

GENERAL NOTES

ALL PLUMBING & PLUMBING MATERIALS SHALL MEET THE REQUIREMENTS OF THE STATE & LOCAL PLUMBING CODES.

PROVIDE UNIONS OR FLANGES AT ALL EQUIPMENT CONNECTIONS INCLUDING TRAPS, CONTROL VALVES AND ANY ITEM WHICH MAY REQUIRE REMOVAL FOR FUTURE MAINTENANCE.

SLOPES & INVERT ELEVATIONS OF ALL INTERIOR PIPING SHALL BE ESTABLISHED BEFORE ANY PIPING IS INSTALLED, IN ORDER THAT PROPER SLOPES WILL BE MAINTAINED. ALL PIPING SHALL BE RUN TO AVOID CONFLICTS WITH OTHER TRADES.

MAKE PROPER HOT & COLD WATER, HOT WATER RE-CIRCULATING, STEAM, STEAM CONDENSATE, & DRAIN, PIPING CONNECTIONS TO ALL FIXTURES & EQUIPMENT EVEN THOUGH ALL BRANCHES, FITTINGS & CONNECTIONS ARE NOT SHOWN.

COORDINATE LOCATION OF ALL EQUIPMENT & PIPING WITH EXISTING CONDITIONS.

IT IS THE INTENTIONS OF THESE DRAWINGS TO COVER ALL WORK & MATERIAL FOR A COMPLETE FIRST CLASS INSTALLATION ANY EQUIPMENT, PLUMBING FIXTURE, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THE CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE ARCHITECT) SHALL BE FURNISHED & INSTALLED BY THE CONTRACTOR AS OF HIS TOTAL WORK.

VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK OR ORDERING EQUIPEMENT, PIPPING, FIXTURES.

SEAL AROUND ALL WALL PENETRATIONS AIR TIGHT AT MECHANICAL ROOM AND FILL ANY VOIDS WITH MORTAR.

INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE LISTING REQUIREMENTS.

DO NOT LIFT LOW PRESSURE CONDENSATE(LPC). ALL LPC PIPING SHALL BE SLOPED FOR GRAVITY DRAINAGE WITHOUT TRAPS OR RISES.

CONSTRUCTION SEQUENCING

WATER HEATERS SHALL BE REPLACED ONE AT A TIME. EACH NEW WATER HEATER SHALL BE STARTED UP, TESTED AND PROVEN TO OPERATE SUCCESSFULLY BEFORE BEGINNING WORK ON THE NEXT WATER HEATER REPLACEMENT. THE FACILITY'S WATER HEATING SYSTEM SHALL BE REMAIN IN OPERATION AT ALL TIMES UNLESS AN OUTAGE IS AUTHORIZED AND SCHEDULED WITH THE COR.

LEGEND & ABBREVIATIONS

	EXISTING PIPING TO REMAIN	AC	ABOVE CEILING
	EXISTING PIPING TO BE REMOVED	AFE	ABOVE FINISHED FLOOR
	LOW PRESSURE CONDENSATE PIPING	AFG	ABOVE FINISHED GRADE
	HIGH PRESSURE STEAM PIPING	BF	BELOW FLOOR
	DRAIN PIPING	BFF	BELOW FINISH FLOOR
	DOMESTIC COLD WATER(CW)	BTU	BRITISH THERMAL UNIT
	DOMESTIC HOT WATER(HW)	CI	CAST IRON
	DOMESTIC HOT WATER RETURN(HWR)	COMP	COMPARTMENT
	SANITARY WASTE PIPE(WP)	DFU	DRAINAGE FIXTURE UNIT
	SANITARY VENT PIPE(VP)	ETR	EXISTING TO REMAIN
	PIPE SLEEVE	F	FAHRENHEIT
	PIPE TURN UP	FT	FEET
	PIPE TURN DOWN	GAL	GALLON
	PIPE CAPPED	GPH	GALLON PER HOUR
	BALANCING VALVE (BV)	GPM	GALLON PER MINUTE
	BALL VALVE (BV)	HD	HEAD
	CHECK VALVE (CV)	HG	MERCURY
	GATE VALVE (GV)	HP	HORSE POWER
	SOLENOID VALVE	HR	HOURLY
	STRAINER	INV	INVERT
	PRESSURE GAUGE WITH PRESSURE COCK	KW	KILOWATTS
	PRESSURE REDUCING VALVE	PSI	PRESSURE PER SQUARE INCH
	SAFETY RELIEF VALVE	PSIG	POUNDS PER SQUARE INCH GAUGE
	UNION	TYP	TYPICAL
	WATER HAMMER ARRESTOR	TP	AUTOMATIC TRAP PRIMER
	LIMIT OF DEMOLITION WORK	UL	UNDERWRITER LABORTORY
	NEW POINT OF CONNECTION	RPBP	REDUCE PRESSURE BACKFLOW PREVENTER
	DEMOLITION NOTE DESIGNATION	°	DEGREE
	NEW WORK NOTE DESIGNATION	ø	PHASE/DIAMETER
	STEAM TRAP DESIGNATION		

