

Memo

To: Docketing Division
From: Jill Henry, Chief, Rail Division
Cc: PUCO Legal Department
Date: 3/18/2022

Re: PUCO Case No. 22-231-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices at the Columbus & Ohio River Railroad Crossing, Gibbard Avenue, DOT#515-129C, in Franklin County, Ohio.

On November 15, 2019, the Ohio Rail Development Commission (ORDC) authorized funding for the Columbus & Ohio River Railroad (CUOH) to install flashing lights and gates at Gibbard Avenue (DOT#515-129C) grade crossing in Franklin County, Ohio. The crossing was surveyed, on July 12, 2019, and was found to warrant the upgrade. The electric utility provider for this crossing is AEP-Ohio.

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amount of \$180,574.00 have been approved. Construction may commence at once. **Staff requests a Finding & Order with completion of the project in nine months.** Staff requests that the following language be incorporated in the Finding & Order:

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the railroad will be responsible for this work. This work includes, but is not limited to:

- **Any ancillary work to make the warning devices function as designed and visible to the roadway user, and**
- **MUTCD compliance, including minor roadway work if necessary.**

Please serve the following parties of record:

Columbus & Ohio River Railroad
Len Wagner
Senior Vice-President
Northern Region/Genesee & Wyoming Inc.
201 N. Penn Street
Punxsutawney, PA 15767

Columbus & Ohio River Railroad
Jared Rishel
AVP Engineering Northern Region
Genesee & Wyoming Inc.
4349 Easton Way
Suite 110
Columbus, OH 43219

Alfred Benesch & Company
Ben Biesterveld
G&W Consultant
4614 Red Fox Road
Oshkosh, WI 54904

Ohio Rail Development Commission
Alan Bell
Manager, Grade Crossing Programs
1980 West Broad Street
Mail Stop #3140
Columbus, Ohio 43223

City of Columbus
Department of Public Service
Traffic Management
111 N Front Street
Columbus, OH 43215

AEP-Ohio

**OHIO RAIL DEVELOPMENT COMMISSION
INTER-OFFICE COMMUNICATION**

TO: John Williams, Director, Transportation Department, PUCO

FROM: Allen Bell, Manager, Safety Section, ORDC

BY: Greg Gronbach, Project Manager, Safety Section, ORDC

SUBJECT: Construction Authorization Grade Crossing Warning Device Improvements
Franklin County CUOH Gibbard Ave DOT# 515129C, PID# 111139

DATE: January 21, 2022

The Ohio Rail Development Commission (ORDC) established a diagnostic survey at the subject location on July 12, 2019. The Public Utilities Commission of Ohio (PUCO) attended the review. The Diagnostic Team recommended the improvement of warning devices to flashing lights and roadway gates. Copies of the diagnostic review form and the plan and estimate are attached.

PE has already been provided by the railroad. ORDC accepts the site plans and estimates as provided. Please issue a construction-only order for the project outlined above. ORDC recommends a nine (9) month construction timeline. This authorization is made with the stipulation and understanding that an approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit.

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the railroad will be responsible for this work. This work includes, but is not limited to:

- any ancillary work to make warning devices function as designed and visible to the roadway user, and
- MUTCD compliance – including minor roadway work if necessary.

Thank you for your assistance with these matters.


Greg Gronbach
Project Manager

Attachment: Diagnostic Review
Letter Agreement
PE Authorization
Plan, Estimate & Material List
Construction Authorization

c: Jill Henry, Rail Specialist, PUCO

ORDC Project Manager (file)



Rail Development Commission

Mike DeWine, Governor
Jon Husted, Lt. Governor

Scott Corbitt, Chair

January 21, 2022

Mr. Len Wagner
President & Legal Official (SVP)
Genesee & Wyoming/CUOH
201 N. Penn Street
Punxsutawney, PA 15767

RE: Construction Authorization Grade Crossing Warning Device Improvements
Franklin County CUOH Gibbard Ave DOT# 515129C, PID# 111139

Dear Mr. Wagner:

The plan dated 11/10/2021 and estimate dated 1/10/2022, for the referenced project is acceptable. Genesee & Wyoming/ CUOH may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan. Construction may include but is not limited to circuitry design, installation of service poles, procurement of materials and signal construction.

This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to \$180,574.00. Additional costs must be approved in writing by the Ohio Rail Development Commission (ORDC) prior to being incurred. Emergency verbal authorizations by ORDC may be permitted and will be confirmed by ORDC in writing within ten (10) business days of the verbal approval.

This authorization is contingent upon Genesee & Wyoming/ CUOH accepting the following instructions:

1. Genesee & Wyoming/ CUOH's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Greg Gronbach, ORDC, email Gregory.Gronbach@dot.ohio.gov, and to the Public Utilities Commission of Ohio at Jill.henry@puco.ohio.gov. Genesee & Wyoming/ OHCR's project foreman will also notify the same of any stops and re-starts of the work activity and of the date work was completed for the project.
2. Genesee & Wyoming/ CUOH will arrange for utilities to be located at the project site by the Ohio Utilities Protection Service (OUPS) prior to any construction activities at the site. Utilities that are not participating members of the service must be contacted directly by Genesee & Wyoming/ CUOH.
3. Genesee & Wyoming/ CUOH's project foremen will notify Greg Gronbach at 614-745-6760 (telephone) or Gregory.Gronbach@dot.ohio.gov (email) of any changes in the scope of work,



cost overruns, material changes, etc. which are not included in the approved plan and estimate and secure approval of same before the work is performed.

4. Open cut of roadways is *not permitted* except in unusual circumstances and must be coordinated with the local highway authority and preapproved by ORDC.
5. Genesee & Wyoming/ CUOH will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
6. Genesee & Wyoming/ CUOH will furnish two (2) copies of the final all-inclusive bill to ORDC stating the exact dates of starting and completing work, the initial and final dates of construction and location where the accounts may be audited.
7. This installation will include any ancillary work to make the warning devices function as designed and meet MUTCD.

Thank you for your assistance with these matters.

Sincerely,


Greg Gronbach
Project Manager

C: John Williams, Director, Transportation Department, PUCO
Jill Henry, Rail Specialist, PUCO
Heather Hamilton, ORDC
ORDC (file)



COLUMBUS & OHIO RIVER RAILROAD

GIBBARD AVE.

COLUMBUS, (FRANKLIN), OHIO

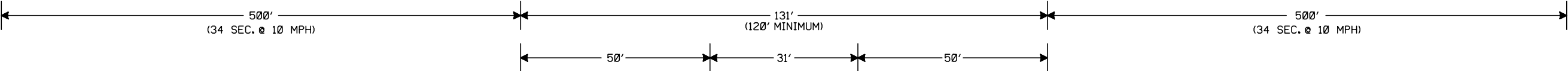
DOT# 515 129C MILEPOST# 1.16

INDEX	
SHEET	DESCRIPTION
00	TITLE AND INDEX
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02	PMD-4R CIRCUITRY & PROGRAM
03	CROSSING CONTROLLER CIRCUITRY
04	DATA RECORDER CIRCUITRY
05	GATE LIGHTING CIRCUITRY
06	GATE MECH CIRCUITRY
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REVISIONS						THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.			TITLE AND INDEX		
									COLUMBUS & OHIO RIVER RAILROAD		
									DRAWN: PRS DESIGNED: MST CHECKED: JMW DATE: 11-10-21		GIBBARD AVE. COLUMBUS, (FRANKLIN), OHIO DOT#515 129C MILEPOST# 1.16

← SOUTH TO CSX JCT.

NORTH TO COLUMBUS →



- LEGEND:**
- ⊗ - TEST TERMINAL
 - △ - EQUALIZER
 - ⌋ - ARRESTOR TO GROUND
 - ⊗ - TWISTED WIRE
2 TURNS PER FOOT
 - - INSULATED NUT
 - - PVC SCHEDULE 80 CONDUIT
(INSTALLED AT MIN 36" DEEP)
 - ⊗ - LOCATION OF AC SERVICE

APPROACH DISTANCE CALCULATION		
	TRACK 1	
	SOUTH	NORTH
ACTUAL PRIME CROSSING WARNING TIME	30 SEC	30 SEC
TIME FOR CROSSING CLEARANCE DISTANCE > 35'	+ 0 SEC	+ 0 SEC
TRAFFIC PRE-EMPTION TIME	+ 0 SEC	+ 0 SEC
TOTAL CALCULATED DESIGN WARNING TIME	30 SEC	30 SEC
EQUIPMENT RESPONSE TIME	+ 4 SEC	+ 4 SEC
BUFFER TIME	+ 0 SEC	+ 0 SEC
TOTAL WARNING TIME FOR APPROACH DISTANCE CALCULATION	34 SEC	34 SEC
CALCULATED AT MAXIMUM TRAIN SPEED	× 10 MPH	× 10 MPH
RATIO OF FEET PER SECOND TO MILES PER HOUR	× 1.47	× 1.47
APPROACH LENGTH (ROUNDED UP TO THE NEXT FOOT)	500 FEET	500 FEET

- NOTES:**
- LAT./LONG. IN DECIMAL DEGREES:
39.9835044°, -82.9751800°
 - MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
 - ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS. VENDOR TO VERIFY ALL CONDITIONS.
 - FLASHING LIGHT SIGNALS & GATE LIGHTS TO BE LIGHT EMITTING DIODE ASSEMBLIES (LED).
 - BEWARE OF OVERHEAD WIRES.
 - SEE APPROACH CIRCUIT DISTANCE CALCULATION TABLE FOR PLANNED WARNING TIME AND TRAIN SPEED PER TRACK.
 - APPROACH DISTANCES ARE TO BE MEASURED FROM THE TERMINATIONS TO CLOSEST SET OF TRACK LEADS AT CROSSING.
 - CONDUIT MUST BE BORED.
 - VENDOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL UTILITIES WITHIN LIMITS OF CONSTRUCTION.
 - CAMERA SYSTEM TO BE SUPPLIED BY VENDOR AND INSTALLED BY RR.
 - ENSURE ALL DITCHES ALONG THE TRACKS IN ALL FOUR QUADRANTS HAVE POSITIVE DRAINAGE FLOW TO 100' FROM THE HIGHWAY.
 - COMMUNICATION CABLE IN SW QUAD IS 28'9" ABOVE GRADE AND 3' 'BEHIND' WITH CURB. SW GATE TIP WILL BE 23'9" WHEN VERTICAL.
 - ELECTRIC OVERHEAD IN NE QUAD IS 34'9" ABOVE GRADE. NE GATE TIP WILL BE 28'9" WHEN VERTICAL.
 - INCLUDE A DUMPSTER TO REMOVE DEBRIS FROM SITE FOR PLACEMENT OF SIGNAL HOUSE.
 - ROW WIDTH IS AN APPROXIMATION AND CANNOT BE CONFIRMED.
 - MAIN ELECTRICAL PANEL TO ACCOUNT FOR 240VAC/100A AC SERVICE.
 - GATE LENGTHS:
GATE #1: 18'
GATE #2: 22'

REVISIONS

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STATE OF OHIO
SCOTT L. WERTANS
E-73435
REGISTERED PROFESSIONAL ENGINEER
12/9/21

