

SIMONTON STREET
 NORTHEASTERLY R/W
 SIMONTON STREET

P.O.C.
 INTERSECTION OF
 NORTHEASTERLY R/W
 SIMONTON STREET &
 NORTHWESTERLY R/W
 GREENE STREET

P.O.B.
 SET 5/8"x18" I.R. W/CAP
 (L.B. #3300)

NORTHWESTERLY R/W
 GREENE STREET
 (BEARING BASIS)

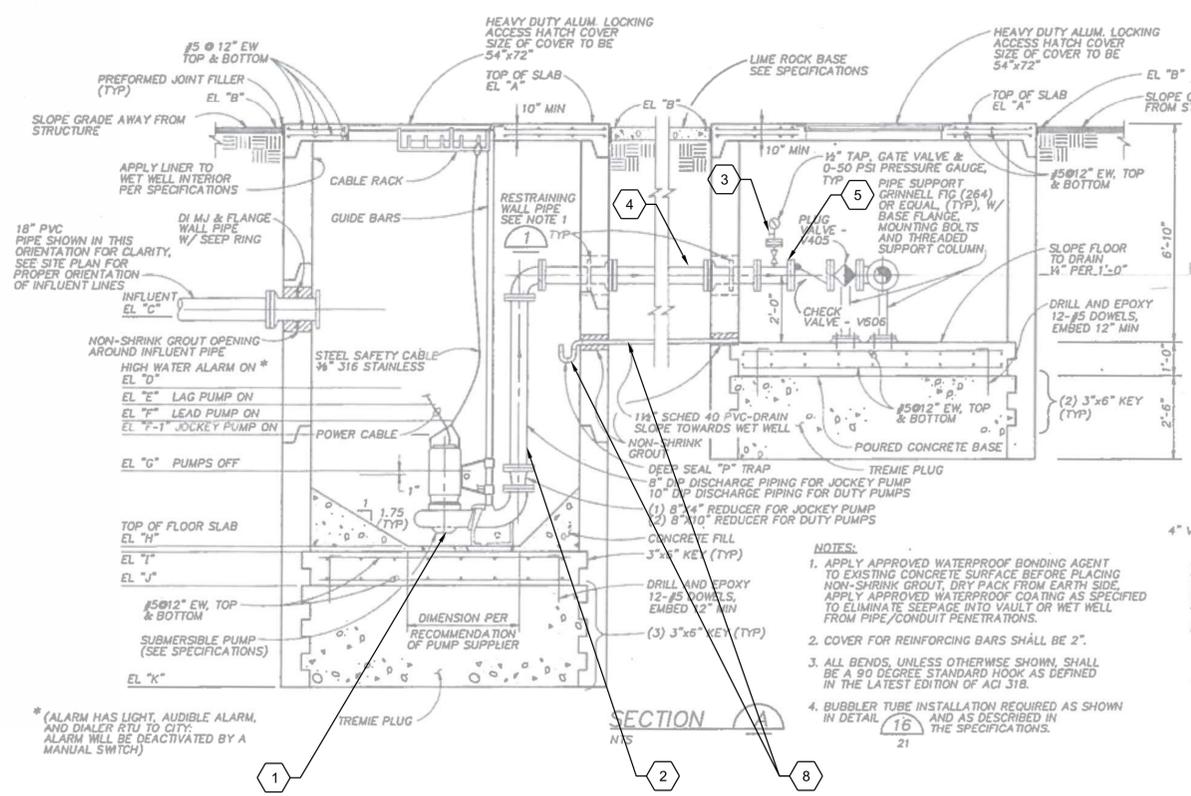
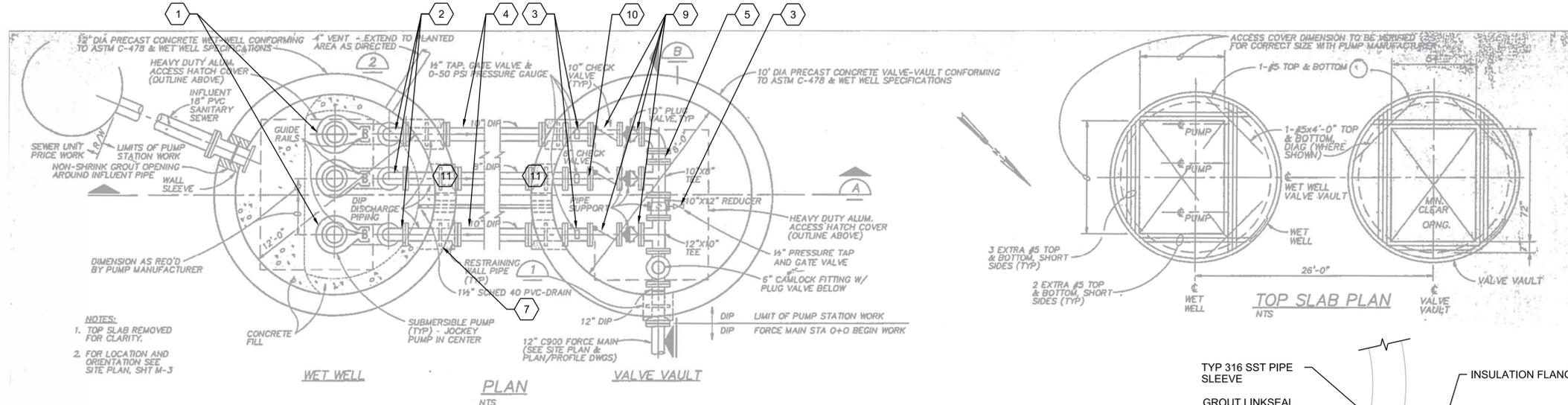
GREENE STREET
 (50' PUBLIC R/W)

