

HRWTF Alternative 4A-1 Light Phase 2 Improvements - Electrical Equipment Schedule

Equipment	Quantity	Location	Voltage/Phase	Horsepower	KW	AMPS	Remarks
Gravelly Run Pumps	3	Gravelly Run PS	480/3	125 ea			
Flow Meter	1	Gravelly Run PS	120/1			1	
Flow Meter (Flow Control Structure)	2	Hopewell RWTF	120/1			1 ea	
Motor Operated Valves (Flow Control Structure)	2	Hopewell RWTF	120/1	1 ea			
Wet Well Level Indicating Transmitter	1	Gravelly Run PS	120/1			1	
Channel Grinder	1	Gravelly Run PS	480/3	5			
Air Handling Unit	1	Gravelly Run PS	208/1		3.8		
Unit Heater	1	Gravelly Run PS	480/3		3		
Electrical Room Exhaust Fan	1	Gravelly Run PS	480/3	1.5			
Mechanical Room Exhaust Fan	1	Gravelly Run PS	480/3	1			
Submersible Pump Station Exhaust Fan	2	Gravelly Run PS	120/1	0.25 ea			
Site Lighting	lot	Gravelly Run PS	208/1		1.2		
Lighting	lot	Gravelly Run PS	120/1		2.4		
Receptacles	lot	Gravelly Run PS	120/1		3.4		
RTU/PLC	1	Gravelly Run PS	120/1		1		
Sodium Bisulfite Transfer Pump (TP-90-01)	1	Sodium Bisulfite Facility	480/3	5			
Sodium Bisulfite Tank Heat Tracing	3	Sodium Bisulfite Facility	208/1		1.8 ea		
Emergency Shower/Eyewash Heat Tracing	1	Sodium Bisulfite Facility	208/1		0.15		
Sodium Bisulfite Pipe Heat Tracing	lot	Sodium Bisulfite Facility	208/1		4.5		
Level Indicating Transmitters (LIT-9001)	3	Sodium Bisulfite Facility	120/1			1 ea	
Pressure Indicating Transmitter	1	Sodium Bisulfite Facility	120/1			1	
Sodium Bisulfite Pump Skid (MP-90-01)	1	Sodium Bisulfite Facility	120/1			20	
Flow Meter (FIT-9001)	1	Sodium Bisulfite Facility	120/1			1	
Sodium Bisulfite Lighting	lot	Sodium Bisulfite Facility	120/1		0.82		
Sodium Bisulfite Receptacles	2	Sodium Bisulfite Facility	120/1		0.18 ea		
MBBR Pump (VTP-75-01)	4	MBBR Influent Pump Station	480/3	150 ea			
Level Indicating Transmitter (LIT-7501)	1	MBBR Influent Pump Station	120/1			1	
Pressure Indicating Transmitter (PIT-7505)	1	MBBR Influent Pump Station	120/1			1	
Flow Meter (FIT-7501)	1	MBBR Influent Pump Station	120/1			1	
MBBR Pump Station Lighting	lot	MBBR Influent Pump Station	120/1		2.1		
Condensing Unit (CU-75-01)	1	MBBR Influent Pump Station	480/3			17	
Air Handling Unit Fan (AHU-75-01)	1	MBBR Influent Pump Station	480/3	2			
Air Handling Unit Electric Heat (AHU-75-01)	1	MBBR Influent Pump Station	480/3		10		
PLC13	1	MBBR Influent Pump Station	120/1		1		
MBBR Pump Station Receptacles	10	MBBR Influent Pump Station	120/1		0.18 ea		
Emergency Shower/Eyewash Heat Tracing	1	MBBR Influent Pump Station	208/1		0.15		
Unit Heater (UH-75-01)	2	MBBR Influent Pump Station	480/3		20 ea		
Unit Heater (UH-75-03)	1	MBBR Influent Pump Station	480/3		5		
Exhaust Fan (EF-75-01)	2	MBBR Influent Pump Station	120/1	0.5 ea			
Exhaust Fan (EF-75-03)	1	MBBR Influent Pump Station	120/1	1/30			
