

three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot

PRESSURE REGULATING VALVE SCHEDULE							
DESIG	LOCATION	FLUID	REQUIRED CAPACITY	MAXIMUM FLOW WIDE OPEN VALVE	PRESSURE (PSIG)		REMARKS
					IN	OUT	
PRV-4104	BOILER No 1	GAS IGNITOR	300 SCFH	-	10	2	SEE GENERAL NOTES
PRV-4105	BOILER No 1	LIQUEFIED PETROLEUM GAS	120 SCFH	-	10	8	SEE GENERAL NOTES
PRV-4113	BOILER No 1	NATURAL GAS	25,000 SCFH	-	10	5	SEE GENERAL NOTES
PRV-4204	BOILER No 2	GAS IGNITOR	300 SCFH	-	10	2	SEE GENERAL NOTES
PRV-4205	BOILER No 2	LIQUEFIED PETROLEUM GAS	120 SCFH	-	10	8	SEE GENERAL NOTES
PRV-4213	BOILER No 2	NATURAL GAS	25,000 SCFH	-	10	5	SEE GENERAL NOTES
PRV-4304	BOILER No 3	GAS IGNITOR	300 SCFH	-	10	2	SEE GENERAL NOTES
PRV-4305	BOILER No 3	LIQUEFIED PETROLEUM GAS	120 SCFH	-	10	8	SEE GENERAL NOTES
PRV-4313	BOILER No 3	NATURAL GAS	25,000 SCFH	-	10	5	SEE GENERAL NOTES
PRV-4703	SUPPLY MAIN	LIQUEFIED PETROLEUM GAS	350 SCFH	-	VARIES	10	SEE GENERAL NOTES
PRV-4804	SUPPLY MAIN	NATURAL GAS	76,000 SCFH	-	15	10	SEE GENERAL NOTES
PRV-4910	HEATING SUPPLY	NATURAL GAS	435 SCFH	-	10	0.5	SEE GENERAL NOTES
PRV-8602	SHOP AIR OUTLET	COMPRESSED AIR	-	-	125	VARIES	SEE GENERAL NOTES
PRV-8603	SHOP AIR OUTLET	COMPRESSED AIR	-	-	125	VARIES	SEE GENERAL NOTES

PRESSURE SAFETY VALVE SCHEDULE							
VA NOMENCLATURE	DESIG	LOCATION	SERVICE	TEMP (°F)	MINIMUM CAPACITY	SET PRESSURE (PSIG)	REMARKS
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
LRVE	PSV-3110	ECONOMIZER EC-1	BOILER FEED WATER	250	_ GPM	275	STAINLESS STEEL TRIM
LRVE	PSV-3210	ECONOMIZER EC-2	BOILER FEED WATER	250	_ GPM	275	STAINLESS STEEL TRIM
LRVE	PSV-3310	ECONOMIZER EC-3	BOILER FEED WATER	250	_ GPM	275	STAINLESS STEEL TRIM
-	PSV-3602	CBHX-1	BLOWDOWN	250	592 PPH	20	STAINLESS STEEL TRIM
-	PSV-5907	FUEL OIL PUMP FOP-1	FUEL OIL	40 - 70	_ GPM	-	STAINLESS STEEL TRIM
-	PSV-5908	FUEL OIL PUMP FOP-1	FUEL OIL	40 - 70	11 GPM	135	STAINLESS STEEL TRIM
-	PSV-5909	FUEL OIL PUMP FOP-2	FUEL OIL	40 - 70	_ GPM	-	STAINLESS STEEL TRIM
-	PSV-5910	FUEL OIL PUMP FOP-2	FUEL OIL	40 - 70	11 GPM	135	STAINLESS STEEL TRIM
SVB1	PSV-6104	BOILER No 1	STEAM	358	_ PPH	135	STAINLESS STEEL TRIM
SVB2	PSV-6105	BOILER No 1	STEAM	361	_ PPH	140	STAINLESS STEEL TRIM
SVB1	PSV-6204	BOILER No 2	STEAM	358	_ PPH	135	STAINLESS STEEL TRIM
SVB2	PSV-6205	BOILER No 2	STEAM	361	_ PPH	140	STAINLESS STEEL TRIM
SVB1	PSV-6304	BOILER No 3	STEAM	358	_ PPH	135	STAINLESS STEEL TRIM
SVB2	PSV-6305	BOILER No 3	STEAM	361	_ PPH	140	STAINLESS STEEL TRIM
-	PSV-6612	REDUCING STATION	STEAM	338	8,210 PPH	15	STAINLESS STEEL TRIM
-	PSV-6613	REDUCING STATION	STEAM	338	2,040 PPH	15	STAINLESS STEEL TRIM
DASV	PSV-6802	DEAERATOR DA-1	STEAM	274	1000 PPH	10	STAINLESS STEEL TRIM
-	PSV-8102	BOILER No 1	ATOMIZING AIR	-	_ SCFM	-	STAINLESS STEEL TRIM
-	PSV-8202	BOILER No 2	ATOMIZING AIR	-	_ SCFM	-	STAINLESS STEEL TRIM
-	PSV-8302	BOILER No 3	ATOMIZING AIR	-	_ SCFM	-	STAINLESS STEEL TRIM
-	PSV-8604	AIR COMPRESSOR	COMPRESSED AIR	-	_ SCFM	-	STAINLESS STEEL TRIM

