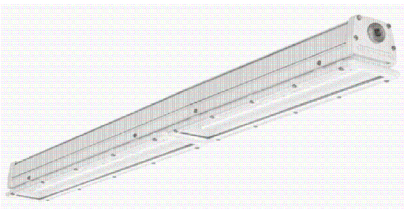


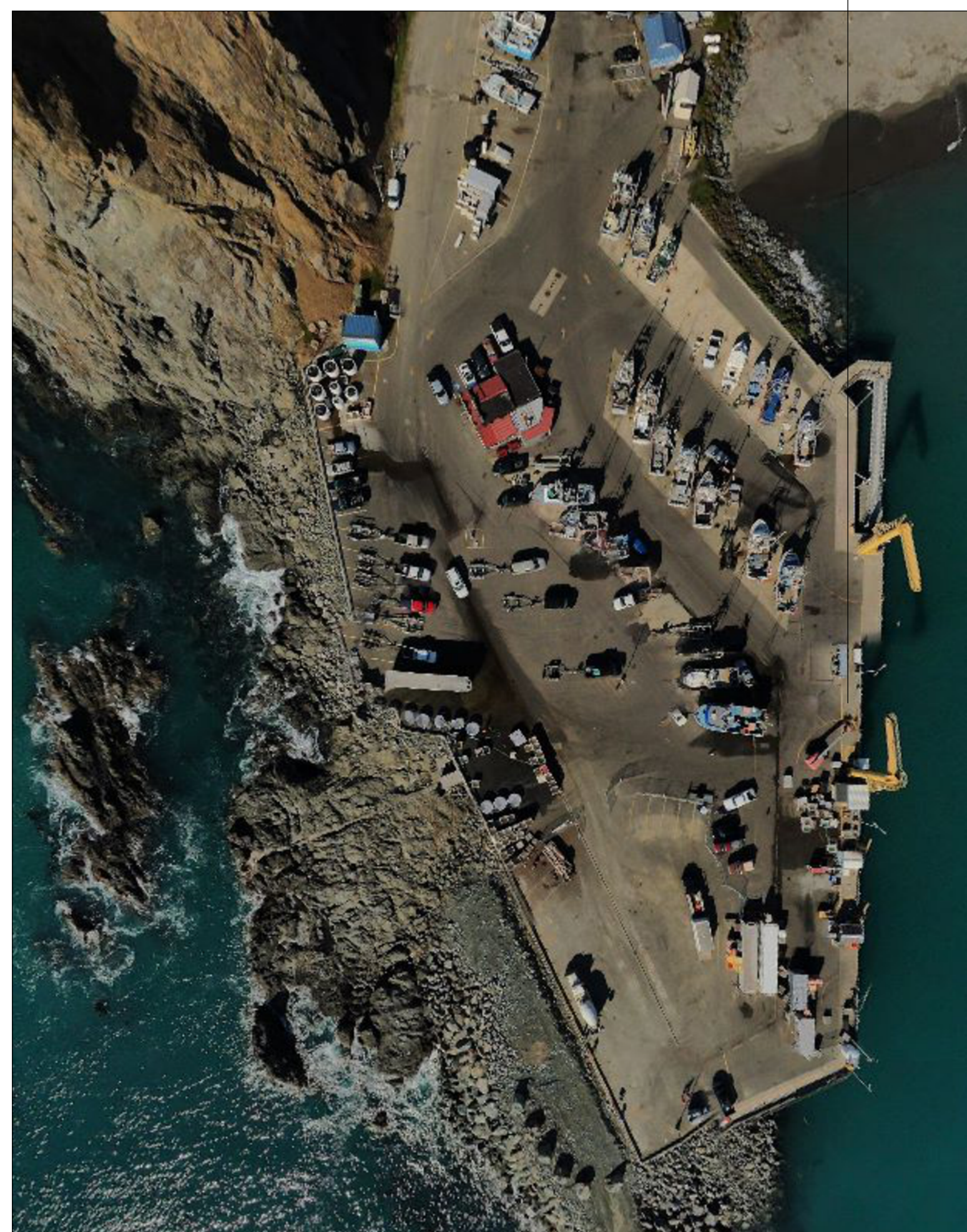
**FIXTURE SCHEDULE:**

TYPE	LIGHT FIXTURE DESCRIPTION	FIXTURE STYLE
A	SURFACE MOUNTED FIXTURE. 48-INCH LENGTH. 52.3-INCH OVERALL LENGTH WITH SENSORS. 53.4 WATTS LED. 8,000 LUMENS. 4000K COLOR TEMPERATURE. 80CRI. 120 VOLTAGE. MARINE RATED. CAST & EXTRUDED ALUMINUM CONSTRUCTION WITH WHITE CORROSION RESISTANT FINISH AND FLAT POLYCARBONATE FROSTED LENS. .125-INCH. STAINLESS STEEL HARDWARE. 0-10 DIMMING DRIVER. MEDIUM DISTRIBUTION. COLD WEATHER. 6W INTERNAL EMERGENCY DRIVER. -20-CELSIUS MINIMUM. 360-DEGREE LOW MOUNT SENSOR (8-15- FEET HEIGHT), ON/OFF OCCUPANCY. 10KV SURGE PROTECTION DEVICE 120-277V. VERIFY FIXTURE WITH OWNER PRIOR TO PURCHASE. LITHONIA: FEX-L48-8000LM-FPFL-MD-120-GZ10-40K-80CRI-BE6WCP-SPD10KV-SBGR10-DWHXD CR	

**INDEX OF DRAWINGS:**

- E-100 ELECTRICAL COVER SHEET
- E-200 ELECTRICAL SITE PLANS
- E-300 ELECTRICAL DETAILS
- E-400 ONE LINE POWER RISER DIAGRAM

**SCOPE OF WORK**





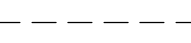


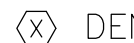
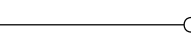

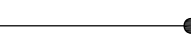


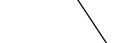



**PORT OF PORT ORFORD - Port Orford, Oregon**

Google Maps Aerial Image - NTS



