

ENVIRONMENTAL CONSTRUCTION CORP.

CWS, DIV.

DUPLEX BLOWER
CONTROL PANEL
WITH CLARIFIER
MOTOR CONTROLS
PORT BIENVILLE

Environmental Construction Corp.
P.O. Box 396
Pass Christian, MS 39571
(228) 255-5353 Fax (228) 255-6095

CP-1871

VOLTAGE	<u>480V</u>	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	<u>3/60</u>	
NO. MOTORS	<u>2,1</u>	
HP	<u>10, 1/2</u>	
FLA	<u>13, 1.0</u>	
TYPE OF PUMP	<u>Blower,Clarifier Motor</u>	(Self-Priming, Submersible)
MANUFACTURER	<u></u>	
CATALOG NUMBER	<u></u>	
CONTROL VOLTAGE	<u>120V</u>	(120V, Other)
ENCLOSURE	<u>NEMA 4X</u>	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	<u>Fiberglass</u>	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR	<u></u>	(Floats, Bubbler, Other)
CAPACITORS	<u></u>	(Yes, No)
CAPACITOR WIRING FIGURE	<u></u>	
THERM. & SEAL FAIL WIRING FIGURE	<u></u>	

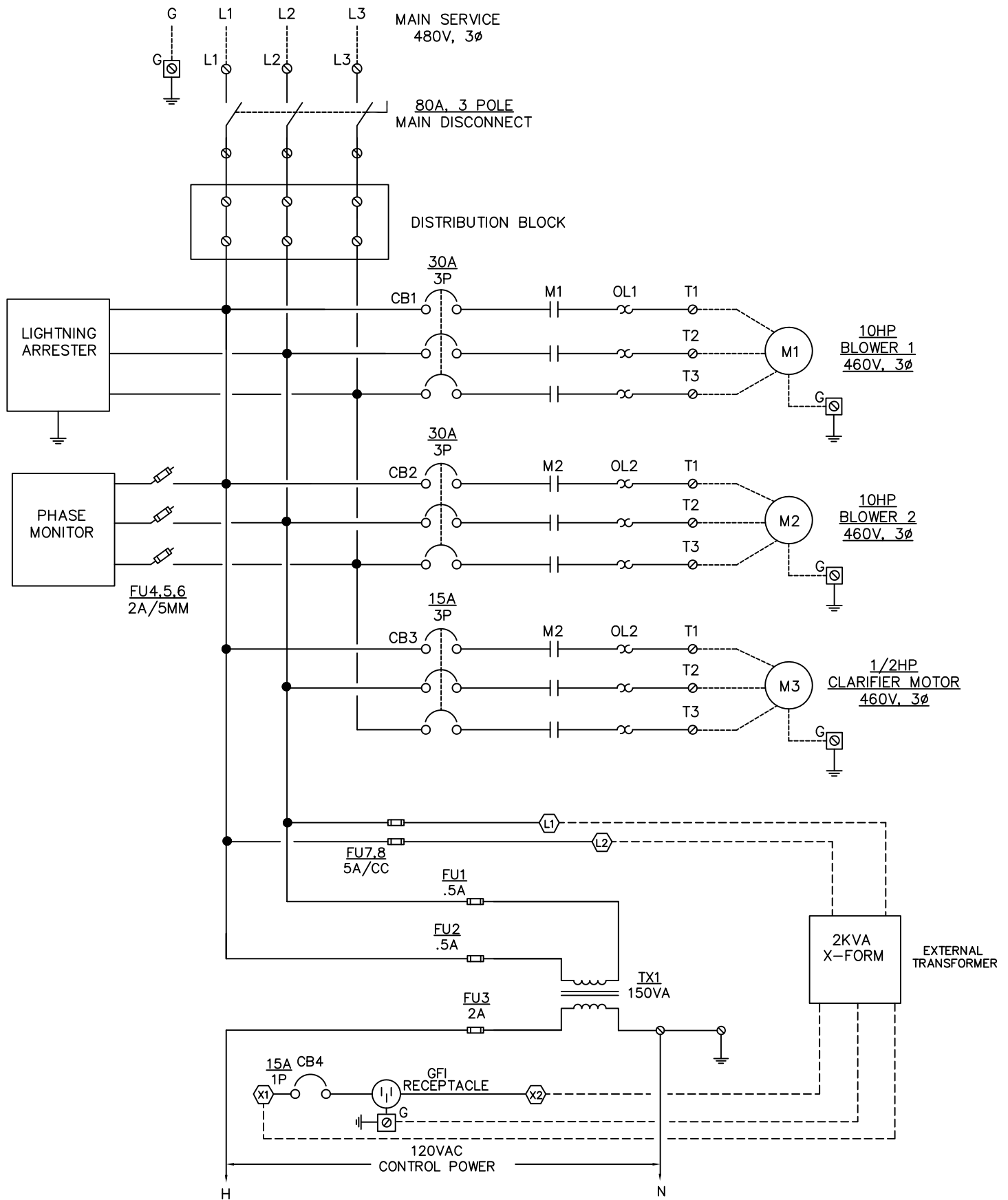
OPTIONS:

SEAL FAIL LIGHTS	<u></u>	(Submersible Only)
SEAL FAIL RELAYS	<u></u>	(Submersible Only)
SEAL FAIL PUMP SHUTDOWN	<u></u>	(Submersible Only)
HT PUMP SHUTDOWN	<u></u>	(Self-Primer, Submersible)
ALARM HORN	<u></u>	
ALARM LIGHT	<u></u>	
LIGHT PANEL MTD	<u></u>	
LIGHT REMOTE MTD	<u></u>	
LIGHT FLASHER	<u></u>	
LIGHTNING ARRESTER	<u>X</u>	
ELAPSED TIME METER	<u></u>	
PHASE MONITOR	<u>X</u>	
NEMA RATED STARTERS	<u></u>	
GROUND FAULT RECPT.	<u>X</u>	
GREEN RUN LIGHTS VS. RED	<u></u>	
POLE, BOX, SEAL	<u></u>	
INTRINSICALLY SAFE RELAYS	<u></u>	
HIGH TEMP. LOCKOUT, MANUAL RESET	<u></u>	
ECONOMY VERSION	<u></u>	

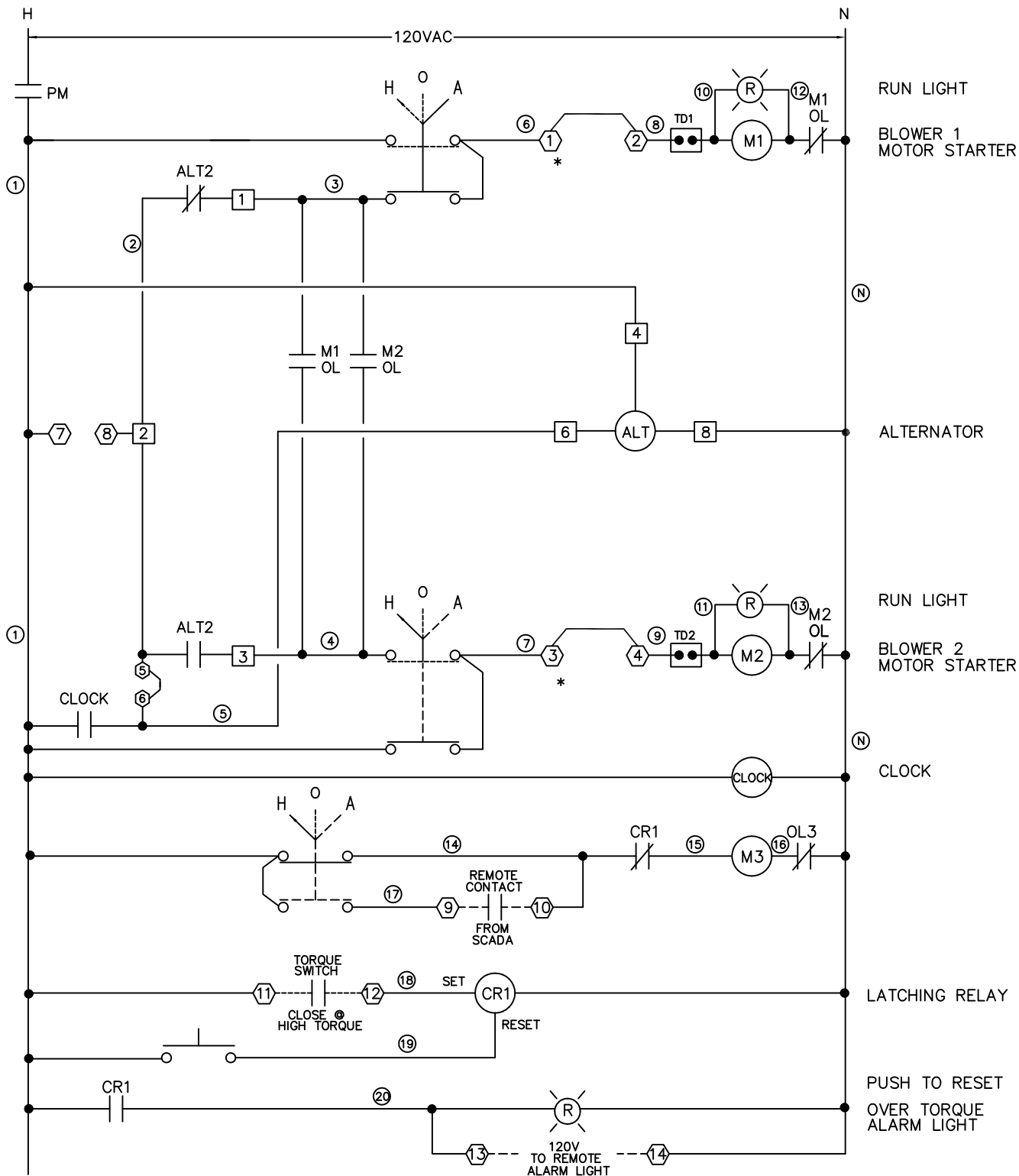
SOLD TO: Environmental Construction Corp.
TAG : PORT BIENVILLE

