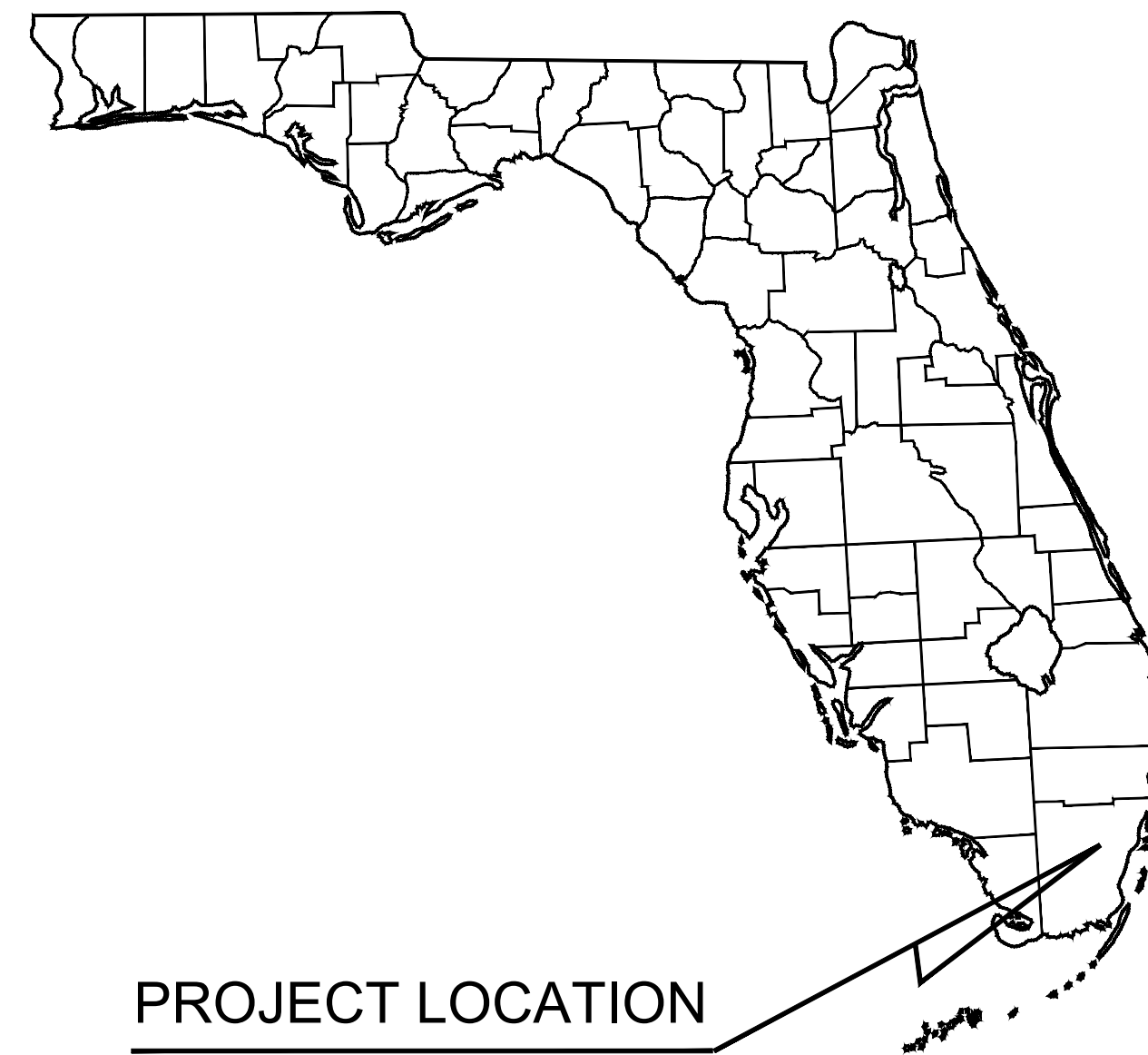


NORTH BAY VILLAGE

MIAMI-DADE COUNTY, FLORIDA

SOUTH TREASURE DRIVE PUMP STATION IMPROVEMENTS



PROJECT LOCATION



PROJECT LOCATION MAP

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PROJECT TEAM:

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Phone: (954) 535-5100
Fax: (561) 863-8175
Contact: Gary Ratay, P.E.

CLIENT:

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North Bay Village, FL 33141
Phone: (305) 756-7171
Fax: (305) 756-7722

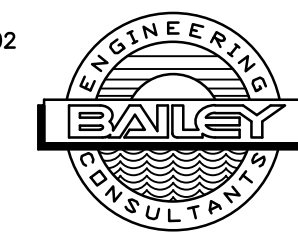
CITY OFFICIALS:

- BRENT LATHAM - MAYOR
- MARVIN WILMOTH - VICE MAYOR
- JOSE R. ALVAREZ - COMMISSIONER
- ANDREANA JACKSON - COMMISSIONER
- JULIANNA STROUT - COMMISSIONER

PROJECT LOCATION

FOR BIDDING

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C.O.A. NO. 6783
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KHA PROJECT	043138041
DATE	May 2020
SCALE	AS SHOWN
DESIGNED BY	SEB
DRAWN BY	SJL
CHECKED BY	SEB

SOUTH TREASURE DRIVE PUMP STATION IMPROVEMENTS

PREPARED FOR
NORTH BAY VILLAGE

NORTH BAY VILLAGE

LICENSED PROFESSIONAL

STEPHEN E. BAILEY

FLORIDA LICENSE NUMBER
42461

FLORIDA DATE: 05/12/20

COVER SHEET

SHEET NUMBER

E-00

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CONSTRUCTION NOTES:

1. CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC PLAN PER APPLICABLE FDOT STANDARD INDEXES FOR APPROVAL PRIOR TO START OF WORK.
2. CONNECTIONS TO EXISTING UTILITIES SHALL NOT BE MADE UNTIL ALL NECESSARY CERTIFICATIONS AND APPROVALS HAVE BEEN OBTAINED FROM THE APPROPRIATE AGENCIES. EXISTING UTILITIES MUST REMAIN IN SERVICE UNTIL NEW UTILITIES ARE READY FOR CONNECTION.
3. THE CONTRACTOR IS RESPONSIBLE FOR A DEWATERING PLAN AND A PERMIT THAT WILL PROVIDE PRETREATMENT OF EFFLUENT PRIOR TO DISCHARGE INTO THE EXISTING DRAINAGE SYSTEM. COST TO OBTAIN ALL DEWATERING PERMITS AS NEEDED AND IMPLEMENTING THE DEWATERING PLAN IS TO BE INCLUDED IN THE RELATED BID ITEM FOR THE WORK BEING DONE.
4. ALL APPLICABLE PERMITS MUST BE OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND ALL APPLICABLE FEES AND CHARGES MUST BE PAID PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS OF ALL UTILITIES AND NOTIFICATION OF SUNSHINE STATE ONE CALL. COORDINATE DIRECTLY WITH NORTH BAY VILLAGE PUBLIC WORKS FOR NORTH BAY VILLAGE UTILITY LOCATIONS.
6. THE CONTRACTOR SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION PLANS ON SITE. THE PLANS ARE TO BE MADE AVAILABLE TO THE ENGINEERING INSPECTOR OR HIS DESIGNEE UPON REQUEST.
7. ALL CONSTRUCTION, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF MDWASD, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FDOT AND ALL OTHER LOCAL AND NATIONAL CODES WHERE APPLICABLE.
8. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE STRICTLY OBSERVED.
9. EXISTING UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES WITHIN THE AREAS OF CONSTRUCTION.
10. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE REPLACEMENT LOCATIONS.
11. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER.
12. THE CONTRACTOR SHALL SUPPORT ANY UTILITIES UNCOVERED DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR ANY UTILITY DAMAGED DURING CONSTRUCTION AT NO COST TO THE VILLAGE.
13. CONTRACTOR SHALL MAINTAIN REQUIRED COVER AND UTILITY SEPARATION AS SHOWN AND SPECIFIED FOR ALL UTILITY IMPROVEMENTS.
14. CONTRACTOR SHALL PROVIDE COMPLETE FINAL RECORD DRAWINGS TO THE OWNER AS SPECIFIED. ALL AS-BUILT MEASUREMENTS AND ELEVATIONS TO BE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR.
15. ALL ROADWAY AND OTHER AREAS OF THE PROJECT SITE IMPACTED BY CONSTRUCTION MUST BE RESTORED TO EQUAL OR BETTER CONDITION AND IN COMPLIANCE WITH NORTH BAY VILLAGE REQUIREMENTS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF WORK, FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES FROM DAMAGE OR DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
17. CONTRACTOR SHALL MAINTAIN FUNCTION OF SEWAGE PUMPING DURING CONSTRUCTION BY UTILIZING BY-PASS PUMPING SYSTEM, FITTINGS AND VALVES AS REQUIRED. CONTRACTOR SHALL SUBMIT A PLAN OUTLINING SEWAGE "BY PASS" PROCEDURE TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.
18. CONTRACTOR SHALL PERFORM ALL WORK WITHIN LEGAL PROPERTY AND EASEMENT, AND SHALL NOT DISTURB ADJACENT PROPERTY.
19. CONTRACTOR SHALL INCLUDE NECESSARY CUTTING, PATCHING AND RESTORATION OF ALL EXISTING SURFACES TO MATCH SURROUNDING AREAS.
20. FIELD VERIFY ALL ELEVATIONS PRIOR TO COMMENCING THE WORK.
21. PROVIDE DIELECTRIC FITTINGS BETWEEN TWO DIFFERENT MATERIALS AS REQUIRED.
22. CONTRACTOR SHALL VERIFY EXISTING PIPING TO REMAIN BEFORE ORDERING PROPOSED PIPING/FITTINGS CONNECTING TO IT.
23. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT JOB SITE AND COORDINATE NEW WORK TO BE DONE WITH THEIR TRADES PRIOR TO COMMENCING IT. THE MECHANICAL WORK SHALL BE SCHEDULED SO THAT IT WILL OCCUR IN THE PROPER SEQUENCE AND WITHOUT DELAYING THE COMPLETION OF THE WORK.
24. CONTRACTOR TO COAT ANY UNDERGROUND PIPE FITTINGS IN DIRECT CONTACT W/SOIL WITH TWO COATS OF BITUMASTIC OR APPROVAL EQUAL.
25. SHEET PILING MAY BE REQUIRED FOR EXCAVATION. IF SO, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED PROFESSIONAL ENGINEER.
26. BASE FLOOD ELEVATION (BFE): 8.0' NGVD 1929, ZONE AE (BASED ON FEMA FIRM MAP).

DEMOLITION NOTES:

1. THE ITEMS DEPICTED FOR DEMOLITION ARE GENERAL ONLY. ALL ANCILLARY STRUCTURES, PIPING AND OTHER ASSOCIATED EQUIPMENT ARE TO BE INCLUDED IN THE DEMOLITION WORK.
2. AFTER DEMOLITION, ALL DEBRIS IS TO BE REMOVED AND LEGALLY DISPOSED BY THE CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. CONTRACTOR MAY ELECT TO SELL ALL EQUIPMENT AND MATERIAL TO BE REMOVED AND INCLUDE COSTS/CREDITS IN PRICE PROPOSAL.
3. AFTER DISPOSAL OF MATERIAL, THE CONTRACTOR SHALL RE-GRADE THE AREA TO MATCH SURROUNDING GRADE AND DRAINAGE PATTERNS. CONTRACTOR TO OBTAIN REQUIRED FILL NEEDED TO LEVEL AREAS WHERE STRUCTURES PREVIOUSLY EXISTED.
4. CONTRACTOR SHALL BACKFILL, COMPACT AND RESTORE SURFACE CONDITIONS AT ALL AREAS OF PIPE/STRUCTURE DEMOLITION AND REMOVAL. COMPACT TO 98% ASTM D-1557, IN 12" LIFTS.
5. CONTRACTOR SHALL REMOVE ALL PIPING, VALVES, AND APPURTENANCES FROM STRUCTURES TO FIRST BEND BELOW GRADE OR MINIMUM OF 4 FEET BELOW GRADE WITHIN 50 FEET OF THE LOCATION. ALL PIPING TO BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. CONTRACTOR TO VERIFY WITH VILLAGE THAT ANY SYSTEM TO BE REMOVED IS OUT OF SERVICE BEFORE DEMOLITION.
6. CONTRACTOR SHALL INVESTIGATE, REMOVE, AND PROPERLY DISPOSE OF THE EXISTING ELECTRICAL WIRING AND CONTROLS EQUIPMENT FROM AREA OF DEMOLITION BACK TO THE SOURCE.
7. CONTRACTOR SHALL REMOVE CONDUITS TO FIRST BEND BELOW GRADE OR MINIMUM OF 4 FEET BELOW GRADE WITHIN 50 FEET OF THE LOCATION AND INSTALL CAP. ALL CABLE AND WIRING ARE TO BE REMOVED BACK TO SOURCE.
8. ALL ELECTRICAL, PIPING OR STRUCTURES LEFT IN GROUND WILL BE MARKED ON PLANS AND SHALL HAVE PICTURES DOCUMENTING THESE ITEMS PRIOR TO AND AFTER FILLING. ALL STRUCTURES LEFT IN GROUND WILL HAVE A HOLE PUNCTURED IN THE BOTTOM AT THE LOWEST POINT. THE HOLE IS TO BE 8 INCH MINIMUM DIAMETER OR EQUIVALENT.
9. ITEMS LISTED "TO REMAIN" SHALL BE FULLY PROTECTED. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THESE ITEMS.
10. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
11. ALL EXISTING UTILITIES, INCLUDING BUT NOT LIMITED TO DRAINAGE, CLEANOUTS, WATER METERS, ELECTRICAL METERS AND IRRIGATION MAINS, IMPACTED BY CONSTRUCTION SHALL BE MODIFIED/RELOCATED AS NECESSARY.
12. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
13. THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE AND OBTAINING ALL NECESSARY PERMITS.