**SYMBOL SCHEDULE:**

	SURFACE MOUNTED FIXTURE WITH OUTLET		WALL MOUNTED DUPLEX RECEPTACLE
	GROUND CONDUCTOR		SPECIAL PURPOSE CONNECTION
	UNDERGROUND CONDUIT SYSTEM		NON-FUSED DISCONNECT
	EXPOSED CONDUIT SYSTEM		DENOTES SHEET NUMBER
	CONDUIT SYSTEM STUB UP		DENOTES BRANCH CIRCUIT "HOME RUN"
	CONDUIT SYSTEM STUB DOWN		DENOTES GROUND
	CONDUIT SEAL OFF		DENOTES NEUTRAL
			DENOTES PHASE/SWITCH LEG

**ABBREVIATIONS:**

A	AMP	kCMIL	KILO CIRCLE MIL
AF	AMPERES FRAME	LCP	LIGHTING CONTROL PANEL
AFC	AVAILABLE FAULT CURRENT	LP	LIGHT POLE
AFG	ABOVE FINISHED GRADE	NTS	NOT TO SCALE
AP	ACCESS POINT	OH	OVERHEAD
AT	AMPERES TRIP	PE	PHOTO ELECTRIC DEVICE
AWG	AMERICAN WIRE GAUGE	P/N	PHASE AND/OR NEUTRAL
C	CONDUIT	Power	POWER
DT	DRY TYPE	PVC	POLYVINYL CHLORIDE
(E)	EXISTING	TYP	TYPICAL
G	GROUND	V	VOLTS
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	WP	WEATHERPROOF
kAIC	KILO AMPERE INTERRUPTER CURRENT	#XP, #XG	PHASE AND GROUND CABLE AWG

PBS Engineering and Environmental Inc.  
4412 S Corbett Avenue  
Beaverton, OR 97129  
503.646.1839  
pbsusa.com



**ELECTRICAL COVER SHEET**  
**74353.000 PORT OF PORT ORFORD 50 TON CRANE REPLACEMENT**  
**A SITE LOCATED IN THE CITY OF PORT ORFORD**



Know what's below.  
Call before you dig.