COLUMBUS
OHIO RIVER

CROSSING TRACK LAYOUT

COLUMBUS & OHIO RIVER RAILROAD

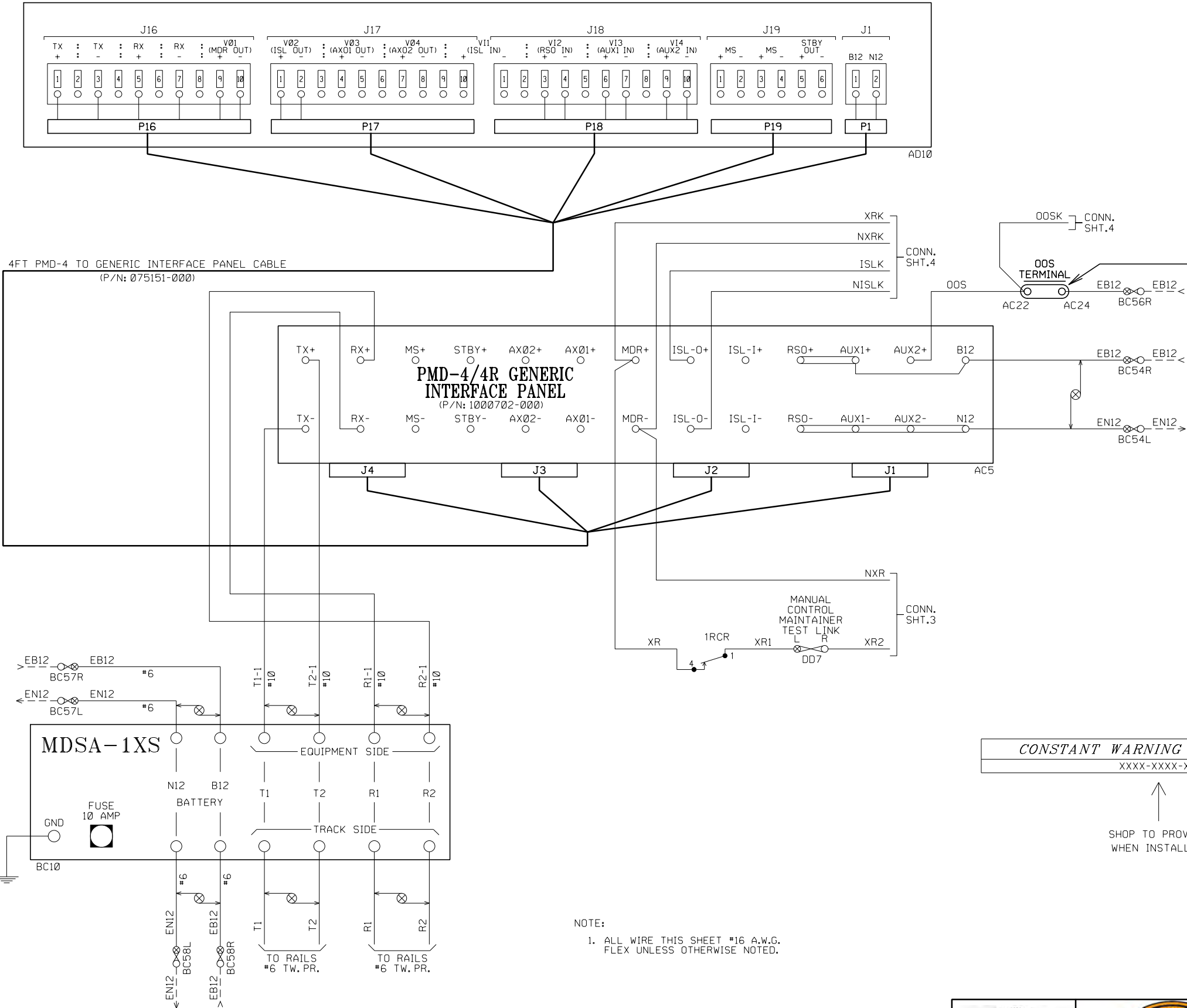
DRAWN: PRS
DESIGNED: MST
CHECKED: JMW
DATE: 11-10-21

GIBBARD AVE.
COLUMBUS, (FRANKLIN), OHIO
DOT#515 129C MILEPOST# 1.16

SHEET
01 OF 12

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PMD-4R



WARNING
USE OF THIS JUMPER TERMINAL WILL COMPLETELY DISABLE THIS CROSSING WARNING SYSTEM. PROPER PROTECTION MUST BE IN PLACE FROM THE TRAIN DISPATCHER BEFORE USING ANY CUT-OUT DEVICE.

NOTE:
DL = DEFAULT LEVEL
NA = NON APPLICABLE

PMD-4R SETUP PARAMETERS	
APPLICATION INFO	
APPLICATION	PMD-4R_MD[CW]OOS
APPLICATION CHECKSUM	7591
APPLICATION CRC	323D
CHASSIS ID	7
MDR1 SETTINGS	
MDR1 WARNING TIME (SEC)	30
MDR1 CW OR MD	CW
MDR1 AP TIME	NA
MDR1 AUX RECOVERY DELAY	5 (DL)
FREQUENCY	
APPROACH TRACK FREQUENCY (HZ)	630 HZ
BASIC APPROACH SETTINGS	
MASTER/SLAVE	MASTER
TRANSMITTER GAIN	200
TCA	FIELD ADJUST
DIRECTION MODE UNI/BI	BI
LIA	FIELD ADJUST
APPROACH LENGTH	500 FT
AUTO RX ENABLE/DISABLE	ENABLED
ADVANCE APPROACH SETTINGS	
FALSE SHUNT	DISABLED
FALSE SHUNT RX	80
FALSE SHUNT DELAY	10
APPROACH RELEASE	DISABLED
APPROACH RELEASE RX	80
APPROACH RELEASE DELAY	10
LOSS OF SHUNT TIME (LOS)	16
APPROACH SETTING	NORMAL
ISLAND SETTINGS	
ISLAND TYPE INTERNAL/EXTERNAL	INTERNAL
ISLAND ENABLED	ENABLED
ISLAND DISABLE TIMEOUT	2 HR
ISLAND FREQUENCY (HZ)	4.9 KHZ
ISLAND LOSS OF SHUNT (LOS)	4
ISLAND FAULT DELAY	2
TRANSMITTER GAIN	0

CONSTANT WARNING KEY NUMBER

XXXX-XXXX-XXXX

SHOP TO PROVIDE
WHEN INSTALLED

NOTE:
1. ALL WIRE THIS SHEET #16 A.W.G.
FLEX UNLESS OTHERWISE NOTED.

REVISIONS

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PMD-4R CIRCUITRY & PROGRAM

COLUMBUS & OHIO RIVER RAILROAD

DRAWN: PRS
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DATE: 11-10-21

GIBBARD AVE.
COLUMBUS, (FRANKLIN), OHIO
DOT#515 129C MILEPOST# 1.16

SHEET
02 OF 12

BATTERY BANK VOLTAGE	VALID LAMP OUTPUT RANGE (in volts)	DIGITAL METER (FLUKE 87 OR EQUIVALENT)	ANALOG METER (SIMPSON 260 OR TS111)
13.3	9.0 TO 12.0	1.3 VOLTS BELOW ACTUAL VALUE	0.6 VOLTS BELOW ACTUAL VALUE
14.7	9.0 TO 12.0	2.2 VOLTS BELOW ACTUAL VALUE	1.1 VOLTS BELOW ACTUAL VALUE
15.8	9.0 TO 12.0	2.6 VOLTS BELOW ACTUAL VALUE	2.0 VOLTS BELOW ACTUAL VALUE

SSCC IIIA
40 AMP CROSSING CONTROLLER
91160-1101

OUTPUT A
J1: 1GC, 1, 1L1, 1L2
BELL
CONN. SHT.5

OUTPUT B
J6: 2GC BELL, 2, 2L1, 2L2
CONN. SHT.5

CROSSING CONTROL INPUT STATUS
J2: B, N, FLASH SYNC, MAINT CALL
J3: 1, 2, 3, 4, 5, 6, 7, GP, HEALTH, TX, RX, LAN
CONN. SHT.2

DIAGNOSTIC
J5: DIAGNOSTIC
CONN. SHT.5

CONN. SHT.5
1GC, 1L1, 1L2, 2GC BELL, 2L1, 2L2, 1-2GP, XN, BD51L

CONN. SHT.2
XR2, NXR

CONN. SHT.5
XN, BD56L, BD55R, BD54R, BD53R, BD53L, BD54L, BD55L, BD47L

13.3	9.0 TO 12.0	1.3 VOLTS BELOW ACTUAL VALUE	0.6 VOLTS BELOW ACTUAL VALUE
14.7	9.0 TO 12.0	2.2 VOLTS BELOW ACTUAL VALUE	1.1 VOLTS BELOW ACTUAL VALUE
15.8	9.0 TO 12.0	2.6 VOLTS BELOW ACTUAL VALUE	2.0 VOLTS BELOW ACTUAL VALUE

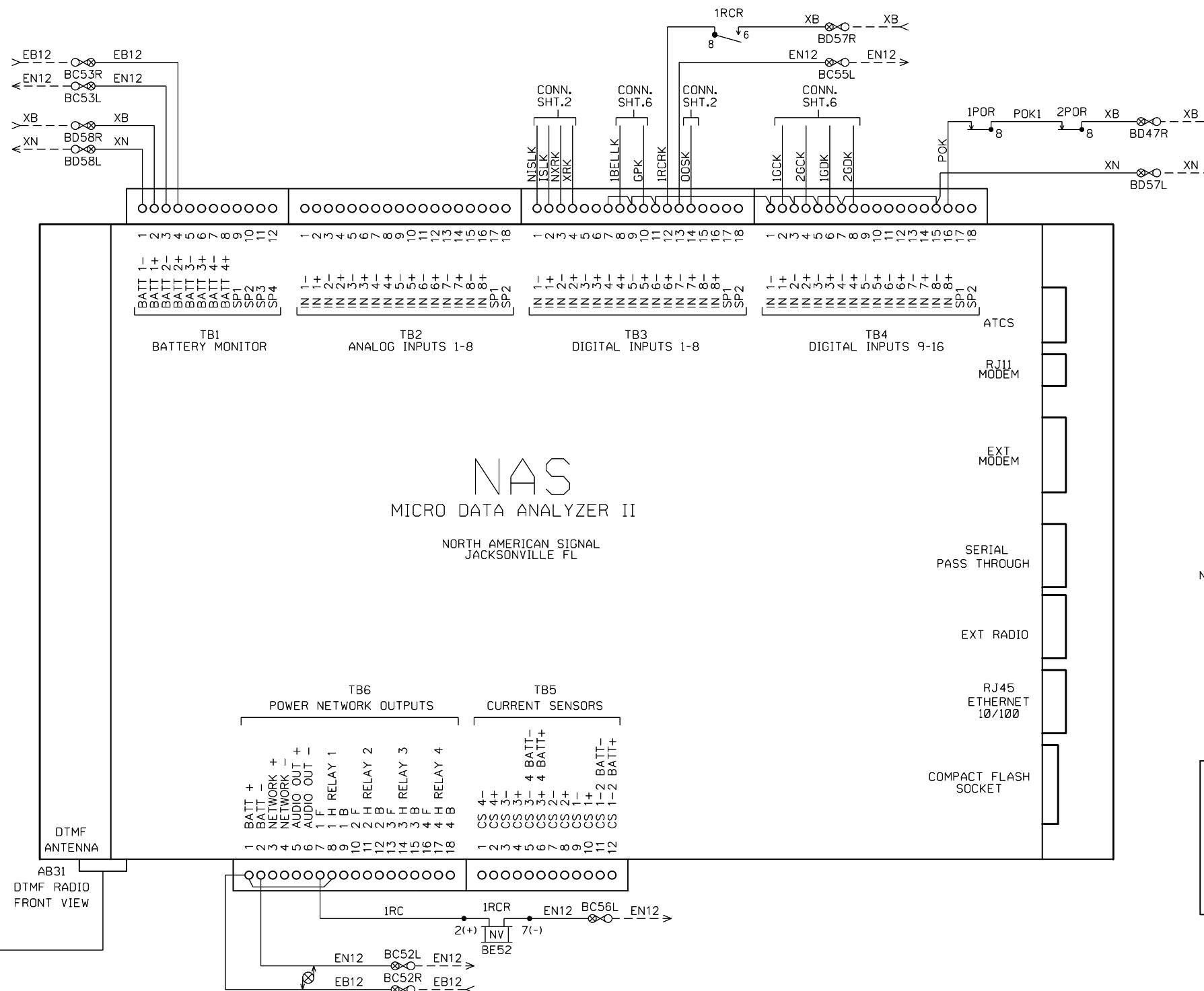
FOR LAMP OUTPUT SETTINGS GREATER THAN 12.0 VOLTS, REDUCE THE LISTED VALUE BY 0.3 VOLTS.
LAMP VOLTAGE MEASUREMENTS SHOULD BE ACCURATE TO 0.3 VOLTS.

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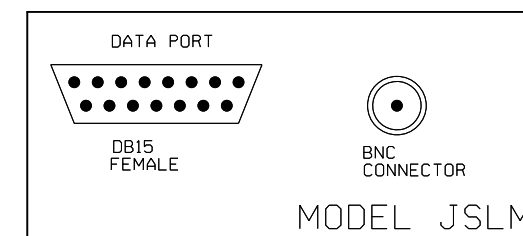
ROOF MOUNT
VHF
ANTENNA

COAX CABLES BY NAS

ANTENNA CABLE
NAS PART NO:
NAS-DTMF-AK-10



- NOTES:
- 1) TO ACTIVATE CROSSING ENTER: 129 #
 - 2) TO DEACTIVATE CROSSING ENTER: 129 *
 - 3) RAILROAD FREQUENCIES: 160.215 MHz
CH. #07-07
TONE 44



MOUNTED INTERNAL ON MDA UNIT

- NOTE:
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FLEX UNLESS OTHERWISE NOTED.

