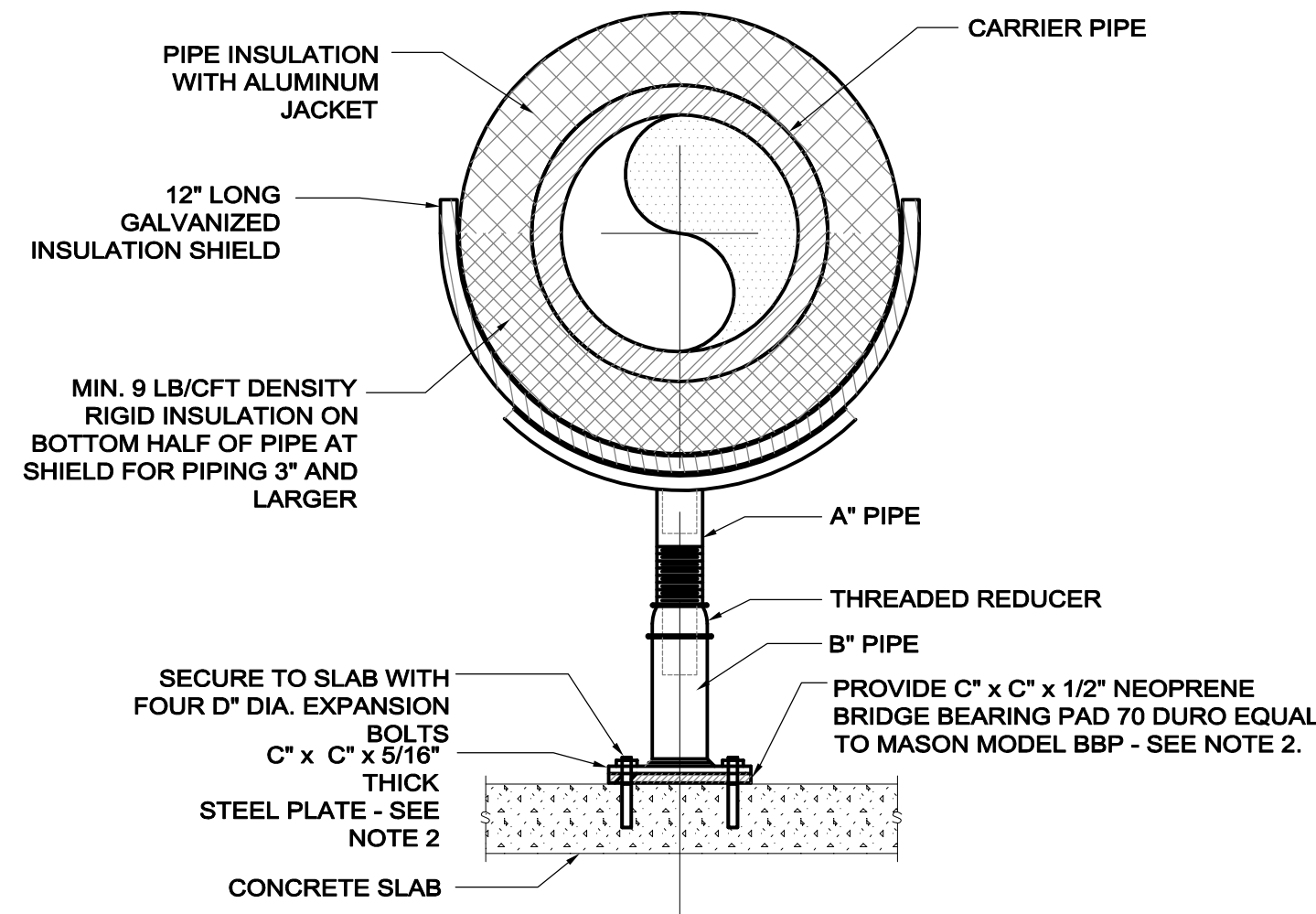


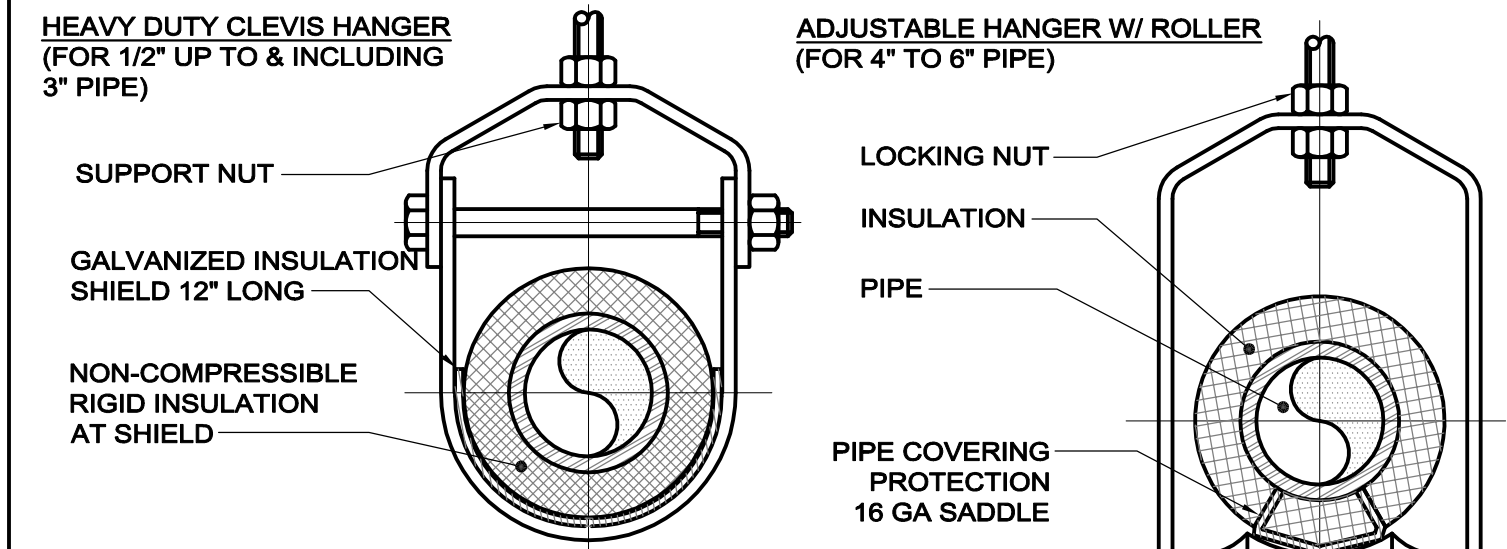
SIZE (IN)	PIPE SIZES (IN)		PLATE INFO (IN)	
	A (MIN)	B (MIN)	C (MIN)	D (MIN)
UP TO 3	2	2 1/2	9	1/2
4 TO 12	2 1/2	3	9	5/8
14 TO 16	3	4	11	3/4
18 AND LARGER	4	6	13 1/2	1



- NOTES:
- ADJUST HEIGHT OF SUPPORTS FOR ZERO STRESS ON ADJACENT FLANGES.
  - FOR SUPPORTS FOR PIPING WITHIN 10 FEET OF EQUIPMENT, PROVIDE A SECOND LAYER OF STEEL PLATE AND PAD.