9/13/2024

DESIGNED:  
PA

CHECKED:  
PA

APRIL 25, 2024  
74353.000

SHEET ID

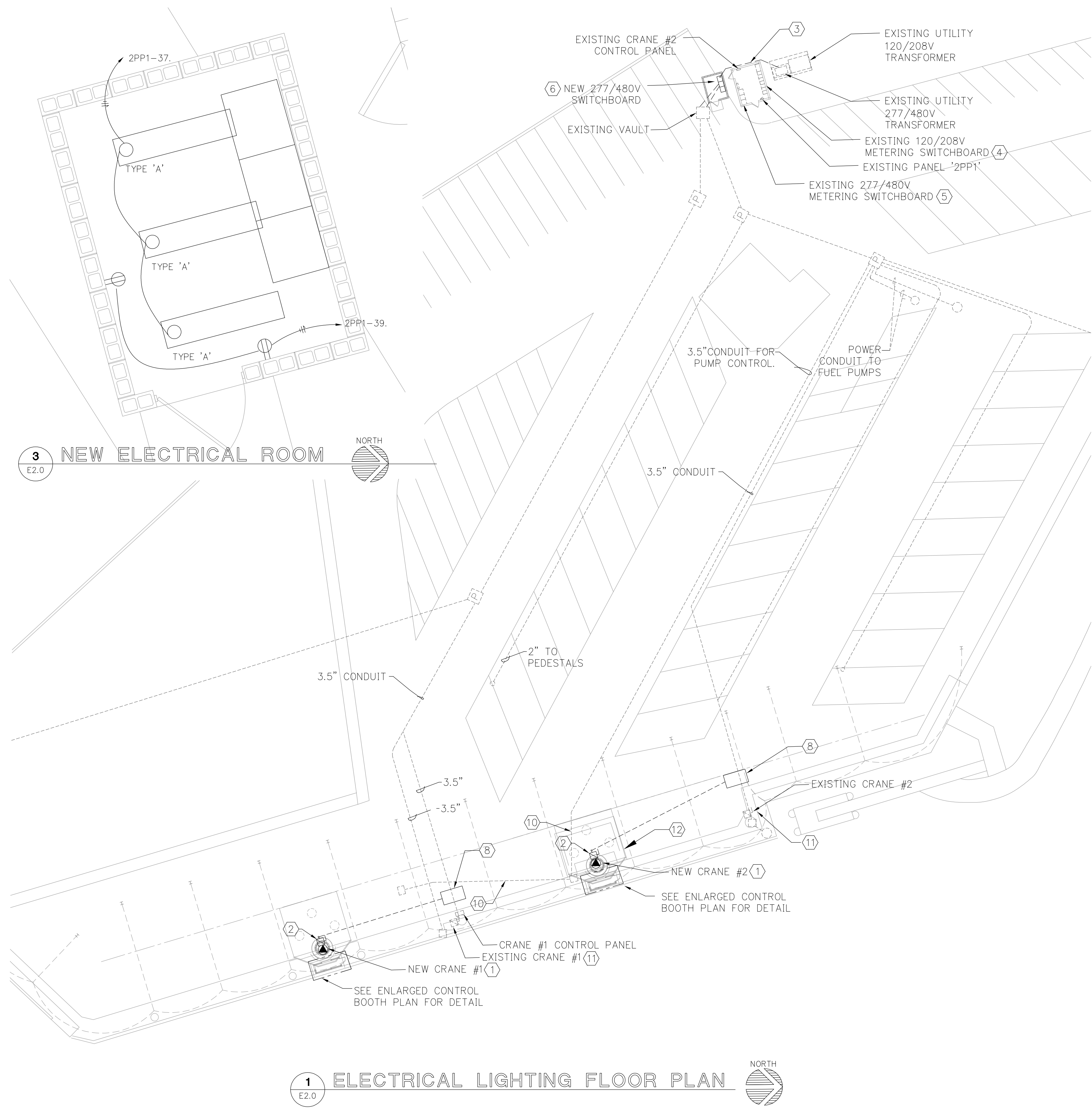
**E-100**

SHEET **15** OF **18**

**CUNDIFF**  
ENGINEERING, INC. / CONSULTING ENGINEERS  
10700 S.W. BEAVERTON-HILSDALE HWY. STE 654  
BEAVERTON, OREGON 97005  
PH 503.521.7260, FX 503.521.7257  
PROJECT NUMBER: 23-050



