



**Alabama State Port Authority**  
**Addendum to R&P or Specification Booklet**

**Project Name** McDuffie Unloaders 1 and 3 Dual Barge Shifter Systems Electrical Construction/Equipment Installation

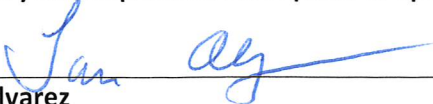
**Project No.** 10873      **Task No.** 04      **Addendum No.** 1

**To:** Prospective Bidders      **Date:** 2/23/2024

These items are hereby included in the bid documents by this addendum.

Item	Description
1.	The Pre-bid sign in sheet is attached and is hereby incorporated into the bid documents by this addendum.
2.	<p>Revised drawings and updated cable schedules for the BU-1 and BU-3 Barge Haul System Upgrades.</p> <p>The purpose of the revised details is to better describe the requirements for installation of the barge haul VFDs. The barge haul VFDs are to be installed into the existing enclosure in the electric room on each of the unloaders. The drive sub-panels have been assembled and tested, as shown in the attached photos for BU-3. Upon dis-assembly, the connecting cables between the sub-panels have been left connected on one end and labeled on the other end. Re-connecting these cables is to be done in the field as shown on drawing 400. The VFDs will also be removed from the sub-panels for shipping, as originally planned. Care must be taken when installing the VFDs to avoid damaging the cables that remain connected to the drives.</p> <p>NOTE: REW originally planned to provide a single sub-panel for each of the barge haul systems. Upon reviewing the existing enclosures, it was determined that a separate sub-panel for each drive would be a more effective solution for the field installation of the equipment.</p> <p>S03828-400 Rev.0 – BU-1 BARGE HAUL DRIVE SUB-PANEL INSTALLATION WIRING  S03828-540 REV.1 – BU-1 BARGE HAUL CONTROL PANEL INTERCONNECTION  S03828 BU-1 – BARGE HAUL SYSTEM FIELD CABLES (02-21-24)  S03750-400 Rev.0 – BU-3 BARGE HAUL DRIVE SUB-PANEL INSTALLATION WIRING  S03750-540 REV.1 – BU-3 BARGE HAUL CONTROL PANEL INTERCONNECTION  S03828 BU-3 – BARGE HAUL SYSTEM FIELD CABLES (02-21-24)  IMG_0436.JPG – BU-3 BARGE HAUL DRIVE PANEL  IMG_0440.JPG – BU-3 BARGE HAUL DRIVE PANEL</p>
3.	<p>Question:</p> <p>Answer:</p>

Please indicate your receipt of this addendum by adding the addendum number in the appropriate place in your Requisition & Proposal or Specification Book.


2/23/24  


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**Tom Alvarez**      **Date**  
**Project Manager**