**SUBMERSIBLE PUMPS
 TO BE REPLACED. ALL
 HATCH MECHANISMS
 TO BE REBUILT OR REPLACED.
 SEE MECHANICAL,
 ELECTRICAL, AND
 I&C DRAWINGS.**

3011 SW WILLISTON ROAD GAINESVILLE, FLORIDA 32608 EB0000072 AAC001982		RICHARD THOMAS MORRISON PE 67713	
ch2m CIVIL		PUMP STATIONS H & B REHABILITATION AND PUMP STATION GENERATOR REPLACEMENT CITY OF KEY WEST KEY WEST, FLORIDA	
PUMP STATION B SITE PLAN		REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.	
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.	DATE MAY 2018	NO. DSGN	DATE DR
PROJ 683450	DWG 010-C-201	REVISION CHK	REVISION APVD
SHEET 07 of 30	PLOT DATE: 2018/05/17	BY R MORRISON	BY R MORRISON

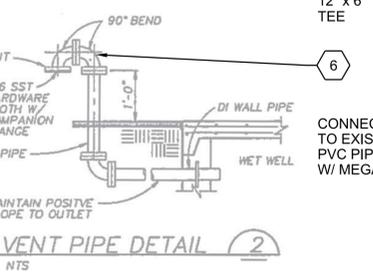
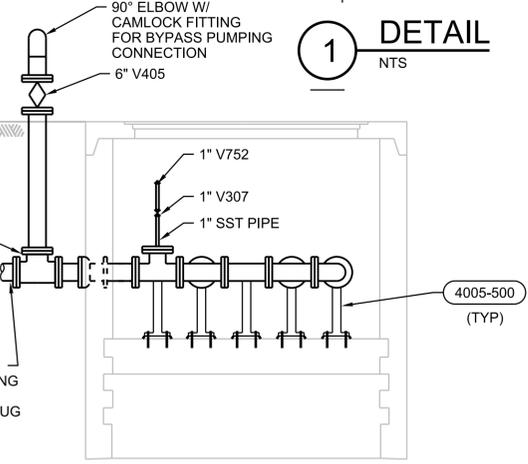
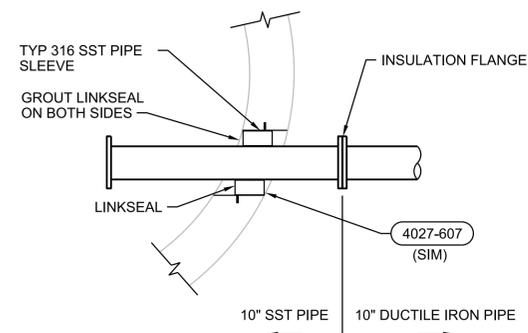
SHEET KEYNOTES