SHIP TO: ECC
Pass Christian, MS

	Drawing Title						
	PANEL DESCRIPTION						
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
8/13/04		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY	DATE
	Project Title	Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095				PURCHASE ORDER NUMBER	
	DUPLEX BLOWER CONTROL PANEL					DRAWING NUMBER CP-1871	
						SHEET NUMBER 1	



	Drawing Title								
	POWER DIAGRAM								
DATE 8/13/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN BY C. RACHAL	DATE BY	BY	DATE	BY
	Project Title	Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095					PURCHASE ORDER NUMBER		
	DUPLEX BLOWER CONTROL PANEL						DRAWING NUMBER CP-1871		
							SHEET NUMBER 2		

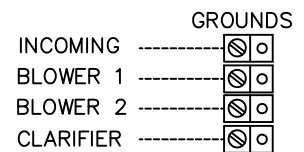
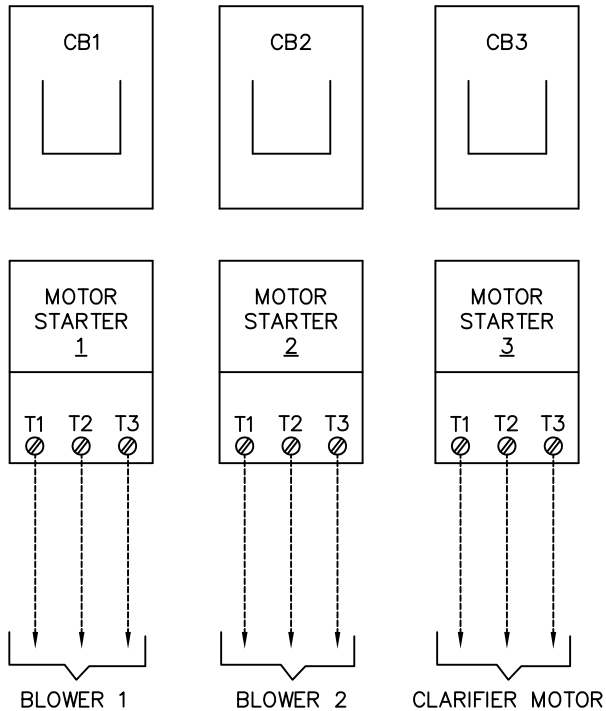
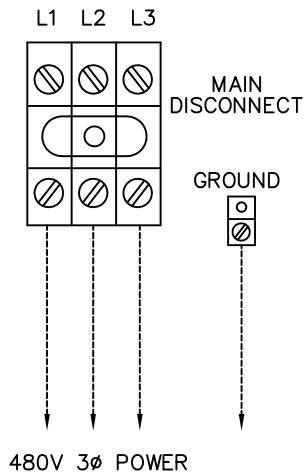


