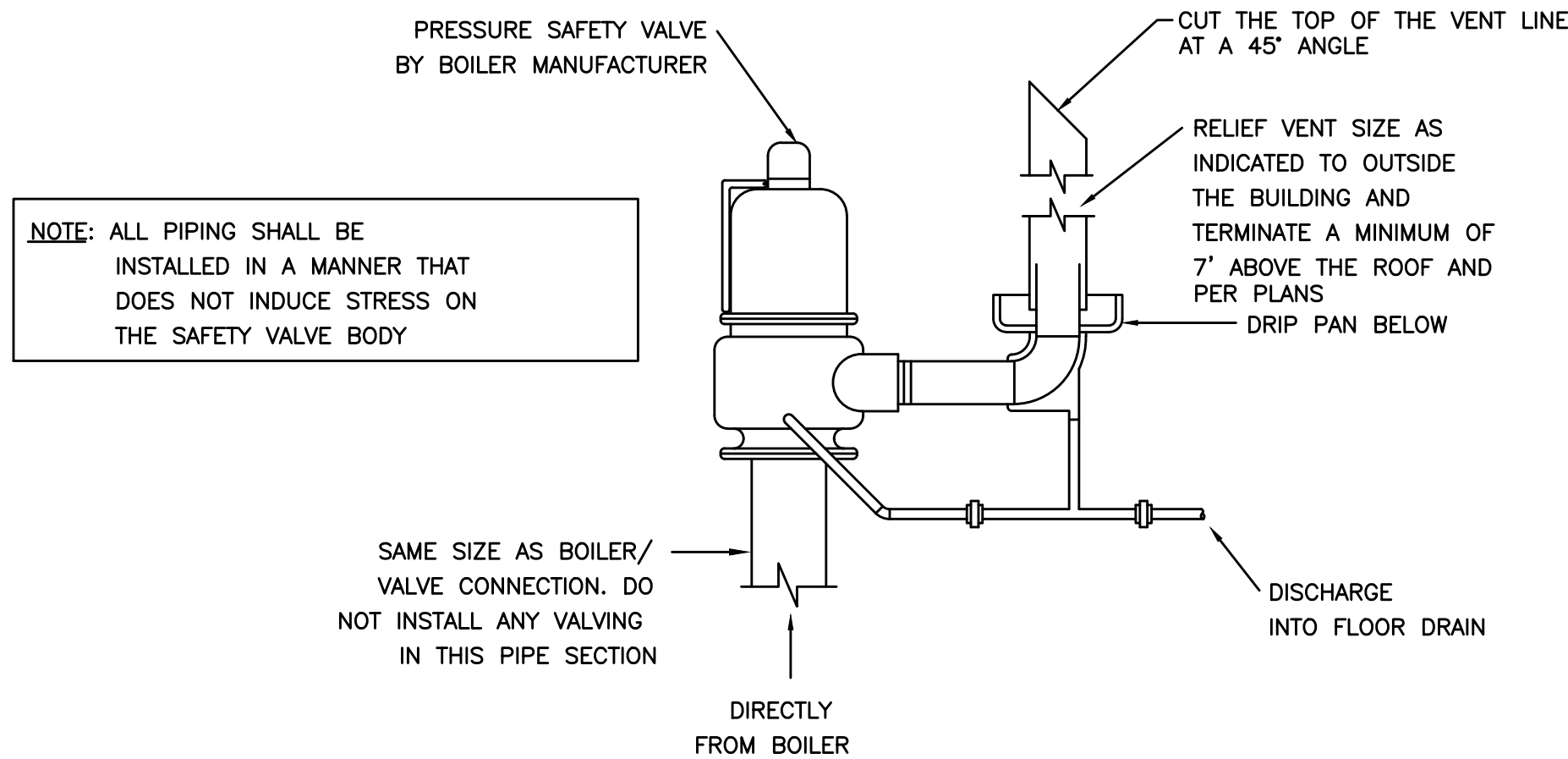
9 COLD WATER PIPE HANGER DETAIL  
H-14 SCALE: NOT TO SCALE



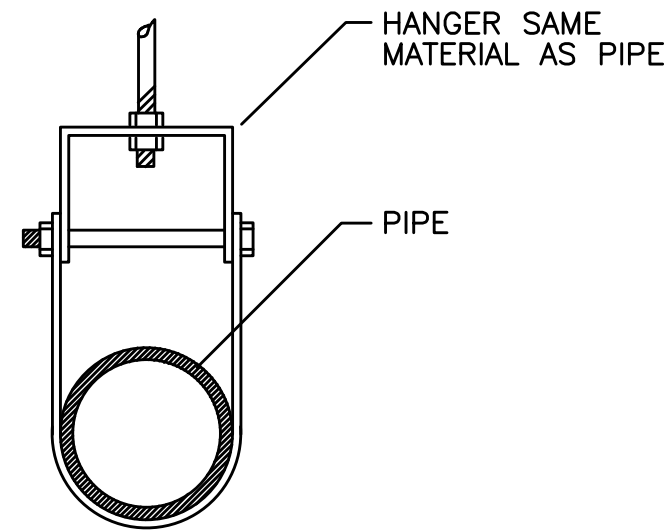