1. REPLACE TWO PUMPS W/ TWO NEW PUMPS WITH NEW 316 SST ELBOWS AND 316 SST GUIDE RAILS. THE PUMP IN THE MIDDLE WAS NEVER INSTALLED AND DOES NOT NEED TO BE REPLACED.
2. REPLACE ALL PIPES IN WET WELL W/ TYP 316 SST PIPES.
3. PROVIDE 1/2" TAP AND 1/2" V307. DO NOT PROVIDE PRESSURE GAUGE.
4. REPLACE ALL 10" PIPES BETWEEN WET WELL AND VALVE VAULT W/ NEW DUCTILE IRON PIPES.
5. REPLACE ALL PIPES & FITTINGS IN VALVE VAULT W/ NEW DUCTILE IRON PIPES & FITTINGS. REPLACE ALL PIPE SUPPORTS W/ NEW ONES.
6. CLEAN AND PAINT VENT W/ PAINT SYSTEM NO-4.
7. DEMOLISH ALL PIPE PENETRATIONS. INSTALL TYP 316 SST WALL PIPES AND USE LINKSEAL FOR ALL PENETRATIONS. (TYP 7) SEE DETAIL 1.
8. INSTALL P-TRAP ON DRAIN PIPE. REPLACE 1 1/2" PVC DRAIN BETWEEN WET WELL & VALVE VAULT.
9. REPAIR & REUSE EXISTING 10" CHECK VALVES & 10" PLUG VALVES.
10. 8" PIPE AND VALVES HAVE BEEN DEMOLISHED. THE PIPE IS PLUGGED. REPAIR THE PLUG. REPLACE THE 10" x 8" TEE W/ 10" PIPE.
11. PLUG MIDDLE PUMP PENETRATION IN WETWELL & VALVE VAULT.



SCHEDULE OF ELEVATIONS (FEET MSL)

LETTER	LEVEL DESCRIPTION	PS B
A	TOP OF PUMP STATION & VALVE VAULT SLAB	3.10
B	FINISH GRADE ADJACENT SLAB	3.00
C	INFLUENT SEWER INVERT	(-)-7.08
D	HIGH WATER ALARM	(-)-7.00
E	LAG PUMP ON	(-)-9.00
F	LEAD PUMP ON	(-)-10.00
F-1	JOCKEY PUMP ON	(-)-12.00
G	PUMPS OFF	(-)-13.00
H	TOP OF FLOOR SLAB	(-)-15.00
I	TOP OF KEY	(-)-15.25
J	BOTTOM OF KEY	(-)-16.25
K	BOTTOM OF TREMIE PLUG	(-)-22.25



0330-001

PUMP STATION B - PLAN & SECTION

NTS

3011 S.W. WILLISTON ROAD
GAINESVILLE, FLORIDA 32608
E80000072 AAC001992
TAO FU PE 63138

PROCESS MECHANICAL
PUMP STATION B
PUMP STATION H & B REHABILITATION
AND PUMP STATION GENERATOR REPLACEMENT
CITY OF KEY WEST
KEY WEST, FLORIDA