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KHA PROJECT	043138041
DATE	May 2020
SCALE	AS SHOWN
DESIGNED BY	SEB
DRAWN BY	SJL
CHECKED BY	SEB

SOUTH TREASURE DRIVE PUMP STATION IMPROVEMENTS



PREPARED FOR
NORTH BAY VILLAGE

NORTH BAY VILLAGE FLORIDA

LICENSED PROFESSIONAL	STEPHEN E. BAILEY
FLORIDA LICENSE NUMBER	42461
DATE:	05/12/20

GENERAL NOTES

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LEGEND:

PLAN SYMBOLS

- (15) ELECTRIC A.C. MOTOR, NO. INDICATES HORSEPOWER.
- CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.
- - - CONDUIT CONCEALED IN OR BELOW FLOOR OR UNDERGROUND.
- HOME RUN TO PANELBOARD. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS. HASH MARKS INDICATE NUMBER OF #12 AWG. CONDUCTORS. NO HASH MARKS INDICATE 2 #12 CONDUCTORS.
- (LE) LEVEL TRANSDUCER
- (LLS) LIQUID LEVEL SWITCH
- (TS) TEMPERATURE SWITCH
- (SF) SEAL FAIL
- ⊗ GROUND ROD
- TW ⊗ GROUND TEST WELL

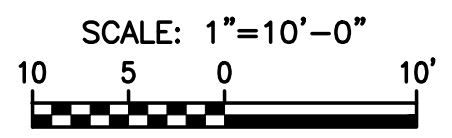
ABBREVIATIONS

- A AMPERES
- AFG ABOVE FINISHED GRADE
- AIC AMPS INTERRUPTING CURRENT CONTROL PANEL
- CP CONTROL POWER TRANSFORMER
- FPL FLORIDA POWER & LIGHT
- FVNR FULL VOLTAGE NON-REVERSING
- GND GROUND
- HP HORSEPOWER
- LSCP LIFT STATION CONTROL PANEL
- MIN MINIMUM
- MSC MANUFACTURER SUPPLIED CABLE
- MTD MOUNTED
- N NEUTRAL
- NEC NATIONAL ELECTRICAL CODE
- NO NUMBER
- NTS NOT TO SCALE
- P POLE
- SPD SURGE PROTECTION DEVICE
- SS STAINLESS STEEL
- SSS SOLID STATE STARTER
- TYP TYPICAL
- V VOLTS
- VA VOLT AMPERES
- VFD VARIABLE FREQUENCY DRIVE
- W WIRE
- WP WEATHERPROOF
- W/ WITH
- φ PHASE

NOTES

1. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK INDICATED.
2. ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. EXISTING CONDITIONS OF ELECTRICAL EQUIPMENT, LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING HIS BID.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE, 2020 FLORIDA BUILDING, 2020 NATIONAL FIRE PROTECTION ASSOCIATION, AND SHALL COMPLY WITH ALL LOCAL RULES AND ORDINANCES.
4. MINIMUM WIRE SIZE SHALL BE #12 A.W.G. FOR POWER CIRCUITS.
5. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
6. ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE LATEST EDITION OF THE N.E.C. OR LOCAL CODES. ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250-122 OF THE NATIONAL ELECTRICAL CODE.
7. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
8. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/OWNER.
9. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
10. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED.
11. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF FPL.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED OF HIS WORK.
13. ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS W/ TYPE WRITTEN DIRECTORIES.
14. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
15. DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO THE APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT DIMENSIONS OF ALL EQUIPMENT.
16. *SLANTED AND SHADED TEXT* DENOTES EXISTING EQUIPMENT OR STRUCTURES. EXISTING EQUIPMENT OR STRUCTURES ARE ALSO CALLED OUT WITH THE WORD "EXISTING" PRECEDING NON-SLANTED TEXT DENOTES NEW EQUIPMENT, STRUCTURES & WORK.
17. ALL CONTROL PANELS SHALL BE UL LISTED AND MEET THE REQUIREMENTS OF ARTICLE 409 OF THE NATIONAL ELECTRICAL CODE.

ELECTRICAL SITE PLAN



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KHA PROJECT 043138041
DATE MARCH 2022
SCALE AS SHOWN
DESIGNED BY SEB
DRAWN BY SJL
CHECKED BY SEB

**SOUTH TREASURE DRIVE PUMP
STATION IMPROVEMENTS**

PREPARED FOR
NORTH BAY VILLAGE

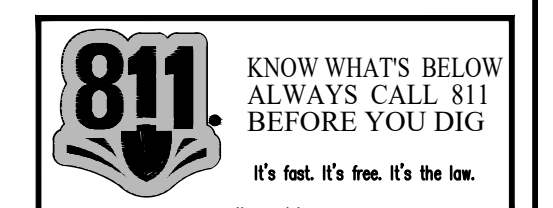
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LICENSED PROFESSIONAL STEPHEN E. BAILEY, P.E. FLORIDA LICENSE NUMBER 42461

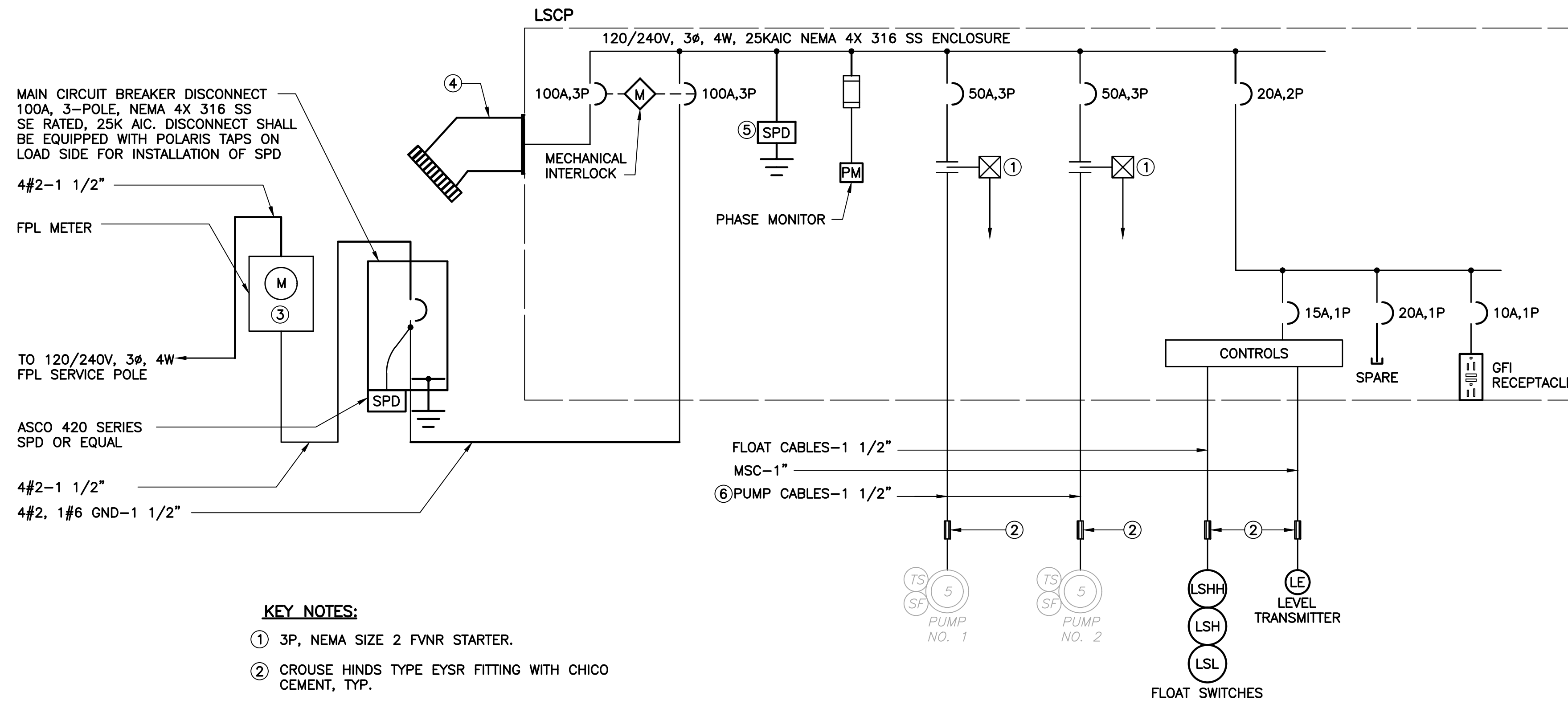
**ELECTRICAL SITE PLAN, NOTES,
SYMBOLS AND ABBREVIATIONS**

SHEET NUMBER E-02

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MAIN CIRCUIT BREAKER DISCONNECT
100A, 3-POLE, NEMA 4X 316 SS
SE RATED, 25K AIC. DISCONNECT SHALL
BE EQUIPPED WITH POLARIS TAPS ON
LOAD SIDE FOR INSTALLATION OF SPD

4#2-1 1/2"

FPL METER

TO 120/240V, 3Ø, 4W
FPL SERVICE POLE

ASCO 420 SERIES
SPD OR EQUAL

4#2-1 1/2"

4#2, 1#6 GND-1 1/2"

- KEY NOTES:**
- ① 3P, NEMA SIZE 2 FVNR STARTER.
 - ② CROUSE HINDS TYPE EYSR FITTING WITH CHICO CEMENT, TYP.
 - ③ METER CAN SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR.
 - ④ GENERATOR RECEPTACLE. 100A RUSSELL STOLL #JRSA1044FR (REVERSE SERVICE).
 - ⑤ ASCO 430 SERIES.
 - ⑥ FURNISH NEW PUMP CABLES FOR EXISTING PUMPS. CONTRACTOR TO CONFIRM REQUIRED CABLE LENGTH FROM PUMPS TO LSCP.

SINGLE LINE DIAGRAM

- GENERAL NOTES:**
- A. EXISTING LIFT STATION SHALL REMAIN OPERATIONAL DURING THE DURATION OF THE WORK. PROVIDE STANDBY POWER, BYPASS PUMPING, AND TEMPORARY UTILITY POWER AS REQUIRED TO COMPLETE THE WORK.
 - B. SUBMIT PLANNED SEQUENCE OF CONSTRUCTION TO ENGINEER PRIOR TO COMMENCING THE WORK.
 - C. TRENCHING FOR RACEWAYS BETWEEN WET WELL AND EQUIPMENT RACK SHALL BE HAND-DUG. SAW CUT PAVED AREAS, AS REQUIRED.
 - D. REPLACE EXISTING FLOAT SWITCHES.

LOAD TABULATION
SERVICE VOLTAGE: 120/240V, 3Ø, 4W

DESCRIPTION	LOAD	AMPACITY
① EXISTING PUMPS	2 @ 5 HP EACH	= 38.00 AMPS
MISCELLANEOUS	1 KVA	= 4.16 AMPS
	CONNECTED LOAD	= 42.16 AMPS
② MINIMUM SERVICE ENTRANCE = 42.16 AMPS + (0.25)(19.00) = 46.91 AMPS		

NOTES:

- ① AMPACITIES PER PUMP MFR. DATASHEETS.
- ② SERVICE ENTRANCE MINIMUM SIZE AS PER ARTICLE 230 OF THE NATIONAL ELECTRICAL CODE.
- ③ EXISTING PUMP IS KEEN K4RN SERIES PUMP.

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**SOUTH TREASURE DRIVE PUMP
STATION IMPROVEMENTS**

PREPARED FOR
NORTH BAY VILLAGE

NORTH BAY VILLAGE FLORIDA

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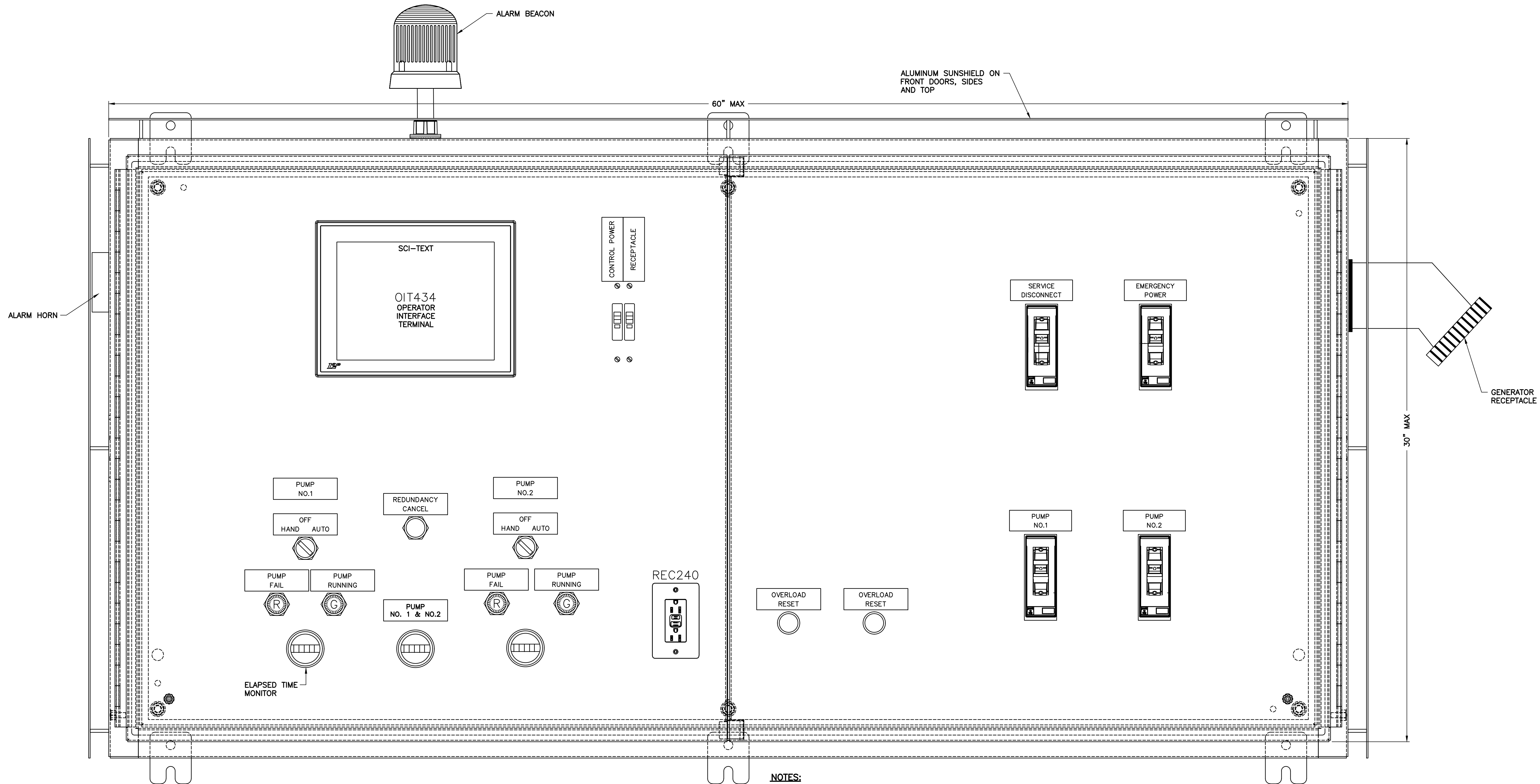
SINGLE LINE DIAGRAM

SHEET NUMBER	E-03
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NOTES:
 1. ILLUSTRATION SHOWN WITH FRONT DOORS OPEN.

