

THE CITY OF SANIBEL
POST HURRICANE IAN LIFT STATION
CONTROL PANEL PROCUREMENT PHASE 1

10600 CHEVROLET WAY, SUITE 102
ESTERO, FLORIDA 33928
Ph: (239) 390-1467
ENGINEERING BUSINESS NO. 2429



www.tetrattech.com

PROJECT LOCATION:
SANIBEL, FLORIDA 33957

CLIENT INFORMATION:
THE CITY OF SANIBEL
SANIBEL, FLORIDA 33957
Ph: (239) 472-1008 - Fax (239) 472-5531

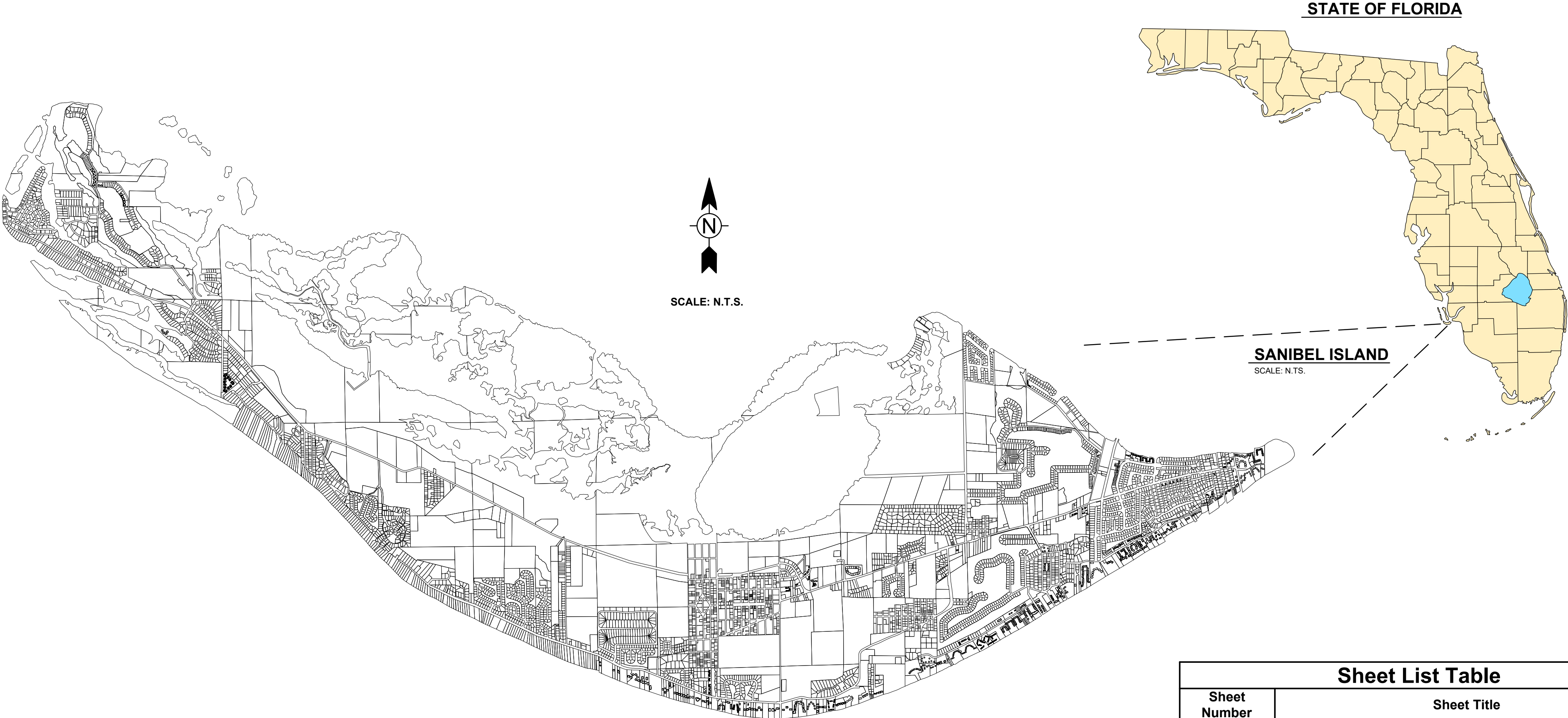
Tt PROJECT No.:
200-08498-24002

CLIENT PROJECT No.:

PROJECT DESCRIPTION / NOTES:
FABRICATION OF 41 DUPLEX PUMP STATION CONTROL PANELS (POWER AND CONTROL PANELS),
TERMINATION CABINETS AND VENTED PEDESTAL BOXES.

ISSUED:
04/03/25 - BID SET

VICINITY MAP:



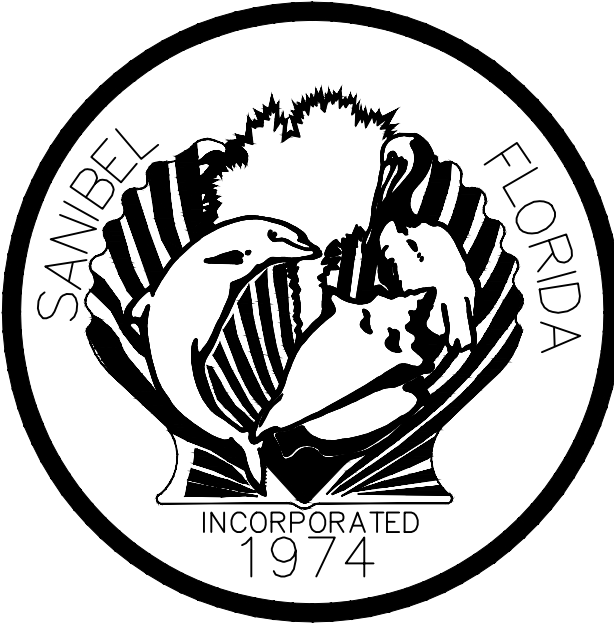
Sheet List Table	
Sheet Number	Sheet Title
G-000	COVER SHEET
E-001	ELECTRICAL LEGEND
E-002	ELECTRICAL LEGEND
E-003	ELECTRICAL LEGEND
E-301	PUMP CONTROL PANEL (POWER PANEL) LAYOUT
E-302	PUMP CONTROL PANEL (CONTROLS PANEL) LAYOUT
E-303	TERMINATION CABINET AND PEDESTAL BOX
E-311	240V, 1 PHASE, VFD CONTROL PANEL (POWER) WIRING DIAGRAM
E-312	240V, 1 PHASE, VFD CONTROL PANEL (POWER) WIRING DIAGRAM
E-313	240V, 1 PHASE, VFD CONTROL PANEL (POWER) WIRING DIAGRAM
E-314	240V, 1 PHASE, VFD CONTROL PANEL (POWER) WIRING DIAGRAM
E-315	240V, 1 PHASE, VFD CONTROL PANEL (POWER) WIRING DIAGRAM
E-321	230V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-322	230V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-323	230V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-324	230V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-331	230V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-332	230V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-333	230V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-334	230V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-335	230V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
F-341	480V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-342	480V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-343	480V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-344	480V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-351	480V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-352	480V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-353	480V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-354	480V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-355	480V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM
E-361	208V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-362	208V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-363	208V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-364	208V, THREE PH, STARTER CONTROL PANEL (POWER) WIRING DIAGRAM
E-371	PUMP CONTROL PANEL (CONTROLS PANEL) WIRING DIAGRAM
E-372	PUMP CONTROL PANEL (CONTROLS PANEL) WIRING DIAGRAM
E-373	PUMP CONTROL PANEL (CONTROLS PANEL) WIRING DIAGRAM

PREPARED FOR
THE CITY OF SANIBEL

UTILITIES DEPARTMENT
800 DUNLOP ROAD
SANIBEL, FLORIDA 33957

MAYOR - MIKE MILLER
VICE MAYOR - HOLLY D. SMITH
CITY COUNCIL - RICHARD JOHNSON
CITY COUNCIL - LAURA DeBRUCE
CITY COUNCIL - JOHN HENSHAW

CITY MANAGER - DANA A. SOUZA
PUBLIC WORKS DIRECTOR - ALFRED J. MITTL, PE



—) (— CONTINUATION

Diagram illustrating a conduit fire-rated wall penetration. A vertical line represents the wall, and a horizontal line represents the conduit. The conduit is shown passing through the wall, with a label 'WALL' pointing to the vertical line and 'CONDUIT FIRE-RATED WALL PENETRATION' pointing to the horizontal line.

 HANDRAIL MOUNTED LIGHT FIXTURE

FLOAT SWITCH

P:X-Y NUMBERS ADJACENT TO RECEPTACLE INDICATED SOURCE PANEL ("P:X") AND CIRCUIT NUMBER ("Y") FEEDING BRANCH CIRCUIT.

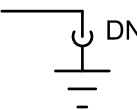
LC LIGHTING CONTACTOR.

 CONCRETE ENCASED ELECTRODE OR INDICATES BONDING TO CONCRETE REBAR

FLOAT SWITCH

Bar Measures 1 inch

LIGHTNING PROTECTION SYMBOLS

SYMBOL	DESCRIPTION
	AIR TERMINAL - ROOF MOUNTED (3/8"Ø X 12" U.N.O.) F = ADHESIVE SECURED
	AIR TERMINAL - MOUNTED TO SIDE OF EQUIPMENT/PARAPET
	AIR TERMINAL - MULTIPOINT
	AIR TERMINAL - ELEVATED HEIGHT WITH DIAGONAL BRACING H = OVERALL HEIGHT ABOVE MOUNTING SURFACE
	CROSS CONDUCTOR
	CLASS I LIGHTNING PROTECTION CABLE
	CLASS II LIGHTNING PROTECTION CABLE
	THROUGH-ROOF PENETRATION SEAL
	CONDUCTOR BONDING CONNECTION
	EQUIPMENT/BUILDING BONDING CONNECTION
	DOWN-LEAD CONDUCTOR (TO EARTH ELECTRODE SYSTEM) PROVIDE BI-METALLIC CONNECTION IN JUNCTION BOX BETWEEN LIGHTNING PROTECTION CABLE AND GROUNDING CABLE

ACCESS CONTROL / SECURITY SYMBOLS

<u>SYMBOL</u>	<u>DESCRIPTION</u>
	DOOR CONTACT
	REQUEST TO EXIT
	CARD READER
	CARD READER WITH PINPAD
	DOOR LATCH - ELECTRIC STRIKE
	INTRUSION DETECTION PANEL, PROVIDE 120VAC BRANCH CIRCUIT
	ACCESS CONTROL PANEL, PROVIDE 120VAC BRANCH CIRCUIT
	INTERCOM HANDSET
	INTERCOM SPEAKER

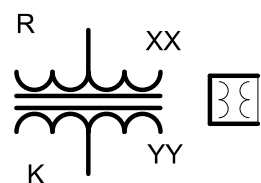
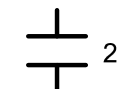
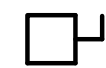
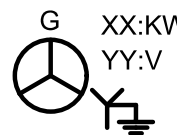
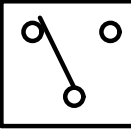
FIRE PROTECTION SYMBOLS

SYMBOL	DESCRIPTION
	FLAME DETECTOR XX-DENOTES TYPE UV/IR - COMBINATION UV - ULTRAVIOLET IR - INFRARED VR - VISIBLE RADIATION
	HEAT DETECTOR XX-DENOTES TYPE F - FIXED R - RATE OF RISE
	GAS DETECTOR XX- GAS TYPE
	SMOKE DETECTOR XX-DENOTES TYPE ID - IN DUCT I - IONIZATION P - PHOTO ELECTRIC IP - DUAL RATED R - RETURN S - SUPPLY
	FIRE ALARM SYSTEM CONDUIT AND WIRING
	FIRE ALARM STROBE LIGHT WALL MOUNTED
	FIRE ALARM HORN ONLY
 CD	FIRE ALARM HORN/STROBE LIGHT COMBINATION WALL MOUNTED CD = CANDELA RATING
	MASS NOTIFICATION SPEAKER/STROBE LIGHT COMBINATION WALL MOUNTED
	FIRE ALARM SPEAKER/STROBE LIGHT COMBINATION CEILING MOUNT
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM CONTROL PANEL
	GRAPHIC ANNUNCIATOR
	REMOTE ANNUNCIATOR PANEL
	OUTPUT RELAY
	VALVE SUPERVISOR SWITCH
	PRESSURE SWITCH
	DOOR HOLDER
	FIRE ALARM MANUAL PULL STATION
	FIRE ALARM RELAY
	FIRE ALARM FLOW SWITCH
	FIRE EXTINGUISHER
	FIRE ALARM TAMPER SWITCH

TELECOMMUNICATIONS SYMBOLS

<u>SYMBOL</u>	<u>DESCRIPTION</u>
	TELECOMMUNICATIONS JACK. PROVIDE CAT-6 IN 1" CONDUIT TO SOURCE AS INDICATED ON PLANS. IN AREAS WITH DROP CEILING PROVIDE 1" CONDUIT TO ABOVE CEILING AND THEN UTILIZE CABLE TRAY OR "J" HOOKS TO ROUTE CAT-6 TO SOURCE
	COMBINATION TELECOMMUNICATIONS JACK. PROVIDE TWO CAT-6
	CEILING MOUNTED
	WIRELESS ACCESS POINT
	FLOOR MOUNTED
	TELEVISION OUTLET, HEIGHT AS NOTED ON PLANS. PROVIDE 1" CONDUIT TO SOURCE SHOWN
	AV BOX, PROVIDE 2" CONDUIT TO SOURCE SHOWN
	BASKET TYPE CABLE TRAY
	LADDER TYPE CABLE TRAY

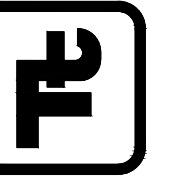
SINGLE-LINE DIAGRAM SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	TRANSFORMER XX - DENOTES SIZE IN KVA YY - DENOTES VOLTAGE AND PHASE R - DENOTE IMPEDANCE (PROVIDE STANDARD IF BLANK) K - DENOTES K-FACTOR		HIGH VOLTAGE FUSE (ABOVE 600 V)		M-MAGNETIC MOTOR STARTER, C-GENERAL USE CONTACTOR (NUMBER INDICATED NEMA SIZE)
			LOW VOLTAGE FUSE XX DENOTES AMP RATING		MOTOR OVERLOAD DEVICE
	DELTA CONFIGURED WINDING		CIRCUIT BREAKER		CAPACITOR, 3 PHASE, SIZE AS INDICATED
	WYE CONFIGURED WINDING		DRAW OUT BREAKER		MAGNETIC STARTER (BACKGROUND DRAWINGS ONLY)
	GROUND ELECTRODE (3/4"Ø X 10') COPPER-CLAD U.N.O.		MOTOR WITH ASSUMED HORSEPOWER. ACTUAL HORSEPOWER MAY DIFFER - INCREASE AS REQUIRED		COMBINATION STARTER FUSED UNLESS NOTED (CIRCUIT BREAKER)
	SURGE PROTECTION DEVICE		SHUNT TRIP		UTILITY METER
	DISCONNECT SWITCH		UTILITY CONNECTION		INTERLOCK FUNCTION
	HEATER w/ SIZE INDICATED		CT ENCLOSURE WITH SEPARATE METER		INTERLOCK ASSOCIATION
	SOLENOID VALVE		GENERATOR XX: DENOTES SIZE IN KW YY: DENOTES VOLTAGE AND PHASE		VARIABLE FREQUENCY DRIVE
	TRANSFER SWITCH		FLOAT SWITCH		SURGE PROTECTION DEVICE
	LOW VOLTAGE DISCONNECT SWITCH		CURRENT TRANSFORMER, (3) INDICATES QUANTITY		POWER QUALITY MONITOR
					SOLID STATE REDUCED VOLTAGE STARTER
					SOLID STATE TRIP
					REDUCED VOLTAGE SOFT STARTER
					BUS CONNECTION

CONTROL CIRCUIT & PILOT DEVICE LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PRESS. ACTUATED SWITCH		CONTROL RELAY COIL		TIMED CLOSED CONTACT ON DE-ENERGIZATION		MAINTAINED STOP MOMENTARY START PUSHBUTTON (JOG)
	FLOAT ACTUATED SWITCH		CONTROL RELAY CONTACT-NORMALLY OPEN		MOMENTARY PUSHBUTTON OPERATOR-NORMALLY OPEN		ZERO SPEED OR ANTI-PLUGGING SWITCH
	FLOW ACTUATED SWITCH		CONTROL RELAY CONTACT-NORMALLY CLOSED		MOMENTARY PUSHBUTTON OPERATOR-NORMALLY CLOSED		PUSHBUTTON OPERATOR WITH MUSHROOM HEAD
	TEMP. ACTUATED SWITCH		TWO COIL LATCHING RELAY		FIELD LOCATED STOP BUTTON		LOCAL TERMINALS WITH EXTERNAL WIRING
	LIMIT SWITCH - NORMALLY OPEN		TIMING RELAY COIL		MAINTAINED PUSH-PULL OPERATOR		ELAPSED TIME INDICATOR
	LIMIT SWITCH - NORMALLY CLOSED		TIMED CLOSED CONTACT ON ENERGIZATION		MAINTAINED STOP-START PUSHBUTTON OPERATOR		TIMING RELAY INSTANTANEOUS CONTACTS NORMALLY OPEN
	LIGHT SWITCH - NORMALLY CLOSED HELD OPEN		TIMED OPEN CONTACT ON ENERGIZATION		SOLENOID OR CLUTCH		TIMING RELAY INSTANTANEOUS CONTACTS NORMALLY CLOSED
	LIGHT SWITCH - NORMALLY OPEN HELD CLOSED		TIMED OPEN CONTACT ON DE-ENERGIZATION		PUSH-TO-TEST INDICATING LIGHT R = COLOR RED Y = COLOR YELLOW G = COLOR GREEN		120 VAC TRANSFORMER
	FUSE						SELECTOR SWITCH OPERATOR WITH FUNCTION SHOWN

TETRA TECH
ENGINEERING BUSINESS NO. 2429



BID SET

**CITY OF
SANIBEL**

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THE CITY OF SANIBEL

LIFT STATION CONTROL PANELS

ELECTRICAL LEGEND

Project No.: 200-08498-24002

Designed By: JAS

Drawn By: JAS

Checked By: JDM

E-002

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GENERAL NOTES

1. PERFORM WORK IN COMPLIANCE WITH CODES AND ORDINANCES APPLICABLE TO AUTHORITIES HAVING JURISDICTION, INCLUDING BUT NOT LIMITED TO: NATIONAL ELECTRICAL CODE, NATIONAL FIRE PROTECTION CODES, BUILDING CODES, ENERGY CODES, HEALTH AND SAFETY CODES, LOCAL LAWS AND REGULATIONS, AND ACCESSIBILITY REQUIREMENTS. ADJUST WORK REQUIRED BY THIS CONTRACT WHERE NECESSARY FOR COMPLIANCE.

