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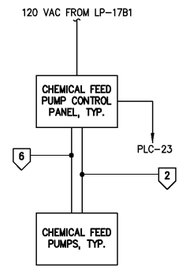
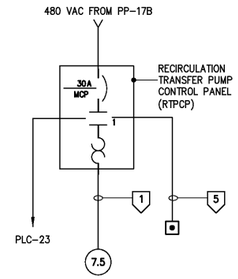
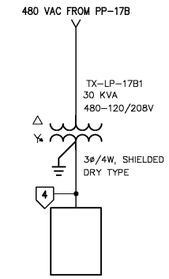


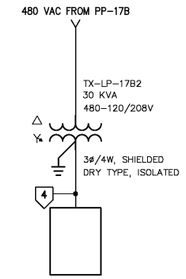
CHEMICAL FEED PUMPS WIRING DIAGRAM, TYP



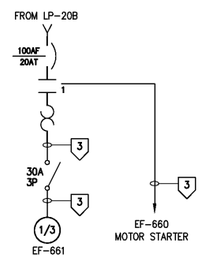
RECIRCULATION TRANSFER PUMPS WIRING DIAGRAM, TYP



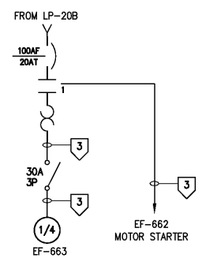
LP-17B1 WIRING DIAGRAM



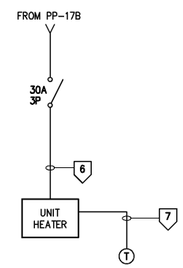
LP-17B2 WIRING DIAGRAM



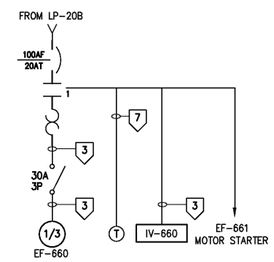
EF-661 MOTOR STARTER WIRING DIAGRAM



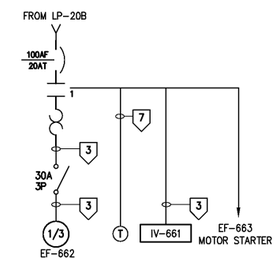
EF-663 MOTOR STARTER WIRING DIAGRAM



UH-660 – UH-663 WIRING DIAGRAM



EF-660 MOTOR STARTER WIRING DIAGRAM



EF-662 MOTOR STARTER WIRING DIAGRAM

CONDUIT AND WIRE LEGEND
(NUMBERS REFERENCE THIS SHEET ONLY)

NO.	DESCRIPTION
1	3#10, 2#12, 4#14, #12G, 1"C
2	1-TTS, 3/4"C
3	2#12, #12G, 3/4"C
4	4#3, #8G, 2"C
5	6#14, #14G, 3/4"C
6	3#12, #12G, 3/4"C
7	4#14, #14G, 3/4"C

120/208 VOLTS
3ø, 4 WIRE

LP-17B2

TYPE:
MOUNT: SURFACE

MAIN BKR
100 A 3 P

DESCRIPTION	WIRE	CKT BKR TRIP	CKT BKR POLE	CKT BKR NO	VOLT AMPERE ØA	VOLT AMPERE ØB	VOLT AMPERE ØC	VOLT AMPERE ØA	VOLT AMPERE ØB	VOLT AMPERE ØC	CKT BKR NO	CKT BKR POLE	CKT BKR TRIP	WIRE	DESCRIPTION
MOV-66201	3	20	1	1	500			500			2	1	20	3	MOV-66202
MOV-66203	3	20	1	3		500			500		4	1	20	3	MOV-66301
MOV-66302	3	20	1	5			500				6	1	20		SPARE
LIT-66401, 66402, 66403	3	20	1	7	200						8	1	20		SPARE
SPARE		20	1	9					200		10	1	20	3	LIT-66501 & 66502
SPARE		20	1	11						500	12	1	20	3	PLC-23
SPARE		20	1	13				200			14	1	20	3	FE/FIT-66410, 66411, 66412
SPARE		20	1	15					100		16	1	20	3	HOT BOX RECEPT HYPO
AIC-430	3	20	1	17			100			500	18	1	20	3	EF-660 MOTOR STARTER
EF-661 MOTOR STARTER	3	20	1	19	500			500			20	1	20	3	EF-662 MOTOR STARTER
EF-663 MOTOR STARTER	3	20	1	21		500			100		22	1	20	3	FE/FIT 66510
FE/FIT 66413	3	20	1	23			100				24	1	20	3	HOT BOX RECEPT BI-SULF
SPARE		20	1	25							26	1	20		SPARE
SPARE		20	1	27							28	1	20		SPARE
SPARE		20	1	29							30	1	20		SPARE
SPARE		20	1	31							32	1	20		SPARE
SPARE		20	1	33							34	1	20		SPARE
SPARE		20	1	35							36	1	20		SPARE
SPARE		20	1	37							38	1	20		SPARE
SPARE		20	1	39							40	1	20		SPARE
SPARE		20	1	41							42	1	20		SPARE
NEMA 12 TVSS				TOTAL	1200	1000	700	1200	900	1000	TOTAL				
					PHASE TOTAL			TOTAL LOAD							
					2400	1900	1700	6000							