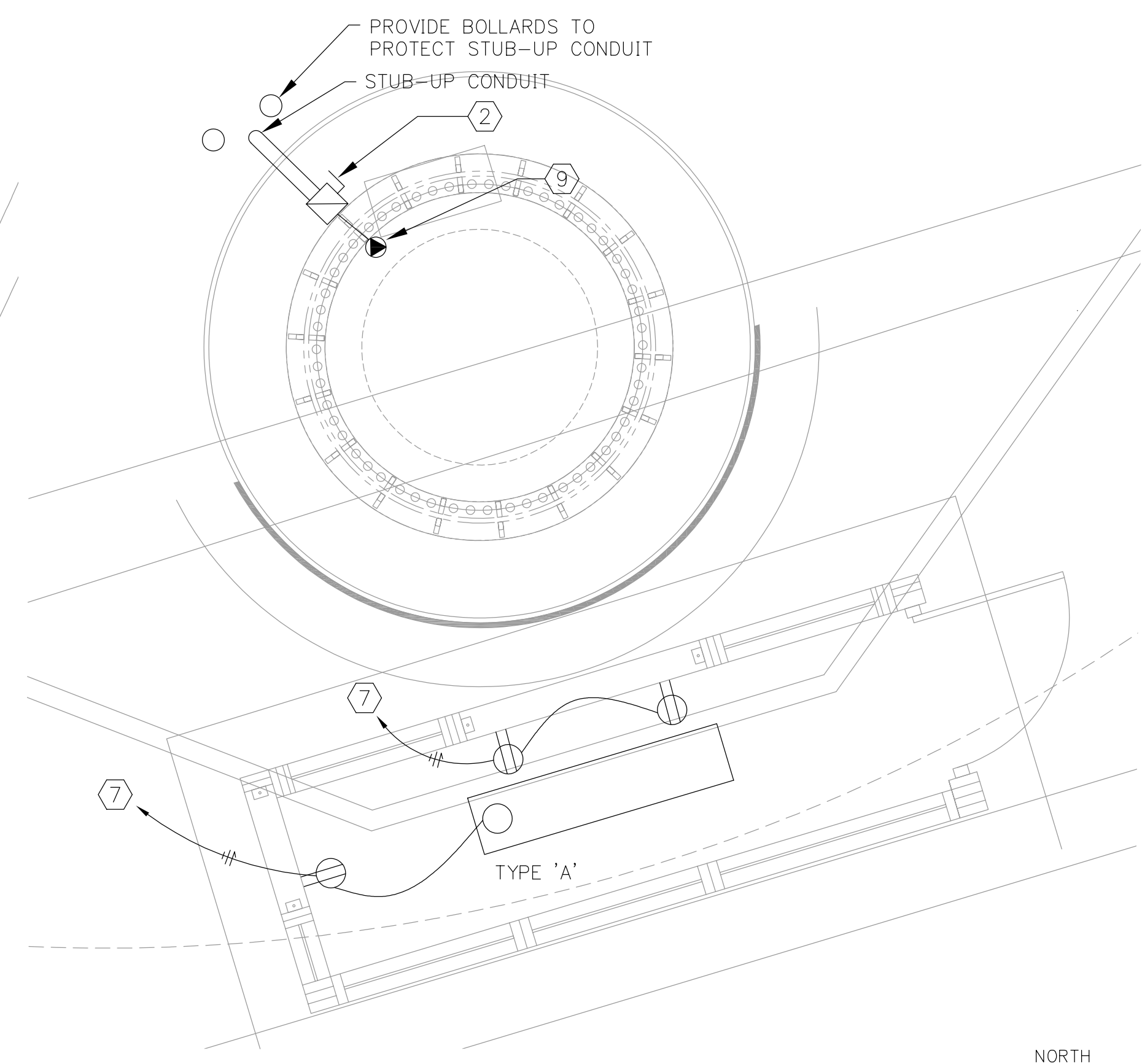
File name: P:\2023\23-050 Port of Port Orford Crane Replacement\Drawings\Electrical\E2-200 Electrical Site Plans.dwg  
 Layout Tab: (SHEET NAME HERE) User: Pedro A CAD Plot Date/Time: 9/13/2024 2:31:49 PM