1 BOILER BURNER GAS TRAIN DETAIL  
H-14 SCALE: NOT TO SCALE



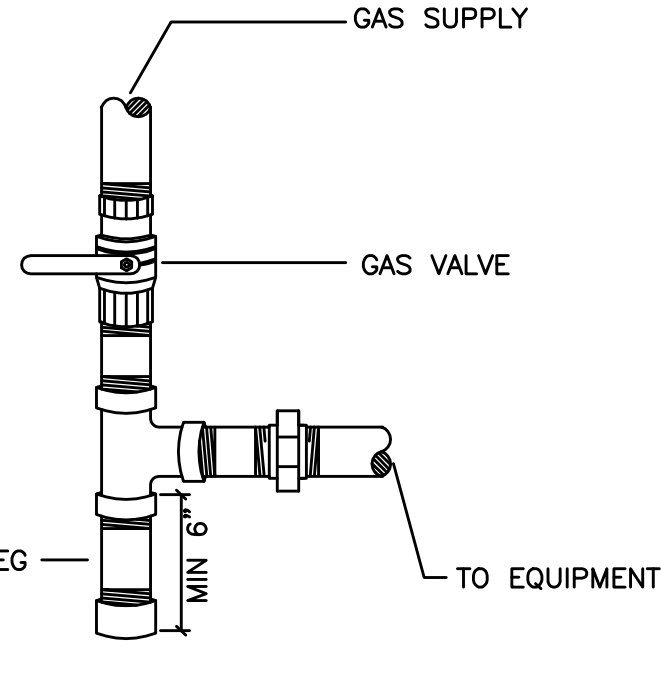
3 DRIP ELBOW DETAIL  
H-14 SCALE: NOT TO SCALE