120/208 VOLTS
3ø, 4 WIRE

LP-17B1

TYPE:
MOUNT: SURFACE

MAIN BKR
100 A 3 P

DESCRIPTION	WIRE	CKT BKR TRIP	CKT BKR POLE	CKT BKR NO	VOLT AMPERE ØA	VOLT AMPERE ØB	VOLT AMPERE ØC	VOLT AMPERE ØA	VOLT AMPERE ØB	VOLT AMPERE ØC	CKT BKR NO	CKT BKR POLE	CKT BKR TRIP	WIRE	DESCRIPTION
HYPOCHLORITE ROOM LIGHTS	3	20	1	1	1200			1200			2	1	20	3	HYPOCHLORITE ROOM LIGHTS
OUTDOOR LIGHTS	3	20	1	3		700			650		4	1	20	3	ELECTRICAL ROOM LIGHTS
BISULFITE ROOM LIGHTS	3	20	1	5			1800			1200	6	1	20	3	HYPOCHLORITE ROOM RECEPT.
ELECTRICAL ROOM RECEPTACLES	3	20	1	7	400			1200			8	1	20	3	BISULFITE ROOM RECEPTACLES
SHFPCP-1	3	20	1	9		1000			1000		10	1	20	3	SHFPCP-2
SHFPCP-3	3	20	1	11			1000			1000	12	1	20	3	SHFPCP-4
SHFPCP-5	3	20	1	13	1000			1000			14	1	20	3	SBFPCP-1
SBFPCP-2	3	20	1	15		1000			500		16	1	20	3	HYPOCHLORITE TANK CP
SODIUM BISULFITE TANK CP	3	20	1	17			500			500	18	1	20	3	CHEMICAL SUMP PUMP NO.1
CHEMICAL SUMP PUMP NO.2	3	20	1	19	500			1500			20	1	20	3	FILL PANEL NO.1 HEATER
FILL PANEL NO.2 HEATER	3	20	1	21		1500			1500		22	1	20	3	WATER SOFTENER
SBFPCP-6	3	20	1	23			1000			500	24	1	20	3	CHLORINE CONTACT HEAT TRACING
CHLORINE PUMP		20	1	25							26	1	20		AE TRANSMITTER
SPARE		20	1	27							28	1	20		SPARE
SPARE		20	1	29							30	1	20		CHLORINE PUMP
SPARE		20	1	31							32	1	20		SPARE
SPARE		20	1	33							34	1	20		SPARE
SPARE		20	1	35							36	1	20		SPARE
SPARE		20	1	37							38	1	20		SPARE
SPARE		20	1	39							40	1	20		SPARE
SPARE		20	1	41							42	1	20		SPARE
NEMA 12 TVSS				TOTAL	3100	3200	4300	4900	3650	3200	TOTAL				
					PHASE TOTAL			TOTAL LOAD							
					8000	6850	7500	22350							

NO.	ISSUED FOR	DATE	BY
	RECORD DRAWINGS	MAR 2008	RLT
	CONSTRUCTION	MAR 2004	RLT
	REGULATORY APPROVAL	NOV 2003	RLT
	PRELIMINARY DESIGN	NOV 2002	RLT

DESIGNED BRL
DRAWN BRL
CHECKED
PROJ. ENGR. H & S
APPROVED

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY RONALD L. TAYLOR, SEAL NO. 024649

RECORD DRAWING

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HAZEN AND SAWYER
Environmental Engineers & Scientists
4011 WestChase Blvd, Raleigh, North Carolina 27607

CITY OF ROANOKE
VIRGINIA

REGIONAL WATER POLLUTION CONTROL PLANT
WET WEATHER IMPROVEMENTS

DISINFECTION CHEMICAL FEED FACILITIES
ELECTRICAL
PANEL SCHEDULES AND WIRING DIAGRAMS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE JULY 2003
H & S JOB NUMBER 30788A
CONTRACT NUMBER A
DRAWING NUMBER E662

PLOT DATE 07/09/03 12:21pm FILE= H:\30788\30788A\ELEC\e662 by BLISK XREF=:30788b\misc\30789tb,