February 7, 2019

Please find the following addendum to the below mentioned BID.

Addendum No.: 4

Bid#: 19-01-2

Project Name: Lift Station and Blower Control Electrical Panels

Bid Due Date: Wednesday, February 13, 2019

GENERAL INFORMATION:

- 1. Delete Lift Station and Blower Control Electrical Panels Bid#19-01-2 Specifications and Pricing Sheet-REVISED-2 and replace with Lift Station and Blower Control Electrical Panels Bid#19-01-2 Specifications and Pricing Sheet-REVISED-3 (Attached).
- 2. Please note that the **Signature and Acknowledgement** sheet (Pg. 3 of 5) and the **Unit Pricing** sheets (Pg. 4 of 5 and Pg. 5 of 5) labeled **Lift Station and Blower Control Electrical Panels Bid#19-01-2 Specifications and Pricing Sheet-REVISED-3** (Attached) to be used when submitting the hardcopy bid.
- 3. Please delete Attachment "A" 240 Volt Duplex Lift Station Standard Control Panel and replace with Attachment "A"-REVISED 240 Volt Duplex Lift Station Standard Control Panel (Attached). The drawing has been modified to include an audible alarm.
- 4. Please delete Attachment "B"-REVISED 480 Volt Duplex Lift Station Standard Control Panel and replace with Attachment "B"-REVISED-2 480 Volt Duplex Lift Station Standard Control Panel (Attached). The drawing has been modified to include an audible alarm and to require an 18KAIC rating for motor starter circuit breaker.
- 5. Please delete Attachment "C"-REVISED-2 480 Volt Blower Standard Control Panel and replace with Attachment "C"-REVISED-3 480 Volt Blower Standard Control Panel (Attached). The drawing has been modified to require an 18KAIC rating for motor starter circuit breaker.

PATRICIA P. BRISTER PARISH PRESIDENT

QUESTIONS & ANSWERS:

- **Question #1:** Attachments B Revise *item #9* requires a 25KAIC rating at 480 volt for the motor circuit breakers. As per *Table A* you specify BDL circuit breakers which are only rated at 18KAIC at 480 voltyou would need to specify the BGL with is rated for 35KAIC at 480 volt
- Attachment C Revised-2 is the same as above.
- Also in the schematic, you do *not* ask for an *audible alarm* but ask for a *silence circuit* to be provided......do you want audible alarm on the panels? Please verify.
- Answer #1: Note No. 9 has been revised to require an 18KAIC rating for motor starter circuit breaker on Attachment "B"-REVISED-2 480 Volt Duplex Lift Station Standard Control Panel (Attached) and Attachment "C"-REVISED-3 480 Volt Blower Standard Control Panel (Attached).

Attachment "A"-REVISED 240 Volt Duplex Lift Station Standard Control Panel (Attached) and Attachment "B"-REVISED-2 480 Volt Duplex Lift Station Standard Control Panel (Attached) have been modified to include an audible alarm.

ATTACHMENTS:

- 1. Lift Station and Blower Control Electrical Panels Bid#19-01-2 Specifications and Pricing Sheet-REVISED-3.pdf
- 2. Attachment "A"-REVISED 240 Volt Duplex Lift Station Standard Control Panel.pdf
- 3. Attachment "B"-REVISED-2 480 Volt Duplex Lift Station Standard Control Panel.pdf
- 4. Attachment "C"-REVISED-3 480 Volt Blower Standard Control Panel.pdf

<< End of Addendum # 4>>

Specifications and Pricing Sheet-REVISED - 3

Bid Specifications:

Prices remain in effect through **December 31, 2019**, with the option to extend for (1) one additional year, by written agreement of both parties. Any delivery and/or service charges must be included in the bid price. Quantities may vary; minimum orders shall not be required. St. Tammany Parish Government (Parish) reserves the right to award materials in whole, in part and/ or to multiple vendors. Bids must be submitted on the Pricing Sheet provided. **All fields must be filled in, NO blanks will be permitted. If the item is unavailable, enter N/A.**

The Parish, as a function of Tammany Utilities, owns and operates approximately fifty (50) wastewater treatment plants, forty (40) water wells, over two-hundred (200) sewage lift stations and miles of water distribution and sewage collection lines.

It is the intent of the Parish to secure pricing for the specified Lift Station and Blower Control Electrical Panels (panels) for use by the Parish. The Parish intends to replace existing panels and acquire panels for new sites on an 'as needed" basis. Panels must be assembled per the specifications (Attachment "A"-REVISED, Attachment "B"-REVISED-2 or Attachment "C"-REVISED-3). Panels will be ordered on an "as needed" basis. Panels shall have at least a one (1) year warranty for the repair or replacement of defects. Samples of materials furnished under the bid shall be submitted for approval by the Parish when and as directed.

Tammany Utilities System is comprised of systems acquired over time which may require items not anticipated in this bid proposal request. In the event additional items and/or upgraded items are required by the Parish, the Bidder may provide the items with prior written approval by the Parish.

Prior Approved Equivalents and Inquiries:

All products shall be new and of current manufacture. Where specified on the bid sheets, prices shall be for the approved brand or a prior approved equal by the Parish. Where the specifications do not indicate an approved brand for an item, the Parish has no preference. The name of any manufacturer mentioned in the specifications is for the purpose of establishing a minimum acceptable standard of quality desired by the Parish. All products bid must have prior approval as "approved equivalents".

Should the Bidder desire to submit inquiries and/or request approval of an alternative product, Bidder shall submit make, model, supply catalog cut sheets and descriptive literature for the alternative product to the Procurement Department via email to purchasing@stpgov.org by 2:00 PM within seven (7) business days prior to the bid opening. Requests for approval of alternative products, shall include a copy of the bid and clearly identify the item(s) for which the equivalent item is being requested. The Parish shall review the inquiry and/or request for "approved equivalent" and issue an addendum within three (3) business days prior to the bid opening if prior approval submission is accepted as equivalent.

Specifications and Pricing Sheet-REVISED - 3

Delivery Locations:

- Cross Gates Maintenance Warehouse, 350 N. Military Road, Slidell, LA 70461
- Tammany Utilities, St. Tammany Parish Government, 636 W. 26th Avenue, Covington, LA 70433

Specifications and Pricing Sheet-REVISED - 3

Signature and Acknowledgement:

Bidder \underline{must} acknowledge all addenda by entering the number the Parish assigned to EACH of the addenda that the Bidder is acknowledging.

The Bidder acknowle	edges receipt of the following:	
ADDENDA:		
All fields must be fi	illed in. NO blanks will be permitted. If the item is unavailab	le please
enter <u>N/A</u> .		
	epresent the cost for the specified item as well as any delivery cl cation(s) indicated in this bid.	narges (if
Company:		
Signature:		
Printed Name:		
Title:		
Address:		
Telephone:		
Email:		
Date:		

Specifications and Pricing Sheet-REVISED - 3

<u>Unit Pricing Sheets:</u> All fields must be filled in, NO blanks will be permitted. If the item is unavailable, enter N/A.

REF No.	ТҮРЕ	WIRING DIAGRAM AND PARTS LIST SPECIFICATIONS	ATTACHMENT	COST PER UNIT
Lift Station Panel-01	240 Volt Control Panel 0 – 2 HP	240 Volt Duplex Lift Station Standard Control Panel	"A"-REVISED	\$
Lift Station Panel-02	240 Volt Control Panel 3 HP	240 Volt Duplex Lift Station Standard Control Panel	"A"-REVISED	\$
Lift Station Panel-03	240 Volt Control Panel 5 HP	240 Volt Duplex Lift Station Standard Control Panel	"A"-REVISED	\$
Lift Station Panel-04	240 Volt Control Panel 7.5 HP	240 Volt Duplex Lift Station Standard Control Panel	"A"-REVISED	\$
Lift Station Panel-05	Control Panel 1		"A"-REVISED	\$
Lift Station Panel-06	240 Volt Control Panel 15 HP	240 Volt Duplex Lift Station Standard Control Panel	"A"-REVISED	\$
Lift Station Panel-07	277/480 Volt Control Panel 0 – 2 HP	480 Volt Duplex Lift Station Standard Control Panel	"B"–REVISED-2	\$
Lift Station Panel-08	277/480 Volt Control Panel 3 HP	480 Volt Duplex Lift Station Standard Control Panel	"B"-REVISED-2	\$
Lift Station Panel-09	277/480 Volt Control Panel 5 HP	480 Volt Duplex Lift Station Standard Control Panel	"B"-REVISED-2	\$
Lift Station Panel-10	277/480 Volt Control Panel 7.5 HP	AXII Volt Dunley Lift Station		\$
Lift Station Panel-11	277/480 Volt Control Panel 11.3 HP	480 Volt Duplex Lift Station Standard Control Panel	"B"-REVISED-2	\$
Lift Station Panel-12	277/480 Volt Control Panel 15 HP	480 Volt Duplex Lift Station Standard Control Panel	"B"-REVISED-2	\$

$Specifications\ and\ Pricing\ Sheet-REVISED\ -\ 3$ All fields must be filled in, NO blanks will be permitted. If the item is unavailable, enter N/A.

REF No.	ТҮРЕ	WIRING DIAGRAM AND PARTS LIST SPECIFICATIONS	ATTACHMENT	COST PER UNIT
Blower Control Panel -001	480 Volt 3 Phase 1 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$
Blower Control Panel -002	480 Volt 3 Phase 2 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$
Blower Control Panel -003	480 Volt 3 Phase 3 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$
Blower Control Panel -004	480 Volt 3 Phase 5 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$
Blower Control Panel -005			"C"-REVISED-3	\$
Blower Control Panel -006	480 Volt 3 Phase 10 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$
Blower Control Panel -007	480 Volt 3 Phase 15 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$
Blower Control Panel -008	480 Volt 3 Phase 20 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$
Blower Control Panel -009	480 Volt 3 Phase 30 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$
Blower Control Panel -010	480 Volt 3 Phase 40 HP	480 Volt Blower Standard Control Panel	"C"-REVISED-3	\$

PARTS LIST FOR 120/240 VOLT CONTROL PANEL

- INCOMING MAIN POWER DISTRIBUTION BLOCK BLACK PHENOLIC, 3 POLE, 380 AMP, 600VOLT, 100KA WITHSTAND RATING WITH RK5 FUSE PROTECTION, FINGER SAFE GUARDS
- A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
 B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
- C. MFGR/CAT#: SQUARE D #9080LBA365106, DIMS.: DXHXW=3.1"x5.5"x8.5", WITH
- CLEAR COVER #9080LB53

 2. NEUTRAL BLOCK- 380 AMP, BLACK PHENOLIC, 1P, 380 AMP, 600VOLT, 100KA
 - WITHSTAND RATING, ISOLATED, FINGER SAFE GUARD
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL

 B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLI
 - B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
 - C. MFGR/CAT#: SQUARE D #9080LBA165106, DIMS: DXHXW=3.1"x5.5"x3.2", WITH CLEAR COVER #9080LB51
- GROUND TERMINAL STRIP 20 POSITION, #6 WIRE MAX., MOUNT TO BACKPLANE
 SURGE CAPACITOR RATED VOLTAGE 650V, 3 PHASE, 4 WIRE, DELTA # CA-603
- 5. LIGHTNING ARRESTOR 600 VOLTS MAX., DELTA TYPE SERVICE, 3 POLE, 4 WIRE, RATED 40KA SURGE PER PHASE, MOUNT ON BRACKET INSIDE CONTROL PANEL. SQUARE D # SDSA3650D, OR DELTA #LA-303.
- 6. PMP1 PHASE MONITOR PROTECTOR 3 POLE PHENOLIC FUSE HOLDER WITH 3 5 (FIVE) AMP 250 VOLT CLASS R FUSES. SQUARE D #FB3211R.
- 7. PHASE MONITOR 3 PHASE, 190-270 VOLT, ADJUSTABLE, WITH GREEN "POWER OKAY" PILOT LIGHT, SPDT 10 AMP RATED CONTACT, UNDERVOLTAGE, PHASE LOSS, PHASE REVERSAL, PLUGIN OCTAL BASE, 8 PIN. RELAY ONLY ALLOWS FOR "A-B-C" ROTATION. DIVERISFIED ELECTRONICS # SLA-230-ASA
- 8. PHASE MONITOR BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR2P-06
- CB1, CB2 THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 18 KAIC AT 240V AMPERAGE RATING, BY PUMP MOTOR HP AS SHOWN IN TABLE A. POWER SHALL BE THROUGH LUGS ON BOTH ENDS.
- 10. M1, M2 MOTOR STARTER SQUARE D, FVNR OPEN
 TYPE, 3 POLE, 600 VOLTS, NEMA SIZE SHOWN IN TABLE B BY PUMP MOTOR
 HP, 4 NO/NC FORM "C" AUX CONTACTS, 120 VOLT COIL
- 11. OL1 AND OL2 "HEATERS" SQUARE D, BUILT INTO STARTER OL FRAME, MELTING ALLOY TYPE, MANUAL RESET, SELECT BASED ON PUMP MOTOR FLA
- 12. GFI RECEPTACLE, 15 AMP, 125 VOLTS, FLUSH MOUNT IN 1G BOX W/ COVER ON BACKPLANE
- 13. CB3, THERMAL-MAGNETIC, 15/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR GFI RECEPTACLE. SQUARE D # Q015
- 14. CB4, THERMAL-MAGNETIC, 15/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR CONTROLS. SQUARE D # Q015
- 15. R1 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA—UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23—14)
- 16. R1 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK), FOR 3 POLE RELAY, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D # 8501NR61
- 17. HOA1, HOA2, 3 POSITION MAINTAINED, METALLIC BODY, 22mm DIAMETER, KNOB OPERATOR. LABEL "HAND-OFF-AUTO". SQUARE D HARMONY XB4 METAL, ZB48BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1 NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).
- 18. ETM1, ETM2, ELAPSED TIME METER, 100,000 HOURS, QUARTZ/DIGITAL WITH 1/8" ANALOG NUMBERS, NON-RESETTABLE, 120 VOLTS AC, NEMA 12/4X, RECTANGULAR HOLE PANEL MOUNT, MOUNT IN DEAD FRONT DOOR PANEL. REDINGTON MODEL 722
- 19. ALTERNATOR (ALT) WITH LEAD/LAG/OFF TOGGLE SELECTOR SWITCH, 125 VOLT AC, 1PDT, RATED 10 AMPS "CONTINUOUS DUTY", REQUIRES 8 PIN OCTAL BASE. TIMEMARK CAT# 261-ST-120
- 20. ALT RELAY SOCKET BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D #8501NR51
- 21. TD1 TIME DELAY RELAY, FOR START LAG PUMP. ANALOG, TIME DELAY ON, ADJUSTABLE 0.1 SEC-600 HOURS, FORM "C" DPDT CONTACTS RATED 10 AMPS RESISTIVE, 7 AMPS INDUCTIVE, PILOT LIGHTS FOR "ON" AND "TIMING", 120 VOLT COIL. IDEC # RTE-P1AF20, OR SQUARE D CAT #JCK11 (0-10 SEC, KNOB ON TOP, SQ D DIGEST PAGE 23-42)
- 22. TD1 SOCKET BASE, 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D # 8501NR51
- 23. R2, R3 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 24. R2, R3 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D #8501NR61
- 25. PL1, PL2— LED TYPE PILOT LIGHTS, 120 VOLT TRANSFORMER INPUT, 22MM RED LENS. LABEL "P1 RUN", "P2 RUN". SQUARE D # XB4BVG4 (ZB4BVG4 [HEAD], ZB4BVO43 [BODY]).
- 26. ON-OFF-TEST SWITCH, METALLIC BODY, 22mm DIAMETER, KNOB
 OPERATOR. LABEL "ON-OFF-TEST". SQUARE D, HARMONY
 XB4 METAL, ZB4BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1

NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).