ENCLOSURE LAYOUT
 N.T.S.

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KHA PROJECT	043138041
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SOUTH TREASURE DRIVE PUMP STATION IMPROVEMENTS
 PREPARED FOR
NORTH BAY VILLAGE
 NORTH BAY VILLAGE FLORIDA

LICENSED PROFESSIONAL
 STEPHEN E. BAILEY
 FLORIDA LICENSE NUMBER
 42461
 DATE: 05/12/20

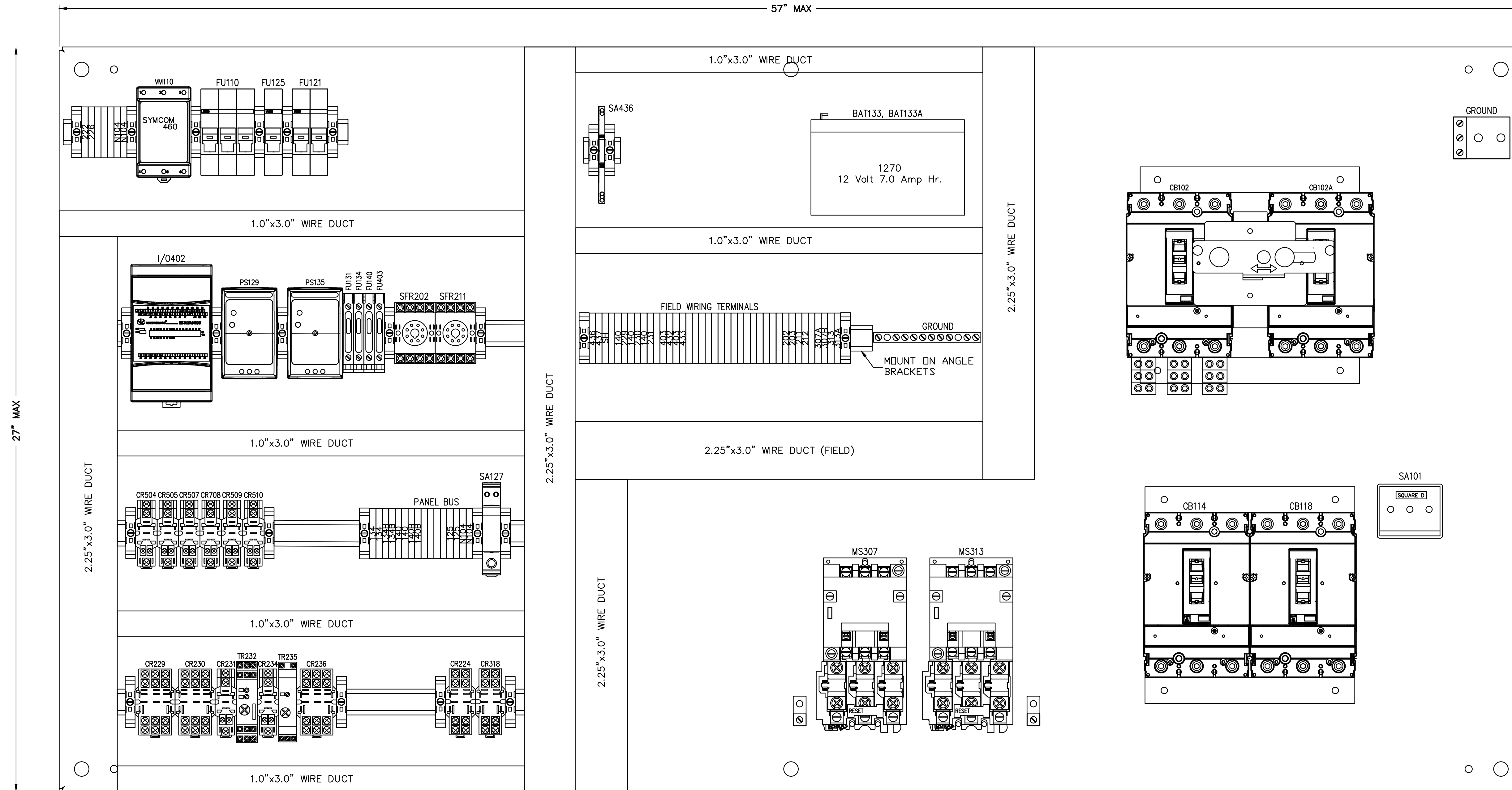
CONTROL PANEL DETAILS

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CONTROL PANEL COMPONENT LAYOUT
SCALE: N.T.S.

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DATE May 2020
SCALE AS SHOWN
DESIGNED BY SEB
DRAWN BY SJM
CHECKED BY SEB

**SOUTH TREASURE DRIVE PUMP
STATION IMPROVEMENTS**

PREPARED FOR
NORTH BAY VILLAGE

FLORIDA

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**CONTROL PANEL COMPONENT
LAYOUT**

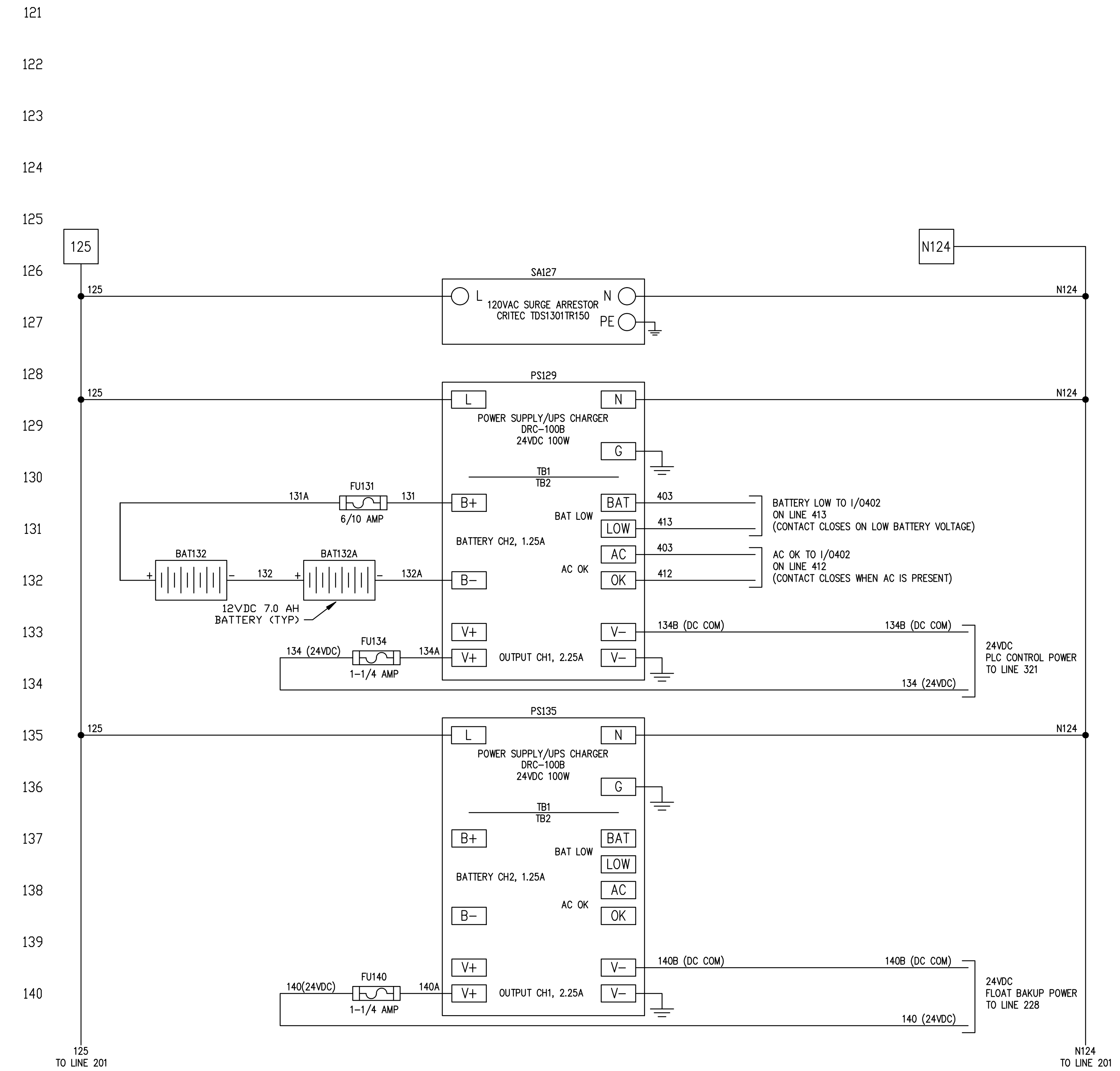
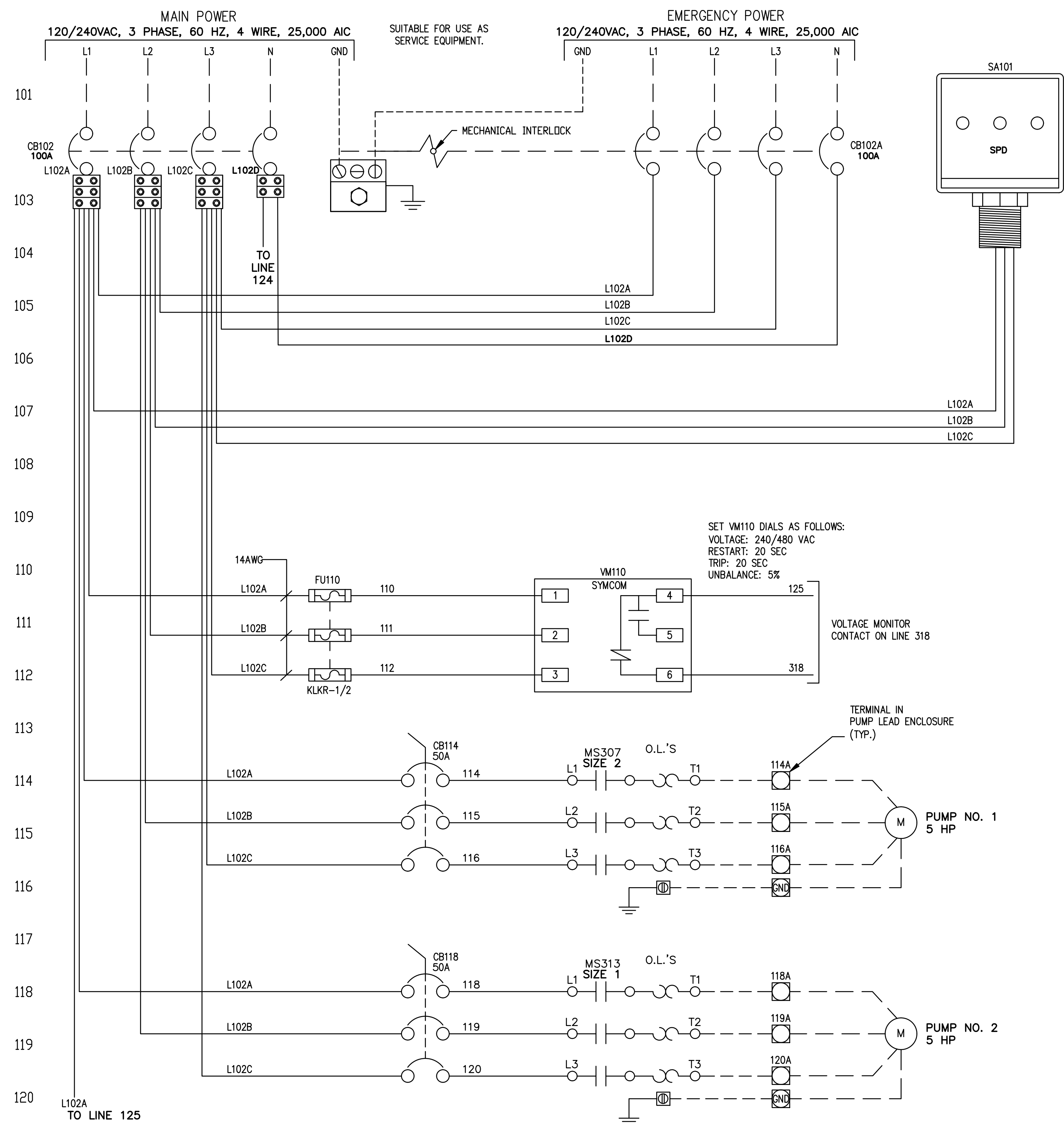
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KHA PROJECT 043138041
DATE May 2020
SCALE AS SHOWN
DESIGNED BY SEB
DRAWN BY SJM
CHECKED BY SEB

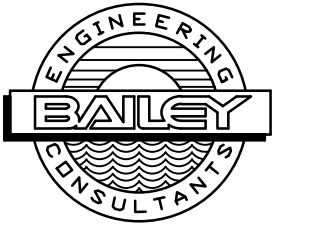
**SOUTH TREASURE DRIVE PUMP
STATION IMPROVEMENTS**
 PREPARED FOR
NORTH BAY VILLAGE
 NORTH BAY VILLAGE
 FLORIDA