**1** ELECTRICAL LIGHTING FLOOR PLAN  
E2.0

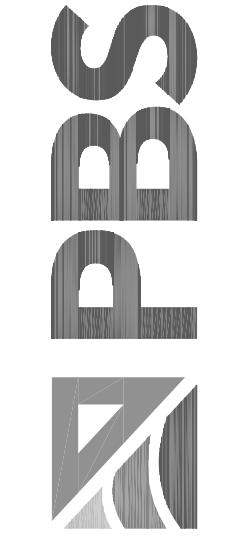
**NOTES THIS SHEET:**

- ① ELECTRICAL CONTRACTOR TO COORDINATE AND REVIEW CRANE MANUFACTURER SPECIFICATIONS FOR EXACT CONNECTION ENTRY AND POWER REQUIREMENTS PRIOR TO ROUGH-IN. SEE ONE LINE POWER RISER DIAGRAM AND LOAD SUMMARY FOR POWER INFORMATION.
- ② PROVIDE NEMA 4X STAINLESS STEEL 400-AMPERE NON-FUSED DISCONNECT.
- ③ PROVIDE TWO (2) 3-INCH PVC SCHEDULE 40 CONDUITS FOR UTILITY SECONDARY CONDUCTORS. COORDINATE WITH THE UTILITY FOR SPECIFIC REQUIREMENTS AND EXACT ENTRY TO THE EXISTING VAULT PRIOR TO ROUGH-IN.
- ④ EXISTING 120/208-VOLT METERING SWITCHBOARD TO REMAIN IN OPERATION DURING CONSTRUCTION.
- ⑤ EXISTING 277/480-VOLT SWITCHBOARD SERVING THE EXISTING TWO (2) CRANES TO REMAIN IN OPERATION AFTER CRANES ARE DISCONNECTED FROM THIS SYSTEM.
- ⑥ SEE ONE LINE POWER RISER DIAGRAM FOR NEW SWITCHBOARD INFORMATION.
- ⑦ PROVIDE TWO 120-VOLTS 20-AMPERES BRANCH CIRCUIT FROM EXISTING PANEL IN THE CONTROL OFFICE. ONE CIRCUIT FOR THE TWO (2) RECEPTACLES AND THE OTHER FOR THE RECEPTACLE AND THE LIGHT IN THE BOOTH.
- ⑧ PROVIDE UNDERGROUND VAULT TO INTERCEPT EXISTING 3.5" CONDUIT AND EXTEND TO NEW CRANE LOCATION AS SHOWN. REMOVE EXISTING CONDUCTOR IN CONDUIT AND PROVIDE NEW CONDUCTOR FROM NEW SWITCHBOARD TO THE NEW CRANE. SEE ONE LINE POWER RISER DIAGRAM FOR FEEDER INFORMATION.
- ⑨ COORDINATE WITH CRANE MANUFACTURER FOR EXACT CRANE POINT OF CONNECTION PRIOR TO ROUGH-IN.
- ⑩ ELECTRICAL CONTRACTOR TO LOCATE EXISTING CONDUIT AND COORDINATE TO RELOCATE IF IN CONFLICT WITH NEW CRANE FOUNDATION.
- ⑪ DISCONNECT EXISTING CRANE FEEDER AND REMOVE CONDUCTORS BACK TO THE SOURCE.
- ⑫ ELECTRICAL CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR FOR DISCONNECTING ALL POWER RELATED TO THE FUEL ISLAND DISPENSER. REMOVE ALL CONDUCTORS BACK TO THE SOURCE OF POWER.



**2** ENLARGED CONTROL BOOTH PLAN  
E2.0

PBS Engineering and  
 Environmental Inc.  
 4412 S Corbett Avenue  
 Beaverton, OR 97229  
 503.246.1839  
 pbseia.com



**SITE PLAN**  
**74353.000 PORT OF PORT ORFORD 50 TON CRANE REPLACEMENT**  
**A SITE LOCATED IN THE CITY OF PORT ORFORD**



Know what's below.  
Call before you dig.