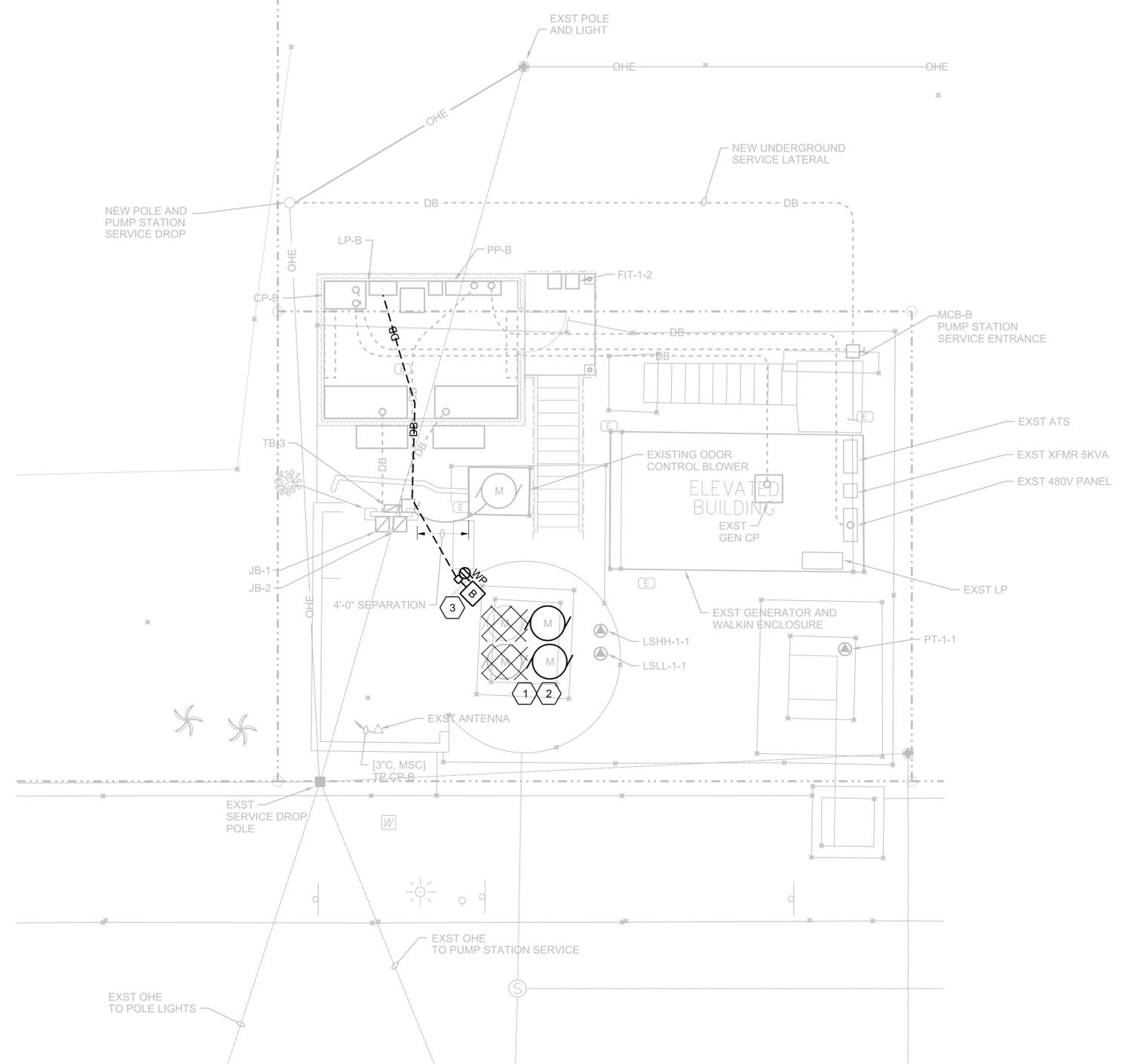
DATE	MAY 2018
PROJ	683450
DWG	010-D-201
SHEET	08 of 30

1" = X'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE: MAY 2018
PROJ: 683450
DWG: 010-D-201
SHEET: 08 of 30

BID DOCUMENTS

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SITE PLAN PUMP STATION B
NTS