LICENSED PROFESSIONAL
 STEPHEN E. BAILEY
 FLORIDA LICENSE NUMBER
 42461
 DATE: 05/12/20

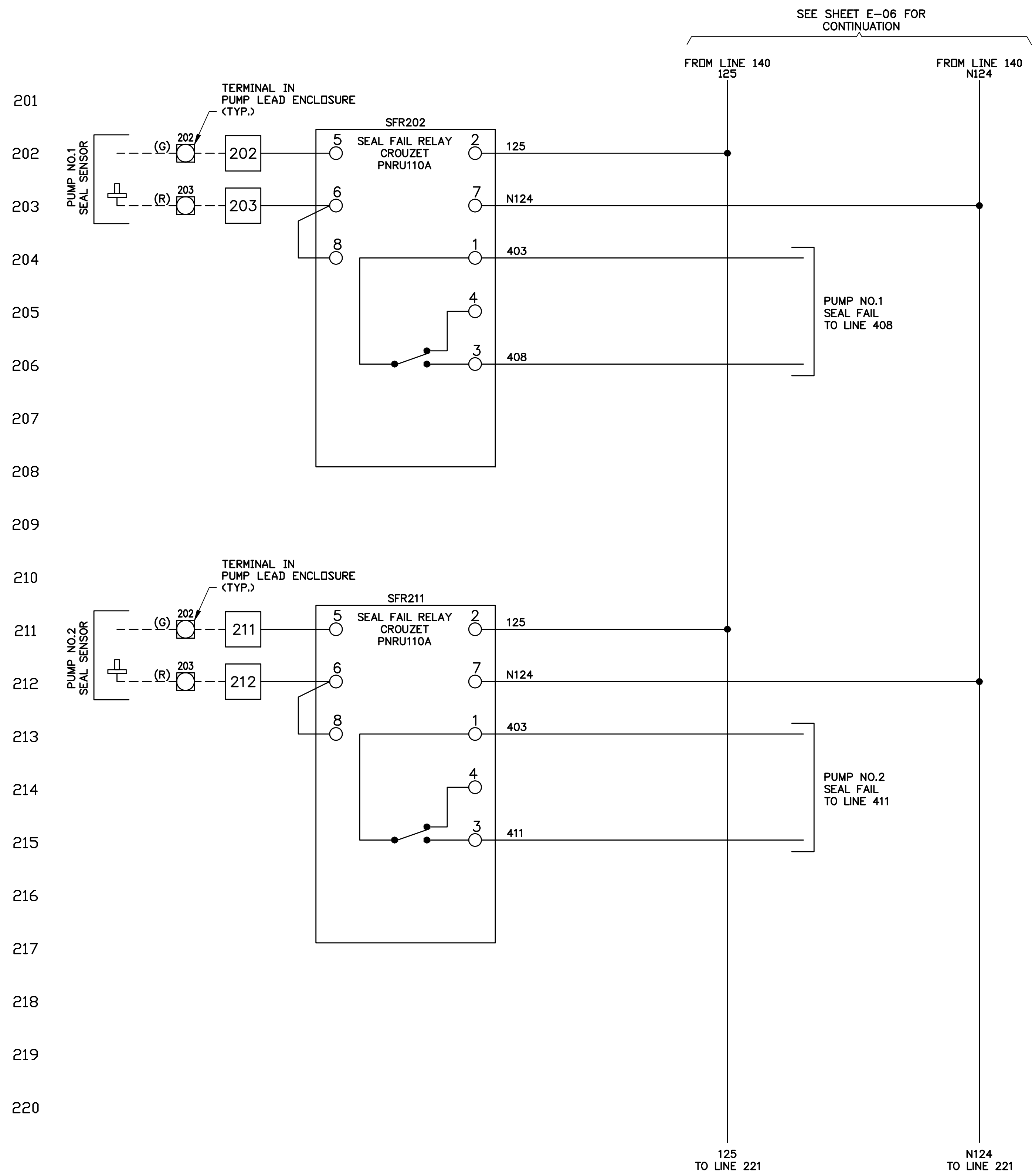
**CONTROL PANEL ELEMENTARY
DIAGRAM - SHEET 1**

SHEET NUMBER
E-06

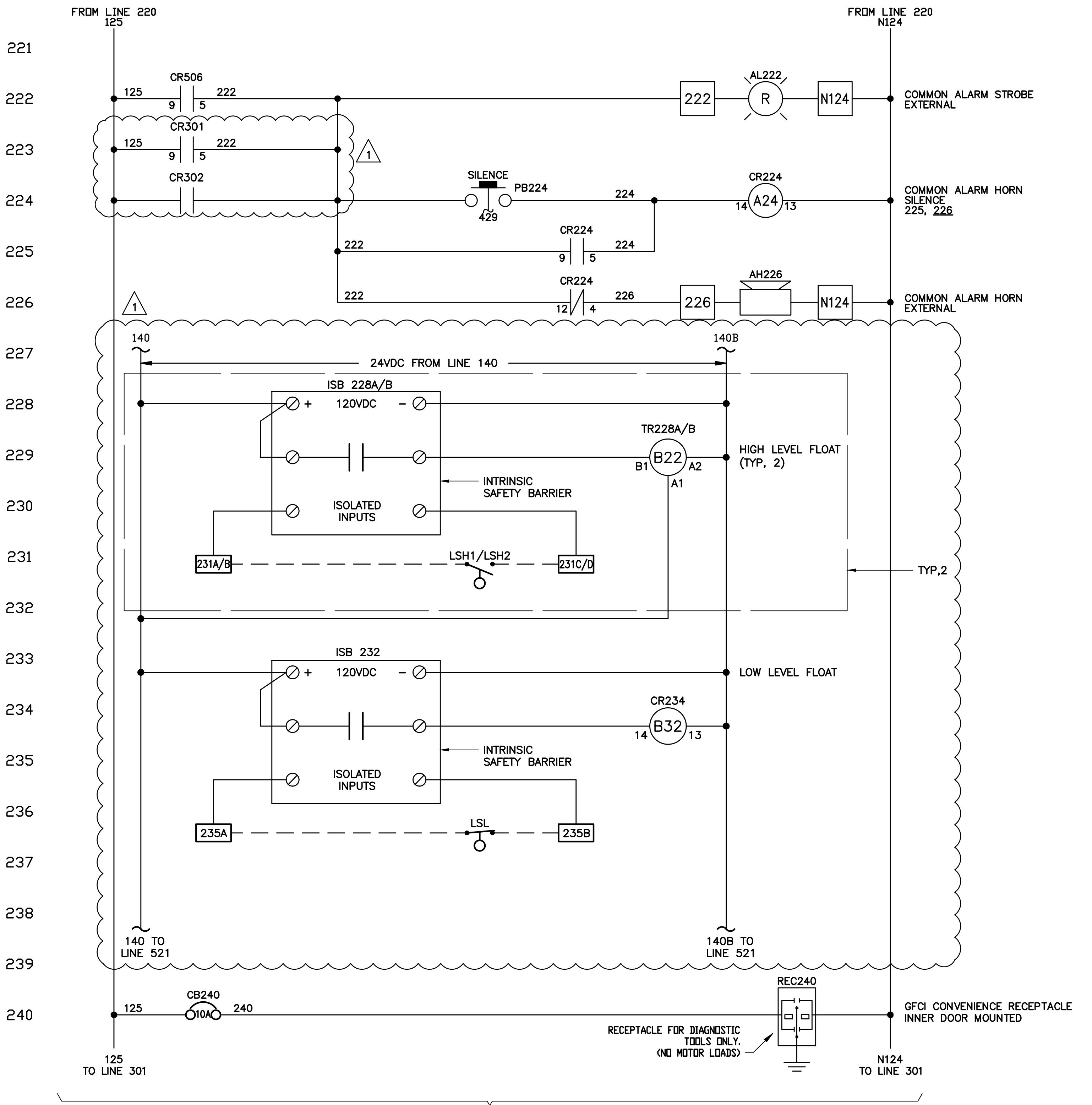
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KHA PROJECT 043138041
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 SCALE AS SHOWN
 DESIGNED BY SEB
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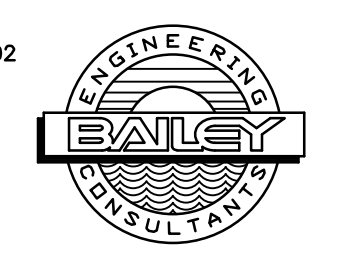
SOUTH TREASURE DRIVE PUMP STATION IMPROVEMENTS
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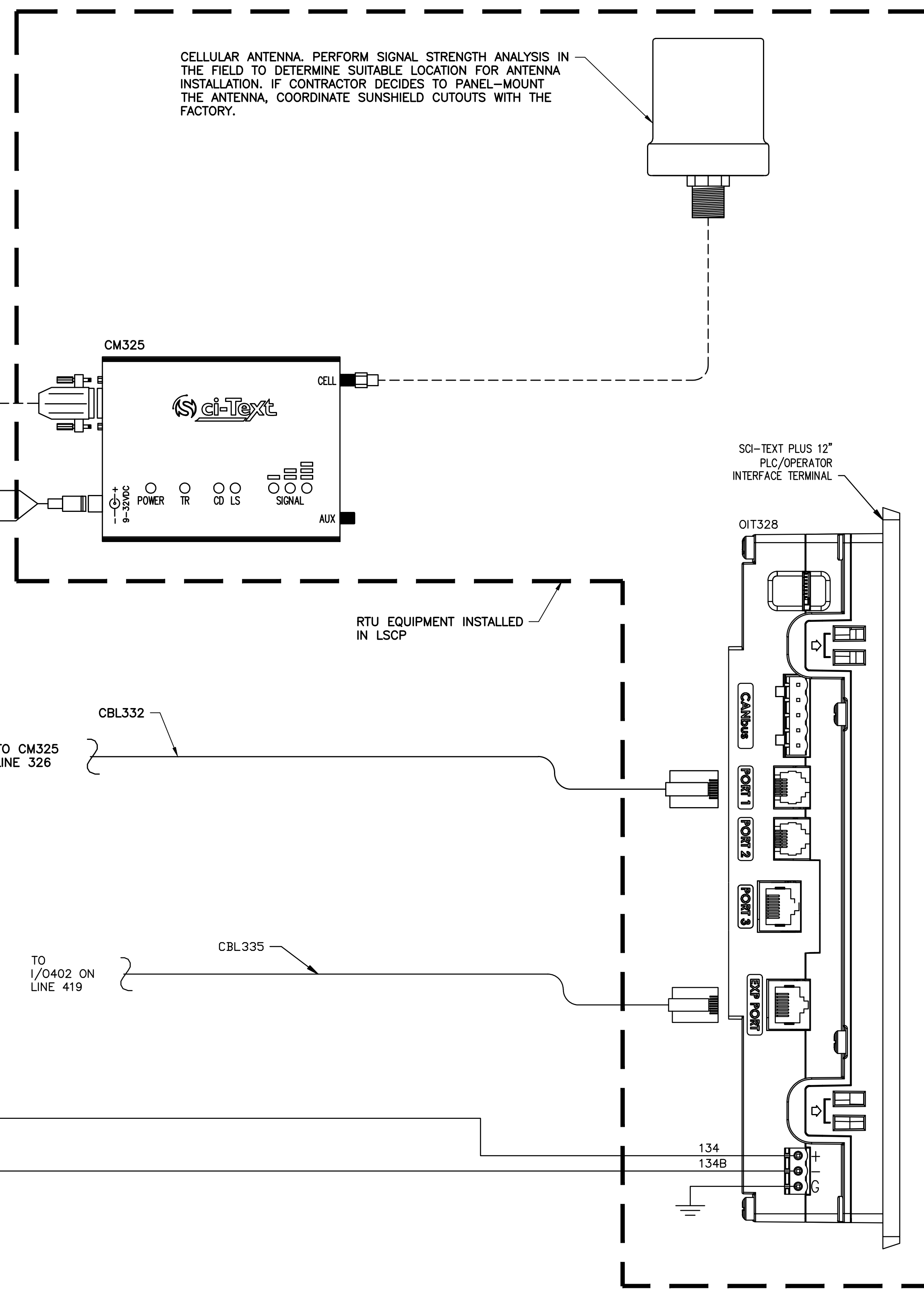
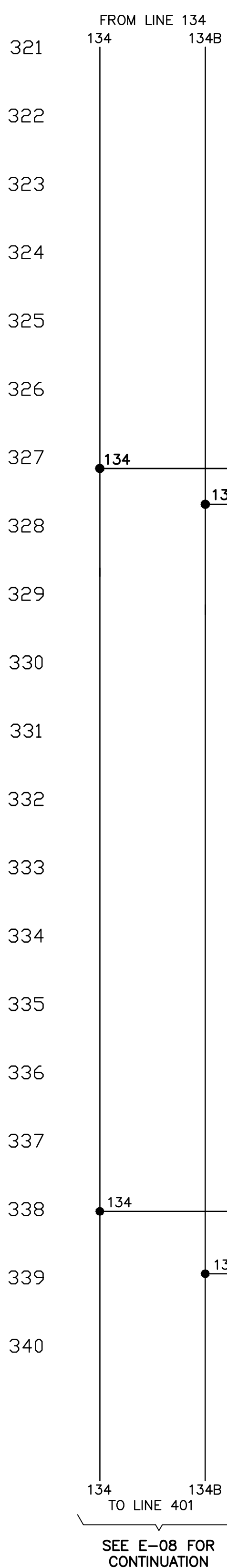
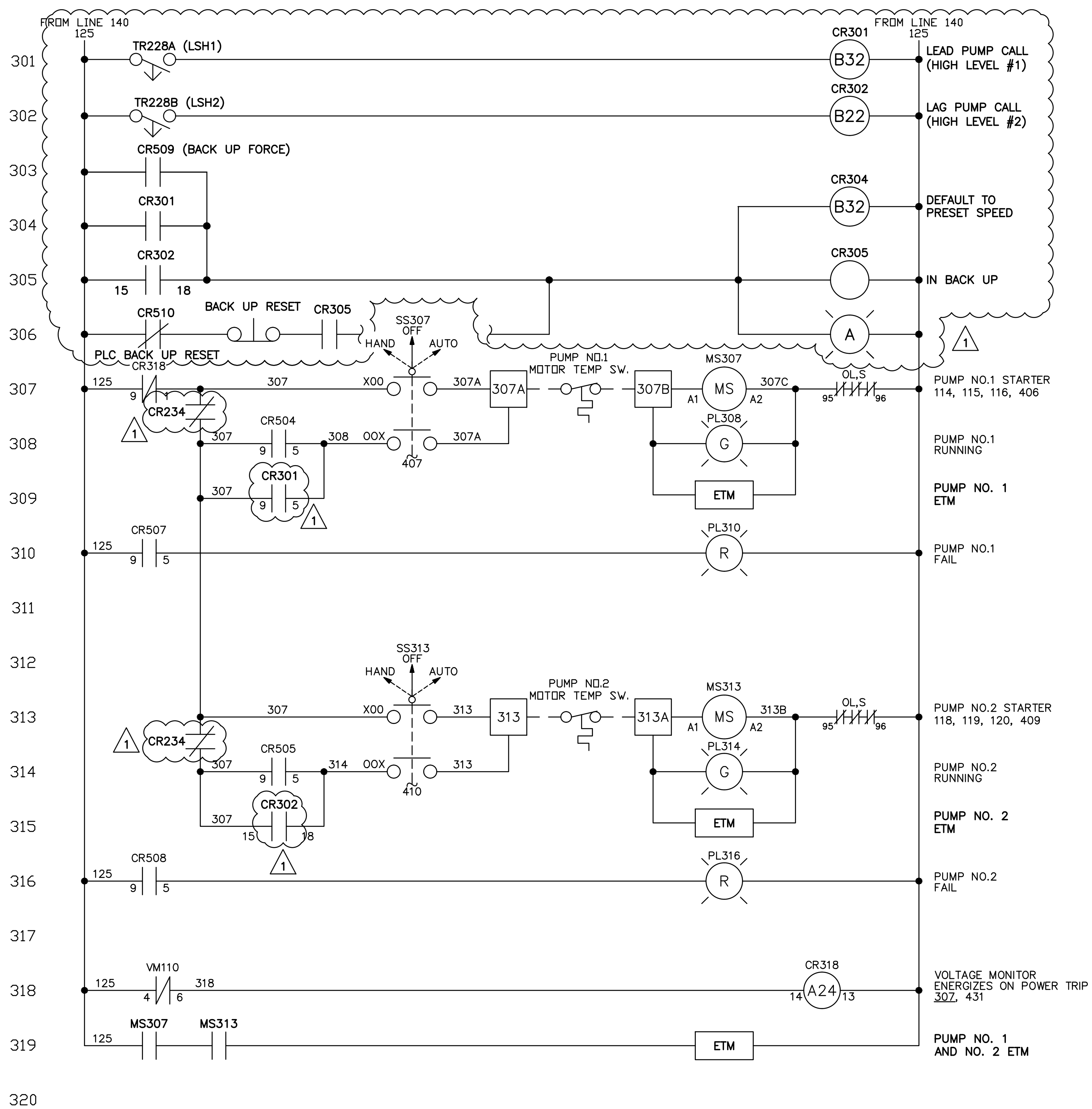
CONTROL PANEL ELEMENTARY DIAGRAM - SHEET 2