9/13/2024

DESIGNED: PA  
 CHECKED: PA  
 APRIL 25, 2024  
 74353.000

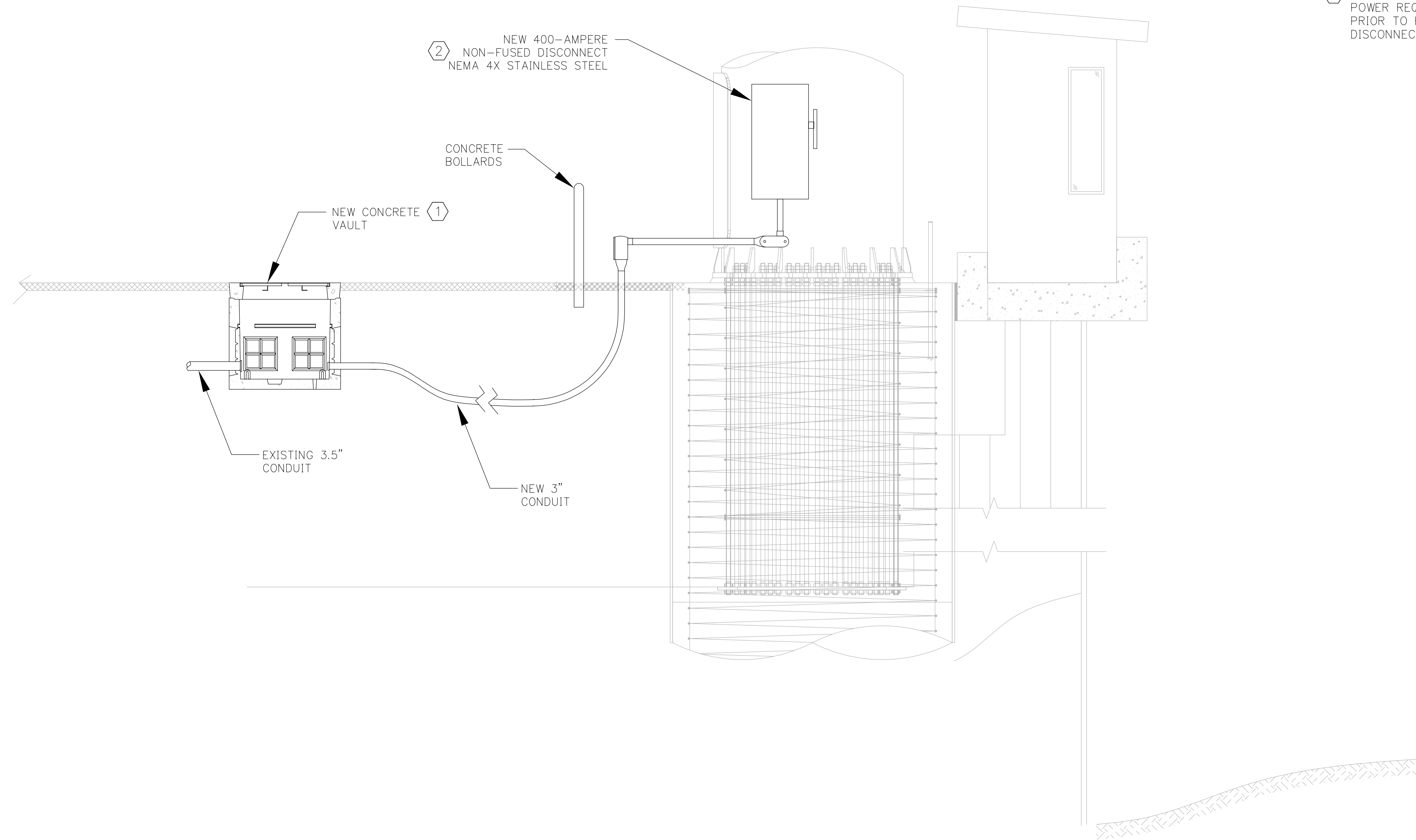
SHEET ID  
**E-200**

SHEET 16 OF 18

**CUNDIFF**  
 ENGINEERING, INC. / CONSULTING ENGINEERS  
 10700 S.W. BEAVERTON-HILLSDALE HWY, STE 654  
 BEAVERTON, OREGON 97005  
 PH 503.521.7260, FX 503.521.7257  
 PROJECT NUMBER: 23-050



Filename: P:\2023\23-050 Port of Port Orford Crane Replacement\Drawings\Electrical\E3-00 Port Orford Electrical Details.dwg Layout Tab: (SHEET NAME HERE) User: Pedro A CAD Plot Date/Time: 9/13/2024 12:55:57 PM



NOTES THIS SHEET:

- ① PROVIDE NEW 2' X 3' CONCRETE VAULT WITH STEEL COVER RATED FOR HEAVY TRAFFIC TO INTERCEPT EXISTING 3.5-INCH CONDUIT AND RE-ROUT TO THE NEW CRANE LOCATION. OLDCASTLE PRECAST 233-LA OR SIMILAR.
- ② COORDINATE WITH CRANE MANUFACTURER FOR CRANE POWER REQUIREMENTS AND EXACT POINT OF CONNECTIONS PRIOR TO ROUGH-IN ANY CONDUIT OR INSTALL THE DISCONNECT.