GENERAL NOTES

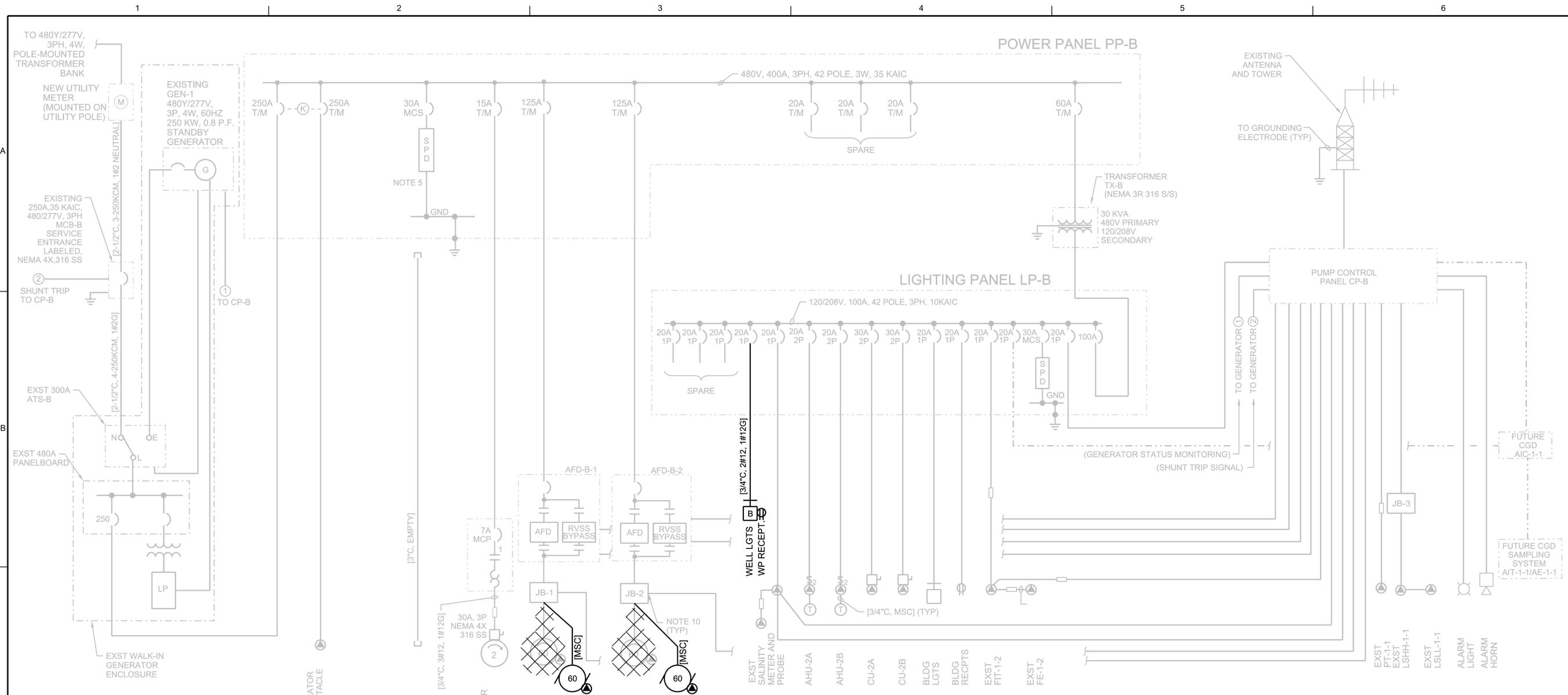
- LEGEND:**
 [Hatched Box] TO BE REMOVED
- A. DO NOT SCALE ELECTRICAL DRAWING. REFER TO THE CIVIL, ARCHITECTURAL/MECHANICAL, STRUCTURAL DRAWINGS AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACTLY LOCATION OF ALL EQUIPMENT.
 - B. ALL WORK SHALL COMPLY WITH THE NEC AND LOCAL CODES.
 - C. CONTRACTOR SHALL FIELD VERIFY EXISTING UNDERGROUND UTILITIES, PIPING, CONDUITS, ETC. AND REROUTE NEW ELECTRICAL CONDUITS AS REQUIRED.
 - D. CONDUCTORS SHALL NOT BE SPLICED EXCEPT AS NOTED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS.
- HAZARDOUS LOCATION NOTES:**
1. PER NFPA 850, TABLE 4.2, ROW 15, LINE a, THE WET WELL IS CLASSIFIED AS A HAZARDOUS LOCATION AS FOLLOWS:
 - a. THE AREA INSIDE THE WETWELL AND WITHIN A 3'-0" RADIUS AROUND VENT OPENING AS CONSIDERED CLASS I, DIV 1, GROUP C AND D LOCATIONS.
 - b. THE AREA WITHIN A 5'-0" RADIUS AROUND VENT OPENING AND AN ENVELOPE 18" ABOVE HATCHES AND EXTENDING 3'-0" FROM THE EDGE OF THE HATCHES ARE CONSIDERED CLASS I, DIV 2, GROUP C AND D LOCATIONS.
 2. PER NFPA 820, TABLE 4.2, ROW 31, LINE a AND ROW 36, LINE a, THE VALVE AND METER VAULTS ARE CLASSIFIED AS HAZARDOUS LOCATIONS AS FOLLOWS:
 - a. THE AREA INSIDE THE VAULT IS CONSIDERED CLASS I, DIV 2, GROUP C AND D LOCATIONS.
 3. PER NFPA 820, TABLE 4.2, ROW 20, LINE b, THE ODOR-CONTROL SYSTEM IS CLASSIFIED AS A HAZARDOUS LOCATION AS FOLLOWS:
 - a. THE AREA WITHIN 3'-0" ENVELOPE AROUND THE ODOR-CONTROL SYSTEM IS CONSIDERED A CLASS I, DIV 2, GROUP C AND D LOCATION.
 4. PROVIDE SUITABLE WIRING METHODS AND MATERIALS FOR THE HAZARDOUS LOCATIONS PER NFPA 70 (NEC).