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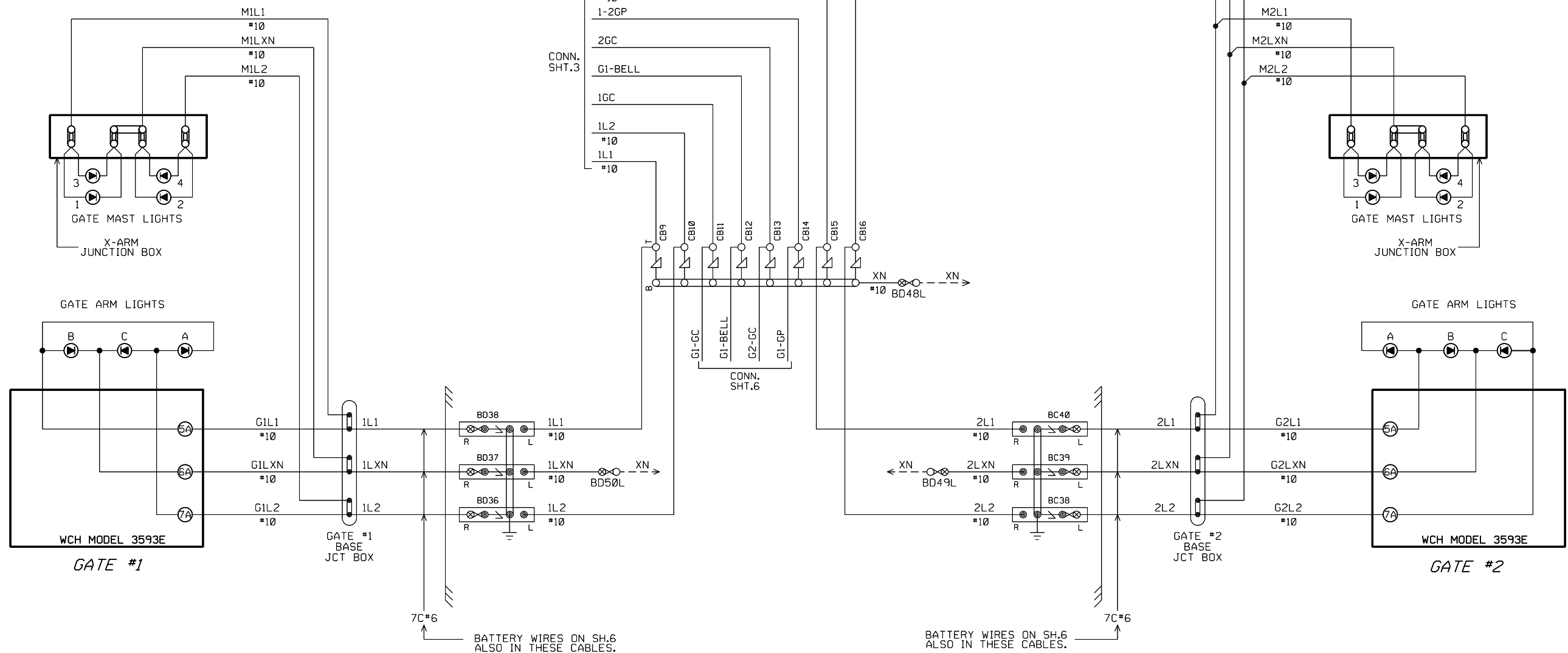
DATA RECORDER CIRCUITRY

COLUMBUS & OHIO RIVER RAILROAD

DRAWN: PRS
DESIGNED: MST
CHECKED: JMW
DATE: 11-10-21

GIBBARD AVE.
COLUMBUS, (FRANKLIN), OHIO
DOT#515 129C MILEPOST# 1.16

SHEET
04 OF 12



NOTE:
1. ALL WIRE THIS SHEET #16 A.W.G.
FLEX UNLESS OTHERWISE NOTED.

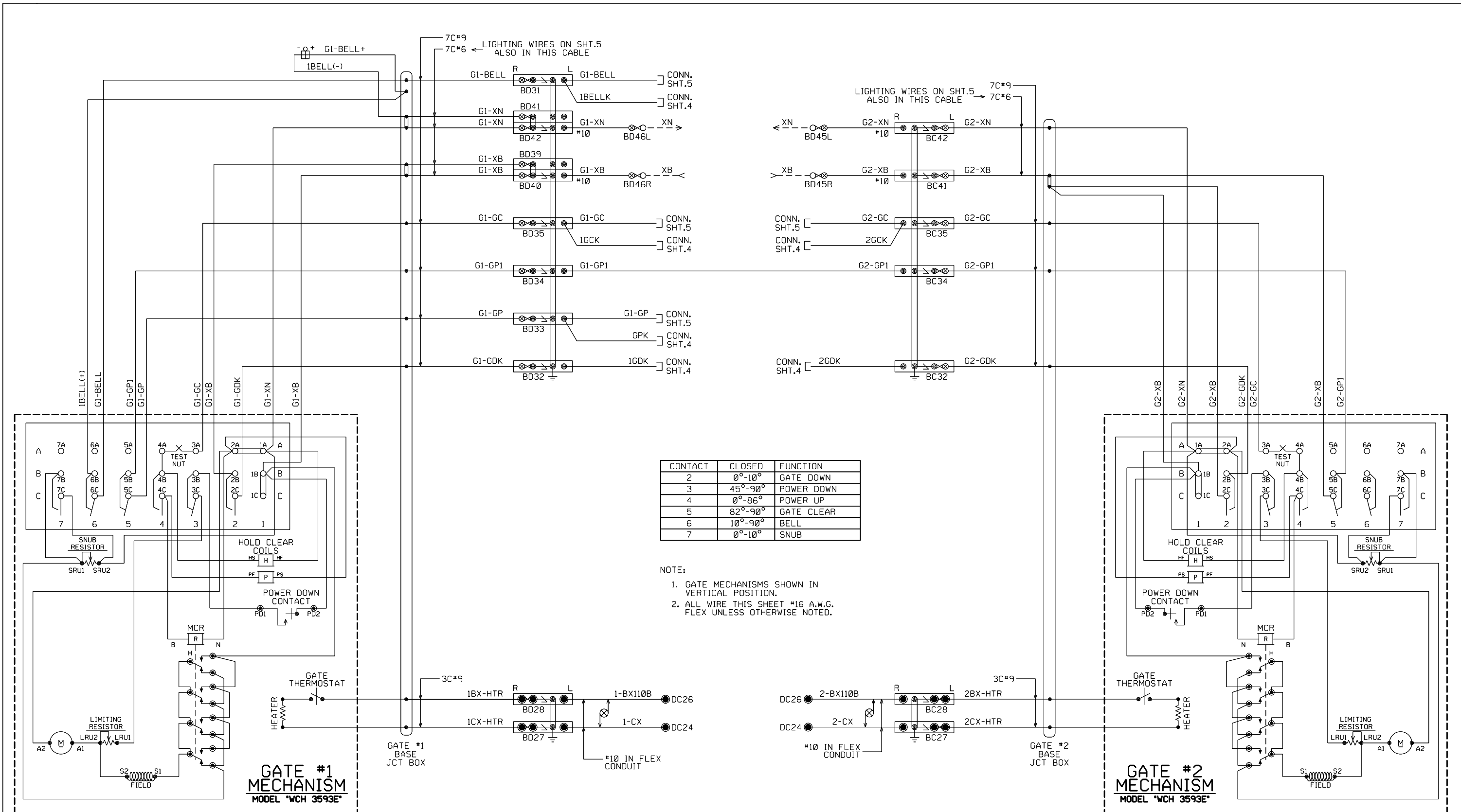
REVISIONS					GATE LIGHTING CIRCUITRY		
					COLUMBUS & OHIO RIVER RAILROAD		
					GIBBARD AVE. COLUMBUS, (FRANKLIN), OHIO DOT#515 129C MILEPOST# 1.16		
					SHEET 05 OF 12		

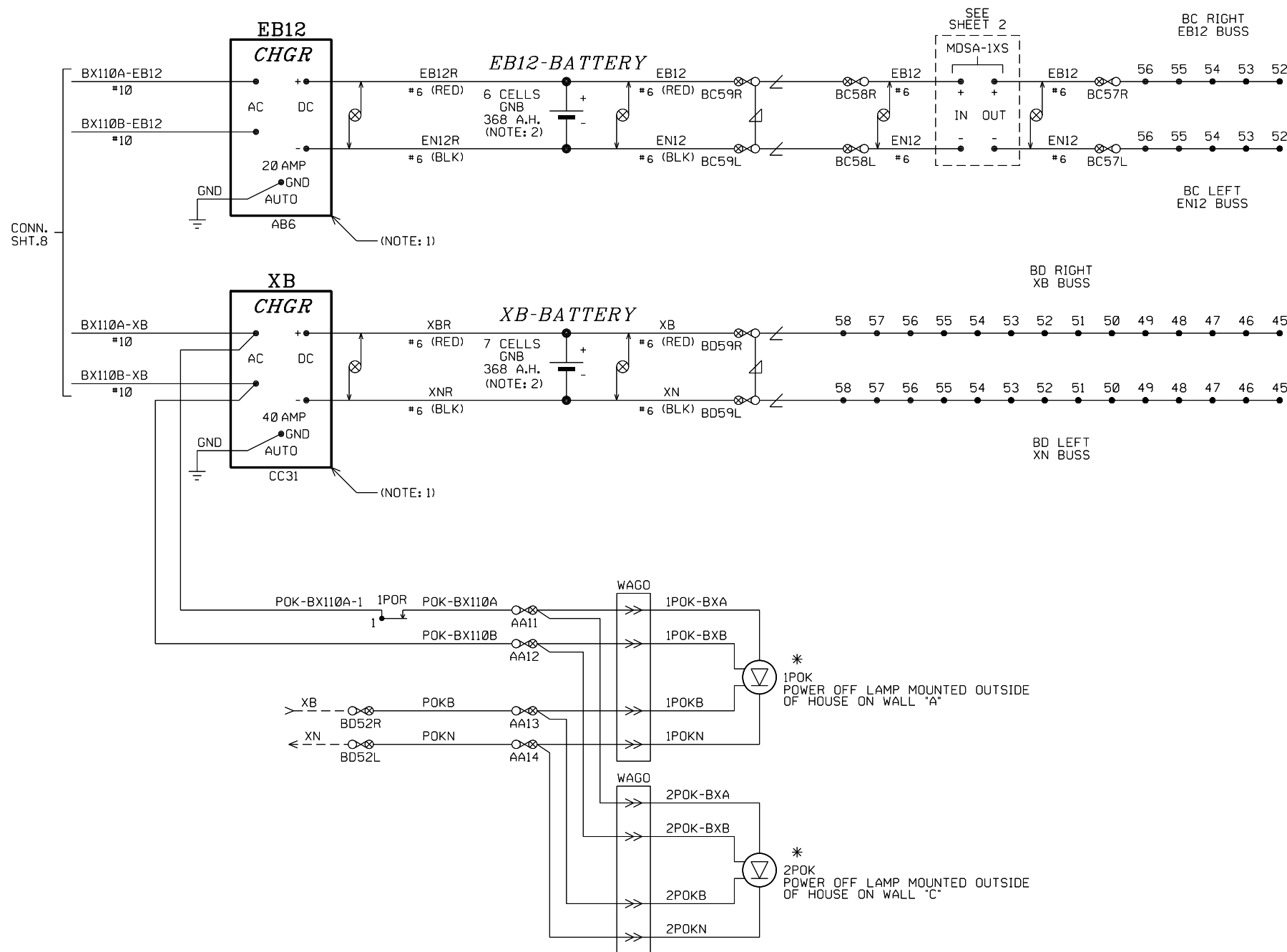
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DRAWN: PRS
DESIGNED: MST
CHECKED: JMW
DATE: 11-10-21





- NOTES:
1. USE 220VAC INPUT FOR CHARGERS.
 2. USE 1/4" TERMINALS AT BATTERY CONNECTIONS.
 3. ALL WIRE THIS SHEET #16 A.W.G. FLEX UNLESS OTHERWISE NOTED.