1 ELECTRICAL DETAILS  
E3.00

PBS Engineering and Environmental Inc.  
4412 S Corbett Avenue  
Portland, OR 97239  
503.246.1839  
pbsusa.com



**ELECTRICAL DETAILS**  
**74353.000 PORT OF PORT ORFORD 50 TON CRANE REPLACEMENT**  
**A SITE LOCATED IN THE CITY OF PORT ORFORD**



Know what's below.  
Call before you dig.

9/13/2024

DESIGNED:  
PA  
CHECKED:  
PA

APRIL 25, 2024  
74353.000

SHEET ID

**E-300**

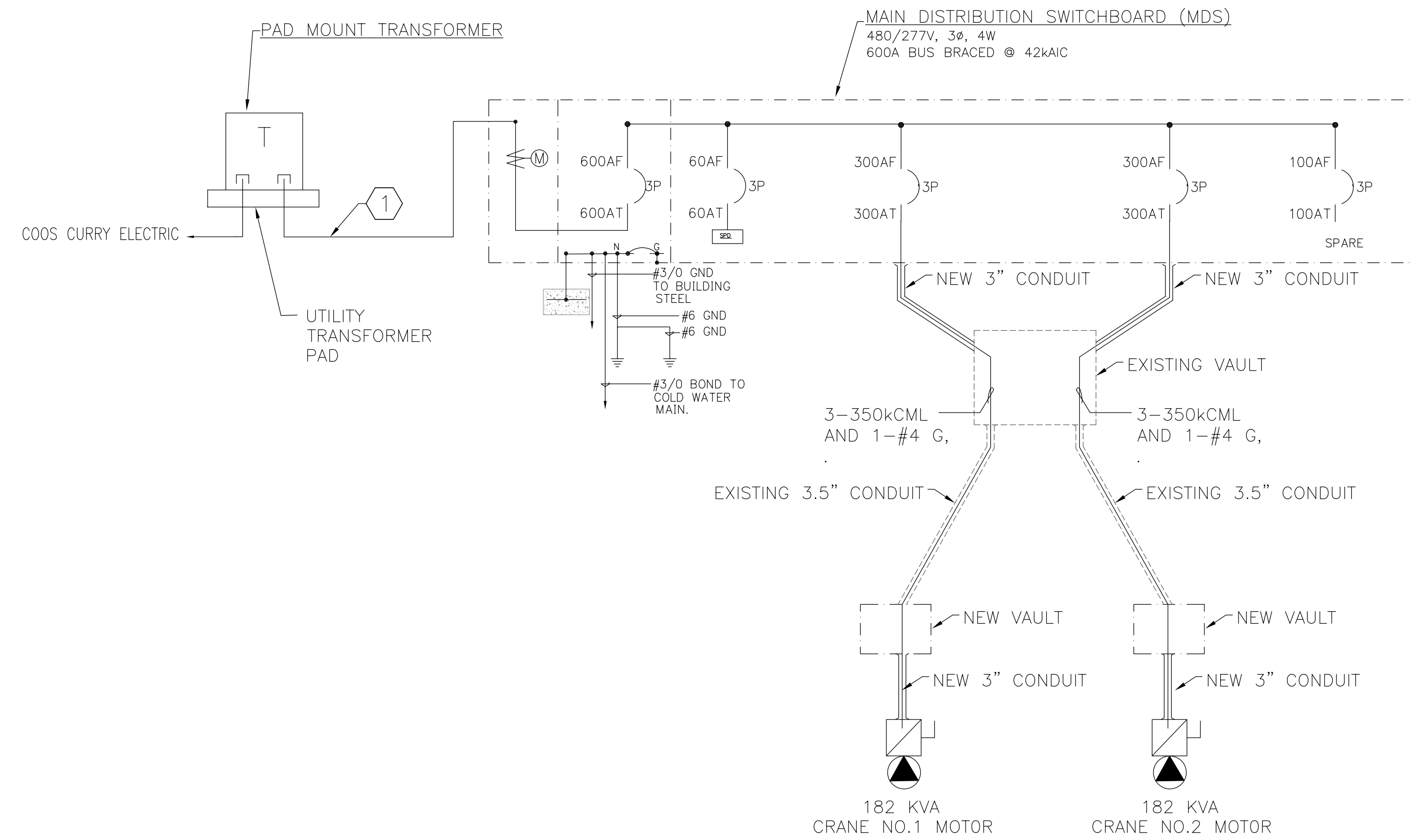
SHEET 17 OF 18

**CUNDIFF**  
ENGINEERING, INC. / CONSULTING ENGINEERS  
10700 S.W. BEAVERTON-HILSDALE HWY, STE 654  
BEAVERTON, OREGON 97005  
PH 503.521.7260, FX 503.521.7257  
PROJECT NUMBER: 23-050

Filename: P:\2023\23-050 Port of Port Orford Crane Replacement\Drawings\Electrical\E4-00 Port Orford One Line Diagram.dwg  
 User: Pedro A  
 CAD Plot Date/Time: 9/13/2024 12:56:30 PM  
 Layout: Tab: 1 (SHEET NAME HERE)

**NOTES THIS SHEET:**

- ① PROVIDE THREE (2) 3-INCH SCHEDULE 40 PVC CONDUIT WITH LONG SWEEP OFFSETS AND ELLS FOR UTILITY PROVIDED AND INSTALLED SECONDARY FEEDER CABLES. INSTALL IN COMPLIANCE WITH PORTLAND COOS CURRY ELECTRIC STANDARDS



① ELECTRICAL ONE LINE DIAGRAM  
E4.00

Panel Schedule		Phase Voltage: 277 Line-Line Voltage: 480			External Circuit Breaker Serving this Panel: No			Main Breaker: 600			Phase: 3 Phase 4 Wire				
Name:		Bus Ampacity: 600			Feed Lugs and Sub Feed Lugs: No			ISCR: TBD							