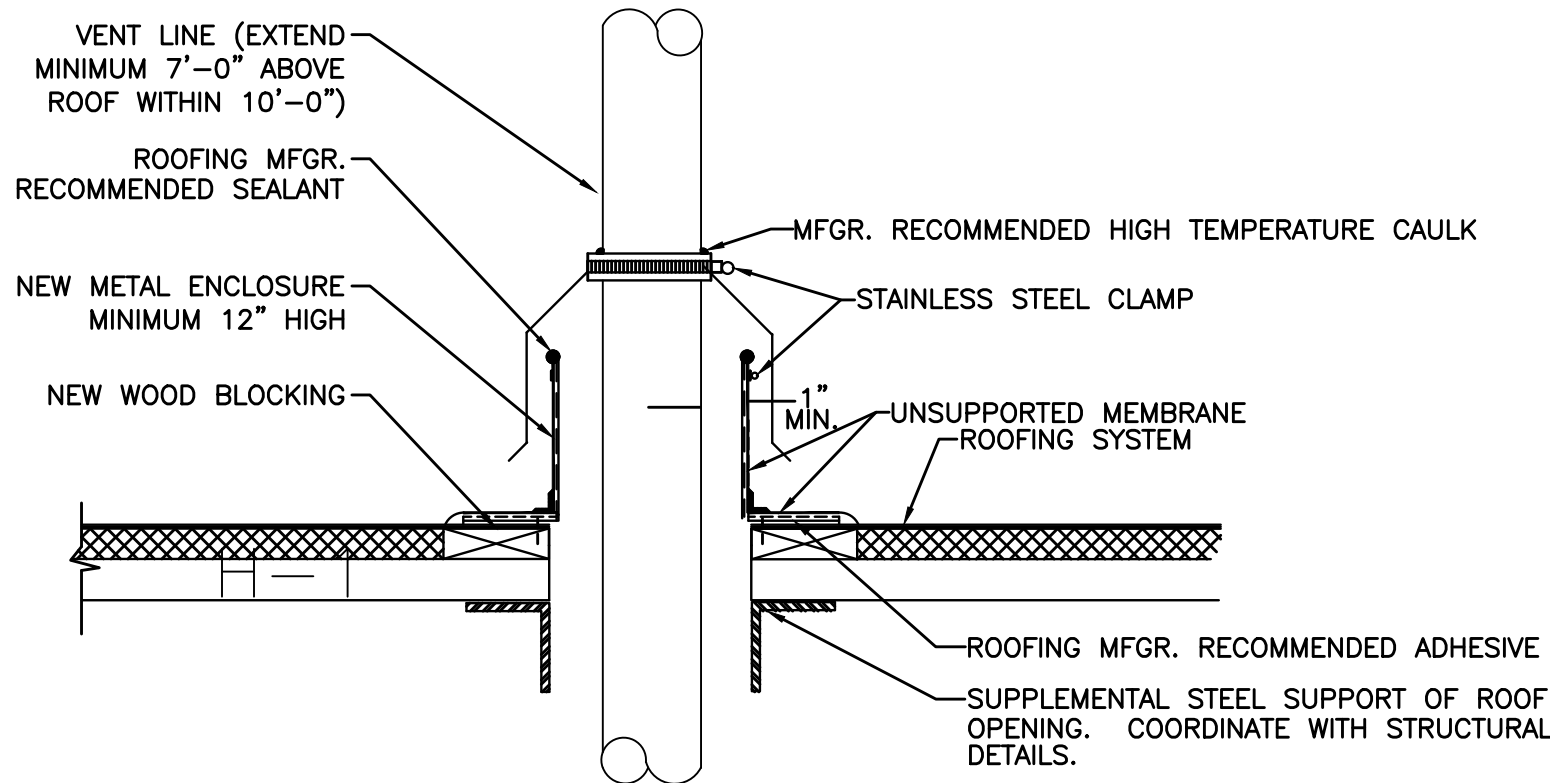
7 STEAM PRESSURE SAFETY RELIEF VALVE DETAIL  
H-14 SCALE: NOT TO SCALE



10 BARE PIPE HANGER DETAIL  
H-14 SCALE: NOT TO SCALE

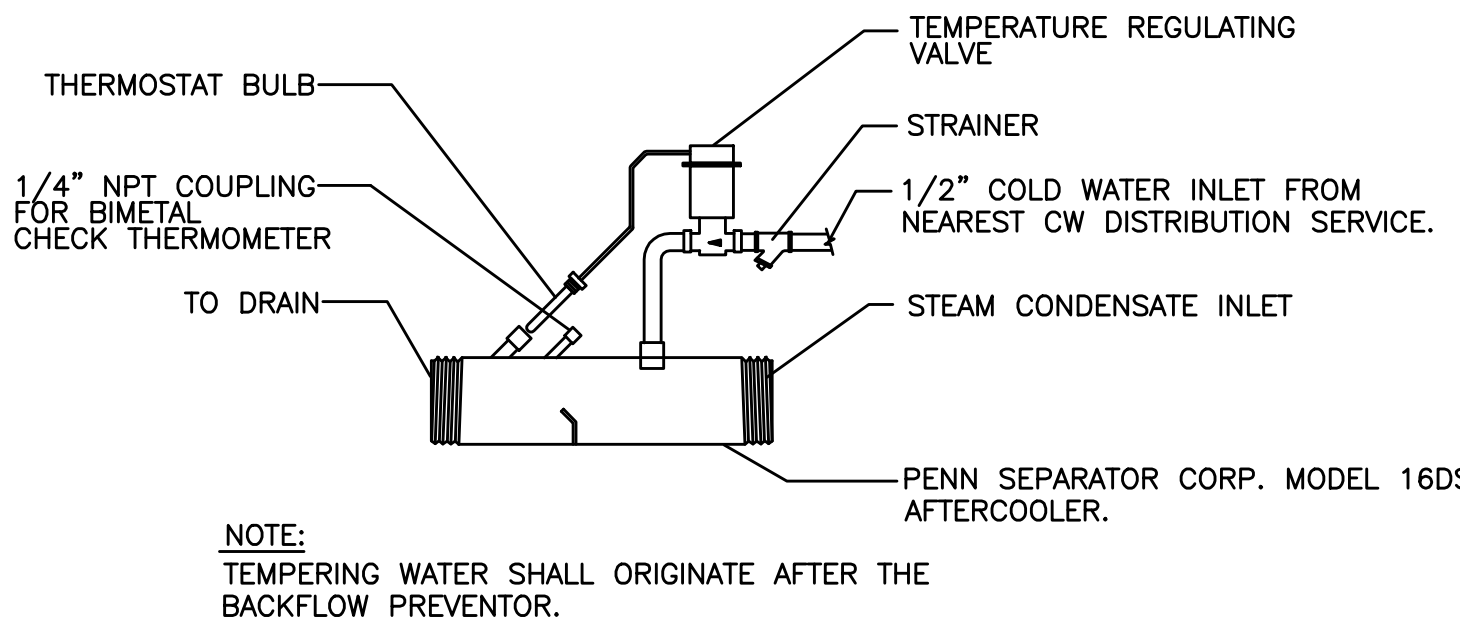


11 GAS DRIP LEG DETAIL  
H-14 SCALE: NOT TO SCALE



- NOTES:  
1. ALL TEMPORARY AND PERMANENT ROOF PATCHING AND FLASHING SHALL BE COMPLETED BY CLIENT AGENCY.  
2. ALL MATERIALS IN CONTACT WITH THE PIPING INSULATION JACKET SHALL BE SUITABLE FOR 400° F TEMPERATURES.  
3. FLASHING SHALL BE A MINIMUM OF 6" HIGH WHENEVER POSSIBLE AND MUST BE ABOVE ROOF FLOOD LEVEL.  
4. FIELD MEMBRANE AND INSULATION (WHEN APPLICABLE) MUST BE CUT TIGHTLY AROUND THE PROJECTION.

2 PIPE ROOF PENETRATION DETAIL  
H-14 SCALE: NOT TO SCALE



4 AFTERCOOLER DETAIL  
H-14 SCALE: NOT TO SCALE

REBID SUBMISSION  
