

EXISTING BOILERS, RELOCATED FROM MIDDLE SCHOOL – REFER TO SPECIFICATIONS										BASIS OF DESIGN: DeDietrich / Buderus			
SYMBOL	TYPE	INPUT		OUTPUT		SQ. FT. OF HEATING SURFACE	RELIEF VALVES	MAXIMUM WORKING PRESSURE	MODEL	BURNER MOTOR DATA			REMARKS
		MBH	#2 OIL GPH	MBH NET WATER	BOILER H.P.					RPM	HP	ELEC.	
B-1/2/3	GAS/OIL, CAST IRON, WATER	5715	39.5	4102	140.9	417.0 MIN.	45 PSI	82 PSI	GTE523A	3450	5	208V-3ø	DUAL FUEL "INDUSTRIAL COMBUSTION" POWER BURNER

NOTES: 1. BOILER SHALL BE EQUIPPED WITH A REMOTE MOUNTED OIL PUMP 1 HP 208V-3ø AND SEPARATE CONTROL PANEL.

EXPANSION TANK SCHEDULE						BASIS OF DESIGN: BELL & GOSSETT	
SYMBOL	TANK VOLUME GALLONS	ACCEPT. VOL. GALLONS	SIZE		MODEL	REMARKS	
			DI. (IN.)	LENGTH (IN.)			
EX-1	211	211	30	82	B-800		
EX-2	211	211	30	82	B-800		

GAS-FIRED UNIT HEATER SCHEDULE								BASIS OF DESIGN: REZNOR		
SYMBOL	FAN DATA				INPUT (MBH)	OUTPUT (MBH)	CFH NAT. GAS	MOUNTING	MODEL	REMARKS
	CFM	RPM	H.P.	ELECTRICAL						
GUH-1	3202	1050	1/4	120V-1ø	250.0	207.5	250.0	OVERHEAD	UDSA250	POWER VENTED, SEALED COMBUSTION UNIT

NOTES: 1. MODEL NUMBERS ARE INDICATED FOR REFERENCE ONLY. THE DUTIES AND CAPACITIES ARE TO BE USED FOR FINAL UNIT SELECTION BY THE MANUFACTURER.
2. PROVIDE EACH UNIT WITH NON-FUSED DISCONNECT SWITCH AND VERTICAL COMBUSTION AIR/VENT KIT INCLUDING CONCENTRIC ADAPTOR MODEL CC2 AND WALL MOUNTED THERMOSTAT.

PUMP SCHEDULE							BASIS OF DESIGN: BELL AND GOSSETT	
SYMBOL	G.P.M.	HEAD	PUMP MOTOR			EFFICIENCY	MODEL	REMARKS
			H.P.	R.P.M.	ELECTRIC			
P-9	360	40	7.5	1750	208V-3ø	74%	SERIES 1510 - 3BC	

REVISIONS	BY

CONSOLIDATED ENGINEERS
1025 James Drive
Langhorne, PA 19053
Tel: 610.916.1600 Fax: 610.916.1610
Internet: www.seme.com

