

# S Y M B O L S

## PLAN

## ABBREVIATIONS

	CONCEALED CONDUIT, EMBEDDED IN CONCRETE, TRENCH OR DUCTBANK
	CONDUIT, CONCEALED IN WALLS OR CEILING
	EXPOSED CONDUITS
	EXISTING CONDUIT
	HOME RUN TO PANEL "A1", CIRCUITS #1,3,7. CROSS MARKS INDICATE NUMBER OF CONDUCTORS. CONDUCTOR SHALL BE #12, UON CONDUIT SIZES NOT IDENTIFIED SHALL BE 3/4" C MINIMUM WITH 2#12, 1#12G FOR POWER & LTG. CKTS. OR 2#14 FOR CONTROLS CKTS.
	CALLOUT, INDICATING CONDUIT SIZE, NUMBER OF WIRE AND WIRE SIZE. G INDICATES GROUND WIRE.
	HATCH INDICATE CONDUIT, CONDUCTORS AND EQUIPMENT TO BE REMOVED AS CONTRACTOR'S PROPERTY UON.
	CONDUIT TO BE CUT AND EXTENDED OR REMOVED AS NOTED, STARTING FROM POINT "X".
	TELEPHONE AND PAGING SYSTEM CONDUIT & WIRING, 1"C UON.
	FIRE ALARM SYSTEM CONDUIT & WIRING
	SECURITY SYSTEM CONDUIT & WIRING
	HOME RUN TO TELEPHONE CABINET.
	HOME RUN TO FIRE ALARM CONTROL PANEL "FCP"
	HOME RUN TO SECURITY ALARM CONTROL PANEL.
	CONDUIT RUN - CHANGE IN ELEVATION
	CONDUIT BENDS TOWARD OBSERVER
	CONDUIT BENDS AWAY FROM OBSERVER
	CONDUIT CAPPED, OR SEALED
	THERMOWELDED "T" CONNECTION (GROUNDING)
	FLEXIBLE LIQUID-TIGHT CONDUIT CONNECTION OR TEMPORARY POWER CABLE.
	LIGHTING FIXTURE TAG "A" INDICATES TYPE OF FIXTURE. (TYPE "A" - SEE LUMINAIRE SCHEDULE) OR POWER CONDUCTOR HOMERUN (SEE WIRING SCHEDULE)
	FLUORESCENT LIGHTING FIXTURE SEE NOTE 3
	CEILING MOUNTED INCANDESCENT, HID OR SIMILAR LAMP FIXTURE, "a" INDICATES SWITCHED CIRCUIT
	WALL MOUNTED INCANDESCENT, HID OR SIMILAR LAMP FIXTURE
	LIGHT POLE W/ LUMINAIRE
	BATTERY EMERGENCY LIGHT FIXTURE
	SINGLE POLE SWITCH (SEE NOTE 3) * 2 = 2 POLE, 3 = 3 WAY, 4 = 4 WAY K = KEY OPERATED WP = WEATHERPROOF D = DIMMER P = SWITCH WITH PILOT LIGHT
	PANELBOARD - SURFACE MOUNTED
	PANELBOARD - FLUSH MOUNTED
	PANELBOARD - SEMI-FLUSH MOUNTED
	POWER PANEL OR CONTROL PANEL
	MOTOR CONTROL CENTER, SWITCHGEAR, OR OTHER MAJOR ELECTRICAL EQUIPMENT

	LIGHTING & POWER DIST. TRANSFORMER.
	GROUND ROD AND GROUND ROD BOX
	GROUND INSERT
	FUSED DISCONNECT SWITCH, 30A, UNO
	CONDUIT SEAL
	DISCONNECTING C.B. SIZE AS NOTED
	LOCAL COMBINATION STARTER
	LOCAL CONTROL STATION. SEE CONTROL DIAGRAM FOR FUNCTION.
	RACEWAY BOX "HH" HANDHOLE "MH" MANHOLE "PB" PULLBOX "TB" TERMINAL BOX
	CEILING MOUNTED JUNCTION BOX
	WALL MOUNTED JUNCTION BOX OR "TJB" TERMINAL JUNCTION BOX
	FLOOR MOUNTED JUNCTION BOX
	FIELD INSTRUMENT I.E. "PSL" PRESSURE SWITCH "LSHH" LEVEL SWITCH HIGH HIGH "LSLL" LEVEL SWITCH LOW LOW, ETC.
	THERMOSTAT
	HEATER
	WATER HEATER
	HORN
	FIRE ALARM SYSTEM MANUAL PULL STATION +48" UNLESS OTHERWISE NOTED.
	FIRE ALARM SYSTEM HORN/STROBE LIGHT +6"-8" UNLESS OTHERWISE NOTED.
	FIRE ALARM BELL
	FIRE ALARM SYSTEM SMOKE DETECTOR
	FIRE ALARM SYSTEM DUCT SMOKE DETECTOR
	FIRE ALARM SYSTEM HEAT DETECTOR
	FIRE ALARM SYSTEM - MOTORIZED DAMPER
	FIRE ALARM SYSTEM STROBE LIGHT
	KEYPAD FOR SECURITY SYSTEM
	CARD ACCESS
	DOOR CONTACT/DOOR RELEASE
	SECURITY SYSTEM DOOR CONTACT
	PHOTOELECTRIC CONTROL UNIT
	PAGING SYSTEM SPEAKER
	PAGING SYSTEM LOUDSPEAKER
	TELEPHONE SYSTEM DEVICE
	MOTOR, 2 INDICATES HORSE POWER AS SPECIFIED IN OTHER DIVISIONS OF THESE SPECIFICATIONS
	GENERATOR, SIZE AS INDICATED IN THE SPECIFICATIONS

	120V SINGLE RECEPTACLE, WALL MOUNTED NEMA CONFIGURATION 5-20.
	120V DUPLEX RECEPTACLE, WALL MOUNTED NEMA CONFIGURATION 5-20
	120V QUADPLEX RECEPTACLE, WALL MOUNTED NEMA CONFIGURATION 5-20
	120V MULTI-OUTLET ASSEMBLY WITH SINGLE RECEPTACLE. SPACING (X INCHES) AS NOTED.
	SINGLE SPECIAL-PURPOSE RECEPTACLE, WALL MOUNTED, 240V RATING
	SINGLE SPECIAL-PURPOSE RECEPTACLE, WALL MOUNTED, 480V RATING
	120V CLOCK RECEPTACLE, WALL MOUNTED NEMA CONFIGURATION 5-20.
	BUZZER
	HORN
	NON-SPECIFIC SYMBOL FOR ELECTRICAL EQUIPMENT FURNISHED UNDER OTHER SPECIFICATION DIVISIONS BUT INSTALLED AND CONNECTED UNDER ELECTRICAL
	GAS DETECTOR
	CCTV CAMERA
	ELECTRIC DOOR LOCK
	DOOR CONTACT
	SECURITY SYSTEM CARD ACCESS
	INDICATES EQUIPMENT TO BE FURNISHED AND INSTALLED UNDER OTHER WORK IN THIS CONTRACT, BUT ALL ELECTRICAL CONNECTIONS UNDER ELECTRICAL WORK
	PUSH BUTTON
	SELECTOR SWITCH
	TYPE I PULLBOX
	REVERSE VOLTAGE STARTER
	VARIABLE FREQUENCY DRIVE

**NOTES FOR PLAN SYMBOLS:**

- FOR ALL SYMBOLS SHOWN ON PLAN, WP OR XP ADJACENT TO SYMBOL INDICATES THE DEVICE OR EQUIPMENT SHALL BE LISTED FOR USE AS FOLLOWS:  
XP - EXPLOSION PROOF  
WP - WEATHERPROOF (NEMA 4X), SUITABLE FOR WET LOCATIONS.  
EXAMPLE - OR XP
- TELEPHONE, FIRE ALARM, AND SECURITY SYSTEM WIRING SHALL BE AS REQUIRED BY THE SYSTEM BEING FURNISHED. TELEPHONE CONDUITS SHALL BE 1" UNO., FIRE ALARM AND SECURITY SYSTEM CONDUITS SHALL BE 3/4" UON.
- LOWER CASE LETTERS ADJACENT TO A SWITCH OR LIGHTING FIXTURE INDICATES SWITCHED CIRCUIT. FOR FOUR LAMP FLUORESCENT FIXTURES WIRED IN PAIRS WITHIN EACH FIXTURE, THE "a" SWITCH CONTROLS THE OUTER LAMPS AND THE "b" SWITCH CONTROLS THE INNER LAMPS: WIRE THE THREE LAMP FIXTURES SIMILARLY.

A	AMPERE
AC	ALTERNATING CURRENT
ADN	ASYNCHRONOUS DATA NETWORK
AFF	ABOVE FINISHED FLOOR
AG	ABOVE GROUND
ATS	AUTOMATIC TRANSFER SWITCH
BG	BELOW GROUND
BSCW	BARE STRANDED COPPER WIRE
BPVO	BYPASS VALVE OPERATOR
CB	CIRCUIT BREAKER
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CCS	CABLE CONCENTRATOR SYSTEM
DCS	DISTRIBUTED CONTROL SYSTEM
DIT	DRIVE ISOLATION TRANSFORMER
DPS	DIFFERENTIAL PRESSURE SWITCH
DS	DISCONNECT SWITCH
DWG	DRAWING
EMERG.	EMERGENCY
EMP	ELECTRONIC METERING PACKAGE UNIT
(E)	EXISTING
FA	FIRE ALARM
F/I	FURNISH AND INSTALL
FDA	FOR DATA AQUISIION
FIT	FLOW INDICATOR TRANSMITTER
FLVO	FILLING LINE VALVE OPERATOR (WITH VALVE SIZE AS SHOWN)
FS	FLOW SWITCH
GEN	GENERATOR
GRS	GALVANIZED RIGID STEEL (CONDUIT)
G, GND	GROUND
HZ	HERTZ
JB	JUNCTION BOX
JBT	JUNCTION TERMINAL BOX
KVA	KILO VOLT AMPERE
LC	LOAD CENTER
LTG	LIGHTING
LCS	LOCAL CONTROL STATION
MBS	MECHANICAL BAR SCREEN
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MRIE	MOTOR ROOM INSTRUMENT ENCLOSURE
MSWBD	MAIN SWITCHBOARD
MSWGR	MAINSWITCHGEAR
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
(N)	NEW, TO BE FURNISHED AND INSTALLED
OL'S	OVER LOAD RELAYS
PGRS	PVC COATED GRS
PCP	PROGRAMMABLE CONTROL PANEL
PLC	PROGRAMMABLE LOGIC CONTROLLER
PNL	PANEL
PWR	POWER
(R)	(E) MATERIAL(S)/EQUIPMENT RELOCATED TO INDICATED LOCATION
R/C	REMOVE AS CONTRACTOR PROPERTY
R/F	REMOVE (E) AS CONTRACTOR PROPERTY & F/I EQUIPMENT OR CONDUCTORS.
R/R	REMOVE AND RELOCATE (E) UNITS, OR REMOVE AND RE-INSTALL.
R/S	REMOVE AND SALVAGE AS CITY PROPERTY
RVO	RECIRCULATION VALVE OPERATOR
REF	REFERENCE
REX	REQUEST TO EXIT
RVS	REDUCED VOLTAGE STARTER
SCCR	SHORT CIRCUIT CURRENT
SFEC	SAN FRANCISCO ELECTRICAL CODE
TB	TERMINAL BOARD
TCP	TEMPERATURE CONTROL PANEL
TE	TEMPERATURE ELEMENT
TEMP	TEMPERATURE

TJB	TERMINAL JUNCTION BOX
TSP	TWISTED SHIELDED PAIRS
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
UPS	UNINTERRUPTIBLE POWER SYSTEM
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
WE/BB	WHITE ENGRAVING ON BLACK BACKGROUND
WB/RB	WHITE ENGRAVING ON RED BACKGROUND
WP	WEATHERPROOF
XP	EXPLOSION PROOF
XFR	TRANSFORMER (POWER DISTRIBUTION)
LEL	LOWER EXPLOSIVE LIMIT OF GAS

REFERENCE	
	ELECTRICAL STANDARD DETAIL, SEE DETAIL ESD - 100 ON PLAN E-5
	NOTE REFERENCE, SEE NOTE 1 ON PLAN E-5
	SEE LUMINAIRE SCHEDULE REFERENCE "B" 2-40 = TWO LAMPS 40 WATTS EACH. ONE LAMP LUMINAIRE HAS DESIGNATION OF 60, 100, ETC. CORRESPONDING TO LAMP WATTAGE.
	NAMEPLATE REFERENCE NO.10 SEE APPROPRIATE NAMEPLATE SCHEDULE.
	RACEWAY SCHEDULE TAG. P=DENOTES POWER AND C=DENOTES CONTROL RACEWAY
	SHEET NOTE REFERENCE
	SECTION CALL OUTS, SEE SECTION "A" ON DRAWING E-9. A BLANK LINE IN PLACE OF E-9 IMPLIES SECTION REFERENCED IS SHOWN ON THE SAME SHEET.

**GENERAL NOTES:**

- DRAWINGS E-1 THROUGH E-2 ARE STANDARD LEGEND SHEETS. SOME SYMBOLS, ABBREVIATIONS OR STANDARD DETAILS SHOWN ON THESE SHEETS MAY NOT HAVE BEEN USED IN THE CONTRACT DRAWINGS.
- ALL EXPOSED CONDUIT IN THIS CONTRACT SHALL BE PGRS UON.
- ALL EMBEDDED CONDUITS IN THIS CONTRACT SHALL BE PVC SCHEDULE 80 UON.

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,505

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS

**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
**DEPARTMENT OF ENGINEERING**

12/13/2023

DESIGNED: DATE:	ST 12/23
DRAWN: DATE:	ST 12/23
CHECKED: DATE:	PN 12/23

PUBLIC WORKS APPROVALS	
SECTION MANAGER DATE:	Chi Sao 12/12/2023
DEPUTY BUREAU MANAGER DATE:	I.DHAPA 02/14/2024
BUREAU MANAGER DATE:	P. RIVERA 03/18/2024

APPROVED BY:	SAN FRANCISCO PORT COMMISSION
DATE:	5/16/2024
SCALE:	NONE
REV. NO.	0

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**

**ELECTRICAL LEGEND, ABBREVIATIONS,**  
**AND GENERAL NOTES**  
**(1 OF 2)**

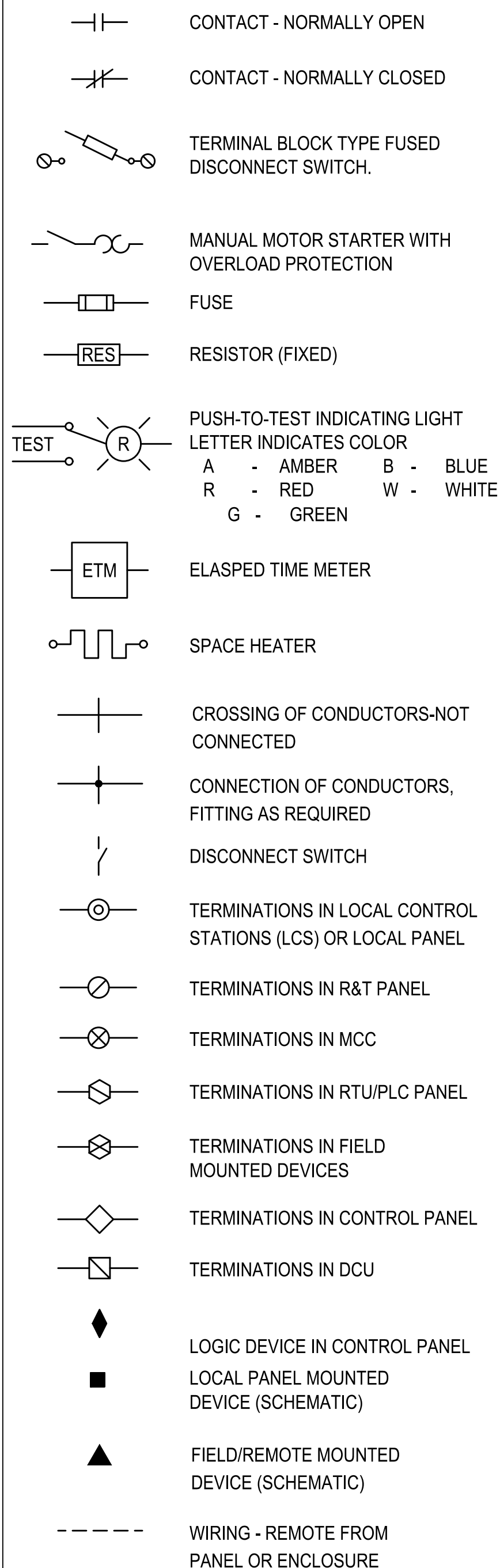
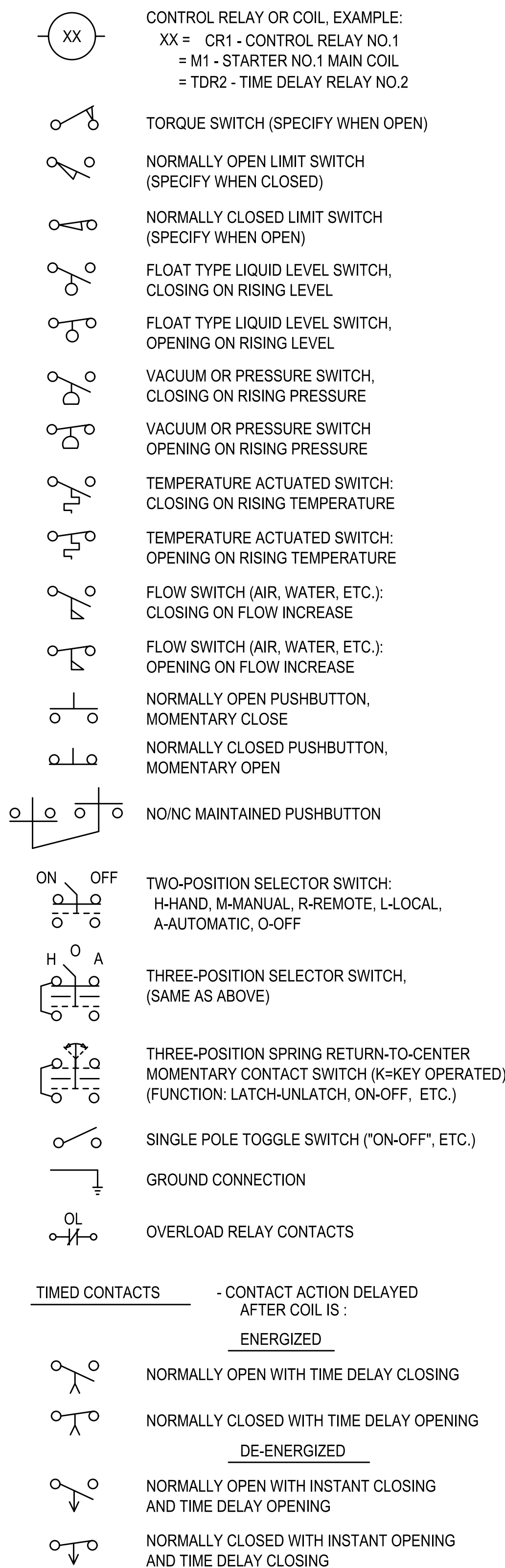
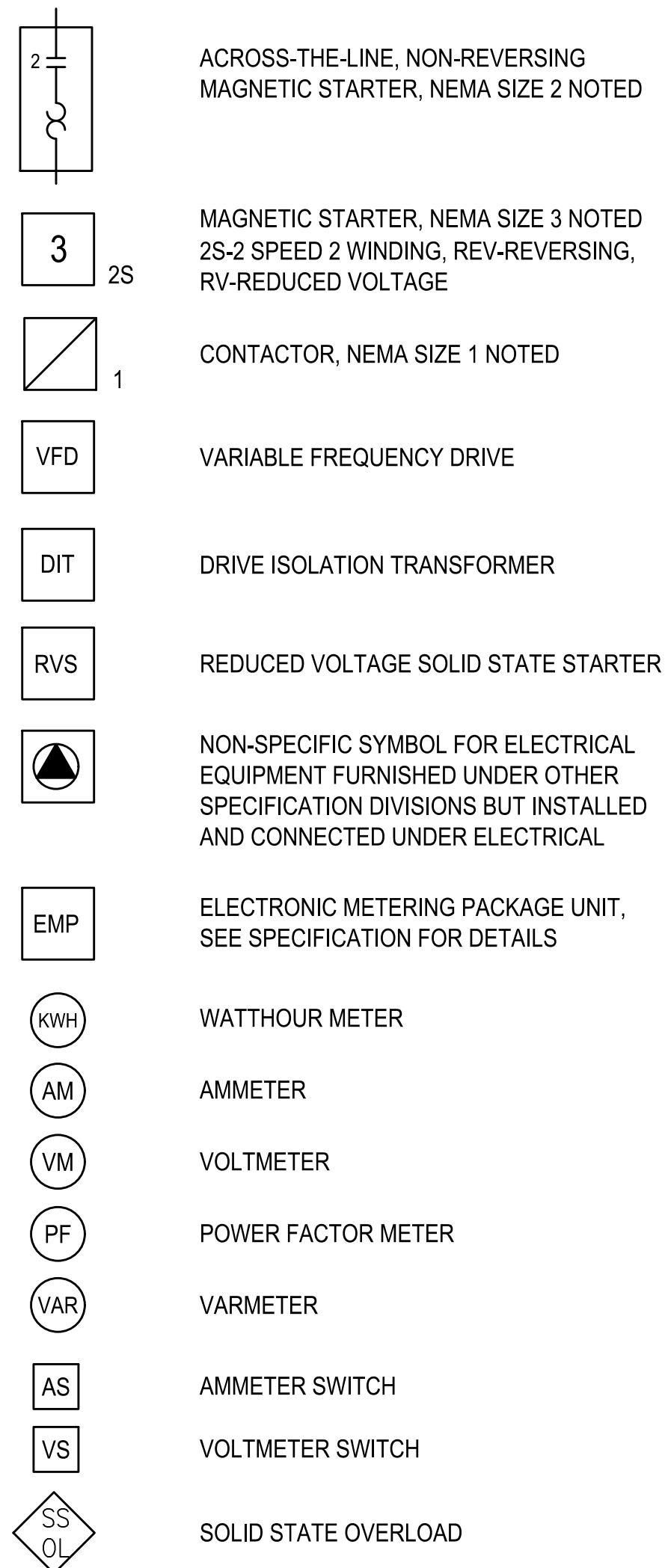
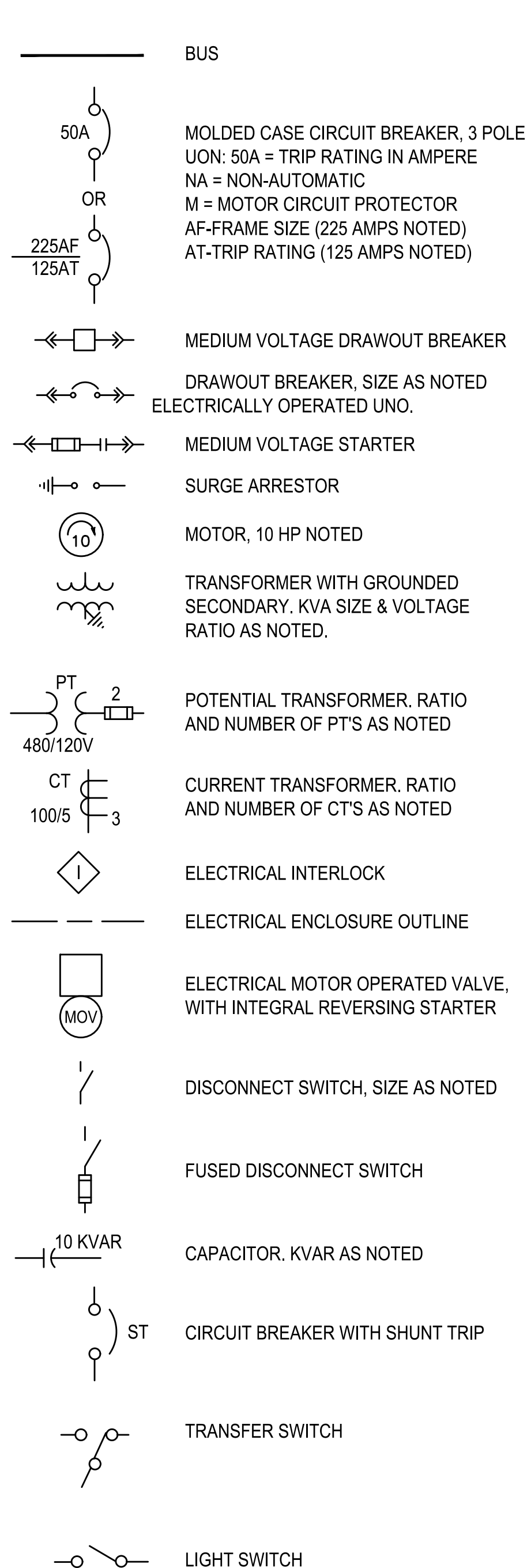
CONTRACT NO.	2852
PORT DRAWING NO.	19210-4043-E
SHEET NO.	E-1
SHEET OF SHEETS	34 OF 72

