

Memo

To: Docketing Division
From: Jill Henry, Rail Specialist, Rail Division
Cc: PUCO Legal Department
Date: 11/17/17

Re: PUCO Case No. 17-2373-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices and Crossing Surface at the RJ Corman Railroad Crossing, Staeger Road/CR 145 DOT#477-009F in Mercer County, Ohio.

On April 17, 2017, the Ohio Rail Development Commission (ORDC) authorized funding for RJ Corman Railroad to install lights and gates and a new crossing surface at Staeger Road/CR 145 DOT#477-009F in Mercer County, Ohio. The crossing was surveyed on October 12, 2016 and found to warrant the upgrades. The electric utility provider for this crossings is Dayton Power & Light (DP&L).

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amounts of \$170,147.57 for the installation of lights and gates and \$68,469.00 for reconstruction of the roadway surface (total project cost of \$238,616.57) 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:

RJ Corman Railroad
James Kelley
Funded Projects Coordinator
P.O. Box 788
101 RJ Corman Drive
Nicholasville, KY 40356

RJ Corman Railroad
Deborah Hawley
Funded Projects Coordinator
P.O. Box 788
101 RJ Corman Drive
Nicholasville, KY 40356

Ohio Rail Development Commission
Cathy Stout
Safety Manager
1980 West Broad Street
Mail Stop #3140
Columbus, Ohio 43223

Mercer County Engineer
James Wiechart
4884 Mud Pike
Celina, Ohio 45822

Dayton Power & Light (DP&L)

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

TO: Randall Schumacher, Supervisor, Rail Division, PUCO
FROM: Cathy Stout, Manager, Safety Section, ORDC
BY: Greg Gronbach, Project Manager, Safety Section, ORDC
SUBJECT: Mercer County, Staeger Rd, CR145, DOT # 477009F, PID # 104282
DATE: October 25, 2017

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on October 12, 2016. The Ohio Rail Development Commission (ORDC) 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 approves the site plans and estimates as provided. Please issue a construction-only order for the project outlined above. 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
Plan & Estimate

c: Jill Henry, PUCO
ORDC Project Manager (file)



OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223

John R. Kasich, Governor • Mark Policinski, ORDC Chairman

October 25, 2017

Ms. Deborah J. Hawley
RJ Corman Railroad Group LLC
101 RJ Corman Drive
P.O. Box 788
Nicholasville, Ky 40356

RE: Mercer County, Staeger Rd, CR145, DOT # 477009F, PID # 104282

Dear Ms. Hawley:

The plan dated (10/23/17) and estimate dated (06/19/17), for the referenced project is acceptable. **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.** RJ Corman Railroad Group LLC may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan, plus surface reconstruction. 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 \$238,616.57. 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 RJ Corman Railroad Group LLC accepting the following instructions:

1. RJ Corman Railroad Group LLC'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 Greg.Gronbach@dot.ohio.gov, and to the Public Utilities Commission of Ohio at Jill.henry@puc.state.oh.us. RJ Corman Railroad Group LLC'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. RJ Corman Railroad Group LLC 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 RJ Corman Railroad Group LLC



www.rail.ohio.gov

phone: 614.644.0306


IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

3. RJ Corman Railroad Group LLC's project foremen will notify Greg Gronbach at 614-395-1824 (telephone) or Greg.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. RJ Corman Railroad Group LLC will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
6. RJ Corman Railroad Group LLC 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.

This project is authorized for construction under the master agreement between Ohio Rail Development Commission, Public Utilities Commission of Ohio.

Thank you for your assistance with these matters.

Sincerely,


Greg Gronbach
Project Manager

C: Randall Schumacher, Rail Division Supervisor, PUCO
Jill Henry, Rail Division Specialist, PUCO
Susan Arduini, ORDC
ORDC (file)

SH. NO.	CONTENTS	REVISION NO.				
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NX1	INDEX SHEET					
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9	LIGHTING/SURGE PANEL HOOK-UP					
10	GATE & FLASHER CIRCUITS SIGNAL "A"					
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12	TERMINAL BOARD					
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14	HOUSE SIDE B LAYOUT					
15	HOUSE SIDE C LAYOUT					
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DESIGNER'S NOTES:
ALL SHEETS TO START ON REV. 1
* = ORIGINAL ISSUE DATE
= DESIGNED BY INITIALS
★ = DRAWN BY INITIALS
** = CHECKED BY INITIALS
= DRAWN BY INITIALS (AIS)
★★ = CHECKED BY INITIALS (AIS)