2. ADHERE TO THE LATEST VERSION OF APPLICABLE INDUSTRY STANDARDS, INCLUDING BUT NOT LIMITED TO: ISA - INSTRUMENT SOCIETY OF AUTOMATION, IES HANDBOOK AND RECOMMENDED PRACTICES FOR LIGHTING, NETA ACCEPTANCE TESTING STANDARDS (ATS), INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE), ANSI, ELECTRONIC INDUSTRY ALLIANCE / TELECOMMUNICATIONS INDUSTRY ASSOCIATION (EIA / TIA), AND BUILDING INDUSTRY CONSULTING SERVICES INTERNATIONAL (BICSI.)

3. PROVIDE EQUIPMENT AND MATERIALS LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCEPTABLE TO THE AUTHORITIES HAVING JURISDICTION. CONTROL PANELS SHALL BE UL 508A LISTED AND LABELED. ANY PLC PANEL, UL 508A CONTROL PANEL, MCC, SWITCHGEAR, STANDALONE MOTOR CONTROLLERS, OR OTHER LISTED ELECTRICAL EQUIPMENT MODIFIED IN THE FIELD AFTER IT HAS LEFT THE FACTORY SHALL BE EVALUATED BY AN NRTL TO PROVIDE A FIELD LISTING.

4. ADHERE TO OWNER'S SITE-SPECIFIC PROTOCOLS INCLUDING, BUT NOT LIMITED TO: SYSTEM OPERATIONS, HEALTH AND SAFETY, SITE ACCESS RESTRICTIONS, AND LOCK-OUT / TAG-OUT PROCEDURES.

5. PERFORM ELECTRICAL WORK IN ADHERENCE TO NECA 1 - STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION.

6. COORDINATE WORK WITH OTHER TRADES, AND WITH OWNER'S THIRD-PARTY CONTRACTORS AS APPLICABLE.

7. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: TEMPORARY PROVISIONS TO MAINTAIN FACILITY USE, TEMPORARY CONSTRUCTION POWER AND COMMUNICATIONS, TOOLS / EQUIPMENT / AND MATERIALS REQUIRED FOR EXECUTION OF THEIR WORK, WORKFORCE SUPERVISION AND STAFFING, SITE HEALTH AND SAFETY, CONSTRUCTION SCHEDULING, SEQUENCE OF CONSTRUCTION, AND PLANNING AND COORDINATION OF WORK.

8. PREPARE AND SUBMIT COORDINATION DRAWINGS FOR ELECTRICAL EQUIPMENT PLACEMENT, UNDERGROUND DUCT BANKS, AND OVERHEAD CONDUIT RACKS AND CABLE TRAYS. ILLUSTRATE CONDUIT STUB-UPS AND ENTRY LOCATIONS INTO EQUIPMENT ENCLOSURES. COORDINATE WITH ADJACENT ITEMS FOR CODE-REQUIRED CLEARANCES, AND ACCESS AS REQUIRED FOR OPERATIONS AND MAINTENANCE. (COORDINATION DRAWINGS ARE REQUIRED PRIOR TO EQUIPMENT SHOP DRAWING APPROVAL.)

9. PLAN, PERMIT AND EXECUTE TRAFFIC CONTROL MEASURES AS REQUIRED TO PERFORM WORK IN STREETS AND PUBLIC RIGHT-OF-WAY.

10. PROTECT NEW AND EXISTING EQUIPMENT AND MATERIALS FROM DAMAGE AND DETERIORATION DURING CONSTRUCTION. REPAIR OR REPLACE ITEMS DAMAGED DURING CONSTRUCTION TO THE EXTENT THEIR DAMAGE IS UNNOTICEABLE AND IN A MANNER THAT DOES NOT AFFECT FUNCTION, USE, OR LONGEVITY (AT NO COST TO THE OWNER). WARRANTIES SHALL NOT BE AFFECTED BY ANY REPAIRS MADE IN THE FIELD.

11. THE OWNER HAS THE RIGHT TO RETAIN OR REFUSE ANY AND REMOVED MATERIALS. COORDINATE WITH THE OWNER ON RETAINED ITEMS AND EXERCISE CARE IN REMOVAL, HANDLING AND STORAGE. ITEMS NOT RETAINED BY THE OWNER SHALL BE RECYCLED WHERE SUCH PROGRAMS EXIST. NON-RECYCLABLE ITEMS SHALL BE LAWFULLY DISPOSED OF BY THE CONTRACTOR.

12. FACILITY OPERATIONS AND USE SHALL BE MAINTAINED, EXCEPT AS EXPLICITLY IDENTIFIED FOR DECOMMISSIONING. PROVIDE TEMPORARY FACILITIES AND SERVICES NECESSARY TO MAINTAIN FACILITY OPERATIONS DURING CONSTRUCTION. COORDINATE SCHEDULING AND TEMPORARY PROVISIONS FOR SYSTEM OUTAGES WITH THE OWNER A MINIMUM OF TWO WEEKS IN ADVANCE OF WORK WHICH MAY AFFECT FACILITY OPERATIONS. THIS MAY INCLUDE TEMPORARY LIFE SAFETY SYSTEMS, TEMPORARY POWER, TEMPORARY COMMUNICATION NETWORKS, TEMPORARY CONTROLS SOFTWARE AND HARDWARE. THESE ITEMS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME.

13. WHERE NEW UTILITIES ARE INCLUDED IN THE SCOPE OF WORK, COORDINATE EXACT DIVISION OF UTILITY WORK WITH LOCAL UTILITY COMPANIES PROVIDING SERVICES. WHERE CONTRACT REQUIREMENTS EXCEED THIS COORDINATED RESPONSIBILITY, PROVIDE SUITABLE CREDIT FOR WORK BEING PERFORMED BY OTHERS.

14. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND REPRESENT SYSTEMS THAT ARE COMPLETE AND FUNCTIONAL FOR THEIR INTENDED USE. PROVIDE SUPPLEMENTAL MATERIALS, LABOR AND OTHER ANCILLARY ITEMS REQUIRED FOR COMPLETE INSTALLATION. THESE ITEMS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME.

15. THE CONTRACTOR SHALL COORDINATE WITH THE HVAC AND PROCESS EQUIPMENT SUPPLIERS. THE INTENT OF THE ELECTRICAL DRAWINGS IS TO PROVIDE A FULLY FUNCTIONAL HVAC AND PROCESS TREATMENT SYSTEM. AS SUCH, THE CONTRACTOR MAY BE REQUIRED TO MODIFY ELECTRICAL INSTALLATION INDICATED ON PLANS OR PROVIDE SUPPLEMENTAL MATERIALS, LABOR AND OTHER ANCILLARY ITEMS REQUIRED FOR COMPLETE INSTALLATION. THESE ITEMS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME

16. PROVIDE ADDITIONAL JUNCTION BOXES, PULL BOXES AND HANDHOLES NECESSARY TO LIMIT INSTALLED CONDUIT BENDS TO NO MORE THAN 360-DEGREES FOR OVERHEAD WORK, AND 270-DEGREES FOR UNDERGROUND WORK. LOCATE BOXES BASED OF CABLE PULLING TENSION AND ACCESSIBILITY. SIZE BOXES PER CABLE MANUFACTURES BENDING RADIUS REQUIREMENTS AND THE NEC. THESE ITEMS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME. INSTALLATION OF NETWORK CABLING AND EQUIPMENT SHALL COMPLY WITH APPLICABLE EIA/TIA AND BICSI REQUIREMENTS.

17. CONVENIENCE OUTLETS SHOWN WITHOUT DESIGNATED CIRCUITRY SHALL INCLUDE CONDUIT AND WIRE BACK TO THE NEAREST 120V BRANCH CIRCUIT PANELBOARD USING WIRING METHODS CONSISTENT WITH SIMILAR CIRCUITS WITHIN THAT AREA. THIS WORK SHALL BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME.
18. PROVIDE BRANCH CIRCUIT WIRING AND CONTROLS FOR INSTALLED LIGHTING SYSTEMS. THIS WORK IS TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME.

19. ADJUST BRANCH CIRCUIT CONDUCTOR SIZES TO COMPENSATE FOR VOLTAGE DROP AND DERATING OF AMPACITY BASED ON THE NUMBER OF CONDUCTORS CONTAINED WITHIN A SUBJECT RACEWAY. FOR 20-AMPERE BRANCH CIRCUITS EXCEEDING 75-FEET IN OVERALL LENGTH, INCREASE CONDUCTORS TO #10AWG SIZE (OR GREATER) AS REQUIRED TO REDUCE VOLTAGE DROP TO NO MORE THAN THREE PERCENT LINE-TO-NEUTRAL. THESE ADJUSTMENTS ARE TO BE INCLUDED IN THE CONTRACTOR'S BID AND SHALL NOT BE A BASIS FOR CLAIMS OF ADDITIONAL COST OR TIME.

20. DIMENSIONAL TOLERANCES ARE NOT SPECIFICALLY INDICATED IN PLANS, DETAILS AND SPECIFICATIONS. ALIGN ABUTTING HORIZONTAL ITEMS WITHIN +/- 1/64", AND WALL-MOUNTED OR SUSPENDED ITEMS SEPARATED BY 12" OR MORE TO A TOLERANCE OF 1/16". PLUMB ITEMS SHALL NOT DEVIATE FROM TRUE VERTICAL BY MORE THAN 1/8" IN 10'-0". LEVEL EQUIPMENT TO WITHIN 1/32" ACROSS ITS HORIZONTAL SURFACE IN EACH DIRECTION.

21. ALL CONDUITS SHALL BE MINIMUM ¾ INCH RGS (ABOVE GRADE) AND 1" PVC (BELOW GRADE) UNLESS OTHERWISE NOTED AND INCLUDE AN INSULATED GREEN GROUNDING CONDUCTOR SIZED PER THE NEC. MINIMUM WIRE SIZE SHALL BE #12 AWG UNLESS OTHERWISE NOTED. THIS GROUND WIRE SHALL BE CONNECTED AT EACH END TO THE EQUIPMENT GROUND. THIS ALSO INCLUDES INSTRUMENTATION DEVICES SUCH AS LEVEL, PRESSURE, FLOW TRANSMITTERS, LIMIT SWITCHES, CONDUITS, NETWORK AND I/O CABLES.

22. COMPLETELY CONCEAL POLY-VINYL CHLORIDE (PVC) CONDUITS WITHIN CONCRETE OR BELOW GRADE (UNLESS SPECIFICALLY INDICATED OTHERWISE.) PROVIDE RIGID GALVANIZED STEEL RISERS AND ELBOWS (WITH OR WITHOUT PVC COATING AS SPECIFIED) FOR EMBEDDED / UNDERGROUND PVC CONDUIT RUNS.

23. SECURELY FASTEN EQUIPMENT AND MATERIALS INTO PLACE TO PROVIDE RESTRAINT AGAINST MOVEMENT AND SEPARATION DURING CONDITIONS OF REGULAR USE AND DURING SEISMIC EVENTS. PROVIDE AND SUBMIT FOR APPROVAL STRUCTURAL DESIGN AND CALCULATIONS BY A REGISTERED PROFESSIONAL ENGINEER FOR SEISMIC RESTRAINT.

24. UNDERGROUND POWER AND CONTROL CONDUIT SYSTEMS SHALL BE SEPARATED BY 12" MINIMUM AND SHALL BE RUN THROUGH SEPARATE JUNCTION BOXES AND MANHOLES.

25. ALL EXTERIOR AREAS SHALL BE CONSIDERED WET AND CORROSIVE. EXTERIOR ELECTRICAL ENCLOSURES SHALL BE NEMA 4X STAINLESS STEEL UNLESS SPECIFICALLY NOTED OTHERWISE.

26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COORDINATED ELECTRICAL POWER DISTRIBUTION SYSTEM IN ACCORDANCE WITH NEC ARTICLE 240.12 AND ARTICLE 700.27 COORDINATION STUDIES SHALL BE APPROVED PRIOR TO ORDERING ELECTRICAL DISTRIBUTION EQUIPMENT AND BREAKERS.

27. ELECTRICAL SYSTEM INSTALLED IN HAZARDOUS LOCATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 5, ARTICLE 500 OF THE NEC. EQUIPMENT SHALL BE RATED FOR THE HAZARDOUS AREA IN WHICH IT IS PLACED. CONDUITS LEAVING HAZARDOUS AREAS SHALL BE SEALED PER THE NEC. STANDARDS SUCH AS NFPA 820 AND API 500 SHALL BE USED IN ACCORDANCE WITH CHAPTER 5 OF THE NEC.

28. THE CONTRACTOR SHALL SIZE WIRING NOT EXPLICITLY SHOWN ON THE DRAWINGS ACCORDING TO THE REQUIREMENT OF THE NEC FOR THE SPECIFIC APPLICATION AND CONDITIONS. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS.

29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES AND PROTECTING SAID UTILITIES DURING THE INSTALLATION OF THE ELECTRICAL SYSTEM.

30. WHERE SELECTIVE DEMOLITION TO EXISTING PAVEMENTS AND SIDEWALKS ARE REQUIRED TO PERFORM CONSTRUCTION ACTIVITIES, NEATLY SAW-CUT SURFACES ALONG EDGES OF WORK AREA.

31. CORE-DRILLING SHALL BE UTILIZED FOR CONCRETE WALLS AND FLOORS WHERE PENETRATIONS ARE REQUIRED. LOCATE REINFORCING STEEL PRIOR TO CORE DRILLING AND AVOID CUTTING STEEL WHERE POSSIBLE. WHERE CUTTING OF REINFORCING STEEL IS UNAVOIDABLE, SUBMIT AN RFI AND OBTAIN STRUCTURAL APPROVAL FOR THE NECESSARY REPAIRS ASSOCIATED WITH CUTTING REINFORCING STEEL.

32. VERIFY VOLTAGE AND PHASE PRIOR TO ORDERING AND AGAIN PRIOR TO TERMINATION OF CONDUCTORS ON EQUIPMENT AND DEVICES. DAMAGES RESULTING FROM LACK OF VERIFICATION SHALL BE BORNE BY THE CONTRACTOR.

33. SECURE SURFACE-MOUNTED ELECTRICAL EQUIPMENT AND RACEWAYS WITH CHANNEL STRUT. MINIMUM STRUT LENGTH TO BE 12 INCHES, WHERE POSSIBLE.

34. APPLY DUCT SEAL TO CONDUITS ENTERING CONTROL PANELS AND ELECTRICAL EQUIPMENT ENCLOSURES.

35. ADJUST EQUIPMENT RATINGS AND CAPACITIES TO COMPENSATE FOR SITE-SPECIFIC AMBIENT TEMPERATURE CONDITIONS AND ELEVATIONS. SIZE EQUIPMENT AS HEAVY DUTY WHERE CONDITIONS OF USE WARRANT.

36. PERFORM FINAL POWER STUDIES AND ARC-FLASH EVALUATION AFTER EQUIPMENT HAS BEEN SELECTED, BUT PRIOR TO ORDERING, ALLOWING FOR ADJUSTMENTS TO OVERCURRENT DEVICE SELECTION AND EQUIPMENT RATINGS AS DETERMINED BY THE STUDY. UNSUITABLE EQUIPMENT ORDERED PRIOR TO PERFORMING THESE STUDIES SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

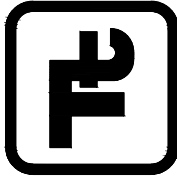
37. WIRE STARTERS IN ACCORDANCE WITH NEMA STANDARD ICS 18-2001 (CURRENT VERSION), CLASS IIB WIRING. SUBMIT ENGINEERED SHOP DRAWINGS FOR STARTERS SHOWN TO BE WIRED.

38. MAINTAIN A COMPREHENSIVE SET OF UP TO DATE AS-CONSTRUCTED RECORD DOCUMENTS, WHICH SHALL BE KEPT AND AVAILABLE FOR ON-SITE REVIEW AT ALL TIMES. USING CONFORMED DOCUMENTS AS A BASE, UTILIZE COLOR-CODED MARKUPS TO INDICATE FIELD MODIFICATIONS: RED TO INDICATE ADDED WORK OR REVISED LOCATIONS OF NEW WORK, GREEN FOR DELETED CONTENT, PURPLE FOR EXISTING CONDITIONS, AND BLUE FOR NON-TECHNICAL EXPLANATORY NOTES. YELLOW HIGHLIGHTING MAY BE USED TO INDICATE WORK COMPLETED AND IN FULL COMPLIANCE WITH THE CONFORMED SET.