# S Y M B O L S

# GENERAL NOTES

## SINGLE LINE DIAGRAM

## SCHEMATIC DIAGRAM



1. ALL NEW CONDUITS & FITTINGS TO BE USED IN THIS PROJECT SHALL BE PVC-COATED RIGID GALVANIZED STEEL UNLESS EXPLICITLY NOTED ON THE DRAWINGS. THIS NOTE TAKES PRECEDENCE OVER THE TECHNICAL SPECIFICATIONS AND THE GENERAL CONDITIONS.
2. LOCATION OF ELECTRICAL EQUIPMENT, DEVICES & CONDUITS SHOWN ON THE DWGS. AND REFERENCE PLANS ARE APPROXIMATE; THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY EXACT LOCATION ON THE FIELD TO DETERMINE THEIR ACCURACY BEFORE STARTING THE INSTALLATION WORK.
3. WHERE ELECTRICAL EQUIPMENT ARE FURNISHED AS A PACKAGE AND/OR SPECIFIED UNDER OTHER DIVISIONS OF THE SPECIFICATION, THE CONTRACTOR SHALL FURNISH ALL MATERIAL AND LABOR REQUIRED FOR A PROPER AND CODE COMPLIANT OPERATION OF THE UNIT. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. ELECTRICAL PLANS DO NOT SHOW ALL EXISTING AND/OR NEW EQUIPMENT & PIPING THAT MAY INTERFERE WITH THE INSTALLATION OF CONDUITS. THE CONTRACTOR IS REQUIRED TO REVIEW ALL REFERENCE CONTRACT DRAWINGS AND INSPECT THE SITE PRIOR TO SUBMITTING HIS BID.
5. ALL ELECTRICAL EQUIPMENT/DEVICES SHOWN ON THE DRAWINGS TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT ARE NEW UNLESS THEY ARE SHOWN TO BE EXISTING OR FURNISHED BY THE CITY.
6. ALL CONDUIT SUPPORT SHALL BE MADE OF STAINLESS STEEL 316.
7. THE SYSTEM INTEGRATOR SHALL PROVIDE A COPY OF THE SOFTWARE CODE TO PORT PERSONAL AFTER THE PROJECT IS COMPLETE.
8. THE SYSTEM INTEGRATOR SHALL PROVIDE TRAINING TO PORT STAFF ON THE CONTROLS.
9. ALL ELECTRICAL MATERIALS AND EQUIPMENT ACQUIRED FOR THE PROJECT SHALL COMPLY WITH THE BUILD AMERICA BUY AMERICA (BABA) ACT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN DOCUMENTATION THAT THE ELECTRICAL MATERIAL AND EQUIPMENT ACQUIRED FOR THIS PROJECT CONFORM TO THE BABA ACT.

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,506

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS	
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**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING

12/13/2023

DESIGNED: DATE:	ST 12/23
DRAWN: DATE:	ST 12/23
CHECKED: DATE:	PN 12/23

PUBLIC WORKS APPROVALS	
SECTION MANAGER: <i>Chi Sao</i> DATE: 12/12/2023	DATE: 5/16/2024
DEPUTY BUREAU MANAGER: <i>I.DHAPA</i> DATE: 02/14/2024	
BUREAU MANAGER: <i>P. RIVERA</i> DATE: 03/18/2024	

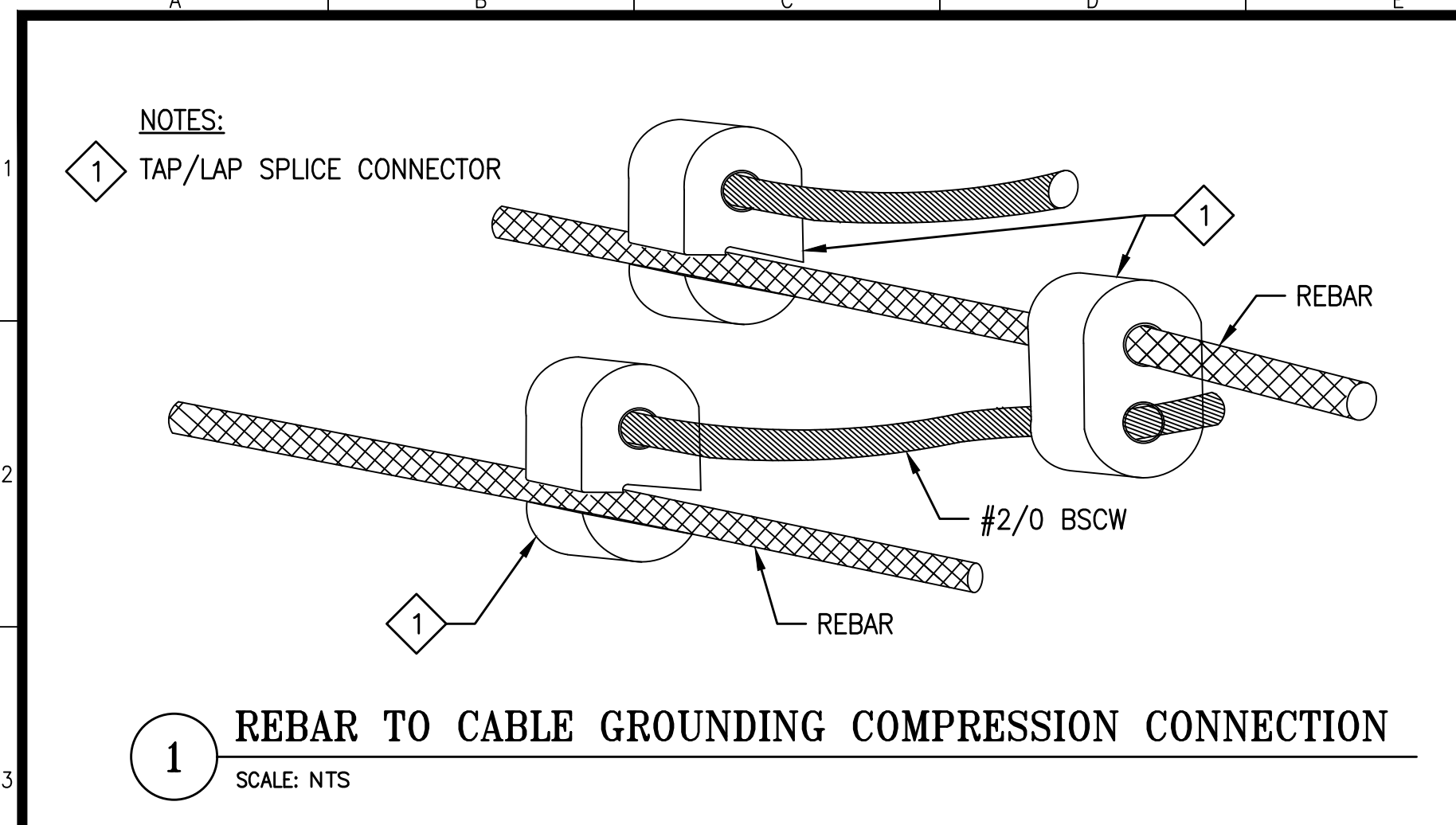
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CHIEF HARBOR ENGINEER: <i>Uday Prasad</i>	DATE: 5/16/2024

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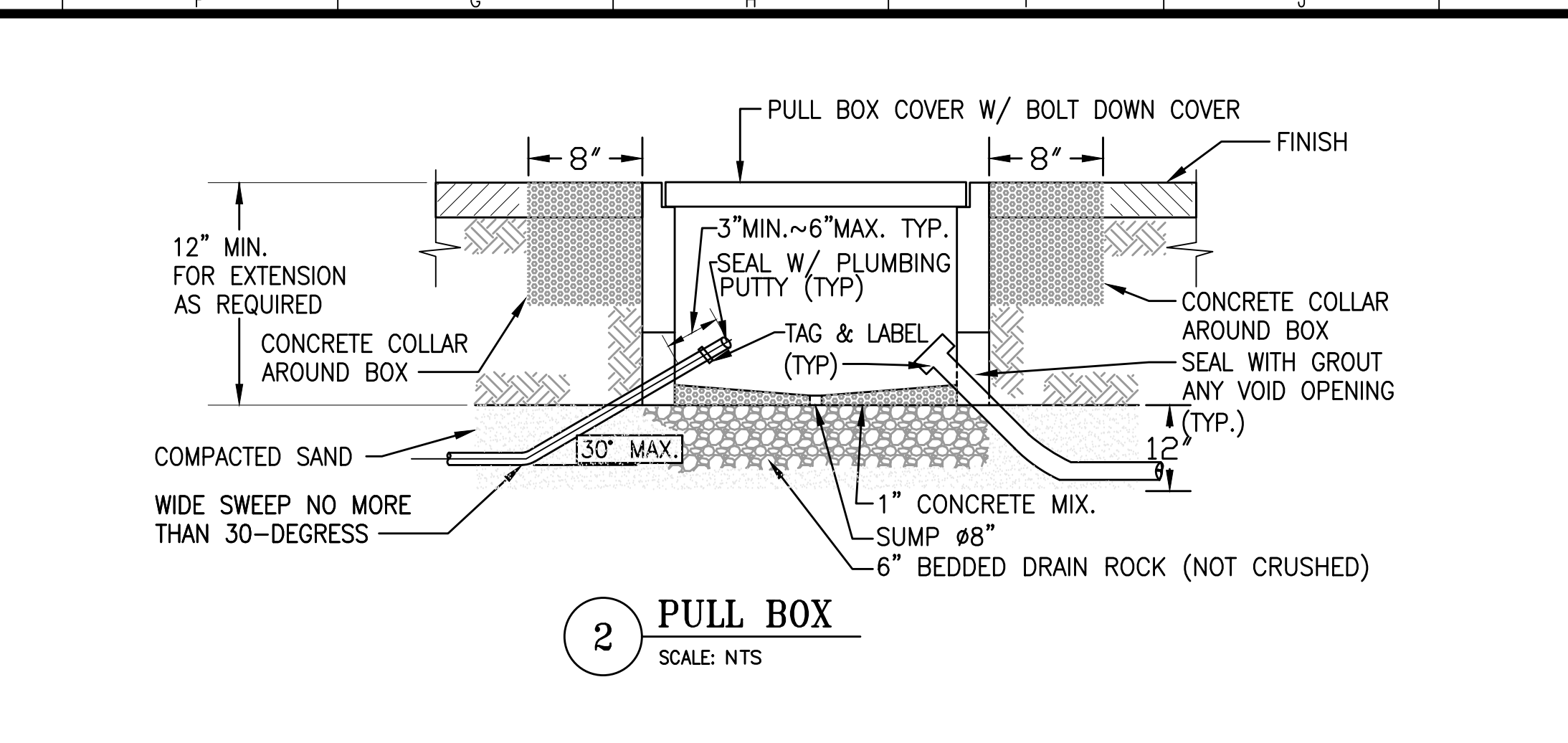
**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**

**ELECTRICAL LEGEND, ABBREVIATIONS,**  
**AND GENERAL NOTES**  
 (2 OF 2)

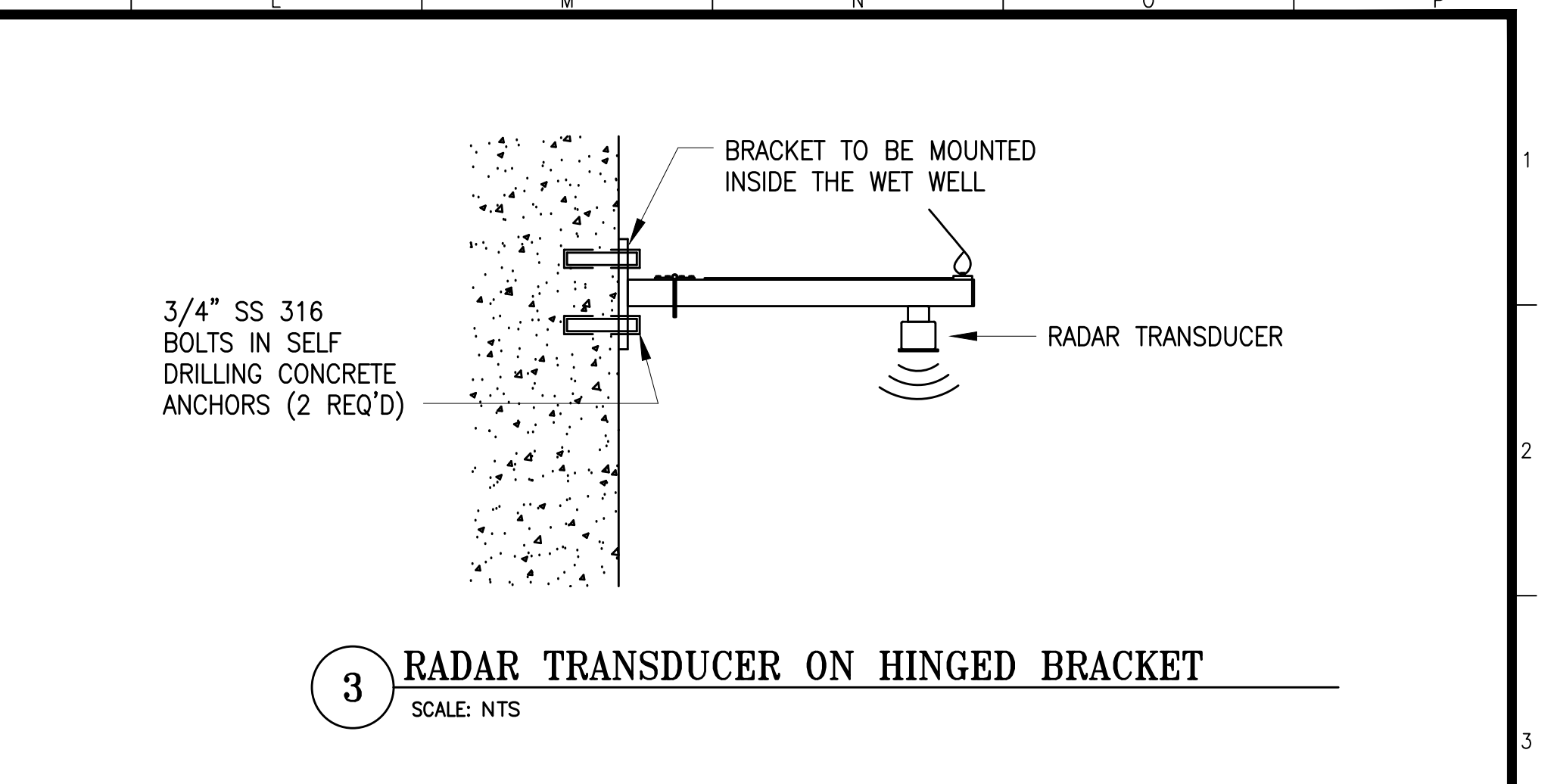
CONTRACT NO.	2852
PORT DRAWING NO.	19211.1-4043-E
SHEET NO.	E-2
SHEET OF SHEETS	35 OF 72