**Alabama State Port Authority**  
**PRE-Bid Opening Sign-In Sheet**

**Project Name** McDuffie Unloaders 1 and 3 Dual Barge Shifter Systems Electrical Construction/Equipment Installation

**Project #** 10873

**Task #** 04

**Date** February 15, 2024

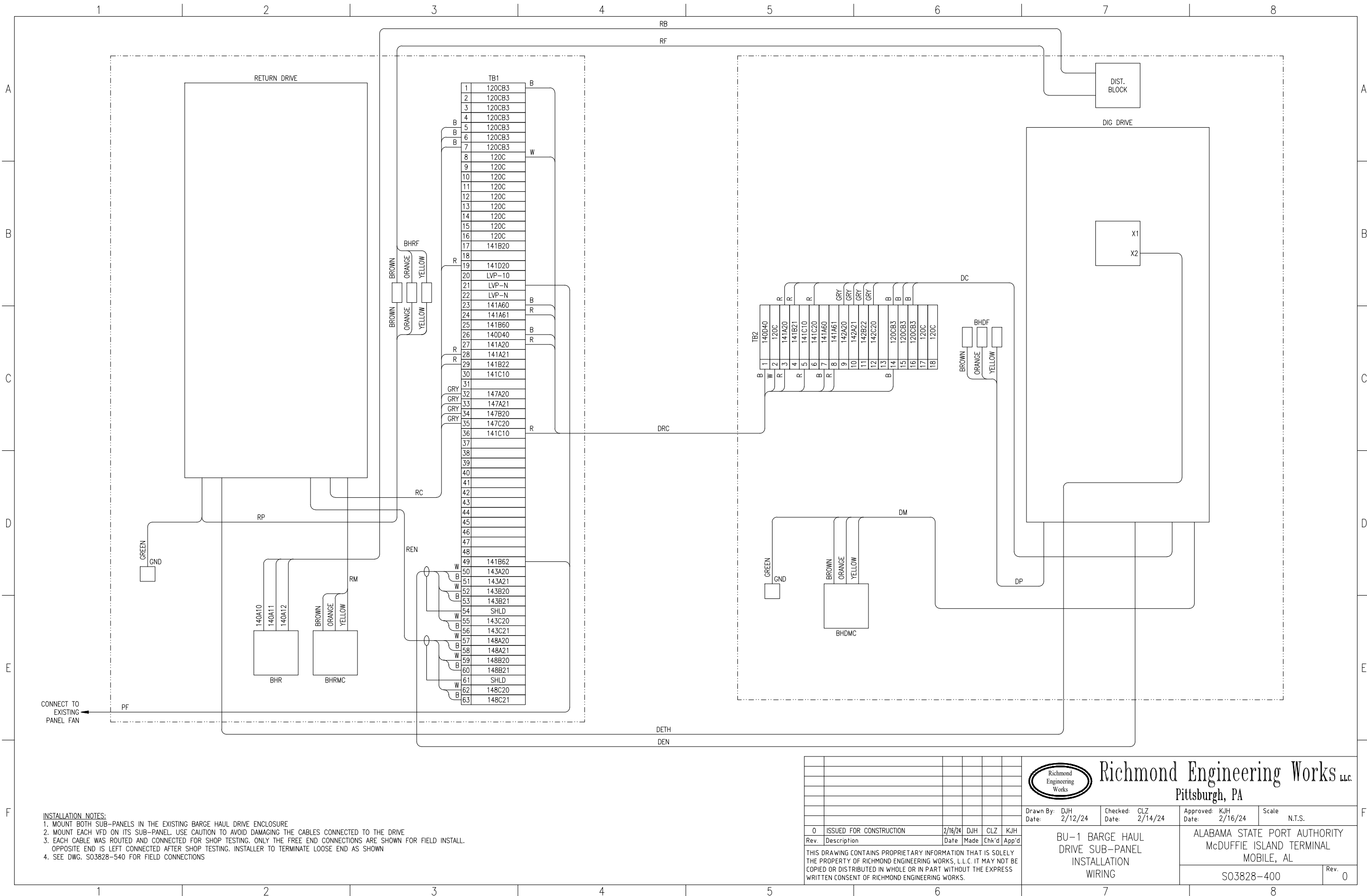
**Time** 10:00 am

**Location** International Trade Center Building, 1<sup>st</sup> floor-Killian Room

**ASPA Representatives**  
 (printed names)  
 (signatures)

Tom Alvarez	Marcus Coleman	Matt Thomas
	Sean Kelly	

Contractor (Business) Name	Attendee Name Printed	Attendee Signature	Telephone #
RAGNAR BENSON	JEREMIAH NOWAK		812-281-1400
Ragnar Benson	Marcus Melvin		812-249-0359
Gulf Electric of Mobile	Chris M Phillips		251-533-0004
G.A. West	Kristian Roe		251-421-5438
GA WEST	David Rhames		251-533-8261
CMG	Gary Cowles		
CMG	John Glaser		
CMG	James Meiss		




CONNECT TO EXISTING PANEL FAN

- INSTALLATION NOTES:**
1. MOUNT BOTH SUB-PANELS IN THE EXISTING BARGE HAUL DRIVE ENCLOSURE
  2. MOUNT EACH VFD ON ITS SUB-PANEL. USE CAUTION TO AVOID DAMAGING THE CABLES CONNECTED TO THE DRIVE
  3. EACH CABLE WAS ROUTED AND CONNECTED FOR SHOP TESTING. ONLY THE FREE END CONNECTIONS ARE SHOWN FOR FIELD INSTALL. OPPOSITE END IS LEFT CONNECTED AFTER SHOP TESTING. INSTALLER TO TERMINATE LOOSE END AS SHOWN
  4. SEE DWG. S03828-540 FOR FIELD CONNECTIONS

Rev.	Description	Date	Made	Chk'd	App'd
0	ISSUED FOR CONSTRUCTION	2/16/24	DJH	CLZ	KJH

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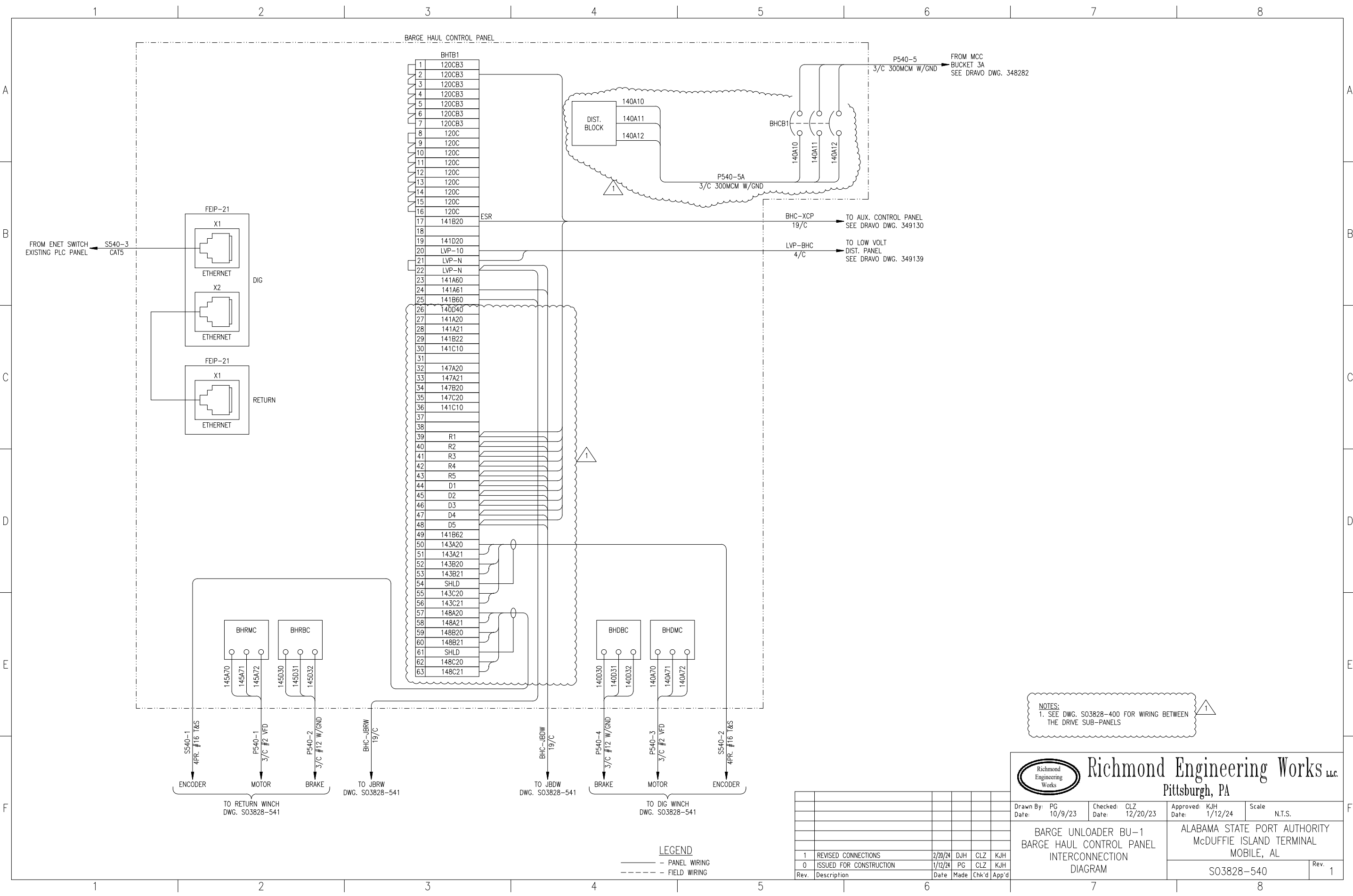