ABBREVIATIONS

%	PERCENTAGE	FACP	FIRE ALARM CONTROL PANEL	LSIG	LONG, SHORT, INSTANTANEOUS, GROUND	PVC	POLYVINYL CHLORIDE CONDUIT
2P	TWO POLE	FAH	FLOW ALARM HIGH	LSL	LEVEL SWITCH LOW	R	RED, RELAY, OR RUN
A	AMPERES OR AMBER, OR AERATOR	FBC	FLORIDA BUILDING CODE	LT	LEVEL TRANSMITTER	RCP	REFLECTED CEILING PLAN
AC	ABOVE COUNTER	FCV	FLOW CONTROL VALVE	LT	LEVEL TRANSMITTER OR LIGHT	RE	RELOCATE
ACS	ACCESS CONTROL STATION	FDR	FEEDER	LTFCMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT	RECEPT	RECEPTACLE
AF	AMPERE FUSE	FE	FLOW ELEMENT	LTG	LIGHTING	REF	REFERENCE
AFF	ABOVE FINISHED FLOOR	FI	FLOW INDICATOR	LTS	LIGHTING AND LIGHTS	RGA	RIGID GALVANIZED ALUMINUM
AFG	ABOVE FINISHED GRADE	FIT	FLOW INDICATING TRANSMITTER	LV	LOW VOLTAGE	RGS	RIGID GALVANIZED STEEL
AHJ	AUTHORITY HAVING JURISDICTION	FMCP	FIRE ALARM & MASS NOTIFICATION CONTROL PANEL	LYR	LEVEL RELAY	RIL	RED INDICATING LIGHT
AHU	AIR HANDLING UNIT	FO	FIBER OPTIC	M	MOTOR STARTER COIL OR CYCLE TIMER	RIO	REMOTE I/O PANEL
AI	ANALOG INPUT	FQI	FLOW TOTALIZER	mA	MILLIAMPERES	RM	ROOM
AIC	AMPERES INTERRUPTING CURRENT	FT	FLOW TRANSMITTER	MAN	MANUAL	RP	REPLACE
AIL	AMBER INDICATING LIGHT	FV	FLOW VALVE	MAX	MAXIMUM	RTD	RESISTANCE TEMPERATURE DETECTOR
AIR	ANALYSIS INDICATING RECORDER	FVR	FULL VOLTAGE REVERSING	MCB	MAIN CIRCUIT BREAKER	RTM	RUNNING TIME METER
AIT	ANALYSIS INDICATING TRANSMITTER	GB	GROUND BUS	MCC	MOTOR CONTROL CENTER	RTU	REMOTE TELEMETRY UNIT
AL	ALUMINUM	GC	GENERAL CONTRACTOR	MCM	THOUSAND CIRCULAR MILS	RVNR	REDUCED VOLTAGE, NON REVERSING
ALT	ALTERNATE OR ALTERNATOR	GEN	GENERATOR	MCP	MAIN CONTROL PANEL	RVS	REDUCED VOLTAGE STARTER
AM	AMMETER	GFCI	GROUND-FAULT CIRCUIT INTERRUPTER	MCP	MOTOR CIRCUIT PROTECTOR	RVSS	REDUCED VOLTAGE SOFT STARTER
AMP	AMPERE	GFI	GROUND-FAULT INTERRUPTING	MDP	MAIN DISTRIBUTION PANEL	S	START CONTACTOR
ANN	ANNUNCIATOR	GFP	GROUND-FAULT PROTECTION OF EQUIPMENT	MH	MANHOLE	S, SEC	SECOND
AO	ANALOG OUTPUT	GIL	GREEN INDICATING LIGHT	MIN	MINUTE, MINIMUM	S2	NEMA SIZE 2 STARTER
AS	AMPERE SWITCH	GND	GROUND	MIN	MINUTES OR MINIMUM	SC	SPEED CONTROL;
ATS	AUTOMATIC TRANSFER SWITCH	GRP	GROUP	MLO	MAIN LUGS ONLY	SEC	SECONDARY OR SECONDS
AUTO	AUTOMATIC	GRS	GALVANIZED RIGID STEEL	MM	MULTIMODE	SEL	SELECTOR
AUX	AUXILIARY	H	HORN OR HIGH	MPC	MINI POWER CENTER	SER	SERVICE ENTRANCE RATED
AWG	AMERICAN WIRE GAUGE	HC	HAND CONTROL	MS	MAGNETIC STARTER	SH	SHEET OR SHIELDED
BAS	BUILDING AUTOMATION SYSTEM	HH	HANDHOLE	MS	MANUAL MOTOR STARTER	SM	SINGLE MODE
BC	BARE COPPER	HOA	HAND-OFF-AUTO	MTR	MOTOR	SPD	SURGE PROTECTION DEVICE
BKR	CIRCUIT BREAKER	HP	HORSEPOWER	MTS	MANUAL TRANSFER SWITCH	SPEC	SPECIFICATION
BLDG	BUILDING	HPS	HIGH PRESSURE SWITCH	mV	MILLIVOLTS	SS	SELECTOR SWITCH OR STAINLESS STEEL
C	CONDUIT	HR	HAND RESET OR HOUR	N	NEUTRAL	SSSS	SOLID STATE SOFT START
CAT	CATEGORY	HS	HAND SWITCH	N/A	NOT APPLICABLE	STP	SHIELDED TWISTED PAIR
CB	CIRCUIT BREAKER	HTR	HEATER	N1	NEMA 1 ENCLOSURE	SV	SOLENOID VALVE
CH	COUNTER HEIGHT	HZ	HERTZ	N12	NEMA 12 ENCLOSURE	SWBD	SWITCHBOARD
CHG	CHARGER-BATTERY	I	INTERLOCK	N3R	NEMA 3R ENCLOSURE	T	THERMOSTAT
CKT	CIRCUIT OR CIRCUIT BREAKER	I/O	INPUT/OUTPUT	NA	NON-AUTO	TB	TERMINAL BOX, TERMINAL BLOCK
CNTL	CONTROL	IC	ISOLATION CONTACTOR	NC	NORMALLY CLOSED	TDR	TIME DELAY RELAY
CP	CONTROL PANEL	IDS	INTRUSION DETECTION SYSTEM	NEC	NATIONAL ELECTRICAL CODE	TEL	TELEPHONE
CR	CONTROL RELAY OR CORROSION RESISTANT	IG	ISOLATED GROUND	NEMA ASSOCIATION	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	TI	TEMPERATURE INDICATOR
CSI	CONTROL SYSTEM INTEGRATOR	INST	INSTANTANEOUS	NEUT	NEUTRAL	TO	TIME DELAY OPENING CONTACT OR THERMAL OVERLOAD
CT	CURRENT TRANSFORMER	INT	INTERVAL TIMER	NF	NON-FUSED	THERMAL	OVERLOAD
CU	COPPER OR CONDENSING UNIT	INTLK	INTERLOCK	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	TOA	TEST-OFF-AUTO
DB	DUCT BANK	ISP	INSTRUMENT AND SAMPLE PANEL	NO	NORMALLY OPEN	TSP	TWISTED SHIELDED PAIR
DCMA	DIRECT CURRENT MILLIAMPERES	JB	JUNCTION BOX	NP	NAMEPLATE	TYP	TYPICAL
DI	DISCRETE INPUT	K	KEY	NTS	NOT TO SCALE	UA	COMMON ALARM
DIAG	DIAGRAM	KCMIL	THOUSAND CIRCULAR MILS	OC	OPEN/CLOSE	UE	UNDERGROUND ELECTRIC
DISC	DISCONNECT	KV	KILOVOLTS	OL	OVERLOAD	UG	UNDERGROUND
DN	DOWN	KVA	KILOVOLT-AMPERES	OLR	OVERLOAD RELAY	UL	UNDERWRITERS LABORATORIES
DO	DISCRETE OUTPUT	KVAR	KILOVAR (REACTIVE KILOVOLT-AMPERES)	OO	ON-OFF	UNO	UNLESS NOTED OTHERWISE
DP	DISTRIBUTION PANEL	KW	KILOWATTS	OOR	ON-OFF RESET	UP	UTILITY POWER
DS	DISCONNECT SWITCH	KWH	KILOWATT HOUR	OUT	OUTPUT	UPS	UNINTERRUPTIBLE POWER SUPPLY
DWG(S)	DRAWING(S)	KY	TIME RELAY	P&ID	PROCESS & INSTRUMENTATION DIAGRAM	UT	UNDERGROUND TELECOMMUNICATIONS
EC	ELECTRICAL CONTRACTOR	LAH	HIGH LEVEL ALARM	PC	PHOTOELECTRIC CELL	V	VOLTS
ECU	ENERGY CONTROL UNIT	LAL	LOW LEVEL ALARM	PCV	PRESSURE CONTROL VALVE	VA	VOLT AMPS
EF	EXHAUST FAN	LC/C	LIGHTING CONTROL / CONTACTOR	PDT	PRESSURE DIFFERENTIAL TRANSMITTER	VAC	VOLTS ALTERNATING CURRENT
EH	ELECTRIC HEATER	LCP	LOCAL CONTROL PANEL	PCV	PRESSURE DIFFERENTIAL TRANSMITTER	VDC	VOLTS DIRECT CURRENT
EL	ELEVATION	LCV	LEVEL CONTROL VALVE	PE	PRESSURE ELEMENT	VFD	VARIABLE FREQUENCY DRIVE
EMER	EMERGENCY	LET	LEVEL ELEMENT TRANSMITTER	PH	PHASE	VM	VOLTMETER
EMT	ELECTRICAL METALLIC TUBING	LF	LINEAR FEET	PI	PRESSURE INDICATOR	W	WIRE, WATTS
ENCL	ENCLOSURE	LI	LEVEL INDICATOR	PIT	PRESSURE INDICATING TRANSMITTER	W/	WITH
ENET	ETHERNET	LIC	LEVEL INDICATING CONTROLLER	PLC	PROGRAMMABLE LOGIC CONTROLLER	W/O	WITHOUT
EP OR E	EXPLOSION PROOF	LIR	LEVEL INDICATING RECORDER	PM	PHASE MONITOR	WAP	WIRELESS ACCESS PORT
EQU	EQUIPMENT	LLH	LEVEL LAMP HIGH	PMP	PUMP	WI	WEIGHT INDICATOR
ETM	ELAPSED TIME METER	LM	LUMEN	PNL	PANEL	WP	WEATHERPROOF
ETR	EXISTING TO REMAIN	LOR	LOCAL-OFF-REMOTE	PP	POWER OVER ETHERNET	XFMR	TRANSFORMER
EUH	ELECTRIC UNIT HEATER	LOS	LOCK-OUT STOP	PR	SHIELDED PAIR	XLP	CROSS-LINKED POLYETHYLENE
EW	ELECTRIC WATER HEATER	LP	LIGHTING PANEL	POE	POWER OVER ETHERNET	XP	EXPLOSION-PROOF
EXDR	EXISTING DEVICE TO REMAIN	LR & L	LATCHING RELAY	PP	POWER PANEL	YC	STATUS CONTROL
EXST	EXISTING	LS	LEVEL SWITCH	PR	SHIELDED PAIR	YL	STATUS INDICATION
EXT	EXTERIOR	LSH	LEVEL SWITCH HIGH	PRI	PRIMARY	ZS	POSITION SWITCH
EXTN	EXTENSION	LSHL	LEVEL SWITCH HIGH/LOW	PSH	PRESSURE SWITCH HIGH	ZSC	POSITION SWITCH CLOSED
FA	FIRE ALARM			PSI	POUNDS PER SQUARE INCH	ZSO	POSITION SWITCH OPEN
				PSL	PRESSURE SWITCH LOW		

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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS

ELECTRICAL LEGEND

Project No.: 200-08498-24002
Designed By: JAS
Drawn By: JAS
Checked By: JDM

E-003

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Bar Measures 1 inch



BACK PANEL:
45"H x 33"W FABRICATED FROM 12ga. CARBON STEEL WITH WHITE
POLYESTER POWDER COAT FINISH.

SCALE: NTS

THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
PUMP CONTROL PANEL (POWER PANEL) LAYOUT

E-301

Sheet

4/3/2025 3:37:24 PM - C:\PROJECTS\ORLANDO\IER\08498\200-08498-24002\CAD\SHEETFILES\E-302 RTU PANEL LAYOUT.DWG - SEIGNORET, JASON

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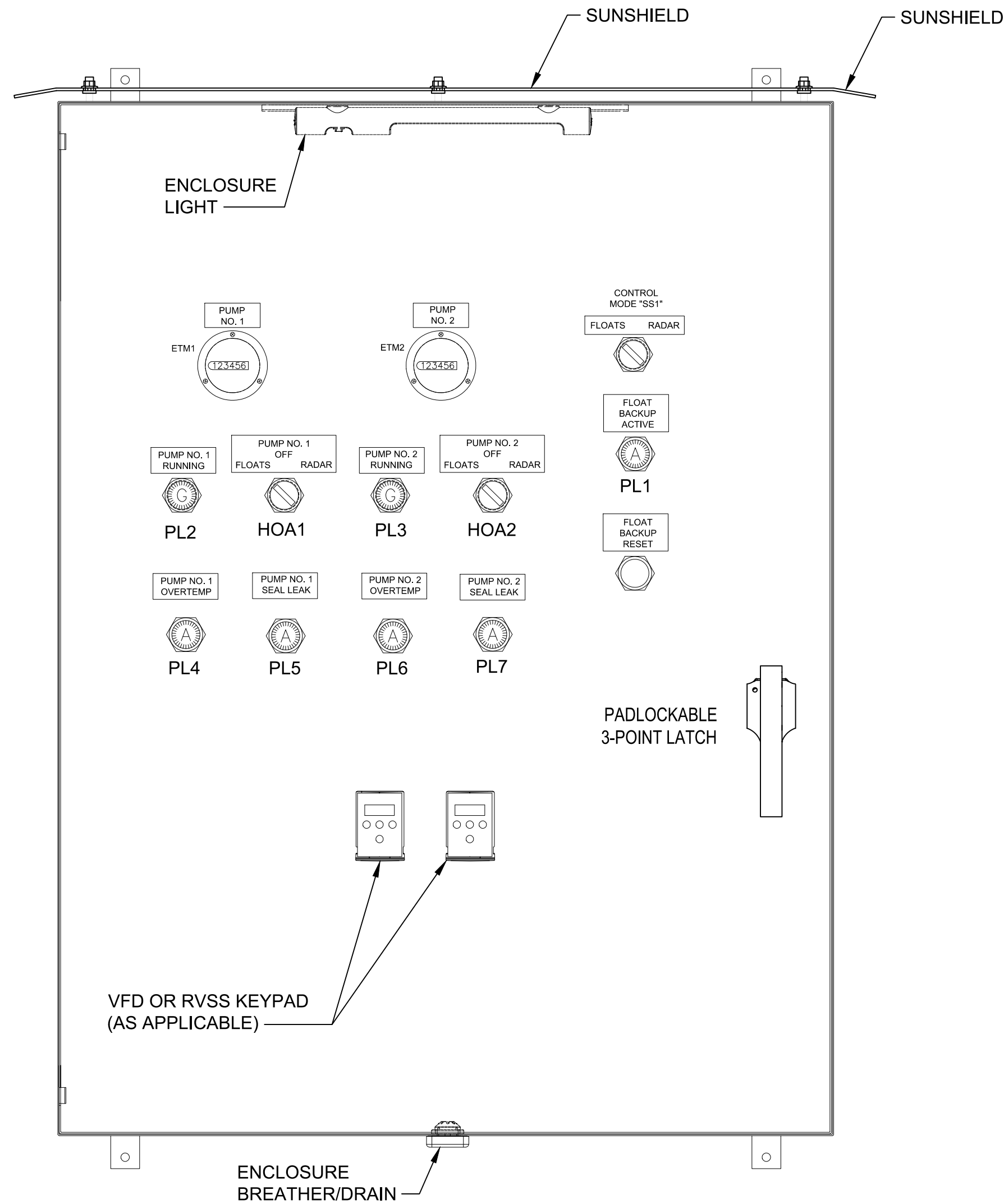
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RTU PANEL ENCLOSURE:
48"H x 36"W x 12"D NEMA 4X RATED, FABRICATED
FROM 14 GAUGE TYPE 316 STAINLESS STEEL WITH WHITE POWDER COAT FINISH.
OUTER DOOR IS FITTED WITH A PADLOCKABLE 3-POINT LATCH.

BACK PANEL:
45"H x 33"W FABRICATED FROM 12ga. CARBON STEEL WITH WHITE
POLYESTER POWDER COAT FINISH.

DUPLEX LIFT STATION PUMP CONTROL PANEL (CONTROLS PANEL) LAYOUT

SCALE: NTS

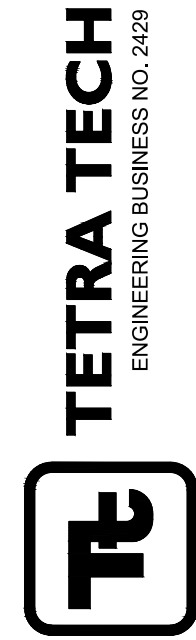
MARK	DATE	DESCRIPTION	BY

THE CITY OF SANIBEL	LIFT STATION CONTROL PANELS
PUMP CONTROL PANEL (CONTROLS PANEL) LAYOUT	

Project No.:	200-08498-24002
Designed By:	JAS
Drawn By:	JAS
Checked By:	JDM

E-302
Sheet

Bar Measures 1 inch



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BID SET

PADLOCKABLE
3-POINT LATCH

The drawing shows the interior of a safe. At the top, there is a horizontal bar with a handle and a label 'PADLOCKABLE 3-POINT LATCH'. Below this, there is a large rectangular area with a grid of horizontal bars. A line points from the bottom left corner of the safe to the bottom left corner of the grid area.

Technical drawing of the rear panel of the device. The top part shows the internal layout with two pump units labeled "PUMP 1" and "PUMP 2". Each pump unit has a series of circular ports. A legend indicates that a square symbol represents a "PUMP 1" and a circle symbol represents a "PUMP 2". The bottom part shows the rear panel with a large rectangular area containing ten horizontal ventilation slots. The panel is secured with screws around the perimeter.