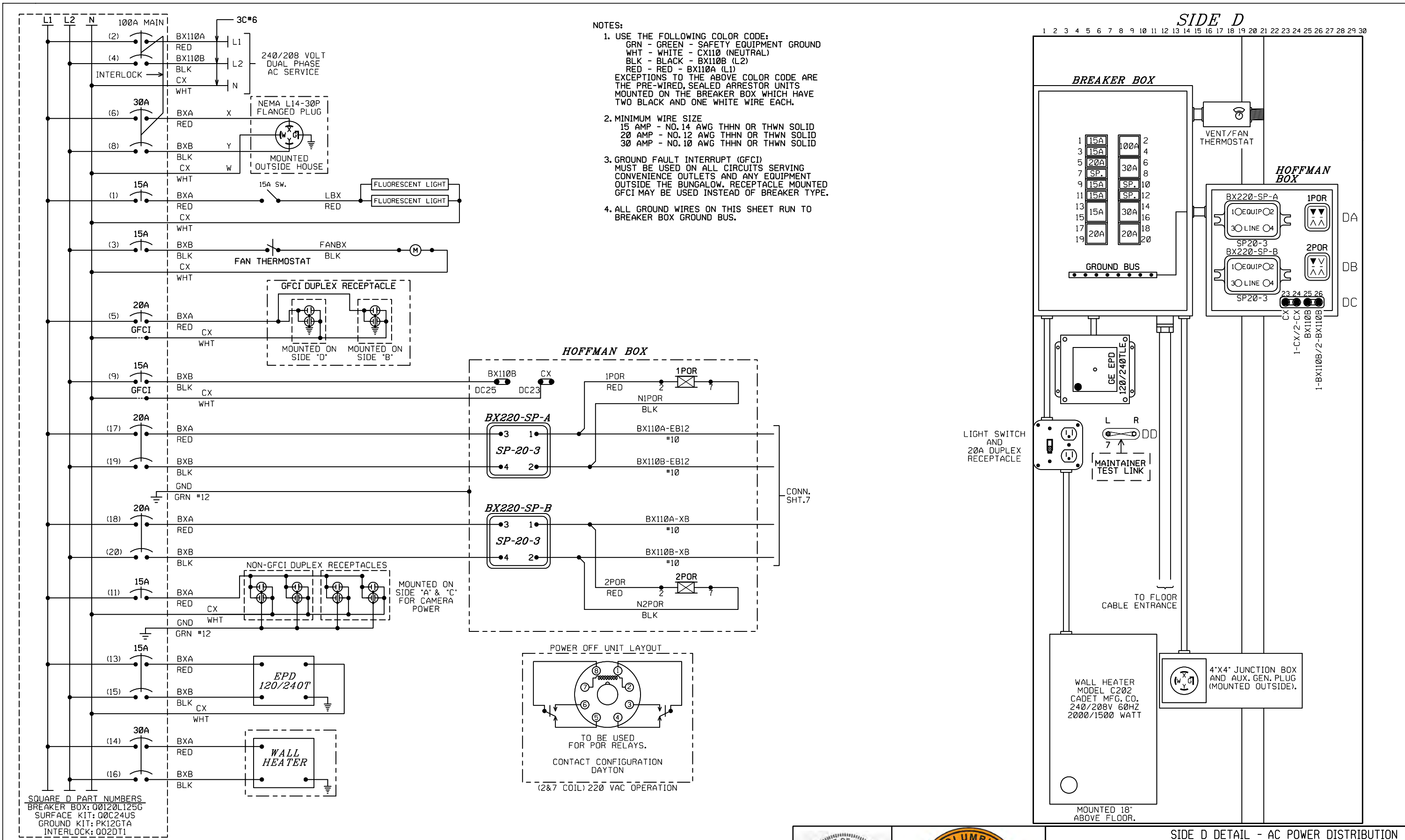
- LEGEND:
- TEST TERMINAL
 - EQUALIZER
 - ARRESTOR TO GROUND
 - TWISTED WIRE 2 TURNS PER FOOT
 - INSULATED NUT
 - * - LIGHTS ARE 12VDC, 4-WIRE LED. (P/N: LC2-001WB-WG4) VELCORP GEMS

REVISIONS					

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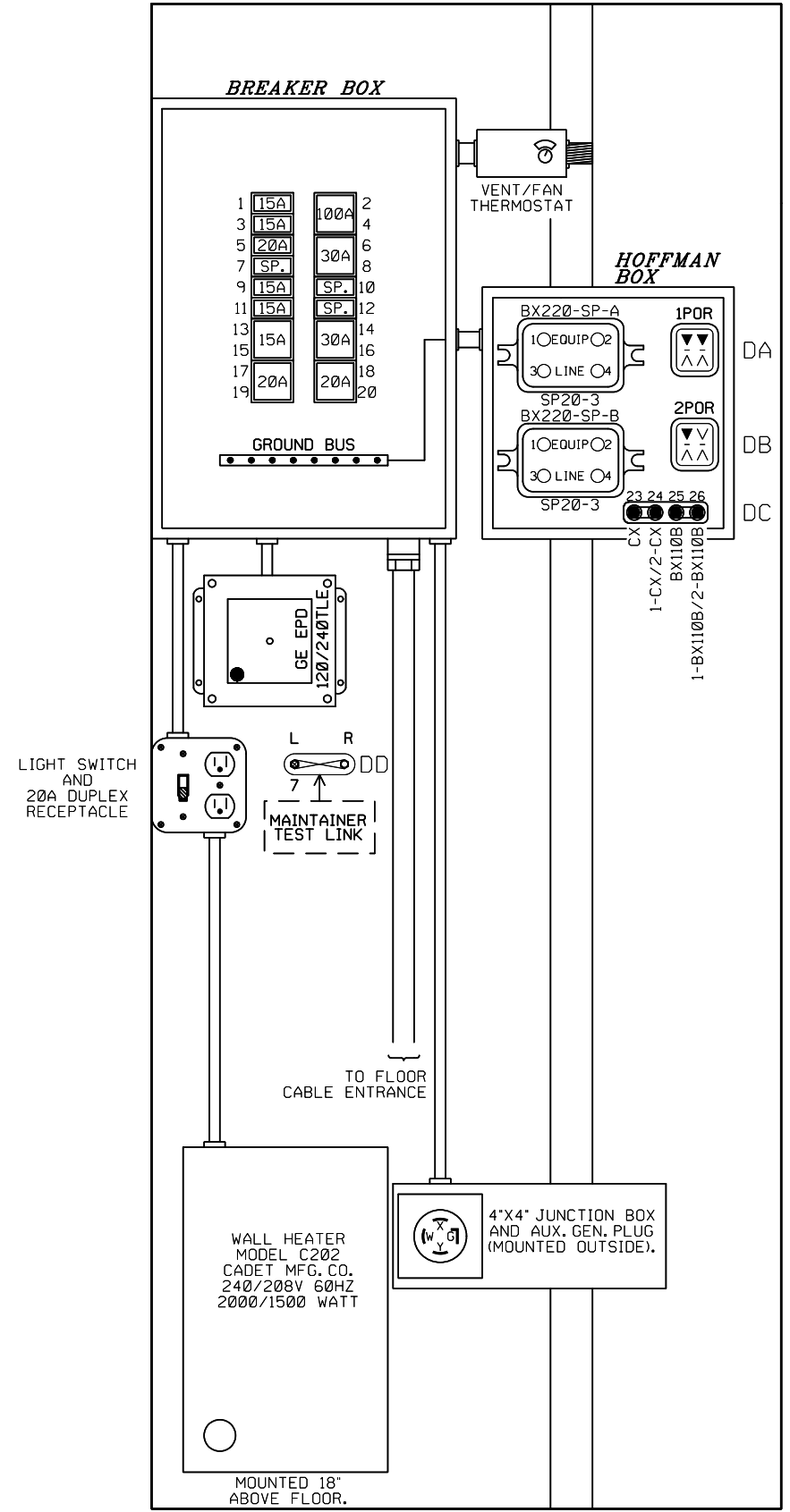


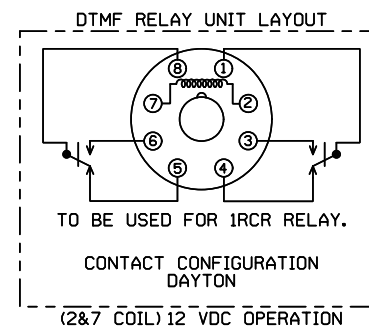
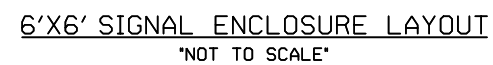
DC POWER DISTRIBUTION		
COLUMBUS & OHIO RIVER RAILROAD		
DRAWN: PRS DESIGNED: MST CHECKED: JMW DATE: 11-10-21	GIBBARD AVE. COLUMBUS, (FRANKLIN), OHIO DOT#515 129C MILEPOST# 1.16	SHEET 07 OF 12



- NOTES:
- USE THE FOLLOWING COLOR CODE:
GRN - GREEN - SAFETY EQUIPMENT GROUND
WHT - WHITE - CX110 (NEUTRAL)
BLK - BLACK - BX110B (L2)
RED - RED - BX110A (L1)
EXCEPTIONS TO THE ABOVE COLOR CODE ARE THE PRE-WIRED, SEALED ARRESTOR UNITS MOUNTED ON THE BREAKER BOX WHICH HAVE TWO BLACK AND ONE WHITE WIRE EACH.
 - MINIMUM WIRE SIZE
15 AMP - NO. 14 AWG THHN OR THWN SOLID
20 AMP - NO. 12 AWG THHN OR THWN SOLID
30 AMP - NO. 10 AWG THHN OR THWN SOLID
 - GROUND FAULT INTERRUPT (GFCI) MUST BE USED ON ALL CIRCUITS SERVING CONVENIENCE OUTLETS AND ANY EQUIPMENT OUTSIDE THE BUNGALOW. RECEPTACLE MOUNTED GFCI MAY BE USED INSTEAD OF BREAKER TYPE.
 - ALL GROUND WIRES ON THIS SHEET RUN TO BREAKER BOX GROUND BUS.

SIDE D





ROW BC

BATTERY BUSS DETAILS

NOTE: NO EQUIPMENT ALLOWED
IN SHADED AREAS.

SIDE B DETAIL - TERMINAL BOARD

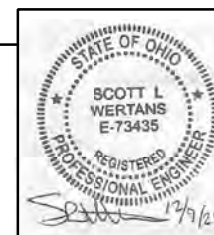
COLUMBUS & OHIO RIVER RAILROAD

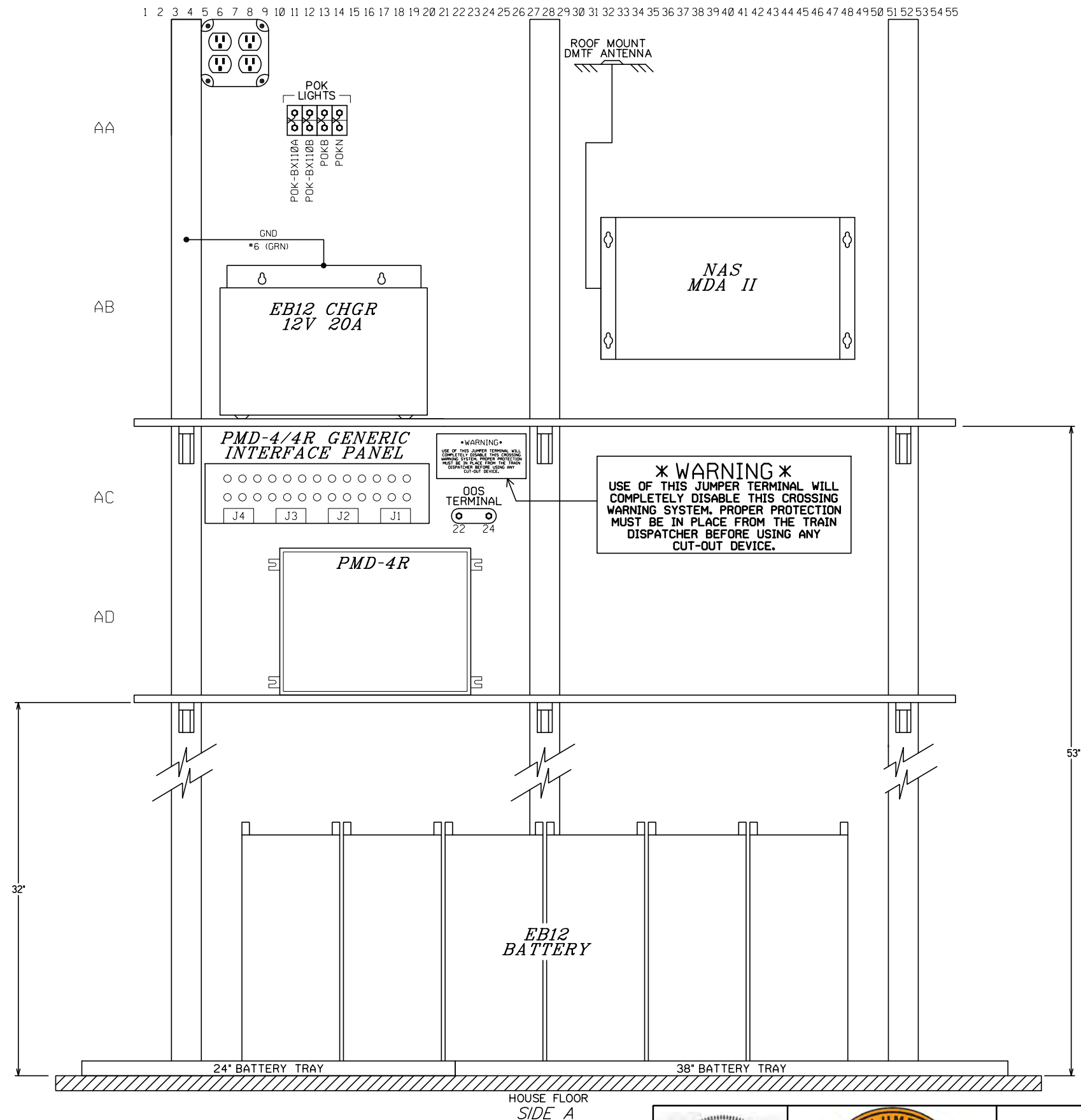
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GIBBARD AVE.
COLUMBUS, (FRANKLIN), OHIO
DOT#515 129C MILEPOST# 1.16

SHEET
09 OF 12

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.