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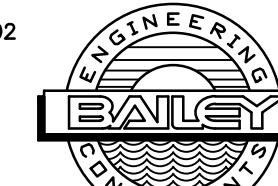
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SEE SHEET E-06 FOR CONTINUATION



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STATION IMPROVEMENTS**
PREPARED FOR
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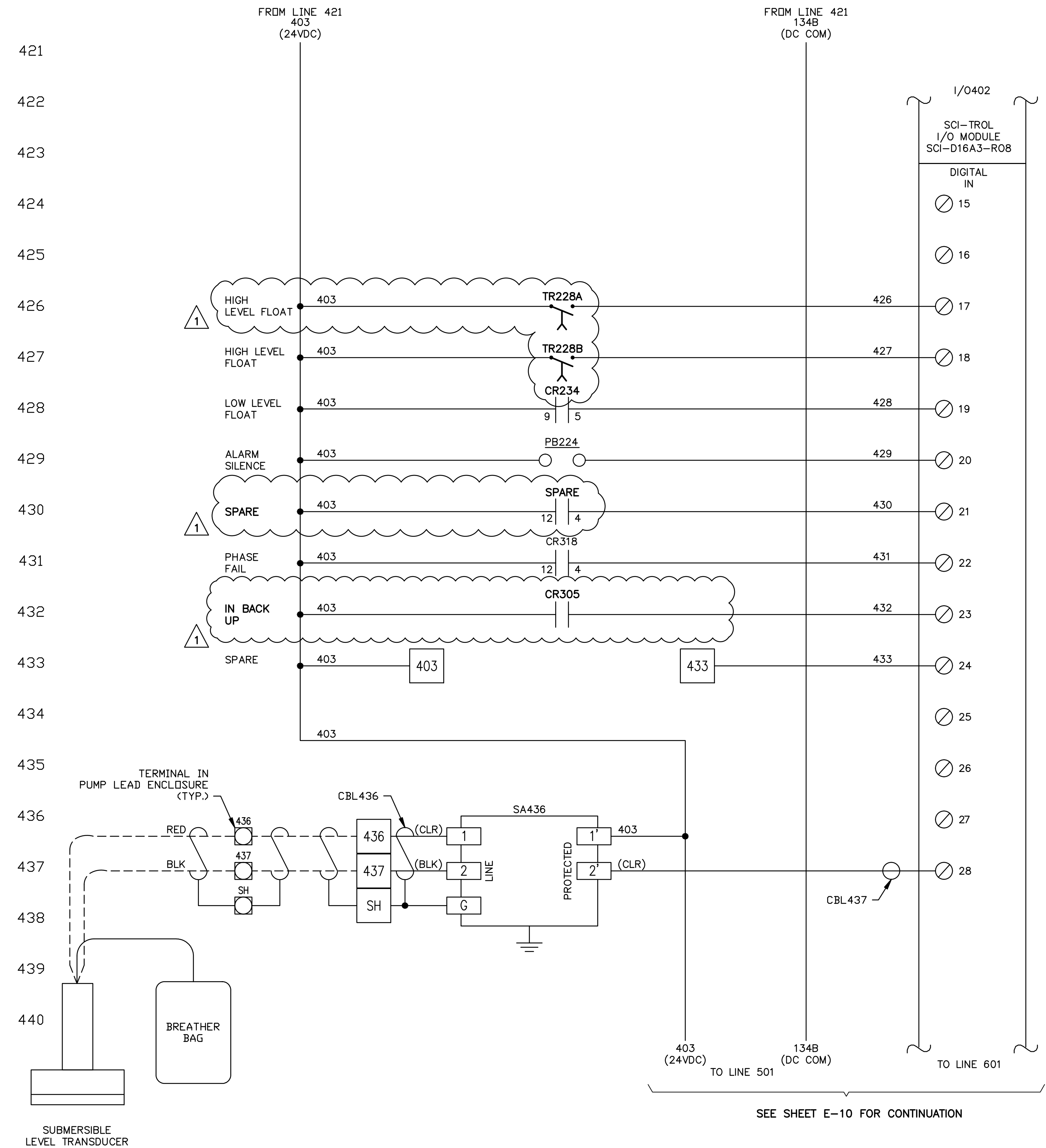
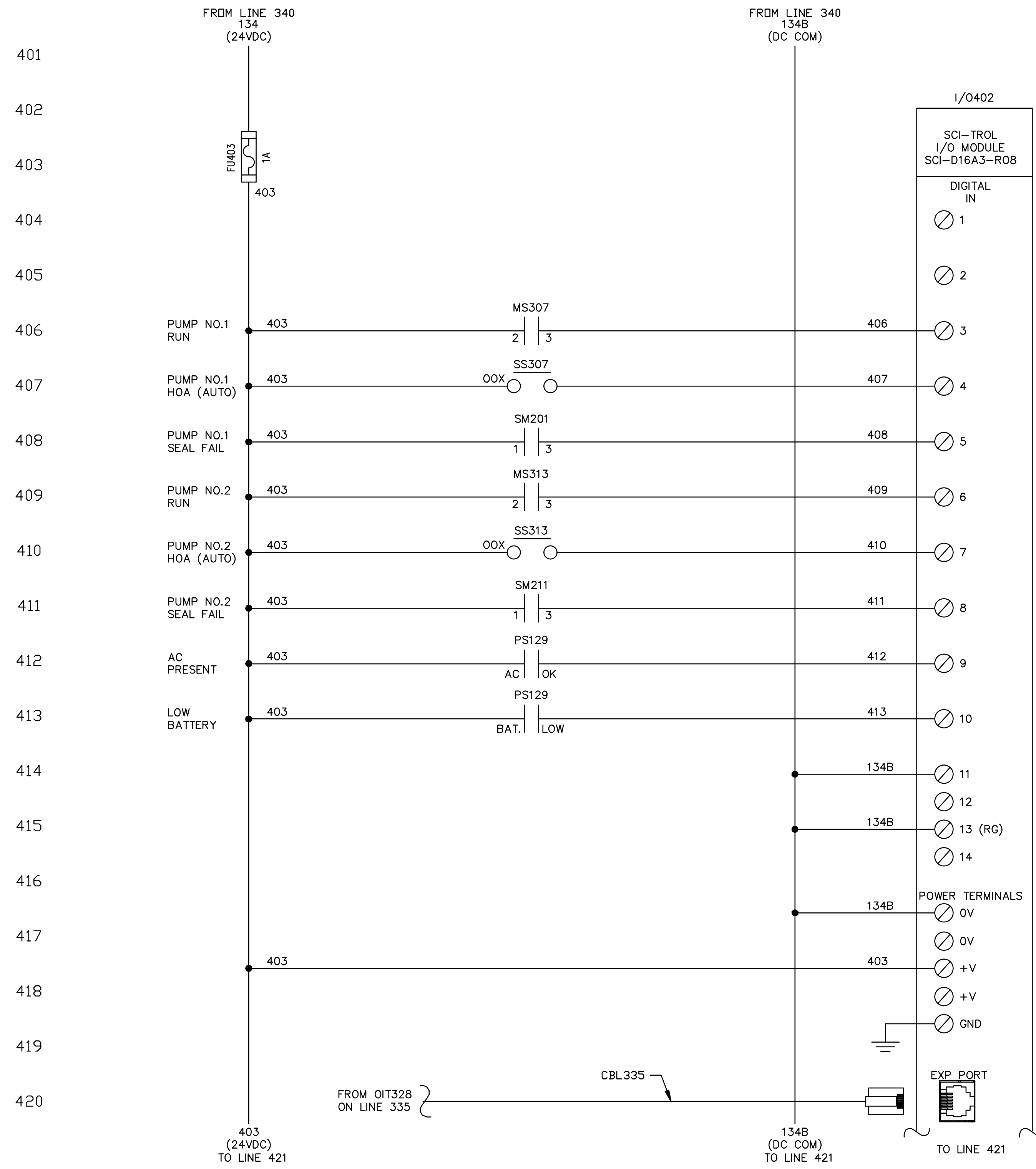
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**CONTROL PANEL ELEMENTARY
DIAGRAM - SHEET 3**

SHEET NUMBER
E-08

SEE SHEET E-08 FOR CONTINUATION



SEE SHEET E-10 FOR CONTINUATION

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SOUTH TREASURE DRIVE PUMP STATION IMPROVEMENTS

PREPARED FOR
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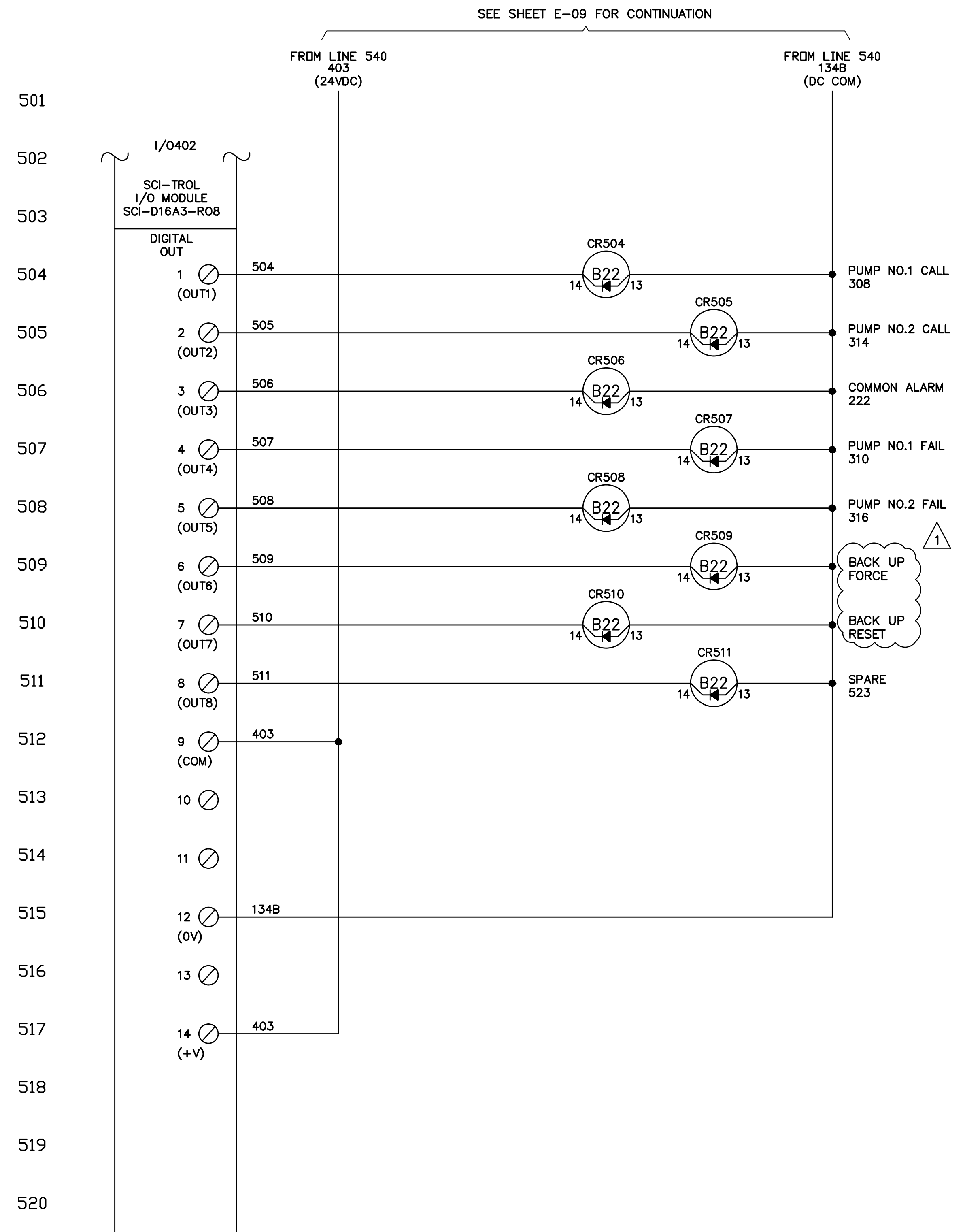
CONTROL PANEL ELEMENTARY DIAGRAM - SHEET 4