SHEET KEYNOTES

1. REMOVE EXISTING SUBMERSIBLE PUMPS AND INSTALL NEW SUBMERSIBLE PUMPS. RECONNECT NEW PUMPS' POWER AND CONTROL TO TJB-1 AND TJB-2 PER DETAIL (2605-101)
2. SAVE EXISTING CONDUIT TO USE WITH NEW SUBMERSIBLE PUMPS.
3. INSTALL LUMINARE AREA LIGHT 12' AFF. USE [3/4", 2#12, 1#12G] CONDUCTOR

3011 S.W. WILLISTON ROAD GAINESVILLE, FLORIDA 32608 EB0000072 AAC001982		DAVID C. NICHOLSON PE 60201	PUMP STATIONS H & B REHABILITATION AND PUMP STATION GENERATOR REPLACEMENT CITY OF KEY WEST KEY WEST, FLORIDA
		N ADAMS DR	A PASTRANA CHK
ELECTRICIAN PUMP STATION B SITE PLAN		NO. DATE DSGN	REVISION APVD
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.		D NICHOLSON APVD	
DATE		MAY 2018	
PROJ		683450	
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- LEGEND:**
- BC = BYPASS CONTACTOR
 - CGD = COMBUSTIBLE GAS DETECTOR
 - CPT = CONTROL POWER TRANSFORMER
 - E = STANDBY SOURCE
 - GND = GROUND BUS
 - L = LOAD SIDE OF AUTOMATIC TRANSFER SWITCH
 - LE = LEVEL TRANSDUCER (ULTRASONIC)
 - LSH = LEVEL SWITCH HIGH
 - LSL = LEVEL SWITCH LOW
 - N = NORMAL SOURCE
 - NEU = NEUTRAL BUS
 - MCB = MAIN CIRCUIT BREAKER
 - MCP = MAGNETIC-ONLY CIRCUIT BREAKER
 - MCS = MOLDED CASE SWITCH
 - MSC = MANUFACTURER SUPPLIED CABLE
 - SPD = SURGE PROTECTIVE DEVICE
 - PMR = POWER MONITORING RELAY
 - T/M = THERMAL MAGNETIC CIRCUIT BREAKER
- (K) - = MECHANICAL KEY INTERLOCK

**PP-B
CONNECTED LOAD SUMMARY**

DESCRIPTION	KVA
PUMP NO.1	56.5
PUMP NO.2	56.5
BLOWER	2
MPC	5
LIGHTING PANEL, LP-B	10
SUBTOTAL	147
25% OF LARGEST MOTOR	14.13
SERVICE RATING	161.13

*ALL LOADS ASSUMED NON-CONTINUOUS

RISER DIAGRAM
PUMP STATION B

SHEET KEYNOTES

LEGEND:
 TO BE REMOVED

- ALL RACEWAYS TO BE PVC-COATED RGS, EXCEPT WHERE REQUIRED FOR VIBRATION MITIGATION. REFER TO SPECIFICATION SECTION 26 05 01, ELECTRICAL. MAINTAIN 12" CLEARANCE FROM CONFLICTING UNDERGROUND UTILITIES.
- CONNECT PUMPS TO EXISTING NEMA 4X 316 STAINLESS STEEL JUNCTION BOXES, REUSE NSI POLARIS BLUE SERIES SUBMERSIBLE POWER DISTRIBUTION BLOCKS IF THEY ARE IN GOOD CONDITION. OTHERWISE, REPLACE WITH NEW NSI POLARIS POWER DISTRIBUTION BLOCKS

ch2m
ELECTRICAL
**PUMP STATION B
ONE LINE DIAGRAM**

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GAINESVILLE, FLORIDA 32608
EB0000072 AAC001982