HOUSE FLOOR
SIDE A

SIDE A DETAIL

REVISIONS

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COLUMBUS & OHIO RIVER RAILROAD

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COLUMBUS, (FRANKLIN), OHIO
DOT#515 129C MILEPOST# 1.16

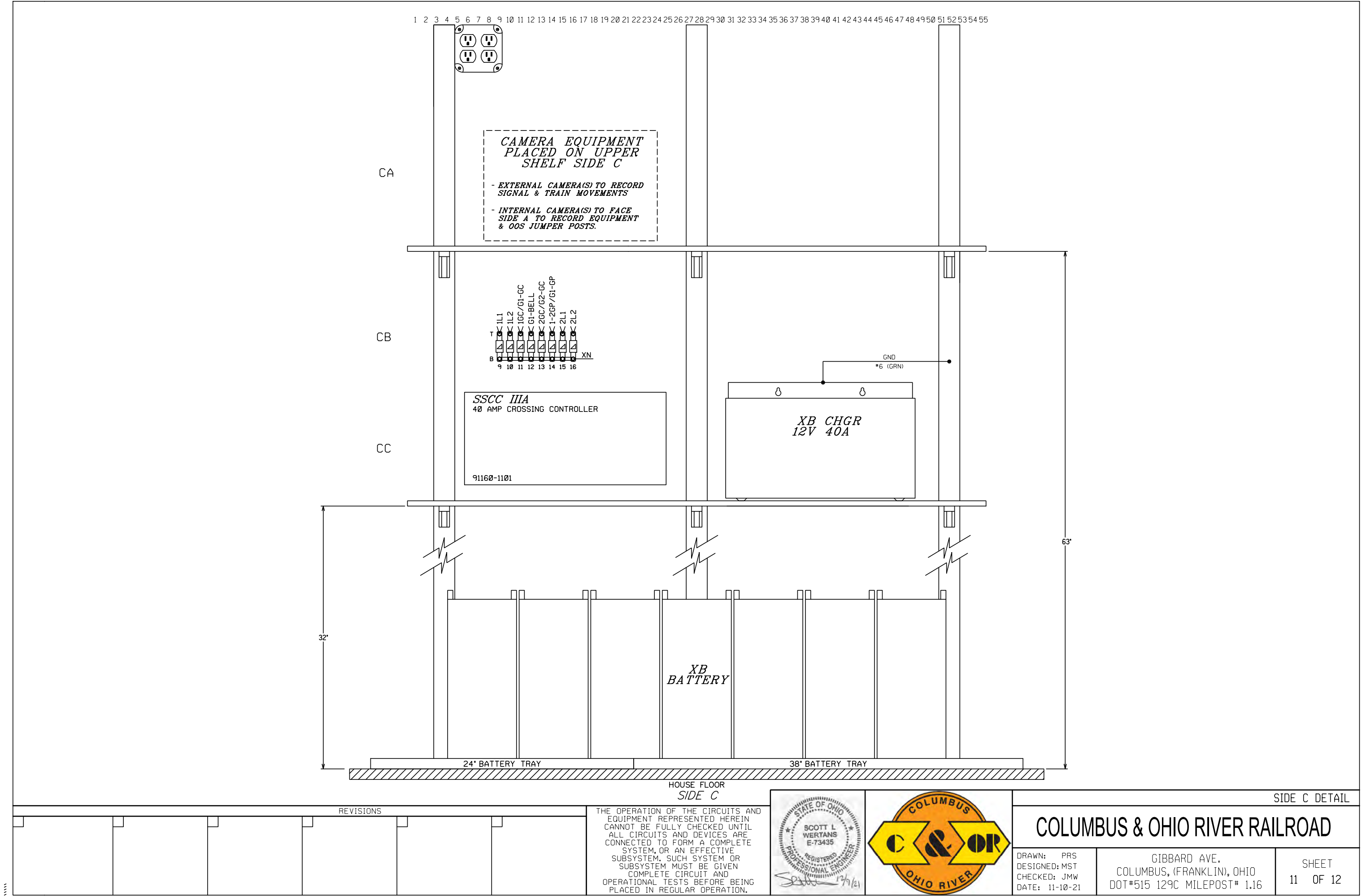
SHEET
10 OF 12

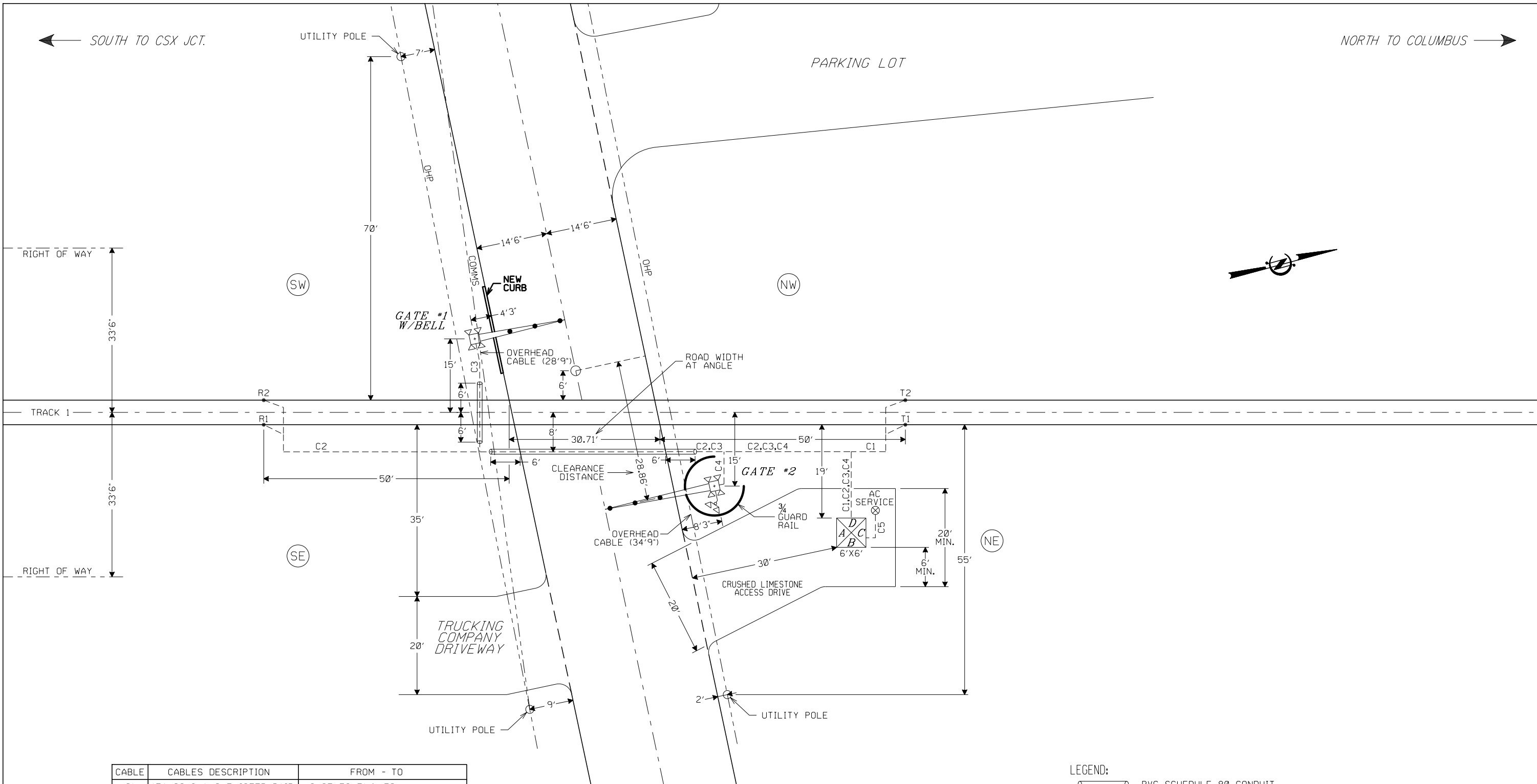
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CABLE	CABLES DESCRIPTION	FROM - TO
C1	1EA. 2C*6 AWG TWISTED PAIR	HOUSE TO T1 & T2
C2	1EA. 2C*6 AWG TWISTED PAIR	HOUSE TO R1 & R2
C3	1EA. 3C*9 & 1EA. 7C*6 AWG & 1EA. 7C*9 AWG	HOUSE TO GATE 1
C4	1EA. 3C*9 & 1EA. 7C*6 AWG & 1EA. 7C*9 AWG	HOUSE TO GATE 2
C5	1EA. 3C*6 AWG	HOUSE TO AC POWER SERVICE

- LEGEND:
- PVC SCHEDULE 80 CONDUIT (INSTALLED AT MIN 36" DEEP)
 - UNDERGROUND CABLE
 - OVERHEAD CABLE
 - LOCATION OF AC SERVICE
 - UTILITY POLE
 - = QUADRANT MARKERS

SCALE:
1" = 20'
0' 5' 10' 20'

REVISIONS				THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.						TRACK AND CABLE LAYOUT	
								COLUMBUS & OHIO RIVER RAILROAD			
								DRAWN: PRS DESIGNED: MST CHECKED: JMW DATE: 11-10-21		GIBBARD AVE. COLUMBUS, (FRANKLIN), OHIO DOT#515 129C MILEPOST# 1.16	
										SHEET 12 OF 12	

Force Account Estimate

Estimate to Complete

Railroad:	Columbus & Ohio River Rail Road (CUOH)	Region:	NORTHEAST
Agency:	ORDC	State:	OH
DOT #:	515129C	COUNTY:	Franklin
ROADWAY:	Gibbard Ave	CITY:	Columbus
DESCRIPTION:	Installation of 12" LED FLS&G, bell, new 6'x6' bungalow, PMD-4R w/CWT, even recorder, DHWS. 3/4 guardrail around signal in NE quad and side light. new power service. Existing Two tracks through crossing. New single track. Install curb and Overhead utilities conflict in SW Quad.		
AGENCY PROJECT NUMBER:	PID 111139	ESTIMATE SUBJECT TO REVISION AFTER:	07/09/22

PRELIMINARY ENGINEERING:

Contracted & Administrative Engineering Services	\$ 13,100
Subtotal	\$ 13,100

CONSTRUCTION & CLOSEOUT:

Contracted & Administrative Engineering Services	\$ 18,700
Subtotal	\$ 18,700

FLAGGING SERVICE:

Contracted or Railroad Flagmen Services	10 Days	\$ 14,000
Subtotal		\$ 14,000

UTILITY WORK:

Power Service	\$ 10,000
Other	\$ -
Subtotal	\$ 10,000

CONTRACT WORK:

Outside Services	\$ -
Design & Labor & Material	\$ 124,774
Subtotal	\$ 124,774

RAILROAD TRACK:

Labor & Material	\$ -
Subtotal	\$ -

RAILROAD SIGNAL & COMMUNICATION:

Labor & Material	\$ -
Subtotal	\$ -

PROJECT SUBTOTAL:

		\$ 180,574
Public Project Admin:	0.00%	\$ -
Contingencies:	0.00%	\$ -

PROJECT TOTAL:

	\$ 180,574
<u>CURRENT AUTHORIZED BUDGET:</u>	\$ -
<u>TOTAL SUPPLEMENT REQUESTED:</u>	\$ 180,574

DIVISION OF COST:

Agency	100.00%	\$ 180,574
Railroad	0.00%	\$ -

NOTE: Estimate is based on FULL CROSSING CLOSURE during work by Railroad Forces & Contractors.

This estimate has been prepared based on site conditions, anticipated work duration periods, material prices, labor rates, manpower and resource availability, and other factors known as of the date prepared. The actual cost for the railroad work may differ based upon the agency's requirements, their contractor's work procedures, and/or other conditions that become apparent once construction commences or during the progress of the work.