FEBRUARY 26, 2024

RECORD REVISIONS	
SIGNATURE	
DATE	
ARRIS ENGINEERING GROUP, LTD. 667 SOUTH RIVER STREET PLAINS, PENNSYLVANIA	
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES HARRISBURG, PENNSYLVANIA	
D.G.S. PROJECT No. C-0304-0015 PHASE 2	
ELIZABETHTOWN TRAINING ACADEMY - RENOVATE BOILER PLANT AND DOMESTIC / FIRE PROTECTION PIPING	
DEPARTMENT OF CORRECTIONS ELIZABETHTOWN, LANCASTER COUNTY, PA	
MECHANICAL SCHEDULES & DETAILS	
DRAWN BY MTD	DATE FEB 2023
CHECKED BY RS	SCALE AS NOTED
DRAWING No. H-14	

VERIFY SCALE  
BAR IS ONE (1) INCH LONG  
ON ORIGINAL DRAWING:  
0 1  
IF BAR IS NOT ONE (1) INCH LONG,  
ADJUST SCALE ACCORDINGLY  
CONTRACTOR SHALL FIELD VERIFY  
ALL DIMENSIONS.  
VARIANCE FROM CONTRACT  
DOCUMENTS NOT PERMITTED  
WITHOUT PROFESSIONAL & BUREAU  
OF CONSTRUCTION APPROVAL.