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**SOUTH TREASURE DRIVE PUMP
STATION IMPROVEMENTS**

PREPARED FOR
NORTH BAY VILLAGE

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**CONTROL PANEL ELEMENTARY
DIAGRAM - SHEET 5**

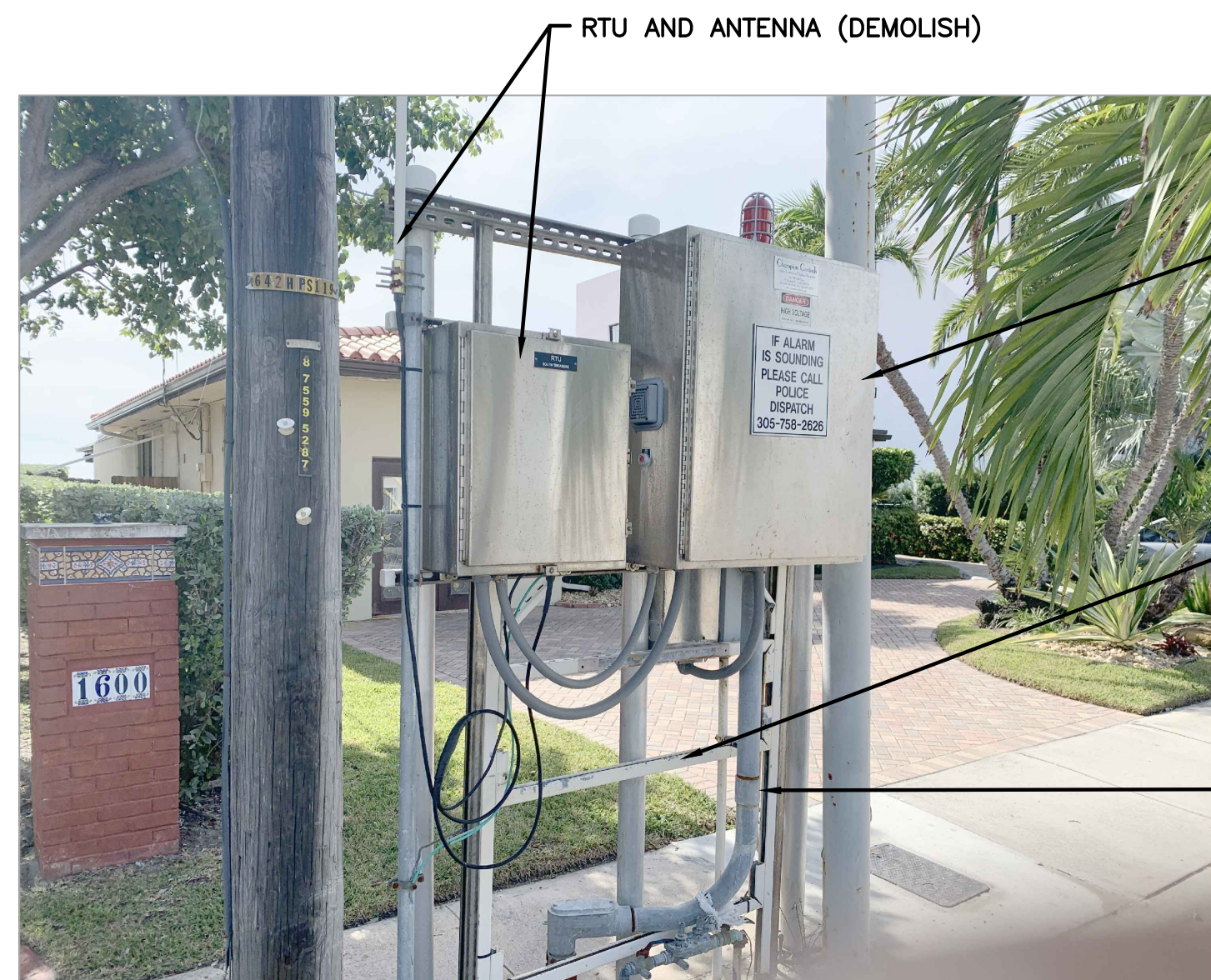
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EQUIPMENT RACK – FRONT
N.T.S

RTU AND ANTENNA (DEMOLISH)

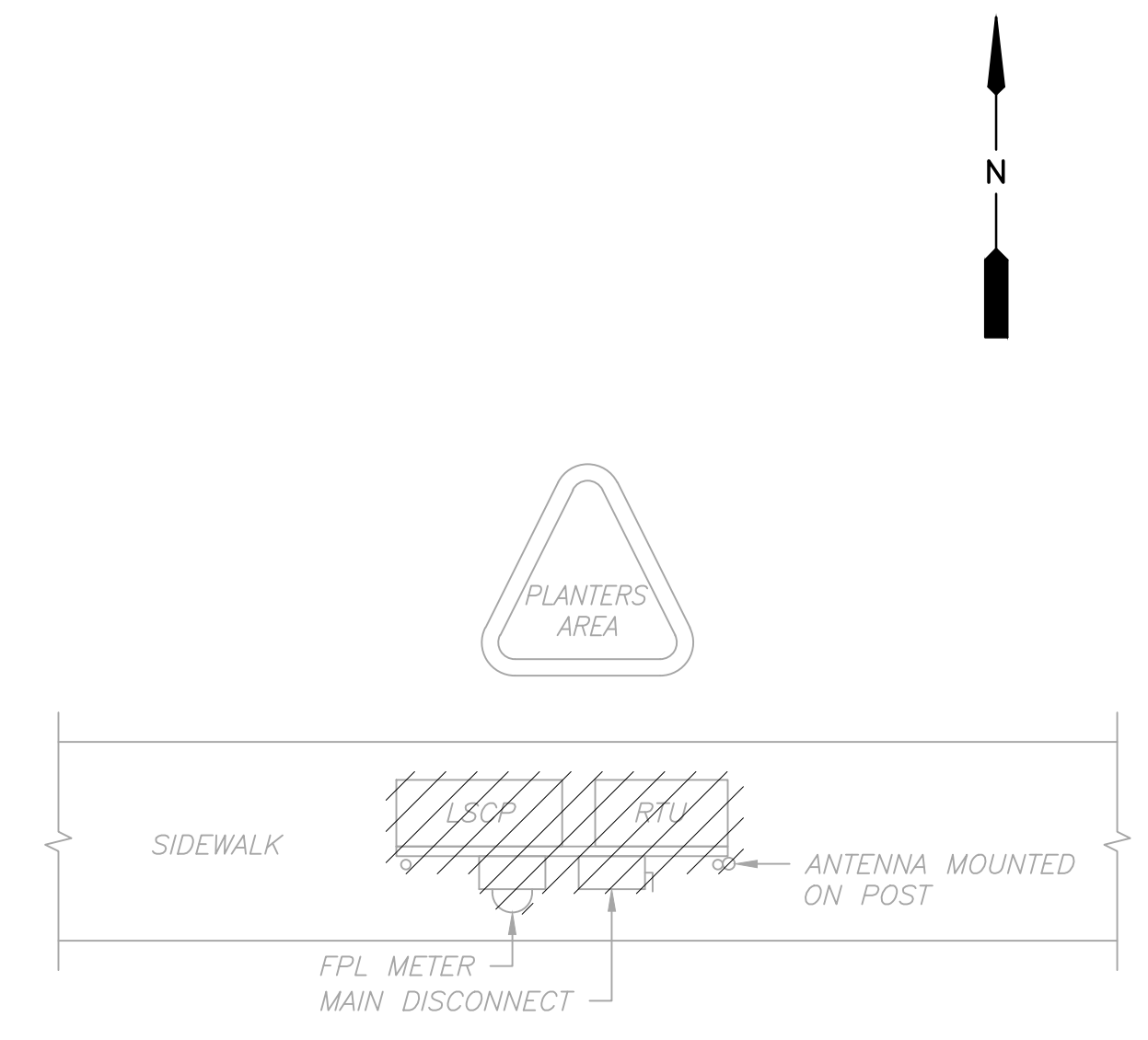
PUMP CONTROL PANEL (REMOVE AND REPLACE)

STRUT CHANNEL FRAMING SYSTEM (REMOVE AND REPLACE)

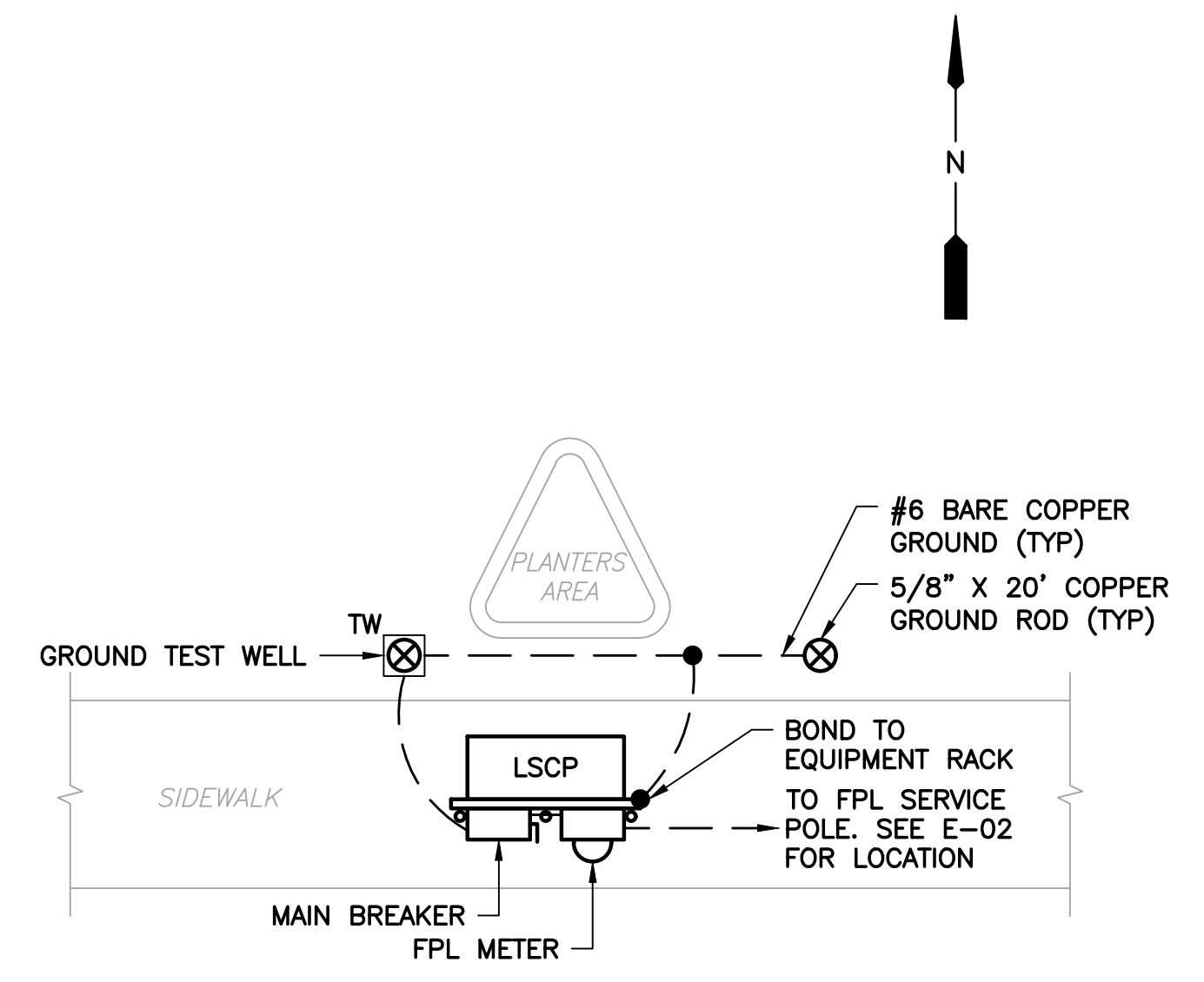
CONDUIT FROM WET WELL TO BE ABANDONED AND CUT TO THE POINT OF CONCEALMENT

NOTES:

- A. EXISTING LIFT STATION SHALL REMAIN OPERATIONAL DURING THE DURATION OF THE WORK. PROVIDE STANDBY POWER, BYPASS PUMPING, AND TEMPORARY UTILITY POWER AS REQUIRED TO COMPLETE THE WORK.
- B. SUBMIT PLANNED SEQUENCE OF CONSTRUCTION TO ENGINEER PRIOR TO COMMENCING THE WORK.
- C. TRENCHING FOR RACEWAYS BETWEEN WET WELL AND EQUIPMENT RACK SHALL BE HAND-DUG. SAW CUT PAVED AREAS, AS REQUIRED.
- D. FURNISH AND INSTALL NEW PUMP CABLES TO EXISTING MOTORS.