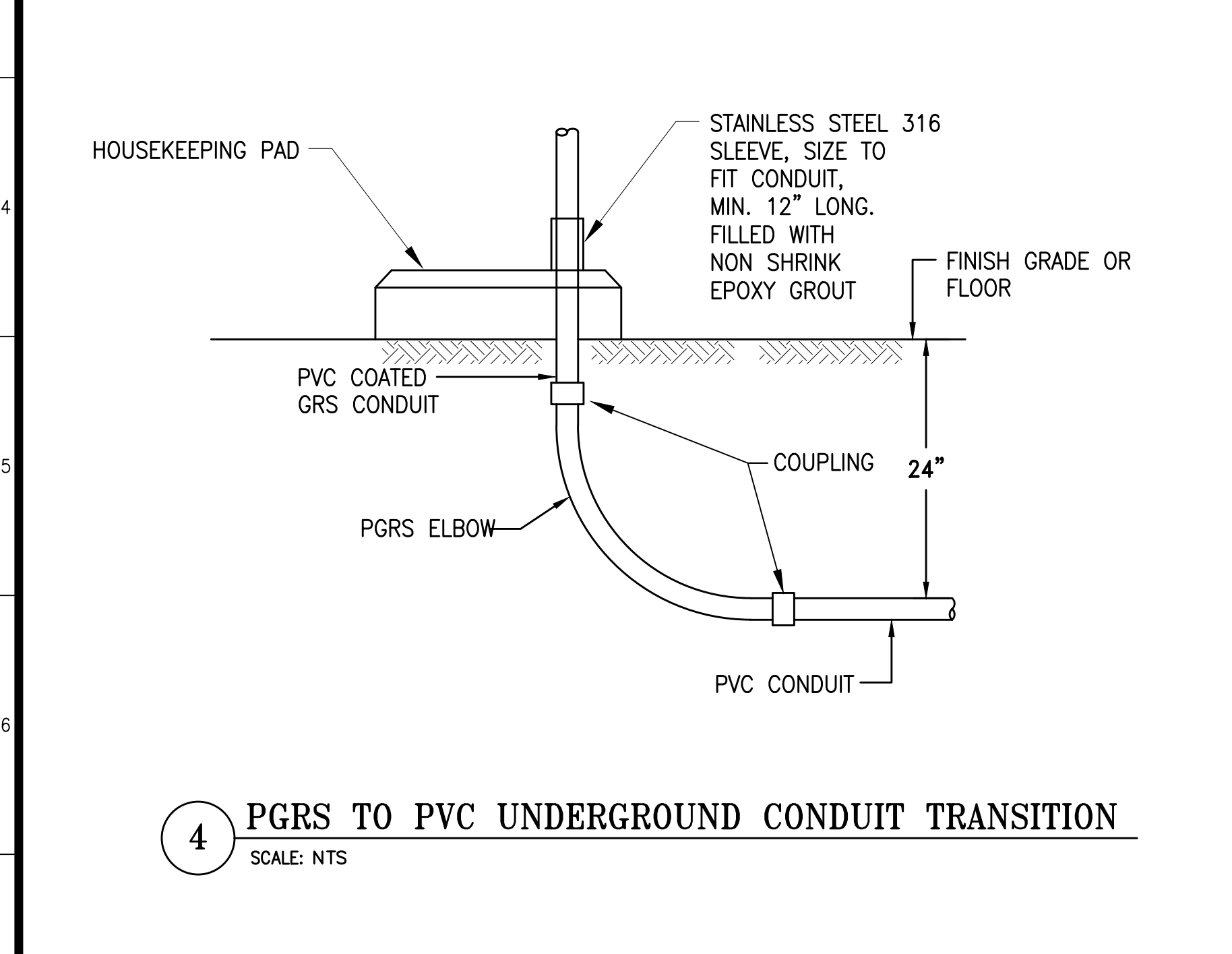
**1 REBAR TO CABLE GROUNDING COMPRESSION CONNECTION**  
SCALE: NTS



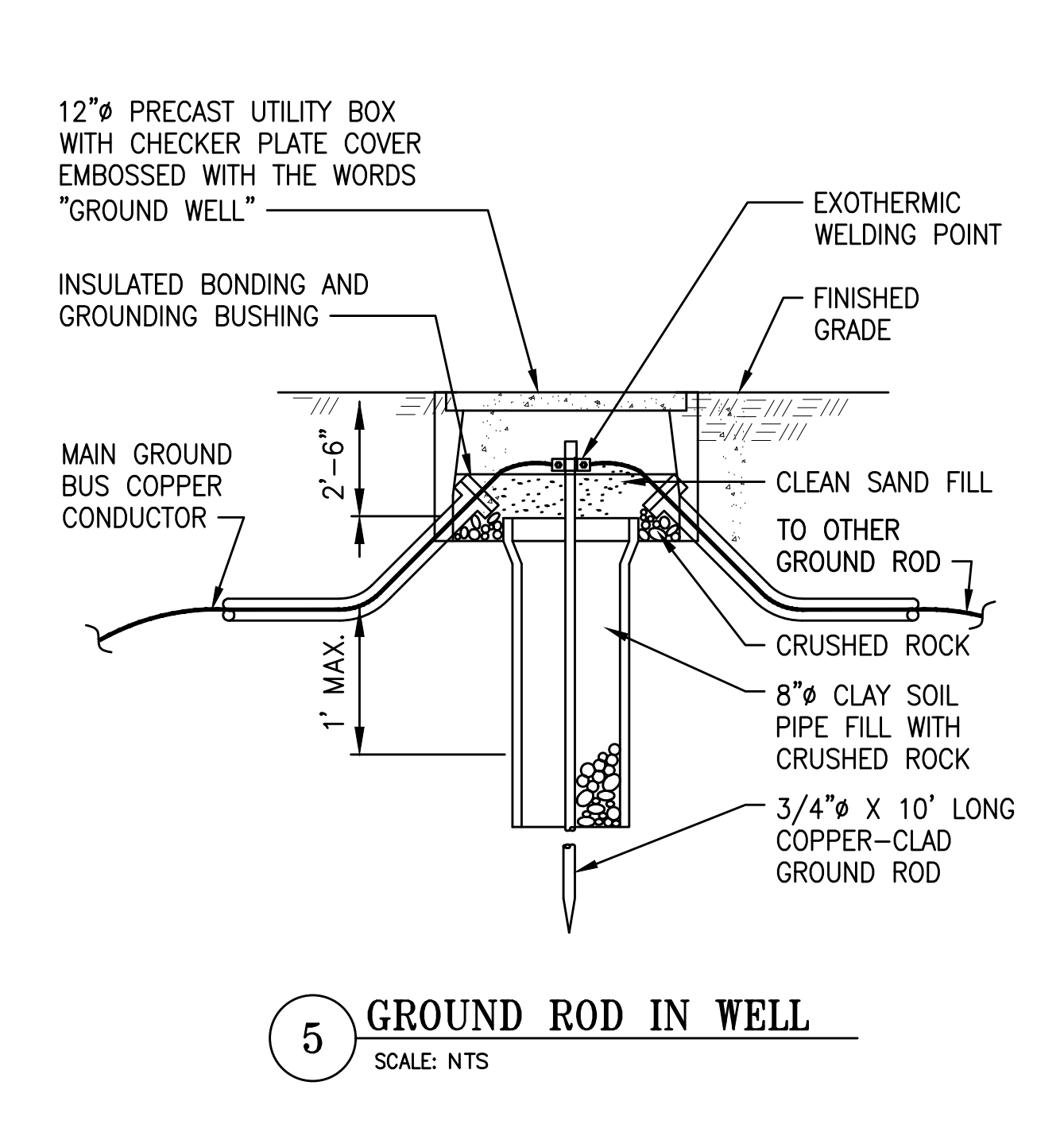
**2 PULL BOX**  
SCALE: NTS



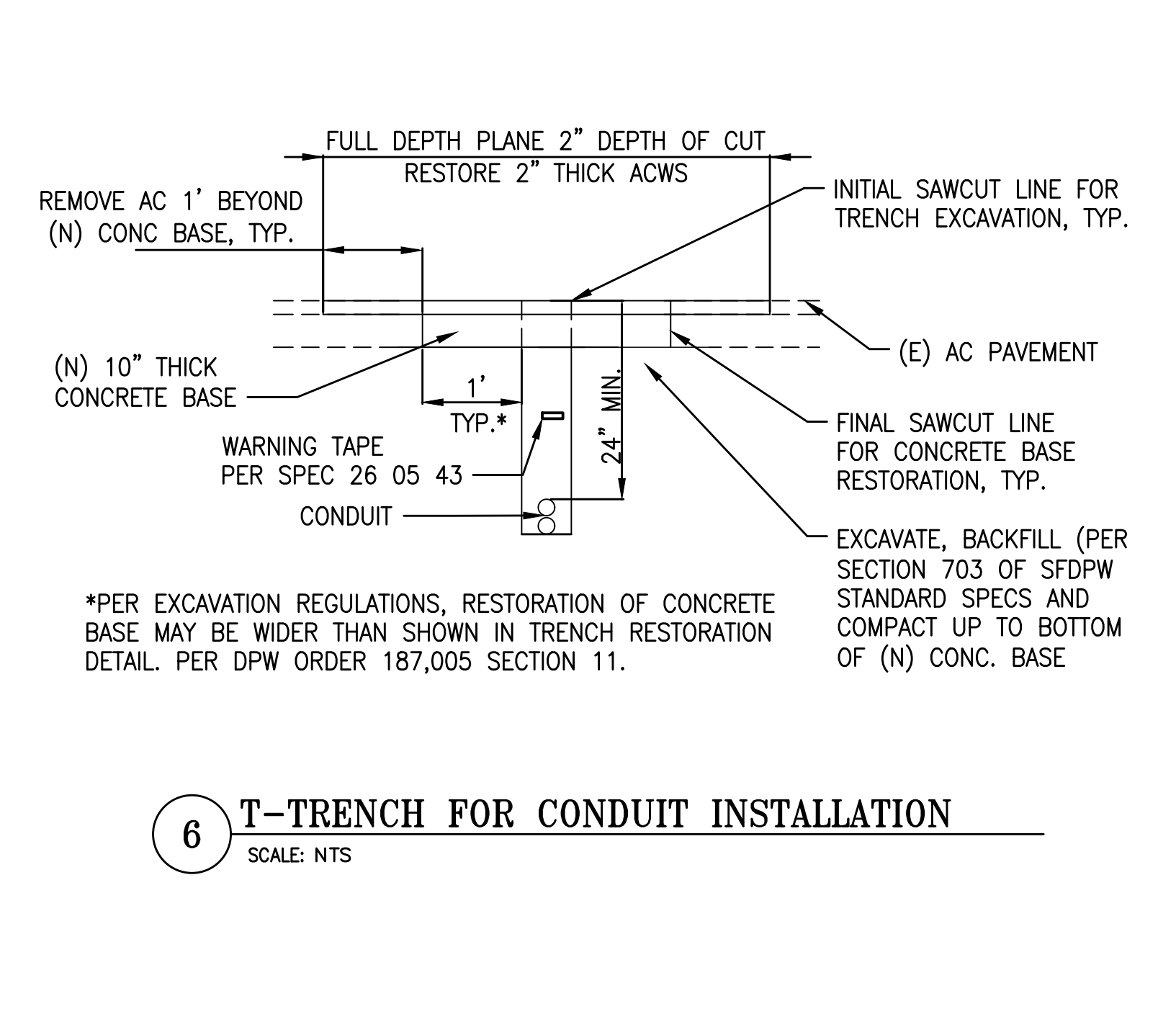
**3 RADAR TRANSDUCER ON HINGED BRACKET**  
SCALE: NTS