**Richmond Engineering Works LLC**  
Pittsburgh, PA

Drawn By: DJH Date: 2/12/24	Checked: CLZ Date: 2/14/24	Approved: KJH Date: 2/16/24	Scale: N.T.S.
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**BU-1 BARGE HAUL DRIVE SUB-PANEL INSTALLATION WIRING**

ALABAMA STATE PORT AUTHORITY McDUFFIE ISLAND TERMINAL MOBILE, AL	
S03828-400	Rev. 0



NOTES:  
1. SEE DWG. S03828-400 FOR WIRING BETWEEN THE DRIVE SUB-PANELS

**Richmond Engineering Works LLC**  
Pittsburgh, PA

Drawn By: PG Date: 10/9/23	Checked: CLZ Date: 12/20/23	Approved: KJH Date: 1/12/24	Scale: N.T.S.
BARGE UNLOADER BU-1 BARGE HAUL CONTROL PANEL INTERCONNECTION DIAGRAM		ALABAMA STATE PORT AUTHORITY McDUFFIE ISLAND TERMINAL MOBILE, AL	
		S03828-540	Rev. 1

Rev.	Description	Date	Made	Ch'k'd	App'd
1	REVISED CONNECTIONS	2/20/24	DJH	CLZ	KJH
0	ISSUED FOR CONSTRUCTION	1/12/24	PG	CLZ	KJH

ASPA - McDuffie Island Terminal  
 BU1 - Barge Haul System  
 Field Cables

CABLE #	FROM	TO	ESTIMATED LENGTH	3C #8 AWG w/GND, 600V	3C #2 AWG VFD CABLE	3C #12 AWG VFD CABLE	3C #2 AWG w/GND	3C #12 AWG w/GND, 600V	3C #300MCM w/GND, 600V	3C #2 AWG w/GND Reeling Cable	0	2C-#14AWG, 600V	7C-#14AWG, 600V	3C-#12AWG, 600V	0	0	0	0	0	0	4 Pair #16 T&S	Cat5 Ethernet	0	0	0	0	0	0	NOTES
				0	480	320	390	800	85	400	0	440	100	320	0	0	0	0	0	0	0	0	1400	530	0	0	0	0	0
<b>Power Cables</b>																													
P540-1	Barge Haul Control Panel	Return Winch Motor			260																								
P540-2	Barge Haul Control Panel	Return Winch Brake						260																					
P540-3	Barge Haul Control Panel	Digging Winch Motor			220																								
P540-4	Barge Haul Control Panel	Digging Winch Brake						220																					
P540-5	Barge Haul Control Panel	MCC Bucket 3A							70																				
P540-5A	Barge Haul Control Panel Breaker	Barge Haul Control Panel Dist. Block							15																				
P542-1	MCC Unit 6E	Cable Reel Slip Rings					320																						
P542-2	Cable Reel VFD Panel	Cable Reel Motor				320																							
P542-3	Cable Reel VFD Panel	Cable Reel Brake						320																					
P542-4	MCC Unit 6F	Cable Reel VFD Panel					70																						
P542-5	Cable Reel Slip Rings	Shifter Barge Control Panel								400																			Cable Supplied by REW
<b>Control Cables</b>																													
C541-1	Return Winch JBRW	Local Maintenance Station											15																
C541-2	Return Winch JBRW	Payout LS										15																	
C541-3	Return Winch JBRW	Return Motor Temp. Switch										15																	
C541-4	Return Winch JBRW	Return Motor Space Heater										15																	
C541-5	Return Winch JBRW	Return Brake Released LS										15																	
C541-6	Digging Winch JBDW	Local Maintenance Station											15																
C541-7	Digging Winch JBDW	Payout LS										15																	
C541-8	Digging Winch JBDW	Digging Motor Temp. Switch										15																	
C541-9	Digging Winch JBDW	Digging Motor Space Heater										15																	
C541-10	Digging Winch JBDW	Digging Brake Released LS										15																	
C542-1	Low Volt. Dist. Panelboard	Cable Reel Slip Ring Heater												320															
C542-2	Cable Reel VFD Panel	Cable Reel Motor Temp. Sw.										320																	
C542-3	Cable Reel VFD Panel	Auxiliary Control Panel											70																

Cable lengths are estimated, final length determined by actual routing.

