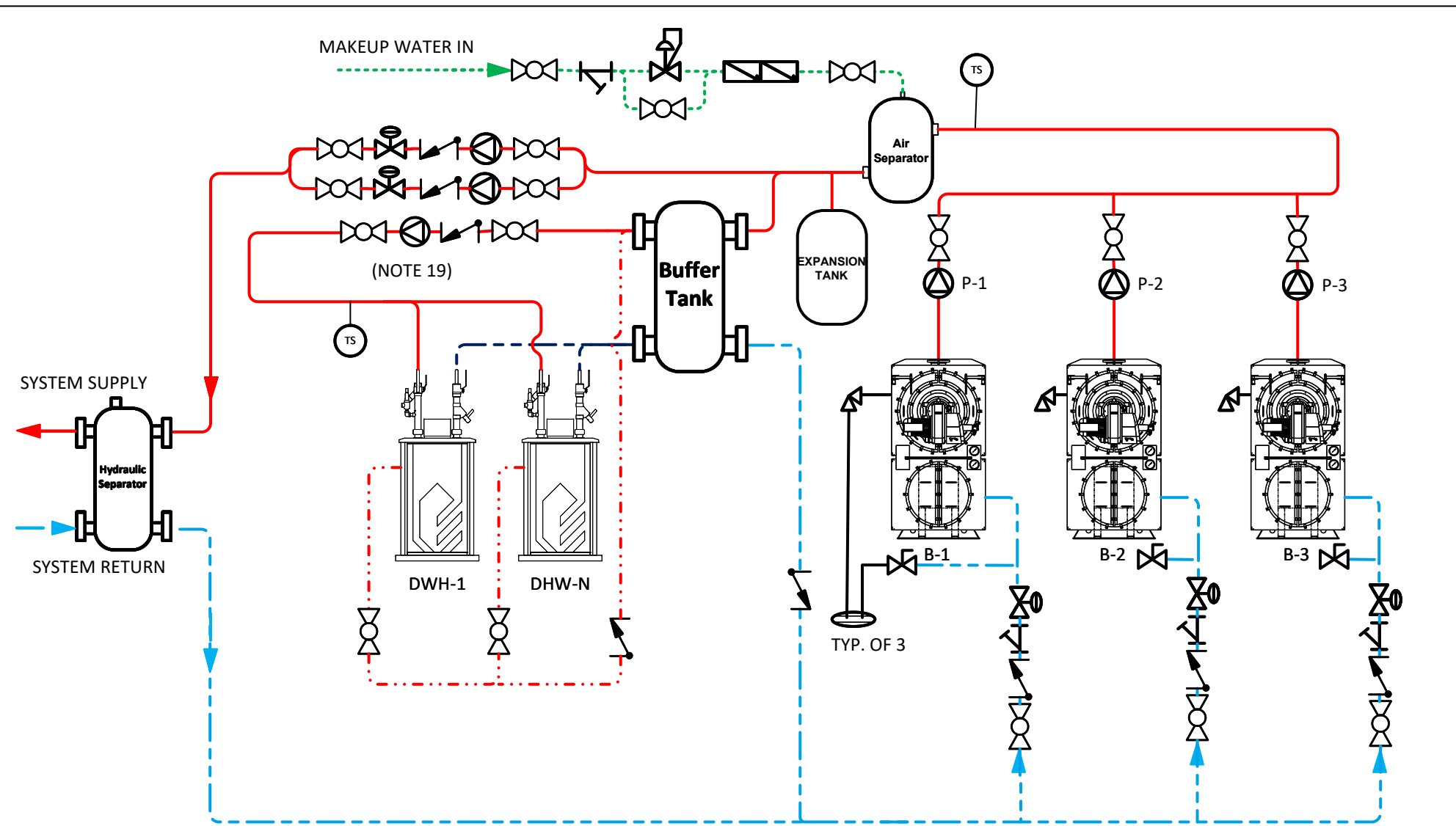




Pipe Temp.	Line Type
CWR SPR	
HWS	
HWR	
BWS	

	Ball Valve
	Check Valve
	Drain Valve
	Strainer
	Pump
	Backflow Preventer
	Pressure Reducing Valve
	Pressure Relief Valve
	Floor Drain
	Temperature Sensor
	Balancing Valve