REVISIONS				
1	04-20-17	DEW	RJC	RJJ
PLAN REVISED ACCOUNT NEW HOUSE INSTALL				
PROJECT: PID 104282				
IN SERVICE: XX-XX-XX				
PER: XXX				

 = SHEETS AFFECTED  = AIS COMPLETE

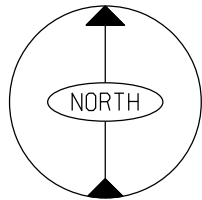
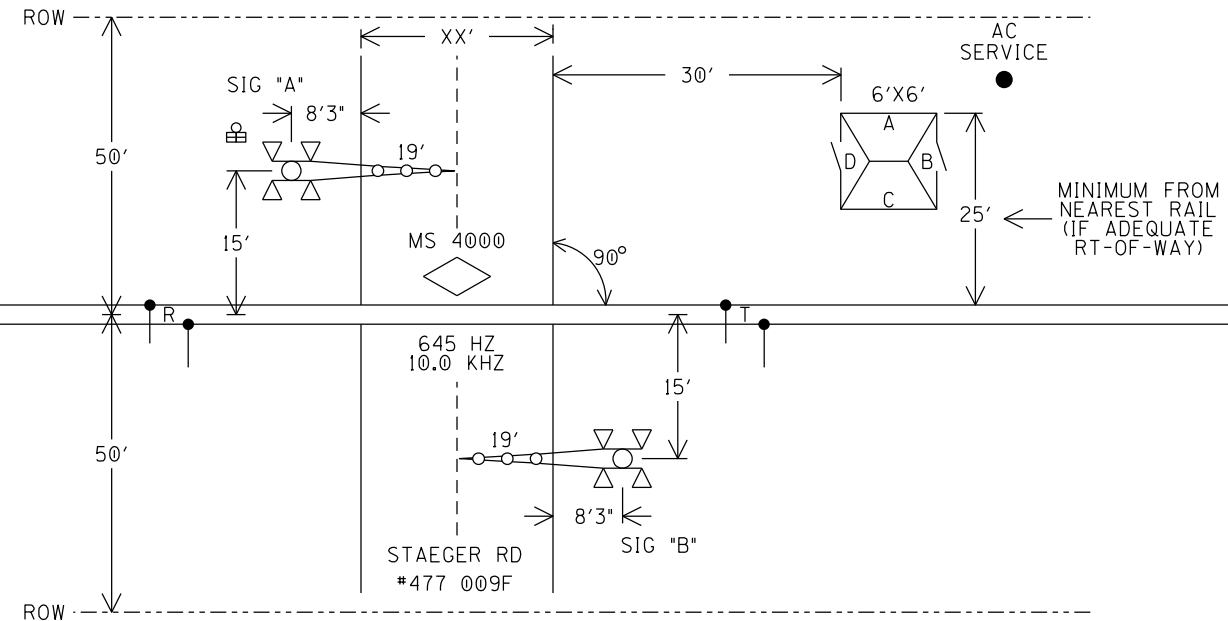


INDEX SHEET		
RJ CORMAN RAILROAD		
DESIGNED BY: DEW	STAEGER RD CELINA, OH ST. MARYS SUBDIVISION	DATE: 04/20/17
DIGITIZED BY: RJC		FILE: ST11740.NX1
CHECKED BY: RJJ		SHEET NX1

TO MUNCIE EAST YARD
(WEST)
M.P. (INCREASING)

TO SOUTH LIMA YARD
(EAST)
M.P. (DECREASING)

CONSTRUCTION NOTE:
HOUSE DOOR TO FACE ROAD.



Ohio Utilities Protection Service

Call 811
before you dig



CONSTRUCTION NOTE:
1. CROSSING SURFACE TO BE REPLACED.
2. APPROACHES REQUIRE BONDING.
3. SWITCH REQUIRES INSULATION:
 A) 2 INSULATED JOINTS.
 B) REPLACE INSULATION #1 & 2 HORIZONTAL RODS.
4. REMOVE OBSOLETE GUAGE PLATE WEST OF CROSSING.