DAVID C. NICHOLSON PE 60201

PUMP STATIONS H & B REHABILITATION
AND PUMP STATION GENERATOR REPLACEMENT
CITY OF KEY WEST
KEY WEST, FLORIDA

NO.	DATE	DR	CHK	APVD

N ADAMS
A PASTRANA
D NICHOLSON

NO. DATE DSGN REVISION BY APVD

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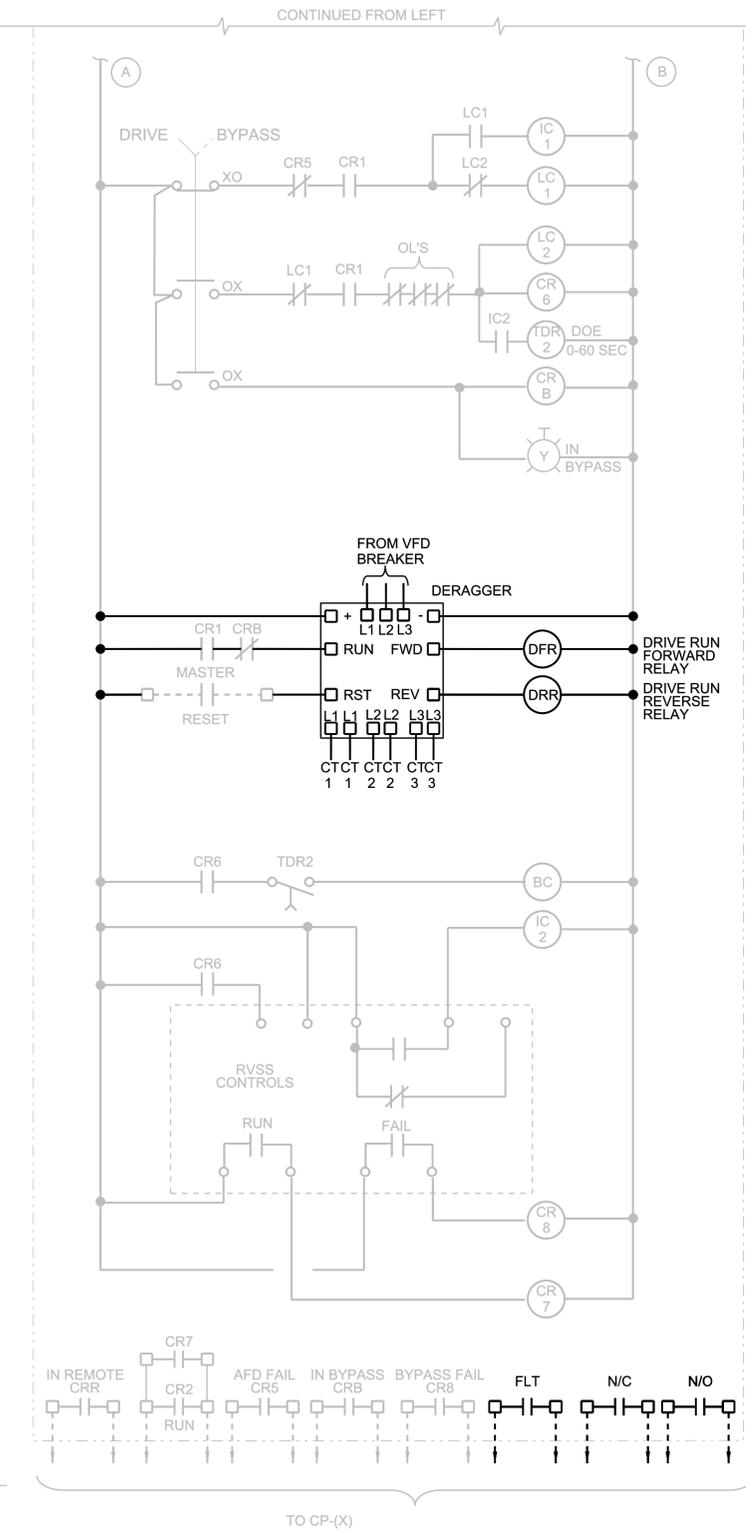
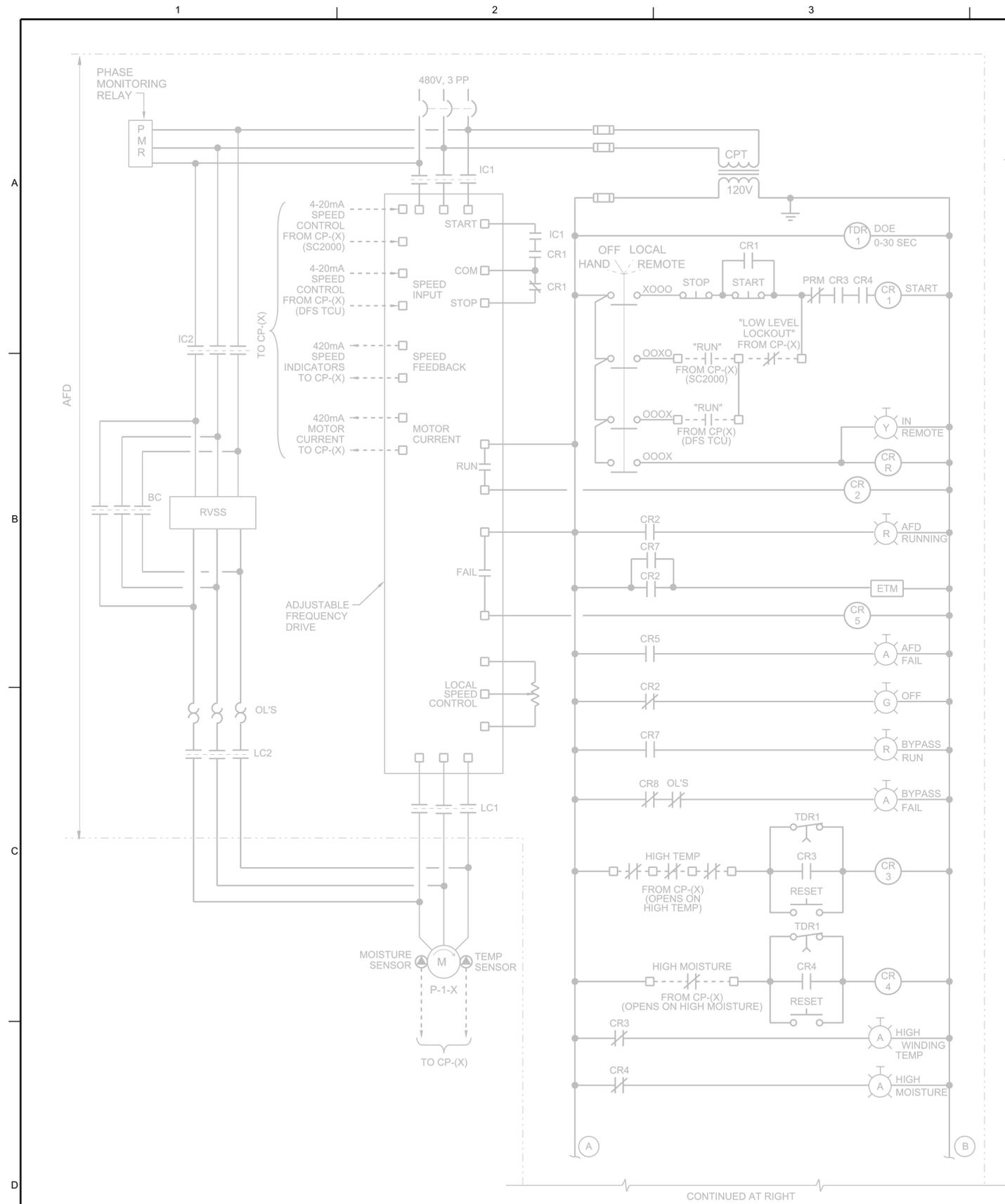
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VERIFY SCALE
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0 1"

DATE MAY 2018
PROJ 683450
DWG 010-E-601
SHEET 10 of 30

FILENAME: 010-E-6001_683450.dgn PLOT DATE: 5/17/2018 PLOT TIME: 1:47:41 PM



GENERAL NOTES:
 CONTRACTOR TO PROVIDE DERAGGER WITH THE CONTROL FUNCTIONS AS SHOWN.

PUMP AFD-(X)-(Y)

(X)	PUMP STATION	TYPICAL FOR:
B	PUMP STATION B	AFD-B-1, AFD-B-2

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EB0000072 AAC001982
DAVID C. NICHOLSON PE 60201

ELECTRICAL
PUMP STATIONS H & B REHABILITATION
AND PUMP STATION GENERATOR REPLACEMENT
CITY OF KEY WEST
KEY WEST, FLORIDA

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**PUMP STATION B
MOTOR CONTROL DIAGRAM**

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NO. DATE
DR
APVD
BY

DSGN
E. CARRASCO
CHK
D. NICHOLSON

REVISION
REVISION

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE
MAY 2018

PROJ
683450

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010-E-602

SHEET
11 of 30