Estimated prepared by: BPB	Approved by:	Public Project Department
DATE: 11/19/19	REVISED: 01/10/22	DATE: 01/10/22

Factory Wired Instrument Shelter

ITEM DESCRIPTION	O.E.M.	LN Item #	QTY	U/M
Alum. 6' x 6', Shelter G&W Crossing W/O NEMA PLUGS	PTMW	9485000216	1	EA
Hex. Railroad Lock	SIEMENS	9463001200	2	EA
Camera Material 5 Cam, 19" Mon, 4 TB HD Package	Porter Security	9409011494	1	EA
Power Off Light, LED, 4 Wire	GRAYBAR	9430500215	2	EA
PMD-4R, Redundant Motion, Generic Upgrade Panel, & Generic Interface Panel Cable 4ft	ALSTOM	9409011753	1	EA
SSCC-IIIA Crossing Controller, 40 Amp, 19" Mounting Plate SSCC-IIIA 40A, 19" Rack	SIEMENS	9429000113	1	EA
Surge Arrestor. MDSA-1XS	ALSTOM	9409012002	1	EA
Lightning Arrester, Clearview	SIEMENS	9409020353	26	EA
Heavy Duty Equalizer	SIEMENS	9409020300	10	EA
AC Line Surge Protector, Model SP20-3, 240Vac	SIEMENS	9409010628	2	EA
Panduit Duct, 2' X 3', 2 inch	GRAYBAR	9422040105	30	FT
Panduit Cover, 2' X 3', 2 inch	GRAYBAR	9422040106	30	FT
Panduit Duct, 2' X 3', 3 inch	GRAYBAR	9422040103	18	FT
Panduit Cover, 2' X 3', 3 inch	GRAYBAR	9422040108	18	FT
#10 TC Blue Flex Wire	GRAYBAR	9450030600	600	FT
#14 TC Blue Flex Wire	OKONITE	9422010213	700	FT
#10/12 AMP Eyelets	GRAYBAR	9422020300	150	EA
#14/16 AMP Eyelets	GRAYBAR	9422020342	150	EA
#6 AWG THHN Strand Red	GRAYBAR	9422001183	100	FT
#6 AWG THHN Strand Black	GRAYBAR	9422001184	100	FT
#6 AWG THHN Strand Green	GRAYBAR	9422001180	12	FT
#10 AWG THHN Solid Red	GRAYBAR	9422001177	10	FT
#10 AWG THHN Solid White	GRAYBAR	9422001179	10	FT
Recorder, Micro Data Analyzer II w/ DTMF	N A Signal	9409010705	1	EA
Insulated Nut	TWINCO	9409050504	16	EA
Relay, NV, 12VAC, 2FB (8 PINS)	GRAINGER	9409020273	1	EA
Relay, NV, 240VAC, 2FB (8 PINS)	GRAINGER	9409020265	2	EA
Socket, Relay (8 PINS) OCT Screw	Allied Electronics	9409020329	3	EA
Battery Charger, 12V / 20A	NRS	9409080111	1	EA
Battery Charger, 12V / 40A	NRS	9409080113	1	EA
4 Post Terminal Block w/ Hardware	ERICO	9409020380	34	EA
Buss Strap Grd Assy.	ERICO	9465000106	3	FT
Tags, Slip On	GRAYBAR	9422990050	0.25	Roll
Stick-On Stencil	Cadillac Sign Co.	9400000078	2	EA
Test Link, 1" Offset w/Gold Nut	REBEL RAILWAY	9409021104	84	EA
Terminal Block, 2 x 6 w/flat nut only	ALSTOM	9473000102	8	EA
Terminal Block, 2 post 2-3/8" w/flat nut only	TWINCO	9473000104	5	EA
1/4" Bevel Washer	WURTH SNIDER	9473000700	300	EA
1/4-24 Clamp Nut Nickel	WURTH SNIDER	9473000705	150	EA
Binding (Barrel) Nuts	WURTH SNIDER	9401037900	300	EA
#6 Non-Insulated Terminal Eye 1/4 stud	GRAYBAR	9422020200	30	EA
#6 Non-Insulated Terminal Eye 5/16 stud	GRAYBAR	9422020210	8	EA
Maintainer Test Switch, 3 post test terminal	L&W	9410002070	1	EA
Strap, Solid, 1" Centers	TWINCO	9473000110	5	EA
Strap, Solid, 2-3/8" Centers	L&W	9473000120	5	EA
Buss Strap, 1" Centers 36 Hole	TWINCO	9473005100	2	EA
Circuit Plan Holder	Village Supplies	9401001050	1	EA

Gate/Flasher Material

ITEM DESCRIPTION	O.E.M.	LN Item #	QTY	U/M
Signal 1				
12" Head w/24" Background & Hood (Painted AL)				
Terminal For LED Hook-up (For larger RDG & GE LED)	WCH	9451000610	4	EA
12" LED Highway Crossing Light (HD)	GE Lighting	9451000523	4	EA
Alum. Mast, 5" x 16", Base Hole 0 & 180 Degrees & Main Hole 90 Degrees	Progress	9413022512	1	EA
Signal Mast Grounding w/ 72" pigtail #6 solid	Erico	9413040011	1	EA
JCT. Box Base, 5" W/2"NPT Cap	Progress	9420001102	1	EA
2-Way Cross Arm Assembly Less Heads (Gate Flasher)	Progress	9451050304	1	EA
5" Crossarms Assembly Mounting Kit	Progress	9451080005	1	EA
Railroad Crossing Sign, HI	Progress	9460001104	1	EA
5" Mounting Kit for Railroad Crossing Signs w/Extension Bracket	Progress	9460005050	1	EA
Gate 3593E Mechanism Assembly, including the 5" Mast Mounting Hardware, Flex				
Conduit, with fittings, Long Arm Supports & Counterweight kit for 25' - 28' Arms W/Gate Heaters	W-C-H	9450010189	1	EA
Gate Heater Thermostat (To Be mounted inside gate mech IORY Projects)	SENASYS	9450020612	1	EA
Insulated Nut	TWINCO	9409050504	4	EA
Test Link, 1" Offset w/Gold Nut	L&W	9409021104	18	EA
Wiring Harness 18'6" Bell	Progress	9454100133	1	EA
Wiring Harness 12' Light	Progress	9454100135	1	EA
Wiring Harness 8' Mech (STD)	Progress	9454100136	1	EA
Gate Arm Wind Bracket, 36"	NEG	9450030203	1	EA
Conversion Bracket Plain w/hardware	NEG	9459001132	1	EA
Hex. Railroad Lock	SIEMENS	9463001200	1	EA
Gate/Flasher Pallet	J&J Pallet	9441001350	1	EA
Signal 2				
12" Head w/24" Background & Hood (Painted AL)				
Terminal For LED Hook-up (For larger RDG & GE LED)	WCH	9451000610	6	EA
12" LED Highway Crossing Light (HD)	GE Lighting	9451000523	6	EA
Pinnacle 5" End Cap	Progress	9463100105	1	EA
4" or 5" Custom Flashing Light Standoff Bracket	Progress	9451060126	1	EA
5" U Bolt for Mounting Crossarms assembly to Mast (2 per Standoff Bracket)	Progress	9401074647	2	EA
Alum. Mast, 5" x 18", Base Hole 0 & 180 Degrees & Main Hole 90 Degrees	Progress	9413022560	1	EA
Signal Mast Grounding w/ 72" pigtail #6 solid	Erico	9413040011	1	EA
JCT. Box Base, 5" W/2"NPT Cap	Progress	9420001102	1	EA
2-Way Cross Arm Assembly Less Heads (Gate Flasher)	Progress	9451050304	1	EA
1-Way Cross Arm Assembly Less Heads Side Light	Progress	9451050414	1	EA
4" Crossarms Assembly Mounting Kit	Progress	9451080004	1	EA
5" Crossarms Assembly Mounting Kit	Progress	9451080005	1	EA
Railroad Crossing Sign, HI	Progress	9460001104	1	EA
5" Mounting Kit for Railroad Crossing Signs w/Extension Bracket	Progress	9460005050	1	EA
Gate 3593E Mechanism Assembly, including the 5" Mast Mounting Hardware, Flex				
Conduit, with fittings, Long Arm Supports & Counterweight kit for 25' - 28' Arms W/Gate Heaters	W-C-H	9450010189	1	EA
Gate Heater Thermostat (To Be mounted inside gate mech IORY Projects)	SENASYS	9450020612	1	EA
Insulated Nut	TWINCO	9409050504	4	EA
Test Link, 1" Offset w/Gold Nut	L&W	9409021104	18	EA
Wiring Harness 12' Light	Progress	9454100135	2	EA
Wiring Harness 8' Mech (STD)	Progress	9454100136	1	EA
Gate Arm Wind Bracket, 36"	NEG	9450030203	1	EA
Conversion Bracket Plain w/hardware	NEG	9459001132	1	EA
Hex. Railroad Lock	SIEMENS	9463001200	1	EA
Gate/Flasher Pallet	J&J Pallet	9441001350	1	EA

Ground Material				
ITEM DESCRIPTION	O.E.M.	LN Item #	QTY	U/M
Insulated Terminal Wrench, 1/2" / Triangle	GRAYBAR	9473000518	1	EA
Plugboard Terminal Wrench	SIEMENS	9473000508	1	EA
Battery Tray (13" x 48")	Progress	9409060127	2	EA
Battery, 368 Amp Hour	GNB	9429005150	13	EA
Electronic Bell, 5" MTG.	GSI	9465000154	1	EA
Gate Arm Light Kit w/LED Bulbs and wire, 3 per set	NEG	9450030494	2	EA
G&W, Lamp Cord Mounting Clamps	RECO	9450030560	2	EA
G&W, Lamp Cord Mounting Clamps	RECO	9450030561	2	EA
G&W Gate Arm 30' or Less, NON-HWP, 16' Al Base sec (HI Intensity), 3' Sleeve	NEG	9450030266	2	EA
G&W Gate Arm 30' or Less, NON-HWP, 16' Fg 2nd sec (HI Intensity)	NEG	9450030267	2	EA
Cast Adapter	NEG	9450020520	2	EA
48" Tall Galv. Steel Gate Foundation w/32" Square Base w/4" Entrance Pipe welded on bottom of to	Progress	9417002040	2	EA
5" Jct. Box Base Shroud	Progress	9454030094	2	EA
Track Cable, #6 Tw. Pr. (150-12-3933)	GRAYBAR	9422001106	250	FT
Signal Cable, 7/C # 6 AWG (206-11-6247)	GRAYBAR	9422001580	300	FT
Signal Cable, 7/C # 9 AWG (206-11-6927)	GRAYBAR	9422001579	300	FT
AC Meter, 3/C # 9 AWG.(206-11-6923)	GRAYBAR	9422001539	300	FT
AC Cable, 3/C # 6 AWG w/GRD (206-11-6070)	GRAYBAR	9422001218	100	FT
AC Cable, 3/C # 2 AWG (112-10-3874)	GRAYBAR	9422001589	100	FT
Railroad Emergency Contact Sign - Reference Spec Prior to Ordering (SEE ENS TAB)	Saf-Ti-Co	9400000079	2	EA
5" Mounting Kit for Railroad Crossing Signs w/Extension Bracket	Progress	9460005050	2	EA
Hex. Railroad Lock	SIEMENS	9463001200	1	EA
Copperweld Ground Rod, 5/8" X 8'	Erico	9409050512	6	EA
Cadweld One Shot, 5/8" (HALO) Triple	Erico	9410001231	4	EA
Cadweld One Shot, 5/8" (SIGNAL) Single	Erico	9410000274	2	EA
Cadweld Rail Bonds, 3/16" x 7-1/2" XS	Erico	9410002990	60	EA
Track Connector, Web	Erico	9410003013	60	EA
Track Connector, Web, 4"	Erico	9410003011	8	EA
Track Connection Kits	Progress	9410002051	2	EA
Track Wire Retainer Clip, Erico #SBA248B	Erico	9410006111	8	EA
4" PVC Sch. 80 Conduit	B&S	TBD	70	FT
Hose, Red Ruber 3/4 Inch Hose (15' Per Track Connection Pair)	Grainger	9469023011	30	FT
AC Meter Base, Breaker Box, W.H. & Pole	Commercial	TBD	1	EA
Guard Rail, Open 3/4 Circle, 96" Radius w/ hardware	Contech	9463055157	1	EA
Dress Stone	Local	N/A	1	EA
Curb	Local	N/A	1	EA
Sleeve, 3/16 - 3/16 & 3/16 - #6 Tinned	Erico	9410001010	8	EA
Duct Seal	Local	9410000502	10	LB
Bond Strand, Erico# SBS8TLINS664	ERICO	9422030010	75	FT
No Oxide Grease	SIEMENS	9410006010	1	EA
Anti-Seize - Silver Grade 4 OZ	Bearing Head	9410006020	1	EA
#6 Bare Copper	Grainger	9422000010	50	FT



Rail Development Commission

Mike DeWine, Governor
Jon Husted, Lt. Governor

Mark Policinski, Chair

November 15, 2019

Mr. Len Wagner
President & Legal Official (SVP)
Genesee & Wyoming/CUOH
201 N. Penn Street
Punxsutawney, PA 15767

RE: PE Authorization for Franklin County, Gibbard Ave, DOT# 515129C, PID# 111139

Dear Mr. Wagner:

A diagnostic review was held at the above grade crossing on July 12, 2019. The crossing has been recommended for the installation of lights and gates at the Columbus & Ohio River Railroad grade crossing DOT# 515129C.