NOTES:
1. MAX TRAIN SPEED 25 MPH



TRACK PLAN

RJ CORMAN RAILROAD

DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.01
SHEET 01

TO SOUTH LIMA YARD
(EAST)
M.P. (DECREASING)

TO MUNCIE EAST YARD
(WEST)
M.P. (INCREASING)

1287'
TO NEAREST
GCP WIRES

1287'
TO NEAREST
GCP WIRES

FLGS

MS 4000

645 HZ
10.0 KHZ

FLGS

STAEGE RD
#477 009F

62'

0' 9"

62'

691'

(A) — HARDWIRE SHUNT



NOTES:
1. MAX TRAIN SPEED 25 MPH
2. SIGNAL "A" TO HAVE BELL



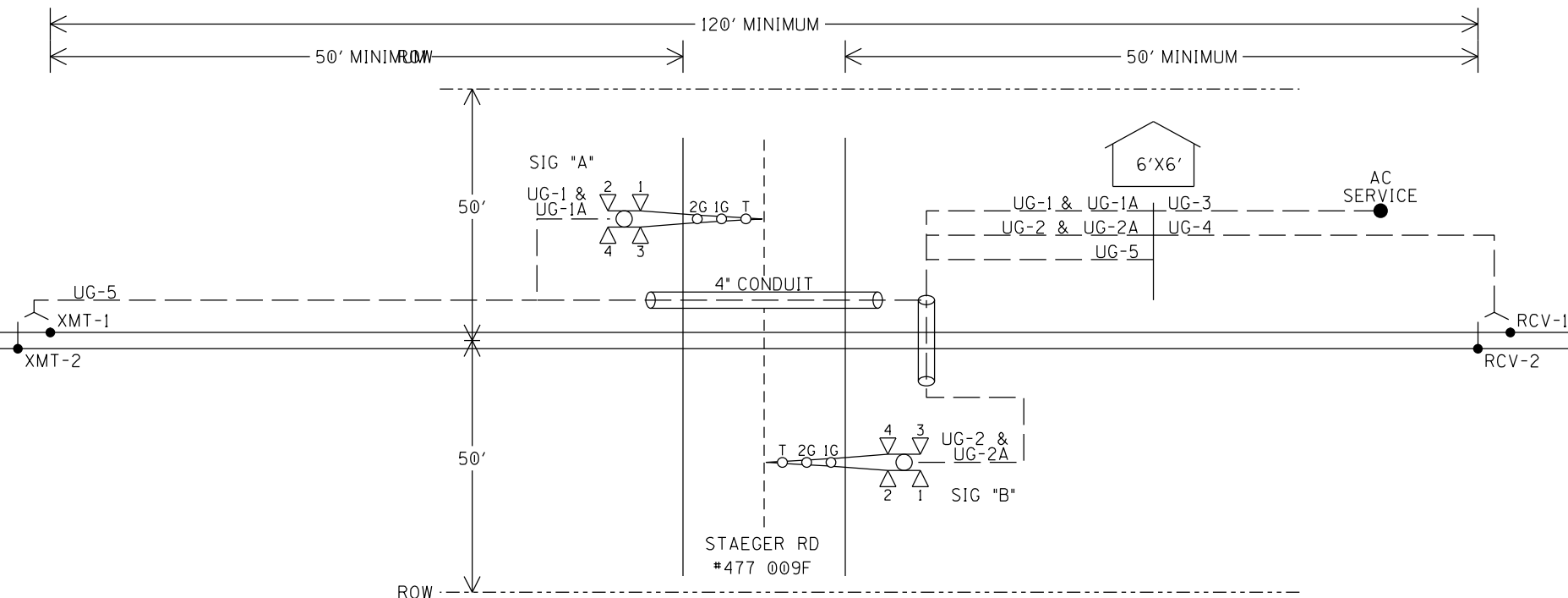
PROFILE

RJ CORMAN RAILROAD

DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGE RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.02
SHEET 02



Ohio Utilities Protection Service
Call 811
 before you dig

UG-1-5CUG #6	UG-1A-5CUG #14	UG-3-3CUG #6 W/#8 GND	UG-4-TW. PR. #6
AEC	AGC	BX120-A BX120-B NX120 GND	RCV-1 RCV-2
AEZ	ABELL		
AEB	GP1		
AB16	GP2		
AN16	SPARE 1		
			UG-5-TW. PR. #6
			XMT-1 XMT-2
UG-2-5CUG #6	UG-2A-5CUG #14		
BEC	BGC		
BEZ	SPARE 3		
BEB	GP3		
BB16	SPARE 1		
BN16	SPARE 2		