STEAM V-CONE FLOWMETER SCHEDULE							
DESIG	LOCATION	TEMP (°F)	PRESSURE (PSIG)	FLOW RANGE (PPH)	MINIMUM ACCURACY (%)	MAX DIFFERENTIAL PRESSURE (PSIG)	NOMINAL PIPE SIZE (INCH)
FE-6101	BOILER No 1	338	100	2,100 - 21,000	5.0	N/A	6
FE-6201	BOILER No 2	338	100	2,100 - 21,000	5.0	N/A	6
FE-6301	BOILER No 3	338	100	2,100 - 21,000	5.0	N/A	6
FE-6604	CAMPUS SUPPLY	338	100	4,000 - 60,000	5.0	N/A	8
FE-6605	DA-1 SUPPLY	338	100	415 - 8,300	5.0	N/A	3
FE-6606	HEATING SUPPLY	338	100	105 - 2,100	5.0	N/A	1 1/2

BOILER FEED WATER V-CONE FLOWMETER SCHEDULE							
DESIG	LOCATION	TEMP (°F)	PRESSURE (PSIG)	FLOW RANGE (PPH)	MINIMUM ACCURACY (%)	MAX DIFFERENTIAL PRESSURE (PSIG)	NOMINAL PIPE SIZE (INCH)
FE-3106	BOILER No 1	250	180	2,300 - 23,000	5.0	N/A	2
FE-3206	BOILER No 2	250	180	2,300 - 23,000	5.0	N/A	2
FE-3306	BOILER No 3	250	180	2,300 - 23,000	5.0	N/A	2
FE-3805	PRIMARY HEADER	230	180	2,300 - 70,000	5.0	N/A	3
FE-3806	AUXILIARY HEADER	230	180	2,300 - 70,000	5.0	N/A	3

NATURAL GAS THERMAL MASS FLOWMETER SCHEDULE						
DESIG	LOCATION	LINE PRESSURE (PSIG)	FLOW RANGE (SCFH)	MINIMUM ACCURACY (%)	MAX DIFFERENTIAL PRESSURE (IN. W.C.)	GAS COMPANY BASE PRESSURE (PSIG)
FE-4109	BOILER No 1	10	2,500 - 25,000	1.0	14	15
FE-4209	BOILER No 2	10	2,500 - 25,000	1.0	14	15
FE-4309	BOILER No 3	10	2,500 - 25,000	1.0	14	15

FUEL OIL POSITIVE DISPLACEMENT FLOWMETER SCHEDULE							
DESIG	LOCATION	OIL VISCOSITY RANGE (cSt)	TEMP RANGE (°F)	LINE PRESSURE (PSIG)	FLOW RANGE (GPH)	MINIMUM ACCURACY (%)	MAX DIFFERENTIAL PRESSURE (PSIG)
FE-5102	BOILER No 1	7.7 - 11	40 - 70	120	18 - 180	1.0	2
FE-5202	BOILER No 2	7.7 - 11	40 - 70	120	18 - 180	1.0	2
FE-5302	BOILER No 3	7.7 - 11	40 - 70	120	18 - 180	1.0	2
FE-5904	SUPPLY MAIN	7.7 - 11	40 - 70	120	66 - 660	1.0	2
FE-5905	RETURN MAIN	7.7 - 11	40 - 70	VARIES	44 - 660	1.0	2

MISCELLANEOUS FLOWMETER SCHEDULE							
DESIG	LOCATION	TEMP (°F)	PRESSURE (PSIG)	FLOW RANGE	MINIMUM ACCURACY (%)	MAX DIFFERENTIAL PRESSURE (PSIG)	NOMINAL PIPE SIZE (INCH)
FE-1419	NON-POTABLE WATER SUPPLY	70	65	0 - 210 GPM	5.0	N/A	2
FE-1429	NON-POTABLE WATER SUPPLY	70	65	0 - 210 GPM	5.0	N/A	2
FE-1439	NON-POTABLE WATER SUPPLY	70	65	0 - 210 GPM	5.0	N/A	2
FE-1501	DOMESTIC WATER SUPPLY	70	65	0 - _ GPM	5.0	N/A	6
FE-1502	DOMESTIC WATER SUPPLY	70	65	0 - 260 GPM	5.0	N/A	4
FE-1701	NON-POTABLE WATER TO CST-1	70	65	0 - 130 GPM	5.0	N/A	3
FE-1702	SOFT WATER TO CST-1	70	65	0 - 130 GPM	5.0	N/A	3
FE-4801	NATURAL GAS SUPPLY	70	15	2,400 - 76,000 SCFH	5.0	N/A	6
FE-6705	STEAM CONDENSATE	212	80	0 - 120 GPM	5.0	N/A	4
FE-6706	STEAM CONDENSATE	212	15	0 - _ GPM	5.0	N/A	3



- GENERAL NOTES:
- ALL ITEMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS AND STRAINERS, TRANSMITTERS, CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS TO THE RESIDENT ENGINEER FOR RESOLUTION.
  - ALL FLOWS, CAPACITIES, PRESSURES, TEMPERATURES, ETC REQUIREMENTS SHALL BE VERIFIED AND COORDINATED WITH THE MANUFACTURERS EQUIPMENT PROVIDED.