- 27. RESET (ALARM) PUSHBUTTON SWITCH, 22mm, NON-ILLUMINATED, 1 POLE, NC, PUSH TO MOMENTARY OPEN, SPRING RETURN TO CLOSED, 120 VOLTS, 10 AMP RATED, CAP COLOR=BLACK, CAP TEXT=RESET. SQUARE D, HARMONY XB4 METAL CAT# ZB4BHO2, ZBE205 CONTACT BLOCK (1 NO + 1 NC, SPRING RETURN TO NC).
- 28. HL, HLA 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D #8501 KPDR 13P14 V20 (SQ D
- DIGEST PAGE 23-14)

 29. HL, HLA SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D
- #8501NR61

 30. ALARM SILENCE PUSHBUTTON SWITCH, 22mm, NON-ILLUMINATED, 1 POLE, 120 VOLTS, 10 AMP RATED, CAP COLOR=RED, CAP TEXT=STOP. SQUARE D, HARMONY XB4 METAL CAT# ZB4BHO4, ZBE205 CONTACT BLOCK (1 NO + 1 NC, SPRING
- 31. AS ALARM SILENCE RELAY, 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA—UL, OR SQUARE D #8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 32. AS SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622 OR SQUARE D #8501NR61
- 33. PL3- LED TYPE PILOT LIGHT, 120 VOLT TRANSFORMER INPUT, 22MM BLUE LENS, LABEL "ALARM SILENCED". SQUARE
- D # XB4BVG6 (ZB4BVG6 [HEAD], ZB4BVO63 [BODY]).
- 34. FLASHER, ADJUSTABLE ON AND OFF INTERVALS, 2 POLES, 120 VOLT AC COIL, 10 AMPS, 8 PIN OCTAL BASE. SQUARE D, CAT# JCK51 (0-10 SEC, 2 KNOBS ON TOP
- FOR ON_TIME + INTERVAL, SQ D DIGEST PAGE 12-42)
 35. FLASHER BASE, SQUARE D #8501NR51

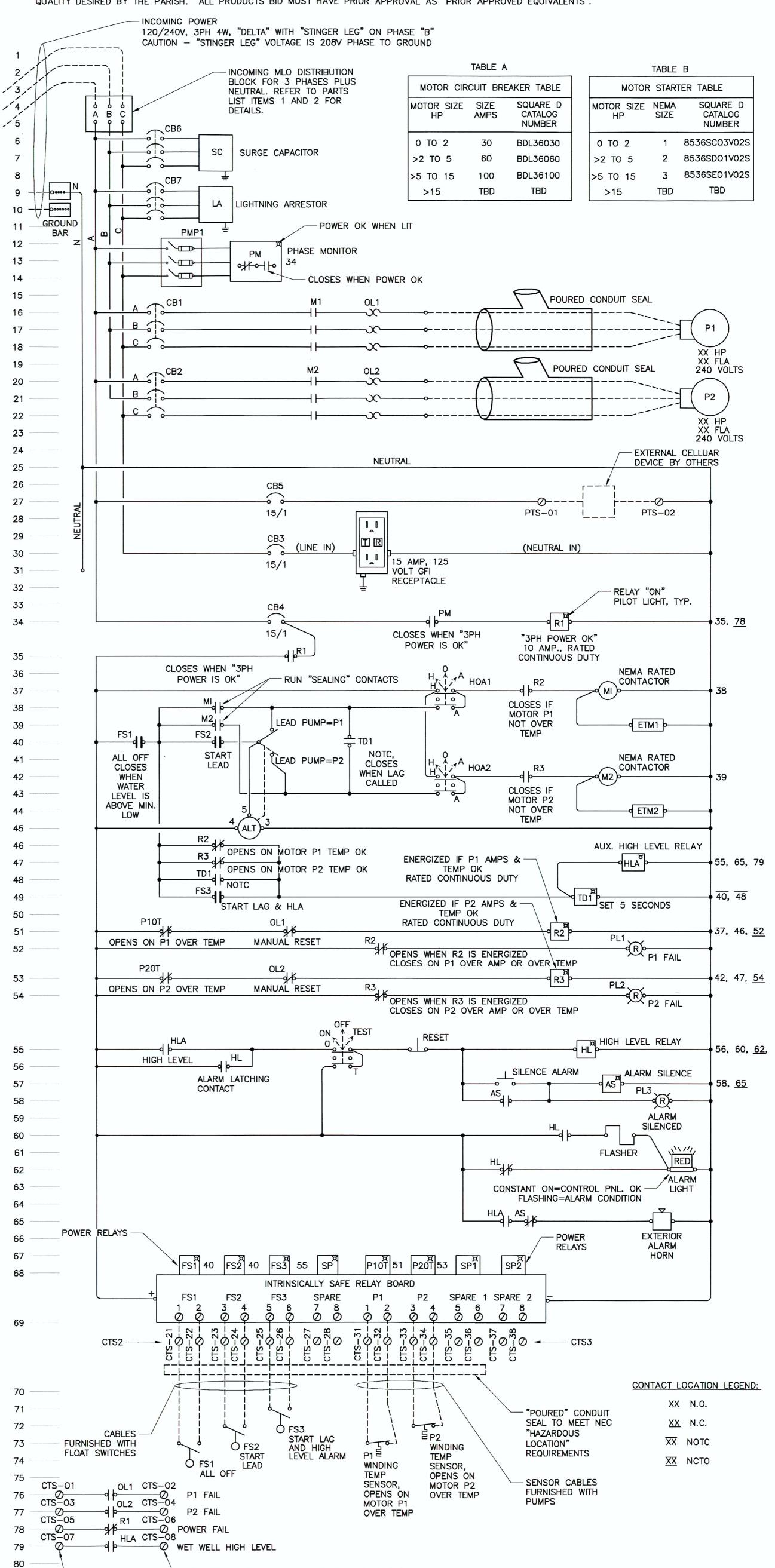
RETURN TO NC), NEMA 4X.

- 36. RED ALARM LIGHT, LED EXTERIOR, NEMA 4X, 120 VOLT.
- 37. ISBR— INTRINSICALLY SAFE BARRIER RELAY FOR FLOAT SWITCHES AND FOR MOTOR SAFETIES, 8 CHANNEL, 5 AMPS, 120 VOLTS, COMMON AND SEPARATE OUTPUT RELAY WIRING. IDEC CAT# EB3C—R08A
- 38. POWER TERMINAL STRIPS (PTS), 30 AMP, 600 VOLT RATED, 10 TERMINALS (AS NEEDED), BLACK PHENOLIC BODY, MARATHON # 672RZ10
- 39. CONTROL TERMINAL STRIPS (CTS), 20 AMP, 300 VOLT RATED, 10 TERMINALS EACH (3x10), BLACK PHENOLIC BODY, MARATHON # 601GP10
- 40. DIN RAIL, EXTRUDED ALUMINUM, DIN STD. DIMENSIONS, LENGTHS AS REQUIRED. IDEC CAT# BNDN1000, WITH DIN RAIL END STOPS, CAT# BNL5
- 41. CB5, THERMAL-MAGNETIC, 15/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR EXTERNAL CELLUAR DEVICE. SQUARE D # Q015
- 42. CB6, CB7, THERMAL-MAGNETIC SQUARE D, 3 POLE, 250 VOLTS, 30 AMP, 22 KAIC, SQUARE D # Q0330 VH
- 43. EXTERIOR ALARM HORN, 8 USER-SELECTABLE SOUNDS, 2 USER-SELECTABLE SOUND LEVELS, 115 V, NEMA 4X, MOUNT ON RIGHT SIDE OF CONTROL PANEL BELOW SILENCE PUSH BUTTON.

GENERAL NOTES:

- 1. ALL PANEL ITEMS SHALL BE MOUNTED ON THE BACKPLANE EXCEPT AS NOTED OTHERWISE. ITEMS TO BE MOUNTED ON THE INNER DOOR FRONT ARE ALL PILOT LIGHTS, SELECTOR SWITCHES, PUSHBUTTONS, STARTER RESETS, AND CIRCUIT BREAKER HANDLE OPENINGS. THE ALARM SILENCE PUSHBUTTON SHALL BE MOUNTED ON THE EXTERIOR SIDE WALL NEAR THE ALARM LIGHT, WHICH SHALL BE MOUNTED ON THE PANEL TOP.
- 2. PANEL ENCLOSURE SHALL BE 36"W X 48"H X 12"D, NEMA 4X TYPE 304 STAINLESS STEEL, WITH HASPS ON 3 SIDES, RAISED LIP ON ENCLOSURE TO RECEIVE DOOR GASKET, WHITE STEEL BACKPLANE, DEAD FRONT INNER DOOR WITH 1/4 TURN KNURLED KNOB FASTENING, BOND BOTH DOORS TO ENCLOSURE GROUND STRIP.
- NOMENCLATURE LABELS FOR ALL ITEMS SHALL BE RED FIELD WITH WHITE CHARACTERS, ENGRAVED LAMINATED NAMEPLATES
- ATTACHED WITH STAINLESS STEEL MACHINE SCREWS AND NUTS. ALL TEXT SHALL BE MINIMUM 1/8" HIGH.
- ALL PROPOSED CONTROL PANELS SHALL BE SUBMITTED TO THE PARISH FOR APPROVAL PRIOR TO FABRICATION.

 THE NAME OF ANY MANUFACTURER, BRAND OR MAKE LISTED ON THE DRAWING IS FOR THE PURPOSE OF ESTABLISHING A MINIMUM ACCEPTABLE STANDARD OF QUALITY DESIRED BY THE PARISH. ALL PRODUCTS BID MUST HAVE PRIOR APPROVAL AS "PRIOR APPROVED EQUIVALENTS".



	¥		SCALE: (24x36)	DESIGNED BY:	*			REVISIONS		24C
		240 VOLT DUPLEX LIFT STATION	N.T.S.	BDB	A DD D LCIDA E	JULIANTE OF LOUIS AND THE	DATE:	REMARKS:	APP'D	
-	ĕ	STANDARD CONTROL PANEL		DRAWN BY:	PRINCIPAL	*	2/5/19	MODIFIED NOTES 9 & 30, ADDED NOTE 44	BDB	802. 802.
		ST. TAMMANY PARISH LOUISIANA	SCALE: (11x17)	DRC	Engineering	BRUCE D. BARTON REG. No. 18286	2/5/19	ADDED AUDIBLE ALARM	BDB	05 ¥
Ti			N.T.S.	CHECKED BY:	Engineering	PROFESSIONAL COMMAND	2/5/19	MODIFIED WIRING LINES 37 THRU 65	BDB	무 !!
					DDINOIDAL Engineering Inc. Du. (085) 624 5001	O TE DE LOS DE LA CONTRACTION				e lie
		WIRING DIAGRAM AND PARTS LIST		1000 05	1011 N. CAUSEWAY BLVD., SUITE 19 info@pi-aec.com					1 1
_		WIRING DIAGRAM AND PARTS LIST	DATE: SEPT. 2018	1000 05	PRINCIPAL Engineering, Inc. 1011 N. CAUSEWAY BLVD., SUITE 19 MANDEVILLE, LA 70471 PH: (985) 624-5001 info@pi-aec.com www.pi-aec.com	2 Fee De Donne				

TERMINALS ON CONTROL TERMINAL STRIP (CTS1)

PARTS LIST FOR 277/480 VOLT CONTROL PANEL

- 1. INCOMING MAIN POWER DISTRIBUTION BLOCK BLACK PHENOLIC, 3 POLE, 380 AMP, 600 VOLT, 100KA WITHSTAND RATING WITH RK5 FUSE PROTECTION, FINGER SAFE
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
 - B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
- C. MFGR/CAT#: SQUARE D #9080LBA365106, DIMS.: DXHXW=3.1"x5.5"x8.5", WITH CLEAR COVER #9080LB53
- 2. NEUTRAL BLOCK- 380 AMP, BLACK PHENOLIC, 1P, 380 AMP, 600VOLT, 100KA WITHSTAND RATING, ISOLATED, FINGER SAFE GUARD
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
 - B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE,
 - #14 TO #2/0 C. MFGR/CAT#: SQUARE D #9080LBA165106, DIMS: DXHXW=3.1"x5.5"x3.2", WITH
- CLEAR COVER #9080LB51 3. GROUND TERMINAL STRIP - 20 POSITION, #6 WIRE MAX., MOUNT TO BACKPLANE
- 4. SURGE CAPACITOR RATED VOLTAGE 650V, 3 PHASE, 4 WIRE, DELTA # CA-603
- 5. LIGHTNING ARRESTOR 600 VOLTS MAX., DELTA TYPE SERVICE, 3 POLE, 4 WIRE, RATED 40KA SURGE PER PHASE, MOUNT ON BRACKET INSIDE CONTROL PANEL. SQUARE D # SDSA3650D, OR DELTA # LA-303.
- 6. FB1, FB2, FUSE BLOCK, 3 POLE PHENOLIC 600V FUSE HOLDER WITH 600 VOLT CLASS "CC" FUSES, SIZE AND NUMBER AS SHOWN. SQUARE D # 9080FB3611CC
- 7. PHASE MONITOR 3 PHASE, 430-480 VOLT, ADJUSTABLE, WITH GREEN "POWER OKAY" PILOT LIGHT, SPDT 10 AMP RATED CONTACT, UNDERVOLTAGE, PHASE LOSS, PHASE REVERSAL, PLUGIN OCTAL BASE, 8 PIN. RELAY ONLY ALLOWS FOR "A-B-C" ROTATION. DIVERISFIED ELECTRONICS # SLA-440-ASA
- 8. PHASE MONITOR BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 600 VOLT, 10 AMP. DIVERSIFIED ELECTRONICS SOCKET #OT-08
- 9. CB1, CB2 THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 18 KAIC AT 480V AMPERAGE RATING, BY PUMP MOTOR HP AS SHOWN IN TABLE A. POWER SHALL BE THROUGH LUGS ON BOTH ENDS.
- 10. M1, M2 MOTOR STARTER SQUARE D, FVNR OPEN TYPE, 3 POLE, 600 VOLTS, NEMA SIZE SHOWN IN TABLE B BY PUMP MOTOR HP, 4 NO/NC FORM "C" AUX CONTACTS, 120 VOLT COIL
- 11. OL1 AND OL2 "HEATERS" SQUARE D. BUILT INTO STARTER OL FRAME, MELTING ALLOY TYPE, MANUAL RESET, SELECT BASED ON PUMP MOTOR FLA
- 12. GFI RECEPTACLE, 15 AMP, 125 VOLTS, FLUSH MOUNT IN 1G BOX W/ COVER ON **BACKPLANE**
- 13. CB3, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR GFI RECEPTACLE. SQUARE D # Q0110
- 14. CB4, THERMAL-MAGNETIC, 15/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR CONTROLS. SQUARE D # QO115
- 15. R1 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 16. R1 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK), FOR 3 POLE RELAY, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D # 8501NR61
- 17. HOA1, HOA2, 3 POSITION MAINTAINED, METALLIC BODY, 22mm DIAMETER, KNOB OPERATOR. LABEL "HAND-OFF-AUTO". SQUARE D HARMONY XB4 METAL, ZB48BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1 NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).
- 18. ETM1, ETM2, ELAPSED TIME METER, 100,000 HOURS, QUARTZ/DIGITAL WITH 1/8" ANALOG NUMBERS, NON-RESETTABLE, 120 VOLTS AC, NEMA 12/4X, RECTANGULAR HOLE PANEL MOUNT, MOUNT IN DEAD FRONT DOOR PANEL. REDINGTON MODEL 722
- 19. ALTERNATOR (ALT) WITH LEAD/LAG/OFF TOGGLE SELECTOR SWITCH, 125 VOLT AC, 1PDT, RATED 10 AMPS "CONTINUOUS DUTY", REQUIRES 8 PIN OCTAL BASE. TIMEMARK CAT# 261-ST-120
- 20. ALT RELAY SOCKET BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D #8501NR51
- 21. TD1 TIME DELAY RELAY, FOR START LAG PUMP. ANALOG, TIME DELAY ON, ADJUSTABLE 0.1 SEC-600 HOURS, FORM "C" DPDT CONTACTS RATED 10 AMPS RESISTIVE, 7 AMPS INDUCTIVE, PILOT LIGHTS FOR "ON" AND "TIMING", 120 VOLT COIL. IDEC # RTE-P1AF20, OR SQUARE D CAT #JCK11 (0-10 SEC, KNOB ON TOP, SQ D DIGEST PAGE 23-42)
- 22. TD1 SOCKET BASE, 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D # 8501NR51
- 23. R2, R3 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 24. R2, R3 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D #8501NR61
- 25. PL1, PL2- LED TYPE PILOT LIGHTS, 120 VOLT TRANSFORMER INPUT, 22MM RED LENS. LABEL "P1 RUN", "P2 RUN". SQUARE D # XB4BVG4 (ZB4BVG4 [HEAD], ZB4BVO43 [BODY]).
- 26. ON-OFF-TEST SWITCH, METALLIC BODY, 22mm DIAMETER, KNOB OPERATOR. LABEL "ON-OFF-TEST". SQUARE D, HARMONY XB4 METAL, ZB4BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1 NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).