Inlet Fan (IF-75-01)	2	MBBR Influent Pump Station	120/1	0.5 ea			
DAF Unit (Rake and Nikuni Air Pumps)	3	DAF Building	480/3	Rake: 5 ea Air pumps: 40 ea			Each DAF unit has 1 rake Each DAF unit has 9 Nikuni air pumps
Polymer Feed System (PFS-125-01)	1	DAF Building	480/3			40	
Polymer Feed Pump (PFP-125-01)	4	DAF Building	480/3	0.5 ea			
DAF Solids Pump (DSP-125-01)	5	DAF Building	480/3	5 ea			
Air Compressor	2	DAF Building	480/3	5 ea			
Motorized Valve (MV-125-01)	6	DAF Building	480/3	0.5 ea			
Flow Meter (FIT-125-01)	1	DAF Building	120/1			1	
DAF Building Lighting	lot	DAF Building	120/1		6.5		
Water Heater (EWH-125-01)	1	DAF Building	480/3		72		
Water Heater (EWH-125-02)	2	DAF Building	208/1		8 ea		

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Condensing Unit (CU-125-01)	1	DAF Building	480/3			17	
Air Handling Unit Fan (AHU-125-01)	1	DAF Building	480/3	2			
Air Handling Unit Electric Heat (AHU-125-01)	1	DAF Building	480/3		10		
PLC15	1	DAF Building	120/1		1		
DAF Building Receptacles	13	DAF Building	120/1		0.18 ea		
Unit Heater (UH-125-01)	6	DAF Building	480/3		25 ea		
Unit Heater (UH-125-07)	2	DAF Building	480/3		15 ea		
Exhaust Fan (EF-125-01)	2	DAF Building	480/3	2 ea			
Exhaust Fan (EF-125-03)	1	DAF Building	120/1	0.5			
Inlet Fan (IF-125-01)	2	DAF Building	480/3	2 ea			
Overhead Door	3	DAF Building	208/1	0.75 ea			
Bridge Crane	1	Blower Building	480/3			72	
Single Stage Blower (SSB-175-01)	1	Blower Building	4160/3	1400			
Single Stage Blower LCP	1	Blower Building	120/1		1		
Multi Stage Blower (MSB-175-01)	2	Blower Building	4160/3	1250 ea			
Multi Stage Blower LCP	2	Blower Building	120/1		1 ea		
Blower Master Control Panel	1	Blower Building	120/1		1		
Motorized Valve (MV-175-01)	5	Blower Building	480/3	1 ea			
Blower Building Lighting	lot	Blower Building	120/1		2.9		
Condensing Unit (CU-175-01)	1	Blower Building	480/3			14	
Air Handling Unit Fan (AHU-175-01)	1	Blower Building	480/3	2			
Air Handling Unit Electric Heat (AHU-175-01)	1	Blower Building	480/3		20		
PLC14	1	Blower Building	120/1		1		
Blower Building Receptacles	6	Blower Building	120/1		0.18 ea		
Unit Heater (UH-175-01)	4	Blower Building	480/3		75 ea		
Exhaust Fan (EF-175-01)	1	Blower Building	480/3	2			
Exhaust Fan (EF-175-02)	1	Blower Building	120/1	0.25			
Sodium Hydroxide Tank Heat Tracing	3	Sodium Hydroxide Facility	208/1		1.8 ea		
Emergency Shower/Eyewash Heat Tracing	1	Sodium Hydroxide Facility	208/1		0.15		
Sodium Hydroxide Pipe Heat Tracing	lot	Sodium Hydroxide Facility	208/1		4.5		
Level Indicating Transmitter (LIT 15001)	3	Sodium Hydroxide Facility	120/1			1 ea	
Transfer Pump (TP-150-01)	1	Sodium Hydroxide Facility	480/3	5			
Metering Pump Skid (MP-150-01)	1	Sodium Hydroxide Facility	120/1			20	
Flow Meter (FIT-15001)	1	Sodium Hydroxide Facility	120/1			1	