STEAM PRESSURE REDUCING VALVE SCHEDULE							
DESIG	LOCATION	REQUIRED CAPACITY (PPH)	MAXIMUM FLOW WIDE OPEN VALVE (PPH)	PRESSURE (PSIG)			REMARKS
				IN	OUT		
PRV-6607	REDUCING STATION	1,470	1,470	100	9		SEE GENERAL NOTES
PRV-6608	REDUCING STATION	2,040	2,040	100	7		SEE GENERAL NOTES
PRV-6609	REDUCING STATION	4,700	4,700	100	5		SEE GENERAL NOTES
PRV-6610	REDUCING STATION	2,040	2,040	100	15		SEE GENERAL NOTES

FLOW AND LEVEL CONTROL VALVE SCHEDULE								
DESIG	LOCATION	SYSTEM	MIN FLOW COEFFICIENT (Cv)	FLOW RANGE	TEMP (°F)	MAX INLET PRESSURE (PSIG)	MIN OUTLET PRESSURE (PSIG)	MAX. LEAKAGE AT SHUT-OFF
LCV-1703	CST-1	NON-POTABLE WATER	23.3	0 - 130 GPM	70	65	45	CLASS IV
LCV-1704	CST-1	SOFT WATER	23.3	0 - 130 GPM	70	65	45	CLASS IV
LCV-1801	DA-1	SOFT WATER	20.8	0 - 130 GPM	70	65	40	CLASS IV
LCV-3107	BOILER No 1	BOILER FEED WATER	13.1	0 - 23,000 PPH	250	153	145	CLASS IV
LCV-3207	BOILER No 2	BOILER FEED WATER	13.1	0 - 23,000 PPH	250	153	145	CLASS IV
LCV-3307	BOILER No 3	BOILER FEED WATER	13.1	0 - 23,000 PPH	250	153	145	CLASS IV
LCV-3808	DA-1	BOILER FEED WATER	20.8	0 - 130 GPM	227	30	5	CLASS IV
FCV-4108	BOILER No 1	NATURAL GAS	40.5	0 - 25,000 SCFH	70	9	7	CLASS IV
FCV-4208	BOILER No 2	NATURAL GAS	40.5	0 - 25,000 SCFH	70	9	7	CLASS IV
FCV-4308	BOILER No 3	NATURAL GAS	40.5	0 - 25,000 SCFH	70	9	7	CLASS IV
FCV-5101	BOILER No 1	FUEL OIL	1.02	0 - 180 GPH	70	120	115	CLASS IV
FCV-5201	BOILER No 2	FUEL OIL	1.02	0 - 180 GPH	70	120	115	CLASS IV
FCV-5301	BOILER No 3	FUEL OIL	1.02	0 - 180 GPH	70	120	115	CLASS IV
FCV-6601	HV-B-1	STEAM	8.6	0 - 500 PPH	250	15	5	CLASS IV
FCV-6602	HV-B-2	STEAM	8.6	0 - 500 PPH	250	15	5	CLASS IV
FCV-6603	HV-B-3	STEAM	8.6	0 - 500 PPH	250	15	5	CLASS IV
LCV-6801	DA-1	CONDENSATE	20.8	0 - 130 GPM	180	60	40	CLASS IV

- NOTE:
- MINIMUM FLOW COEFFICIENT (Cv) IS BASED ON AN OPERATING CONDITION AT 80% LOAD.

FINAL DESIGN  
APPROVED FOR CONSTRUCTION

		CONSULTANTS:		ENGINEER-OF-RECORD JACK STEWART NEALE		FL P.E. NO. 42678		ARCHITECT/ENGINEERS:		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management	
		 <b>Affiliated Engineers</b> Affiliated Engineers SE, Inc. Trioga Town Center 12921 SW 1st Road Ste 205 Gainesville, Florida 32669 Tel 352.376.5500 Fax 352.375.3479 CA-6140				 <b>INC.</b> 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #26693 AKEA Project No. 083-14		MECHANICAL SCHEDULES		Approved: Project Director		REPLACE BOILERS - FCA D, ENERGY AT THE MALCOM RANDALL VAMC		573-14-600			
Building Number																	
Drawing Number																	
1 - Addendum #2		08/30/17										Location GAINESVILLE, FLORIDA		MP602			
Revisions:		Date										Date JULY 8, 2016		Checked JSN		Drawn RWD	