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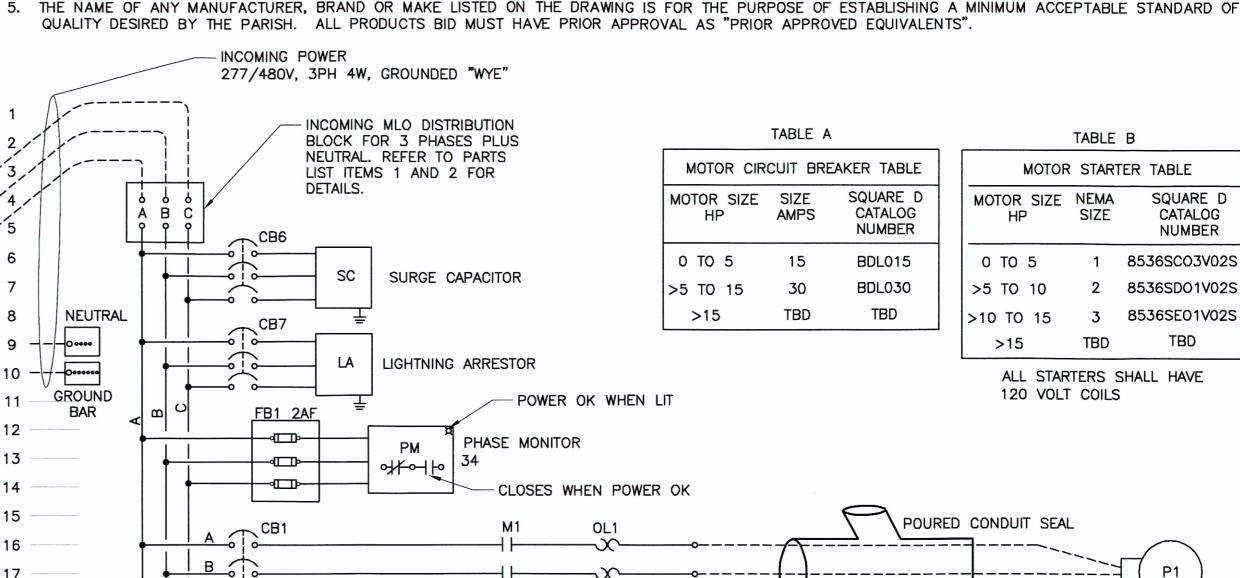
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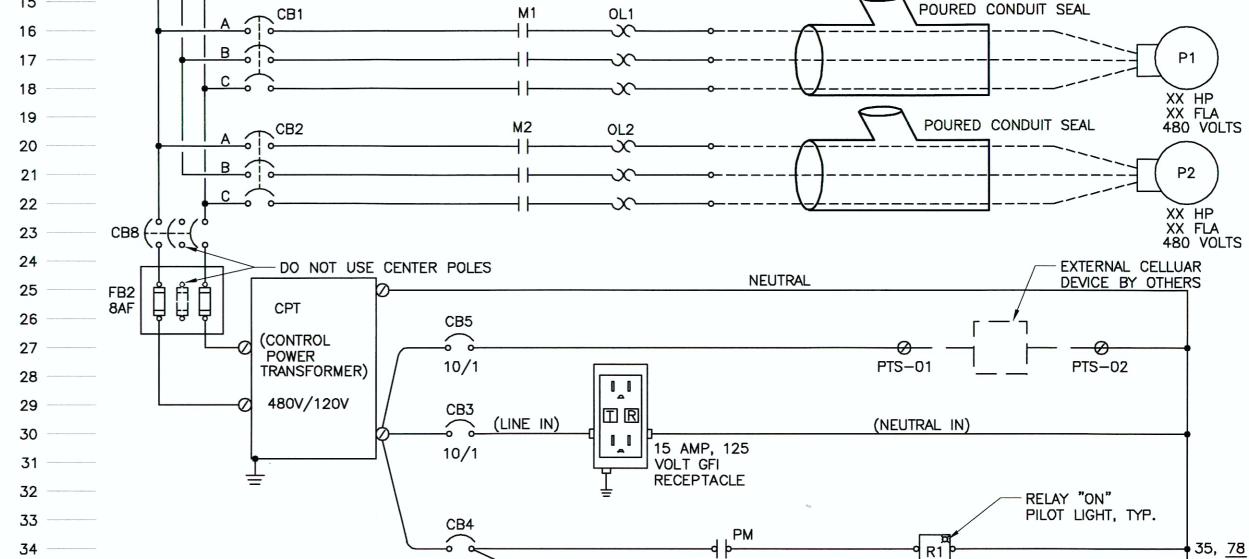
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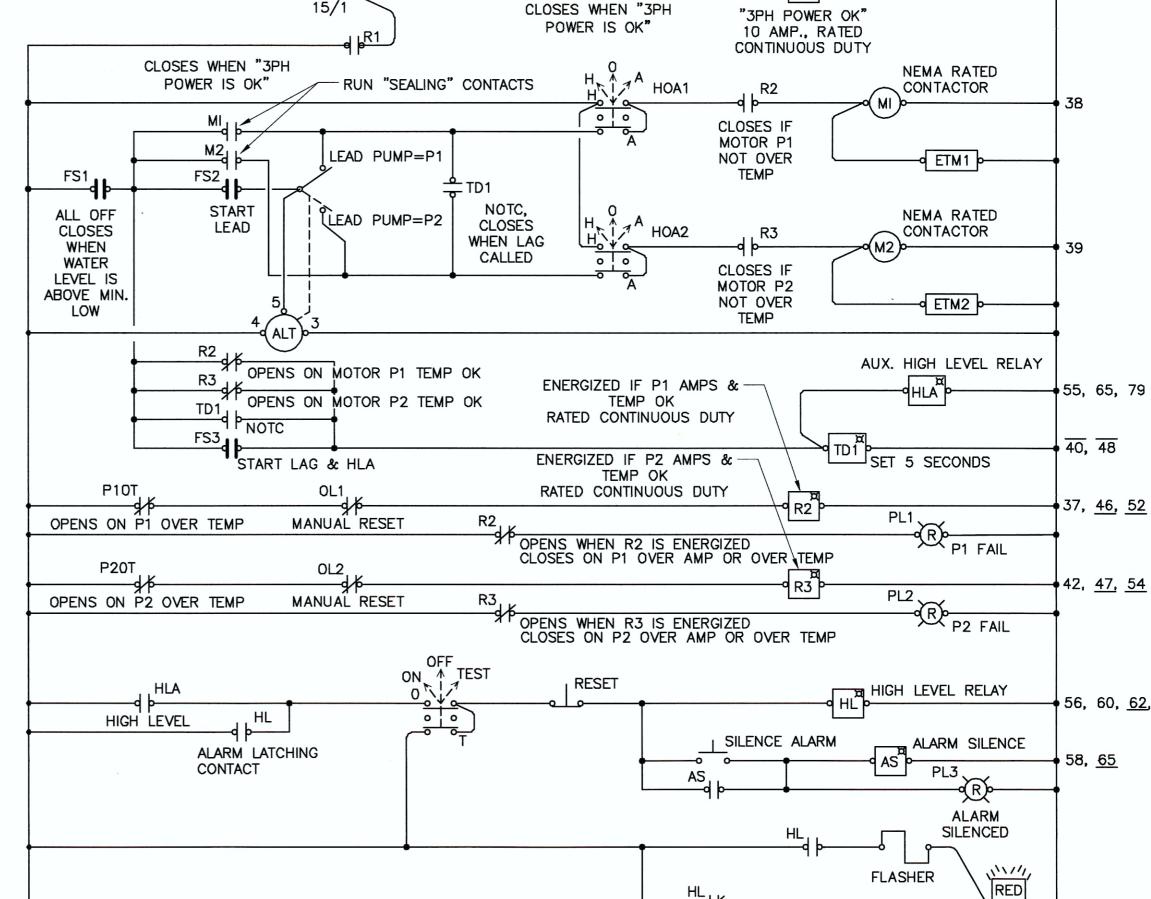
- 27. RESET (ALARM) PUSHBUTTON SWITCH, 22mm, NON-ILLUMINATED, 1 POLE, NC, PUSH TO MOMENTARY OPEN, SPRING RETURN TO CLOSED, 120 VOLTS, 10 AMP RATED, CAP COLOR=BLACK, CAP TEXT=RESET. SQUARE D, HARMONY XB4 METAL CAT# ZB4BHO2, ZBE205 CONTACT BLOCK (1 NO + 1 NC, SPRING RETURN TO NC).
- 28. HL, HLA 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D #8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 29. HL, HLA SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D #8501NR61
- 30. ALARM SILENCE PUSHBUTTON SWITCH, 22mm, NON-ILLUMINATED, 1 POLE, 120 VOLTS, 10 AMP RATED, CAP COLOR=RED, CAP TEXT=STOP. SQUARE D, HARMONY XB4 METAL CAT# ZB4BHO4, ZBE205 CONTACT BLOCK (1 NO + 1 NC, SPRING RETURN TO NC), NEMA 4X.
- 31. AS ALARM SILENCE RELAY, 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D #8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 32. AS SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622 OR SQUARE D #8501NR61
- 33. PL3- LED TYPE PILOT LIGHT, 120 VOLT TRANSFORMER INPUT, 22MM BLUE LENS. LABEL "ALARM SILENCED". SQUARE
- D # XB4BVG6 (ZB4BVG6 [HEAD], ZB4BV063 [BODY]). 34. FLASHER, ADJUSTABLE ON AND OFF INTERVALS, 2 POLES, 120 VOLT AC COIL, 10 AMPS, 8 PIN OCTAL BASE. SQUARE D, CAT# JCK51 (0-10 SEC, 2 KNOBS ON TOP
- FOR ON_TIME + INTERVAL, SQ D DIGEST PAGE 12-42) 35. FLASHER BASE, SQUARE D #8501NR51
- 36. RED ALARM LIGHT, LED, EXTERIOR, NEMA 4X, 120 VOLT.
- 37. ISBR- INTRINSICALLY SAFE BARRIER RELAY FOR FLOAT SWITCHES AND FOR MOTOR SAFETIES. 8 CHANNEL, 5 AMPS, 120 VOLTS, COMMON AND SEPARATE OUTPUT RELAY WIRING. IDEC CAT# EB3C-R08A
- 38. POWER TERMINAL STRIPS (PTS), 30 AMP, 600 VOLT RATED, 10 TERMINALS (AS NEEDED), BLACK PHENOLIC BODY, MARATHON # 672RZ10
- 39. CONTROL TERMINAL STRIPS (CTS), 20 AMP, 300 VOLT RATED, 10 TERMINALS (3x10), BLACK PHENOLIC BODY, MARATHON # 601GP10
- 40. DIN RAIL, EXTRUDED ALUMINUM, DIN STD. DIMENSIONS, LENGTHS AS REQUIRED. IDEC CAT# BNDN1000, WITH DIN RAIL END STOPS, CAT# BNL5
- 41. CB5, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR EXTERNAL CELLUAR DEVICE, MOUNT WITH CB HANDLE PROTRUDING THRU DEAD FRONT DOOR PANEL. SQUARE D # Q0110
- 42. CB6, CB7, CB8 THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 15 AMP, 18 KAIC, SQUARE D # BDL36015
- 43. CONTROL POWER TRANSFORMER (CPT) 480 VOLT 1P TO 120 VOLT 1P, 2 KVA (2000 VA), SQUARE D # 9070T2000D1, SIZE 6.2"Hx7.1"Wx7.2"D, WT.=47#, PROVIDE WITH FINGER SAFE COVERS # FSC2.
- 44. EXTERIOR ALARM HORN, 8 USER-SELECTABLE SOUNDS, 2 USER-SELECTABLE SOUND LEVELS, 115 V, NEMA 4X, MOUNT ON RIGHT SIDE OF CONTROL PANEL BELOW

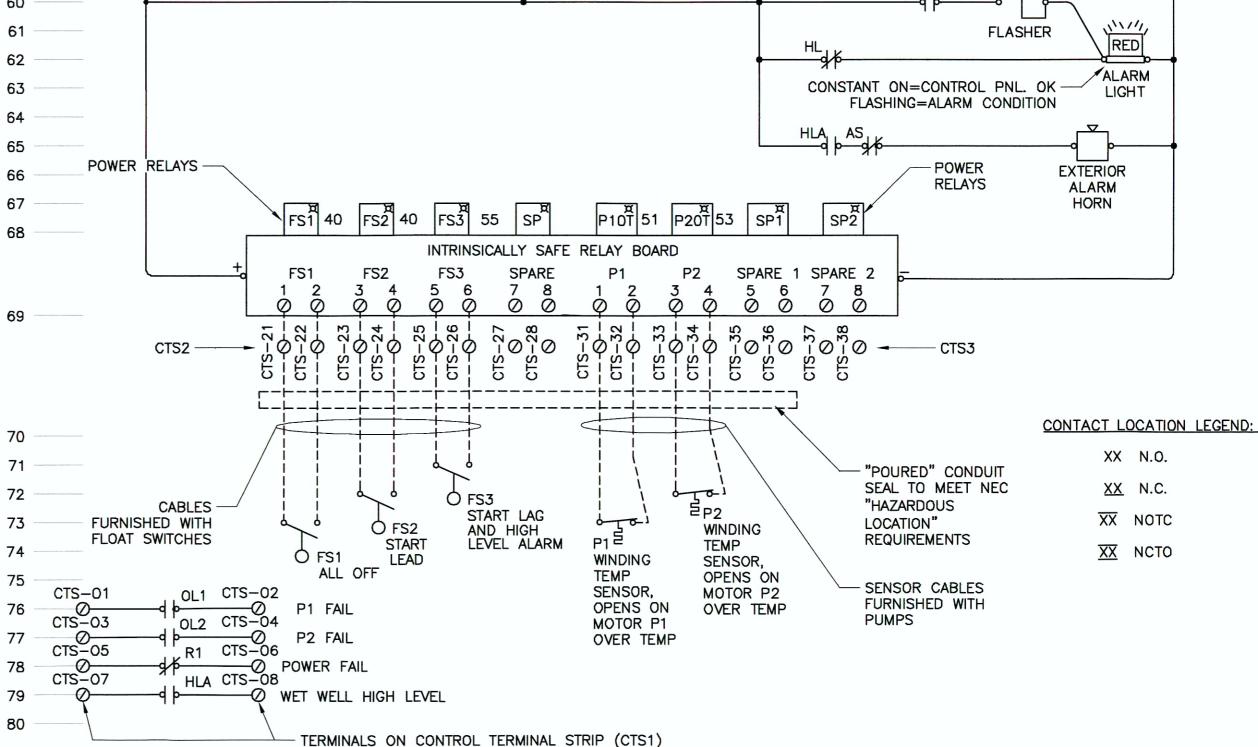
GENERAL NOTES:

- 1. ALL PANEL ITEMS SHALL BE MOUNTED ON THE BACKPLANE EXCEPT AS NOTED OTHERWISE. ITEMS TO BE MOUNTED ON THE INNER DOOR FRONT ARE ALL PILOT LIGHTS, SELECTOR SWITCHES, PUSHBUTTONS, STARTER RESETS, AND CIRCUIT BREAKER HANDLE OPENINGS. THE ALARM SILENCE PUSHBUTTON SHALL BE MOUNTED ON THE EXTERIOR SIDE WALL NEAR THE ALARM LIGHT, WHICH SHALL BE MOUNTED ON THE PANEL TOP.
- 2. PANEL ENCLOSURE SHALL BE 36"W X 48"H X 12"D, NEMA 4X TYPE 304 STAINLESS STEEL, WITH HASPS ON 3 SIDES, RAISED LIP ON ENCLOSURE TO RECEIVE DOOR GASKET, WHITE STEEL BACKPLANE, DEAD FRONT INNER DOOR WITH 1/4 TURN KNURLED KNOB FASTENING, BOND BOTH DOORS TO ENCLOSURE GROUND STRIP.
- 3. NOMENCLATURE LABELS FOR ALL ITEMS SHALL BE RED FIELD WITH WHITE CHARACTERS, ENGRAVED LAMINATED NAMEPLATES
- ATTACHED WITH STAINLESS STEEL MACHINE SCREWS AND NUTS. ALL TEXT SHALL BE MINIMUM 1/8" HIGH ALL PROPOSED CONTROL PANELS SHALL BE SUBMITTED TO THE PARISH FOR APPROVAL PRIOR TO FABRICATION. THE NAME OF ANY MANUFACTURER, BRAND OR MAKE LISTED ON THE DRAWING IS FOR THE PURPOSE OF ESTABLISHING A MINIMUM ACCEPTABLE STANDARD OF









SILENCE PUSH BUTTON. SCALE: (24x36) DESIGNED BY: REVISIONS 480 VOLT DUPLEX LIFT STATION **BDB** N.T.S. REMARKS: APP'D 1802-STANDARD CONTROL PANEL DRAWN BY: BDB 2/1/19 MODIFIED TABLE A & B ST. TAMMANY PARISH DRC BRUCE D. BARTON SCALE: (11x17) BDB 2/5/19 MODIFIED NOTES 9 & 30, ADDED NOTE 44 Engineering LOUISIANA REG. No. 18286 유 ĎŢ. N.T.S. CHECKED BY: PROFESSIONAL ENGINEER BDB 2/5/19 ADDED AUDIBLE ALARM **BDB** ф BDB 2/5/19 MODIFIED WIRING LINES 37 THRU 65 PRINCIPAL Engineering, Inc. PH: (985) 624-5001 JOB NO. WIRING DIAGRAM AND PARTS LIST info@pi-aec.com 1011 N. CAUSEWAY BLVD., SUITE 19 SEPT. 2018 1802-05 www.pi-aec.com MANDEVILLE, LA 70471 02/05/

GENERAL NOTES:

- 1. ALL PANEL ITEMS SHALL BE MOUNTED ON THE BACKPLANE EXCEPT AS NOTED OTHERWISE. ITEMS TO BE MOUNTED ON THE INNER DOOR FRONT ARE ALL PILOT LIGHTS, SELECTOR SWITCHES, PUSHBUTTONS, STARTER RESETS, AND CIRCUIT BREAKER HANDLE OPENINGS.
- 2. PANEL ENCLOSURE SHALL BE 36"W X 36"H X 12"D, NEMA 4X TYPE 304 STAINLESS STEEL, WITH HASPS ON 3 SIDES, RAISED LIP ON ENCLOSURE TO RECEIVE DOOR GASKET. WHITE STEEL BACKPLANE, DEAD FRONT INNER DOOR WITH 1/4 TURN KNURLED KNOB FASTENING, BOND BOTH DOORS TO ENCLOSURE WITH GROUNDING STRAP.
- 3. NOMENCLATURE LABELS FOR ALL ITEMS SHALL BE RED FIELD WITH WHITE CHARACTERS, ENGRAVED LAMINATED NAMEPLATES ATTACHED WITH STAINLESS STEEL MACHINE SCREWS AND NUTS. ALL TEXT SHALL BE MINIMUM 1/8" HIGH.
- 4. ALL PROPOSED CONTROL PANELS SHALL BE SUBMITTED TO THE PARISH FOR APPROVAL PRIOR TO FABRICATION.
- 5. THE NAME OF ANY MANUFACTURER, BRAND OR MAKE LISTED ON THE DRAWING IS FOR THE PURPOSE OF ESTABLISHING A MINIMUM ACCEPTABLE STANDARD OF QUALITY DESIRED BY THE PARISH. ALL PRODUCTS BID MUST HAVE PRIOR APPROVAL AS "PRIOR APPROVED EQUIVALENTS".
- 6. EXTERNAL ITEMS WITH DASHED LINES ARE NOT IN CONTROL PANEL SCOPE.

PARTS LIST FOR 277/480 VOLT CONTROL PANEL

- INCOMING MAIN POWER DISTRIBUTION BLOCK BLACK PHENOLIC, 3 POLE, 380 AMP, 600 VOLT, 100KA WITHSTAND RATING WITH RK5 FUSE PROTECTION, FINGER SAFE GUARDS
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
 - B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
 - C. MFGR/CAT#: SQUARE D #9080LBA365106, DIMS.: DXHXW=3.1"x5.5"x8.5", WITH CLEAR COVER #9080LB53
- 2. NEUTRAL BLOCK- 380 AMP, BLACK PHENOLIC, 1P, 380 AMP, 600VOLT, 100KA WITHSTAND RATING, ISOLATED, FINGER SAFE GUARD
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
 - B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
 - C. MFGR/CAT#: SQUARE D #9080LBA165106, DIMS: DXHXW=3.1"x5.5"x3.2", WITH CLEAR COVER #9080LB51
- GROUND TERMINAL STRIP 20 POSITION, #6 WIRE MAX., MOUNT TO BACKPLANE
 SURGE CAPACITOR RATED VOLTAGE 650V, 3 PHASE, 4 WIRE, DELTA # CA-603
- 5. LIGHTNING ARRESTOR 600 VOLTS MAX., DELTA TYPE SERVICE, 3 POLE, 4 WIRE, RATED 40KA SURGE PER PHASE, MOUNT ON BRACKET INSIDE CONTROL PANEL. SQUARE D # SDSA3650D, OR DELTA # LA—303.
- 6. FB1, FB2, FUSE BLOCK, 3 POLE PHENOLIC 600V FUSE HOLDER WITH 600 VOLT CLASS "CC" FUSES, SIZE AND NUMBER AS SHOWN. SQUARE D # 9080FB3611CC
- 7. PHASE MONITOR 3 PHASE, 430—480 VOLT, ADJUSTABLE, WITH GREEN "POWER OKAY" PILOT LIGHT, SPDT 10 AMP RATED CONTACT, UNDERVOLTAGE, PHASE LOSS, PHASE REVERSAL, PLUGIN OCTAL BASE, 8 PIN. RELAY ONLY ALLOWS FOR "A-B-C" ROTATION. DIVERISFIED ELECTRONICS # SLA-440—ASA
- 8. PHASE MONITOR BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 600 VOLT, 10 AMP. DIVERSIFIED ELECTRONICS SOCKET #OT-08
- 9. CB1, CB2 THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 18 KAIC AT 480V, AMPERAGE RATING BY PUMP MOTOR HP AS SHOWN IN TABLE A. POWER SHALL BE THROUGH LUGS ON BOTH ENDS.
- 10. M1, M2 MOTOR STARTER SQUARE D, FVNR OPEN
 TYPE, 3 POLE, 600 VOLTS, NEMA SIZE SHOWN IN TABLE B BY BLOWER MOTOR
 HP, 4 NO/NC FORM "C" AUX CONTACTS, 120 VOLT COIL
- 11. OL1 AND OL2 "HEATERS" SQUARE D, BUILT INTO STARTER OL FRAME, MELTING ALLOY TYPE, MANUAL RESET, SELECT BASED ON BLOWER MOTOR FLA
- 12. GFI RECEPTACLE, 15 AMP, 125 VOLTS, FLUSH MOUNT IN 1G BOX W/ COVER ON BACKPLANE
- 13. CB3, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR GFI RECEPTACLE. SQUARE D # Q0110
- 14. CB4, THERMAL-MAGNETIC, 15/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR CONTROLS. SQUARE D # Q0115
- 15. R1, R2, R3 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 16. R1, R2, R3 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK), FOR 3 POLE RELAY, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D # 8501NR61
- 17. HOA1, HOA2, 3 POSITION MAINTAINED, METALLIC BODY, 22mm DIAMETER, KNOB OPERATOR. LABEL "HAND-OFF-AUTO". SQUARE D HARMONY XB4 METAL, ZB48BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1 NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).
- 18. ETM1, ETM2, ELAPSED TIME METER, 100,000 HOURS, QUARTZ/DIGITAL WITH 1/8" ANALOG NUMBERS, NON-RESETTABLE, 120 VOLTS AC, NEMA 12/4X, RECTANGULAR HOLE PANEL MOUNT, MOUNT IN DEAD FRONT DOOR PANEL. REDINGTON MODEL 722
- 19. ALTERNATOR (ALT) WITH LEAD/LAG/OFF TOGGLE SELECTOR SWITCH, 125 VOLT AC, 1PDT, RATED 10 AMPS "CONTINUOUS DUTY", REQUIRES 8 PIN OCTAL BASE. TIMEMARK CAT# 261-ST-120
- 20. ALT RELAY SOCKET BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D #8501NR51
- 21. TS1 TIME SWITCH #1, 24 HOUR MECHANICAL TIMESWITCH WITH 96 PUSH-PULL PINS, EACH TIMING A 15 MINUTE INTERVAL. ONE SPDT CONTACT RATED 40 AMPS. 120 VOLT MOTOR. TORK/NSI CAT. #8009A.
- 22. POWER TERMINAL STRIPS (PTS), 30 AMP, 600 VOLT RATED, 10 TERMINALS (AS NEEDED), BLACK PHENOLIC BODY, MARATHON # 672RZ10
- 23. CONTROL TERMINAL STRIPS (CTS), 20 AMP, 300 VOLT RATED, 10 TERMINALS (AS NEEDED), BLACK PHENOLIC BODY, MARATHON # 601GP10
- 24. DIN RAIL, EXTRUDED ALUMINUM, DIN STD. DIMENSIONS, LENGTHS AS REQUIRED. IDEC CAT# BNDN1000, WITH DIN RAIL END STOPS, CAT# BNL5
- 25. CB5, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR EXTERNAL CELLUAR DEVICE. MOUNT WITH CB HANDLE PROTRUDING THRU DEAD FRONT DOOR PANEL, SQUARE D # Q0110
- 26. CB6, CB7, CB8 THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 15 AMP, 18 KAIC, SQUARE D # BDL36015
- 27. CONTROL POWER TRANSFORMER (CPT) 480 VOLT 1P TO 120 VOLT 1P, 2 KVA (2000 VA), SQUARE D # 9070T2000D1, SIZE 6.2"Hx7.1"Wx7.2"D, WT.=47#. PROVIDE WITH FINGER SAFE COVERS # FSC2.

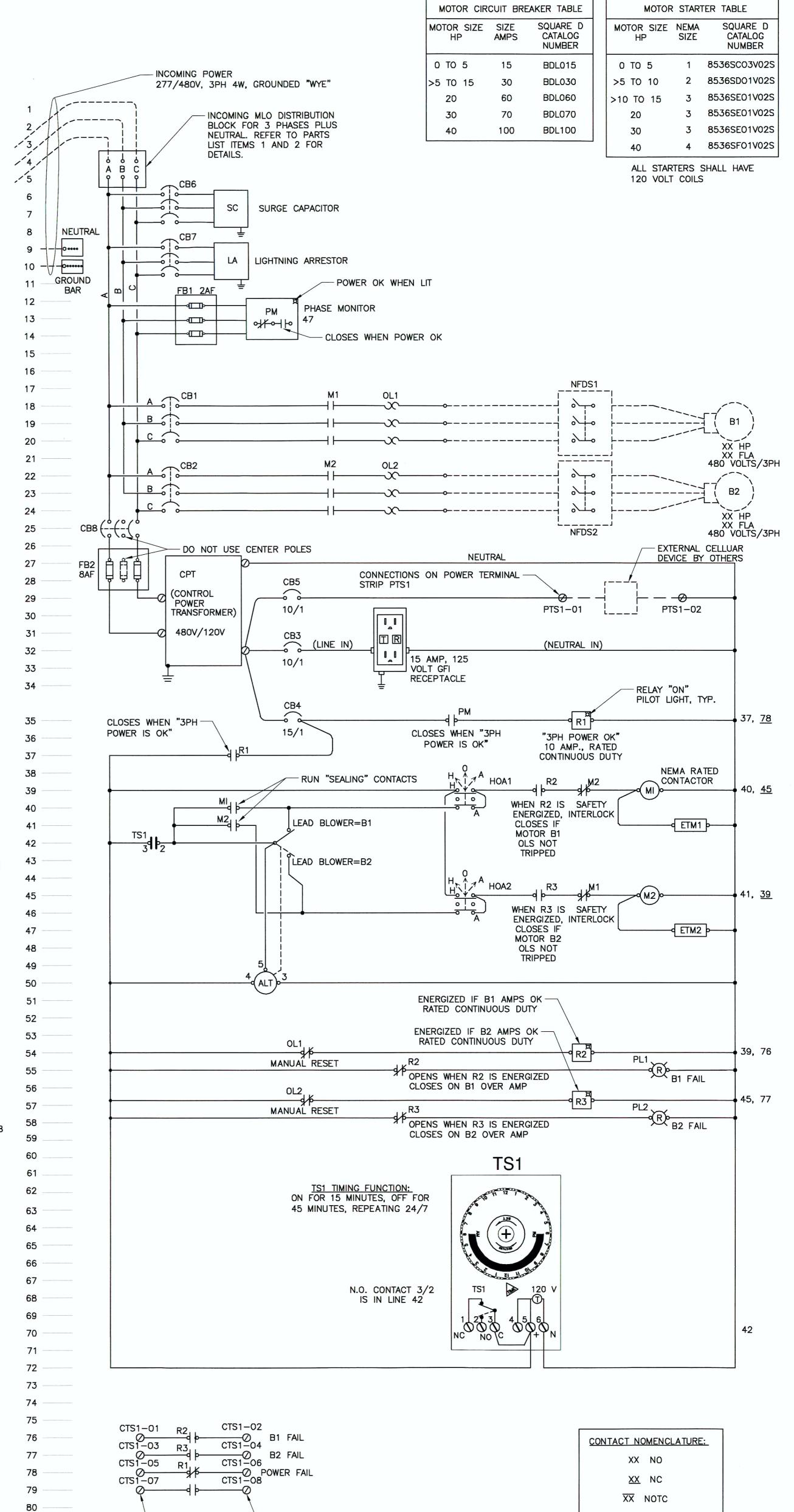
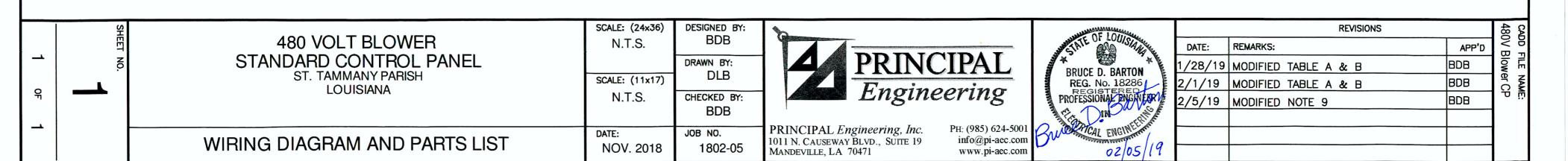


TABLE A

TABLE B

XX NCTO



TERMINALS ON CONTROL TERMINAL STRIP (CTS1)

February 1, 2019

Please find the following addendum to the below mentioned BID.