POWER PLAN FOR STEPS 1 & 2
NTS



POWER PLAN FOR STEPS 3, 4, 5 & 6
NTS

RECOMMENDED SEQUENCE OF CONSTRUCTION:

1. DISCONNECT AND REMOVE EXISTING LSCP, METER, ANTENNA, DISCONNECT SWITCH, RTU AND ALL ASSOCIATED MOUNTING HARDWARE. REMOVE ASSOCIATED CONDUCTORS BACK TO THE SOURCE. ABANDON EXISTING CONDUITS AND CUT TO THE POINT OF CONCEALMENT.
2. PROVIDE STANDBY POWER BYPASS PUMPING, AND TEMPORARY UTILITY POWER AS REQUIRED DURING CONSTRUCTION
3. FURNISH AND INSTALL NEW EQUIPMENT RACK AS SHOWN. CONNECT NEW FPL METER, MAIN DISCONNECT SWITCH AND LSCP.
4. INSTALL NEW SERVICE CONDUIT AND CONDUCTORS FROM EXISTING FPL POLE MOUNTED TRANSFORMERS TO NEW FPL METER.
5. INSTALL NEW CONDUIT FROM WET WELL TO NEW CONTROL PANEL. CONNECT NEW LEVEL INSTRUMENTATION AND EXISTING PUMPS.
6. ENERGIZE NEW EQUIPMENT.



EQUIPMENT RACK – REAR
N.T.S

RACK SUPPORT POST (TYP, 3) REPLACE AS NEEDED, TO MEET PANEL ELEVATION REQUIREMENTS

PUMP CONTROL PANEL (REMOVE AND REPLACE)

RTU (DEMOLISH)

MAIN DISCONNECT (REMOVE AND REPLACE)

EXISTING FPL UTILITY METER #KJ45939 (REMOVE AND REPLACE)

STRUT CHANNEL FRAMING SYSTEM (REMOVE AND REPLACE)

EXISTING GROUNDING SYSTEM TO BE REPLACED

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KHA PROJECT	043138041
DATE	May 2020
SCALE	AS SHOWN
DESIGNED BY	SEB
DRAWN BY	SJL
CHECKED BY	SEB

SOUTH TREASURE DRIVE PUMP STATION IMPROVEMENTS

PREPARED FOR
NORTH BAY VILLAGE

NORTH BAY VILLAGE FLORIDA

LICENSED PROFESSIONAL

STEPHEN E. BAILEY

FLORIDA LICENSE NUMBER
42461

DATE: 05/12/20

PICTURES AND ANNOTATIONS

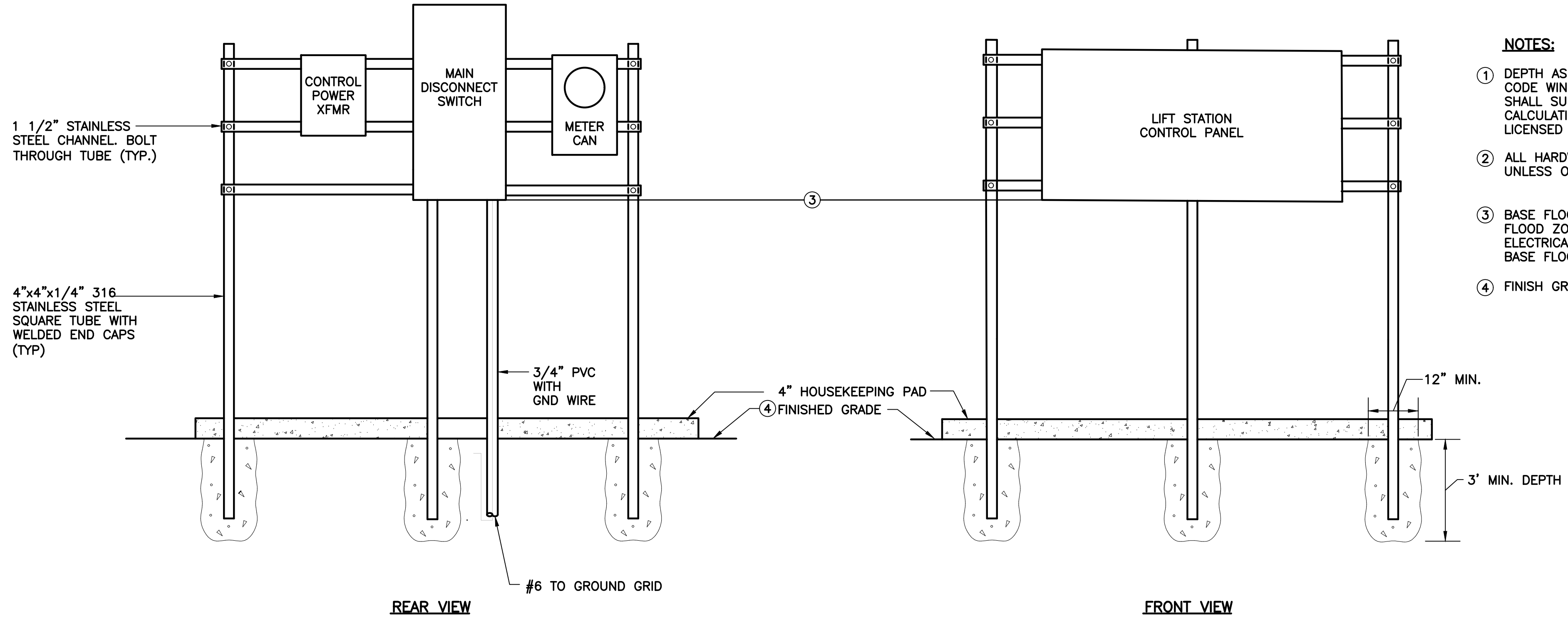
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E-11

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- NOTES:**
- ① DEPTH AS REQUIRED TO MEET FLORIDA BUILDING CODE WIND LOAD REQUIREMENTS. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED WIND LOAD CALCULATIONS FROM A STRUCTURAL ENGINEER LICENSED IN THE STATE OF FLORIDA.
 - ② ALL HARDWARE SHALL BE 316 STAINLESS STEEL UNLESS OTHERWISE NOTED.
 - ③ BASE FLOOD ELEVATION IS 8'-0" NGVD 29, FLOOD ZONE AE. INSTALL BOTTOM OF ALL ELECTRICAL EQUIPMENT 12 INCHES CLEAR OF BASE FLOOD ELEVATION.
 - ④ FINISH GRADE ELEVATION IS 2'-0".

ELECTRICAL EQUIPMENT RACK FRONT/REAR VIEW ELEVATION
N.T.S.

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KHA PROJECT	043138041
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LICENSED PROFESSIONAL
STEPHEN E. BAILEY
FLORIDA LICENSE NUMBER
42461
DATE: 05/12/20