**NV5** ADJUSTABLE FLOOR PIPE SUPPORT

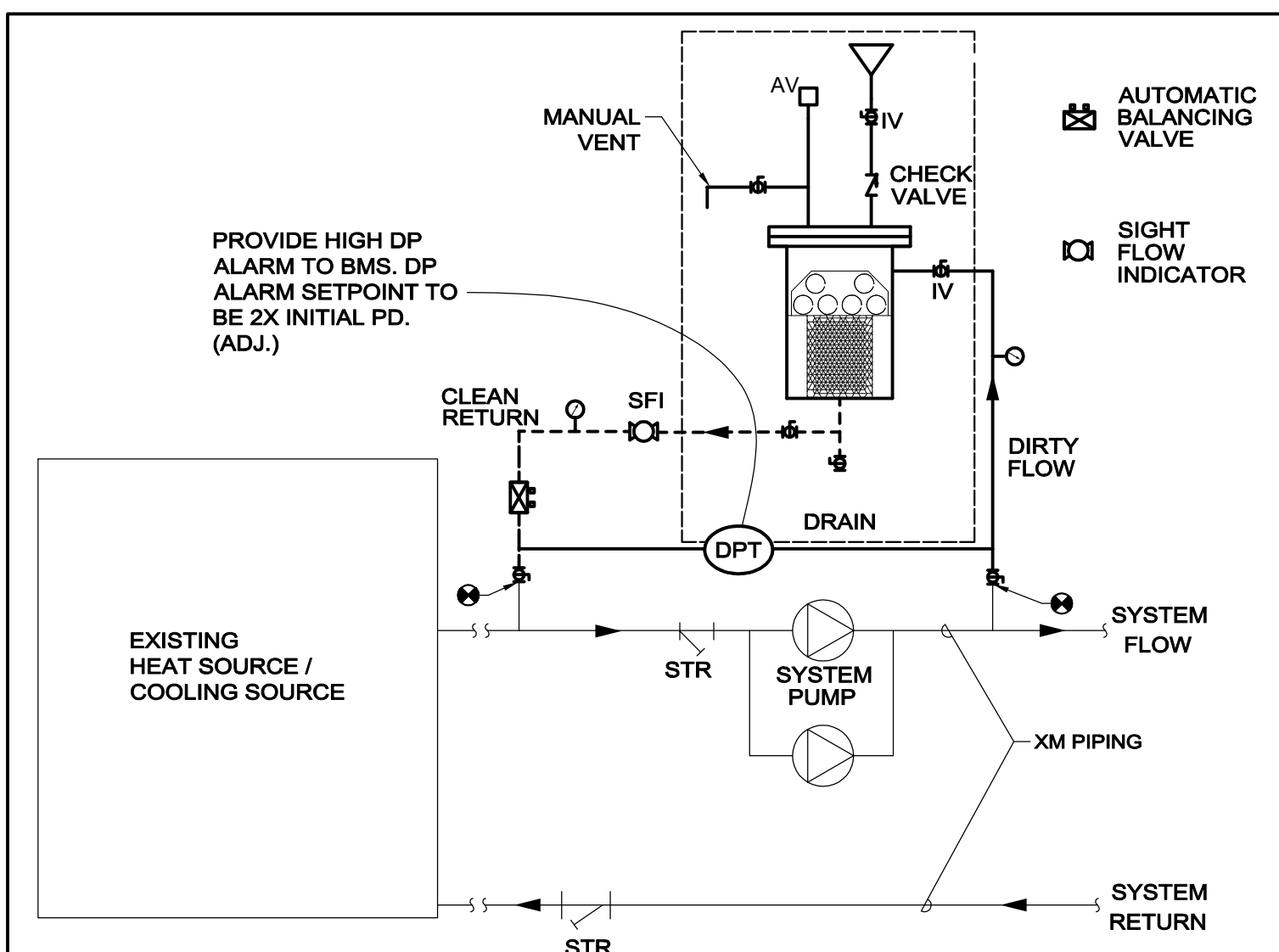
H012



- NOTES:
- SEE SPECIFICATION FOR HANGER SIZES.
  - PIPES 8" AND LARGER SHALL BE ROLLER SUPPORTED W/ DUAL RODS.
  - FOR CHW SERVICE OVER 3", REPLACE SADDLE W/ 12" LONG, 14 GAUGE SHIELD W/ RIGID INSULATION BETWEEN THE PIPE AND SHIELD. PROTECT WITH CONTINUOUS VAPOR BARRIER.