Addendum No.: 3

Bid#: 19-01-2

Project Name: Lift Station and Blower Control Electrical Panels

Bid Due Date: Wednesday, February 13, 2019

GENERAL INFORMATION:

- 1. Please note that the Bid Opening has been pushed to Wednesday, February 13, 2019. Time and location remain the same. The last day to submit inquiries is Monday, February 4, 2019 at 2:00 pm. The last day for an addendum is Friday, February 8, 2019 at 2:00 pm.
- 2. Delete Lift Station Blower Control Electrical Panels Bid #19-01-2 Specifications and Pricing Sheet-REVISED and replace with Lift Station Blower Control Electrical Panels Bid #19-01-2 Specifications and Pricing Sheet-REVISED-2.
- 3. Please note that the Signature and Acknowledgment Sheet (Pg. 3 of 5) and Unit Pricing Sheets (Pg. 4 of 5 and Pg. 5 of 5) labeled **Lift Station Blower Control Electrical Panels Bid #19-01-2 Specifications and Pricing Sheet-REVISED-2** to be used when submitting the bid.
- 4. Please delete Attachment "B" 480 Volt Duplex Lift Station Standard Control Panel and replace with Attachment "B"-REVISED 480 Volt Duplex Lift Station Standard Control Panel. Table A and Table B have been modified.
- 5. Please delete **Attachment** "C"-**REVISED 480 Volt Blower Standard Control Panel** and replace with **Attachment** "C"-**REVISED-2 480 Volt Blower Standard Control Panel**. Table A and Table B have been modified.

QUESTIONS & ANSWERS:

Question #1: I am not sure what to do here. I know this is a technical question, but regarding the note on motor starters. It says to use a Size 3 motor starter on motors greater than 5HP, but less than 15 HP – that is all well and good, but this will not work for the 5 HP unit and 7.5 HP units as there are no overload heaters available for that small of a motor for use w/ such a large motor starter. Minimum amperage on heater for a size 3 starter are 14.3 Amps. The 5HP draws 7.6 FLA and the 7.5 HP will draw somewhere close to 11FLA. We cannot provide proper protection using this size 3 motor starter for 5 and 7.5 HP panels.

Answer #1: Table A and Table B for the 480 Volt Duplex Lift Station Standard Control Panel and the 480 Volt Blower Standard Control Panel drawings have been revised (Attached). 5 HP and smaller shall have a size 1 motor starter. Greater than 5 HP up to and including 10 HP shall have a size 2 starter.

Question #2: I understand maybe wanting to oversize these units a little, but Officially they are rated for the HP's as follows.

Size 1 starter is rated for .5 HP to 7.5 HP at 230V and 0 to 10HP

Size 1 starter is rated for .5 HP to 7.5 HP at 230V and 0 to 10HP at 480V

Size 2 starter is rated for 10 HP at 230V and 15 HP to 25 HP at 480V

Size 3 starter is rated for 20 to 30 HP at 230V and 30HP to 50 HP at 480V

Size 4 starter is rated for 40 HP to 50HP at 230V and 60 HP to 100 HP at 480V

Answer #2: Table A and Table B for the 480 Volt Duplex Lift Station Standard Control Panel and the 480 Volt Blower Standard Control Panel drawings have been revised (Attached).



PATRICIA P. BRISTER PARISH PRESIDENT

Question #3: Well, small correction, the notes says we can use a size two motor starter on the 5 HP units and it also says to use size 3 for 5 HP units.... conflict for sure. We have to use the size 2 motor starter for the 5 HP and the 7.5 HP there is no way around it

Answer #3: Table A and Table B for the 480 Volt Duplex Lift Station Standard Control Panel and the 480 Volt Blower Standard Control Panel drawings have been revised (Attached). 5 HP motors and smaller shall have a size 1 motor starter. Greater than 5 HP motors up to and including 10 HP shall have a size 2 starter.

ATTACHMENTS:

- 1. Lift Station Blower Control Electrical Panels Bid #19-01-2 Specifications and Pricing Sheet-REVISED-2.pdf
- 2. ATTACHMENT "B"- REVISED.pdf
- 3. ATTACHMENT "C"- REVISED-2.pdf

<< End of Addendum # 3>>

Specifications and Pricing Sheet-REVISED - 2

Prices remain in effect through **December 31, 2019**, with the option to extend for (1) one additional year, by written agreement of both parties. Any delivery and/or service charges must be included in the bid price. Quantities may vary; minimum orders shall not be required. St. Tammany Parish Government (Parish) reserves the right to award materials in whole, in part and/ or to multiple vendors. Bids must be submitted on the Pricing Sheet provided. **All fields must be filled in, NO blanks will be permitted. If the item is unavailable, enter N/A.**

The Parish, as a function of Tammany Utilities, owns and operates approximately fifty (50) wastewater treatment plants, forty (40) water wells, over two-hundred (200) sewage lift stations and miles of water distribution and sewage collection lines.

It is the intent of the Parish to secure pricing for the specified Lift Station and Blower Control Electrical Panels (panels) for use by the Parish. The Parish intends to replace existing panels and acquire panels for new sites on an 'as needed" basis. Panels must be assembled per the specifications (Attachment "A", Attachment "B"-REVISED or Attachment "C"-REVISED-2). Panels will be ordered on an "as needed" basis. Panels shall have at least a one (1) year warranty for the repair or replacement of defects. Samples of materials furnished under the bid shall be submitted for approval by the Parish when and as directed.

Tammany Utilities System is comprised of systems acquired over time which may require items not anticipated in this bid proposal request. In the event additional items and/or upgraded items are required by the Parish, the Bidder may provide the items with prior written approval by the Parish.

All products shall be new and of current manufacture. Where specified on the bid sheets, prices shall be for the approved brand or a prior approved equal by the Parish. Where the specifications do not indicate an approved brand for an item, the Parish has no preference. The name of any manufacturer mentioned in the specifications is for the purpose of establishing a minimum acceptable standard of quality desired by the Parish. All products bid must have prior approval as "approved equivalents".

Should the Bidder desire to submit inquiries and/or request approval of an alternative product, Bidder shall submit make, model, supply catalog cut sheets and descriptive literature for the alternative product to the Procurement Department via email to purchasing@stpgov.org by 2:00 PM within seven (7) business days prior to the bid opening. Requests for approval of alternative products, shall include a copy of the bid and clearly identify the item(s) for which the equivalent item is being requested. The Parish shall review the inquiry and/or request for "approved equivalent" and issue an addendum within three (3) business days prior to the bid opening if prior approval submission is accepted as equivalent.

Lift Station and Blower Control Electrical Panels Bid # 19-01-2 Specifications and Pricing Sheet-REVISED - 2

Delivery Locations:

- Cross Gates Maintenance Warehouse, 350 N. Military Road, Slidell, LA 70461
- Tammany Utilities, St. Tammany Parish Government, 636 W. 26th Avenue, Covington, LA 70433

Lift Station and Blower Control Electrical Panels Bid # 19-01-2 Specifications and Pricing Sheet-REVISED - 2

Bidder \underline{must} acknowledge all addenda by entering the number the Parish assigned to EACH of the addenda that the Bidder is acknowledging.

The Bidder acknowle	dges receipt of the following:	
ADDENDA:		
All fields must be fi	lled in. NO blanks will be permitted. If the item is unavailab	le please
enter <u>N/A</u> .		
	epresent the cost for the specified item as well as any delivery cheation(s) indicated in this bid.	narges (if
Company:		
Signature:		
Printed Name:		
Title:		
Address:		
Telephone:		
Email:		
Date:		

Specifications and Pricing Sheet-REVISED - 2

REF No.	ТҮРЕ	WIRING DIAGRAM AND PARTS LIST SPECIFICATIONS	ATTACHMENT	COST PER UNIT
Lift Station Panel-01	240 Volt Control Panel 0 – 2 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-02	240 Volt Control Panel 3 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-03	240 Volt Control Panel 5 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-04	240 Volt Control Panel 7.5 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-05	240 Volt Control Panel 11.3 HP	240 Volt Duplex Lift Station Standard Control Panel		\$
Lift Station Panel-06	240 Volt Control Panel 15 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-07	277/480 Volt Control Panel 0 – 2 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-08	277/480 Volt Control Panel 3 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-09	277/480 Volt Control Panel 5 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-10	277/480 Volt Control Panel 7.5 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-11	277/480 Volt Control Panel 11.3 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-12	277/480 Volt Control Panel 15 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$

$Specifications\ and\ Pricing\ Sheet-REVISED\ -\ 2$ All fields must be filled in, NO blanks will be permitted. If the item is unavailable, enter N/A.

Blower Control Panel -001	480 Volt 3 Phase 1 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -002	480 Volt 3 Phase 2 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -003	480 Volt 3 Phase 3 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -004	480 Volt 3 Phase 5 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -005	480 Volt 3 Phase 7.5 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -006	480 Volt 3 Phase 10 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -007	480 Volt 3 Phase 15 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -008	480 Volt 3 Phase 20 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -009	480 Volt 3 Phase 30 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -010	480 Volt 3 Phase 40 HP	480 Volt Blower Standard Control Panel	С	\$

PARTS LIST FOR 277/480 VOLT CONTROL PANEL

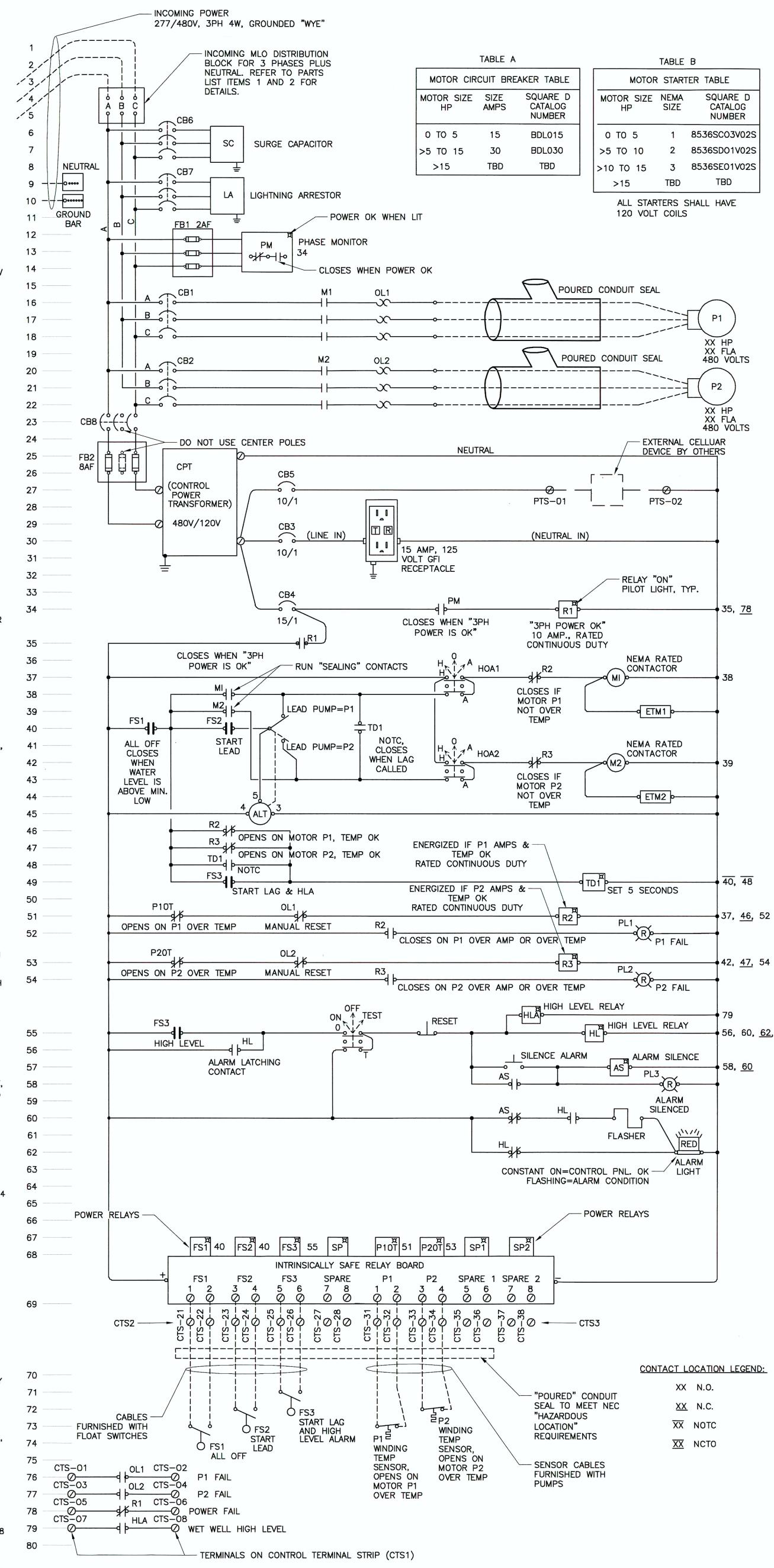
- 1. INCOMING MAIN POWER DISTRIBUTION BLOCK BLACK PHENOLIC, 3 POLE, 380 AMP, 600 VOLT, 100KA WITHSTAND RATING WITH RK5 FUSE PROTECTION, FINGER SAFE **GUARDS**
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
 - B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
- C. MFGR/CAT#: SQUARE D #9080LBA365106, DIMS.: DXHXW=3.1"x5.5"x8.5". WITH
- CLEAR COVER #9080LB53 2. NEUTRAL BLOCK- 380 AMP, BLACK PHENOLIC, 1P, 380 AMP, 600VOLT, 100KA
 - WITHSTAND RATING, ISOLATED, FINGER SAFE GUARD A. INCOMING WIRE RANGE - 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
- B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
- C. MFGR/CAT#: SQUARE D #9080LBA165106, DIMS: DXHXW=3.1"x5.5"x3.2", WITH CLEAR COVER #9080LB51
- 3. GROUND TERMINAL STRIP 20 POSITION, #6 WIRE MAX., MOUNT TO BACKPLANE
- 4. SURGE CAPACITOR RATED VOLTAGE 650V, 3 PHASE, 4 WIRE, DELTA # CA-603
- 5. LIGHTNING ARRESTOR 600 VOLTS MAX., DELTA TYPE SERVICE, 3 POLE, 4 WIRE. RATED 40KA SURGE PER PHASE, MOUNT ON BRACKET INSIDE CONTROL PANEL. SQUARE D # SDSA3650D, OR DELTA # LA-303.
- 6. FB1, FB2, FUSE BLOCK, 3 POLE PHENOLIC 600V FUSE HOLDER WITH 600 VOLT CLASS "CC" FUSES, SIZE AND NUMBER AS SHOWN. SQUARE D # 9080FB3611CC
- 7. PHASE MONITOR 3 PHASE, 430-480 VOLT, ADJUSTABLE, WITH GREEN "POWER OKAY" PILOT LIGHT, SPDT 10 AMP RATED CONTACT, UNDERVOLTAGE, PHASE LOSS, PHASE REVERSAL, PLUGIN OCTAL BASE, 8 PIN. RELAY ONLY ALLOWS FOR "A-B-C" ROTATION. DIVERISFIED ELECTRONICS # SLA-440-ASA
- 8. PHASE MONITOR BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 600 VOLT, 10 AMP, DIVERSIFIED ELECTRONICS SOCKET #OT-08
- 9. CB1, CB2 THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 25 KAIC AT 480V AMPERAGE RATING, BY PUMP MOTOR HP AS SHOWN IN TABLE A. POWER SHALL BE THROUGH LUGS ON BOTH ENDS.
- 10. M1, M2 MOTOR STARTER SQUARE D, FVNR OPEN TYPE, 3 POLE, 600 VOLTS, NEMA SIZE SHOWN IN TABLE B BY PUMP MOTOR HP, 4 NO/NC FORM "C" AUX CONTACTS, 120 VOLT COIL
- 11. OL1 AND OL2 "HEATERS" SQUARE D, BUILT INTO STARTER OL FRAME, MELTING ALLOY TYPE, MANUAL RESET, SELECT BASED ON PUMP MOTOR FLA
- 12. GFI RECEPTACLE, 15 AMP, 125 VOLTS, FLUSH MOUNT IN 1G BOX W/ COVER ON BACKPLANE
- 13. CB3, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR GFI RECEPTACLE. SQUARE D # Q0110
- 14. CB4, THERMAL-MAGNETIC, 15/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR CONTROLS. SQUARE D # Q0115
- 15. R1 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 16. R1 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK), FOR 3 POLE RELAY, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D # 8501NR61
- 17. HOA1, HOA2, 3 POSITION MAINTAINED, METALLIC BODY, 22mm DIAMETER, KNOB OPERATOR. LABEL "HAND-OFF-AUTO". SQUARE D HARMONY XB4 METAL, ZB48BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1 NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).
- 18. ETM1, ETM2, ELAPSED TIME METER, 100,000 HOURS, QUARTZ/DIGITAL WITH 1/8" ANALOG NUMBERS, NON-RESETTABLE, 120 VOLTS AC, NEMA 12/4X, RECTANGULAR HOLE PANEL MOUNT, MOUNT IN DEAD FRONT DOOR PANEL. REDINGTON MODEL 722
- 19. ALTERNATOR (ALT) WITH LEAD/LAG/OFF TOGGLE SELECTOR SWITCH, 125 VOLT AC, 1PDT, RATED 10 AMPS "CONTINUOUS DUTY", REQUIRES 8 PIN OCTAL BASE. TIMEMARK CAT# 261-ST-120
- 20. ALT RELAY SOCKET BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D #8501NR51
- 21. TD1 TIME DELAY RELAY, FOR START LAG PUMP. ANALOG, TIME DELAY ON, ADJUSTABLE 0.1 SEC-600 HOURS, FORM "C" DPDT CONTACTS RATED 10 AMPS RESISTIVE, 7 AMPS INDUCTIVE, PILOT LIGHTS FOR "ON" AND "TIMING", 120 VOLT COIL. IDEC # RTE-P1AF20, OR SQUARE D CAT #JCK11 (0-10 SEC, KNOB ON TOP, SQ D DIGEST PAGE 23-42)
- 22. TD1 SOCKET BASE, 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D # 8501NR51
- 23. R2, R3 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 24. R2, R3 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D #8501NR61
- 25. PL1, PL2- LED TYPE PILOT LIGHTS, 120 VOLT TRANSFORMER INPUT, 22MM RED LENS. LABEL "P1 RUN", "P2 RUN". SQUARE D # XB4BVG4 (ZB4BVG4 [HEAD], ZB4BV043 [BODY]).
- 26. ON-OFF-TEST SWITCH, METALLIC BODY, 22mm DIAMETER, KNOB OPERATOR. LABEL "ON-OFF-TEST". SQUARE D, HARMONY XB4 METAL, ZB4BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1 NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).
- 27. RESET (ALARM) PUSHBUTTON SWITCH, 22mm, NON-ILLUMINATED, 1 POLE, NC, PUSH TO MOMENTARY OPEN, SPRING RETURN TO CLOSED, 120 VOLTS, 10 AMP RATED, CAP COLOR=BLACK, CAP TEXT=RESET. SQUARE D, HARMONY XB4 METAL CAT# ZB4BH02, ZBE205 CONTACT BLOCK (1 NO + 1 NC, SPRING RETURN TO NC).
- 28. HL, HLA 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D #8501 KPDR 13P14 V20 (SQ D
- DIGEST PAGE 23-14) 29. HL, HLA SOCKET BASE - 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D #8501NR61
- 30. ALARM SILENCE PUSHBUTTON SWITCH, 22mm, NON-ILLUMINATED, 1 POLE, 120 VOLTS, 10 AMP RATED, CAP COLOR=RED, CAP TEXT=STOP. SQUARE D, HARMONY XB4 METAL CAT# ZB4BHO4, ZBE205 CONTACT BLOCK (1 NO + 1 NC, SPRING
- 31. AS ALARM SILENCE RELAY, 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D #8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 32. AS SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK TERMINALS), 3 POLE, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622 OR SQUARE D #8501NR61
- 33. PL3- LED TYPE PILOT LIGHT, 120 VOLT TRANSFORMER INPUT, 22MM BLUE LENS. LABEL "ALARM SILENCED". SQUARE
- D # XB4BVG6 (ZB4BVG6 [HEAD], ZB4BV063 [BODY]).
- 34. FLASHER, ADJUSTABLE ON AND OFF INTERVALS, 2 POLES, 120 VOLT AC COIL, 10 AMPS, 8 PIN OCTAL BASE. SQUARE D, CAT# JCK51 (0-10 SEC, 2 KNOBS ON TOP
- FOR ON_TIME + INTERVAL, SQ D DIGEST PAGE 12-42) 35. FLASHER BASE, SQUARE D #8501NR51