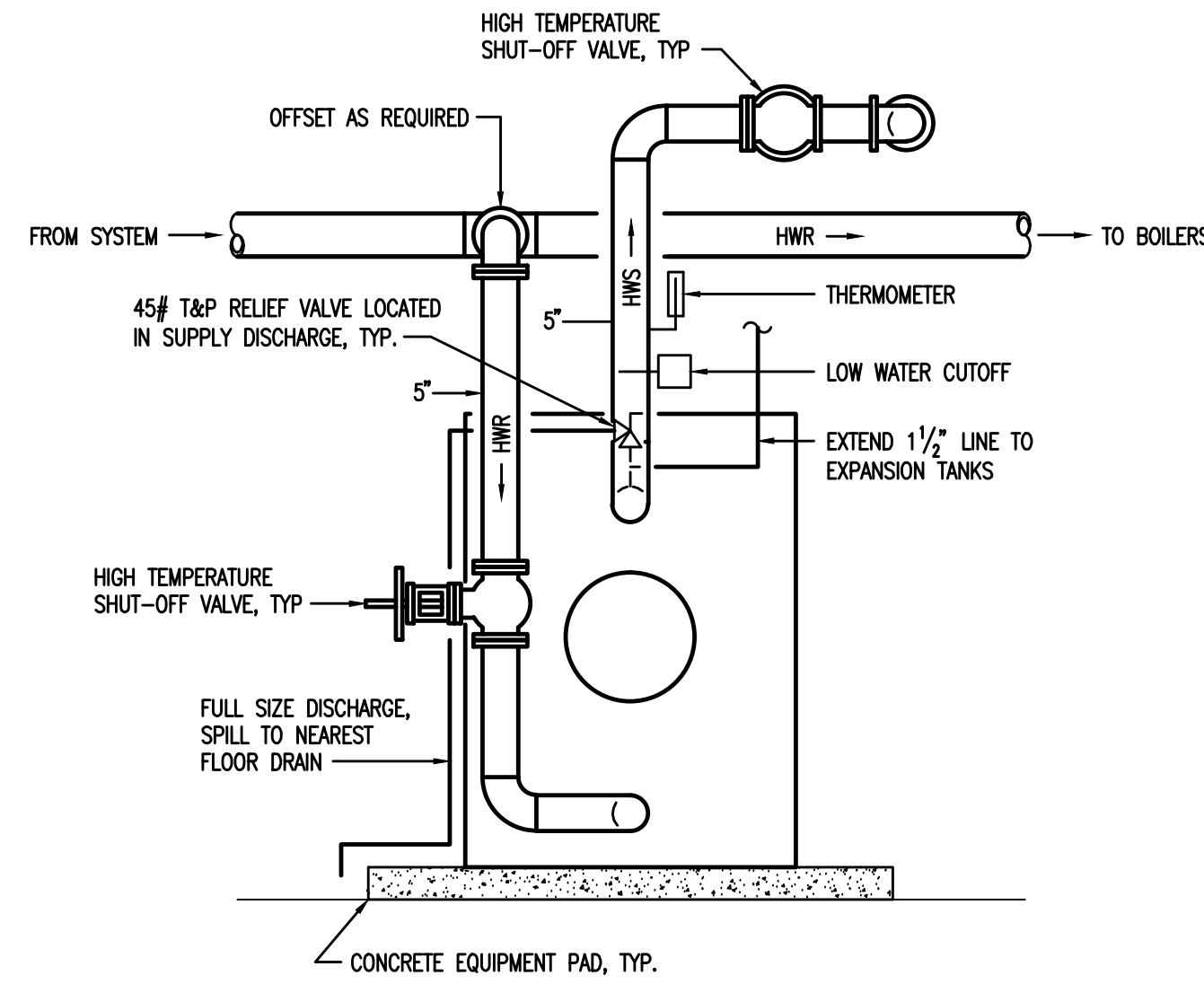


BOILER REPLACEMENT
FOR THE
NESHAMINY HIGH SCHOOL
NESHAMINY SCHOOL DISTRICT
LANGHORNE, PA

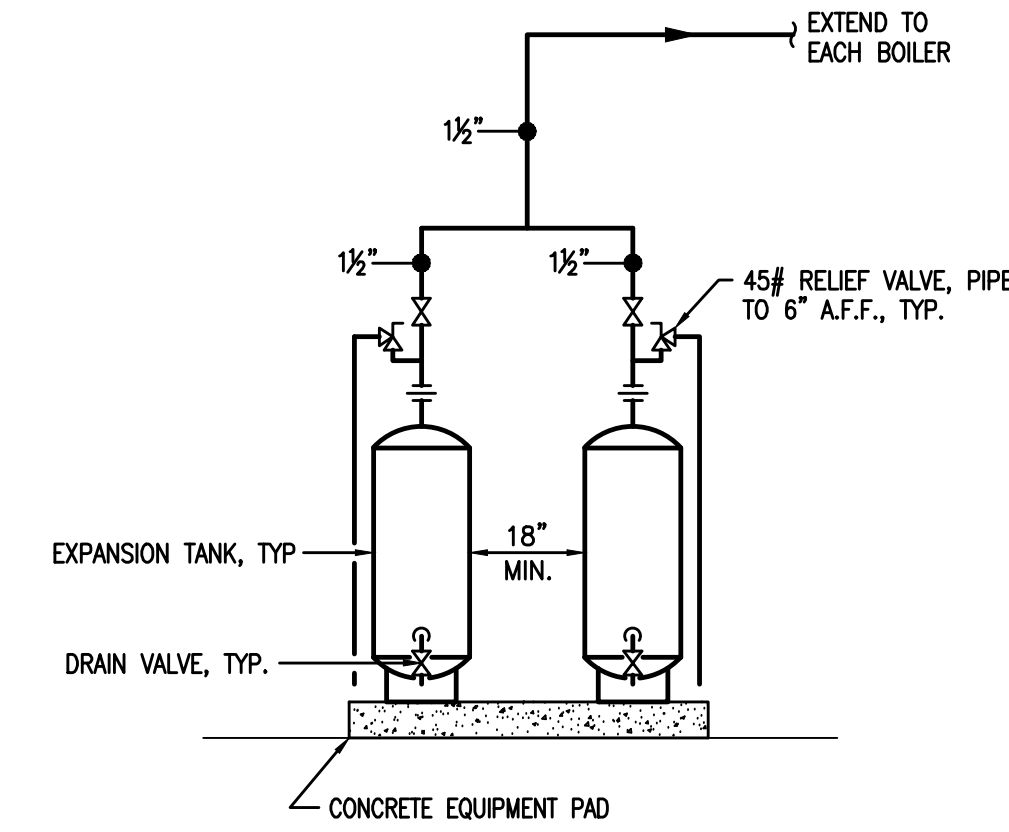