Columbus & Ohio River Railroad is authorized to proceed with the site plans and cost estimates or bid package for this project. This authorization is made with the stipulation and understanding that any field work needs prior approval before work begins. This authorization is made with the stipulation and understanding that an approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Please note that the railroad must provide ORDC with a plan stamped by a professional engineer licensed in the State of Ohio prior to acceptance and close out of the project.

The diagnostic review form is attached. Please note any recommendations (page 8), if any, made by the team about requirements for this location. Any minor roadway work necessary for MUTCD compliance should be incorporated into the PE and such costs will flow through the railroad reimbursement process.

The Project Manager for this project is Greg Gronbach. Greg Gronbach can be reached at (614) 745-6760, or Gregory.Gronbach@dot.ohio.gov, if you have any questions.

Sincerely,


Greg Gronbach
Project Manager

C: Randall Schumacher, Chief, Rail Division, PUCO
Jill Henry, Rail Specialist, PUCO
Heather Hamilton, ORDC
ORDC (file)



Attachments: 3 (diagnostic review form, letter agreement, purchase order)

APPENDIX C

CONTRACT SUMMARY SHEET			
PART I [Requesting Party to Complete]			
Requesting Party: Jacob Smith		Department: Engineering	
Counterparties: Ohio Rail Development Commission		Contract File Number: CUOH.2019.10.25.OHI.01	
GWI Subsidiary: CUOH		Region: Northeast	
Contract Type (check one) [See Appendix A for Contract Type]:			
<input type="checkbox"/> Operations/Transportation Related <input type="checkbox"/> Supplier/Vendor <input type="checkbox"/> Employment/Labor/Consulting <input type="checkbox"/> Legal Settlement <input type="checkbox"/> Finance <input type="checkbox"/> Partnerships <input type="checkbox"/> Acquisitions/Dispositions/Lease Arrangements <input type="checkbox"/> Locomotive and Railcar Leases and Related Agreements <input type="checkbox"/> Intellectual Property <input checked="" type="checkbox"/> Other			
Joint Facilities Related <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, Joint Facilities #			
Contract Sub-Type [See Appendix A for Contract Sub-Type]: Public Project Agreement			
Status (check one): <input checked="" type="checkbox"/> New Contract <input type="checkbox"/> If Amendment, Amendment No <input type="checkbox"/> Renewal <input type="checkbox"/> Termination			
If Termination, Termination Date:			
If Amendment, Renewal, or Termination:			
Contract File Number of Initial Contract:		Effective Date of Initial Contract:	
Estimated Contract Value: \$225,000.00		Effective Date: 10/23/2019	
Term and Contract Expiration:			
Initial Term: year(s) month(s); termination date:			
Renewal Term(s):			
Renewal term duration: year(s) month(s); GWI renewal notice period: (days) in advance of then current term;			
renewal term(s) capped (if specified): ; GWI deadline to provide notice for renewal:			
Evergreen Term(s):			
Evergreen term duration: year(s) month(s); GWI evergreen termination notice period: (days) in advance of then current term;			
evergreen term capped (if specified): ; GWI deadline to provide notice for evergreen termination:			
Terminable at Will by GWI? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, Termination Notice Period:			
Consequential Damages Limitation: <input checked="" type="checkbox"/> NO, no indemnity <input type="checkbox"/> YES			
Non-Standard Terms: Governed by master agreement dated 5/28/2001			
Any non-standard deadlines? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, Deadline:			
Ongoing Insurance Obligations of GWI: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)			
Rate Adjustment Mechanism for Multi-year Contract (check one): <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)			
If YES, insert Adjustment Date for Reminder:			
PART II [Requesting Party to Complete. Must Complete for All Operations/Transportation Related Contracts]			
Fuel Surcharge included (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
Volume Guarantee (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
Refund Provision (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
GWI Fleet Addition/Equipment Required (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
HAZMAT/Passenger Involvement (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
PART III [Signatures Required – To Be Coordinated by Requesting Party]			
Approved for Legal Sufficiency	Alfred Q. Ricotta	Deputy General Counsel	10/25/2019
Approved for Accounting Sufficiency	/s/ Andrea Alexander	Manager BC&TA	10/28/2019
Additional Approvals Required? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, (department/business unit)			
PART IV [Finance Director to Complete Simultaneous to the Execution of the Material Contract]			
Approved by Finance Director	Name <i>[Signature]</i>	Title Director of Finance	Date 10/29/19
Capex Approval Needed? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, Approved Date			
Approved by RSVP	Name <i>[Signature]</i>	Title RSVP	Date 10/30/19



Rail Development Commission

Mike DeWine, Governor
Jon Husted, Lt. Governor

Mark Policinski, Chair

October 23, 2019

Len Wagner
SVP, Northeast Region Railroads
Genesee & Wyoming/CUOH
400 Meridian Center, Ste. 300
Rochester, NY 14618

Subject: Grade Crossing Warning Device Improvement
Franklin County, Gibbard Ave., DOT# 515129C, PID 111139

Dear Mr. Wagner:

A diagnostic review was conducted at the subject grade crossing on 7/12/2019. As a result of the review, the warning devices will be upgraded to flashing lights and roadway gates.

This project shall be completed in compliance with Agreement No. 0009-A dated May 28, 2001, entered into by the State of Ohio and Columbus and Ohio River Railroad (CUOH) and incorporated as if fully rewritten herein. This construction shall also meet the general terms and conditions under the Fixing America's Surface Transportation Act and subsequent amendments and the State of Ohio's Federally Funded Warning Device Program.

Preliminary engineering (PE) and construction costs shall be borne one hundred percent (100%) by ORDC. Reimbursable costs will be limited by the ORDC based on approved estimates and bid tabulations, if applicable. These limits will be quantified by the ORDC in its construction authorization to CUOH and may be amended by the ORDC based on revised estimates and bid tabulations.

This Letter Agreement and the approved plans constitute the scope of the project. CUOH shall notify ORDC in writing of any changes in the scope of work which are not in the approved plans and estimates and secure approval in writing of same before the work is performed.

PE will not be commenced by CUOH prior to ORDC issuing a PE authorization. PE and project estimate will be submitted by CUOH to ORDC within ninety (90) days or other time specified by ORDC in the PE authorization. Construction will not be commenced by CUOH prior to ORDC issuing a construction authorization. Construction will be completed by CUOH within nine (9) months or other time specified in the time specified by ORDC in the construction authorization.

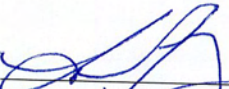
Please indicate your acceptance of the terms and conditions of this Letter Agreement by signing and returning one (1) copy to me at the address listed above and retain a copy for your files. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be a duplicate original, but all of which taken together shall be deemed to constitute a single Agreement.

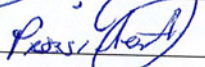
Sincerely,

Matthew Dietrich
Executive Director



Columbus and Ohio River Railroad:

By:  _____

Title:  _____

Date:  _____

FRA Gibbard Ave CUOH 111139 515129C

Gibbard Avenue (DOT #515129C), City of Columbus, Franklin County, Columbus & Ohio River Railroad

Crossing at a glance: Rank 2483

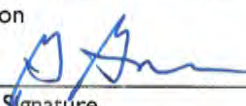
ORDC Notes: Constituent - Sight clearance

Please Sign In

Greg Gronbach

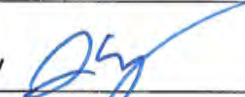
Project Manager

ORDC

Name	Title	Organization	
	614-745-6760	gregory.gronbach@dot.ohio.gov	
Phone Number		Email	Signature

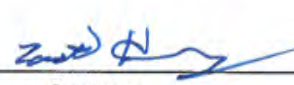
Joshua Elzey

PUCO

Name	Title	Organization	
	740-637-0588	joshua.elzey@puco.ohio.gov	
Phone Number		Email	Signature


Todd Hensley

CUOH

Name	Title	Organization	
	740-502-7214	ghensley@gwrr.com	
Phone Number		Email	Signature

Daniel Groh

Traffic Control Engineer City of Columbus

Name	Title	Organization	
	614-896-0326	dcmroh@columbus.gov	
Phone Number		Email	Signature

Name	Title	Organization	
Phone Number		Email	Signature

Name	Title	Organization	
Phone Number		Email	Signature

Name	Title	Organization	
Phone Number		Email	Signature

Name	Title	Organization	
Phone Number		Email	Signature

Reason for Request: Constituent
(e.g. formula, accident, constituent, etc.)

Date: 7/12/19

Location Data			
Street or Road Name:		Gibbard Avenue	
County:	Franklin	Township:	
City (in or near):	Columbus	Railroad Name:	CUOH
US DOT No.:		515129C	
RR Milepost:		1.16	
Safety Data (Obtain crash reports, if possible)			
	Initial Information (from database)		Revised
Number & dates of vehicle crashes in previous 5 years:	n/a		
Number & dates of pedestrian/bicycle crashes in previous 5 years:			
Hazard Ranking:	2483	Date Run:	05/20/2019

Existing Traffic Control Devices		
Type of Warning Devices	Installed?	Quantity/Comments
HIGHWAY		
Advance Warning Signs (condition?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2 - GOOD
'Stop' Signs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2 - GOOD
'Stop Ahead' Signs	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pavement Markings (condition?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1 - EAST / FAIR
Dynamic Envelope Markings (condition?)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Illumination	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
'No Turn' Signs (highway/passive)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Barriers/fencing (pedestrian/bicycle)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
LOOK Sign	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do Not Stop On Track Sign	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
RAILROAD		
Crossbucks	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Crossbucks – assembly with Stop	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2
Crossbucks – assembly with Yield	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Mast-Mounted Flashing Lights	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Cantilever Flashing Lights	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Number: Length:
Side Lights	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
LED or Incandescent Lights? Size?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Automatic Gates	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Number: Length:
Bells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Number:
Sidewalk/Pedestrian Gate Arms	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Number: Length:
'No Turn' Signs (railroad/active)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Is crossing flagged by train crew?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
OTHER	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2 BLUE ENS SIGNS

Railroad Data		
Type of Train: <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Commuter <input type="checkbox"/> Tourist/Other		
Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	1	2 WEEK RETURNS MAY INCREASE.
<1 per day? Trains per week	-	
Day thru trains	1	2 WEEK
Night thru trains	0	
Switching	0	
Total number of tracks	2	
Number of main tracks	0	
Number of other tracks	2	
Maximum train speed	5	
Typical train speed	0-5	
Amtrak	-	
Are there other track(s) crossing this same roadway within 100ft of this crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If yes, Crossing DOT# (if different) <u>N/A</u>		
If yes, distance <u>N/A</u> (take measurement between track centerlines at closest point along roadway)		
If multiple tracks, can two trains occupy crossing at the same time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Can one train block the motorists' view of another train at the crossing? <input checked="" type="checkbox"/> Yes (explain below) <input type="checkbox"/> No		
Can one or more tracks be eliminated through the crossings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Comments: 1 MAIN / 1 SIDING - SIDING TRACK DONT APPEAR TO BE USED TREES + VEGETATION GROWING BETWEEN TRACKS		
Circuitry: <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input checked="" type="checkbox"/> Other <u>NONE</u>		

Roadway Data		
Local Highway Authority: City of Columbus		
Roadway Characteristics	Initial Information (from database)	Revised
Average Daily Traffic	1,042	1,700 (1994)
Highway Paved	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Roadway Surface: <input checked="" type="checkbox"/> Blacktop <input type="checkbox"/> Gravel <input type="checkbox"/> Concrete Other _____		
Roadway width (paved/travelled way): 32' ft		
Number of Highway Lanes	2	
Urban or Rural	Urban - Local	
Vehicle Speed: 25 MPH		
School Bus Operation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Amount _____		
Location of nearby schools:		
Hazardous Materials Trucks: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Amount (from FRA) 3% LHA verified/changed?		
Shoulders: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No CURBS DOWN ROADWAY, NOT AT CROSSING.		
Is the Shoulder Surfaced? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, shoulder width: _____ ft.		
Is there existing guardrail along the roadway in crossing vicinity? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Crossing Angle <input type="checkbox"/> 0-29° <input type="checkbox"/> 30-59° <input checked="" type="checkbox"/> 60-90° Measured in _____ Quadrant?		
Quadrant NE Curb & Gutter:	Quadrant SW Curb & Gutter:	
<input type="checkbox"/> Functional (Curb height = 4" or more)	<input type="checkbox"/> Functional (Curb height = 4" or more)	
<input type="checkbox"/> Non-functional (Curb height = less than 4")	<input type="checkbox"/> Non-functional (Curb height = less than 4")	
<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> None	
Is there a nearby intersection that could cause queuing over the crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If yes, distance N/A		
Is this intersection signalized? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Are there signals currently interconnected with the existing crossing warning devices? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is there a 'Do Not Stop on Track' sign? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is a roadway improvement project (e.g. widening, turn lanes, nearby new or upgraded traffic signal, sidewalk) planned at or near this location in the foreseeable future? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If yes:		
Improvement type _____ Lead Agency _____ Timeline/completion _____		

Pedestrian & Bicycle Data

Regular pedestrian usage: ☐ Yes ☐ No Volumes: ☐ Occasional ☐ <20 ☐ 20-60 ☐ >60

Is sidewalk present in the approach? ☐ Yes ☒ No Quadrants:

Does crossing surface accommodate pedestrians? ☐ Yes ☒ No

Both sides of roadway? ☐ Yes ☒ No If no, which side is paved?