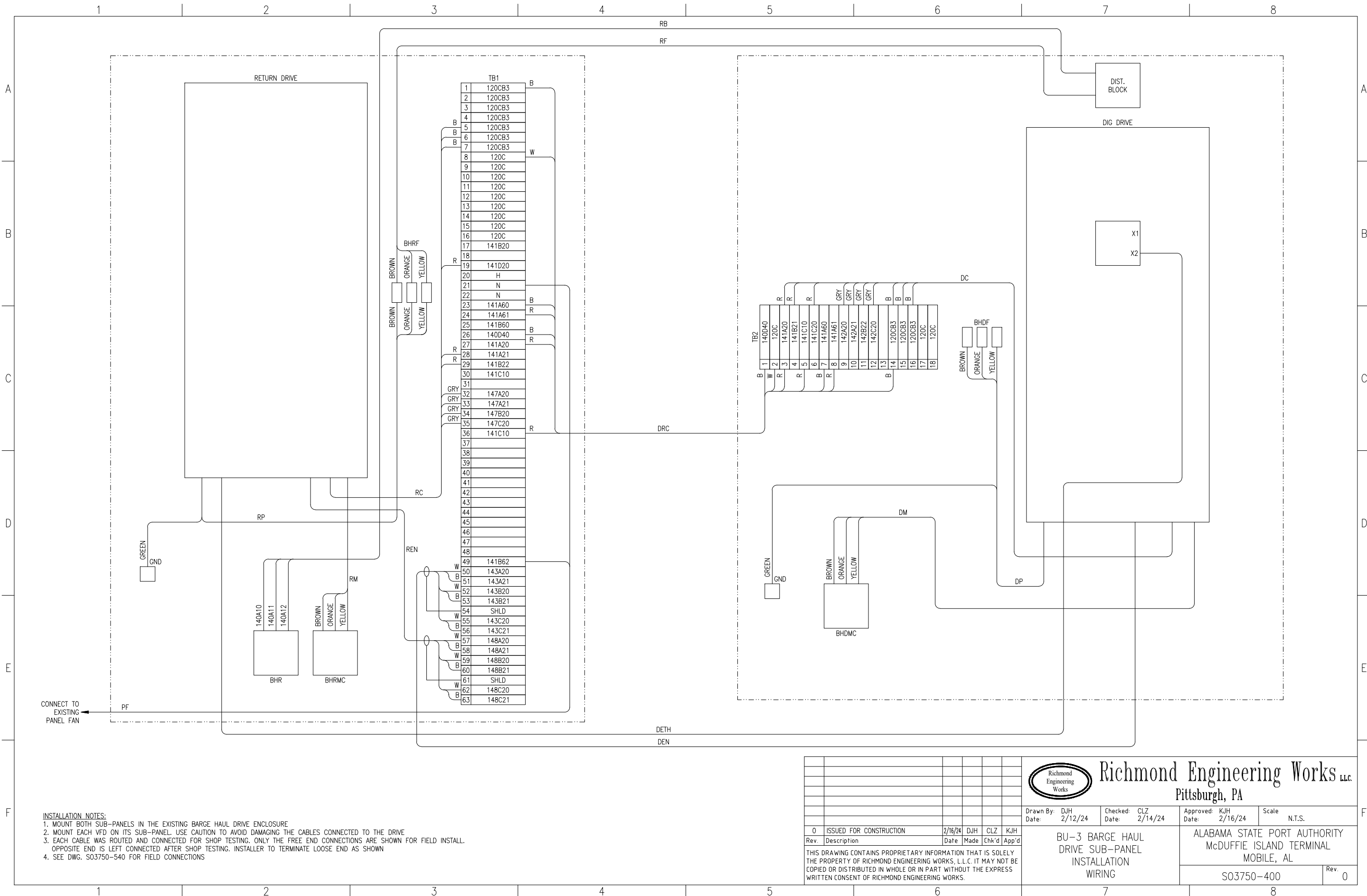
Rev. 2

2/21/2024

ASPA - McDuffie Island Terminal  
 BU1 - Barge Haul System  
 Field Cables

			ESTIMATED LENGTH	3C #8 AWG w/GND, 600V	3C #2 AWG VFD CABLE	3C #12 AWG VFD CABLE	3C #2 AWG w/GND	3C #12 AWG w/GND, 600V	3C #300MCM w/GND, 600V	3C #2 AWG w/GND Reeling Cable		2C-#14AWG, 600V	7C-#14AWG, 600V	3C-#12AWG, 600V						4 Pair #16 T&S	Cat5 Ethernet							NOTES
CABLE #	FROM	TO		0	480	320	390	800	85	400	0	440	100	320	0	0	0	0	0	1400	530	0	0	0	0	0		
<b>Signal/Communication Cables</b>																												
S540-1	Barge Haul Control Panel	Return Winch Motor Encoder																		260								
S540-2	Barge Haul Control Panel	Digging Winch Motor Encoder																		220								
S540-3	Barge Haul Control Panel	Auxiliary Control Panel																			70							
S540-4	Barge Haul Control Panel	Auxiliary Control Panel																			70							Spare
S542-1	Cable Reel VFD Panel	Cable Reel Motor Encoder																		320								
S542-2	Auxiliary Control Panel	Cable Reel Position Encoder																			320							
S542-3	Cable Reel VFD Panel	Auxiliary Control Panel																			70							
S542-5	Auxiliary Control Panel	Cable Reel Tension Inclinator A																			300							
S542-6	Auxiliary Control Panel	Cable Reel Tension Inclinator B																			300							


Cable lengths are estimated, final length determined by actual routing.  
 Rev. 2  
 2/21/2024



**INSTALLATION NOTES:**  
 1. MOUNT BOTH SUB-PANELS IN THE EXISTING BARGE HAUL DRIVE ENCLOSURE  
 2. MOUNT EACH VFD ON ITS SUB-PANEL. USE CAUTION TO AVOID DAMAGING THE CABLES CONNECTED TO THE DRIVE  
 3. EACH CABLE WAS ROUTED AND CONNECTED FOR SHOP TESTING. ONLY THE FREE END CONNECTIONS ARE SHOWN FOR FIELD INSTALL. OPPOSITE END IS LEFT CONNECTED AFTER SHOP TESTING. INSTALLER TO TERMINATE LOOSE END AS SHOWN  
 4. SEE DWG. S03750-540 FOR FIELD CONNECTIONS

Rev	Description	Date	Made	Chk'd	App'd
0	ISSUED FOR CONSTRUCTION	2/16/24	DJH	CLZ	KJH