- NOTES:
1. FOR ACTUAL SIZES AND LOCATIONS OF PIPING AND OTHER CONNECTIONS TO THE HEATER, SEE DIMENSIONAL DRAWING.
 2. SHELL DRAIN VALVE AND CONDENSATE HOSE SHOULD BE ARRANGED TO PERMIT THE FLUIDS TO DRAIN FREELY, BY GRAVITY, TO A FLOOR DRAIN. T&P RELIEF VALVE IS INSTALLED ON HOT WATER OUTLET AND MUST BE PIPED WITHIN 12" OF FLOOR WITH NO SHUTOFF VALVES OR RESTRICTION IN THE LINE; OR PER LOCAL CODE REQUIREMENTS. CONDENSATE DRAIN LINE WITH NEUTRALIZER PIPED TO FLOOR DRAIN NOT SHOWN.
 3. REFER TO SMARTPLATE INSTALLATIONS DRAWINGS FOR RECOMMENDED DOMESTIC PIPING INSTALLATION.
 4. THIS IS A TYPICAL INSTALLATION DRAWING. LOCAL CODES AND AUTHORITIES SHOULD BE CONSULTED.
 5. LOCATE WATER INLET AND OUTLET FITTINGS (i.e. UNIONS, ELBOWS, ETC.) A MINIMUM OF 6" FROM HEATER FITTINGS, TO PREVENT INTERFERENCE WITH REMOVAL OF BOILER PANELS AND COVERS. ALL PIPING AND ELECTRIC CONNECTIONS (SERVICE SWITCHES, CONDUIT BOXES) SHOULD LIKEWISE BE 6" AWAY FROM SIDE PANELS.
 6. WHEN USING A CONDENSATE NEUTRALIZER TANK, THE NEUTRALIZER TANK MUST BE INSTALLED IN A PIT OR THE HOUSEKEEPING PAD HEIGHT INCREASED TO ALLOW FOR PROPER DRAINAGE BY GRAVITY.
 7. REFER TO INSTALLATION MANUAL AND APPLICATION GUIDES FOR AIR, GAS, AND CONDENSATE CONNECTIONS.
 8. SEE CLEARANCE DIAGRAMS FOR APPROXIMATE INSTALLED FOOTPRINT WIDTH AND DEPTH.
 9. THE FOLLOWING COMPONENTS SHALL BE FIELD SOURCED: CHECK VALVES, STRAINERS, BALL VALVES, BALANCING VALVES, PUMPS, EXPANSION TANK, BACKFLOW PREVENTER.
 10. IF PERMITTED BY LOCAL CODES, A CHECK VALVE MAY BE USED IN PLACE OF A BACKFLOW PREVENTER.
 11. CONSULT AERCO FOR ADDITIONAL INFORMATION OR DIFFERENT DESIGN CONDITIONS.
 12. USE OF BALANCING VALVES IS RECOMMENDED IF THE PIPING ARRANGEMENT IS NOT REVERSE RETURN.
 13. IF A SEQUENCING PANEL IS USED, HEADER SENSOR MUST BE INSTALLED BETWEEN 2 TO 10 FEET FROM THE LAST BOILER CONNECTION. RETURN HEADER SENSOR IS OPTIONAL.
 14. COMMON PIPE DIAMETER MUST BE SIZED FOR LESS THAN 4.0 FT/SEC; COMMON PIPE LENGTH MUST BE 3 TO 5 TIMES ITS DIAMETER. HYDRAULIC SEPARATORS ARE PREFERRED.
 15. BOILER PUMP MUST BE SIZED TO PROVIDE THE APPROPRIATE FLOW AT THE DESIGN ΔT PER THE SPECIFIED RANGE.
 16. RECOMMENDED TO TREAT/FILTER INLET MAKEUP WATER FOR OPTIMAL PERFORMANCE.
 17. THE DHW SYSTEM PUMP RUNS CONTINUOUSLY TO PROVIDE BOILER WATER TO THE WATER HEATERS.
 18. OPTIONAL SECONDARY INLET CONNECTION, COMBINE RETURNS IF UNAVAILABLE
 19. BOILER SUPPLY TEMPERATURE MUST NOT RESET BELOW DHW HEATING WATER TEMPERATURE UNLESS USING A SEQUENCER WITH BOOST FUNCTIONALITY
 20. RECOMMENDED RATIO OF SYSTEM VOLUME TO INSTALLED BOILER VOLUME IS 1 GALLON PER 100 BTUS.



Blauvelt, NY 10913

MFC II -- COMBINATION - SPACE HEATING AND DHW, SMARTPLATE EV APPLICATION, PRIMARY SECONDARY, 4-PORT BUFFER TANK

DRWN BY.	DATE	DWG. NO:	REV.
CSC	070126	SD-A-1393	A

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