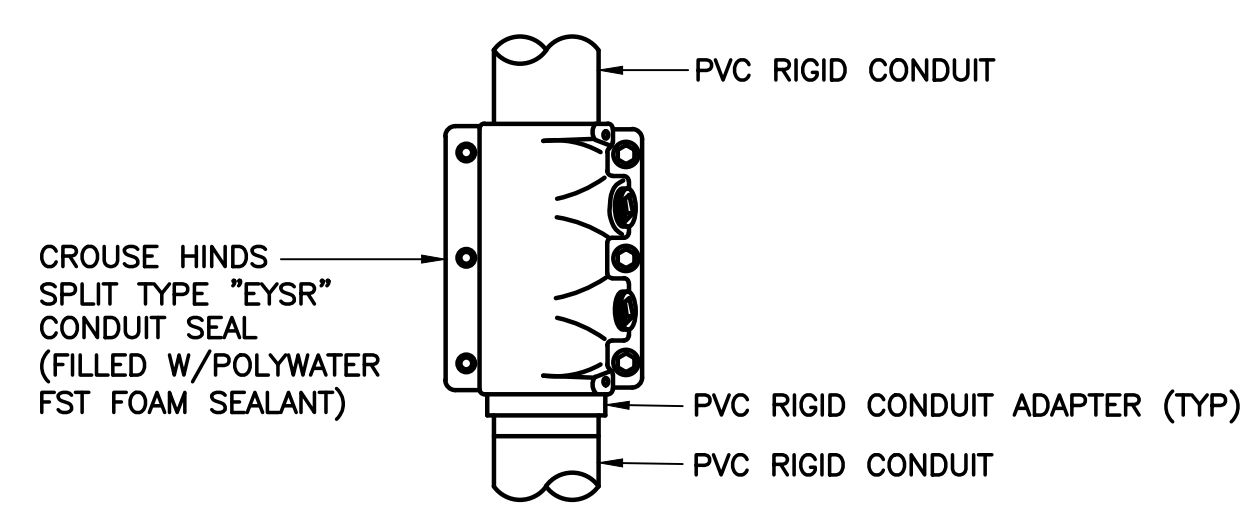
ELECTRICAL DETAILS - 1

SHEET NUMBER
E-12

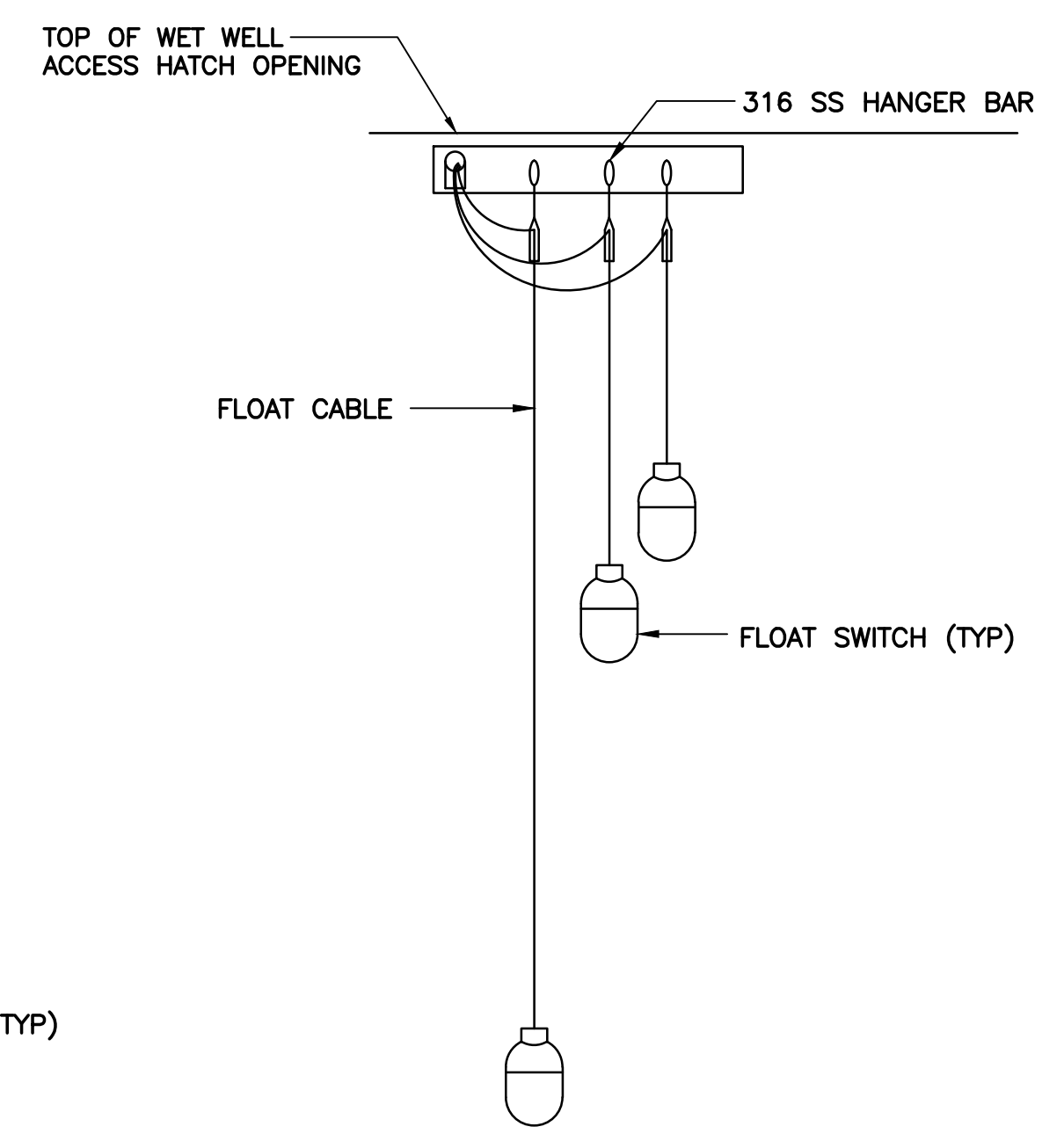
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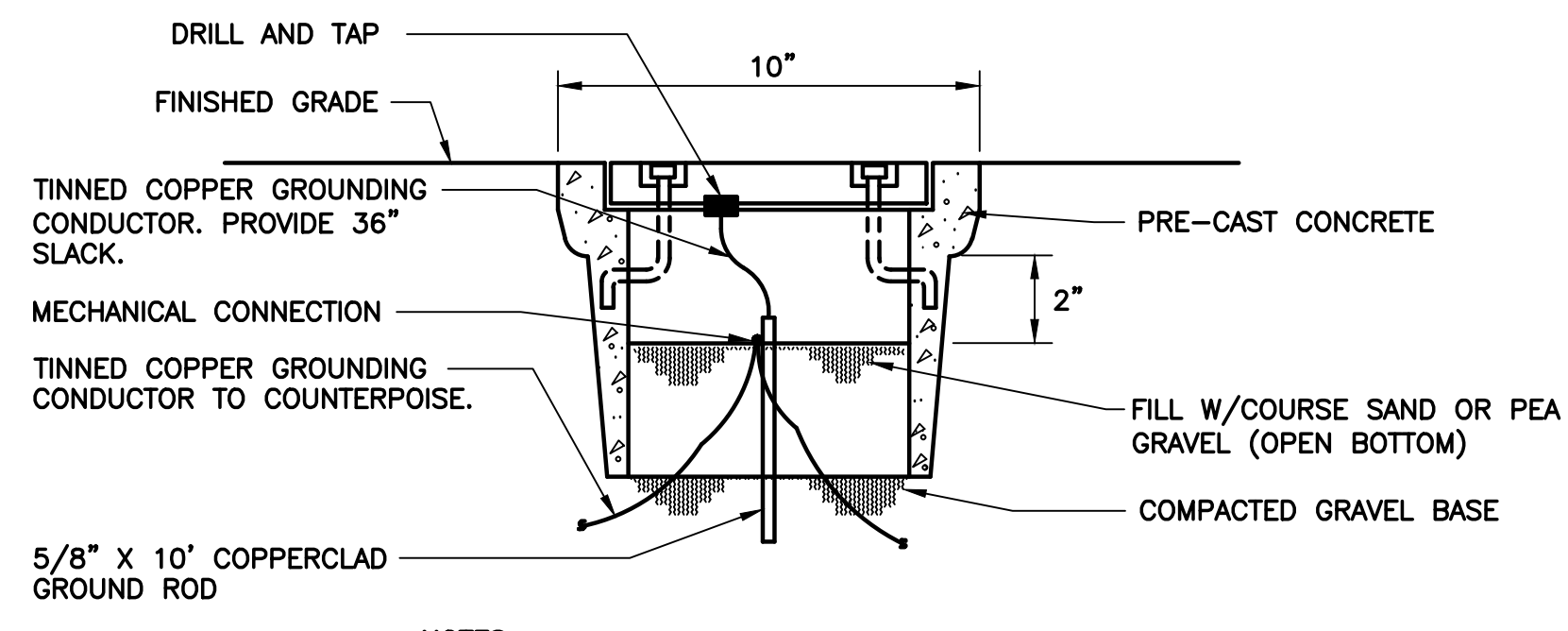
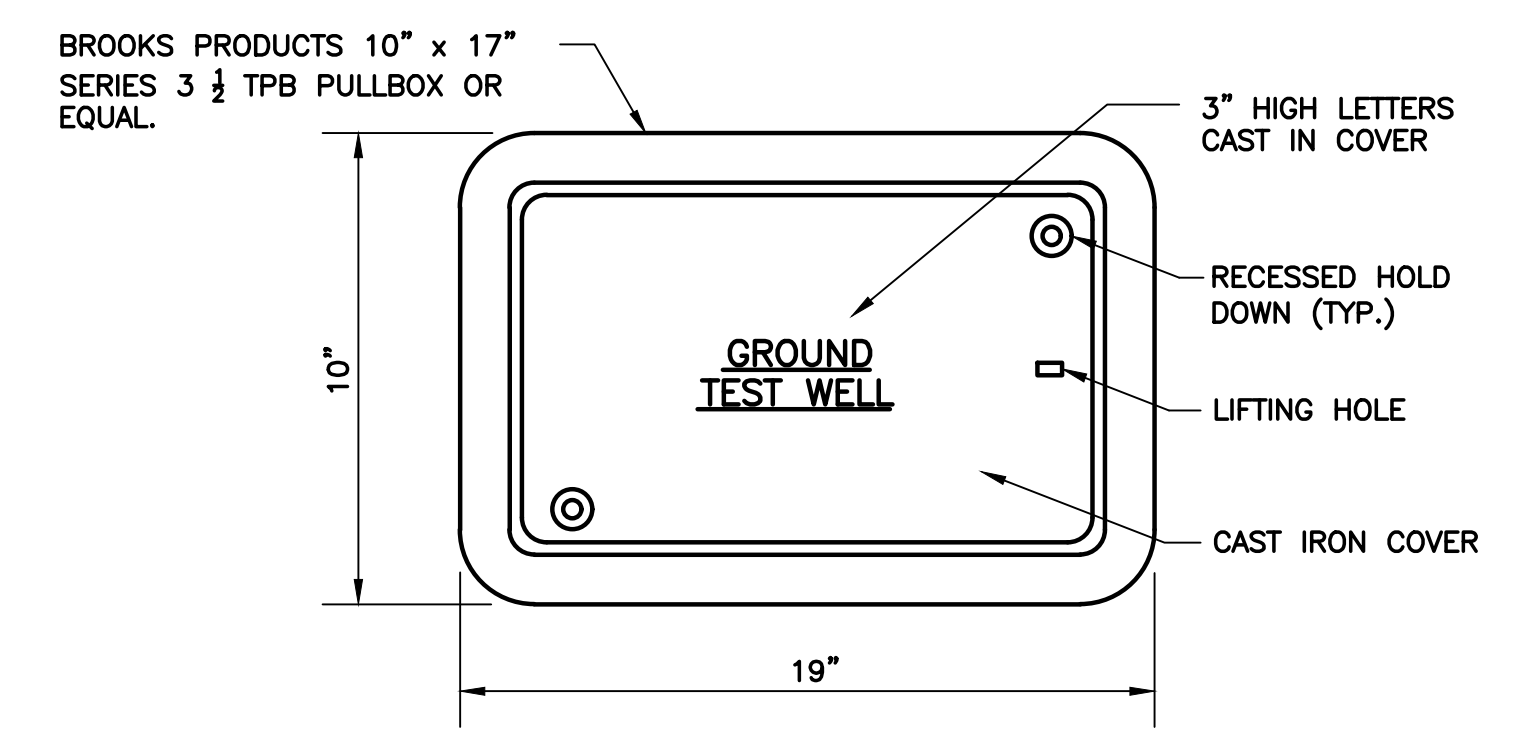
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SEAL-OFF FITTING DETAIL
SCALE: N.T.S.

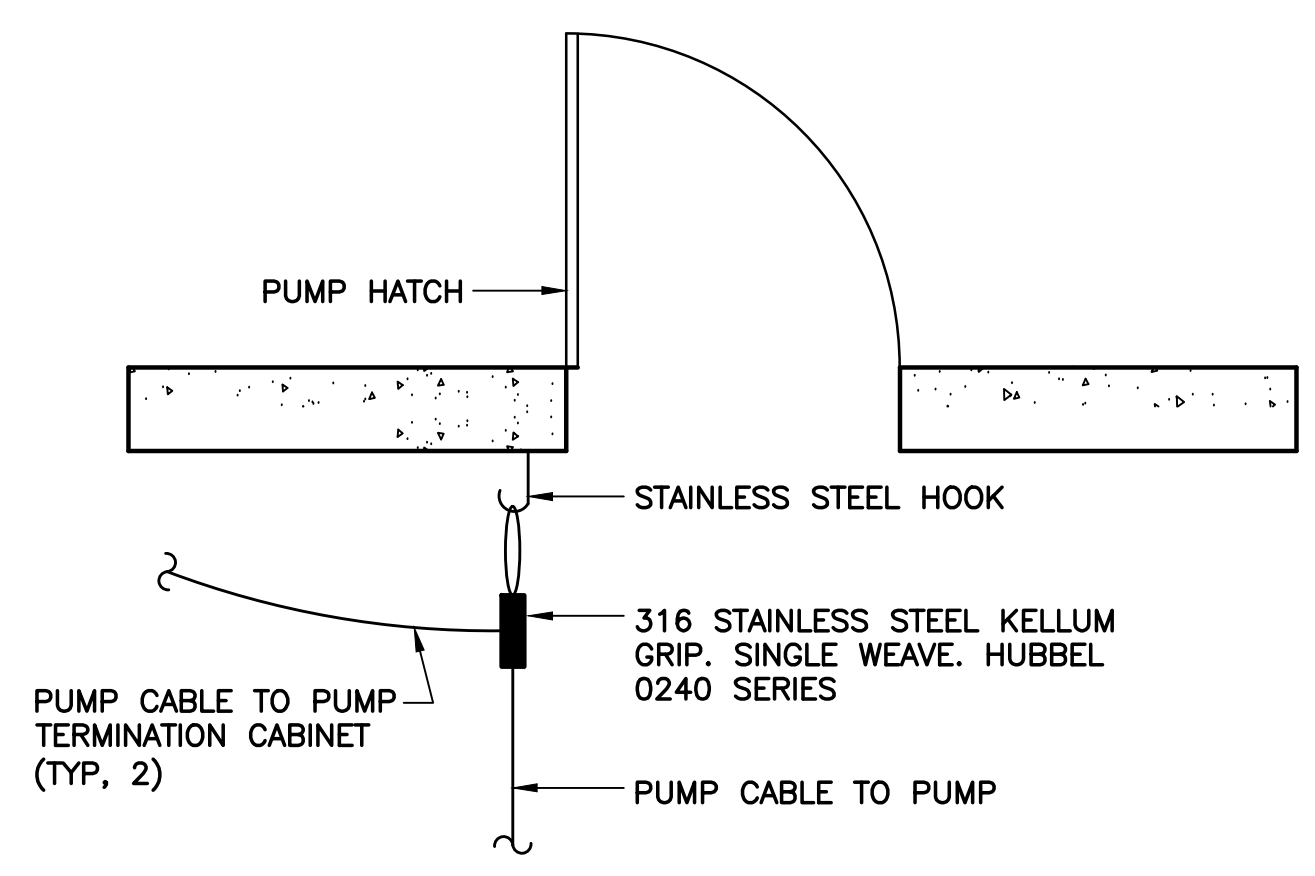


TYPICAL LEVEL SWITCH MOUNTING DETAIL
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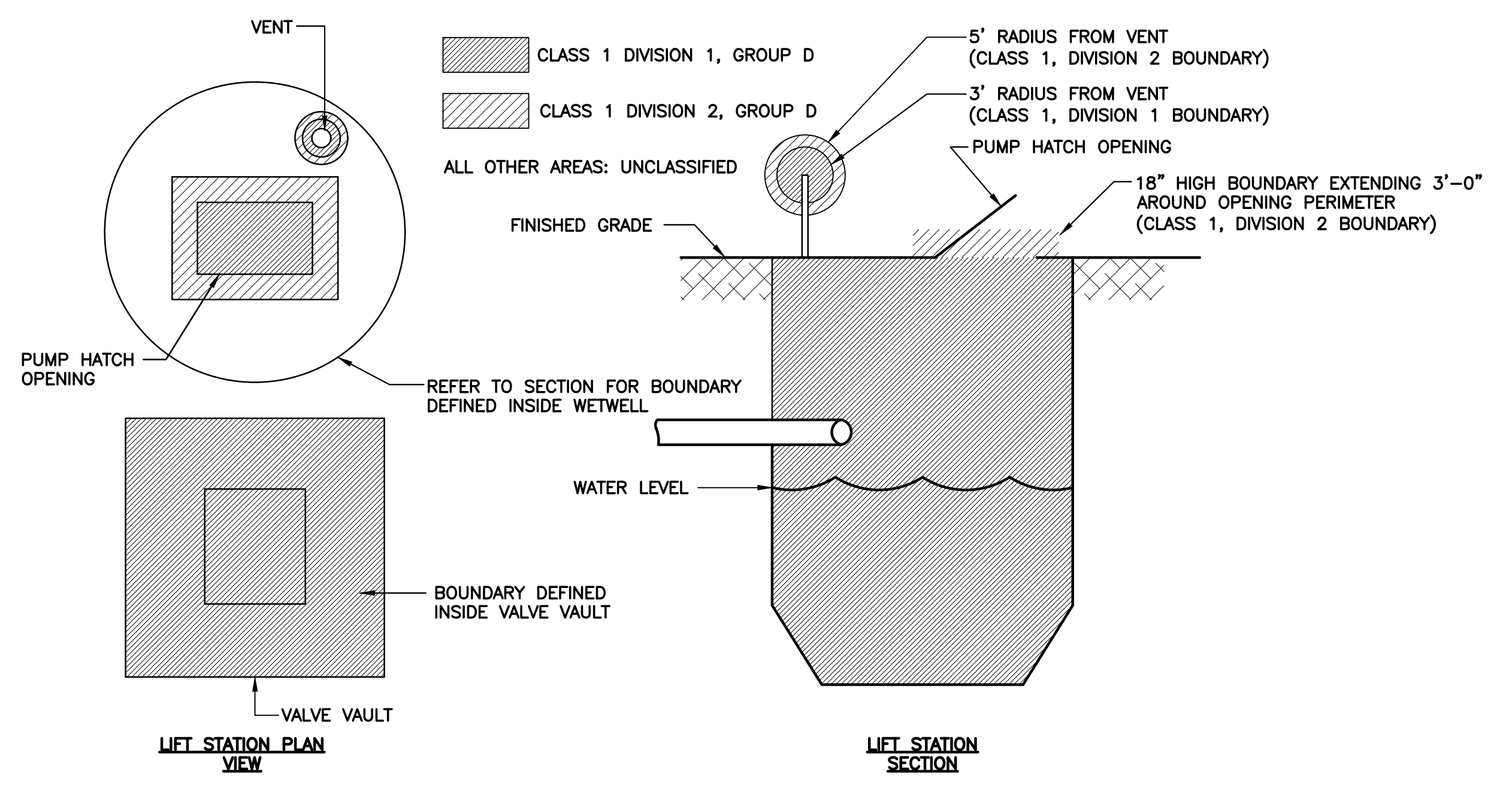


NOTES:
1. TEST WELL AND COVER SHALL BE H-20 RATED.

TYPICAL GROUND TEST WELL
SCALE: N.T.S.



TYPICAL PUMP CABLE MOUNTING DETAIL
SCALE: N.T.S.



HAZARDOUS AREA CLASSIFICATION
SCALE: N.T.S.

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DRAWN BY S.JL
CHECKED BY SEB

SOUTH TREASURE DRIVE PUMP STATION IMPROVEMENTS
PREPARED FOR
NORTH BAY VILLAGE
NORTH BAY VILLAGE
FLORIDA

LICENSED PROFESSIONAL STEPHEN E. BAILEY FLORIDA LICENSE NUMBER 42461 DATE: 05/12/20

ELECTRICAL DETAILS - 2

SHEET NUMBER E-13

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