MECHANICAL SCHEDULES AND DETAILS

DRAWN: RLC
CHECKED: FB
DATE: 11-22-11
SCALE: AS NOTED
JOB NO.: 11-2051-1
SHEET

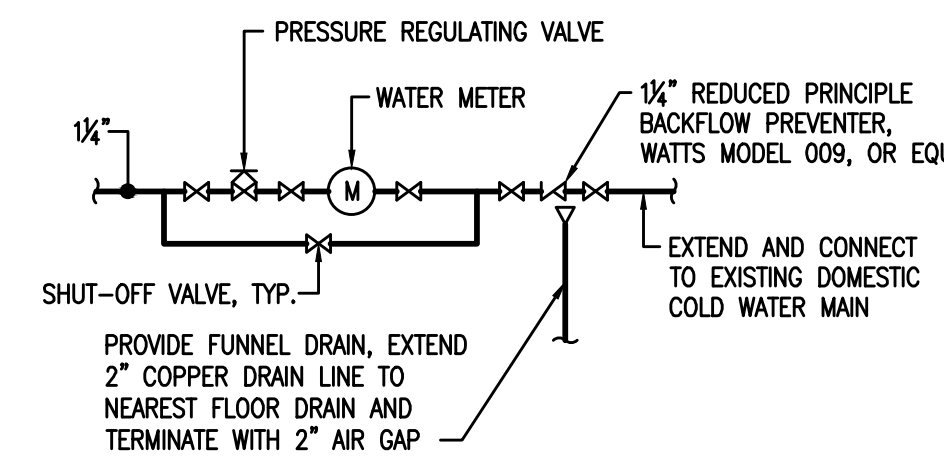
M-3



TYPICAL BOILER PIPING DETAIL