* REMOVE JUMPERS AND INSTALL LOCKOUT DEVICES IF REQUIRED

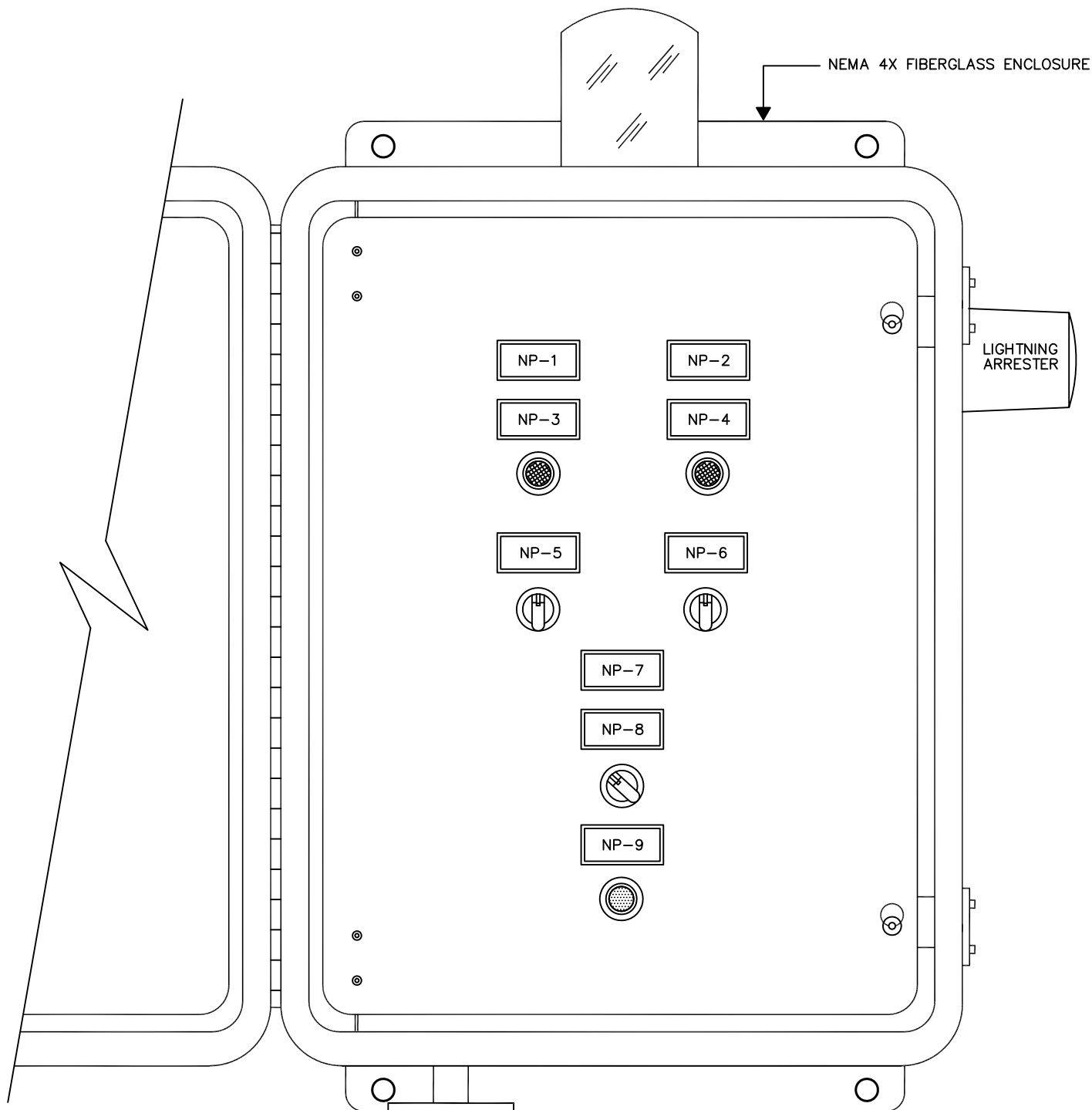
PANEL IS DESIGNED TO RUN AERATORS WITH A MINIMUM OF 15 MINUTES OF OFF TIME BETWEEN ALTERNATION. PINS PUSHED OUT ON CLOCK INDICATE RUN TIME. PINS PUSHED IN INDICATE OFF TIME. EACH PIN IS EQUAL TO 15 MINUTES.