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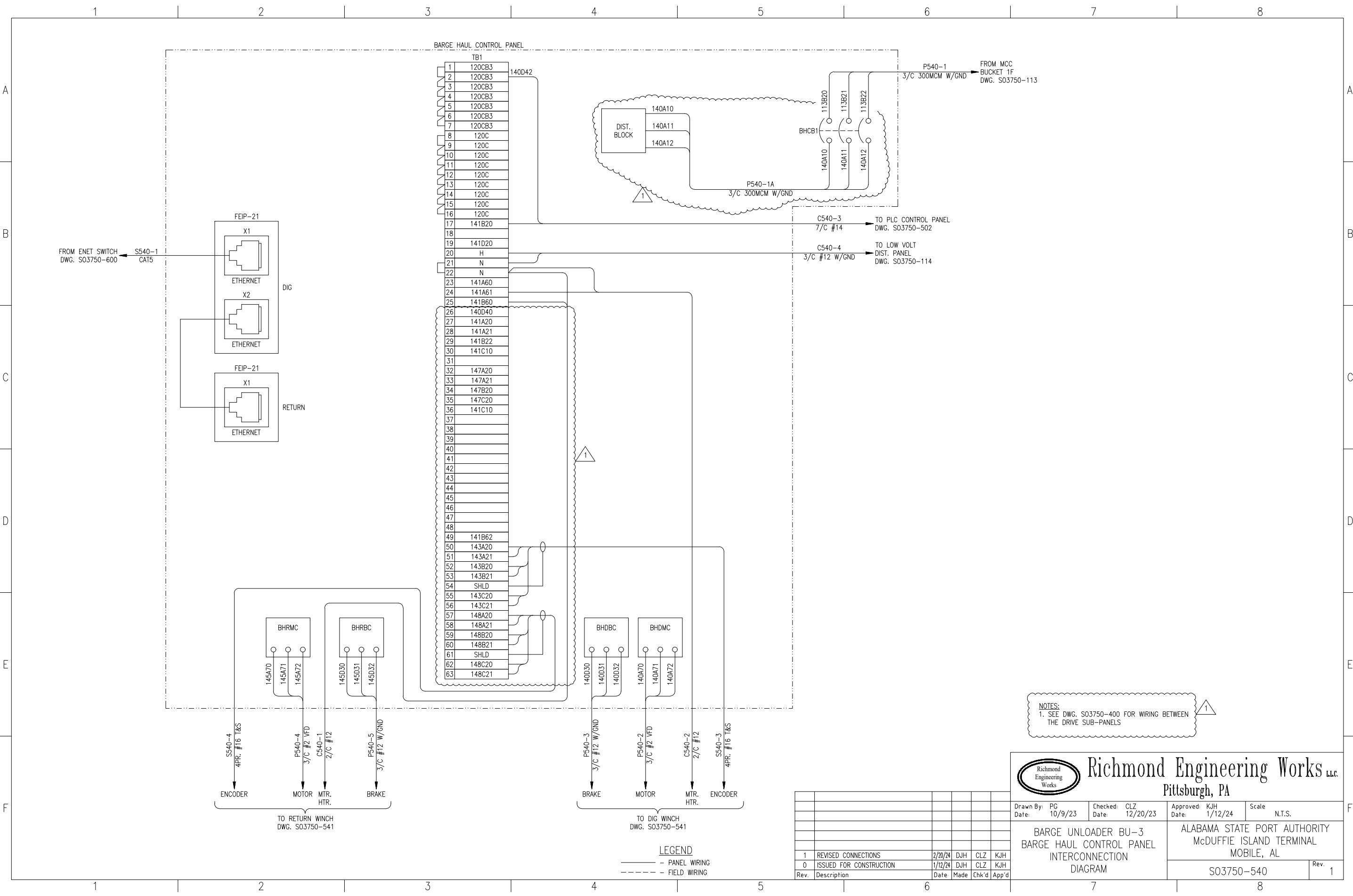
**Richmond Engineering Works LLC**  
Pittsburgh, PA

Drawn By: DJH Date: 2/12/24	Checked: CLZ Date: 2/14/24	Approved: KJH Date: 2/16/24	Scale: N.T.S.
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BU-3 BARGE HAUL  
DRIVE SUB-PANEL  
INSTALLATION  
WIRING

ALABAMA STATE PORT AUTHORITY  
McDUFFIE ISLAND TERMINAL  
MOBILE, AL

S03750-400	Rev 0
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**Richmond Engineering Works LLC**  
Pittsburgh, PA

Drawn By: PG Date: 10/9/23	Checked: CLZ Date: 12/20/23	Approved: KJH Date: 1/12/24	Scale: N.T.S.
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**BARGE UNLOADER BU-3  
BARGE HAUL CONTROL PANEL  
INTERCONNECTION  
DIAGRAM**

ALABAMA STATE PORT AUTHORITY  
McDUFFIE ISLAND TERMINAL  
MOBILE, AL

S03750-540 Rev. 1

Rev.	Description	Date	Made	Ch'k'd	App'd
1	REVISED CONNECTIONS	2/20/24	DJH	CLZ	KJH
0	ISSUED FOR CONSTRUCTION	1/12/24	DJH	CLZ	KJH



ASPA - McDuffie Island Terminal  
 BU3 - Barge Haul System  
 Field Cables

CABLE #	FROM	TO	ESTIMATED LENGTH	3C #8 AWG w/GND, 600V	3C #2 AWG VFD CABLE	3C #12 AWG VFD CABLE	3C #2 AWG w/GND	3C #12 AWG w/GND, 600V	3C #300MCM w/GND, 600V	3C #2 AWG w/GND Reeling Cable	2C-#14AWG, 600V	7C-#14AWG, 600V	3C-#12AWG, 600V								4 Pair #16 T&S	Cat5 Ethernet								NOTES
				0	480	320	390	800	85	400	0	2150	610	280	0	0	0	0	0	0	0	0	1270	470	0	0	0	0	0	
<b>Power Cables</b>																														
P540-1	MCC Bucket 1F	Barge Haul Control Panel							70																					
P540-1A	Barge Haul Control Panel Breaker	Barge Haul Control Panel Dist. Block							15																					
P540-2	Barge Haul Control Panel	Digging Winch Motor		220																										
P540-3	Barge Haul Control Panel	Digging Winch Brake						220																						
P540-4	Barge Haul Control Panel	Return Winch Motor		260																										
P540-5	Barge Haul Control Panel	Return Winch Brake						260																						
P542-1	MCC Unit 2G	Cable Reel Slip Rings					320																							
P542-2	Cable Reel VFD Panel	Cable Reel Motor			320																									
P542-3	Cable Reel VFD Panel	Cable Reel Brake						320																						
P542-4	MCC Unit 2M	Cable Reel VFD Panel					70																							
P542-5	Shifter Barge Control Panel	Cable Reel							400																				Cable Supplied by REW	
<b>Control Cables</b>																														
C501-1	PLC Control Panel	Digging Winch Motor Temp. Sw.									215																			
C501-2	PLC Control Panel	Return Winch Motor Temp. Sw.									255																			
C501-3	PLC Control Panel	Digging Winch Payout Limit Sw.									240																			
C501-4	PLC Control Panel	Digging Local Maintenance Station										215																		
C501-5	PLC Control Panel	Return Local Maintenance Station										255																		
C501-6	PLC Control Panel	Return Winch Payout Limit Sw.									280																			
C501-16	PLC Control Panel	Digging Winch Released Limit Sw.									215																			
C501-17	PLC Control Panel	Return Winch Released Limit Sw.									255																			
C540-1	Barge Haul Control Panel	Return Winch Heater									255																			
C540-2	Barge Haul Control Panel	Digging Winch Heater									215																			
C540-3	PLC Control Panel	Barge Haul Control Panel										70																		
C540-4	Low Voltage Distribution Panel	Barge Haul Control Panel											60																	

Cable lengths are estimated, final length determined by actual routing.