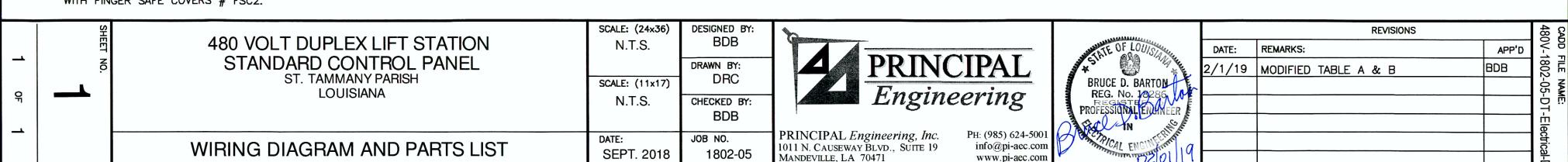
RETURN TO NC).

- 36. RED ALARM LIGHT, LED, EXTERIOR, NEMA 4X, 120 VOLT.
- 37. ISBR- INTRINSICALLY SAFE BARRIER RELAY FOR FLOAT SWITCHES AND FOR MOTOR SAFETIES, 8 CHANNEL, 5 AMPS, 120 VOLTS, COMMON AND SEPARATE OUTPUT RELAY WIRING. IDEC CAT# EB3C-R08A
- 38. POWER TERMINAL STRIPS (PTS), 30 AMP, 600 VOLT RATED, 10 TERMINALS (AS NEEDED), BLACK PHENOLIC BODY, MARATHON # 672RZ10
- 39. CONTROL TERMINAL STRIPS (CTS), 20 AMP, 300 VOLT RATED, 10 TERMINALS (3x10), BLACK PHENOLIC BODY, MARATHON # 601GP10
- 40. DIN RAIL, EXTRUDED ALUMINUM, DIN STD. DIMENSIONS, LENGTHS AS REQUIRED. IDEC CAT# BNDN1000, WITH DIN RAIL END STOPS, CAT# BNL5
- 41. CB5, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR EXTERNAL CELLUAR DEVICE. MOUNT WITH CB HANDLE PROTRUDING THRU DEAD FRONT DOOR PANEL, SQUARE D # QO110
- 42. CB6, CB7, CB8 THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 15 AMP, 18 KAIC, SQUARE D # BDL36015
- 43. CONTROL POWER TRANSFORMER (CPT) 480 VOLT 1P TO 120 VOLT 1P, 2 KVA (2000 VA), SQUARE D # 9070T2000D1, SIZE 6.2"Hx7.1"Wx7.2"D, WT.=47#. PROVIDE WITH FINGER SAFE COVERS # FSC2.

GENERAL NOTES:

- 1. ALL PANEL ITEMS SHALL BE MOUNTED ON THE BACKPLANE EXCEPT AS NOTED OTHERWISE. ITEMS TO BE MOUNTED ON THE INNER DOOR FRONT ARE ALL PILOT LIGHTS, SELECTOR SWITCHES, PUSHBUTTONS, STARTER RESETS, AND CIRCUIT BREAKER HANDLE OPENINGS. THE ALARM SILENCE PUSHBUTTON SHALL BE MOUNTED ON THE EXTERIOR SIDE WALL NEAR THE ALARM LIGHT, WHICH SHALL BE MOUNTED ON THE PANEL TOP.
- 2. PANEL ENCLOSURE SHALL BE 36"W X 48"H X 12"D, NEMA 4X TYPE 304 STAINLESS STEEL, WITH HASPS ON 3 SIDES, RAISED LIP ON ENCLOSURE TO RECEIVE DOOR GASKET, WHITE STEEL BACKPLANE, DEAD FRONT INNER DOOR WITH 1/4 TURN KNURLED KNOB FASTENING, BOND BOTH DOORS TO ENCLOSURE GROUND STRIP.
- 3. NOMENCLATURE LABELS FOR ALL ITEMS SHALL BE RED FIELD WITH WHITE CHARACTERS, ENGRAVED LAMINATED NAMEPLATES
- ATTACHED WITH STAINLESS STEEL MACHINE SCREWS AND NUTS. ALL TEXT SHALL BE MINIMUM 1/8" HIGH. ALL PROPOSED CONTROL PANELS SHALL BE SUBMITTED TO THE PARISH FOR APPROVAL PRIOR TO FABRICATION.
- THE NAME OF ANY MANUFACTURER, BRAND OR MAKE LISTED ON THE DRAWING IS FOR THE PURPOSE OF ESTABLISHING A MINIMUM ACCEPTABLE STANDARD OF QUALITY DESIRED BY THE PARISH. ALL PRODUCTS BID MUST HAVE PRIOR APPROVAL AS "PRIOR APPROVED EQUIVALENTS".





GENERAL NOTES:

- 1. ALL PANEL ITEMS SHALL BE MOUNTED ON THE BACKPLANE EXCEPT AS NOTED OTHERWISE, ITEMS TO BE MOUNTED ON THE INNER DOOR FRONT ARE ALL PILOT LIGHTS, SELECTOR SWITCHES, PUSHBUTTONS, STARTER RESETS, AND CIRCUIT BREAKER HANDLE OPENINGS.
- 2. PANEL ENCLOSURE SHALL BE 36"W X 36"H X 12"D, NEMA 4X TYPE 304 STAINLESS STEEL, WITH HASPS ON 3 SIDES, RAISED LIP ON ENCLOSURE TO RECEIVE DOOR GASKET, WHITE STEEL BACKPLANE, DEAD FRONT INNER DOOR WITH 1/4 TURN KNURLED KNOB FASTENING, BOND BOTH DOORS TO ENCLOSURE WITH GROUNDING STRAP.
- 3. NOMENCLATURE LABELS FOR ALL ITEMS SHALL BE RED FIELD WITH WHITE CHARACTERS, ENGRAVED LAMINATED NAMEPLATES ATTACHED WITH STAINLESS STEEL MACHINE SCREWS AND NUTS. ALL TEXT SHALL BE MINIMUM 1/8" HIGH.
- 4. ALL PROPOSED CONTROL PANELS SHALL BE SUBMITTED TO THE PARISH FOR APPROVAL PRIOR TO FABRICATION.
- 5. THE NAME OF ANY MANUFACTURER, BRAND OR MAKE LISTED ON THE DRAWING IS FOR THE PURPOSE OF ESTABLISHING A MINIMUM ACCEPTABLE STANDARD OF QUALITY DESIRED BY THE PARISH. ALL PRODUCTS BID MUST HAVE PRIOR APPROVAL AS "PRIOR APPROVED EQUIVALENTS".
- 6. EXTERNAL ITEMS WITH DASHED LINES ARE NOT IN CONTROL PANEL SCOPE.

PARTS LIST FOR 277/480 VOLT CONTROL PANEL

- 1. INCOMING MAIN POWER DISTRIBUTION BLOCK BLACK PHENOLIC, 3 POLE, 380 AMP, 600 VOLT. 100KA WITHSTAND RATING WITH RK5 FUSE PROTECTION, FINGER SAFE **GUARDS**
- A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
- B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
- C. MFGR/CAT#: SQUARE D #9080LBA365106, DIMS.: DXHXW=3.1"x5.5"x8.5", WITH CLEAR COVER #9080LB53
- 2. NEUTRAL BLOCK- 380 AMP, BLACK PHENOLIC, 1P, 380 AMP, 600VOLT, 100KA WITHSTAND RATING, ISOLATED, FINGER SAFE GUARD
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
 - B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
 - C. MFGR/CAT#: SQUARE D #9080LBA165106, DIMS: DXHXW=3.1"x5.5"x3.2", WITH CLEAR COVER #9080LB51
- 3. GROUND TERMINAL STRIP 20 POSITION, #6 WIRE MAX., MOUNT TO BACKPLANE
- 4. SURGE CAPACITOR RATED VOLTAGE 650V, 3 PHASE, 4 WIRE, DELTA # CA-603
- 5. LIGHTNING ARRESTOR 600 VOLTS MAX., DELTA TYPE SERVICE, 3 POLE, 4 WIRE, RATED 40KA SURGE PER PHASE, MOUNT ON BRACKET INSIDE CONTROL PANEL. SQUARE D # SDSA3650D, OR DELTA # LA-303.
- 6. FB1, FB2, FUSE BLOCK, 3 POLE PHENOLIC 600V FUSE HOLDER WITH 600 VOLT CLASS "CC" FUSES, SIZE AND NUMBER AS SHOWN. SQUARE D # 9080FB3611CC
- 7. PHASE MONITOR 3 PHASE, 430-480 VOLT, ADJUSTABLE, WITH GREEN "POWER OKAY" PILOT LIGHT, SPDT 10 AMP RATED CONTACT, UNDERVOLTAGE, PHASE LOSS, PHASE REVERSAL, PLUGIN OCTAL BASE, 8 PIN. RELAY ONLY ALLOWS FOR "A-B-C" ROTATION. DIVERISFIED ELECTRONICS # SLA-440-ASA
- 8. PHASE MONITOR BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 600 VOLT, 10 AMP. DIVERSIFIED ELECTRONICS SOCKET #OT-08 9. CB1, CB2 - THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 25 KAIC AT
- 480V, AMPERAGE RATING BY PUMP MOTOR HP AS SHOWN IN TABLE A. POWER SHALL BE THROUGH LUGS ON BOTH ENDS. 10. M1, M2 MOTOR STARTER - SQUARE D, FVNR OPEN
- TYPE, 3 POLE, 600 VOLTS, NEMA SIZE SHOWN IN TABLE B BY BLOWER MOTOR HP, 4 NO/NC FORM "C" AUX CONTACTS, 120 VOLT COIL
- 11. OL1 AND OL2 "HEATERS" SQUARE D, BUILT INTO STARTER OL FRAME, MELTING ALLOY TYPE, MANUAL RESET, SELECT BASED ON BLOWER MOTOR FLA
- 12. GFI RECEPTACLE, 15 AMP, 125 VOLTS, FLUSH MOUNT IN 1G BOX W/ COVER ON BACKPLANE
- 13. CB3, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR GFI RECEPTACLE. SQUARE D # Q0110
- 14. CB4, THERMAL-MAGNETIC, 15/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR CONTROLS. SQUARE D # Q0115
- 15. R1, R2, R3 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 16. R1, R2, R3 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK), FOR 3 POLE RELAY, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D # 8501NR61
- 17. HOA1, HOA2, 3 POSITION MAINTAINED, METALLIC BODY, 22mm DIAMETER, KNOB OPERATOR. LABEL "HAND-OFF-AUTO". SQUARE D HARMONY XB4 METAL, ZB48BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1 NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).
- 18. ETM1, ETM2, ELAPSED TIME METER, 100,000 HOURS, QUARTZ/DIGITAL WITH 1/8" ANALOG NUMBERS, NON-RESETTABLE, 120 VOLTS AC, NEMA 12/4X, RECTANGULAR HOLE PANEL MOUNT, MOUNT IN DEAD FRONT DOOR PANEL. REDINGTON MODEL 722
- 19. ALTERNATOR (ALT) WITH LEAD/LAG/OFF TOGGLE SELECTOR SWITCH, 125 VOLT AC, 1PDT, RATED 10 AMPS "CONTINUOUS DUTY", REQUIRES 8 PIN OCTAL BASE. TIMEMARK CAT# 261-ST-120
- 20. ALT RELAY SOCKET BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D #8501NR51
- 21. TS1 TIME SWITCH #1, 24 HOUR MECHANICAL TIMESWITCH WITH 96 PUSH-PULL PINS, EACH TIMING A 15 MINUTE INTERVAL. ONE SPDT CONTACT RATED 40 AMPS. 120 VOLT MOTOR. TORK/NSI CAT. #8009A.
- 22. POWER TERMINAL STRIPS (PTS), 30 AMP, 600 VOLT RATED, 10 TERMINALS (AS NEEDED), BLACK PHENOLIC BODY, MARATHON # 672RZ10
- 23. CONTROL TERMINAL STRIPS (CTS), 20 AMP, 300 VOLT RATED, 10 TERMINALS (AS NEEDED), BLACK PHENOLIC BODY, MARATHON # 601GP10
- 24. DIN RAIL, EXTRUDED ALUMINUM, DIN STD. DIMENSIONS, LENGTHS AS REQUIRED. IDEC CAT# BNDN1000, WITH DIN RAIL END STOPS, CAT# BNL5
- 25. CB5. THERMAL-MAGNETIC. 10/1, 125 VOLTS. FULL SIZE. 10KAIC, FOR EXTERNAL CELLUAR DEVICE. MOUNT WITH CB HANDLE PROTRUDING THRU DEAD FRONT DOOR PANEL. SQUARE D # Q0110
- 26. CB6. CB7, CB8 THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 15 AMP, 18 KAIC, SQUARE D # BDL36015
- 27. CONTROL POWER TRANSFORMER (CPT) 480 VOLT 1P TO 120 VOLT 1P, 2 KVA (2000 VA), SQUARE D # 9070T2000D1, SIZE 6.2"Hx7.1"Wx7.2"D, WT.=47#. PROVIDE WITH FINGER SAFE COVERS # FSC2.