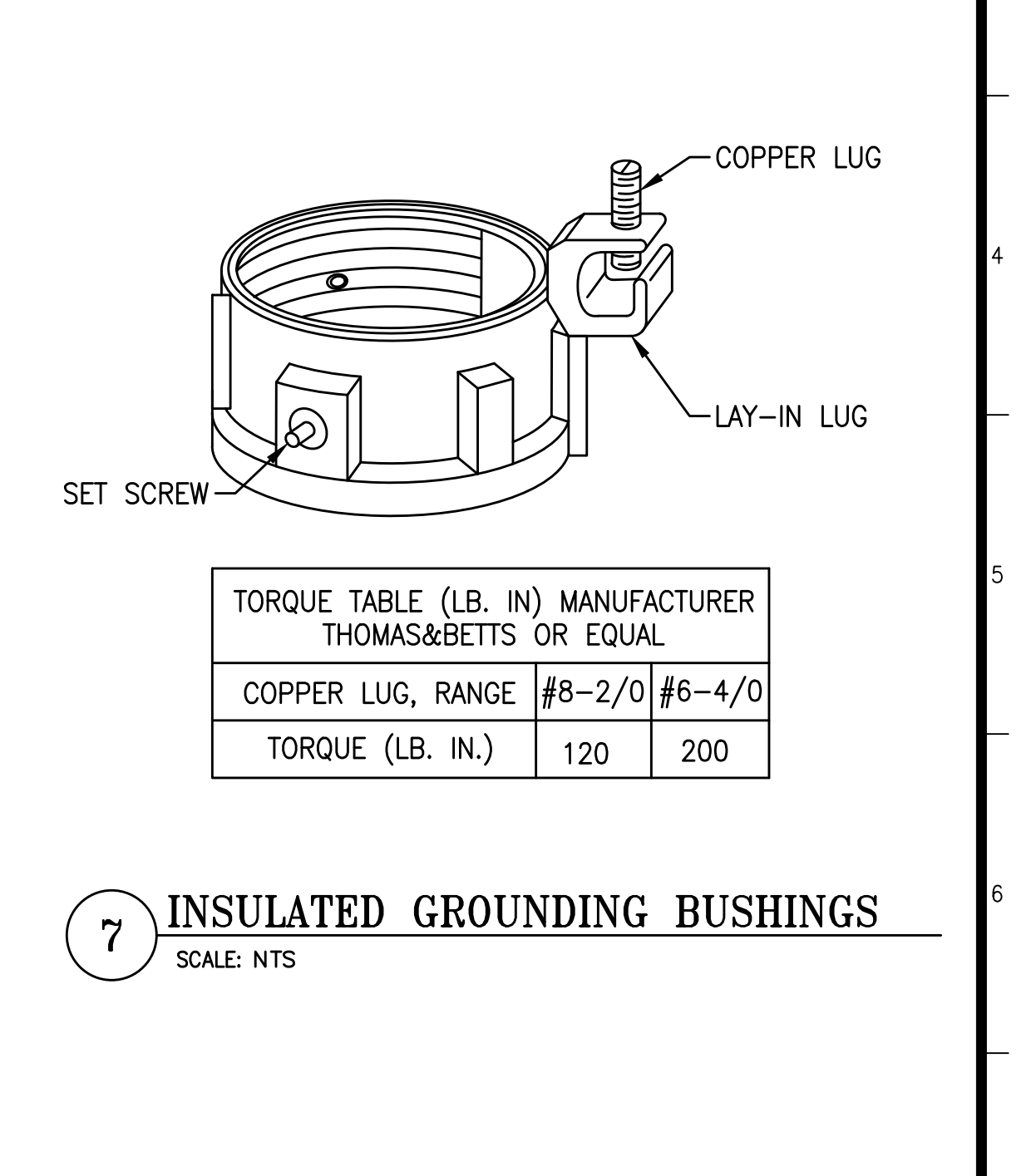
**4 PGRS TO PVC UNDERGROUND CONDUIT TRANSITION**  
SCALE: NTS



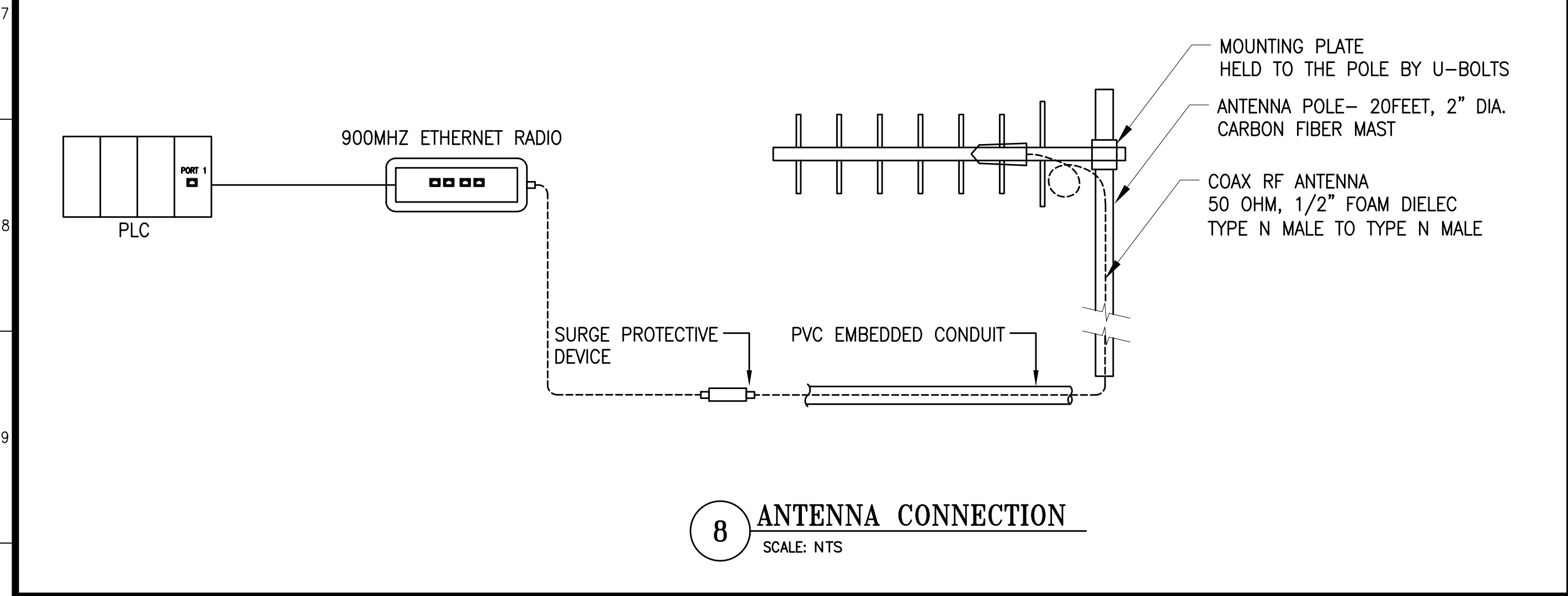
**5 GROUND ROD IN WELL**  
SCALE: NTS



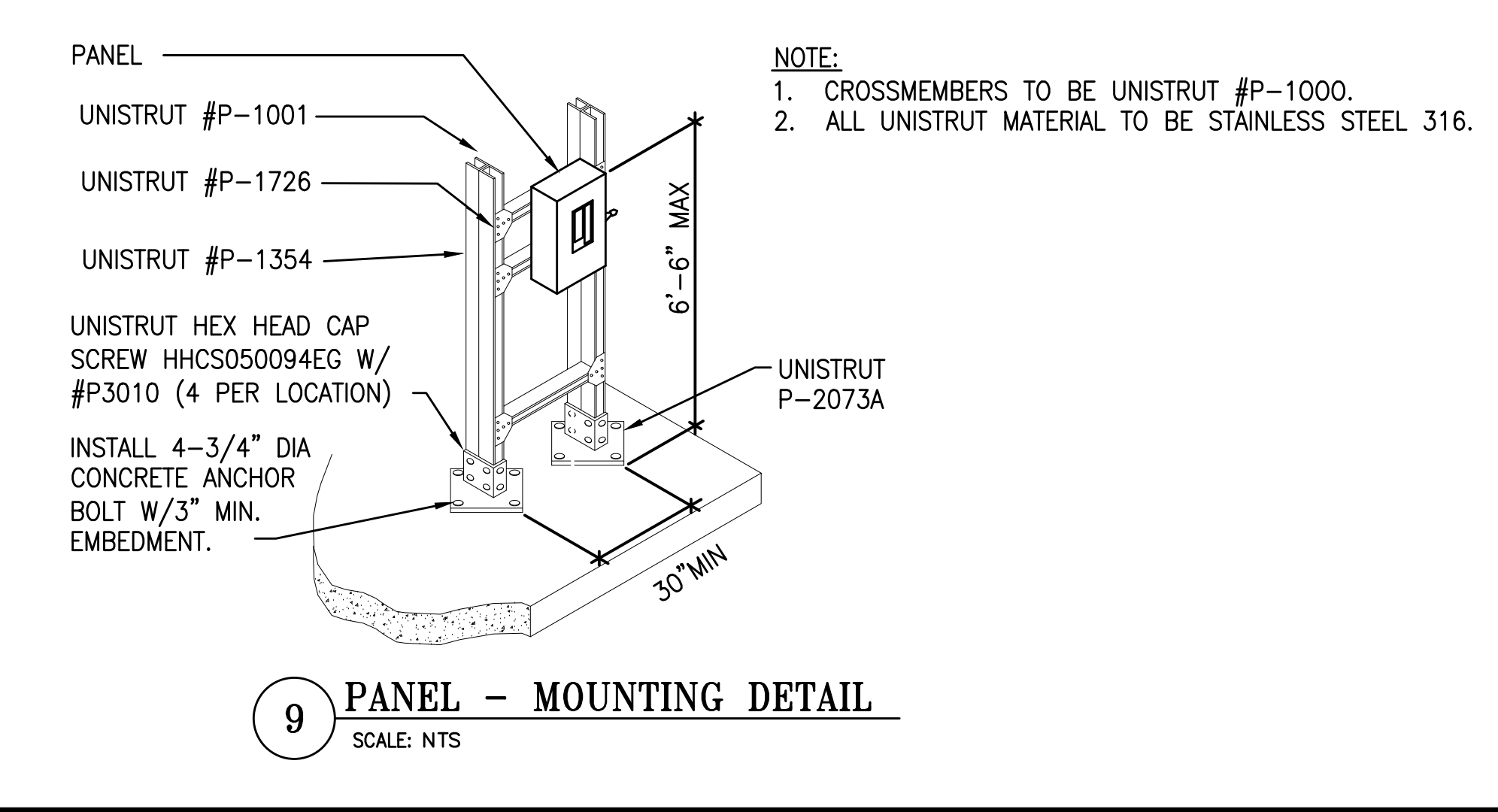
**6 T-TRENCH FOR CONDUIT INSTALLATION**  
SCALE: NTS



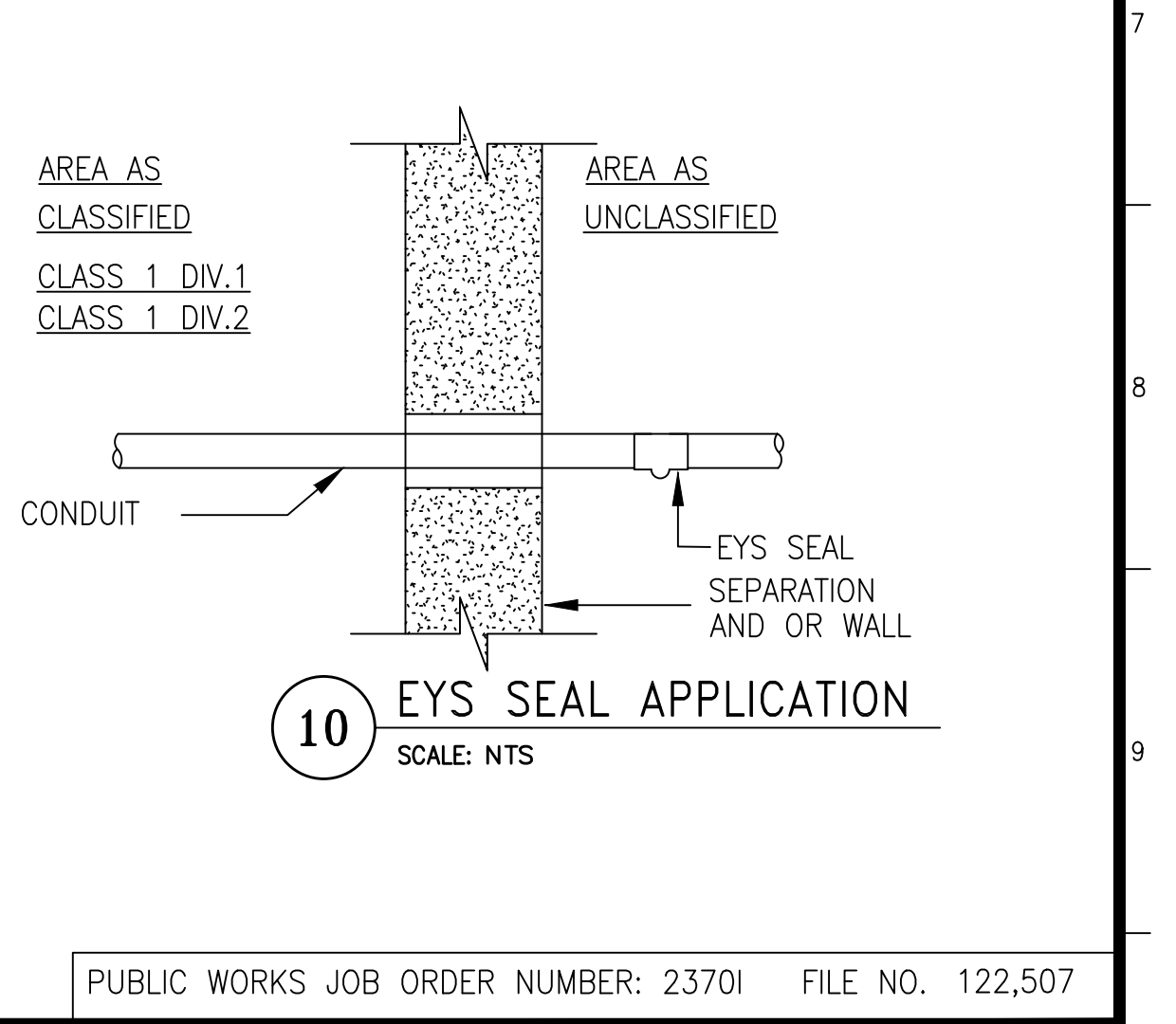
**7 INSULATED GROUNDING BUSHINGS**  
SCALE: NTS



**8 ANTENNA CONNECTION**  
SCALE: NTS



**9 PANEL - MOUNTING DETAIL**  
SCALE: NTS



**10 EYS SEAL APPLICATION**  
SCALE: NTS

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS

**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING

DESIGNED: DATE: 12/23/23  
 DRAWN: DATE: 12/23/23  
 CHECKED: DATE: 12/23/23  
 PUBLIC WORKS APPROVALS  
 SECTION MANAGER: DATE: 12/12/2023  
 DEPUTY BUREAU MANAGER: DATE: 03/18/2024  
 BUREAU MANAGER: DATE:

APPROVED BY: SAN FRANCISCO PORT COMMISSION  
 DATE: 5/16/2024  
 CHIEF HARBOR ENGINEER

SCALE: NONE  
 REV. NO: 0

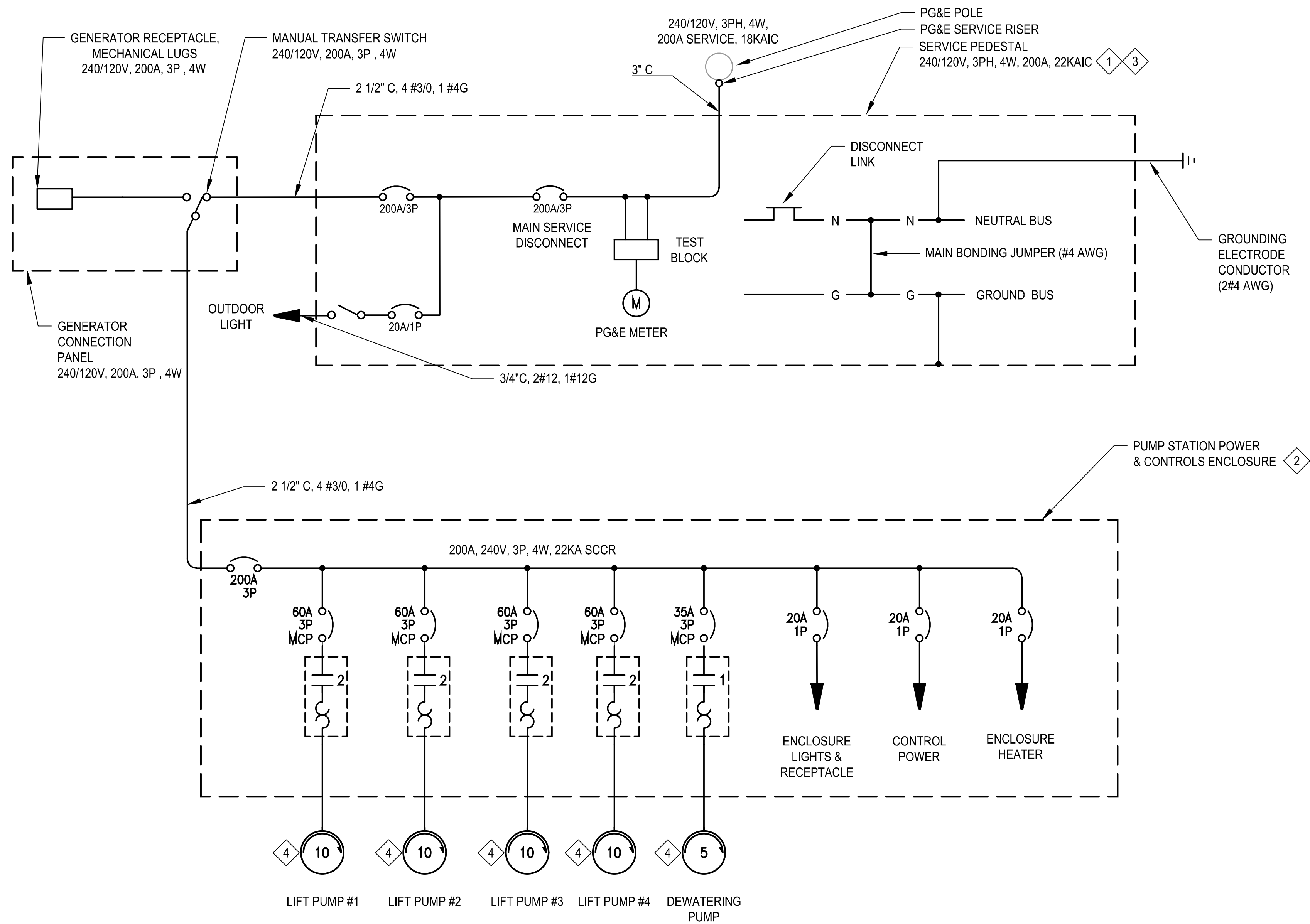
**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
**ELECTRICAL DETAILS**

CONTRACT NO. 2852  
 PORT DRAWING NO. 19211.2-4043-E  
 SHEET NO. E-3  
 SHEET OF SHEETS 36 OF 72

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,507

**SHEET NOTES:**

- 1 REFER TO E-SERIES DRAWING EI-02 FOR MORE DETAILS ON THE SERVICE & METERING PEDESTAL.
- 2 F/I FREE STANDING NEMA 3RX ENCLOSURE FOR PUMP STATION POWER DISTRIBUTION & CONTROLS. SEE ELEVATION, DETAILS, AND EQUIPMENT SCHEDULES ON DRAWINGS E-6, E-7, E-8, E-9, AND E-10.
- 3 COORDINATE WITH UTILITY FOR IDENTIFICATION OF HIGH-LEG FOR SINGLE PHASE 120V LOADS. HIGH-LEG TO BE DIFFERENTIATED IN PANEL PER SFEC.
- 4 SEE DRAWINGS E-7, E-8, E-9, AND E-10 FOR ELEMENTARY CONTROL DIAGRAMS AND CONTROLLER INTERCONNECTIONS.



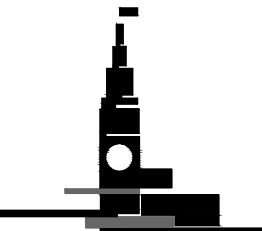
**PUMP STATION SINGLE LINE DIAGRAM**

SCALE: NTS

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,508

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS


**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING

6/17/2024

DESIGNED:	DATE:	PUBLIC WORKS APPROVALS	
ST	6/24	C. IAO	6/18/24
DRAWN:	DATE:	SECTION MANAGER DATE:	
ST	6/24	I. DHAPA	06/20/2024
CHECKED:	DATE:	DEPUTY BUREAU MANAGER DATE:	
PN	6/24	P. RIVERA	06/20/2024
		BUREAU MANAGER DATE:	

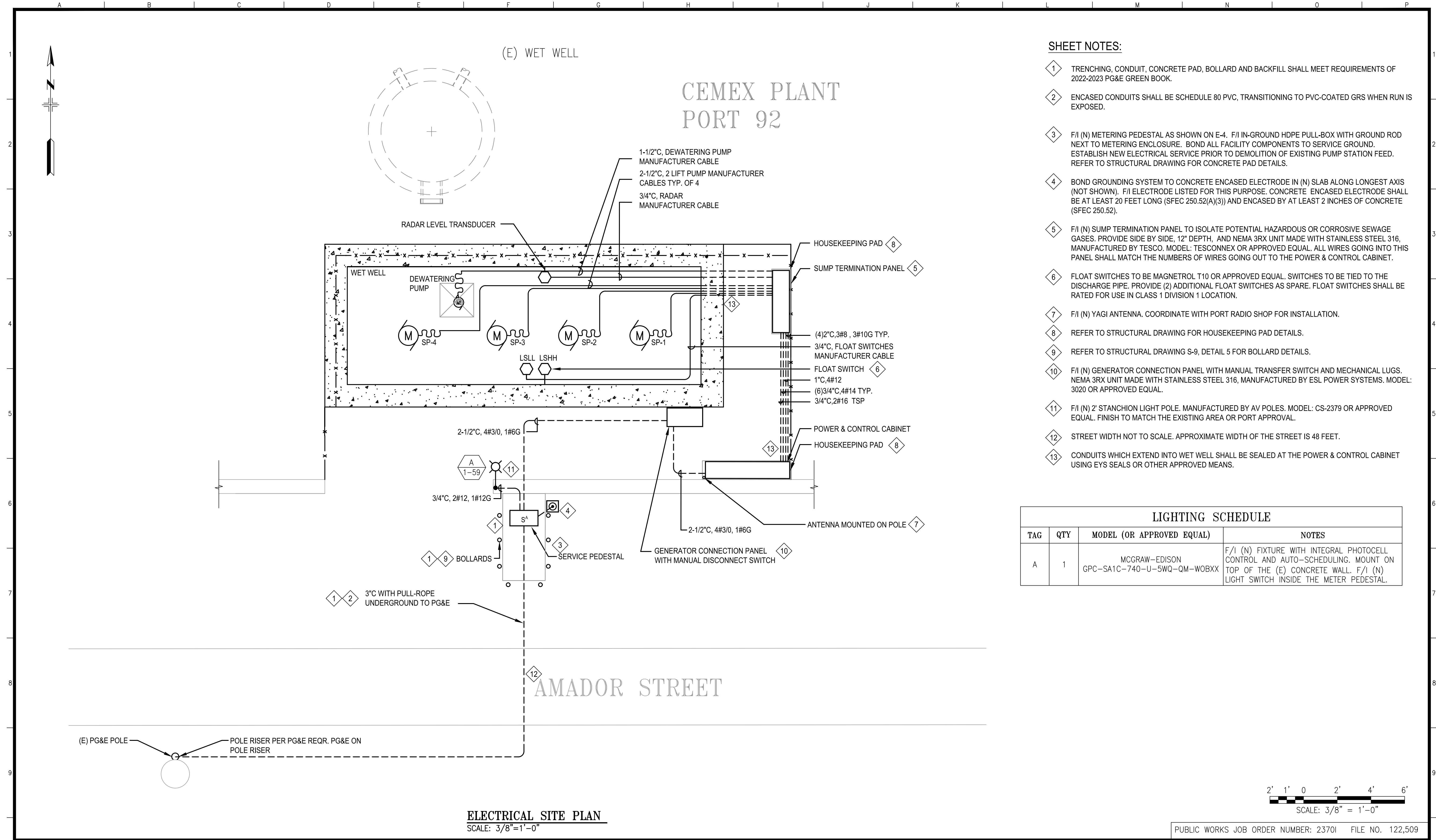
APPROVED BY  
SAN FRANCISCO PORT COMMISSION  
DATE: 7/3/2024

DocuSigned by:  
**Uday Prasad**  
CHIEF HARBOR ENGINEER

SCALE:	AS SHOWN
REV. NO.	0

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
  
**SINGLE LINE DIAGRAM**

CONTRACT NO.	2852
PORT DRAWING NO.	19212-4043-E
SHEET NO.	E-4
SHEET OF SHEETS	37 OF 72

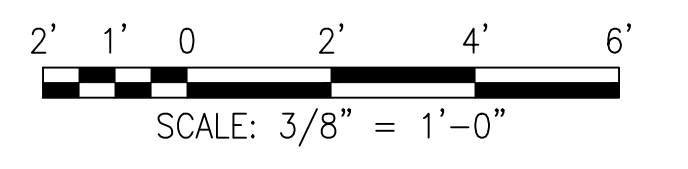


**SHEET NOTES:**

- 1 TRENCHING, CONDUIT, CONCRETE PAD, BOLLARD AND BACKFILL SHALL MEET REQUIREMENTS OF 2022-2023 PG&E GREEN BOOK.
- 2 ENCASED CONDUITS SHALL BE SCHEDULE 80 PVC, TRANSITIONING TO PVC-COATED GRS WHEN RUN IS EXPOSED.
- 3 F/I (N) METERING PEDESTAL AS SHOWN ON E-4. F/I IN-GROUND HDPE PULL-BOX WITH GROUND ROD NEXT TO METERING ENCLOSURE. BOND ALL FACILITY COMPONENTS TO SERVICE GROUND. ESTABLISH NEW ELECTRICAL SERVICE PRIOR TO DEMOLITION OF EXISTING PUMP STATION FEED. REFER TO STRUCTURAL DRAWING FOR CONCRETE PAD DETAILS.
- 4 BOND GROUNDING SYSTEM TO CONCRETE ENCASED ELECTRODE IN (N) SLAB ALONG LONGEST AXIS (NOT SHOWN). F/I ELECTRODE LISTED FOR THIS PURPOSE. CONCRETE ENCASED ELECTRODE SHALL BE AT LEAST 20 FEET LONG (SFEC 250.52(A)(3)) AND ENCASED BY AT LEAST 2 INCHES OF CONCRETE (SFEC 250.52).
- 5 F/I (N) SUMP TERMINATION PANEL TO ISOLATE POTENTIAL HAZARDOUS OR CORROSIVE SEWAGE GASES. PROVIDE SIDE BY SIDE, 12" DEPTH, AND NEMA 3RX UNIT MADE WITH STAINLESS STEEL 316, MANUFACTURED BY TESCO. MODEL: TESCONNEX OR APPROVED EQUAL. ALL WIRES GOING INTO THIS PANEL SHALL MATCH THE NUMBERS OF WIRES GOING OUT TO THE POWER & CONTROL CABINET.
- 6 FLOAT SWITCHES TO BE MAGNETROL T10 OR APPROVED EQUAL. SWITCHES TO BE TIED TO THE DISCHARGE PIPE. PROVIDE (2) ADDITIONAL FLOAT SWITCHES AS SPARE. FLOAT SWITCHES SHALL BE RATED FOR USE IN CLASS 1 DIVISION 1 LOCATION.
- 7 F/I (N) YAGI ANTENNA. COORDINATE WITH PORT RADIO SHOP FOR INSTALLATION.
- 8 REFER TO STRUCTURAL DRAWING FOR HOUSEKEEPING PAD DETAILS.
- 9 REFER TO STRUCTURAL DRAWING S-9, DETAIL 5 FOR BOLLARD DETAILS.
- 10 F/I (N) GENERATOR CONNECTION PANEL WITH MANUAL TRANSFER SWITCH AND MECHANICAL LUGS. NEMA 3RX UNIT MADE WITH STAINLESS STEEL 316, MANUFACTURED BY ESL POWER SYSTEMS. MODEL: 3020 OR APPROVED EQUAL.
- 11 F/I (N) 2' STANCHION LIGHT POLE. MANUFACTURED BY AV POLES. MODEL: CS-2379 OR APPROVED EQUAL. FINISH TO MATCH THE EXISTING AREA OR PORT APPROVAL.
- 12 STREET WIDTH NOT TO SCALE. APPROXIMATE WIDTH OF THE STREET IS 48 FEET.
- 13 CONDUITS WHICH EXTEND INTO WET WELL SHALL BE SEALED AT THE POWER & CONTROL CABINET USING EYS SEALS OR OTHER APPROVED MEANS.