Rev. 2

2/21/2024

ASPA - McDuffie Island Terminal  
 BU3 - Barge Haul System  
 Field Cables

CABLE #	FROM	TO	ESTIMATED LENGTH	3C #8 AWG w/GND, 600V	3C #2 AWG VFD CABLE	3C #12 AWG VFD CABLE	3C #2 AWG w/GND	3C #12 AWG w/GND, 600V	3C #300MCM w/GND, 600V	3C #2 AWG w/GND Reeling Cable	2C-#14AWG, 600V	7C-#14AWG, 600V	3C-#12AWG, 600V						4 Pair #16 T&S	Cat5 Ethernet								NOTES
				0	480	320	390	800	85	400	0	2150	610	280	0	0	0	0	0	0	1270	470	0	0	0	0	0	0
C542-1	Cable Reel VFD Panel	PLC Control Panel										70																
C542-2	Cable Reel VFD Panel	Cable Reel Motor Temp. Sw.									220																	
LPAN-2	Low Voltage Distribution Panel	Cable Reel Space Heater										220																
<b>Signal/Communication Cables</b>																												
S500-3	PLC Control Panel	Cable Reel Inclinomter A																	235									
S500-4	PLC Control Panel	Cable Reel Inclinomter B																	235									
S540-1	PLC Control Panel	Barge Haul Control Panel																		70								
S540-2																												
S540-3	Barge Haul Control Panel	Digging Winch Encoder																	220									
S540-4	Barge Haul Control Panel	Return Winch Encoder																	260									
S542-1	Cable Reel VFD Panel	Cable Reel Motor Encoder																	320									
S542-2	PLC Control Panel	Cable Reel Position Encoder																		320								
S542-3	PLC Control Panel	Cable Reel VFD Panel																	70									
S600-10	PLC Control Panel	POE Ethernet Switch for Cable Reel Position Encoder																	10									

Cable lengths are estimated, final length determined by actual routing.