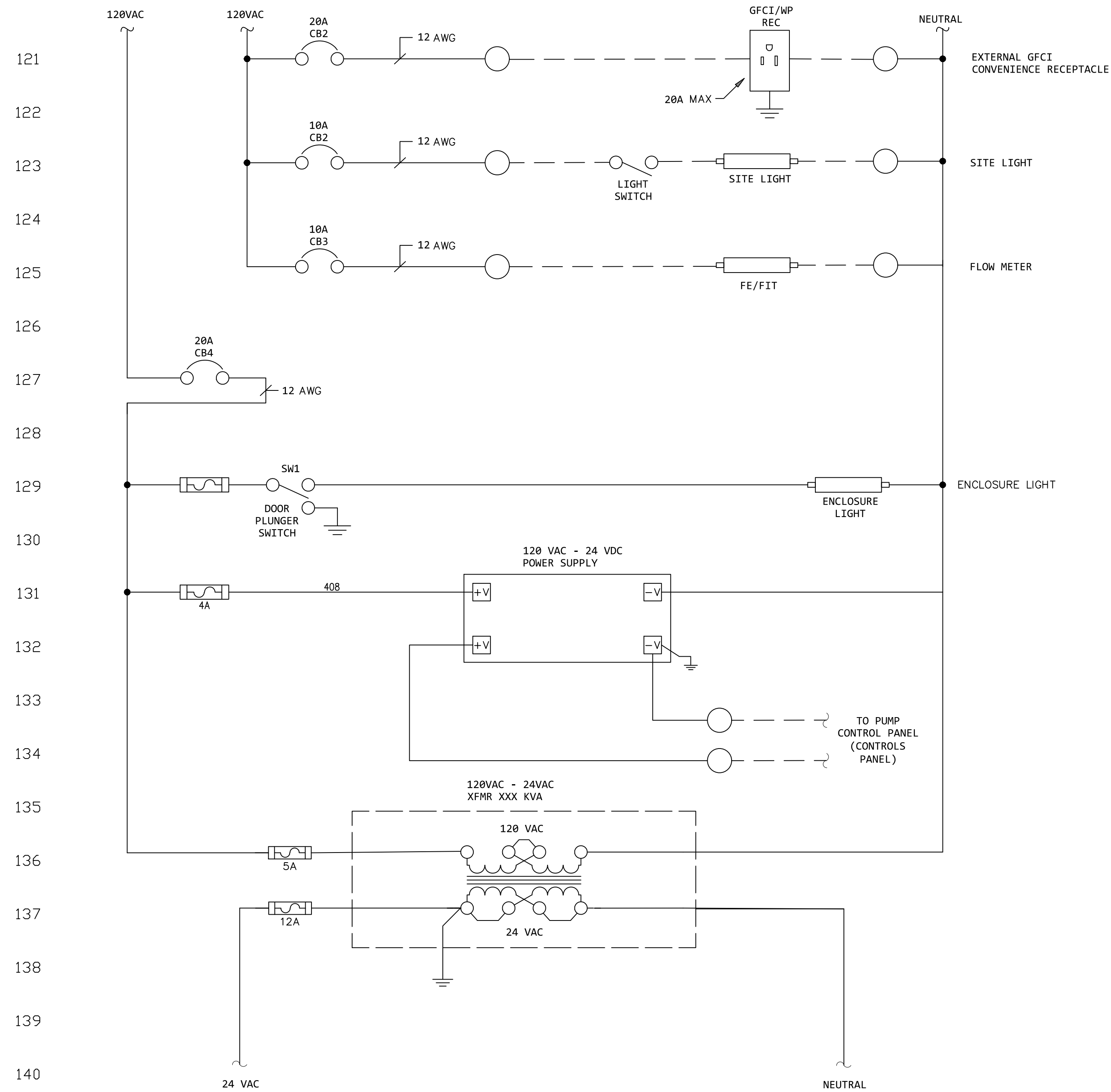
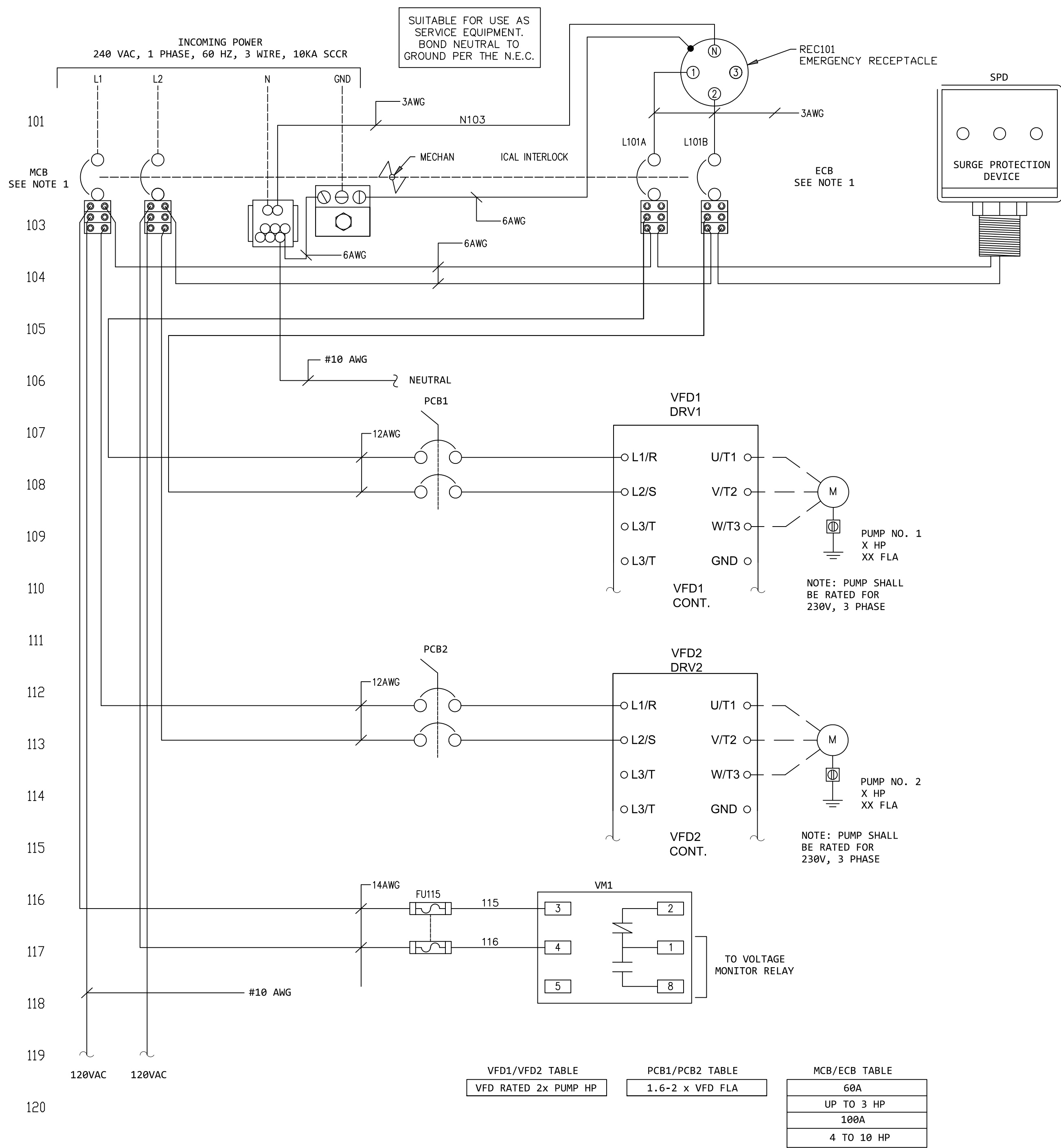
— GROUND LUG

SCALE: NTS

Bar Measures 1 inch

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**240V, 1 PHASE, VFD
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM**
SCALE: NTS

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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS

**240V, 1 PHASE, VFD
CONTROL PANEL (POWER)
WIRING DIAGRAM**

Project No.: 200-08498-24002

Designed By: JAS

Drawn By: JAS

Checked By: JDM

E-311

Sheet

Bar Measures 1 inch

Copyright: Tetra Tech





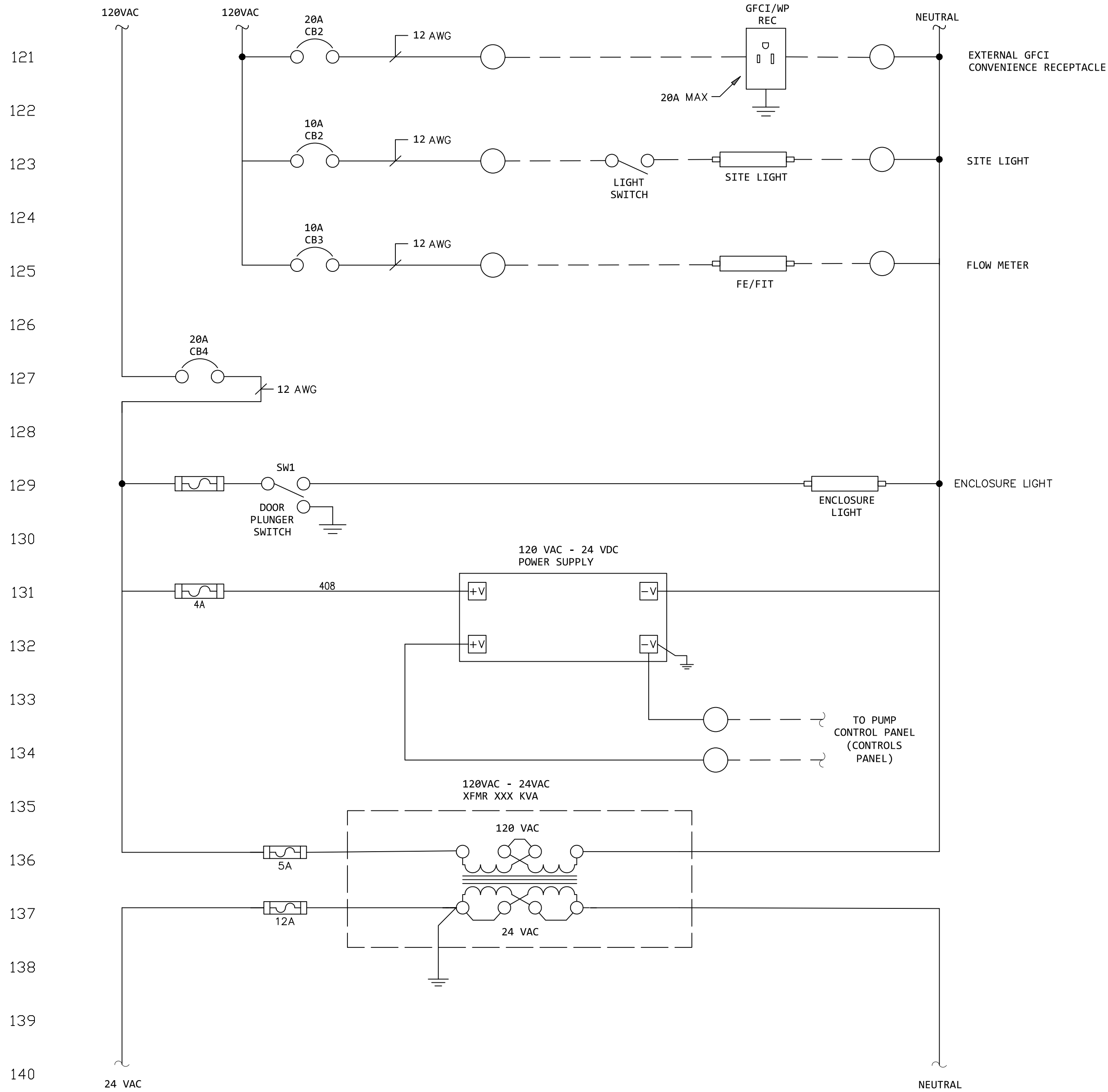
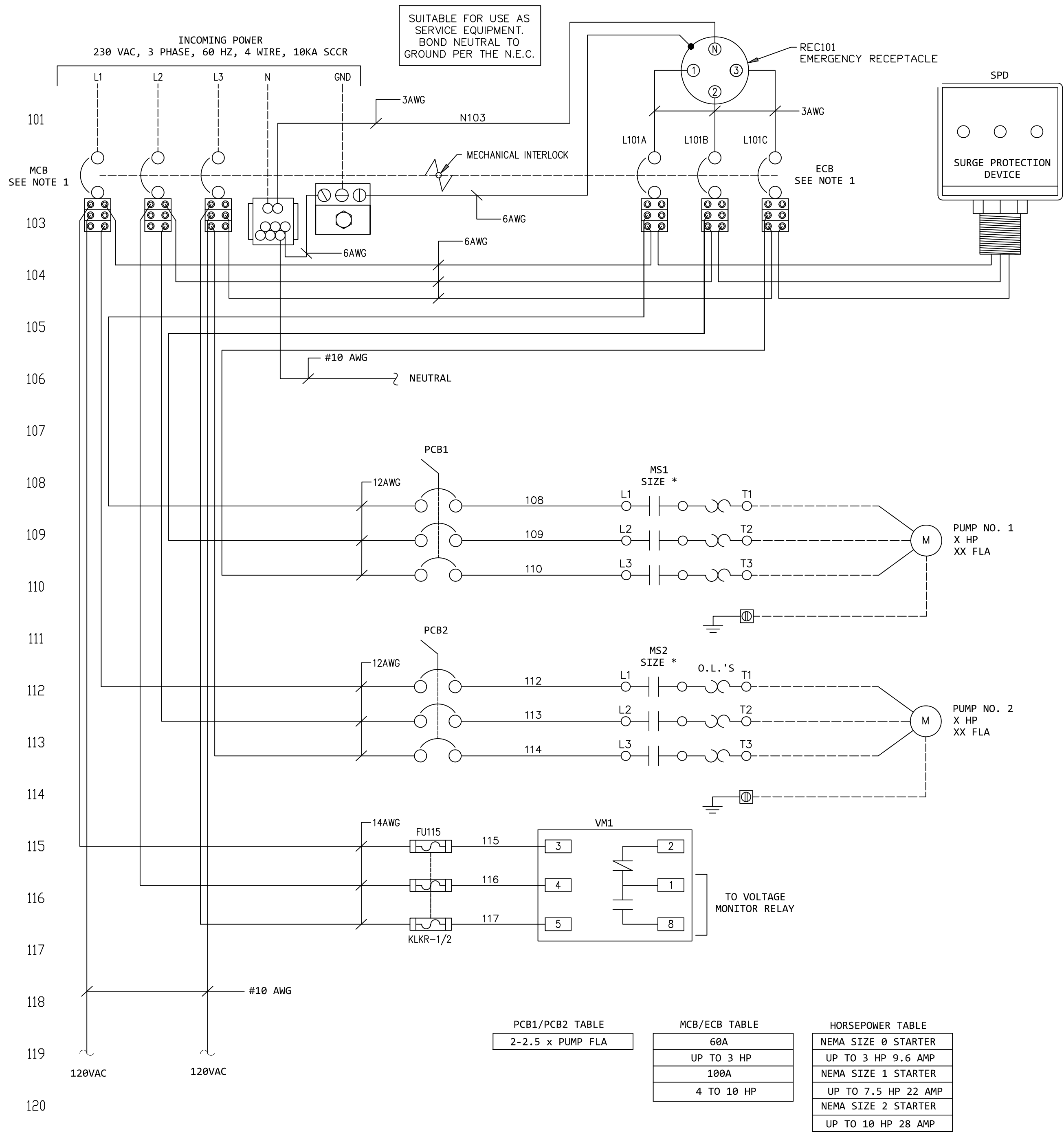


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THE CITY OF SANIBEL LIFT STATION CONTROL PANELS 240V, 1 PHASE, VFD CONTROL PANEL (POWER) WIRING DIAGRAM

Project No.:	200-08498-24002
Designed By:	JAS
Drawn By:	JAS
Checked By:	JDM

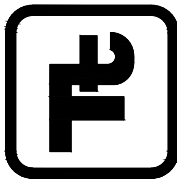
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**230V, 3 PHASE, STARTER
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM**

SCALE: NTS

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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS

**230V, THREE PH, STARTER
CONTROL PANEL (POWER)
WIRING DIAGRAM**

Project No.: 200-08498-24002

Designed By: JAS

Drawn By: JAS

Checked By: JDM

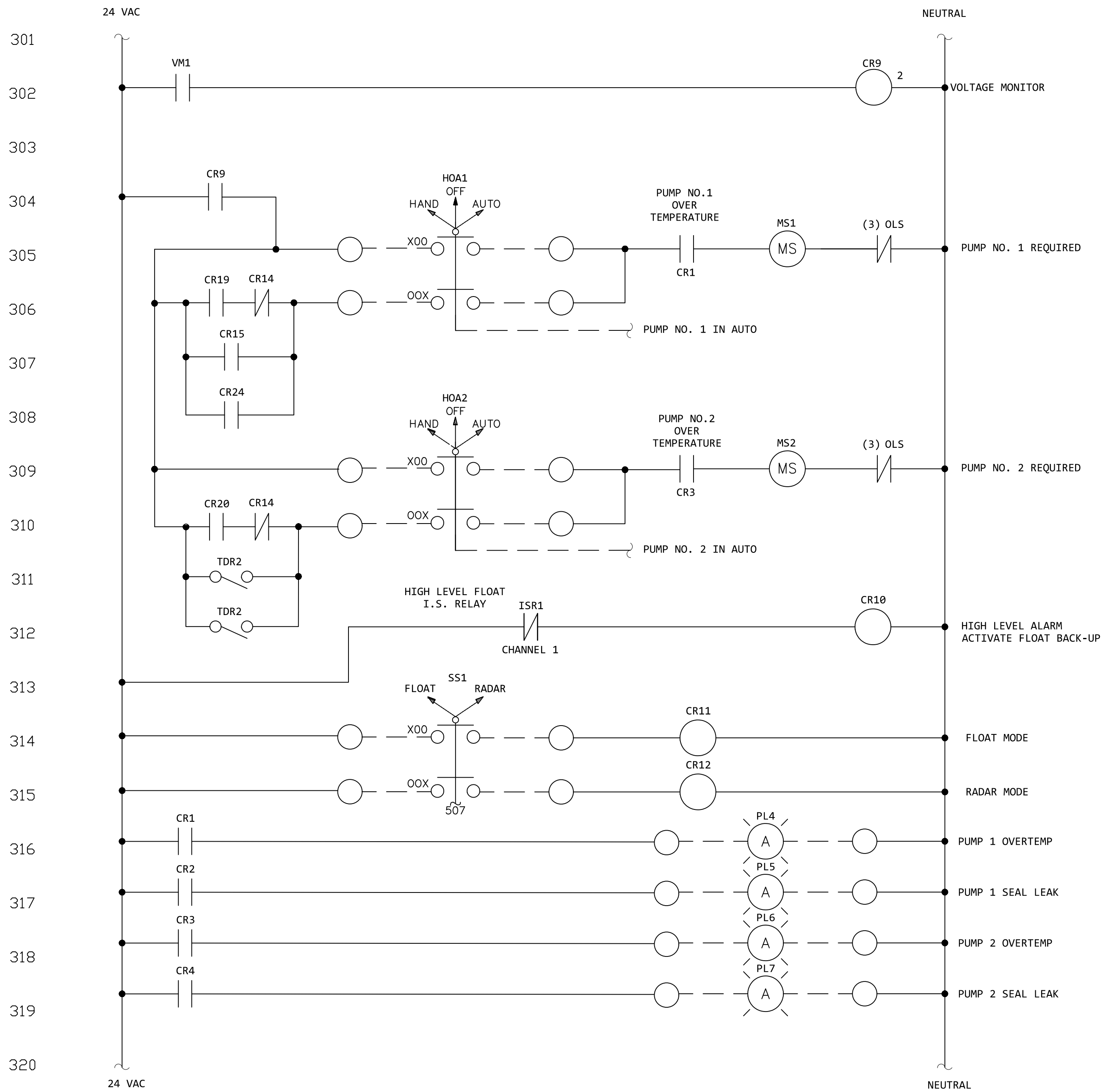
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Bar Measures 1 inch

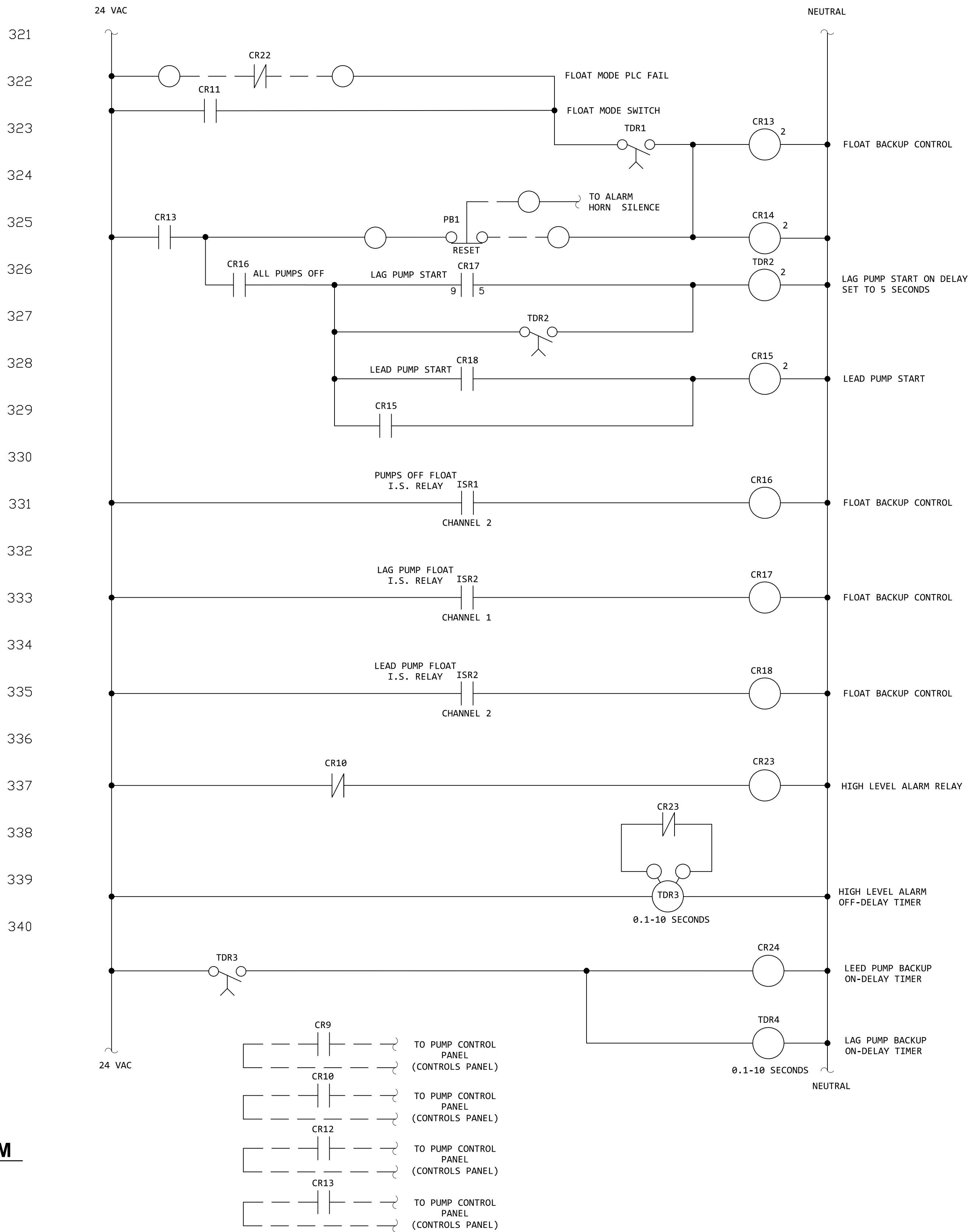


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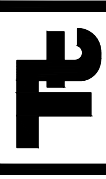