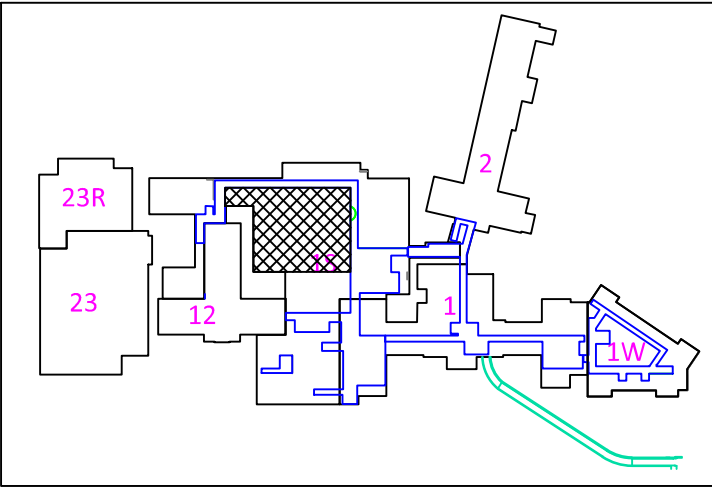
NEW STEAM TRAP SCHEDULE								
MARK	CAPACITY LBS/HR	MANUFACTURER	MODEL	SIZE	STEAM PRESSURE	ORIFICE RATING	APPLICATION	REMARKS
T-1	425	SPENCE	80S	3/4"	45 PSI	80 PSI	HEATER SUPPLY DRIP	5
T-2	425	SPENCE	80S	3/4"	45 PSI	80 PSI	HEATER SUPPLY DRIP	5
T-3	425	SPENCE	80S	3/4"	45 PSI	80 PSI	HEATER SUPPLY DRIP	5
T-4	425	SPENCE	80S	3/4"	45 PSI	80 PSI	HEATER SUPPLY DRIP	5
T-5	795	SPENCE	81S	3/4"	45 PSI	80 PSI	STEAM SUPPLY HEADER DRIP	5
T-6	SIZED BY HEATER MFR.	SARCO	FT-75	2"	45 PSI	75 PSI	WATER HEATER STEAM TRAP	
T-7	SIZED BY HEATER MFR.	SARCO	FT-75	2"	45 PSI	75 PSI	WATER HEATER STEAM TRAP	
T-8	SIZED BY HEATER MFR.	SARCO	FT-75	2"	45 PSI	75 PSI	WATER HEATER STEAM TRAP	
T-9	SIZED BY HEATER MFR.	SARCO	FT-75	2"	45 PSI	75 PSI	WATER HEATER STEAM TRAP	

NEW STEAM PRESSURE REDUCING VALVE SCHEDULE								
MARK	CAPACITY REQUIRED	LBS/HR MAXIMUM	MANUFACTURER	TYPE	STEAM INLET	PRESSURE OUTLET	PIPE SIZE	
							D1	D2
PRV-1	2800	3300	SPENCE	D PILOT	90 PSI	45 PSI	2"	3"