NO SCALE



TYPICAL EXPANSION TANK PIPING DETAIL
NO SCALE



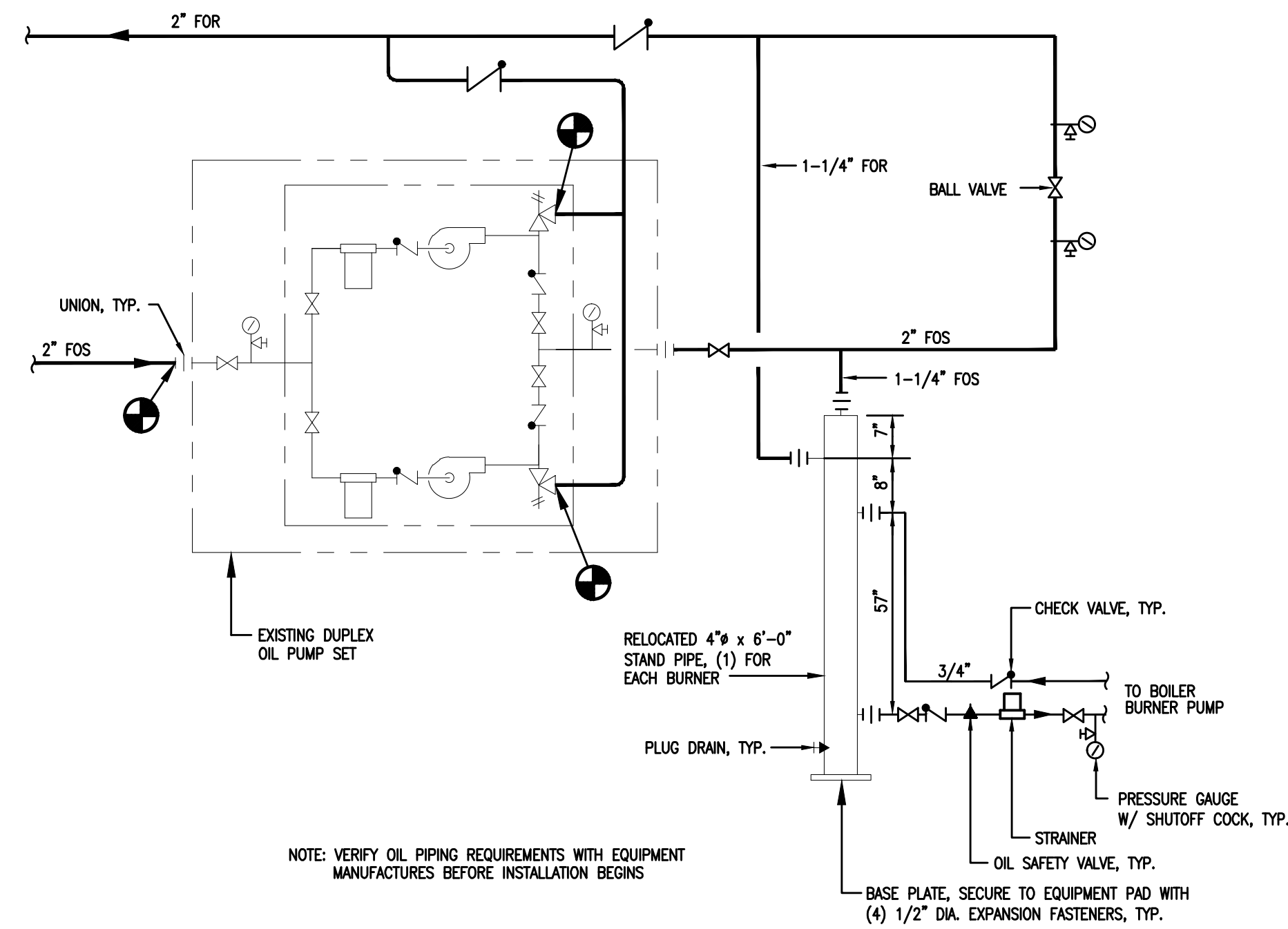
MAKE-UP WATER PIPING DETAIL
NO SCALE

IMPORTANT GENERAL NOTES:

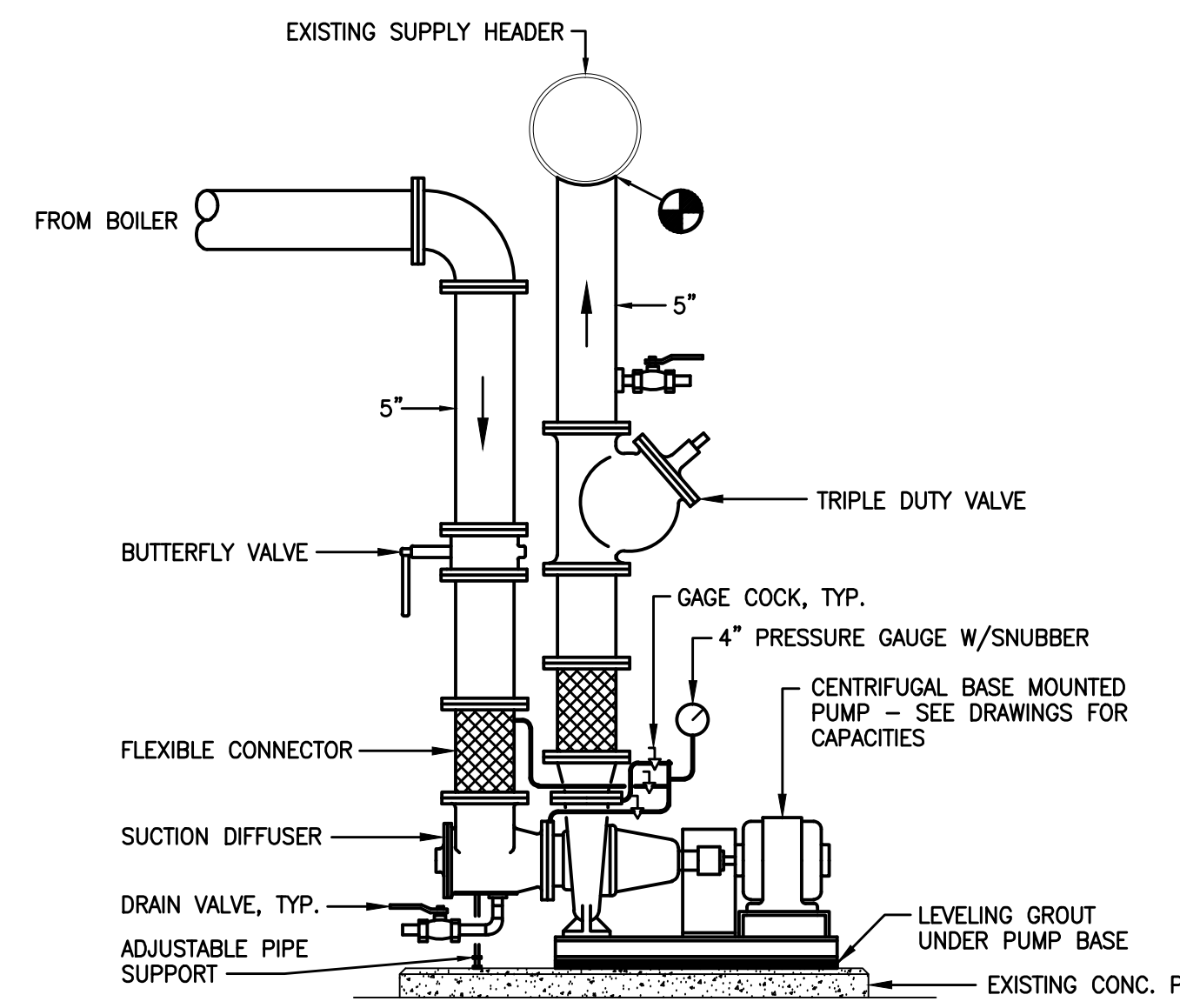
- ALL CUTTING AND PATCHING SHALL BE BY THE CONTRACTOR.
- THE TERMS "MECHANICAL CONTRACTOR", "MECH. CONTRACTOR", "HVAC CONTRACTOR", OR "THE CONTRACTOR", ETC. ALL REFER TO THE CONTRACTOR RESPONSIBLE FOR THE INSTALLATION OF THE WORK PRESENTED ON DRAWINGS.
- COMPLETE ALL DEMOLITION IN A PROFESSIONAL MANNER. COORDINATED DEMOLITION WITH THE OWNER. COORDINATE ANY SERVICE SHUT DOWN WITH THE OWNER.
- THE EXISTING H.B. SMITH BOILERS MUST BE DISMANTLED AND REMOVED FROM THE BOILER ROOM IN SECTIONS. THIS CONTRACTOR SHALL ALSO REMOVE THE EXISTING COMBUSTION CHAMBER IN PIECES.
- THIS CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE THE WIRING FROM THE NEW BOILER CONTROLS AND DEVICES TO THE EXISTING MAIN SIEMENS CONTROLLER. THIS WORK MUST BE COMPLETED BY THE DISTRICT'S "SIEMENS" INSTALLER. SEE SPECIFICATION SECTION 15900.
- THIS CONTRACTOR IS RESPONSIBLE TO PAINT THE ENTIRE BOILER ROOM. THE CONTRACTOR SHALL PAINT THE FLOORS, ENTIRE CATWALK AND STAIRS GRAY AND THE WALLS WHITE. COMPLETELY CLEAN AND PRIME SURFACES IN ACCORDANCE WITH THE PAINT MANUF. RECOMMENDATIONS. APPLY ONE PRIME COAT AND TWO FINAL COATS. PROVIDE PAINT SEALER ON WALLS AND FLOOR. IN ADDITION PAINT ALL EXISTING AND NEW GAS AND GAS VENT PIPING YELLOW.
- MAINTAIN 30" MIN. CLEAR AROUND ALL SIDES OF THE BOILERS INCLUDING ALL PIPING OR APPURTENANCES.
- FULLY REPLACE ANY SECTIONS OF EXISTING PIPE OR FLUE INSULATION WHICH IS DAMAGED BY THE NEW INSTALLATIONS.