LIGHTING SCHEDULE			
TAG	QTY	MODEL (OR APPROVED EQUAL)	NOTES
A	1	MCGRAW-EDISON GPC-SA1C-740-U-SWQ-QM-WOBXX	F/I (N) FIXTURE WITH INTEGRAL PHOTOCELL CONTROL AND AUTO-SCHEDULING. MOUNT ON TOP OF THE (E) CONCRETE WALL. F/I (N) LIGHT SWITCH INSIDE THE METER PEDESTAL.

**ELECTRICAL SITE PLAN**  
SCALE: 3/8" = 1'-0"



PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,509

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS

**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
**DEPARTMENT OF ENGINEERING**

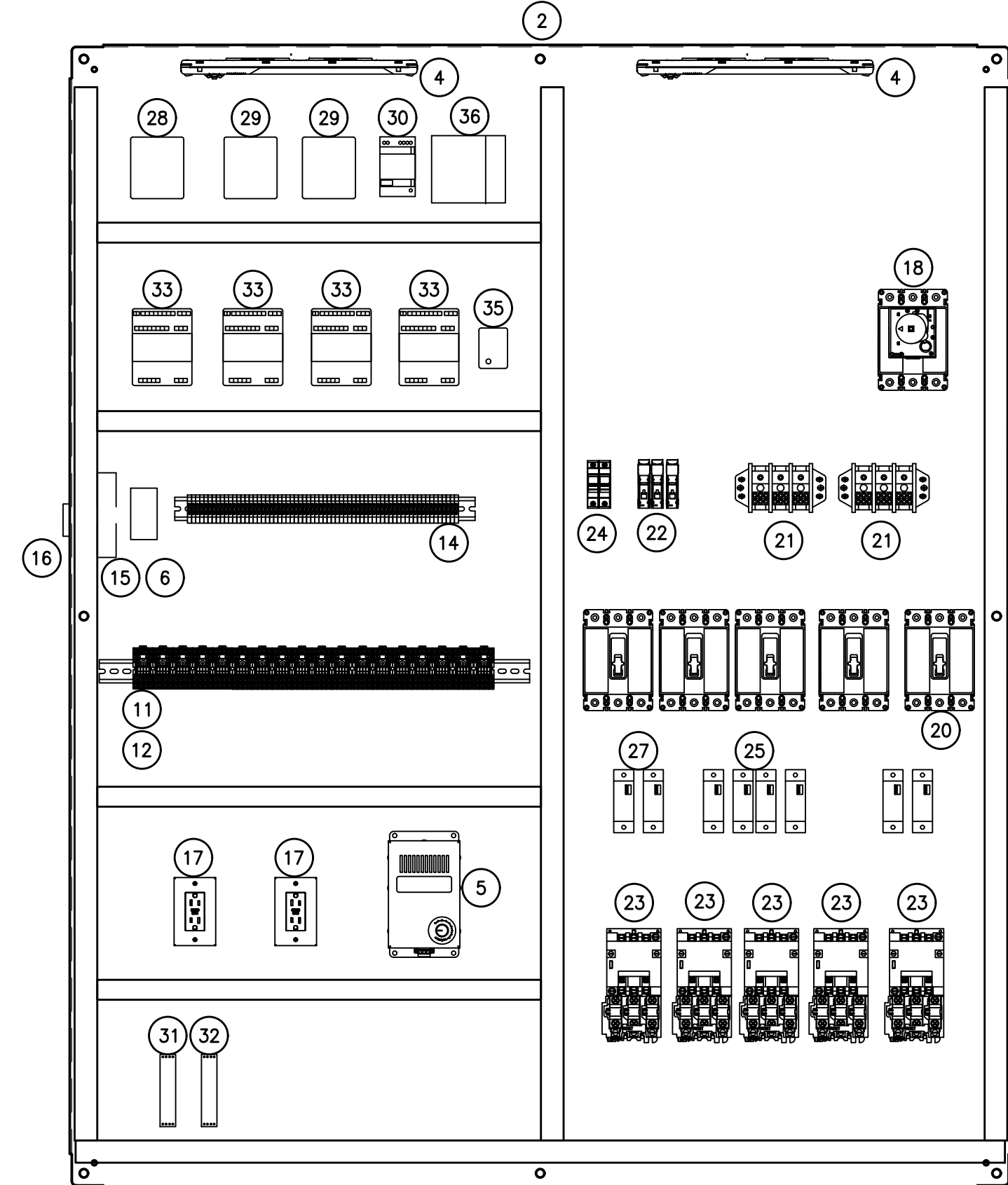
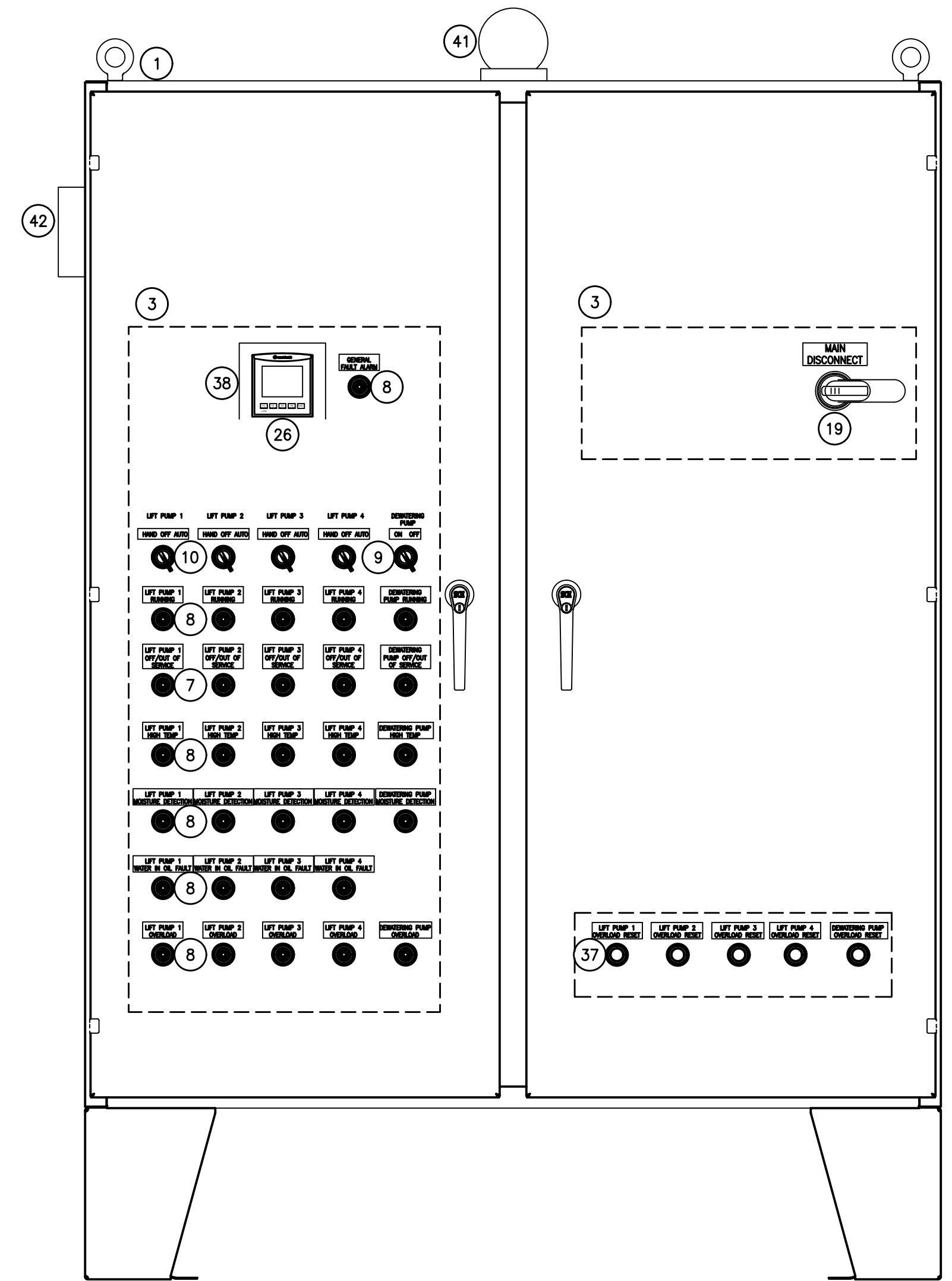
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 DRAWN: DATE: 12/23  
 CHECKED: DATE: 12/23  
 PUBLIC WORKS APPROVALS  
 SECTION MANAGER: Chi Sao, DATE: 12/12/2023  
 DEPUTY BUREAU MANAGER: I.DHAPA, DATE: 02/14/2024  
 BUREAU MANAGER: P. RIVERA, DATE: 03/18/2024

APPROVED BY: SAN FRANCISCO PORT COMMISSION  
 DATE: 5/16/2024  
 CHIEF HARBOR ENGINEER: Uday Prasad

SCALE: AS SHOWN  
 REV. NO. 0

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
**ELECTRICAL SITE PLAN**

CONTRACT NO. 2852  
 PORT DRAWING NO. 19213-4043-E  
 SHEET NO. E-5  
 SHEET OF SHEETS 38 OF 72



BILL OF MATERIALS				
TAG	QTY.	DESCRIPTION	MFR. (OR APPROVED EQUAL)	PART NO.
1	1	NEMA 4X, 316 SS; 72"H X 60"W X 18"D	SAGINAW CONTROL & ENGINEERING	SCE-72EL6018SS6LPPL
2	1	SUB-PANEL; 68"H X 56"W X 0.88"D	SAGINAW CONTROL & ENGINEERING	SCE-72P60
3	2	SWING-OUT PANEL; 68"H X 25.88"W X 1.5"D	SAGINAW CONTROL & ENGINEERING	SCE-DF72EL60
4	2	ENCLOSURE LED STRIP LIGHT WITH SWITCH	SAGINAW CONTROL & ENGINEERING	SCE-SLOF
5	1	ENCLOSURE HEATER, 120VAC, 400W	HOFFMAN	DAH4001B
6	1	COXIAL ANTENNA SURGE PROTECTOR		
7	5	PILOT LIGHT W/ PTT, 120VAC LED, GREEN, NEMA 4X	ALLEN BRADLEY	800H-QRTH2G
8	25	PILOT LIGHT W/ PTT, 120VAC LED, RED, NEMA 4X	ALLEN BRADLEY	800H-QRTH2R
9	1	30 MM SELECTOR SWITCH, 120VAC, 2 POSITION, MAINTAINED, NEMA 4X	ALLEN BRADLEY	800H-HR
10	4	30 MM SELECTOR SWITCH, 120VAC, 3 POSITION, MAINTAINED, NEMA 4X	ALLEN BRADLEY	800H-J2
11	18	GENERAL PURPOSE CONTROL RELAY, COIL:120VAC, 4PDT, W/ INDICATOR	IDEC	RY4S-UL
12	18	STANDARD DIN RAIL MOUNT SOCKET	IDEC	SY4S-05
13	AS REQ'D	COXIAL ANTENNA CABLE, 50 OHM, OUTDOOR	BELDEN	
14	AS REQ'D	TERMINAL BLOCKS	PHOENIX CONTACT	
15	1	XETA WAVE RADIO, 900MHZ	XETA WAVE	XETA9
16	1	COAX CABLE GLAND, NEMA 4X LISTED		
17	2	DUPLEX GFCI RECEPTACLE		
18	1	MOLDED CASE CIRCUIT BREAKER WITH 1-NO/NC AUXILIARY CONTACT, 22KAIC	ALLEN BRADLEY	140G
19	1	ROTARY HANDLE KIT, BLACK	ALLEN BRADLEY	140G-G-RVM12B
20	5	MOTOR CIRCUIT PROTECTION WITH 1NO/NC AUXILIARY CONTACT, 22KAIC	ALLEN BRADLEY	140G-MG
21	2	POWER DISTRIBUTION BLOCK, 3 POLE, 1 LINE, 6 LOAD	SQUARE D	9080LBA362106
22	3	CIRCUIT BREAKER, 20A, 1P	EATON	FAZ-C20/1-NA-L
23	5	MOTOR STARTER WITH E1 PLUS SOLID STATE OVERLOAD RELAY, NEMA SIZE 1, SUPPLY: 240VAC, COIL: 120VAC	ALLEN BRADLEY	509
24	2	FUSE HOLDER	EATON	
25	4	CURRENT SENSORS	EATON	EAC1420SP
26	1	PROGRAMMABLE LOGIC CONTROLLER WITH COLOR HMI TOUCHSCREEN	UNITRONICS	V350-35-R34
27	1	EXPANSION MODULE ADAPTOR	UNITRONICS	EX-A2K
28	1	I/O EXPANSION MODULE	UNITRONICS	IO-A14-A02
29	2	I/O EXPANSION MODULE	UNITRONICS	IO-D18-T08
30	1	POWER SUPPLY 24VDC, 3.8A	SCHNEIDER ELECTRIC	ABLS1A24038
31	1	SMART TRANSMITTER POWER SUPPLY	PEPPERL FUCHS	KCD2-STC-EX1
32	1	PULSE ISOLATOR	PR ELECTRONICS	5202B
33	4	PUMP IO MODULE	GRUNFOS	IO 113
34	4	MOISTURE SENSOR	GRUNFOS	WIO SENSOR
35	1	OVER TEMPERATURE AND SEAL LEAKAGE RELAY	MACROMATIC	TCP2G100
36	1	UNINTERRUPTIBLE POWER SUPPLY (UPS)	PHOENIX CONTACT	QUINT-UPS/24DC/24DC/10/3.4AH
37	5	OVERLOAD RESET BUTTON	ALLEN BRADLEY	1493-N21
38	1	HMI SUN SHADE	SMITH AND LOVELESS	SHADEIDE H87A379
39	1	CIRCUIT BREAKER, 10A, 1P	EATON	FAZ-C10/1-NA-L
40	1	CIRCUIT BREAKER, 2A, 1P	EATON	FAZ-C2/1-NA-L
41	1	STROBE LIGHT, FLASHING, NEMA 4X, RED, SURFACE MOUNT	WERMA	
42	1	HORN, ALARM, NEMA 4X	WERMA	

**GENERAL NOTES:**

1. TERMINAL BLOCK SHOWN IN THE CONTRACT DOCUMENT IS TYPICAL. FURNISH AND INSTALL QUANTITIES AS REQUIRED PER THE SPECIFICATIONS AND CONTROL SCHEMATIC DRAWINGS TO ACCOMMODATE ALL INPUTS, OUTPUTS AND PROVIDE 20% SPARES BASED ON INSTALLED QUANTITIES.
2. ENCLOSURE SHALL HAVE PAD-LOCKABLE OUTER DOOR. OPERATOR DEVICES SHALL BE MOUNTED ON THE SWING-OUT PANEL.
3. THIS PANEL SHALL BE LISTED UL508A AND UL698A.
4. PROVIDE ELECTRIC HEATER THAT IS ADEQUATE TO AVOID CONDENSATION BUILD UP IN THE ENCLOSURE. REFER TO REQUIREMENT AS SPECIFIED IN SPECIFICATION SECTION 40 94 31 FOR REQUIREMENT.
5. AIC RATINGS OF ALL POWER COMPONENTS SHALL BE 22KAIC. PANEL SCCR SHALL BE 22KA.
6. PROVIDE SUN SHADE ENCLOSURE FOR THE HMI TO REDUCE SUN EXPOSURE.
7. PUMP PROTECTION RELAY SHALL BE SUITABLE TO THE PUMP AS PROVIDED AND INSTALLED. THE PUMP PROTECTION RELAY AS SHOWN IN THIS CONTRACT DOCUMENT IS TYPICAL. THEREFORE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PUMP MANUFACTURER AND PROVIDE RELAY WITH CORRECT SCHEMATIC IN THE SUBMITTAL WITHOUT ADDITIONAL COST TO THE CITY.

**CONTROL PANEL ELEVATION**

SCALE: NTS

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS


**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING  
 12/13/2023

DESIGNED: DATE: 12/23  
 DRAWN: DATE: 12/23  
 CHECKED: DATE: 12/23  
 PUBLIC WORKS APPROVALS  
 SECTION MANAGER: DATE: 12/12/2023  
 DEPUTY BUREAU MANAGER: DATE: 03/18/2024  
 BUREAU MANAGER: DATE:

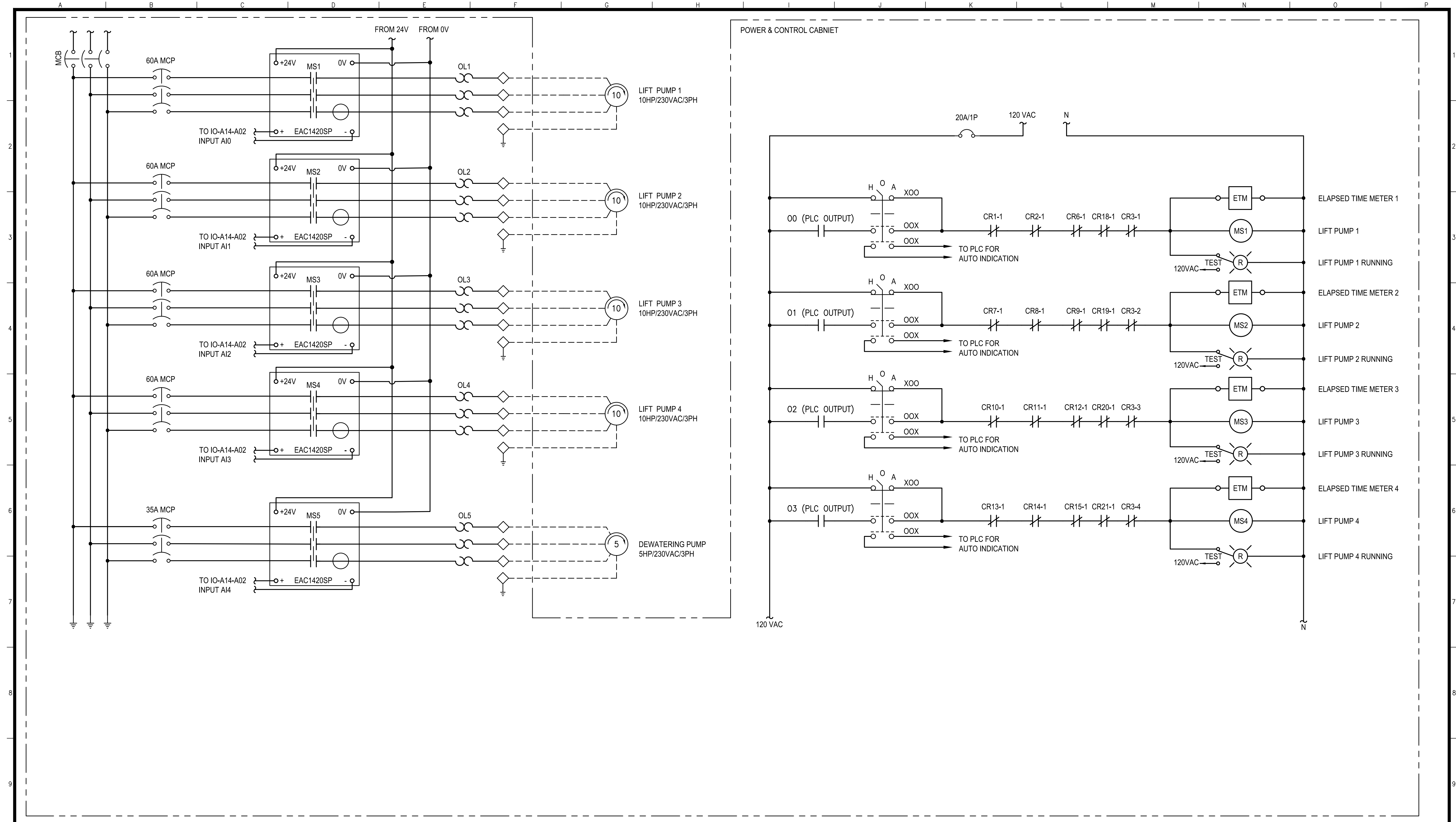
APPROVED BY: DATE: 5/16/2024  
 SAN FRANCISCO PORT COMMISSION  
 CHIEF HARBOR ENGINEER