NEW STEAM WATER HEATER SCHEDULE									
MARK	STEAM		GPM	MANUFACTURER	MODEL	STEAM	STEAM	RECOVERY	REMARKS
	PSI	LBS/HR				INLET	COIL	@ 100	
<u>WH-1</u>	45	2980	60	SELLER	QHV-45-B3-140	45 PSI	7 PSI	3600	1-2-3-4 ELECTRONIC CONTROL
<u>WH-2</u>	45	2980	60	SELLER	QHV-45-B3-140	45 PSI	7 PSI	3600	1-2-3-4 ELECTRONIC CONTROL
<u>WH-3</u>	45	1490	30	SELLER	QHV-45-A3-140	45 PSI	4 PSI	1800	1-2-3-4 ELECTRONIC CONTROL
<u>WH-4</u>	45	1490	30	SELLER	QHV-45-A3-140	45 PSI	4 PSI	1800	1-2-3-4 ELECTRONIC CONTROL

NEW RE-CIRCULATION PUMP SCHEDULE									
MARK	TYPE	MANUFACTURER	MODEL	VOLT	HP	PHASE	GPM	HEAD	REMARKS
RP-1	RE-CIRCULATOR PUMP	BELL & GOSSETT	PL-36	115	1/4	1	5	15'	
RP-2	RE-CIRCULATOR PUMP	BELL & GOSSETT	PL-36	115	1/4	1	5	15'	
RP-3	RE-CIRCULATOR PUMP	BELL & GOSSETT	PL-36	115	1/4	1	5	15'	
RP-4	RE-CIRCULATOR PUMP	BELL & GOSSETT	PL-36	115	1/4	1	5	15'	

BOOSTER PUMP SCHEDULE							
MARK	TYPE	MANUFACTURER	MODEL	FLANGE	HP	RPM	REMARKS
BP-1	TP32-160/2B U-G-Z BUBE	GRUNDFOS	964405252 P1 0116	1-1/2"	3/4	3500	
BP-2	TP32-160/2B U-G-Z BUBE	GRUNDFOS	964405252 P1 0116	1-1/2"	3/4	3500	
BP-3	TP32-160/2B U-G-Z BUBE	GRUNDFOS	964405252 P1 0116	1-1/2"	3/4	3500	
BP-4	TP32-160/2B U-G-Z BUBE	GRUNDFOS	964405252 P1 0116	1-1/2"	3/4	3500	



KEY PLAN  
SCALE: NTS

- RECOVERY IS GPH AT TEMPERATURE RISE SHOWN (100 DEGREES F & A 40F-140F RISE)
- INSTALL ACCORDING TO MANUFACTURERS RECOMMENDATIONS
- PROVIDE WITH CUPRO-NIKEL HEAT EXCHANGER(DOUBLE WALL)
- 10 YEAR EXTENDED WARRANTY
- ELEVATION OF STEAM SUPPLY HEADER SERVING EXISTING WATER IS ABOVE THE ELEVATION OF STEAM CONTROL VALVES THAT SERVE THOSE HEATERS. THIS REQUIRES THAT A DRIP TAP BE INSTALLED ON THE STEAM SUPPLY LINE SERVING EACH WATER HEATER. IN THE EVENT THESE TAPS ARE ELIMINATED, THEIR CONNECTIONS POINTS IN THE CONDENSATE COLLECTION HEADER WILL BE PLUGGED. DEPENDING ON MANUFACTURER, IF ELEVATION OF CONTROL VALVE ON NEW HEATERS IS AT OR ABOVE STEAM SUPPLY LINE ELEVATION, TRAPS T-1 THROUGH WILL NO LONGER BE REQUIRED.



UNITED STATES DEPARTMENT OF VETERANS AFFAIRS  
VA MEDICAL CENTER - 1540 SPRING VALLEY DRIVE - HUNTINGTON WV 25704

DRAWING TITLE: <b>PLUMBING GENERAL NOTES, LEGEND, ABBREVIATIONS &amp; SCHEDULES</b>		PROJECT TITLE: <b>REPLACE HOT WATER HEATERS BLDG. 1S</b>		
APPROVED: CHRISTOPHER ECKLES ASST CHIEF, ENGINEERING SERVICE	BUILDING: <b>1S</b>	PROJECT NUMBER: <b>581-12-108</b>	DRAWING NUMBER: <b>P1</b>	
APPROVED: JOHN KLIM CHIEF, ENGINEERING SERVICE	DRAWN: KAZI HOSSAIN	DATE: <b>MAY '12</b>	DWG. <b>2</b> OF <b>6</b>	