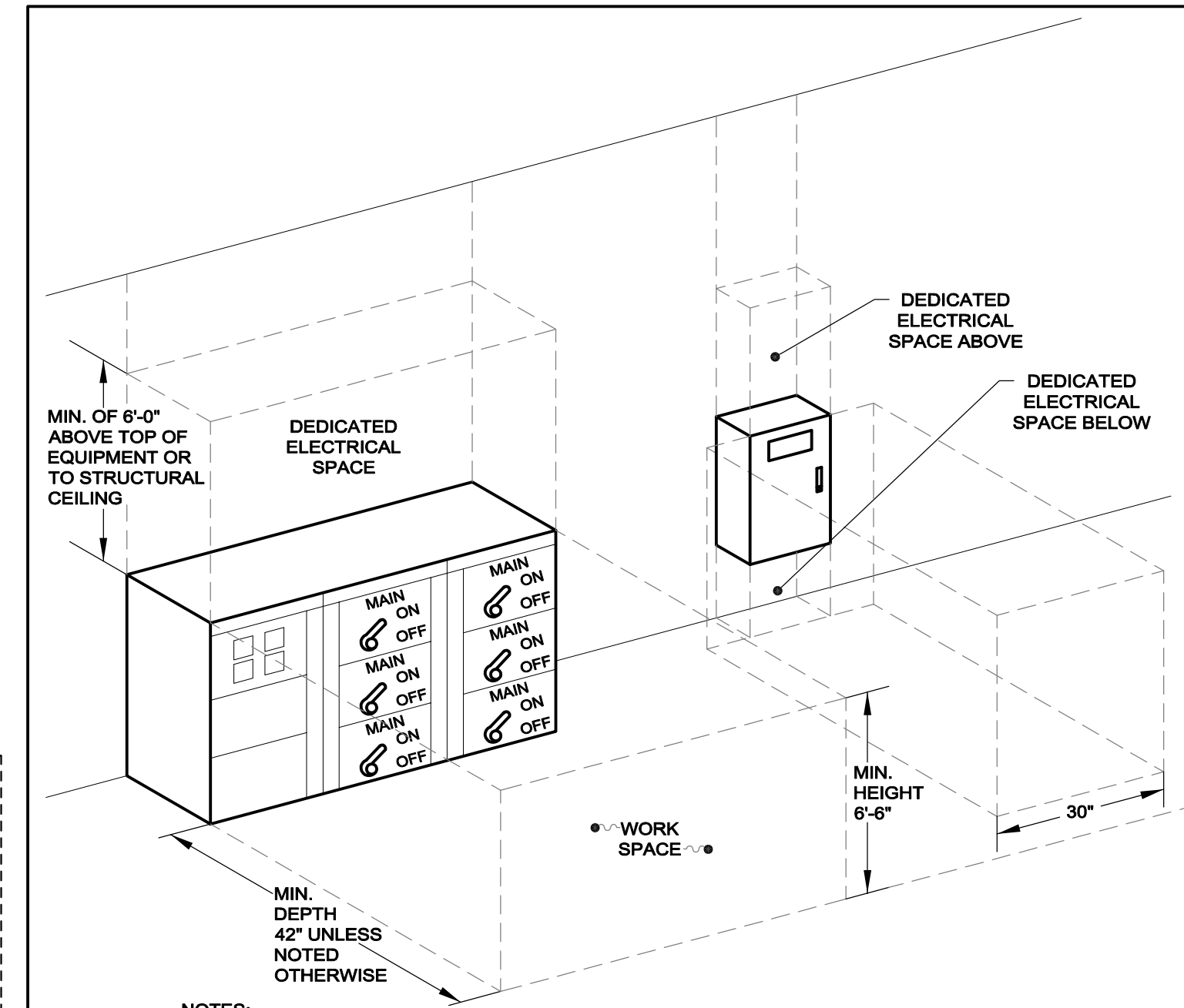
**NV5** PIPE HANGER SUPPORT

H001



**NV5** COMBINED SHOT FEEDER / SIDESTREAM FILTER / MAGNETIC FILTER

H002



- NOTES:
- NO EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION (PIPING, DUCTS, ETC.) SHALL ENTER THE DEDICATED SPACE ABOVE OR BELOW ELECTRICAL POWER EQUIPMENT INCLUDING SWITCHGEAR, SWITCHBOARDS, PANELBOARDS, & MOTOR CONTROL CENTERS.
  - PIPING SYSTEMS INSTALLED ABOVE THE DEDICATED ELECTRICAL SPACE SHALL BE ALLOWED WHERE DRIP PANS ARE INSTALLED TO CAPTURE LEAKS, RUPTURES OR CONDENSATION DRIPS. THE PIPING AND DRIP PANS SHALL BOTH BE OUTSIDE THE DEDICATED SPACE ENVELOPE.
  - WORK SPACE SHALL BE PROVIDED AT ALL EQUIPMENT UNDER 600V REQUIRING ACCESS INCLUDING BUT NOT LIMITED TO PANELS, DISCONNECTS, STARTERS, CONTROL PANELS INTEGRATED INTO HVAC/PLUMBING/FP EQUIPMENT, ETC.
  - NO EQUIPMENT SHALL PROTRUDE INTO THE WORK SPACE.
  - WORK SPACE DEPTH BASED UPON NEC TABLE 110.26(A)(1) CONDITION 2 150V TO GROUND.