LEGEND AND ABBREVIATIONS

	MANUAL AIR VENT		CONNECT NEW TO EXISTING
	FLOW METER		EXTENT OF REMOVAL OR REMOVE TO THIS POINT
	CALIBRATED PLUG VALVE		THERMOMETER
	AQUASTAT		EMERGENCY BOILER SHUT-OFF SWITCH
	CHECK VALVE		THERMOSTAT
	2-WAY MODULATING CONTROL VALVE		FLOW SWITCH
	3-WAY MODULATING CONTROL VALVE		MOTOR OPERATED DAMPER
	UNION OR FLANGE CONNECTION		HWS - HOT WATER SUPPLY PIPING
	SHUT OFF VALVE		HWR - HOT WATER RETURN PIPING
	BUTTERFLY VALVE		FOS - FUEL OIL PIPING SUPPLY
	BACKFLOW PREVENTER		FOR - FUEL OIL PIPING RETURN
	TRIPLE DUTY VALVE		Y - GAS VENT PIPING
	OS&Y VALVE		G - GAS PIPING
	PRESSURE REGULATING VALVE		DOMESTIC COLD WATER
	RELIEF VALVE		DOMESTIC HOT WATER
	FLEX PIPE CONNECTION		DOMESTIC HOT WATER RETURN
	STRAINER		140 - DOMESTIC 140° HOT WATER
	PRESSURE GAUGE WITH SNUBBER	SUP.	SUPPLY
	GAS REGULATOR	PSI	POUNDS PER SQUARE INCH
	GAS COCK	QTY	QUANTITY
	GAS OPERATED DAMPER	ABV	ABOVE FINISHED FLOOR
	ABV	DWG	DRAWING
	BEL	CFM	CUBIC FEET PER MINUTE
	CLG	W/	WITH
	EXIST.	CLG.	CEILING
	FLR.	GPM	GALLONS PER MINUTE
	M.O.D.	CONN	CONNECTION
	TYP.	N.C.	NORMALLY CLOSED
	C.S.		



OIL PIPING SCHEMATIC
NO SCALE



BASE MOUNTED PUMP DETAIL
NO SCALE