Ckt No.	Item	CBA	POLE	PHASE LOADS VA	A	B	C	Ckt No.	Item	CBA	POLE	PHASE LOADS VA	A	B	C
1	Crane #1	300	3	60,412				2	Crane #2	300	3	60,412			
3	Crane #1				60,412			4	Crane #2				60,412		
5	Crane #1						60,412	6	Crane #2						60,412
7	SPD	60	3	0				8	Spare	100	3	0			
9	SPD				0			10	Spare				0		
11	SPD						0	12	Spare						0

A	B	C	Total Phase Loads VA
120,824	120,824	120,824	362,472
436	436	436	1308
			Total Phase Loads Line Current
			362,472
			Total VA

② PANEL SCHEDULE  
E4.00

Electrical Load Summary		
Description		Remarks
New Crane #1	181,237 VA	VA
New Crane #2	181,237 VA	VA
2125% of the full-load highest Motor NEC 430.24	45,309 VA	VA
New Total Loads	407,782 VA	VA
New Total Loads Amperes @ 480-Volts	491 Amperes	Amperes
New Panel Capacity in Amperes	600 Amperes	Amperes
Remain Capacity in the panel	(109) Amperes	Amperes

③ LOAD SUMMARY  
E4.00

PBS Engineering and Environmental Inc.  
 4412 S Corbett Avenue  
 Beaverton, OR 97005  
 503.521.1939  
 pbssusa.com



**ONE LINE POWER RISER DIAGRAM**  
**74353.000 PORT OF PORT ORFORD 50 TON CRANE REPLACEMENT**  
**A SITE LOCATED IN THE CITY OF PORT ORFORD**



Know what's below. Call before you dig.

9/13/2024

DESIGNED: PA  
 CHECKED: PA  
 APRIL 25, 2024  
 74353.000

SHEET ID  
**E-400**

SHEET 18 OF 18

**CUNDIFF**  
 ENGINEERING, INC. / CONSULTING ENGINEERS  
 10700 S.W. BEAVERTON-HILLSDALE HWY. STE 654  
 BEAVERTON, OREGON 97005  
 PH 503.521.7260, FX 503.521.7257  
 PROJECT NUMBER: 23-050