IF NO OFF TIME IS REQUIRED BETWEEN ALTERNATION, REMOVE JUMPER FROM TERMINALS 7 AND 8. PLACE JUMPER ACROSS TERMINALS 7 AND 8. NOW AERATORS WILL RUN CONTINUOUSLY. SET 1 PIN IN AT THE TIME YOU WISH THE AERATORS TO ALTERNATE. ALL REMAINING PINS SHOULD BE PUSHED OUT.

DATE 8/13/04	Drawing Title							
	CONTROL DIAGRAM							
	REFERENCE DRAWING		NO.		REVISION-LOCATION		ECN	DATE
	S/N		Sales Engineer		Application Engineer		DRAWN	
Project Title		C.C.		R.C.		BY C. RACHAL		APPROVED
Project Title		Environmental Construction Corp.		P.O. Box 396		Pass Christian, MS 39571		PURCHASE ORDER NUMBER
Project Title		(228) 255-5353		Fax (228) 255-6095				DRAWING NUMBER
Project Title								CP-1871
Project Title								SHEET NUMBER
Project Title								3



	Drawing Title						
	EXTERNAL CONNECTIONS						
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
8/13/04		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY	
	Project Title	Environmental Construction Corp.				PURCHASE ORDER NUMBER	
	DUPLEX BLOWER CONTROL PANEL	P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095				DRAWING NUMBER CP-1871	
						SHEET NUMBER 4	



VIEW OF SWING OUT PANEL

NAMEPLATE SCHEDULE

NP-1	BLOWER 1
NP-2	BLOWER 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA
NP-7	CLARIFIER MOTOR
NP-8	HOA
NP-9	OVER TORQUE/RESET

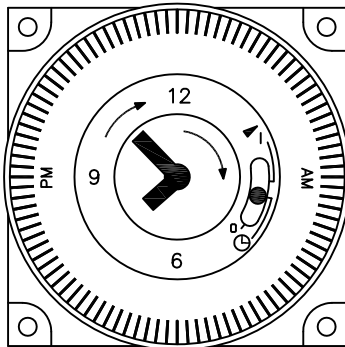
NOTE:
SEWER GASSES WILL DESTROY COMPONENTS IN PANEL.
PROPER SEALS MUST BE INSTALLED EXTERNAL TO THE
PANEL TO PREVENT ENTRY OF GASSES.

	Drawing Title								
	ENCLOSURE								
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY		
8/13/04		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED			
	Project Title	Environmental Construction Corp.					PURCHASE ORDER NUMBER		
	DUPLEX BLOWER CONTROL PANEL	P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095					DRAWING NUMBER CP-1871		
							SHEET NUMBER 5		

BILL OF MATERIAL

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	ALLIED	AM24200RL	ENCLOSURE
2	1	ALLIED	HFP2420	BACKPLATE
3	3	ABB	A16-30-10-84	STARTER
4	2	ABB	TA25DU14	O.L.1,2 (10-14A)
5	2	ABB	S1N030TL	CIRCUIT BREAKER 1,2
6	2	ACI	JR22P3M20B	H.O.A. SWITCH
7	1	TIMEMARK	261DT120	ALTERNATING RELAY
8	1	GRASSLIN	FM/1 STUZH-L	TIMER
9	2	ACI	JR22FR	RED PILOT LIGHT
10	1	SQUARE D	9070TF150D1	TRANSFORMER
11	1	ABB	OT63E3	DISCONNECT SWITCH
12	1	STOCK		GFI RECEPTACLE
13	1	SQUARE D	QOU115	CB4
14	1	SSAC	PLMU-11	PHASE MONITOR
15	1	DELTA	LA603	LIGHTNING ARRESTER
16	1	MARATHON	1323580	DISTRIBUTION BLOCK
17	2	DAYTON	2A561	TIME DELAY
18	1	ABB	TA25DU1.4	O.L.3 (1.0-1.4A)
19	1	ABB	S1N015TL	CIRCUIT BREAKER 3
20	1	ACI	JR22AN11B	PUSH BUTTON
21	1	MAGNECRAFT	W388AMLCPX-9	LATCHING RELAY
22	1	LUMA PRO	3RB24	REMOTE ALARM LIGHT
23				