**230V, 3 PHASE, STARTER
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM**

SCALE: NTS



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THE CITY OF SANIBEL

LIFT STATION CONTROL PANELS

**230V, THREE PH, STARTER
CONTROL PANEL (POWER)
WIRING DIAGRAM**

Project No.: 200-08498-24002
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Checked By: JDM

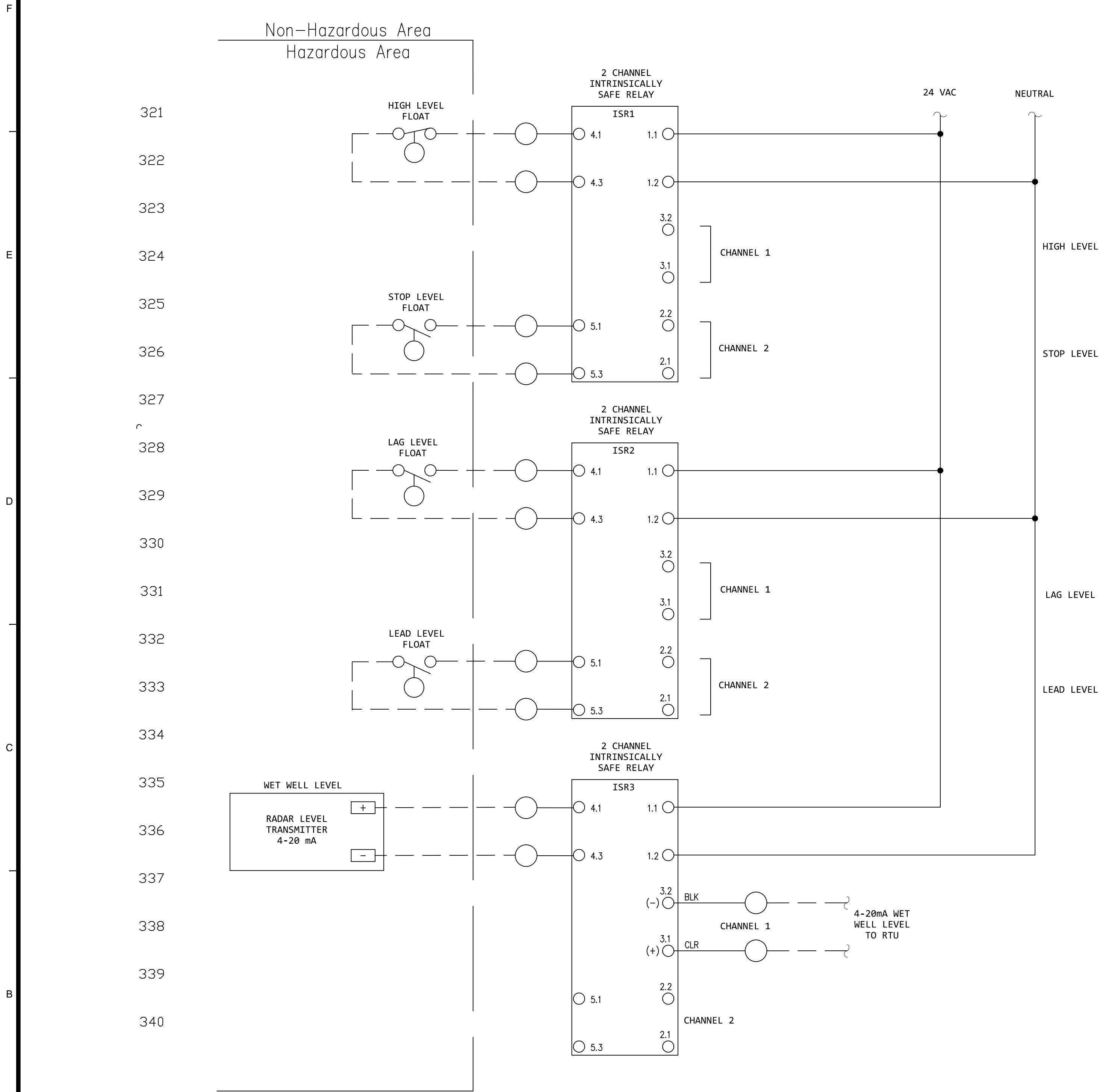
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Bar Measures 1 inch

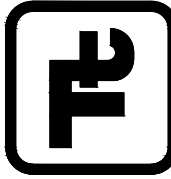
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230V, 3 PHASE, STARTER
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM
SCALE: NTS

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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS

230V, THREE PH, STARTER
CONTROL PANEL (POWER)
WIRING DIAGRAM

Project No.: 200-08498-24002

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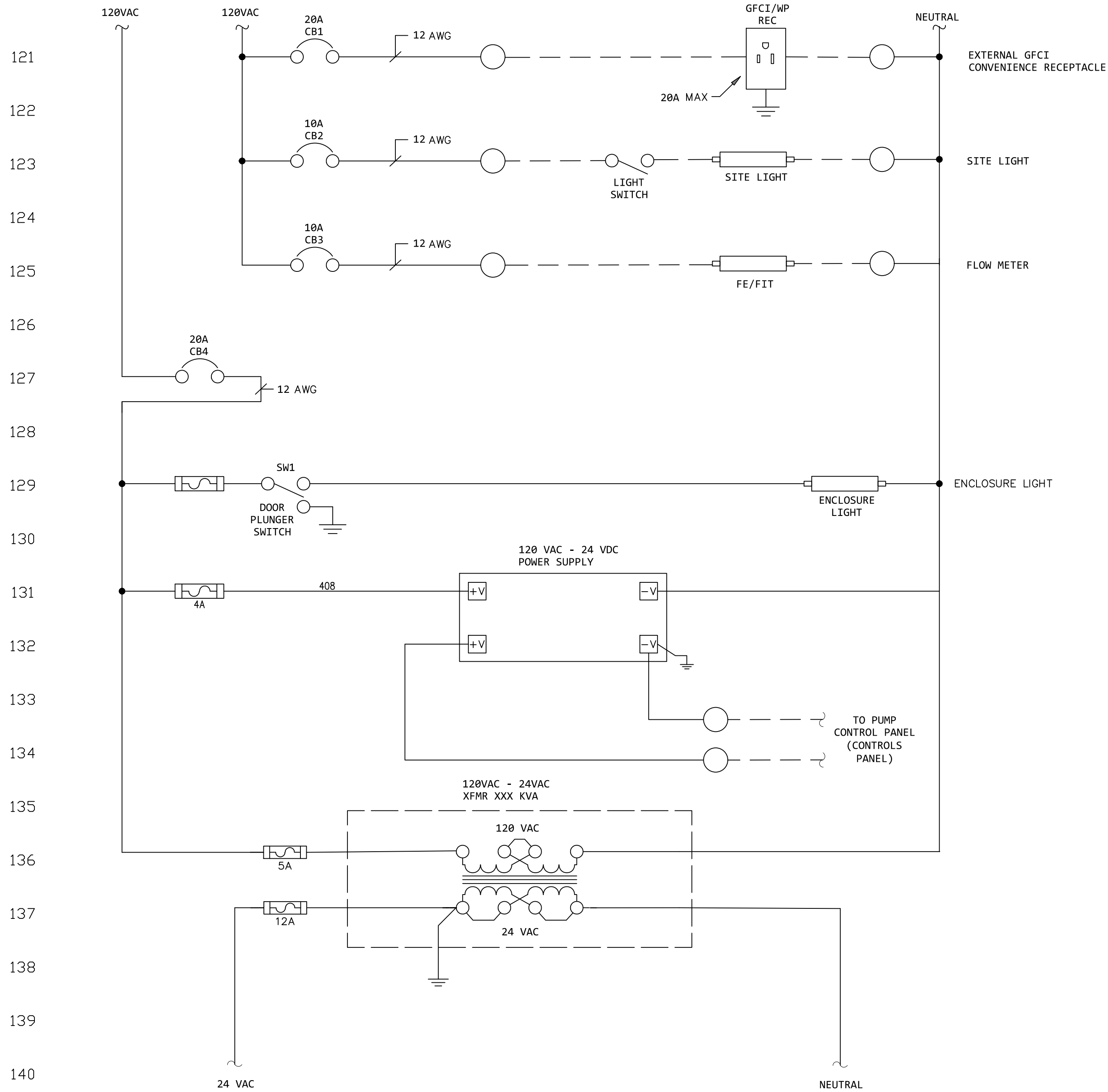
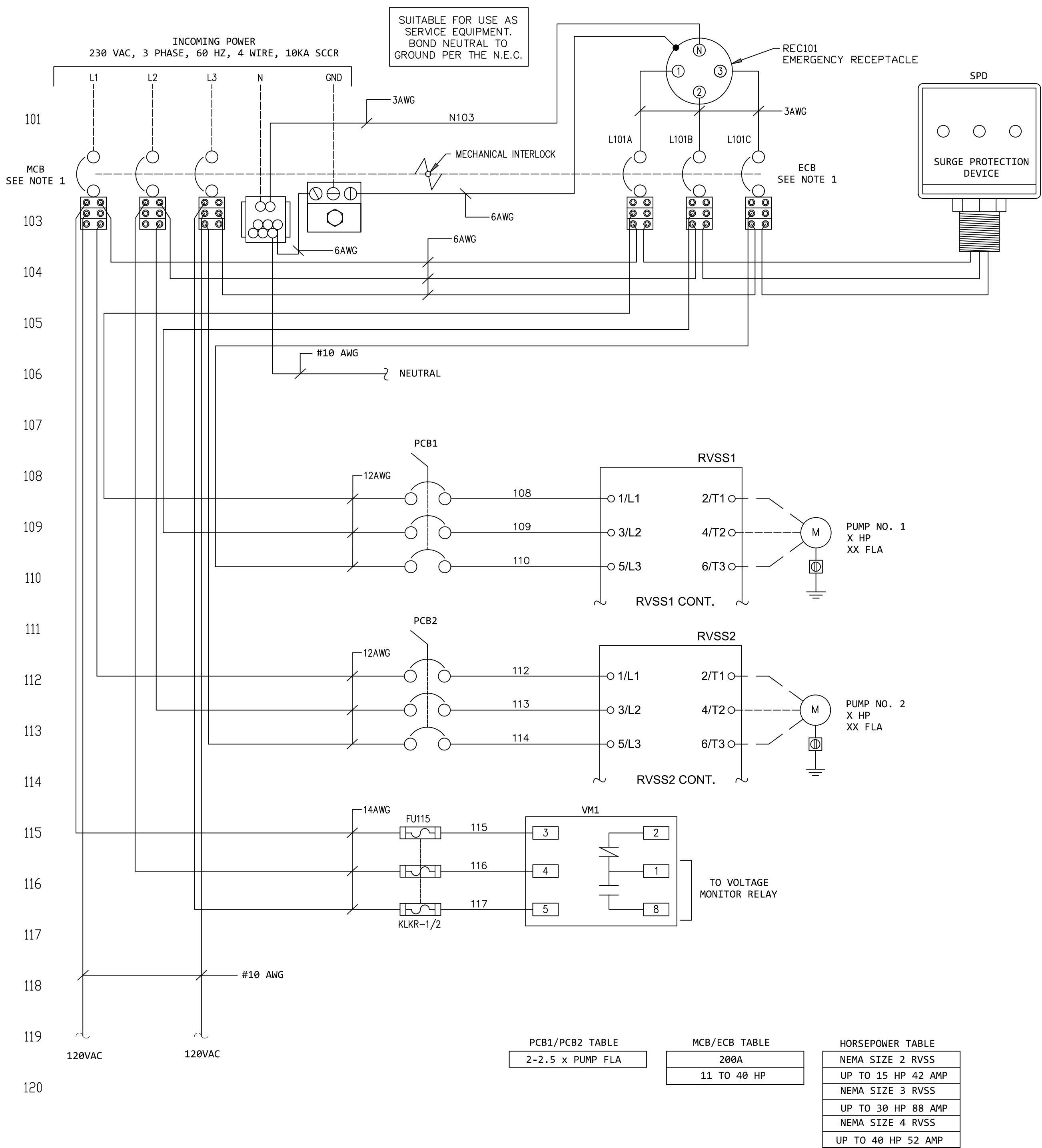
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Bar Measures 1 inch

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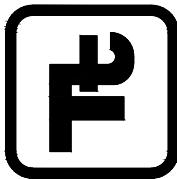
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230V, 3 PHASE, RVSS
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM

SCALE: NTS

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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS

230V, THREE PH, RVSS
CONTROL PANEL (POWER)
WIRING DIAGRAM

Project No.: 200-08498-24002

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E-331

Sheet

Bar Measures 1 inch



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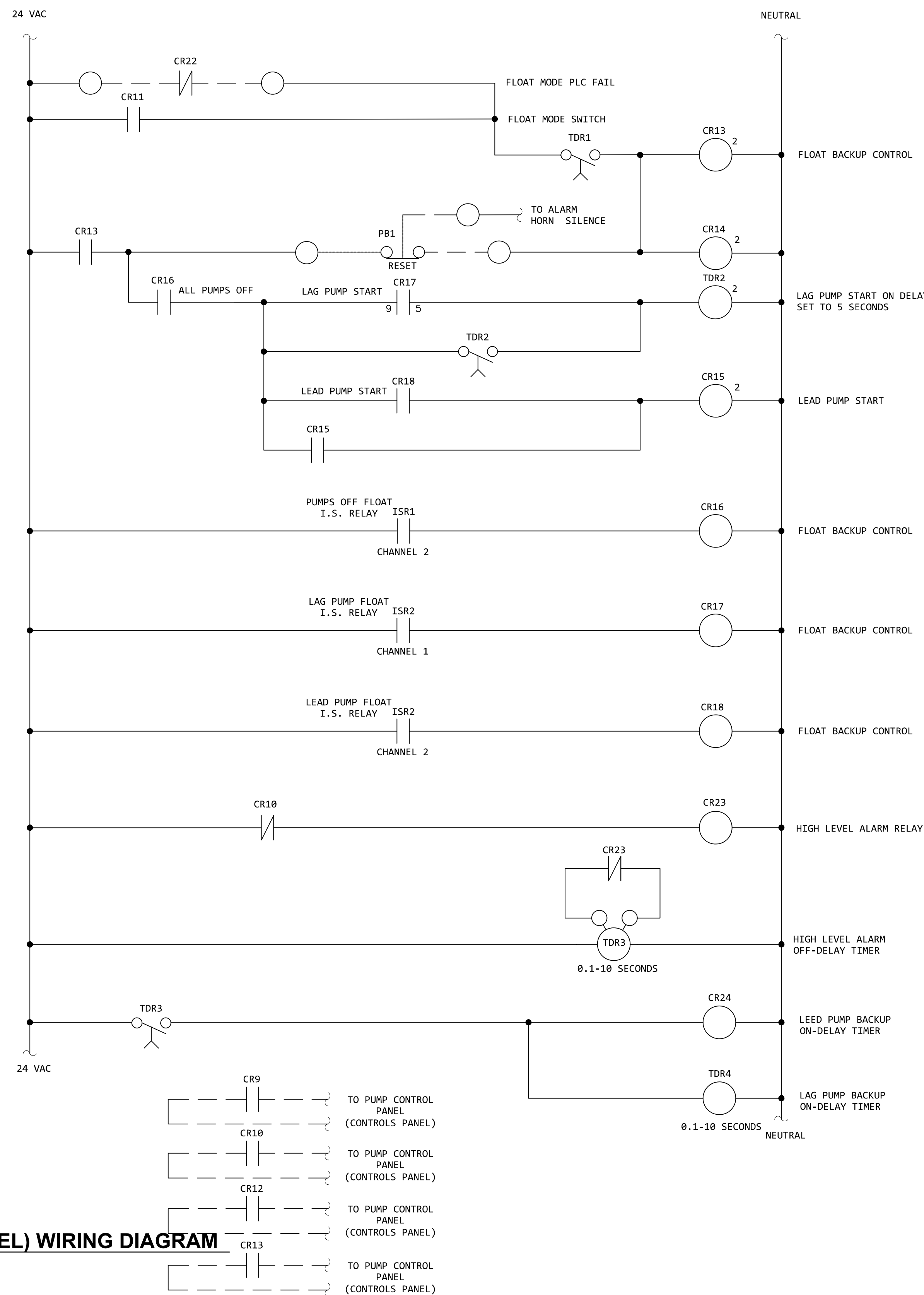
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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
230V, THREE PH, RVSS
CONTROL PANEL (POWER)
WIRING DIAGRAM