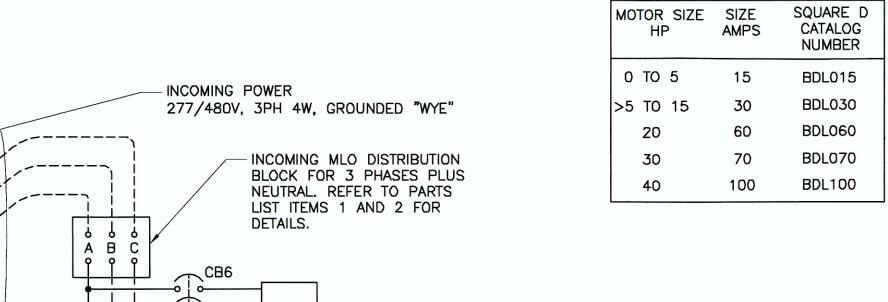
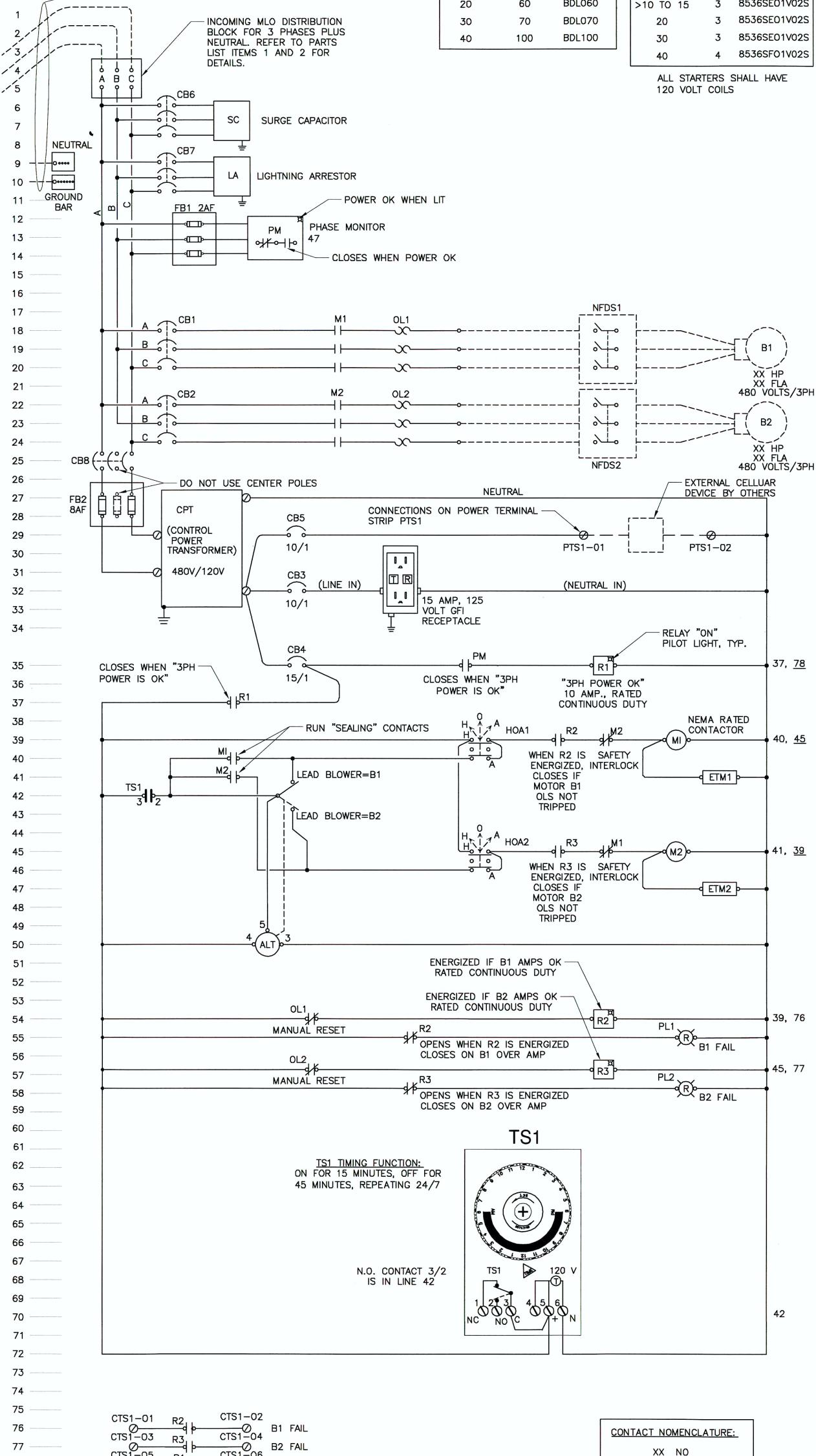
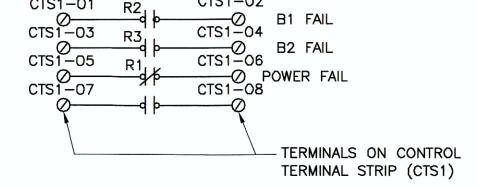


TABLE B MOTOR STARTER TABLE MOTOR SIZE NEMA SQUARE D SIZE CATALOG NUMBER 0 TO 5 8536SC03V02S 8536SD01V02S >5 TO 10 8536SE01V02S >10 TO 15 8536SE01V02S 8536SE01V02S 30 8536SF01V02S 40

TABLE A

MOTOR CIRCUIT BREAKER TABLE





XX NO XX NC XX NOTC XX NCTO

	<u>۱</u> %	400 VOLT DI OVVED	SCALE: (24x36)	DESIGNED BY:			REVISIONS	48C £
١,		480 VOLT BLOWER	N.T.S.	BDB	A DE DICIPLE	STRIE OF LOUISIAN,	DATE: REMARKS:	APP'D $<$ $\stackrel{\circ}{>}$
-	, s	STANDARD CONTROL PANEL		DRAWN BY:	PRINCIPAL	*STATE OF THE STATE OF THE STAT	1/28/19 MODIFIED TABLE A & B	B MO
		ST. TAMMANY PARISH LOUISIANA	SCALE: (11x17)	DLB	Fracina	BRUCE D. BARTON	2/1/19 MODIFIED TABLE A & B	B er N≱
۳	-	LOGIOIANA	N.T.S.	CHECKED BY:	Engineering	REGISTER APPROFESSIONAL ENGAGER		این م
				BDB		S. C. S.		
_		WIRING DIAGRAM AND PARTS LIST	DATE:		PRINCIPAL Engineering, Inc. 1011 N. CAUSEWAY BLVD., SUITE 19 PH: (985) 624-5001 info@pi-aec.com	120000		
		WINING DIAGNAM AND PANTS LIST	NOV. 2018	1802-05	MANDEVILLE, LA 70471 www.pi-aec.com	6) 10 Bilarumum		



January 30, 2019

Please find the following addendum to the below mentioned BID.

Addendum No.: 2

Bid#: 19-01-2

Project Name: Lift Station and Blower Control Electrical Panels

Bid Due Date: February 4, 2019

GENERAL INFORMATION:

- 1. Delete Lift Station and Blower Control Electrical Panels Bid #19-01-2 Specifications and Pricing Sheet and replace with Lift Station and Blower Control Electrical Panels Bid #19-01-2 Specifications and Pricing Sheet –REVISED (Attached).
- 2. Bid Items Blower Control-011 (50 HP), Blower Control-012 (75 HP), and Blower Control-013 (100 HP) have been removed from the Bid.

QUESTIONS & ANSWERS:

Question #1: For the blower bid, In the spec, you did not provide the starter or breaker sizing for 20, 30, 40, 50, 75 and 100 H.P. units. What are the sizes you want??

Answer #1: The starter and breaker sizes for 20 HP, 30 HP, and 40 HP have been specified on Attachment "C"-REVISED (Attached).

Bid Items Blower Control-011 (50 HP), Blower Control-012 (75 HP), and Blower Control-013 (100 HP) have been removed from the Bid and the Specifications and Pricing Sheet has been revised (Attached).

Question #2: Regarding this bid due next Monday, February 4, 2019, are the prospective bidders required to include sales tax as part of their prices?

Answer #2: The price in the Bid shall include all applicable Federal, State, Parish, Municipal or other taxes.

ATTACHMENTS:

- 1. Specifications and Pricing Sheet REVISED.pdf
- 2. ATTACHMENT "C"-REVISED.pdf

<< End of Addendum # 2>>

Lift Station and Blower Control Electrical Panels Bid # 19-01-2 Specifications and Pricing Sheet-REVISED

Prices remain in effect through **December 31, 2019**, with the option to extend for (1) one additional year, by written agreement of both parties. Any delivery and/or service charges must be included in the bid price. Quantities may vary; minimum orders shall not be required. St. Tammany Parish Government (Parish) reserves the right to award materials in whole, in part and/ or to multiple vendors. Bids must be submitted on the Pricing Sheet provided. **All fields must be filled in, NO blanks will be permitted. If the item is unavailable, enter N/A.**

The Parish, as a function of Tammany Utilities, owns and operates approximately fifty (50) wastewater treatment plants, forty (40) water wells, over two-hundred (200) sewage lift stations and miles of water distribution and sewage collection lines.

It is the intent of the Parish to secure pricing for the specified Lift Station and Blower Control Electrical Panels (panels) for use by the Parish. The Parish intends to replace existing panels and acquire panels for new sites on an 'as needed" basis. Panels must be assembled per the specifications (Attachment "A", Attachment "B" or Attachment "C"-REVISED). Panels will be ordered on an "as needed" basis. Panels shall have at least a one (1) year warranty for the repair or replacement of defects. Samples of materials furnished under the bid shall be submitted for approval by the Parish when and as directed.

Tammany Utilities System is comprised of systems acquired over time which may require items not anticipated in this bid proposal request. In the event additional items and/or upgraded items are required by the Parish, the Bidder may provide the items with prior written approval by the Parish.

All products shall be new and of current manufacture. Where specified on the bid sheets, prices shall be for the approved brand or a prior approved equal by the Parish. Where the specifications do not indicate an approved brand for an item, the Parish has no preference. The name of any manufacturer mentioned in the specifications is for the purpose of establishing a minimum acceptable standard of quality desired by the Parish. All products bid must have prior approval as "approved equivalents".

Should the Bidder desire to submit inquiries and/or request approval of an alternative product, Bidder shall submit make, model, supply catalog cut sheets and descriptive literature for the alternative product to the Procurement Department via email to purchasing@stpgov.org by 2:00 PM within seven (7) business days prior to the bid opening. Requests for approval of alternative products, shall include a copy of the bid and clearly identify the item(s) for which the equivalent item is being requested. The Parish shall review the inquiry and/or request for "approved equivalent" and issue an addendum within three (3) business days prior to the bid opening if prior approval submission is accepted as equivalent.

Lift Station and Blower Control Electrical Panels Bid # 19-01-2 Specifications and Pricing Sheet-REVISED

Delivery Locations:

- Cross Gates Maintenance Warehouse, 350 N. Military Road, Slidell, LA 70461
- Tammany Utilities, St. Tammany Parish Government, 636 W. 26th Avenue, Covington, LA 70433

Lift Station and Blower Control Electrical Panels Bid # 19-01-2 **Specifications and Pricing Sheet-REVISED**

Bidder \underline{must} acknowledge all addenda by entering the number the Parish assigned to EACH of the addenda that the Bidder is acknowledging.

The Bidder acknowled	lges receipt of the following:	
ADDENDA:		
All fields must be fil	led in. NO blanks will be permitted. If the item is unavailable	e please
enter <u>N/A</u> .		
"Price/Each" shall re	present the cost for the specified item as well as any delivery cha	arges (if
applicable) to the loca	ation(s) indicated in this bid.	
Company:		
Signature:		
Printed Name:		
Title:		
A 11		
Address:		
Telephone:		
Email:		
Date:		

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Specifications and Pricing Sheet-REVISED

REF No.	ТҮРЕ	WIRING DIAGRAM AND PARTS LIST SPECIFICATIONS ATTACHME		COST PER UNIT
Lift Station Panel-01	240 Volt Control Panel 0 – 2 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-02	240 Volt Control Panel 3 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-03	240 Volt Control Panel 5 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-04	240 Volt Control Panel 7.5 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-05	240 Volt Control Panel 11.3 HP	el 240 Volt Duplex Lift Station Standard Control Panel A		\$
Lift Station Panel-06	240 Volt Control Panel 15 HP	240 Volt Duplex Lift Station Standard Control Panel	A	\$
Lift Station Panel-07	277/480 Volt Control Panel 0 – 2 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-08	277/480 Volt Control Panel 3 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-09	277/480 Volt Control Panel 5 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-10	277/480 Volt Control Panel 7.5 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-11	277/480 Volt Control Panel 11.3 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$
Lift Station Panel-12	277/480 Volt Control Panel 15 HP	480 Volt Duplex Lift Station Standard Control Panel	В	\$

Specifications and Pricing Sheet-REVISED

All fields must be filled in, NO blanks will be permitted. If the item is unavailable, enter N/A.

