

HEATING AND COOLING

System Name	Robur (Skid)	QTY.	Heating 5° Ambient 122° Water Temp	Cooling 95° Ambient 44.6° Water Temp	Heat Recovery @ 86° Water Return Temp	Robur Voltage	Gas Connection	Water Connection	Weight (Lbs)	Length (Inches)	Width (Inches)
Park Forest South Wing (Skid 1)	RTAR360-720	1.00	528,000	346,200	N/A	208-230/1/60	1.25"	2"	5,500	306	49
Park Forest South Wing (Skid 2)	ACF-RTCF120 HR	1.00	N/A	122,480	182,236	208-230/1/60	1.0"	1.5"	2,040	93	49
Park Forest North Wing	RTAR360-720	1.00	528,000	346,200	N/A	208-230/1/60	1.25"	2"	5,500	306	49
Park Forest West Wing (Skid 1)	RTAR360-720	1.00	528,000	346,200	N/A	208-230/1/60	1.25"	2"	5,500	306	49
Park Forest West Wing (Skid 2)	ACF-RTCF120 HR	1.00	N/A	122,480	182,236	208-230/1/60	1.0"	1.5"	2,040	93	49
		Total	1,584,000	1,283,560	364,472						

CURRENT BUILDING FAN COILS

System Name	Square Feet	2 Pipe Fan Coil Units			Fan Coil Capacity (MBH)		Total Capacity (MBH)	
		W-602	W-302X	W-202	Cooling	Heating	Cooling	Heating
Park Forest South Wing	56,316							
South East	28,158	4	19	10	415	449	830	898
South West	28,158	4	19	10	415	449		
Park Forest North Wing	56,316						678	738
East	28,158		20	10	339	369		
West	28,158		20	10	339	369		
Park Forest West Wing	56,316						370	437
North West	28,158		20	5	185	219		
South West	28,158		20	5	185	219		
Total		8	118	50	1,878	2,073	1,878	2,073

PUMPS

Pump No.	System Name	Pump Model Number	Pump Qty.	Pump HP	Pump Voltage	System Flow (GPM)	System Head (FT.)
P1	Park Forest South Wing	Paco 20709 VL	1	2.00	208-230/3/60	120	27
P2	Park Forest South Wing	Paco 20709 VL	1	2.00	208-230/3/60	120	27
P3	Park Forest North Wing	Paco 20709 VL	1	2.00	208-230/3/60	120	27
P4	Park Forest North Wing	Paco 20709 VL	1	2.00	208-230/3/60	120	27
P5	Park Forest West Wing	Paco 20709 VL	1	2.00	208-230/3/60	120	26
P6	Park Forest West Wing	Paco 20709 VL	1	2.00	208-230/3/60	120	26
P7	Domestic Hot Water Pump (From Chillers)	Grundfos UPS 43-100	1	0.50	208-230/1/60	40	15
P8	Heat Recovery Pump	Grundfos 15-55SF	1	0.06	115-120/1/60	10	3
P9	Recirculation Pump (Existing)	Grundfos UP26-99B	1	0.16	115-120/1/60	10	

SYSTEM CAPACITIES

System Name	System Volume (Gal.)	Expansion Tank	Total Volume (Gal.)	Max Accept. (Gal.)	System Connection	Air Separator	Pipe Size
Park Forest South Wing	200.00	Flexcon SXHT 40	20	8	1"	Wessels SPA-3	3"
Park Forest North Wing	203.00	Flexcon SXHT 40	20	8	1"	Wessels SPA-3	3"
Park Forest West Wing	225.00	Flexcon SXHT 40	20	8	1"	Wessels SPA-3	3"
Park Forest (DHW) Recirculation		Wessels TTA 12	5	3.3	3/4"		
Park Forest (DHW) Heat Recovery		Flexcon SXHT 30	4.5	2.5	1/2"	Spirovent VJR 150 TM	1-1/2"

Glycol Makeup Unit	Glycol Makeup (Gal.)	Total System Volume (Gal.)
SF100-D-P	61.00	834.00

DOMESTIC HOT WATER

Boiler	Maximum Output (BTU/Hr)	Turn Down Ratio (TDR)	GPM 75° F Rise
Intellihot iQ 1001	940,940	33:1	25

CONTROLS

Alternating Pump Control Relay	Chiller Control
Tekmar Pump Sequencer C 132	Robur DDC

HYDRONIC SPECIALTIES

Indirect Hot Water Tank	Domestic Capacity (Gal.)	Boiler output BTU/Hr	1st Hour Recovery (Gal.)	Heat Exchanger	Qty.	Hot Side Temps		Cold Side Temps		Hot Side		Cold Side	
						In / Out (F°) 30% Glycol	In / Out (F°) Water	GPM	Pressure Drop (PSI)	GPM	Pressure Drop (PSI)		
Triangle Tube Smart 80	70	300,000	460	Triangle Tube TTP4-50	1	130/119.6	100/120	16	1.5	10	0.5		

SCHEDULES

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REVIEWED BY:
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APPROVED BY:
AD
ISSUED FOR
09/15/16 SUBMITTAL
09/22/16 REARRANGED PIPING
09/27/16 UPDATED TO FIELD CHANGES
10/06/16 REMOVED REV RET SUPPLY PIPING
11/03/16 REVISED PIPING
11/08/16 REVISED CONTROLS

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DRAWING NO.
16-009P_E_
PARK FOREST

SHEET NO.
S1