Project No.:	200-08498-24002
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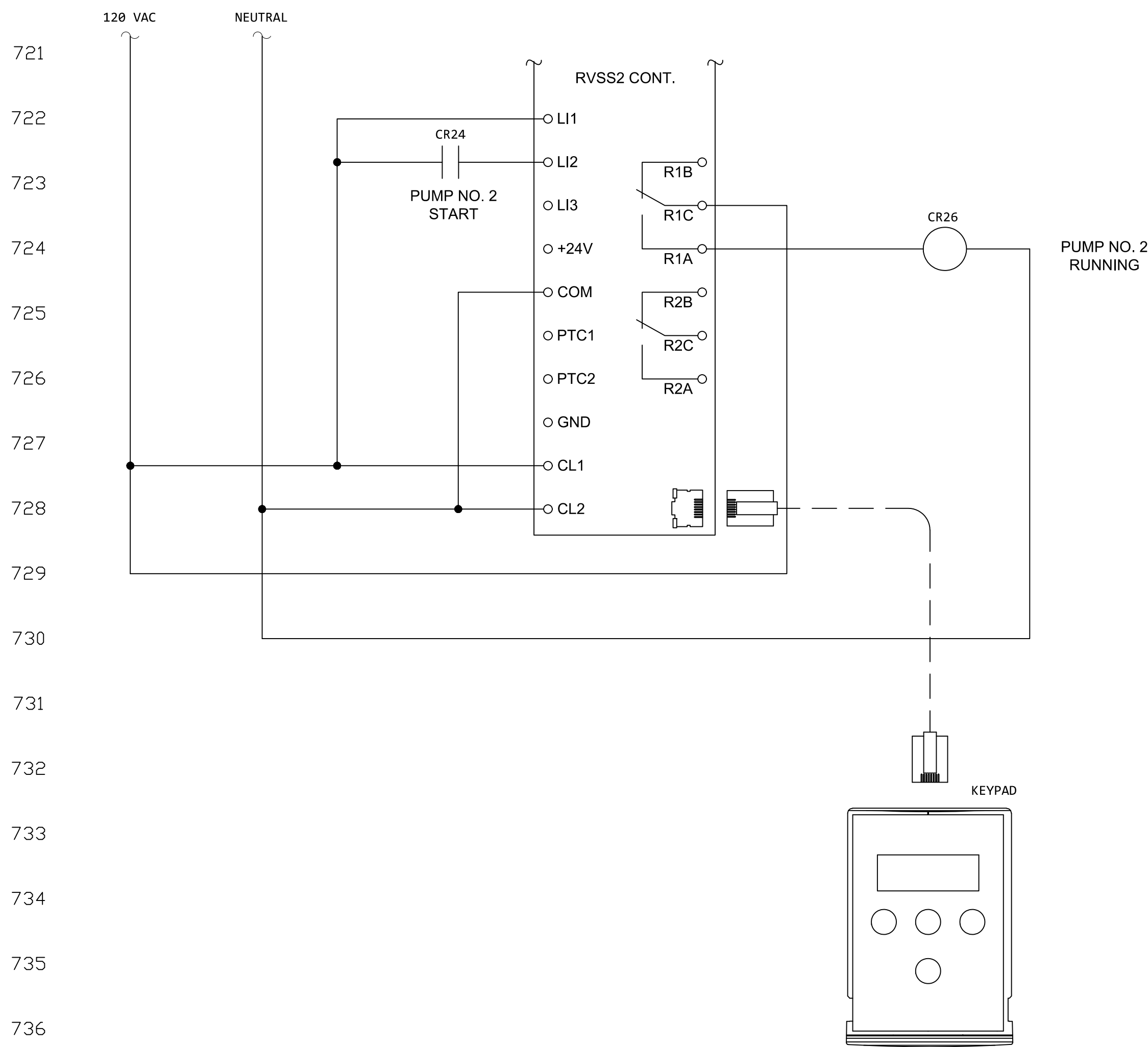
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Bar Measures 1 inch



SCALE: NTS

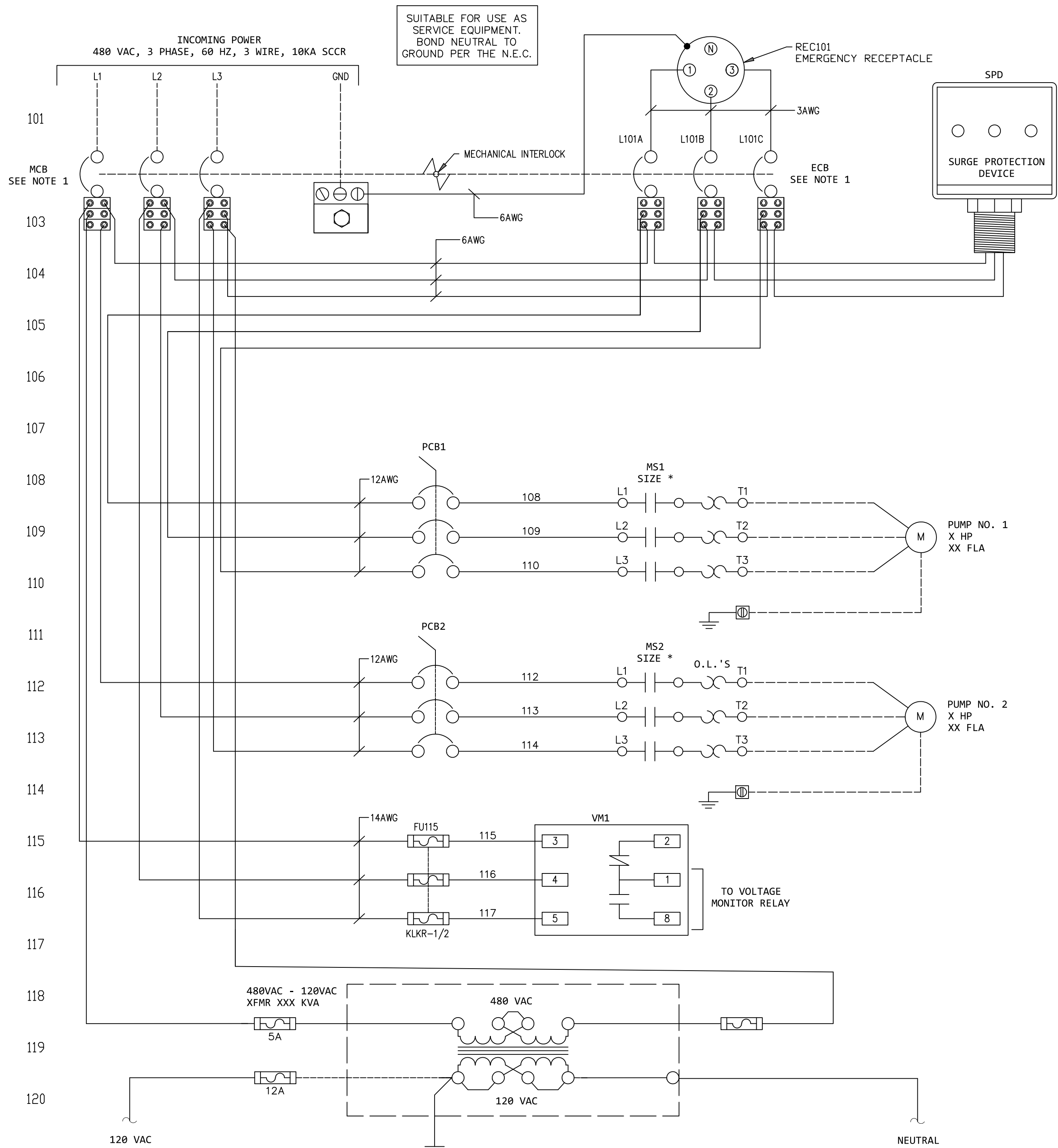


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THE CITY OF SANIBEL LIFT STATION CONTROL PANELS 230V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM	
Project No.:	200-08498-24002
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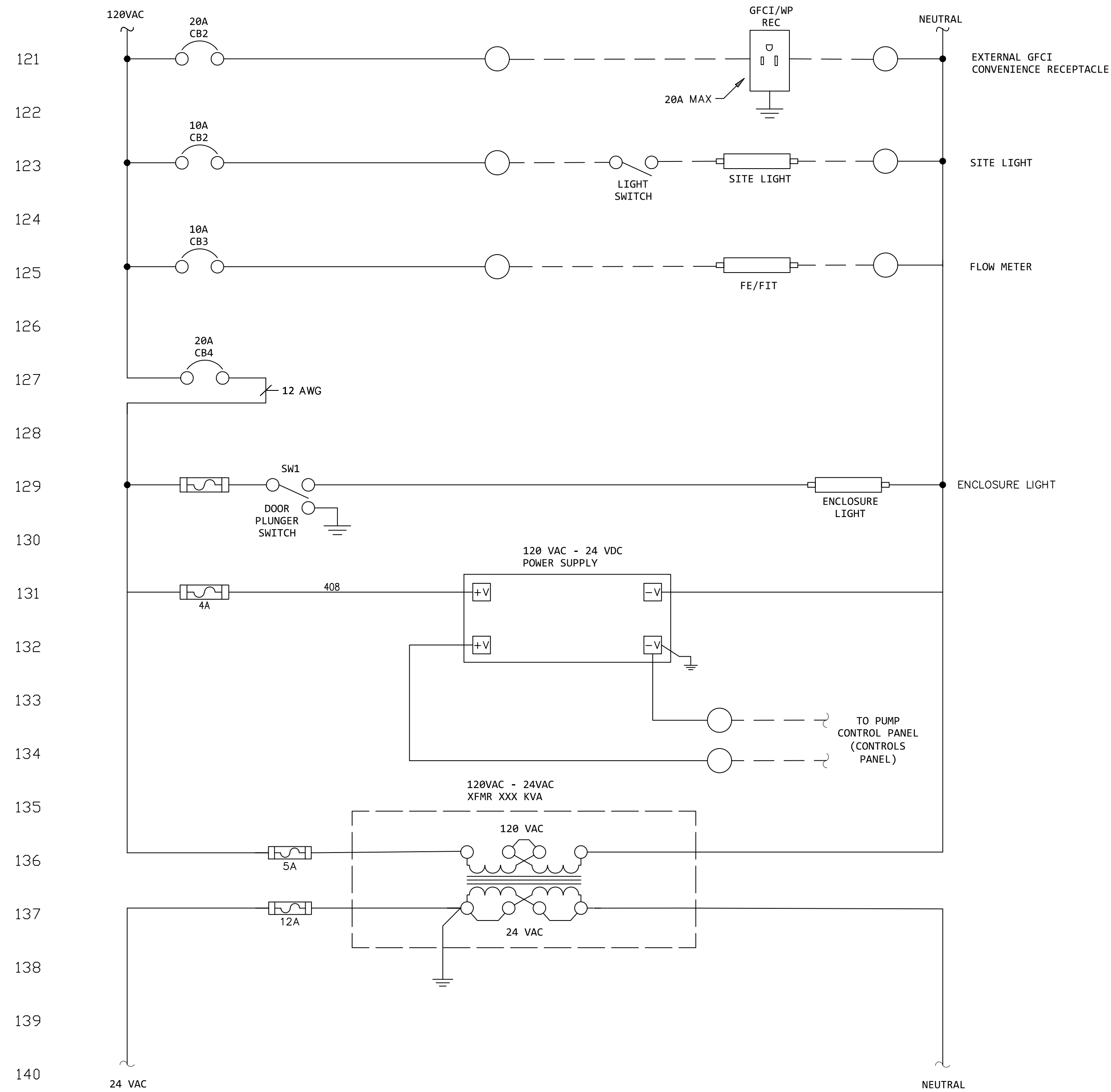
PCB1/PCB2 TABLE	
2-2.5	x PUMP FLA

MCB/ECB TABLE	
60A	
0 TO 10 HP	
100A	
11 TO 25 HP	
200A	
26 TO 40 HP	

HORSEPOWER TABLE	
NEMA SIZE 0 STARTER	
UP TO 5 HP 7.6 AMP	
NEMA SIZE 1 STARTER	
UP TO 10 HP 14 AMP	

480V, 3 PHASE, STARTER PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM

SCALE: NTS



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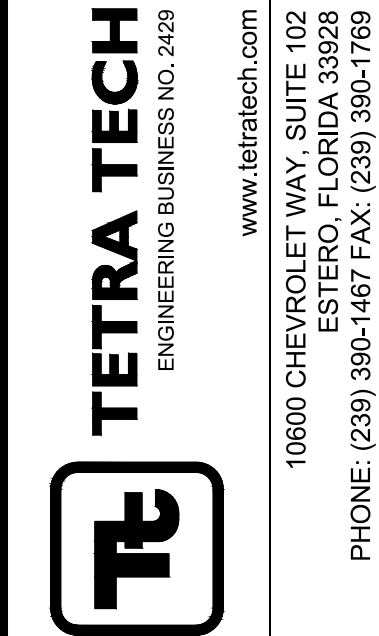
THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
**480V, THREE PH, STARTER
CONTROL PANEL (POWER)
WIRING DIAGRAM**

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Bar Measures 1 inch



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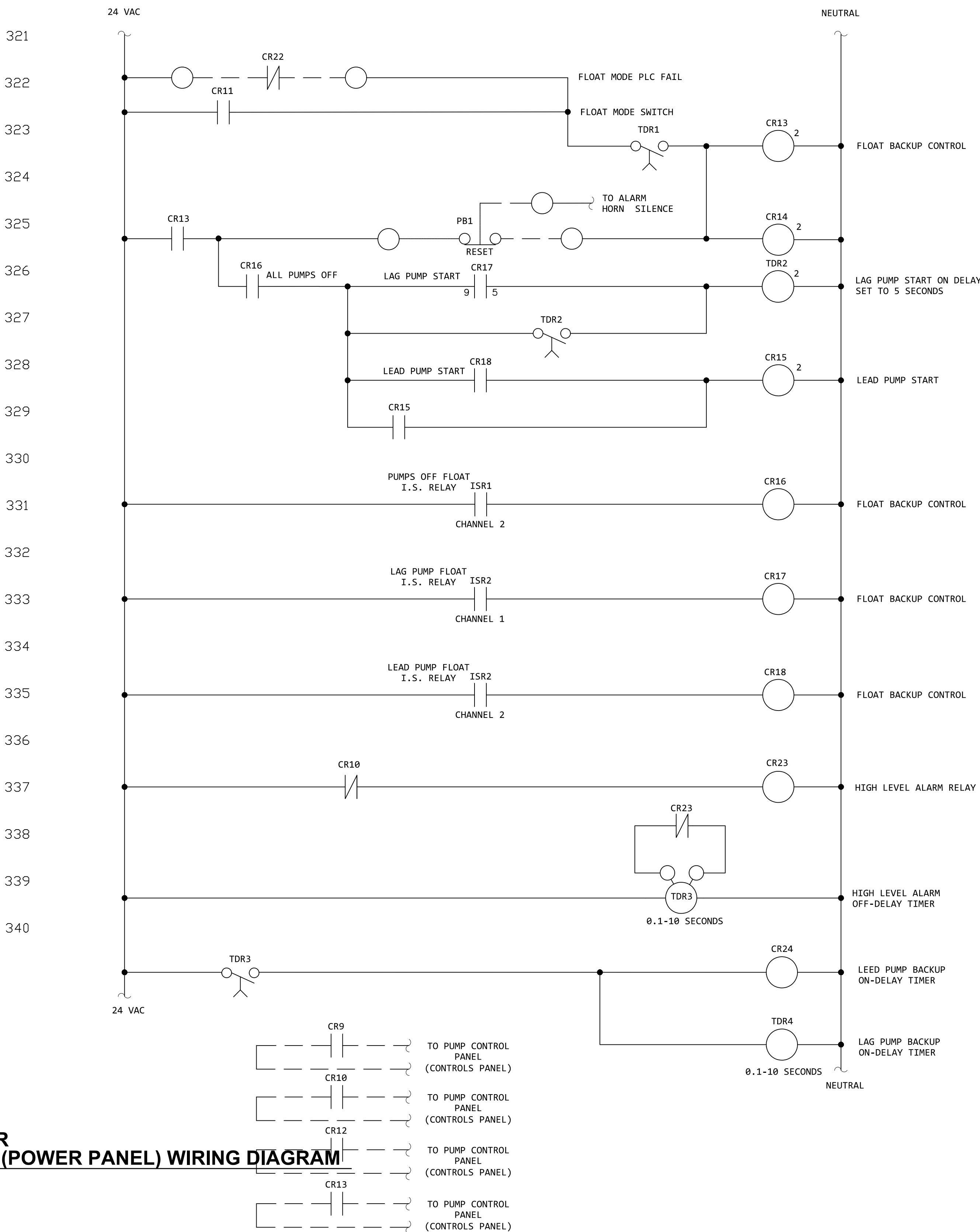
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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
480V, THREE PH, STARTER
CONTROL PANEL (POWER)
WIRING DIAGRAM

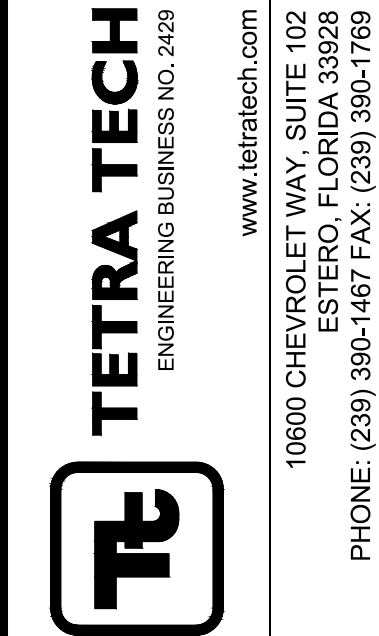
Project No.:	200-08498-24002
Designed By:	JAS
Drawn By:	JAS
Checked By:	JDM

E-342

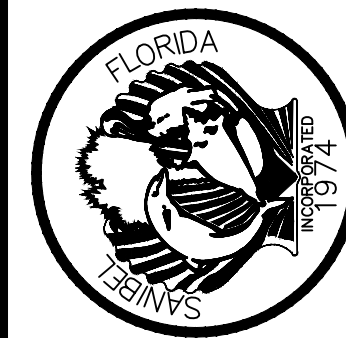
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SCALE: NTS