Pedestrian generators in close proximity (e.g. schools, sports/entertainment venues)? ☐ Yes ☒ No

Comments:

Regular bicycle usage: ☐ Yes ☒ No

☐ Roadway ☐ Dedicated Lane (on street) ☐ Dedicated Path (off street) ☐ Shared Use (pedestrian/bicycle) Path

☐ Bikes must use sidewalk

Future plans for pedestrian or bicycle routes? ☐ Yes ☒ No

Comments:

Utility Information

Is commercial power available? ☒ Yes ☐ No

Utility Provider (Company Name) AEP

Nearest Available Power Source At CROSSING

What other utilities are present? ☐ Gas ☐ Cable ☐ Telephone ☐ Fiber Optic Cable (add locations to sketch)

☐ Petroleum ☒ Water ☒ Sanitary Sewer ☐ Other

Comments:

Surface

Surface review form completed? ☐ Yes ☒ No

Sight Preview (REFER TO TABLES)

If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table 1) ☐ Yes ☒ No 240' SW QUAD

Is stopping sight distance adequate? (See Table 2) ☒ Yes ☐ No If no, which quadrant? 180'

When considering recommendations for bicycle treatments:

Bicycle sight distance adequate? ☐ Yes ☒ No If no, which quadrant? SW 100'

When considering recommendations for pedestrian treatments:

Pedestrian sight distance adequate? ☐ Yes ☒ No If no, which quadrant? SW 120'

Potential Red Flags / Project Challenges

Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):

N/A

Crossing Consolidation or Closure:

NO - VERY BUSY ROADWAY TO LOCAL
BUSINESS'S.

Real Estate or ROW:

NO

Culvert / Drainage / Ballast Conditions:

NO

Roadway and/or Sidewalks:

NO

Circuitry (e.g. reaches out to other crossings, specific needs, etc.):

NONE

Environmental:

NO

Utilities:

OVERHEAD UTILITY'S IN SW QUAD.

Other:

Potential Closure

Is it the consensus of the Diagnostic Review Team that this is a potential closure project?

NO

Explain reasons:

ACCESS TO LOCAL BUSINESS.

Diagnostic Team Recommendations

<input type="checkbox"/> No improvements needed	Quadrants Needed
<input checked="" type="checkbox"/> Install/upgrade active devices	
<input type="checkbox"/> Automatic Flashing Lights (AFLS)	
<input type="checkbox"/> AFLS / Cants	
<input checked="" type="checkbox"/> AFLS / Gates	
<input type="checkbox"/> AFLS / Gates / Cants	
<input type="checkbox"/> Bells / number	
<input type="checkbox"/> Upgrade circuitry / type	
<input checked="" type="checkbox"/> Sidelights	NE QUAD HENDERSON MAT DRIVEWAY
<input type="checkbox"/> LED Upgrades	
<input type="checkbox"/> Guardrail Needed	
<input type="checkbox"/> Install/Replace curb	
<input checked="" type="checkbox"/> Bungalow placement & offset from rail & highway	NE QUAD
<input type="checkbox"/> Other (define)	
Comments:	
<input type="checkbox"/> Install/upgrade traffic signal preemption	
Other (define):	




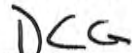
Diagnostic Team Recommendations (cont.)

PEDESTRIAN/BICYCLE Treatments (additional, not included above)

<input type="checkbox"/> Crossing Surface (specify)	<input type="checkbox"/> Sidewalk (specify)
<input type="checkbox"/> Detectable warning surfaces	<input type="checkbox"/> LOOK Sign (R15-8)
<input type="checkbox"/> Stop lines	<input type="checkbox"/> Illumination
<input type="checkbox"/> Dynamic envelop markings	<input type="checkbox"/> Channelization
<input type="checkbox"/> Path delineation	<input type="checkbox"/> Fencing/barriers
<input type="checkbox"/> Other	

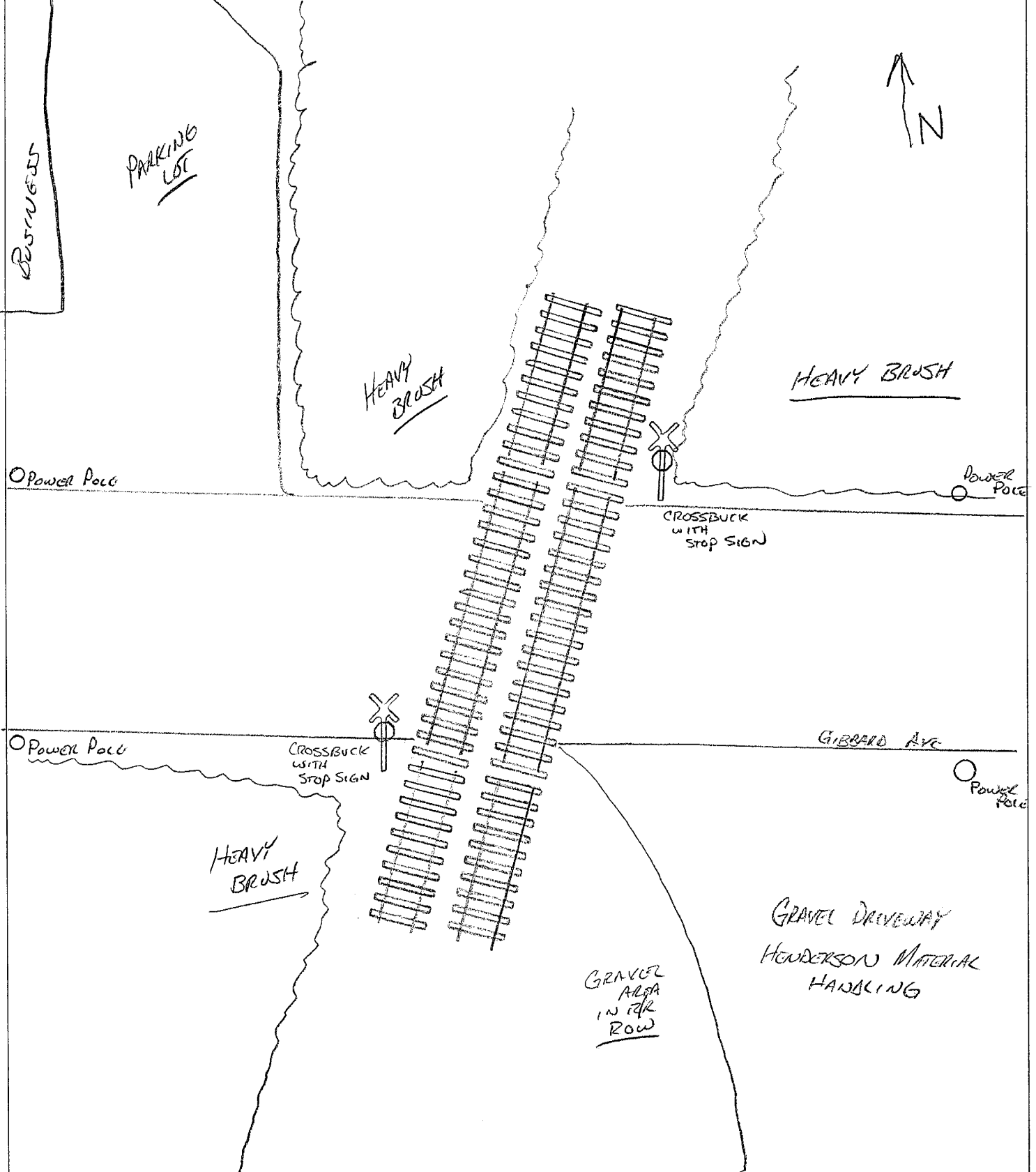
Comments:

Acknowledgement of Recommendations (each entity represented at the diagnostic must have at least one signature/initial acknowledgement):

Field Sketch (optional)

Include utilities as marked by OUPS and LHA; include ROW boundaries as indicated by railroad and LHA.



Clearing Sight Distances

Maximum Authorized Train Speed	Distance (dT) Along Railroad from Crossing (ft)
1 - 10	240
15	360
20	480
25	600
30	720
35	840
40	960
45	1080
50	1200
55	1320
60	1440
65	1560
70	1680
75	1800
80	1920
85	2040
90	2160

Source: R-H Grade Crossing Handbook Table 36 (pp. 132-133)

Notes:

All calculated distances are rounded up to the next higher 5-foot increment.

Distances indicated are for 65-ft double bottom semi-tractor trailers and level single track 90 degree crossings; and may need to be adjusted for multiple tracks, skewed crossings or approaches on grades.

Clearing Sight Distance is to be measured in each vehicle travel direction at non-gated crossings as viewed from a point 25 feet from centerline of nearest track in the center of whichever travel lane is nearest the direction along track being measured.

Stopping Sight Distances

Highway Vehicle Speed	Distance (dH) Along Roadway from Crossing (ft)
0	n/a
5	50
10	70
15	105
20	135
25	180
30	225
35	280
40	340
45	410
50	490
55	570
60	660
65	760
70	865

Source: R-H Grade Crossing Handbook Table 36 (pp. 132-133)

Notes:

All calculated distances are rounded up to the next higher 5-foot increment.

Distances indicated are for 65-ft double bottom semi-tractor trailers on dry level pavements.

Stopping Sight Distance is to be measured on each roadway approach to crossing from stop bar.

Bicycle & Pedestrian Clearing Sight Distances

Clearing Sight Distance from Stop Position*											
Crossing of one track								Crossing 2 Tracks		Crossing 3 Tracks	
Train Speed	Car	Single-unit Truck	Bus	WB-50 Semitruck	65-foot Double Truck	Pedestrian ¹	Bicyclist ²	Pedestrian ¹	Bicyclist ²	Pedestrian ¹	Bicyclist ²
10	105	185	200	225	240	120	100	180	120	240	140
20	205	365	400	450	485	240	200	360	240	480	270
25	255	455	500	560	605	300	250	450	290	590	340
30	310	550	600	675	725	360	290	530	350	710	410
40	410	730	795	895	965	480	390	710	470	950	540
50	515	910	995	1,120	1,205	590	490	890	580	1180	670
60	615	1,095	1,195	1,345	1,445	710	580	1060	700	1420	810
70	715	1,275	1,395	1,570	1,680	830	680	1240	810	1650	940
80	820	1,460	1,590	1,790	1,925	950	780	1420	930	1890	1080
90	920	1,640	1,790	2,015	2,165	1060	870	1590	1040	2120	1210

*A single track, 90-degree, level crossing

¹ Walking 3.5 feet per second across tracks 15 feet apart, with a 2-second reaction time to reach a decision point 10 feet before the center of the first track, and clearing 10 feet beyond the centerline of the second track.

² Bicycling 8 miles per hour across tracks 15 feet apart, from a stopped position 10 feet before the center of the first track with an acceleration of 2.5 feet per second, and clearing 10 feet beyond the centerline of the second track on a bike of 6 feet length.

**This foregoing document was electronically filed with the Public Utilities
Commission of Ohio Docketing Information System on**

3/21/2022 10:27:33 AM

in

Case No(s). 22-0231-RR-FED

Summary: Application In the Matter of a Request for the Installation of Active Warning Devices at the Columbus & Ohio River Railroad Crossing, Gibbard Avenue, DOT#515-129C, in Franklin County, Ohio. electronically filed by Mrs. Jill A. Henry on behalf of PUCO/Rail Division