SCALE: NONE  
 REV. NO. 0

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,510

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
**CONTROL PANEL ELEVATION &**  
**BILL OF MATERIALS**

CONTRACT NO. 2852  
 PORT DRAWING NO. 19214-4043-E  
 SHEET NO. E-6  
 SHEET OF SHEETS 39 OF 72



PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,511

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS

**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING

12/13/2023

DESIGNED: DATE: 12/23  
 ST  
 DRAWN: DATE: 12/23  
 ST  
 CHECKED: DATE: 12/23  
 PN

PUBLIC WORKS APPROVALS  
 SECTION MANAGER: *Chi Sao* 12/12/2023  
 DEPUTY BUREAU MANAGER: *I. DHAPA* 02/14/2024  
 BUREAU MANAGER: *P. RIVERA* 03/18/2024

APPROVED BY  
 SAN FRANCISCO PORT COMMISSION  
 DATE: 5/16/2024  
 CHIEF HARBOR ENGINEER: *Uday Prasad*

SCALE: NONE  
 REV. NO. 0

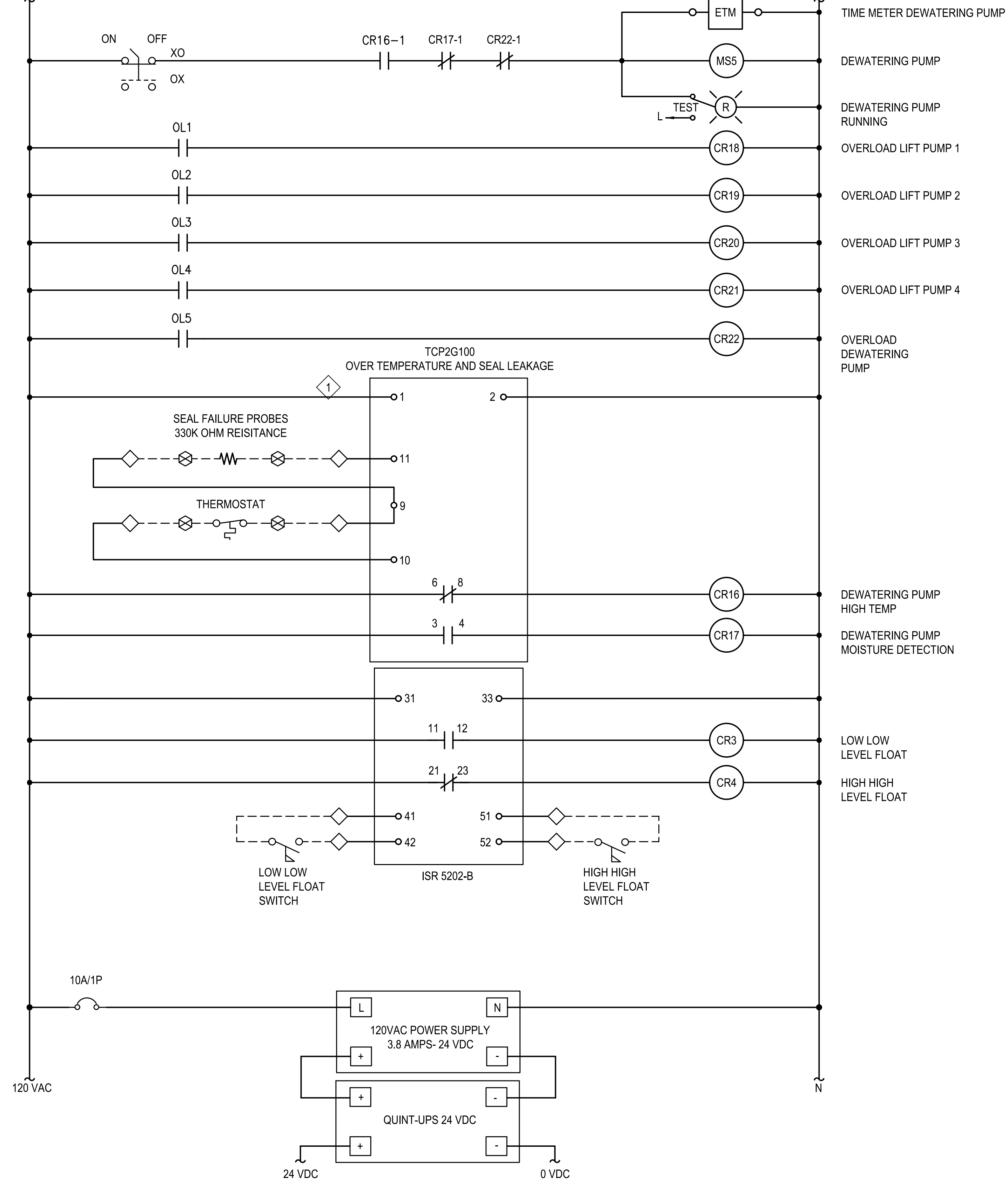
**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
 ELEMENTARY WIRING DIAGRAM (1 OF 4)

CONTRACT NO. 2852  
 PORT DRAWING NO. 19215-4043-E  
 SHEET NO. E-7  
 SHEET OF SHEETS 40 OF 72

POWER & CONTROL CABINET

120 VAC

N



**SHEET NOTES:**

1 TYPICAL MOTOR PROTECTION EQUIPMENT AND CONFIGURATION. CONTRACTOR SHALL F/I MOTOR PROTECTION EQUIPMENT FOR THE SPECIFIC PUMP AND PROVIDE CORRECT CONFIGURATION FOR IT.

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,512

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS


**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING



DESIGNED:	DATE:	PUBLIC WORKS APPROVALS
ST	12/23	<i>Chi Sao</i> 12/12/2023
DRAWN:	DATE:	SECTION MANAGER
ST	12/23	<i>I. DHAPA</i> 02/14/2024
CHECKED:	DATE:	DEPUTY BUREAU MANAGER
PN	12/23	<i>P. Rivera</i> 03/18/2024
		BUREAU MANAGER

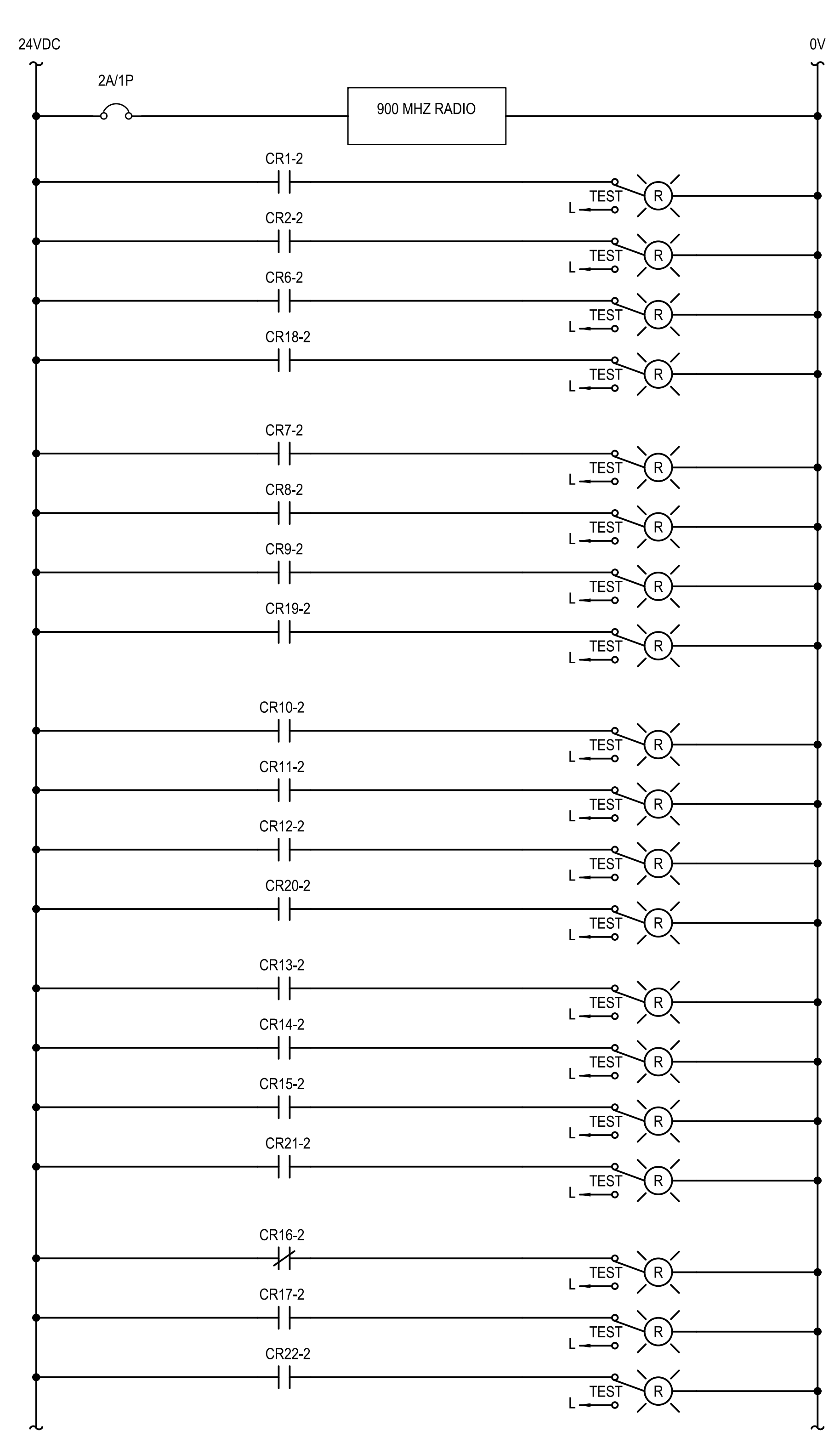
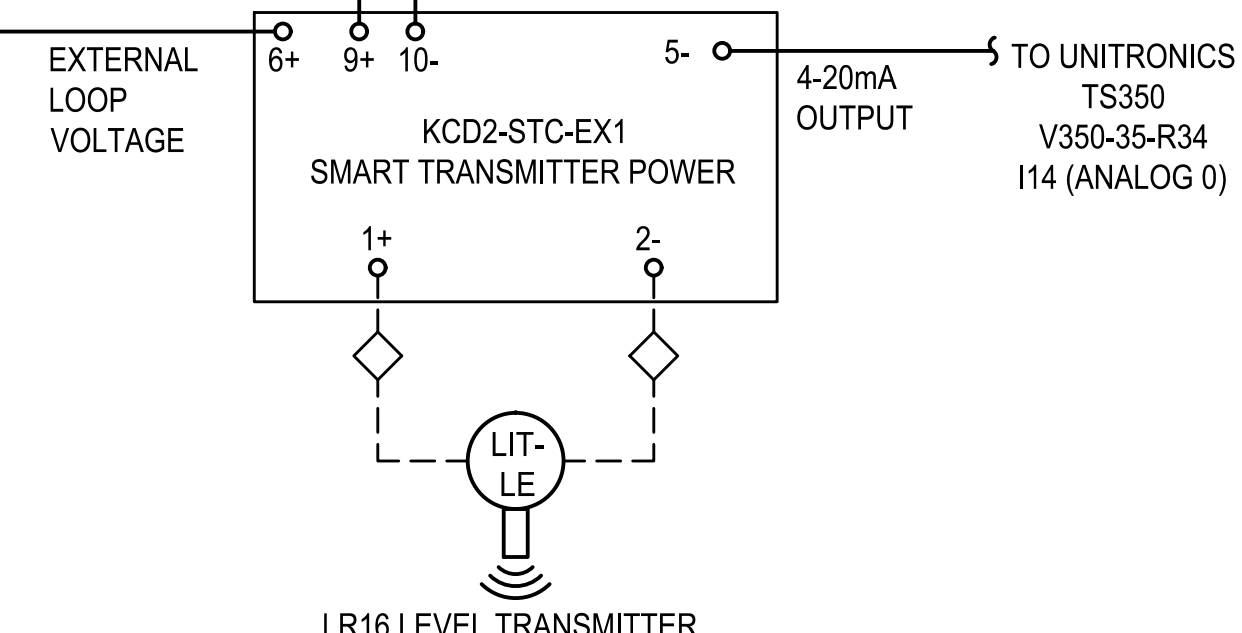
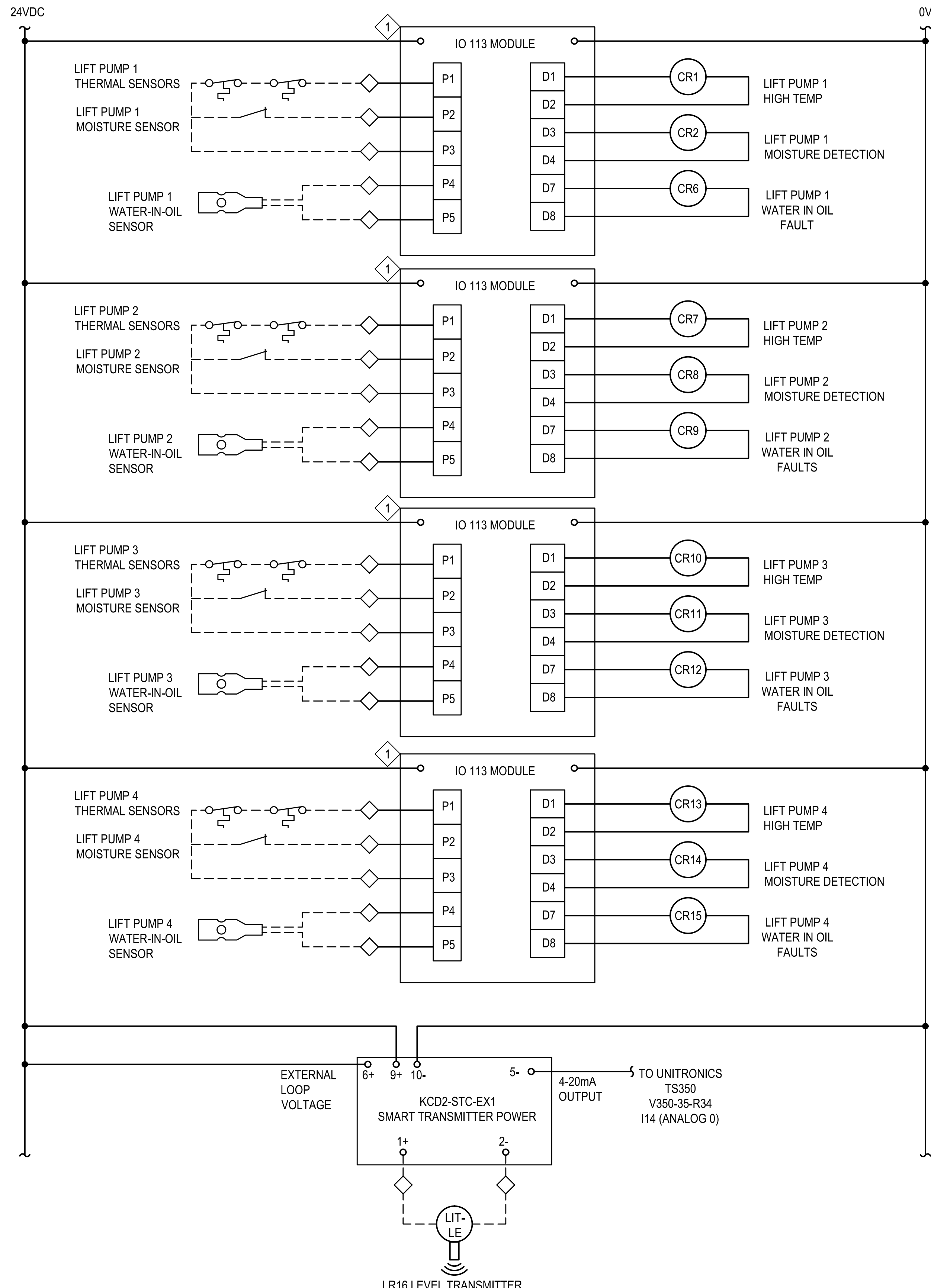
APPROVED BY	DATE:
<i>Uday Prasad</i>	5/16/2024
SAN FRANCISCO PORT COMMISSION	
CHIEF HARBOR ENGINEER	

SCALE:	NONE
REV. NO.	0

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
**ELEMENTARY WIRING DIAGRAM (2 OF 4)**

CONTRACT NO.	2852
PORT DRAWING NO.	19216-4043-E
SHEET NO.	E-8
SHEET OF SHEETS	41 OF 72





**SHEET NOTES:**  
 1 TYPICAL MOTOR PROTECTION EQUIPMENT AND CONFIGURATION. CONTRACTOR SHALL F/I MOTOR PROTECTION EQUIPMENT FOR THE SPECIFIC PUMP AND PROVIDE CORRECT CONFIGURATION FOR IT.

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,513

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS

**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING

12/13/2023

DESIGNED: DATE: 12/23  
 DRAWN: DATE: 12/23  
 CHECKED: DATE: 12/23  
 PN

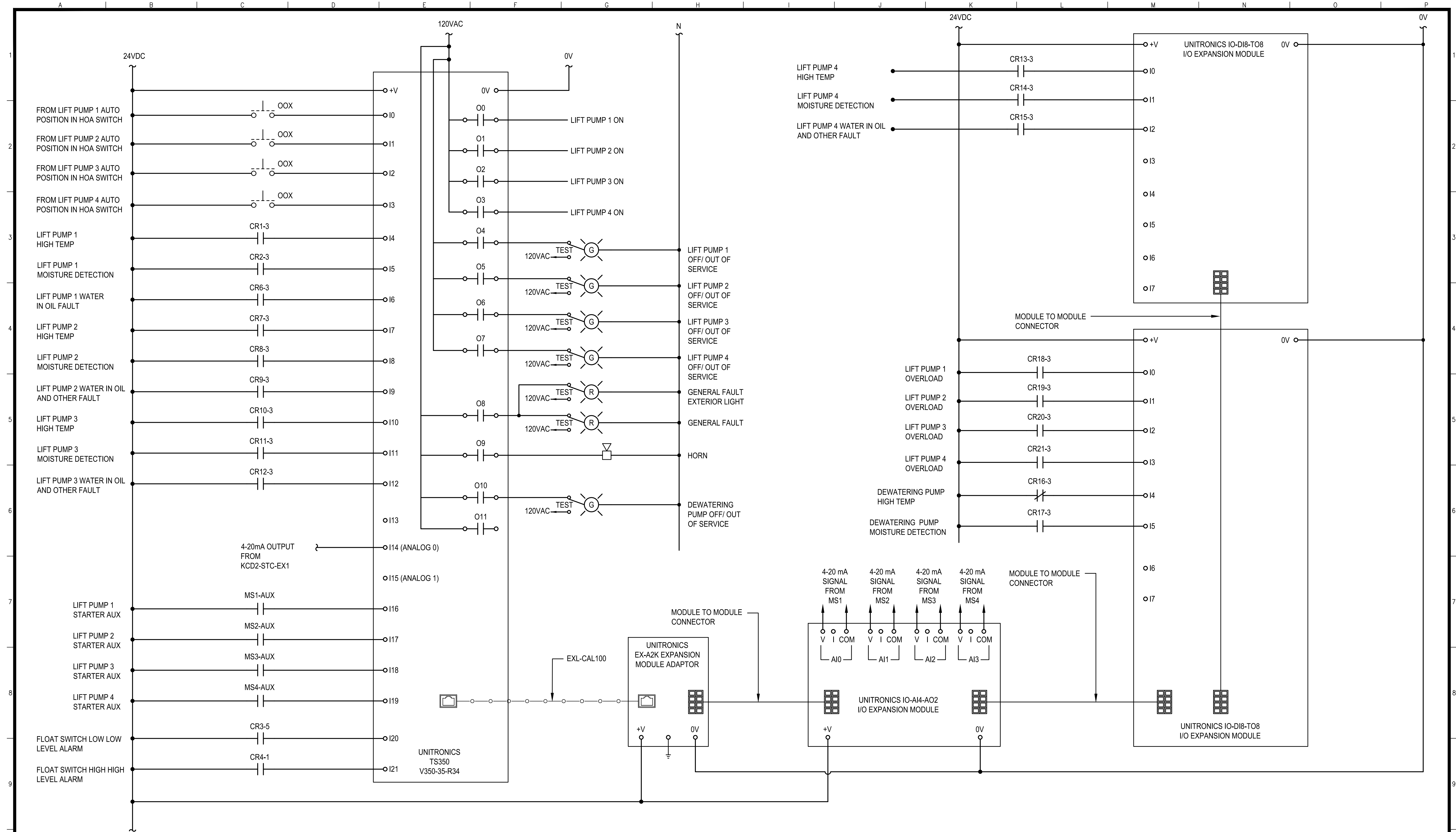
PUBLIC WORKS APPROVALS  
 SECTION MANAGER: *Chi Sao* 12/12/2023  
 DEPUTY BUREAU MANAGER: *I. DHAPA* 02/14/2024  
 BUREAU MANAGER: *P. RIVERA* 03/18/2024