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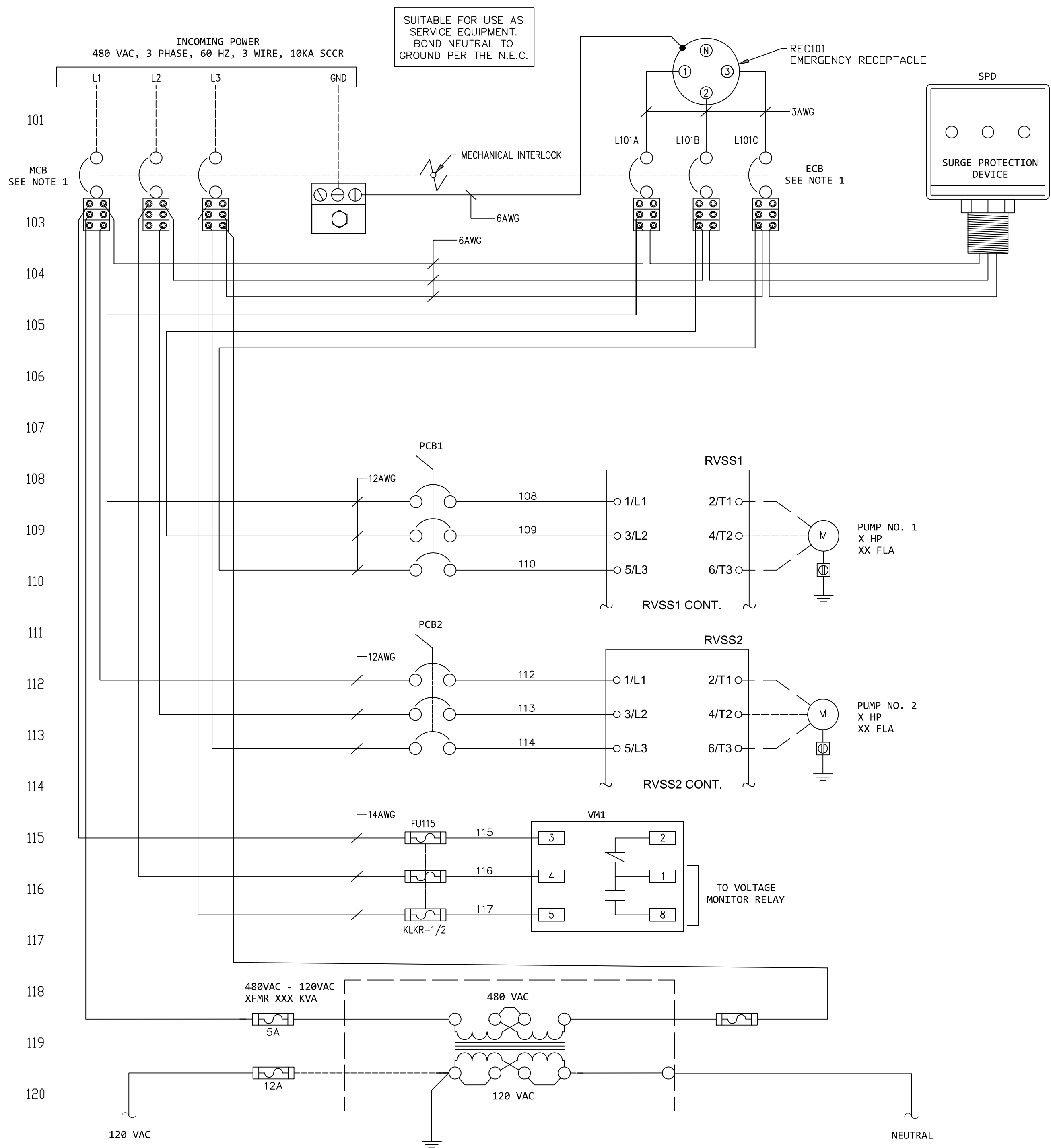
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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
480V, THREE PH, START
CONTROL PANEL (POWER
WIRING DIAGRAM

Project No.:	200-08498-24002
Designed By:	JAS
Drawn By:	JAS
Checked By:	JDM

E-344

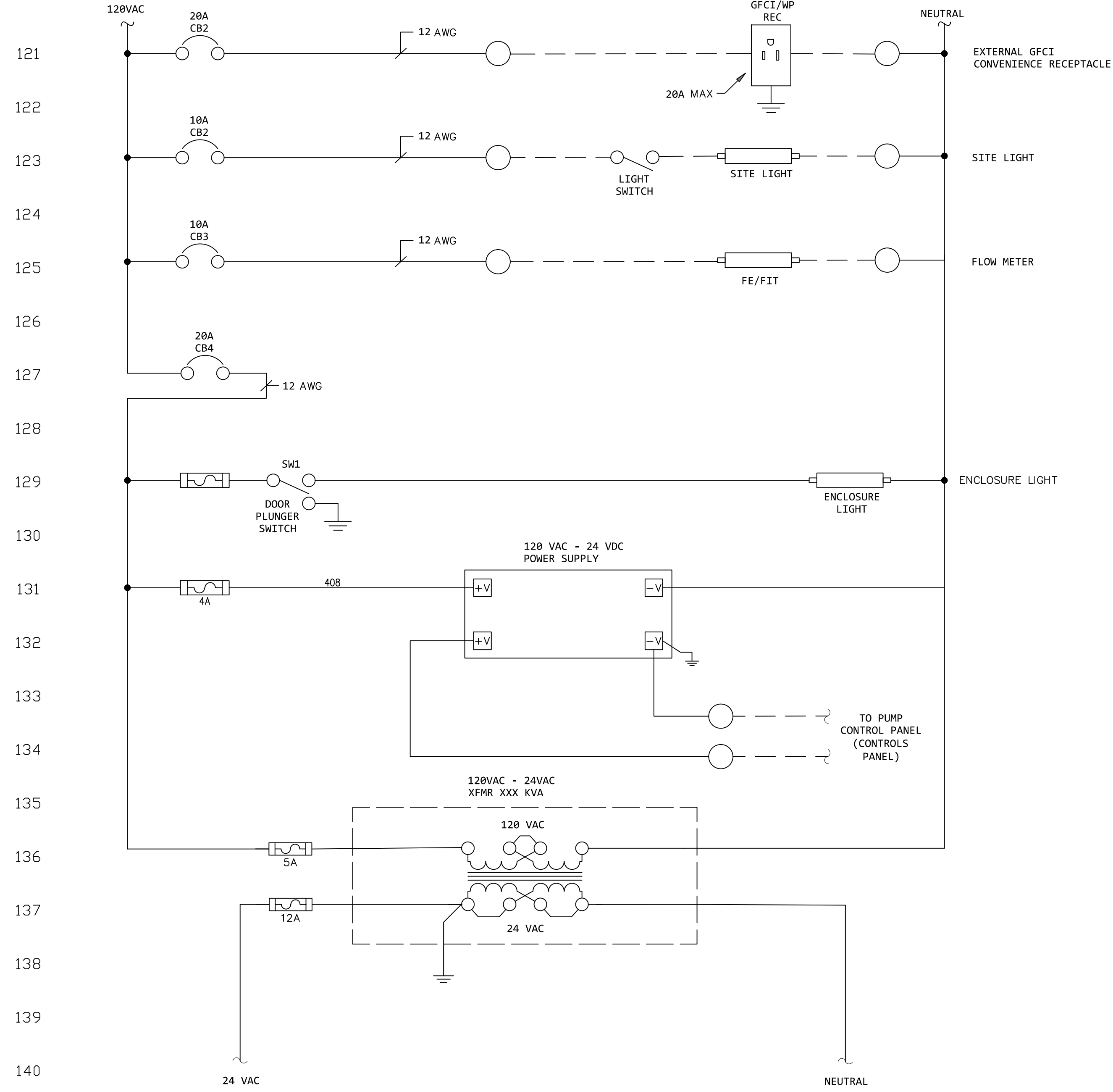
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PCB1/PCB2 TABLE
2-2.5 x PUMP FLA

MCB/ECB TABLE
200A
11 TO 25 HP
200A
26 TO 40 HP

HORSEPOWER TABLE
NEMA SIZE 2 RVSS
UP TO 25 HP 34 AMP
NEMA SIZE 3 RVSS
UP TO 40 HP 52 AMP



480V, 3 PHASE, RVSS
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM

SCALE: NTS

TETRA TECH
ENGINEERING BUSINESS NO. 2429



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DATE									
DESCRIPTION									
MARK									

THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
480V, THREE PH, RVSS
CONTROL PANEL (POWER)
WIRING DIAGRAM

Project No.:	200-08498-24002
Designed By:	JAS
Drawn By:	JAS
Checked By:	JDM

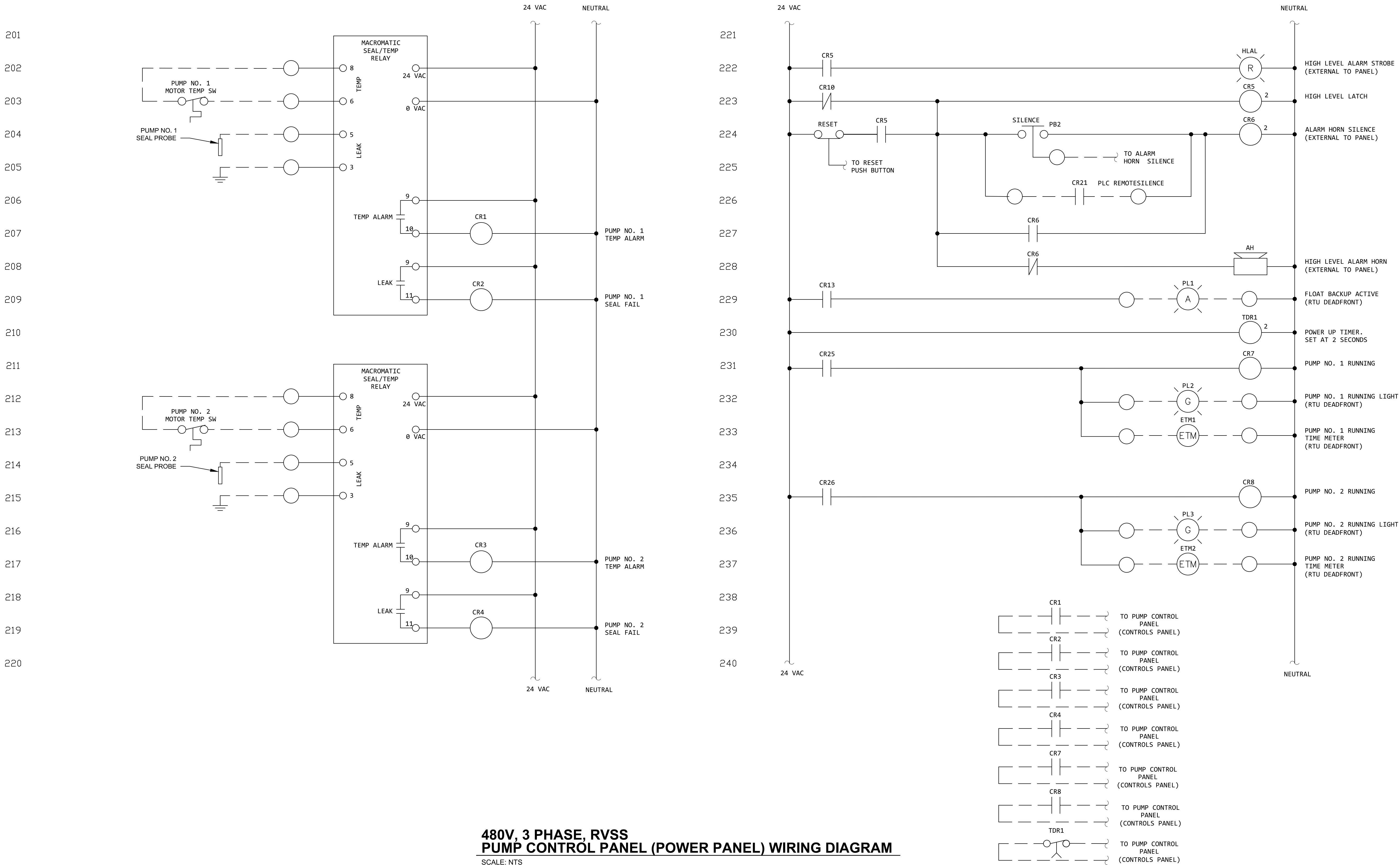
E-351

Sheet

Bar Measures 1 inch

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480V, 3 PHASE, RVSS
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM
SCALE: NTS

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10600 CHEVROLET WAY, SUITE 102
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PHONE: (239) 390-1467 FAX: (239) 390-1769

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DATE									
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THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
480V, THREE PH, RVSS
CONTROL PANEL (POWER)
WIRING DIAGRAM

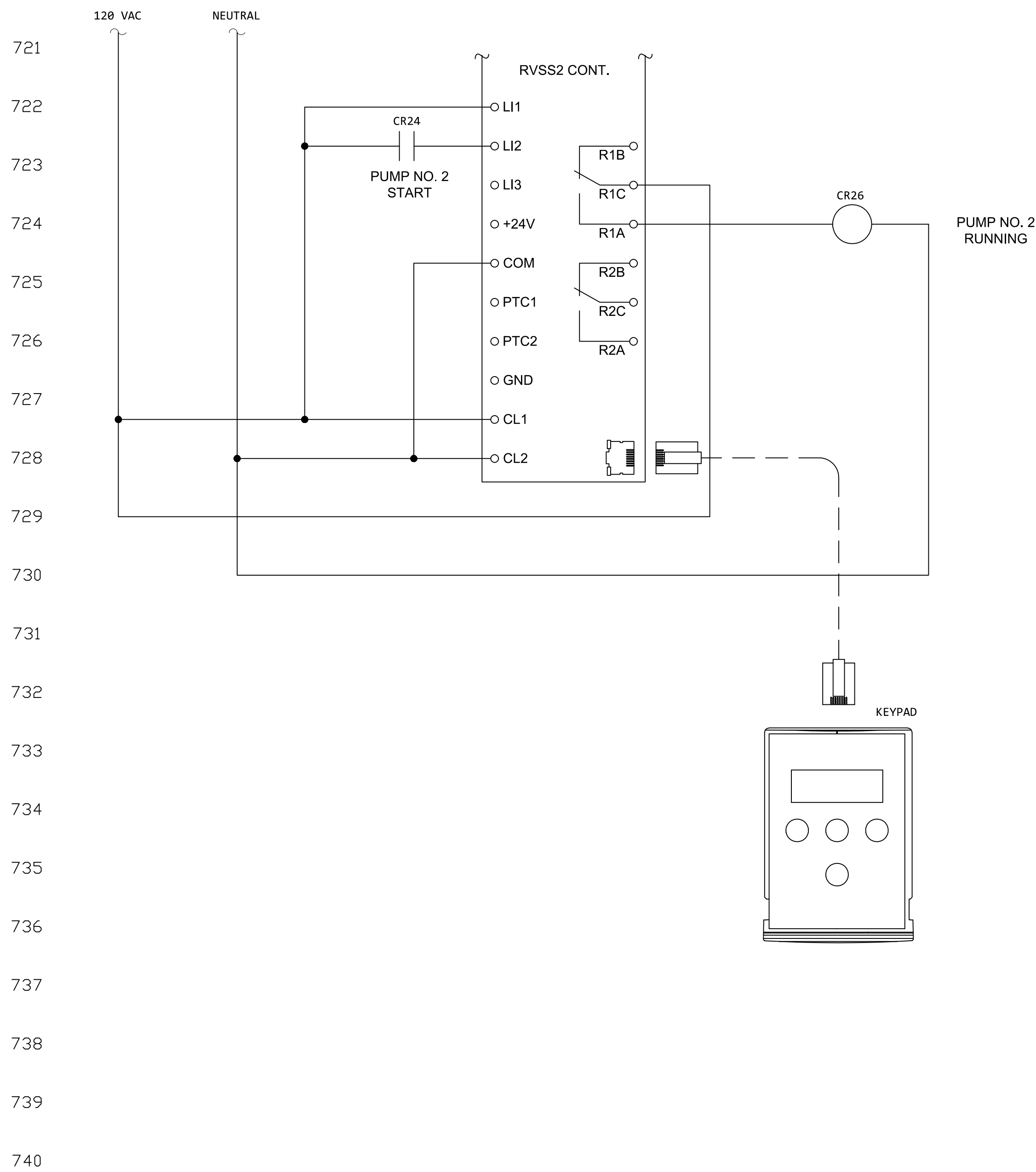
Project No.: 200-08498-24002
Designed By: JAS
Drawn By: JAS
Checked By: JDM

E-352

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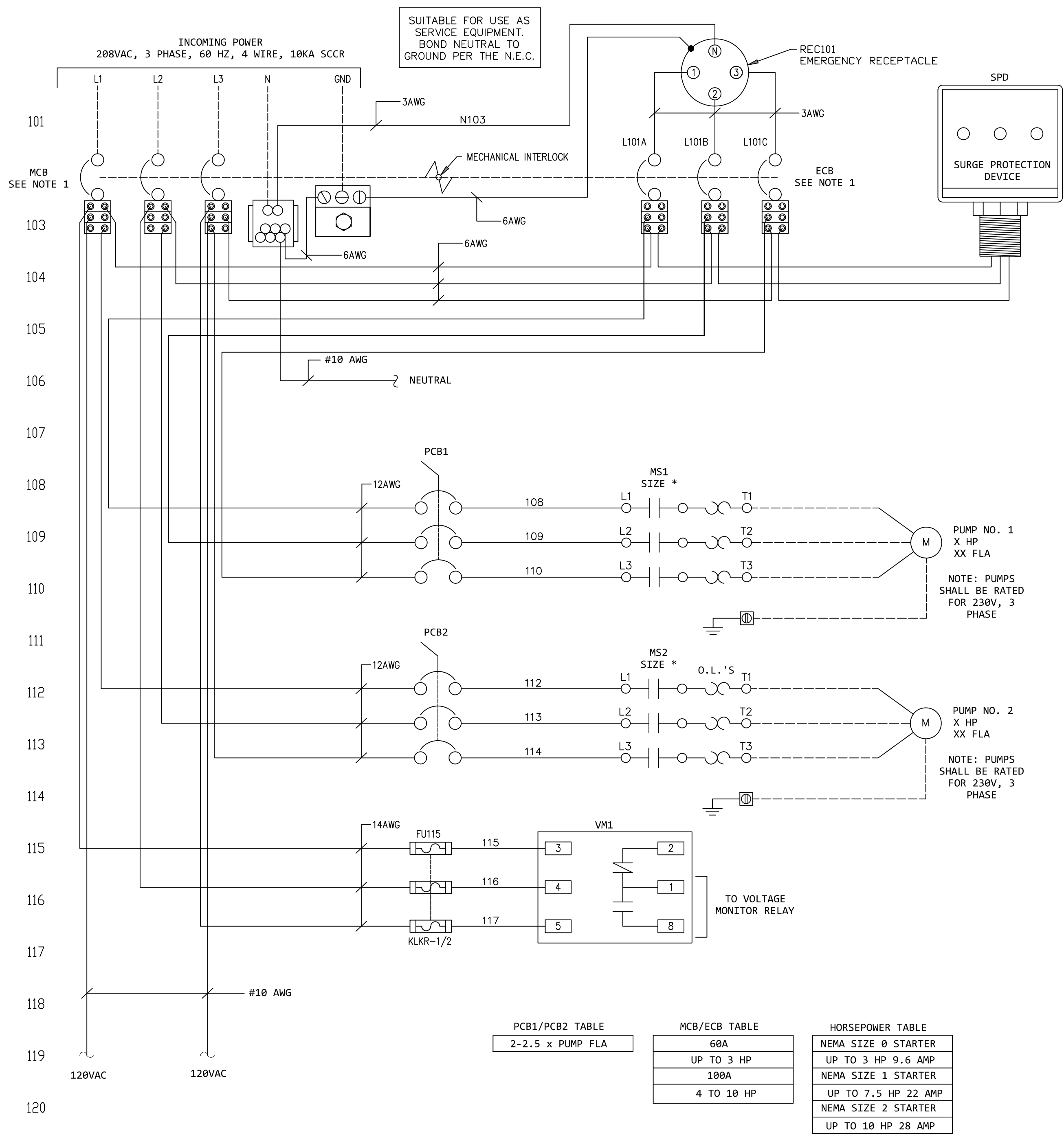
Bar Measures 1 inch