**RDK** ELECTRICAL WORK AND DEDICATED SPACE

H101

HYDRONIC FILTER SCHEDULE											
TAG	SERVICE	LOCATION	DESIGN WATER FLOW GPM	MAX WATER FLOW GPM	PIPE SIZE (IN)	CAPACITY (GAL)	WORKING PRESSURE (PSIG)	PRESSURE DROP (FT H2O)	FLOOD WEIGHT (LBS)	MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS
F-1	EXISTING HYDRONIC DISTRIBUTION SYSTEM	SEE DRAWINGS	1.6	6.3	1/2	1.18	150	2.31	38	SKIDMORE / X-POT COMPACT MODEL 58760	1

NOTES:  
1 PROVIDE W/ AUTOMATIC BALANCING VALVE, SIGHT FLOW INDICATOR, INSULATION JACKET, (2) 50 MICRON CARTRIDGE FILTERS, AND (1) 100 MICRON START-UP FILTER.

**HVAC ALTERNATE #1**

PIPE INSULATION (IECC - 2015 AND ASHRAE 90.1 - 2013 COMPLIANCE)				
MINIMUM INSULATION THICKNESS IN INCHES FOR INDOOR PIPE SIZES (SEE NOTES BELOW)				
PIPING SYSTEM TYPES	FLUID TEMP. RANGE (°F)	1 1/2" - 3"	4" - 6"	K-FACTOR (BTU-INCH²-F-HR-SF) AT AVE. TEMP. (°F)
LOW TEMPERATURE HEATING	141 - 200	2	2	0.25-0.29 @ 125°F
CHILLED WATER OR GLYCOL HEAT RECOVERY OR INDOOR FREE COOLING CHWS OR REFRIGERANT OR COOLING COIL CONDENSATE DRAIN	≤ 60	1	1	0.20-0.27 @ 75°F

NOTES:  
1. FOR MINIMUM THICKNESS OF ALTERNATIVE INSULATION TYPES OUTSIDE THE STATED CONDUCTIVITY RANGE, SEE TEST METHOD FOR STEADY STATE HEAT TRANSFER PROPERTIES OF HORIZONTAL PIPE INSULATIONS, ASTM C 335-95, AND THE STATE ENERGY CODE.  
2. FOR DUAL TEMPERATURE SYSTEMS (HEATING AND COOLING) USE THE THICKER INSULATION VALUE REQUIRED FOR EITHER HEATING OR COOLING AND PROVIDE VAPOR BARRIER JACKET.  
3. REFER TO SPECIFICATIONS AND DETAILS FOR ADDITIONAL INFORMATION.

**BOILER SCHEDULE (HOT WATER)**

TAG	LOCATION	CAPACITY				PRESS. (PSIG)	WATER				BREECHING		BURNER			MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS				
		OUTPUT (GROSS I=B=R)		NATURAL GAS			ENT (°F)	LVG (°F)	GPM	%P.G.	°F	CFM	TYPE	TURN DOWN	BLOWER						
		MBH	BHP	INPUT (CFH)	PRESSURE (IN.WG)										EFFICIENCY (%)			MAX DESIGN	RELIEF VALVE	HP	V
B-1	BLUEBERRY HILL SCHOOL	2583	76.5	3082	7 / 14	83.1	80	50	160	180	226	0	-	1101	POWERFLAME - WCR3-G-20	10:1	1 1/2	208	3	WEIL-MCLAIN - BG1088-WF	1,2,3

NOTES:  
1 REFER TO SPECIFICATIONS, ON DRAWING NOTES, AND DETAILS FOR ADDITIONAL INFORMATION.  
2 PROVIDE WITH FULLY MODULATING BURNER. PROVIDE WITH SINGLE POINT ELECTRICAL CONNECTION AND STEP DOWN TRANSFORMER FOR BURNER CONTROLS, REMOTE START/STOP, BACNET INTEGRATION, PROVIDE W ALL CONTROL POINTS TO MATCH EXISTING.  
3 PROVIDE WITH CSD-1 CONTROLS

**CONSTRUCTION DOCUMENTS**  
07-18-2019

**REVISIONS**

DATE CHK DESCRIPTION

DATE	CHK	DESCRIPTION

**SEAL**

**PROJECT**

NUMBER 0190327

DATE 07/18/2019

BLUEBERRY HILL SCHOOL BOILER REPLACEMENT

**DRAWING**

DRAWN BY SRL

CHECKED BY JFL

SCALE NTS

HVAC DETAILS AND SCHEDULES