APPROVED BY  
 SAN FRANCISCO PORT COMMISSION  
 DATE: 5/16/2024  
 CHIEF HARBOR ENGINEER: *Uday Prasad*

SCALE: NONE  
 REV. NO. 0

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
**ELEMENTARY WIRING DIAGRAM (3 OF 4)**

CONTRACT NO. 2852  
 PORT DRAWING NO. 19217-4043-E  
 SHEET NO. E-9  
 SHEET OF SHEETS 42 OF 72



PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,514

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS


**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING  
12/13/2023

DESIGNED: DATE: 12/23  
 ST  
 DRAWN: DATE: 12/23  
 ST  
 CHECKED: DATE: 12/23  
 PN

PUBLIC WORKS APPROVALS  
 SECTION MANAGER: *Chi Sao* DATE: 12/12/2023  
 DEPUTY BUREAU MANAGER: *I. DHAPA* DATE: 02/14/2024  
 BUREAU MANAGER: *P. RIVERA* DATE: 03/18/2024

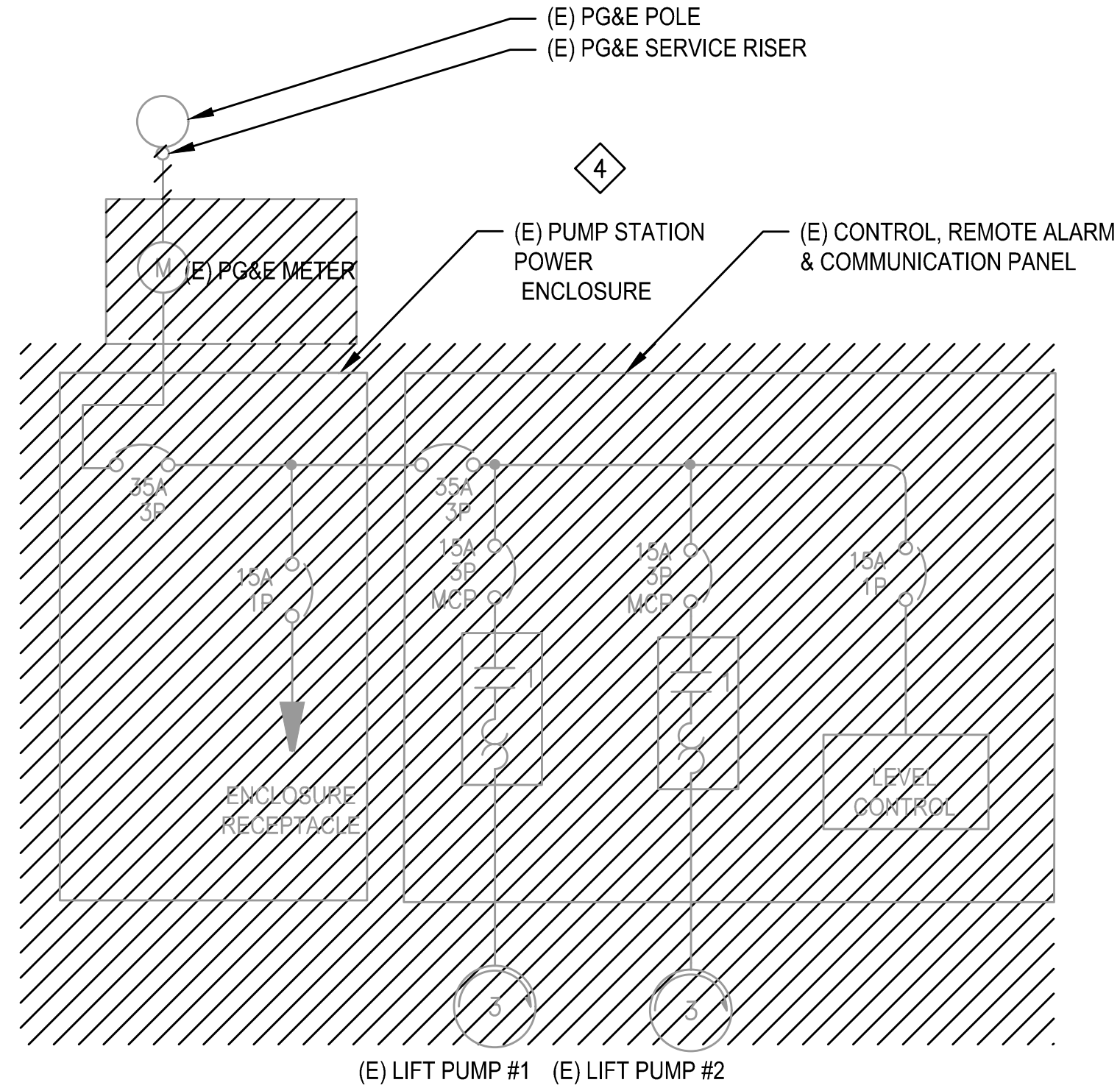
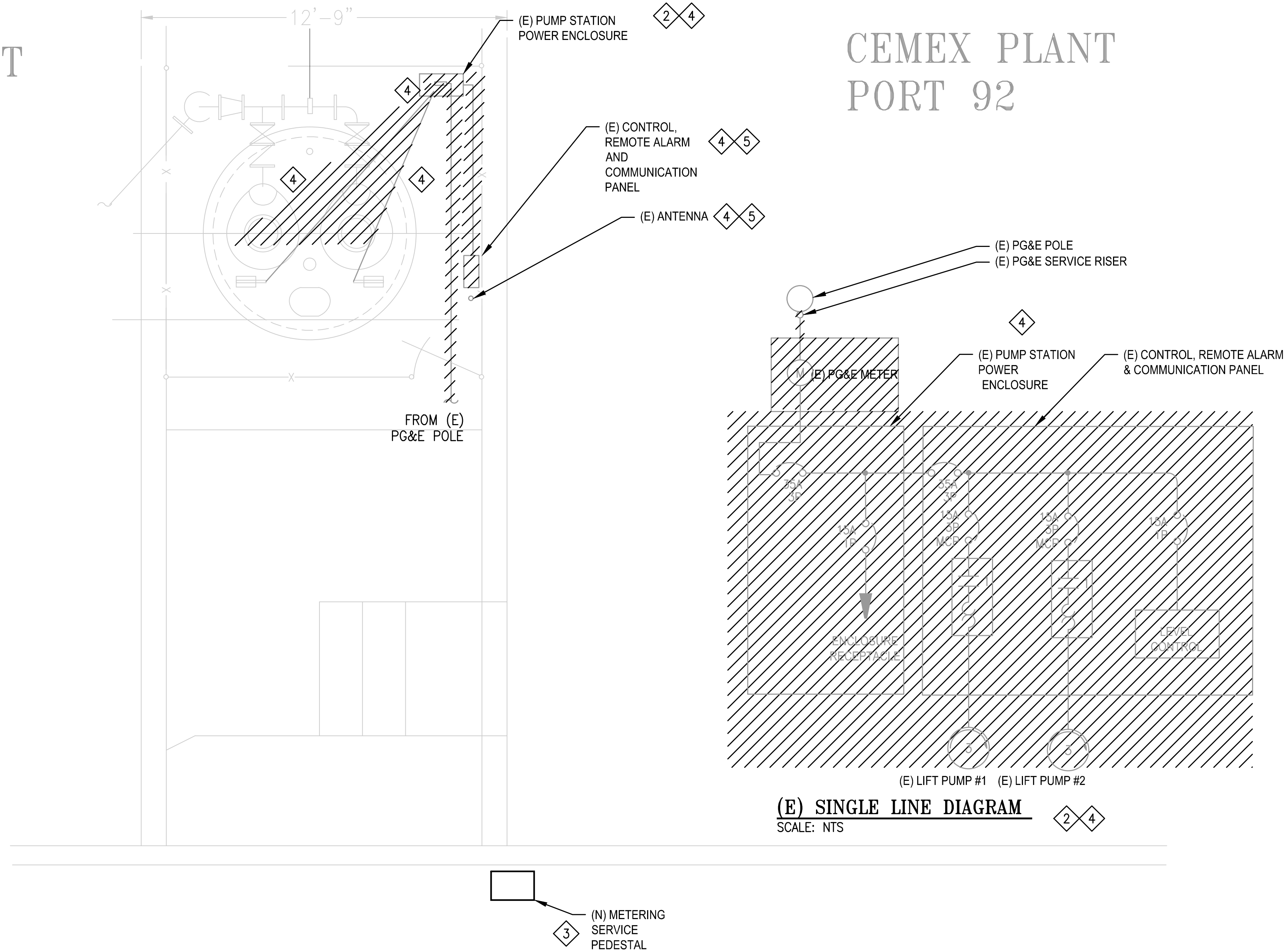
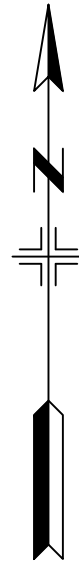
APPROVED BY  
 SAN FRANCISCO PORT COMMISSION  
 DATE: 5/16/2024  
 CHIEF HARBOR ENGINEER: *Uday Prasad*

SCALE: NONE  
 REV. NO. 0

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
**ELEMENTARY WIRING DIAGRAM (4 OF 4)**

CONTRACT NO. 2852  
 PORT DRAWING NO. 19217.1-4043-E  
 SHEET NO. E-10  
 SHEET OF SHEETS 43 OF 72

# CEMEX PLANT PORT 92



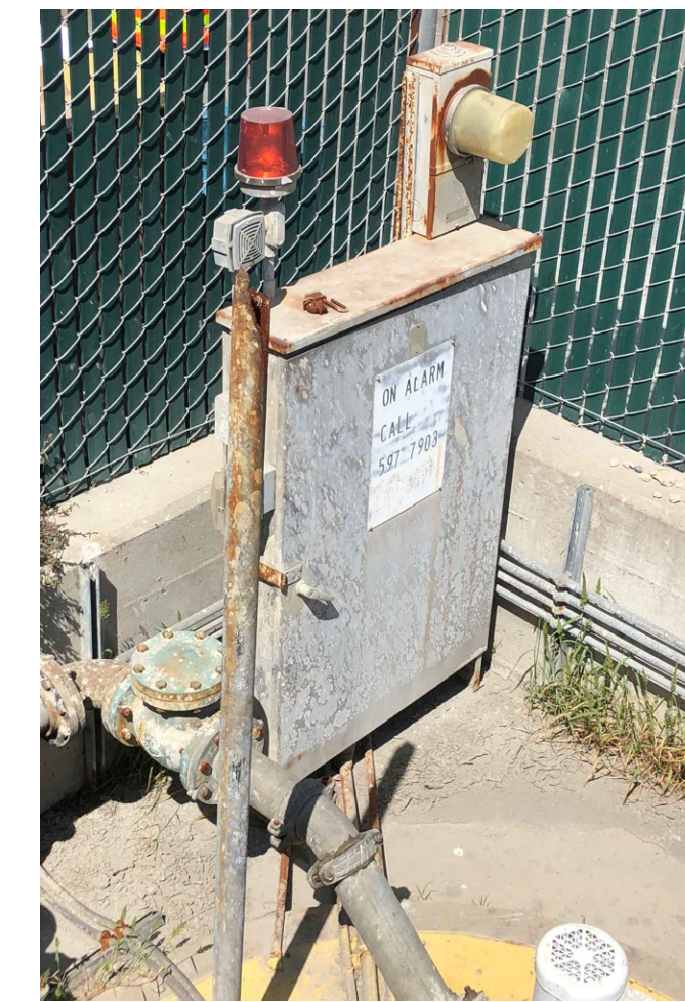
**(E) SINGLE LINE DIAGRAM**  
SCALE: NTS

**SHEET NOTES:**

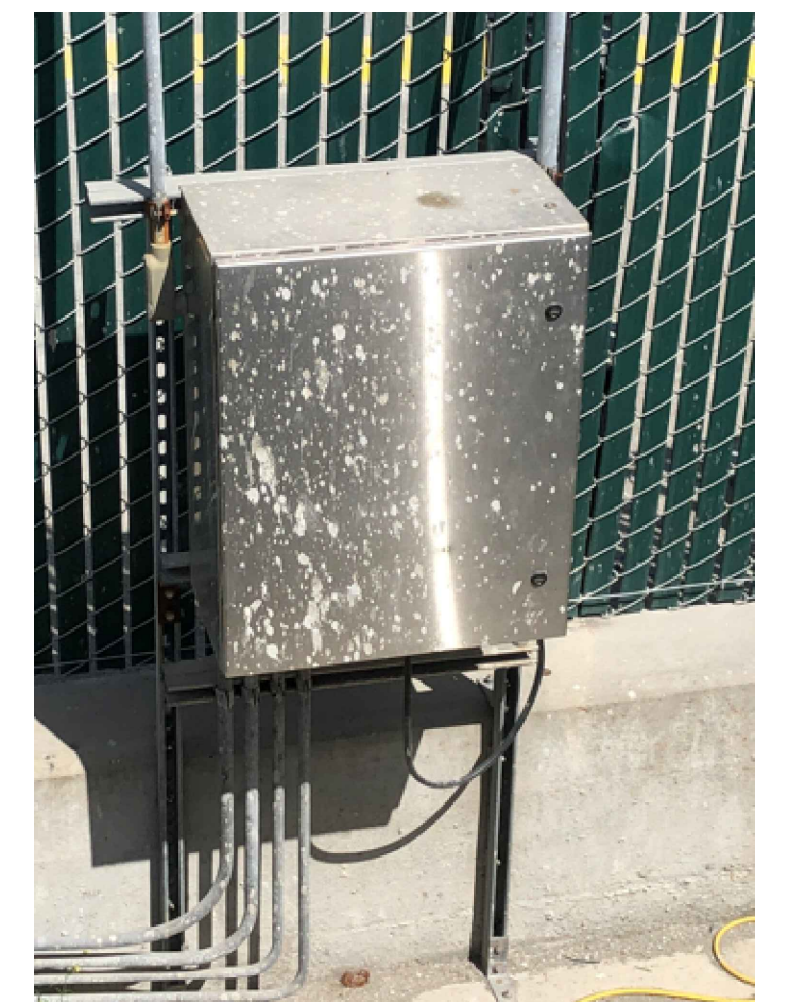
- 1 IDENTIFY ALL TENANT/CEMAX FUEL SYSTEM ELECTRICAL COMPONENTS WITHIN THE WORK AREA AND NOTIFY CITY REPRESENTATIVE IF SUCH SYSTEM STILL EXIST WITHIN THE WORK AREA. TENANT/CEMAX IS RESPONSIBLE FOR RELOCATION OF EXISTING FUEL DISPENSER SYSTEM AND ASSOCIATED RACEWAYS, CONDUCTORS AND DEVICES SUCH THAT THEY ARE CLEAR OF THE WORK AREA.
- 2 EXISTING PUMP STATION TO BE POWERED BY NEW ELECTRICAL SERVICE DURING CONSTRUCTION. THE (E) PUMP POWER AND CONTROL ENCLOSURES ARE NOT TO BE DEMOLISHED UNTIL (N) PUMP STATION IS CONSTRUCTED AND COMMISSIONED.
- 3 SEE DRAWING EI-02 FOR DETAILS ON NEW SERVICE PEDESTAL LOCATION AND PG&E SERVICE INSTALLATION.
- 4 R/C ALL ELECTRICAL, CONTROL COMPONENTS AND ASSOCIATED CONDUITS AND WIRING OF EXISTING PUMP STATION ONCE NEW STATION HAS BEEN TESTED AND COMMISSIONED.
- 5 R/S TELEMETRY SYSTEM INCLUDING ANTENNA AND RADIO SYSTEM AS PORT PROPERTY.



1 **(E) FUEL SYSTEM STATION PANELS**  
SCALE: NTS



2 4 **(E) POWER ENCLOSURE**  
SCALE: NTS



2 4 **(E) CONTROL, REMOTE ALARM & COMMUNICATION PANEL**  
SCALE: NTS

500 AMADOR STREET

**ELECTRICAL PLAN - DEMOLITION PLAN**  
SCALE: 1"=30'

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,515

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS



**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
**DEPARTMENT OF ENGINEERING**



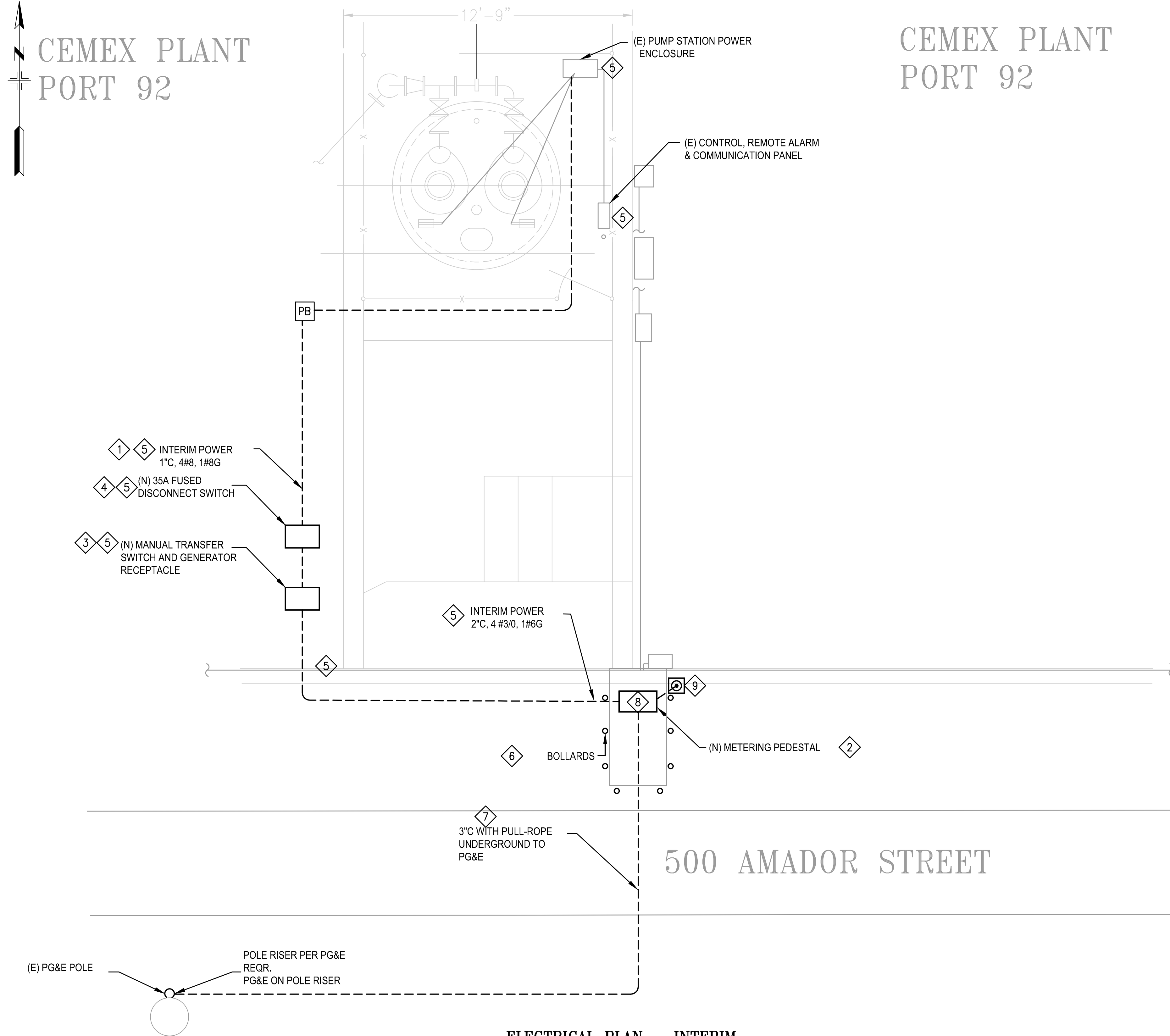
DESIGNED:	DATE:	PUBLIC WORKS APPROVALS
ST	6/24	C. JAO <i>Chi Jao</i> 6/18/24 SECTION MANAGER
DRAWN:	DATE:	APPROVED BY:
ST	6/24	SAN FRANCISCO PORT COMMISSION
CHECKED:	DATE:	DATE:
PN	6/24	7/3/2024
		Uday Prasad CHIEF HARBOR ENGINEER