Pressure Indicating Transmitter	1	Sodium Hydroxide Facility	120/1			1	
Sodium Hydroxide Facility Lighting	lot	Sodium Hydroxide Facility	120/1		1.5		
Condensing Unit (CU-150-01)	1	Sodium Hydroxide Facility	208/1			12	
Air Handling Unit Fan (AHU-150-01)	1	Sodium Hydroxide Facility	480/3	0.5			
Air Handling Unit Electric Heat (AHU-150-01)	1	Sodium Hydroxide Facility	480/3		3		
Sodium Hydroxide Facility Receptacles	11	Sodium Hydroxide Facility	120/1		0.18 ea		
Unit Heater (UH-150-01)	1	Sodium Hydroxide Facility	480/3		10.00		
Exhaust Fan (EF-150-01)	1	Sodium Hydroxide Facility	120/1	1/6			
Water Heater (EWH-150-01)	1	Sodium Hydroxide Facility	480/3		72		
Collector Drive	2	Secondary Clarifier No. 9	480/3	0.5 ea			
RAS Pump (RP-200-01)	1	Secondary Clarifier No. 9	480/3	20			
Flow Meter (FIT-200-01)	1	Secondary Clarifier No. 9	120/1			1	
New Secondary Clarifier Lighting	lot	Secondary Clarifier No. 9	208/1		3		Electrical requirements must be field verified. New lights are to match existing.
Hyperbolic Mixers (VTM-225-01)	4	UNOX Tanks	480/3	15 ea			
Vertical Turbine Surface Aerator (VTM-225-05)	4	UNOX Tanks	480/3	125 ea			
Vertical Turbine Surface Aerator (VTM-225-06)	4	UNOX Tanks	480/3	100 ea			
Vertical Turbine Surface Aerator (VTM-225-07)	4	UNOX Tanks	480/3	75 ea			

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Equipment	Quantity	Location	Voltage/Phase	Horsepower	KW	AMPS	Remarks
MBBR Screen (S-100-01)	2	Segregated MBBR System	480/3	1 ea			
MBBR Washer & Compactor	2	Segregated MBBR System	480/3	3 ea			
MBBR Screen Control Panel	1	Segregated MBBR System	120/1		1		
Mixers (MIX-100-01)	30	Segregated MBBR System	480/3	9 ea			
Recycle Pump (AFP-100-01)	3	Segregated MBBR System	480/3	100 ea			
Motorized Valve (MV-100-01)	15	Segregated MBBR System	480/3			2 ea	
Flow Meter (FIT-100-01)	16	Segregated MBBR System	120/1			1 ea	
pH Probe (AIT 10001)	2	Segregated MBBR System	120/1			1 ea	
DO Probes (AIT 10002)	6	Segregated MBBR System	120/1			1 ea	
Chemical Analyzer	2	Segregated MBBR System	120/1			1 ea	
MBBR Tank Lighting	lot	Segregated MBBR System	120/1		0.9		
MBBR Tank Receptacles	13	Segregated MBBR System	120/1		0.18 ea		
Centrifuge Feed Pump	1	Centrifuge Building	460/3	25			
Macerator	1	Centrifuge Building	480/3	5			
Flow Meter	1	Centrifuge Building	120/1			1	
Solenoid Valve	3	Centrifuge Building	120/1			1 ea	
Centrifuge Main Drive Motor	1	Centrifuge Building	480/3	150			
Centrifuge Back Drive Motor	1	Centrifuge Building	480/3	50			
Centrifuge Local Control Panel	1	Centrifuge Building	120/1		1		
Centrifuge Lube Oil Motor & Controls	1	Centrifuge Building	480/3	5			
Incline Screw Conveyor	1	Centrifuge Building	480/3	7.5			
Incline Screw Conveyor Local Control Panel	1	Centrifuge Building	120/1		1		
Cross Screw Conveyor	1	Centrifuge Building	480/3	20			