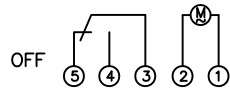
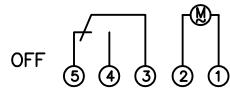
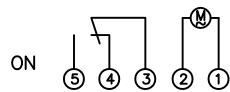
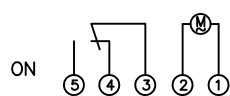
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	BILL OF MATERIALS							
DATE 8/13/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE	BY
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							SHEET NUMBER 6	



"OFF" POSITION – TRIPPERS PUSHED INWARD
 "ON" POSITION – TRIPPERS PUSHED OUTWARD

3-WAY MANUAL
 OVERRIDE SWITCH

I = PERMANENT ON
 ☉ = AUTOMATIC
 O = PERMANENT OFF



I = PERMANENT ON



☉ = AUTOMATIC



O = PERMANENT OFF

TIME SETTING

TURN THE PROGRAM DIAL GRADUALLY CLOCKWISE UNTIL THE DAY OF THE WEEK (7-DAY TIMER) AND TIME OF DAY ON THE OUTER DIAL IS ALIGNED WITH THE TRIANGLE MARKER ON THE INNER DIAL (TWO O'CLOCK POSITION). FOR TO-THE-MINUTE SETTING TURN THE MINUTE HAND CLOCKWISE TO THE EXACT TIME OF DAY.

EXAMPLE FOR 7-DAY PROGRAM DIAL. MONDAY 10:30 AM. TURN PROGRAM DIAL OR MINUTE HAND CLOCKWISE UNTIL MONDAY 10:30 AM IS ALIGNED WITH THE TRIANGLE ON THE INNER DIAL. THE HOUR AND MINUTE HAND WILL SHOW EXACTLY 10:30.

EXAMPLE FOR 24-HOUR PROGRAM DIAL. MONDAY 10:30 AM. TURN MINUTE HAND CLOCKWISE UNTIL 10:30 AM IS ALIGNED WITH TRIANGLE ON THE INNER DIAL. THE HOUR AND MINUTE HAND WILL SHOW EXACTLY 10:30.

PROGRAMMING

THE WEEKLY PROGRAM DIAL REFLECTS THE SEVEN DAYS OF THE WEEK AND AM/PM IMPRINTS FOR EACH DAY. THE 24-HOUR DIAL HAS QUARTER-HOUR DIVISIONS AND AM/PM INDICATIONS.

THE TIME SWITCH IS PROGRAMMED BY PUSHING THE CAPTIVE TRIPPERS TO THE OUTER RING POSITION FOR THE ENTIRE PERIOD THAT THE LOAD IS TO BE TURNED "ON" I.E. FIFTEEN MINUTES FOR EACH TRIPPER ON THE TWENTY-FOUR DIAL AND TWO HOURS FOR EACH TRIPPER ON THE SEVEN DAY DIAL. WHEN THE TRIPPER IS PUSHED TO THE INSIDE THE SWITCH IS IN THE "OFF" POSITION.

HAND WILL SHOW EXACTLY 10:30.

AUTOMATIC MODE

IN ORDER TO OPERATE THE TIME SWITCH MODULE IN THE AUTOMATIC MODE THE MANUAL SWITCH MUST BE IN THE CENTER POSITION (AUTOMATIC)—SEE DIAGRAM ABOVE.

MANUAL MODE

WITH THE MANUAL SWITCH SELECTOR LEVER THE SELECTED PROGRAMS CAN BE OVERRIDEN. IN THE LOWER POSITION MARKED O. TERMINALS 3 AND 5 ARE CLOSED—PERMANENT OFF. IN THE UPPER POSITION MARKED L TERMINALS 3 AND 4 ARE CLOSED—PERMANENT ON (SEE DIAGRAM ABOVE).

	Drawing Title						
	CLOCK INSTRUCTIONS						
DATE 8/13/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE BY
	Project Title	Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095				PURCHASE ORDER NUMBER	
	DUPLEX BLOWER CONTROL PANEL					DRAWING NUMBER CP-1871	
						SHEET NUMBER 7	