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THE CITY OF SANIBEL	
LIFT STATION CONTROL PANELS	
480V, THREE PH, RVSS CONTROL PANEL (POWER) WIRING DIAGRAM	
Project No.:	200-08498-24002
Designed By:	JAS
Drawn By:	JAS
Checked By:	JDM

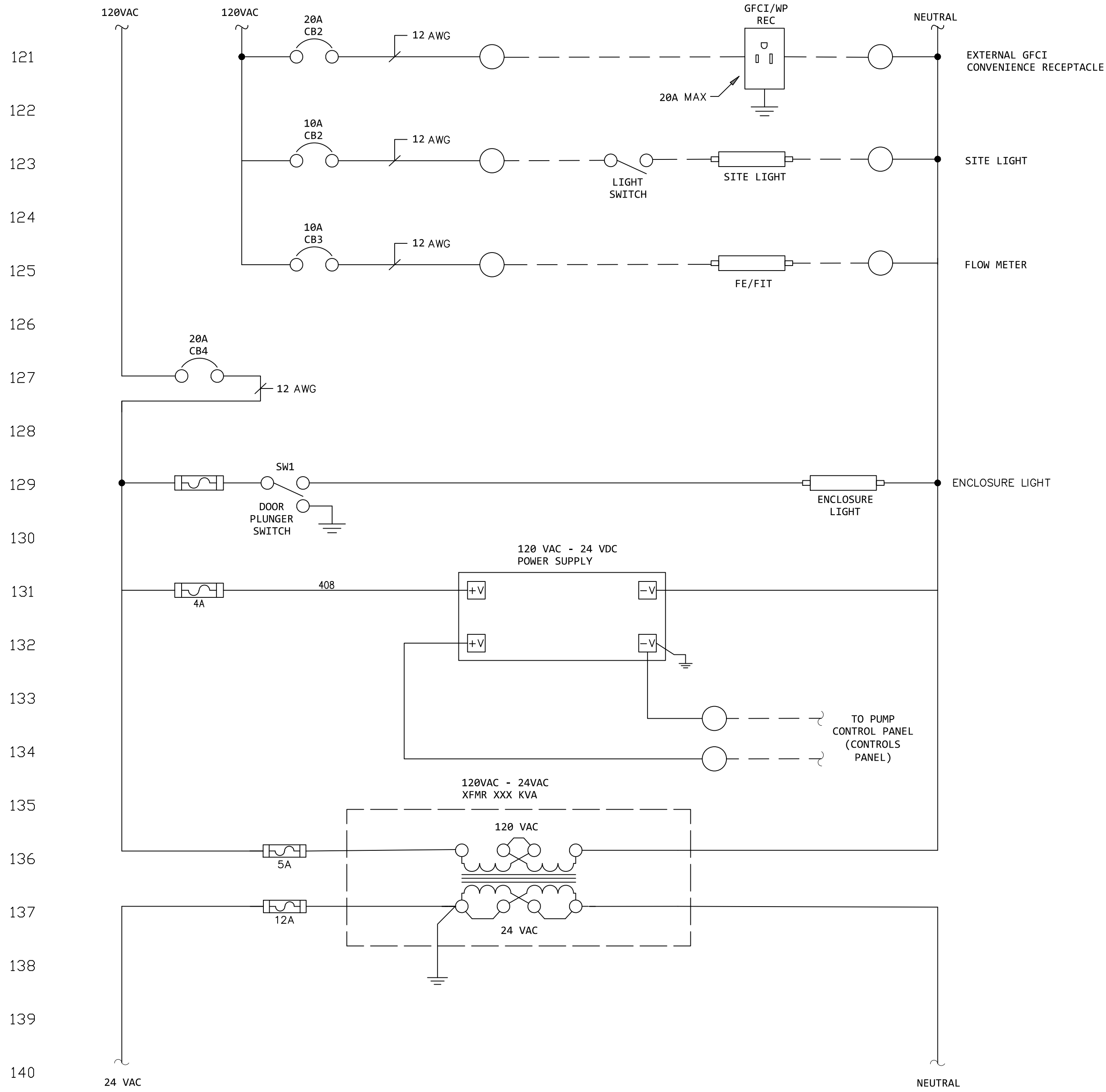
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PCB1/PCB2 TABLE
2-2.5 x PUMP FLA

MCB/ECB TABLE
60A
UP TO 3 HP
100A
4 TO 10 HP

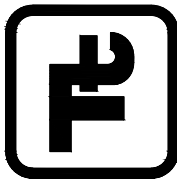
HORSEPOWER TABLE
NEMA SIZE 0 STARTER
UP TO 3 HP 9.6 AMP
NEMA SIZE 1 STARTER
UP TO 7.5 HP 22 AMP
NEMA SIZE 2 STARTER
UP TO 10 HP 28 AMP



**208V, 3 PHASE, STARTER
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM**

SCALE: NTS

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DATE									
DESCRIPTION									
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THE CITY OF SANIBEL

LIFT STATION CONTROL PANELS

**208V, THREE PH, STARTER
CONTROL PANEL (POWER)
WIRING DIAGRAM**

Project No.:	200-08498-24002
Designed By:	JAS
Drawn By:	JAS
Checked By:	JDM

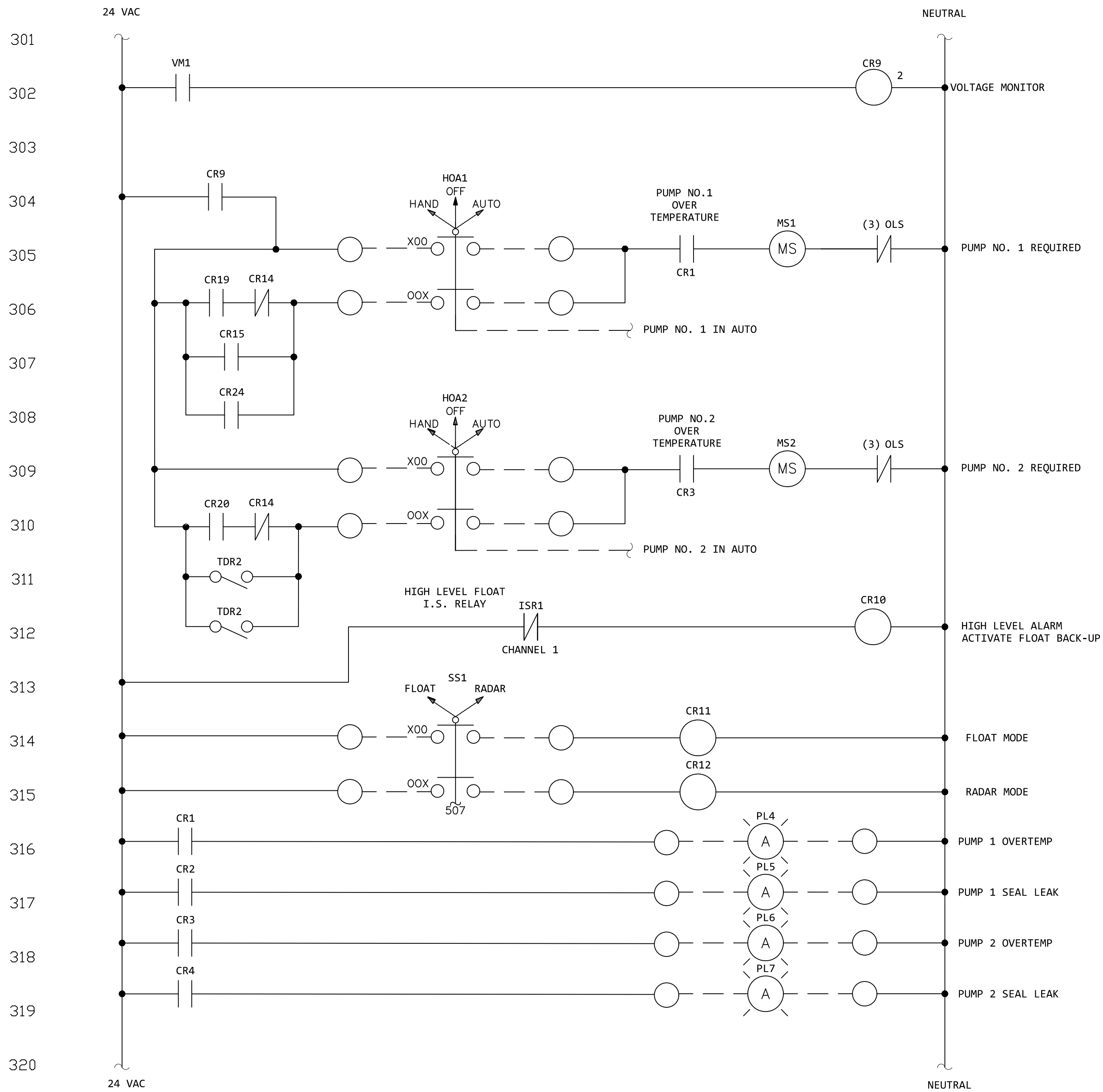
E-361

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Bar Measures 1 inch

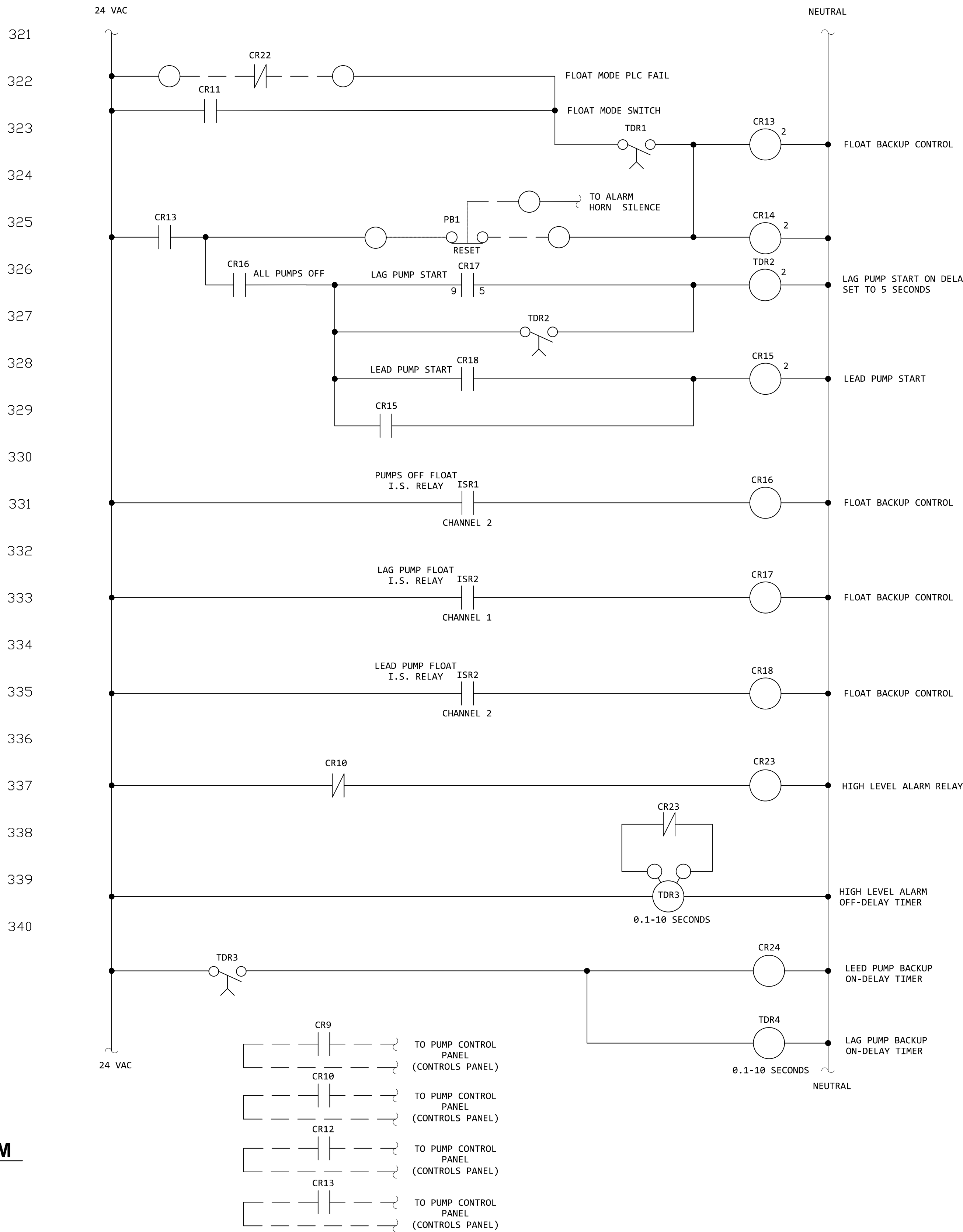


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**208V, 3 PHASE, STARTER
PUMP CONTROL PANEL (POWER PANEL) WIRING DIAGRAM**

SCALE: NTS



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DATE									
MARK									

THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
**208V, THREE PH, STARTER
CONTROL PANEL (POWER)
WIRING DIAGRAM**

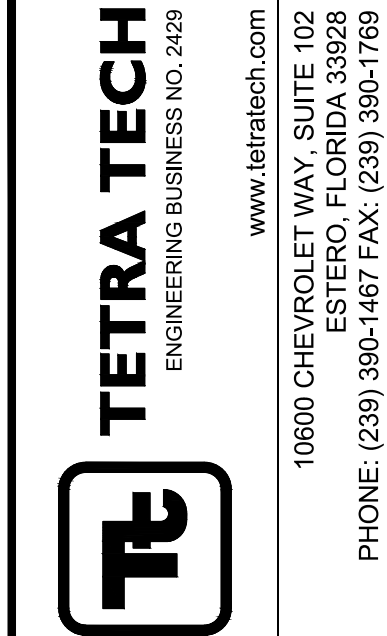
Project No.: 200-08498-24002
Designed By: JAS
Drawn By: JAS
Checked By: JDM

E-363

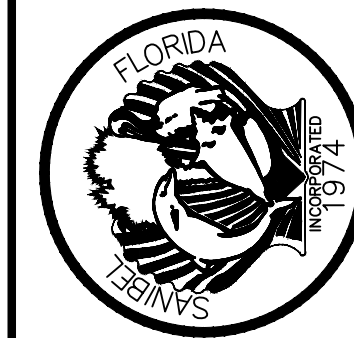
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[illegible]

THE CITY OF SANIBEL
LIFT STATION CONTROL PANELS
208V, THREE PH, START
CONTROL PANEL (POWER)
WIRING DIAGRAM

Project No.:	200-08498-24002
Designed By:	JAS
Drawn By:	JAS
Checked By:	JDM

E-364



**CITY OF
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800 Dunlop Road
Sanibel, Florida 33958

[illegible]

THE CITY OF SANIBEL
POST HURRICANE IAN LIFT STATION
CONTROL PANEL PROCUREMENT PHASE 1
PUMP CONTROL PANEL
(CONTROLS PANEL)
WIRING DIAGRAM

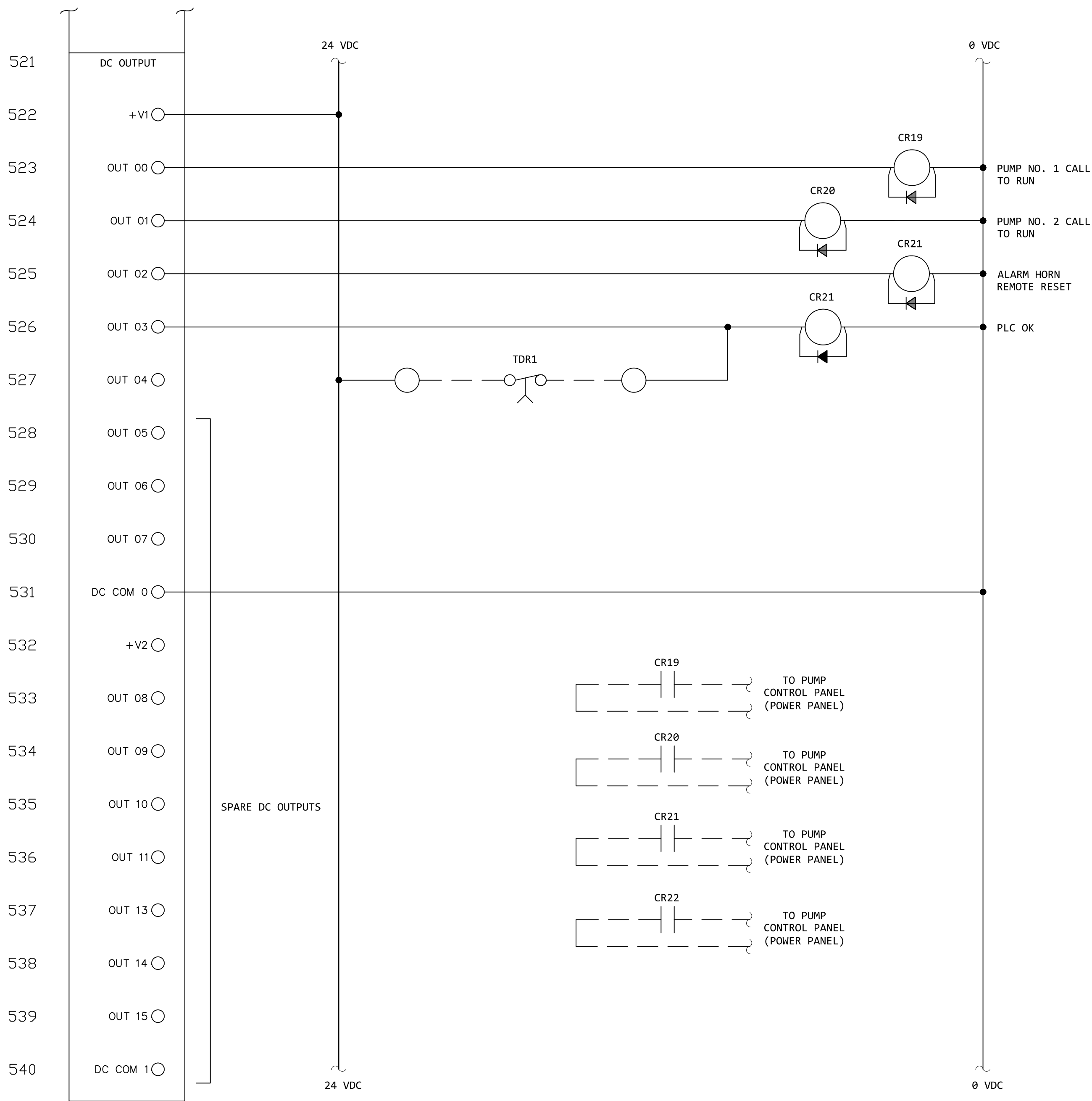
Project No.:	200-08498-24002
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Drawn By:	JAS
Checked By:	JDM

E-371

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