Rev. 2

2/21/2024



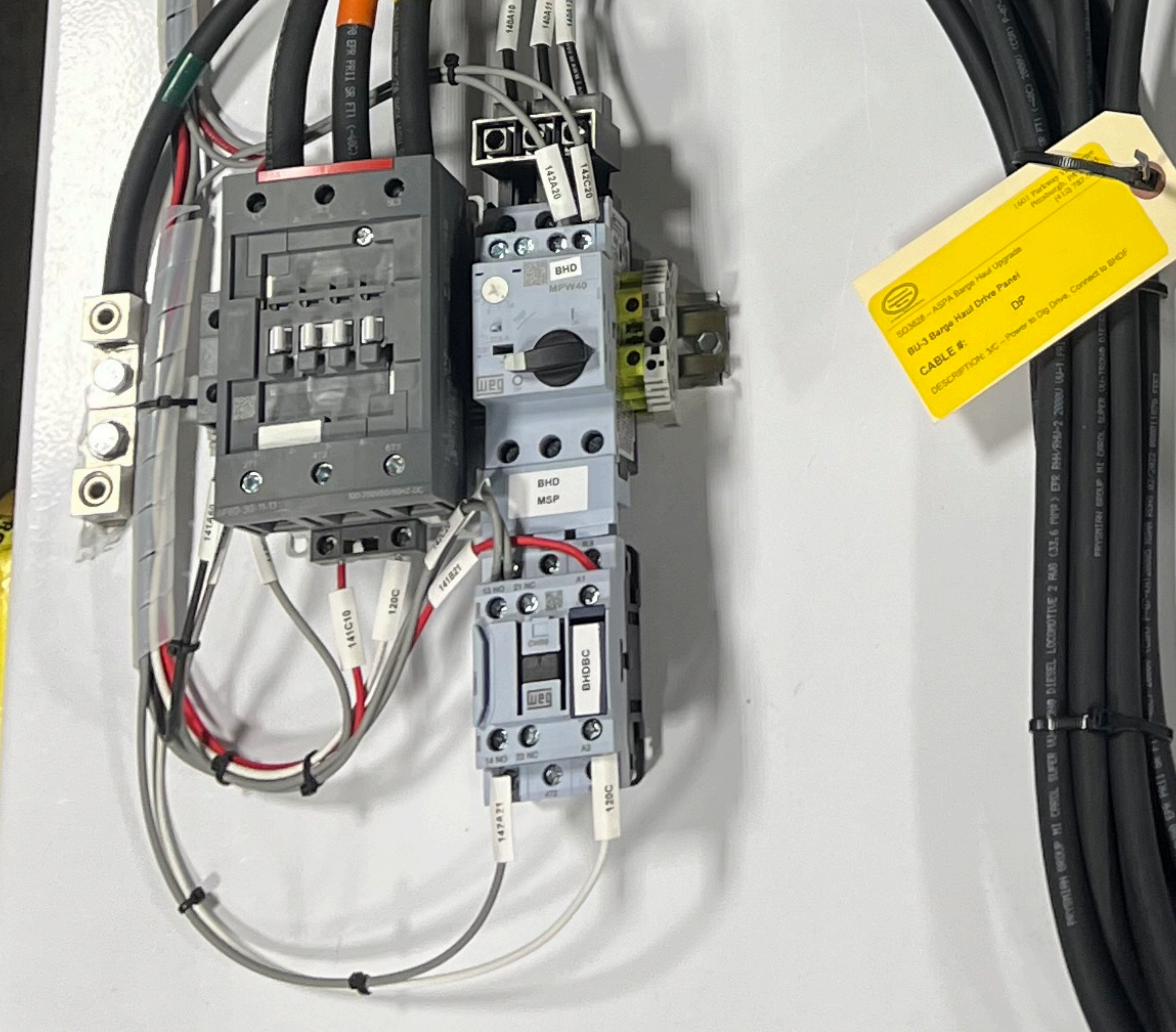
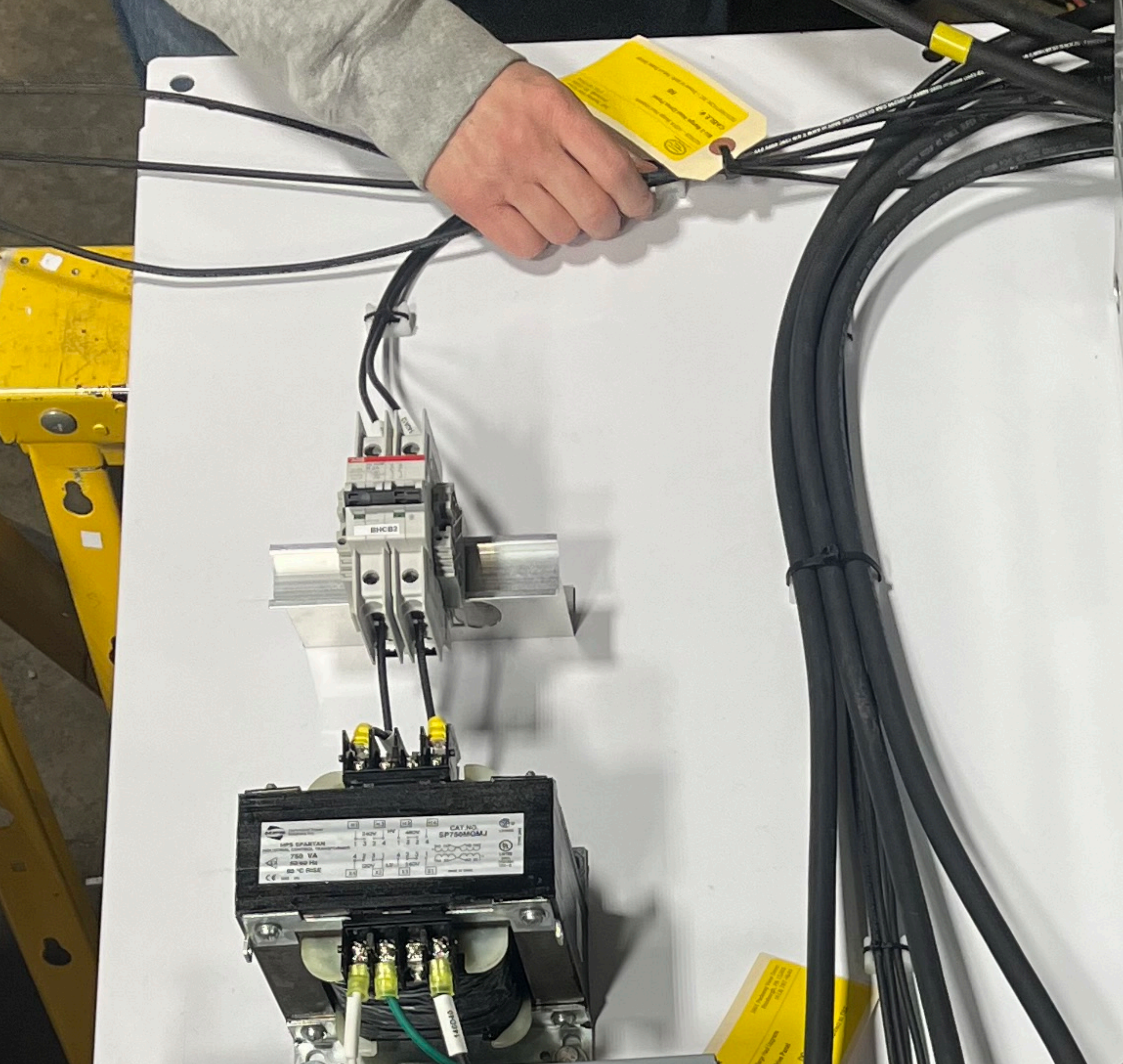
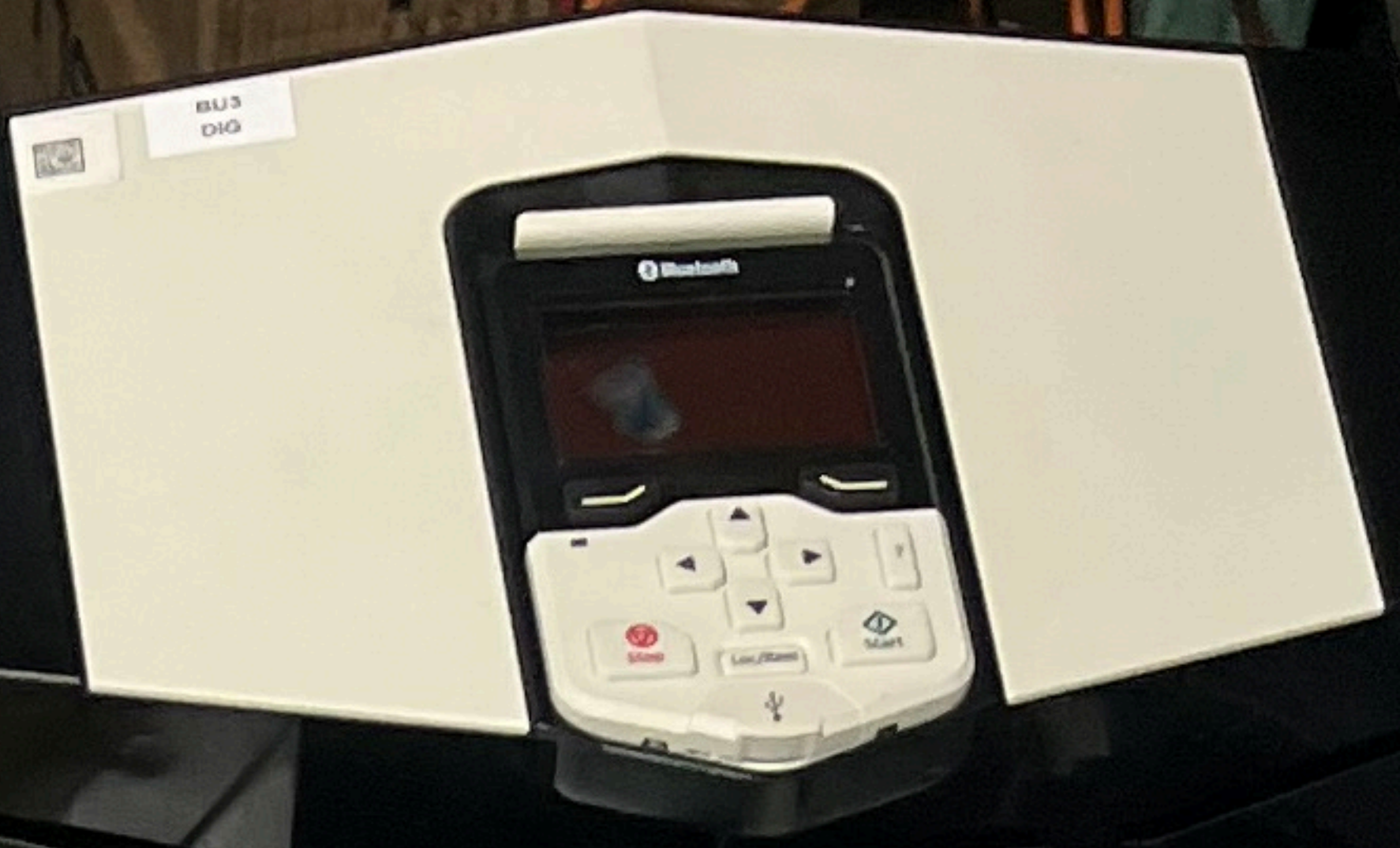
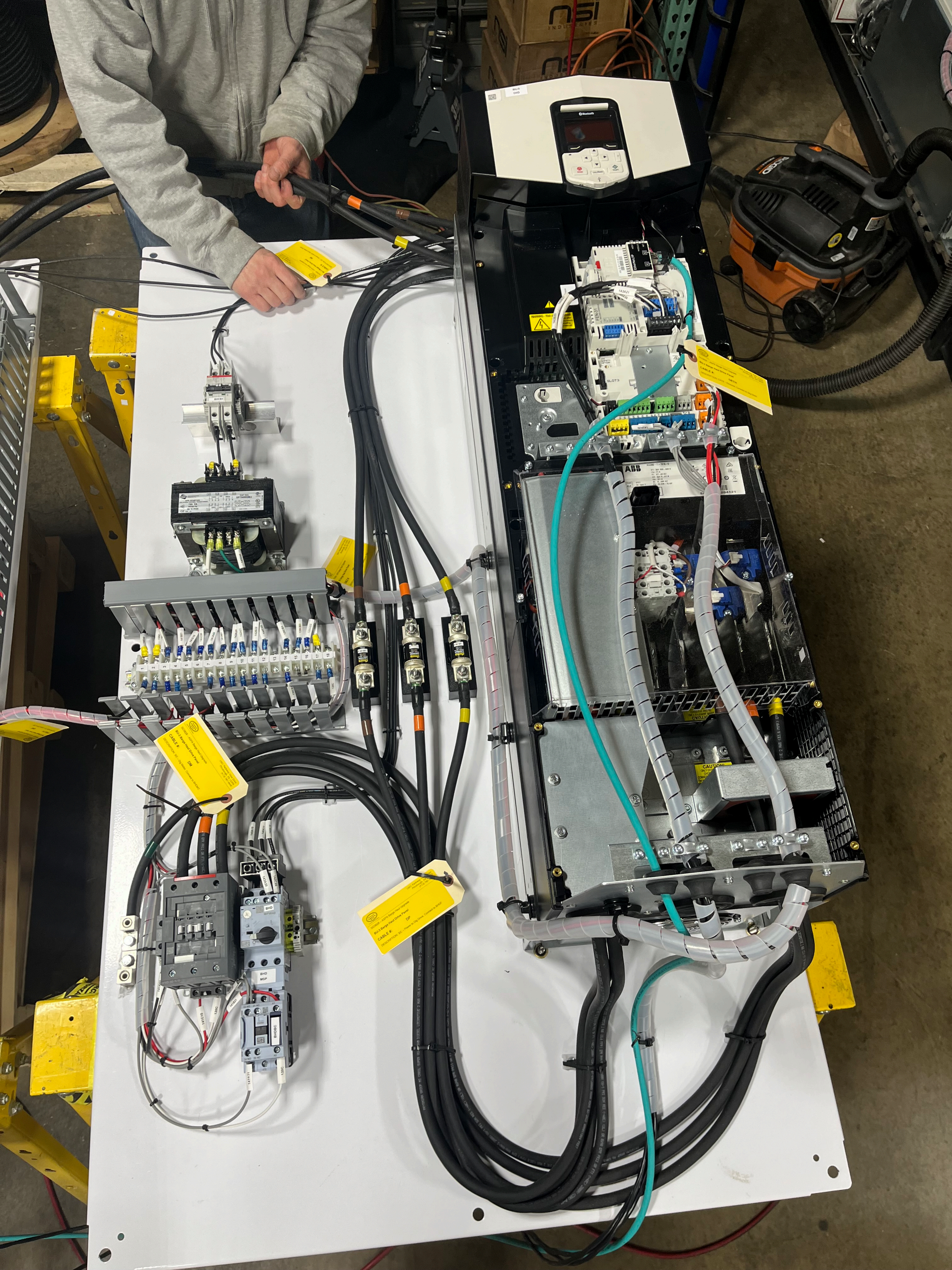


ABB  
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CAUTION  
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LIVE PARTS

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