Blower Control Panel -001	480 Volt 3 Phase 1 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -002	480 Volt 3 Phase 2 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -003	480 Volt 3 Phase 3 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -004	480 Volt 3 Phase 5 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -005	480 Volt 3 Phase 7.5 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -006	480 Volt 3 Phase 10 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -007	480 Volt 3 Phase 15 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -008	480 Volt 3 Phase 20 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -009	480 Volt 3 Phase 30 HP	480 Volt Blower Standard Control Panel	С	\$
Blower Control Panel -010	480 Volt 3 Phase 40 HP	480 Volt Blower Standard Control Panel	С	\$

GENERAL NOTES:

- 1. ALL PANEL ITEMS SHALL BE MOUNTED ON THE BACKPLANE EXCEPT AS NOTED OTHERWISE. ITEMS TO BE MOUNTED ON THE INNER DOOR FRONT ARE ALL PILOT LIGHTS, SELECTOR SWITCHES, PUSHBUTTONS, STARTER RESETS, AND CIRCUIT BREAKER HANDLE OPENINGS.
- 2. PANEL ENCLOSURE SHALL BE 36"W X 36"H X 12"D, NEMA 4X TYPE 304 STAINLESS STEEL, WITH HASPS ON 3 SIDES, RAISED LIP ON ENCLOSURE TO RECEIVE DOOR GASKET, WHITE STEEL BACKPLANE, DEAD FRONT INNER DOOR WITH 1/4 TURN KNURLED KNOB FASTENING, BOND BOTH DOORS TO ENCLOSURE WITH GROUNDING STRAP.
- 3. NOMENCLATURE LABELS FOR ALL ITEMS SHALL BE RED FIELD WITH WHITE CHARACTERS, ENGRAVED LAMINATED NAMEPLATES ATTACHED WITH STAINLESS STEEL MACHINE SCREWS AND NUTS. ALL TEXT SHALL BE MINIMUM 1/8" HIGH.
- 4. ALL PROPOSED CONTROL PANELS SHALL BE SUBMITTED TO THE PARISH FOR APPROVAL PRIOR TO FABRICATION.
- THE NAME OF ANY MANUFACTURER, BRAND OR MAKE LISTED ON THE DRAWING IS FOR THE PURPOSE OF ESTABLISHING A MINIMUM ACCEPTABLE STANDARD OF QUALITY DESIRED BY THE PARISH. ALL PRODUCTS BID MUST HAVE PRIOR APPROVAL AS "PRIOR APPROVED EQUIVALENTS".
- EXTERNAL ITEMS WITH DASHED LINES ARE NOT IN CONTROL PANEL SCOPE.

PARTS LIST FOR 277/480 VOLT CONTROL PANEL

- 1. INCOMING MAIN POWER DISTRIBUTION BLOCK BLACK PHENOLIC, 3 POLE, 380 AMP. 600 VOLT, 100KA WITHSTAND RATING WITH RK5 FUSE PROTECTION, FINGER SAFE **GUARDS**
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
- B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
- C. MFGR/CAT#: SQUARE D #9080LBA365106, DIMS.: DXHXW=3.1"x5.5"x8.5". WITH CLEAR COVER #9080LB53
- 2. NEUTRAL BLOCK- 380 AMP, BLACK PHENOLIC, 1P, 380 AMP, 600VOLT, 100KA WITHSTAND RATING, ISOLATED, FINGER SAFE GUARD
 - A. INCOMING WIRE RANGE 1 PRIMARY PORT PER POLE, #4 TO #500 KCMIL
 - B. DISTRIBUTION WIRE RANGE AND NUMBER SIX SECONDARY PORTS PER POLE, #14 TO #2/0
 - C. MFGR/CAT#: SQUARE D #9080LBA165106, DIMS: DXHXW=3.1"x5.5"x3.2", WITH CLEAR COVER #9080LB51
- 3. GROUND TERMINAL STRIP 20 POSITION, #6 WIRE MAX., MOUNT TO BACKPLANE
- 4. SURGE CAPACITOR RATED VOLTAGE 650V, 3 PHASE, 4 WIRE, DELTA # CA-603 5. LIGHTNING ARRESTOR - 600 VOLTS MAX., DELTA TYPE SERVICE, 3 POLE, 4 WIRE, RATED 40KA SURGE PER PHASE, MOUNT ON BRACKET INSIDE CONTROL PANEL.
- SQUARE D # SDSA3650D, OR DELTA # LA-303.
- 6. FB1, FB2, FUSE BLOCK, 3 POLE PHENOLIC 600V FUSE HOLDER WITH 600 VOLT CLASS "CC" FUSES. SIZE AND NUMBER AS SHOWN. SQUARE D # 9080FB3611CC
- 7. PHASE MONITOR 3 PHASE, 430-480 VOLT, ADJUSTABLE, WITH GREEN "POWER OKAY" PILOT LIGHT, SPDT 10 AMP RATED CONTACT, UNDERVOLTAGE, PHASE LOSS, PHASE REVERSAL, PLUGIN OCTAL BASE, 8 PIN. RELAY ONLY ALLOWS FOR "A-B-C" ROTATION. DIVERISFIED ELECTRONICS # SLA-440-ASA
- 8. PHASE MONITOR BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 600 VOLT, 10 AMP. DIVERSIFIED ELECTRONICS SOCKET #OT-08
- 480V, AMPERAGE RATING BY PUMP MOTOR HP AS SHOWN IN TABLE A. POWER SHALL BE THROUGH LUGS ON BOTH ENDS.

9. CB1, CB2 - THERMAL-MAGNETIC SQUARE D, 3 POLE, 600 VOLTS, 25 KAIC AT

- 10. M1, M2 MOTOR STARTER SQUARE D, FVNR OPEN TYPE, 3 POLE, 600 VOLTS, NEMA SIZE SHOWN IN TABLE B BY BLOWER MOTOR HP, 4 NO/NC FORM "C" AUX CONTACTS, 120 VOLT COIL
- 11. OL1 AND OL2 "HEATERS" SQUARE D, BUILT INTO STARTER OL FRAME, MELTING ALLOY TYPE, MANUAL RESET, SELECT BASED ON BLOWER MOTOR FLA
- 12. GFI RECEPTACLE, 15 AMP, 125 VOLTS, FLUSH MOUNT IN 1G BOX W/ COVER ON **BACKPLANE**
- 13. CB3, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR GFI RECEPTACLE. SQUARE D # QO110
- 14. CB4, THERMAL-MAGNETIC, 15/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR CONTROLS. SQUARE D # QO115
- 15. R1, R2, R3 3 POLE "ICE CUBE" RELAY, 120 VOLT AC COIL AND 3PDT CONTACTS, 10 AMP, RATED FOR "CONTINUOUS DUTY", "ON" PILOT LIGHT, 11 PIN OCTAL BASE. IDEC # RR3PA-UL, OR SQUARE D # 8501 KPDR 13P14 V20 (SQ D DIGEST PAGE 23-14)
- 16. R1, R2, R3 SOCKET BASE 11 PIN OCTAL BASE, (SINGLE STACK), FOR 3 POLE RELAY, SNAPON DIN RAIL MOUNT, 300 VOLT, 10 AMP. IDEC # SR3P-0622, OR SQUARE D # 8501NR61
- 17. HOA1, HOA2, 3 POSITION MAINTAINED, METALLIC BODY, 22mm DIAMETER, KNOB OPERATOR. LABEL "HAND-OFF-AUTO". SQUARE D HARMONY XB4 METAL, ZB48BD3 (STD BLK 45 DEGREE HANDLE), ZB4BZ105 CONTACT BLOCK (1 NO + 1 NC), 1 ADDITIONAL ZBE505 CONTACT BLOCK (1 NO + 1 NC).
- 18. ETM1, ETM2, ELAPSED TIME METER, 100,000 HOURS, QUARTZ/DIGITAL WITH 1/8" ANALOG NUMBERS, NON-RESETTABLE, 120 VOLTS AC, NEMA 12/4X, RECTANGULAR HOLE PANEL MOUNT, MOUNT IN DEAD FRONT DOOR PANEL. REDINGTON MODEL 722
- 19. ALTERNATOR (ALT) WITH LEAD/LAG/OFF TOGGLE SELECTOR SWITCH, 125 VOLT AC, 1PDT, RATED 10 AMPS "CONTINUOUS DUTY", REQUIRES 8 PIN OCTAL BASE. TIMEMARK CAT# 261-ST-120
- 20. ALT RELAY SOCKET BASE 8 PIN OCTAL BASE, (SINGLE STACK), SNAPON DIN RAIL MOUNT, 300 V, 10 AMP. IDEC # SR2P-06, OR SQUARE D #8501NR51
- 21. TS1 TIME SWITCH #1, 24 HOUR MECHANICAL TIMESWITCH WITH 96 PUSH-PULL PINS, EACH TIMING A 15 MINUTE INTERVAL. ONE SPDT CONTACT RATED 40 AMPS. 120 VOLT MOTOR. TORK/NSI CAT. #8009A.
- NEEDED), BLACK PHENOLIC BODY, MARATHON # 672RZ10

22. POWER TERMINAL STRIPS (PTS), 30 AMP, 600 VOLT RATED, 10 TERMINALS (AS

- 23. CONTROL TERMINAL STRIPS (CTS), 20 AMP, 300 VOLT RATED, 10 TERMINALS (AS NEEDED), BLACK PHENOLIC BODY, MARATHON # 601GP10
- 24. DIN RAIL, EXTRUDED ALUMINUM, DIN STD. DIMENSIONS, LENGTHS AS REQUIRED. IDEC CAT# BNDN1000, WITH DIN RAIL END STOPS, CAT# BNL5
- 25. CB5, THERMAL-MAGNETIC, 10/1, 125 VOLTS, FULL SIZE, 10KAIC, FOR EXTERNAL CELLUAR DEVICE. MOUNT WITH CB HANDLE PROTRUDING THRU DEAD FRONT DOOR PANEL. SQUARE D # Q0110
- 26. CB6. CB7. CB8 THERMAL-MAGNETIC SQUARE D. 3 POLE. 600 VOLTS, 15 AMP, 18 KAIC, SQUARE D # BDL36015
- 27. CONTROL POWER TRANSFORMER (CPT) 480 VOLT 1P TO 120 VOLT 1P, 2 KVA (2000 VA), SQUARE D # 9070T2000D1, SIZE 6.2"Hx7.1"Wx7.2"D, WT.=47#. PROVIDE WITH FINGER SAFE COVERS # FSC2.

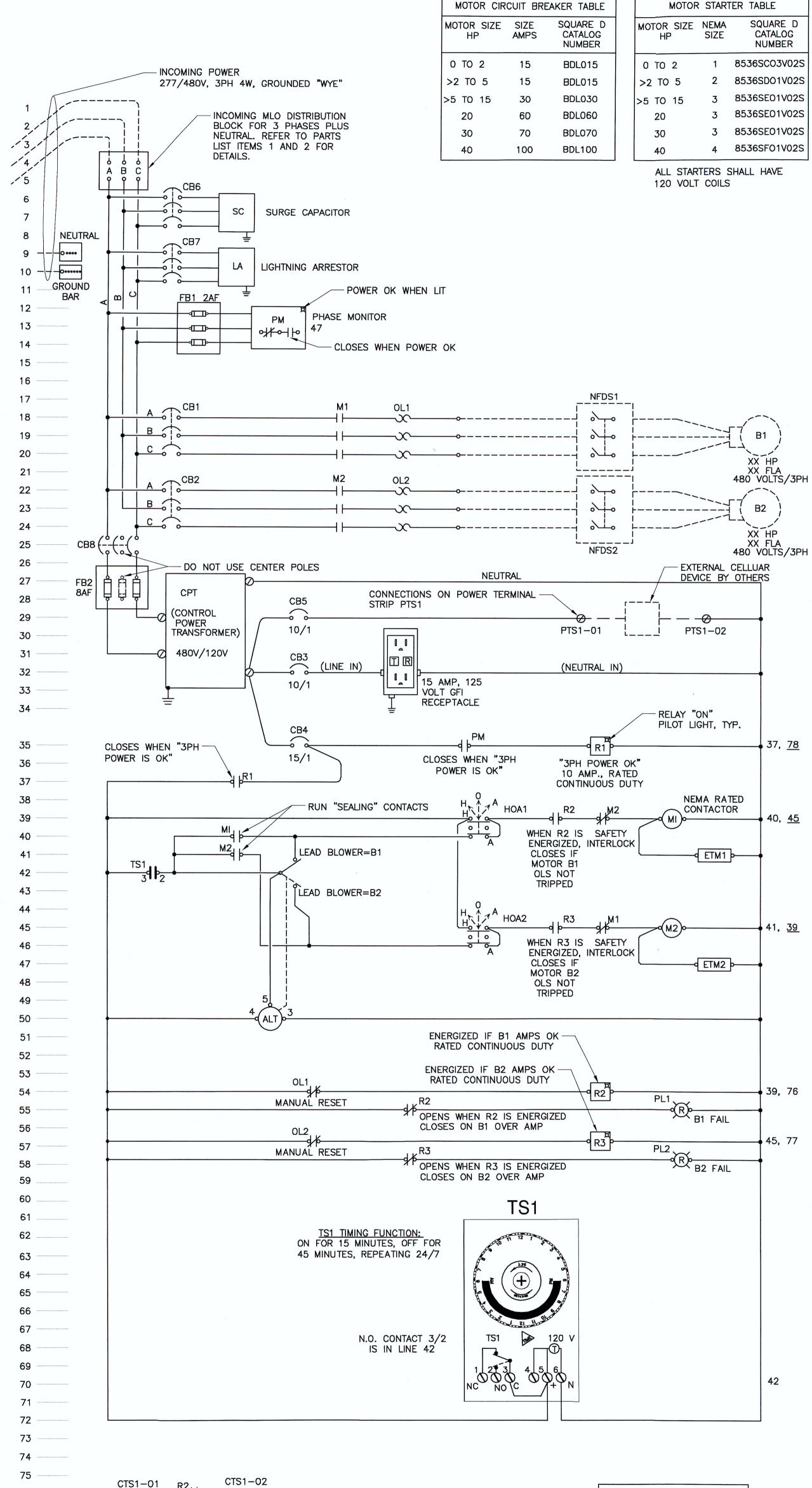


TABLE A

TABLE B

CONTACT NOMENCLATURE:

XX NO

XX NC

XX NOTC

XX NCTO

L								
	1 OF 1	SHEET NO.	480 VOLT BLOWER STANDARD CONTROL PANEL ST. TAMMANY PARISH LOUISIANA	SCALE: (24x36) N.T.S. SCALE: (11x17) N.T.S.	DESIGNED BY: BDB DRAWN BY: DLB CHECKED BY: BDB	PRINCIPAL Engineering Inc. Phy (985) 624 5001	PROFESSIONAL ENGINEER	REVISIONS DATE: REMARKS: APP'D 1/28/19 MODIFIED TABLE A & B BDB WEYCOP NAME:
			WIRING DIAGRAM AND PARTS LIST	DATE: NOV. 2018	ЈОВ NO. 1802-05	PRINCIPAL Engineering, Inc. 1011 N. CAUSEWAY BLVD., SUITE 19 MANDEVILLE, LA 70471 PH: (985) 624-5001 info@pi-aec.com www.pi-aec.com	The sand and a sand sand	

CTS1-04 CTS1-06

B2 FAIL

TERMINALS ON CONTROL

TERMINAL STRIP (CTS1)

01/28/19

CTS1-08

CTS1-03

O_____ CTS1 −05

<u>⊘</u> CTS1 –07

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January 25, 2019

Please find the following addendum to the below mentioned BID.

Addendum No.: 1

Bid#: 19-01-2

Project Name: Lift Station and Blower Control Electrical Panels

Bid Due Date: February 4, 2019

QUESTIONS & ANSWERS:

Question #1: Under General Notes #2 – states that the enclosures shall be 36"W x 48" H

x 12" D / question.....Can we sized the panels that will fit the required contents (which should be smaller) or provide the panel size as specified

even if they are oversized?

Answer #1: The panel enclosures shall be provided as specified.

<< End of Addendum # 1>>