APPROVED BY:	SCALE:
SAN FRANCISCO PORT COMMISSION	NONE
DATE:	REV. NO.
7/3/2024	0

SCALE:	NONE
REV. NO.	0

AMADOR STREET INFRASTRUCTURE IMPROVEMENTS	
ELECTRICAL DEMOLITION PLAN	

CONTRACT NO.	2852
PORT DRAWING NO.	19218-4043-E
SHEET NO.	ED-01
SHEET OF SHEETS	44 OF 72



# CEMEX PLANT PORT 92

**GENERAL NOTES:**

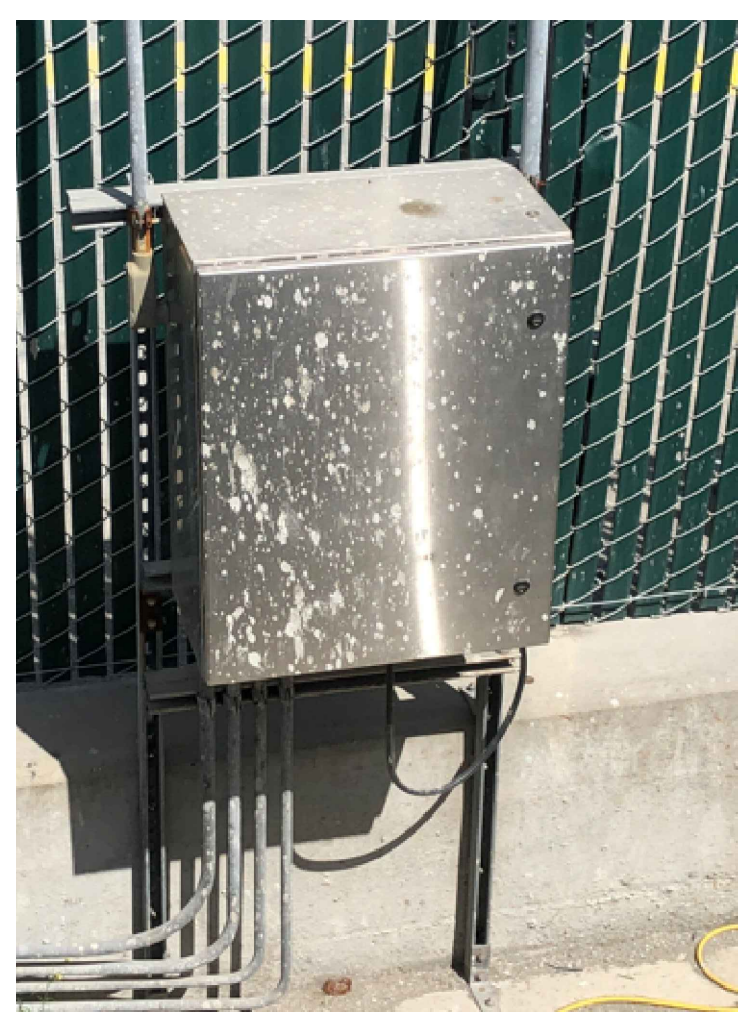
1. CONTRACTOR SHALL USE CAUTION WHEN WORKING AROUND NEWLY INSTALLED CONDUITS, INCLUDING HAND-DIGGING, IF REQUIRED, TO BE PERFORMED AS INCIDENTAL WORK.
2. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGES TO THE CONDUITS WHICH MAY OCCUR AS A RESULT OF THE CONTRACTOR'S OPERATIONS. ANY DAMAGES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

**SHEET NOTES:**

1. F/I INTERIM POWER CONDUITS AND CONDUCTORS FROM NEW SERVICE PEDESTAL TO THE EXISTING PUMP POWER ENCLOSURE TO POWER THE EXISTING PUMPS FROM NEW METERING PEDESTAL. COORDINATE WITH PG&E TO DISCONNECT THE EXISTING METER FROM (E) MAIN 35 AMP MAIN BREAKER IN THE ENCLOSURE. CONNECT INTERIM POWER CONDUCTORS TO THE (E) MAIN BREAKER.
2. SEE DRAWING EI-02 FOR DETAILS ON NEW SERVICE PEDESTAL LOCATION AND PG&E SERVICE INSTALLATION.
3. F/I (N) GENERATOR CONNECTION PANEL WITH MANUAL TRANSFER SWITCH AND CAM LOCKS CONNECTORS. NEMA 3RX UNIT MADE WITH STAINLESS STEEL 316.
4. F/I NEW FUSED DISCONNECT SWITCH AS INDICATED. NEMA 4X UNIT MADE WITH STAINLESS STEEL 316.
5. R/C INTERIM POWER CONDUCTORS, DISCONNECT SWITCH, MANUAL TRANSFER SWITCH, AND GENERATOR RECEPTACLE ONCE NEW STATION HAS BEEN TESTED AND COMMISSIONED.
6. TRENCHING, CONDUIT, CONCRETE PAD, BOLLARD AND BACKFILL SHALL MEET REQUIREMENTS OF 2022-2023 PG&E GREEN BOOK. STREET WIDTH NOT TO SCALE. APPROXIMATE WIDTH OF THE STREET IS 48 FEET. CONTRACTOR TO PROTECT ALL THE CONDUITS AGAINST ANY POTENTIAL DAMAGE AFTER INSTALLATION.
7. ENCASED CONDUITS SHALL BE SCHEDULE 80 PVC, TRANSITIONING TO PVC-COATED GRS WHEN RUN IS EXPOSED.
8. ALL THE CONDUITS TO METERING PEDESTAL MUST BE INSTALLED BEFORE POURING CONCRETE, SEE E05.
9. BOND GROUNDING SYSTEM TO CONCRETE ENCASED ELECTRODE IN (N) SLAB ALONG LONGEST AXIS (NOT SHOWN). F/I ELECTRODE LISTED FOR THIS PURPOSE. CONCRETE ENCASED ELECTRODE SHALL BE AT LEAST 20 FEET LONG (SFEC 250.52(A)(3)) AND ENCASED BY AT LEAST 2 INCHES OF CONCRETE (SFEC 250.52).



5 (E) POWER ENCLOSURE  
SCALE: NTS



5 (E) CONTROL, REMOTE ALARM & COMMUNICATION PANEL  
SCALE: NTS

**ELECTRICAL PLAN - INTERIM**  
SCALE: 3/8"=1'-0"

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,516

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				


REFERENCE INFORMATION & FILE NO. OF SURVEYS


**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
 DEPARTMENT OF ENGINEERING

6/17/2024

DESIGNED:	DATE:	PUBLIC WORKS APPROVALS
ST	6/24	C. JAO <i>Chi Jao</i> 6/18/24 SECTION MANAGER
DRAWN:	DATE:	
ST	6/24	I. DHAPA <i>I. Dhapa</i> 06/20/2024 DEPUTY BUREAU MANAGER
CHECKED:	DATE:	
PN	6/24	P. RIVERA <i>P. Rivera</i> 06/20/2024 BUREAU MANAGER

APPROVED BY  
SAN FRANCISCO PORT COMMISSION  
DATE: 7/3/2024

  
 Uday Prasad  
 CHIEF HARBOR ENGINEER

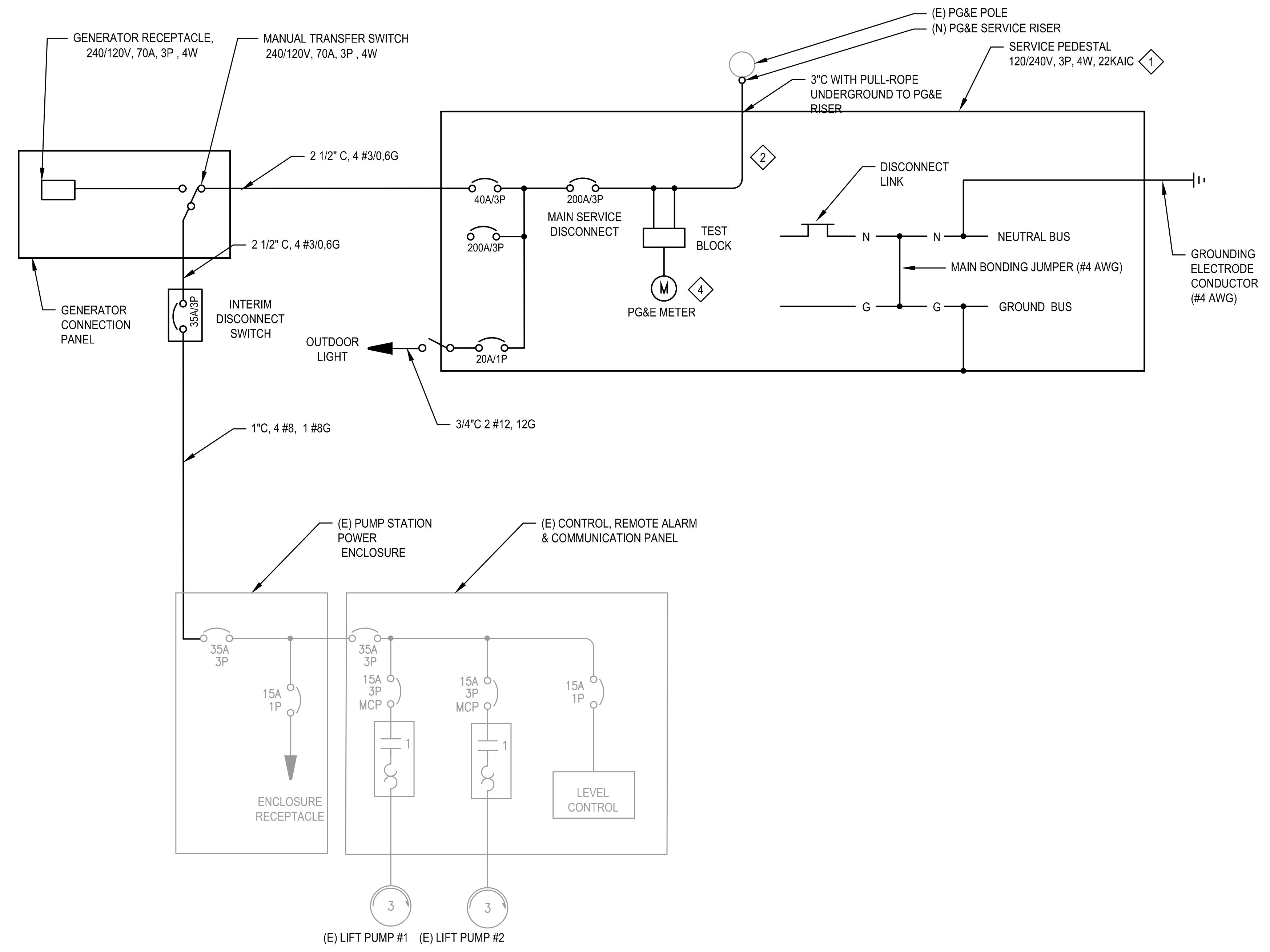
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REV. NO.	0

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**  
**ELECTRICAL INTERIM PLAN**

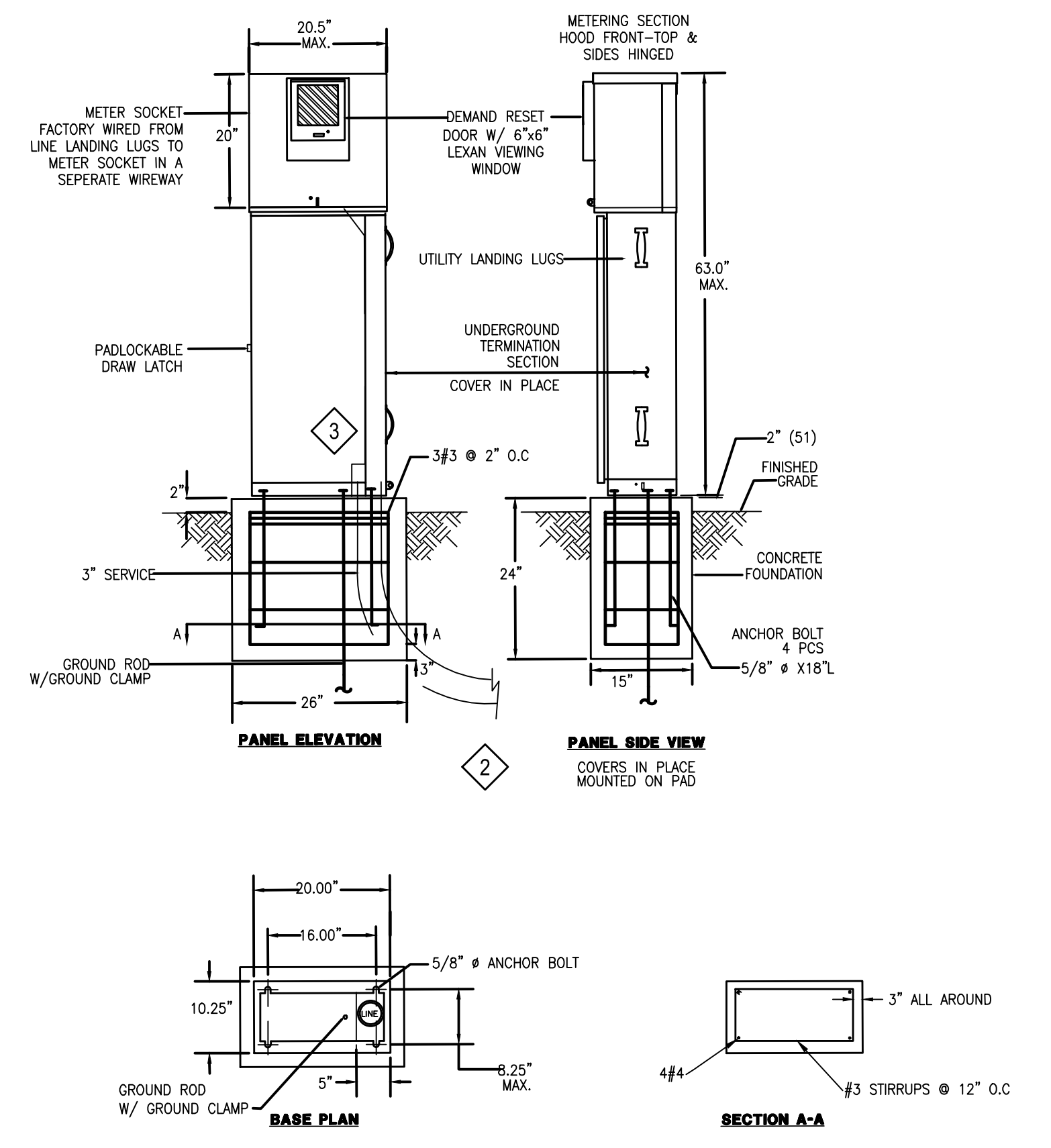
CONTRACT NO.	2852
PORT DRAWING NO.	19218.1-4043-E
SHEET NO.	EI-01
SHEET OF SHEETS	45 OF 72

**SHEET NOTES:**

- 1 F/I PEDESTAL MOUNTED PG&E METERING EQUIPMENT WITH MAIN CIRCUIT BREAKER FOR NEW SERVICE. ENCLOSURE SHALL BE RATED NEMA 3RX USE AND SHALL HAVE TAMPER RESISTANT HARDWARE. METERING EQUIPMENT SHALL BE EUSERC COMPLIANT. INSTALLATION SHALL COMPLY WITH PG&E ELECTRIC AND GAS SERVICE REQUIREMENTS (GREENBOOK). COORDINATE WITH UTILITY FOR IDENTIFICATION OF HIGH-LEG FOR SINGLE PHASE 120V LOADS. HIGH-LEG TO BE DIFFERENTIATED IN PANEL PER SPEC. CONTRACTOR MUST HAVE PRE-CONSTRUCTION MEETING WITH PG&E BEFORE INSTALLING METERING PEDESTAL AND CONDUITS TO IT. THE EXISTING METER HAS TO BE REMOVED BEFORE CONNECTION TO THE NEW METERING PEDESTAL.
- 2 F/I 3" PGRS CONDUIT FROM METERING PEDESTAL TO PG&E RISER. COORDINATE WITH PG&E FOR CONDUIT INSTALLATION.
- 3 F/I (N) LIGHT SWITCH FOR THE EXTERIOR POLE LIGHTING INSIDE THE METER PEDESTAL.



**PUMP STATION SINGLE LINE DIAGRAM INTERIM**  
SCALE: NTS



**PG&E SERVICE PEDESTAL MOUNTING DETAIL**

SCALE: NTS

**SERVICE PEDESTAL CONSTRUCTION NOTES:**

1. FABRICATED FROM 14 GAUGE. #316 STAINLESS STEEL AND INT. 14 GAUGE. COLD ROLLED STEEL ELECTRICALLY WELDED AND REINFORCED WHERE REQUIRED.
2. ALL NUTS, BOLTS AND SCREWS SHALL BE STAINLESS STEEL.
3. CONCRETE COMPRESSIVE STRENGTH 4000 PSI, STEEL REINFORCING A615, GRADE 60.
4. NUTS, BOLTS & SCREWS SHALL NOT BE VISIBLE FROM OUTSIDE OF ENCLOSURE.
5. CONTROL WIRING SHALL BE MARKED AT BOTH ENDS BY PERMANENT WIRE MARKERS.
6. A PLASTIC COVERED WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
7. ENCLOSURE SHALL BE FACTORY WIRED AND CONFORM TO REQUIRED NEMA AND UL 508A STANDARDS.
8. EQUIPMENT RATED AT 22,000 SHORT CIRCUIT CURRENT RATING.
9. UTILITY SERVICE METER PEDESTAL SHALL BE FREE STANDING. TESCO MODEL 27-100 IN NEMA 3RX STAINLESS STEEL 316.
10. COLOR SHALL BE APPROVED BY THE PORT OF SAN FRANCISCO.

PUBLIC WORKS JOB ORDER NUMBER: 23701 FILE NO. 122,516.1

NO.	DATE	DESCRIPTION	BY	APP.
TABLE OF REVISIONS				

REFERENCE INFORMATION & FILE NO. OF SURVEYS

**SAN FRANCISCO PORT COMMISSION**  
**PORT OF SAN FRANCISCO**  
DEPARTMENT OF ENGINEERING

6/17/2024

DESIGNED: DATE:	6/24	PUBLIC WORKS APPROVALS	APPROVED BY:
DRAWN: DATE:	6/24	C. JAO <i>Chiao</i> 6/18/24 SECTION MANAGER	SAN FRANCISCO PORT COMMISSION
CHECKED: DATE:	6/24	I. DHAPA <i>Dhapa</i> 06/20/2024 DEPUTY BUREAU MANAGER	DATE: 7/3/2024
PN	6/24	P. RIVERA <i>Rivera</i> 06/20/2024 BUREAU MANAGER	DATE:

APPROVED BY: *Uday Prasad*  
CHIEF HARBOR ENGINEER

SCALE: AS SHOWN  
REV. NO. 0

**AMADOR STREET**  
**INFRASTRUCTURE IMPROVEMENTS**

**ELECTRICAL INTERIM SINGLE LINE DIAGRAM**  
**& SERVICE PEDESTAL ELEVATION**

CONTRACT NO. 2852  
PORT DRAWING NO. 19218.2-4043-E  
SHEET NO. EI-02  
SHEET OF SHEETS 46 OF 72