CONSTRUCTION NOTE:
**** USE THIS TAG LIST IF 110VAC USED.**

TRACK LAYOUT

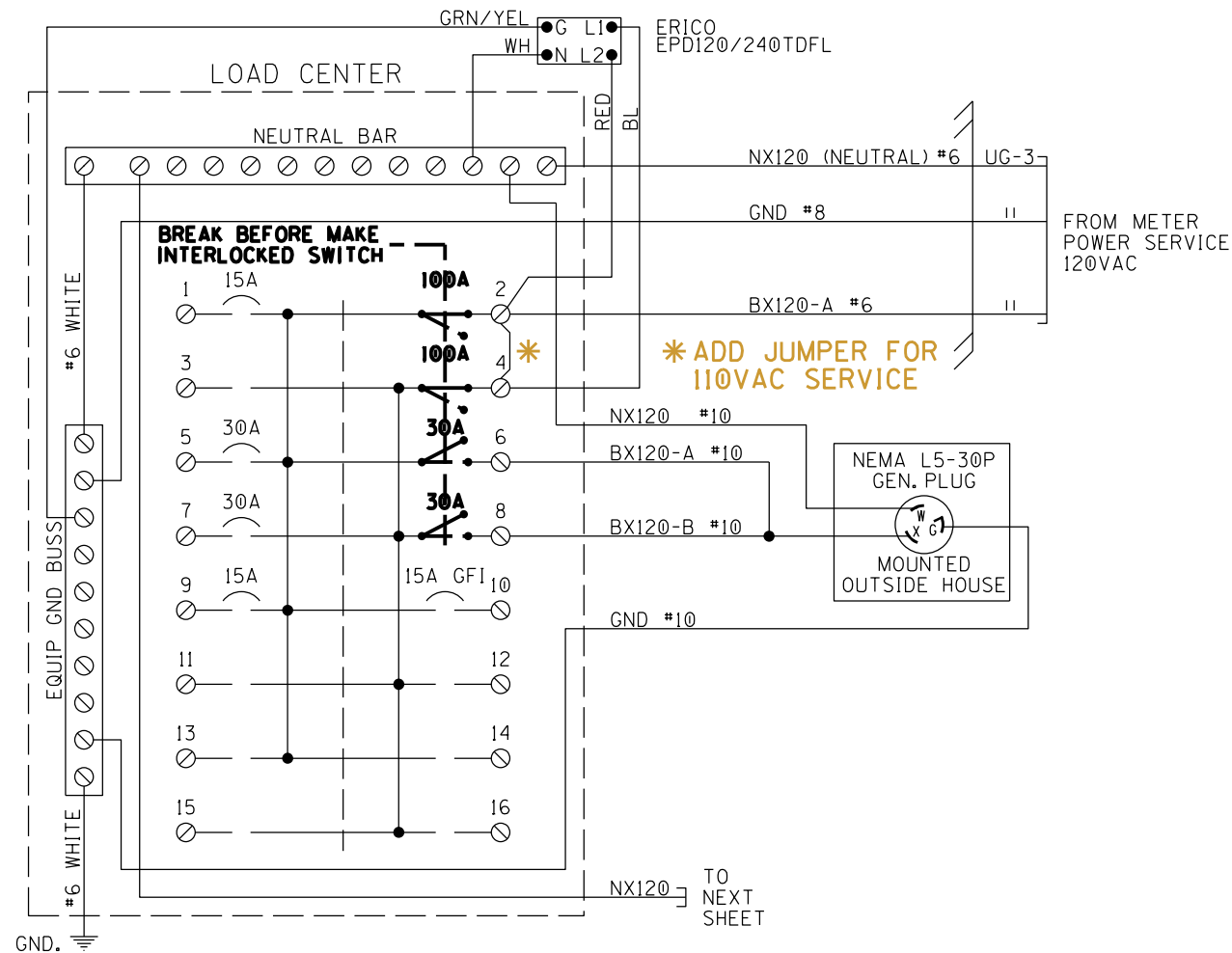
RJ CORMAN RAILROAD



DESIGNED BY: DEW
 DIGITIZED BY: RJC
 CHECKED BY: RJJ

STAEGER RD
 CELINA, OH
 ST. MARYS SUBDIVISION

DATE: 04/20/17
 FILE: ST11740.03
 SHEET 03



SQUARE "D" PART NUMBERS:

LOAD CENTER — Q0116L125G

10A 1P CIR BKR — Q0110

10A 2P CIR BKR — Q0210

15A 1P GF1 CIR BKR — Q0115GF1

15A 1P CIR BKR — Q0115

20A 1P CIR BKR — Q0120

30A 1P CIR BKR — Q0130

30A 2P CIR BKR — Q0230

60A 2P CIR BKR — Q0260

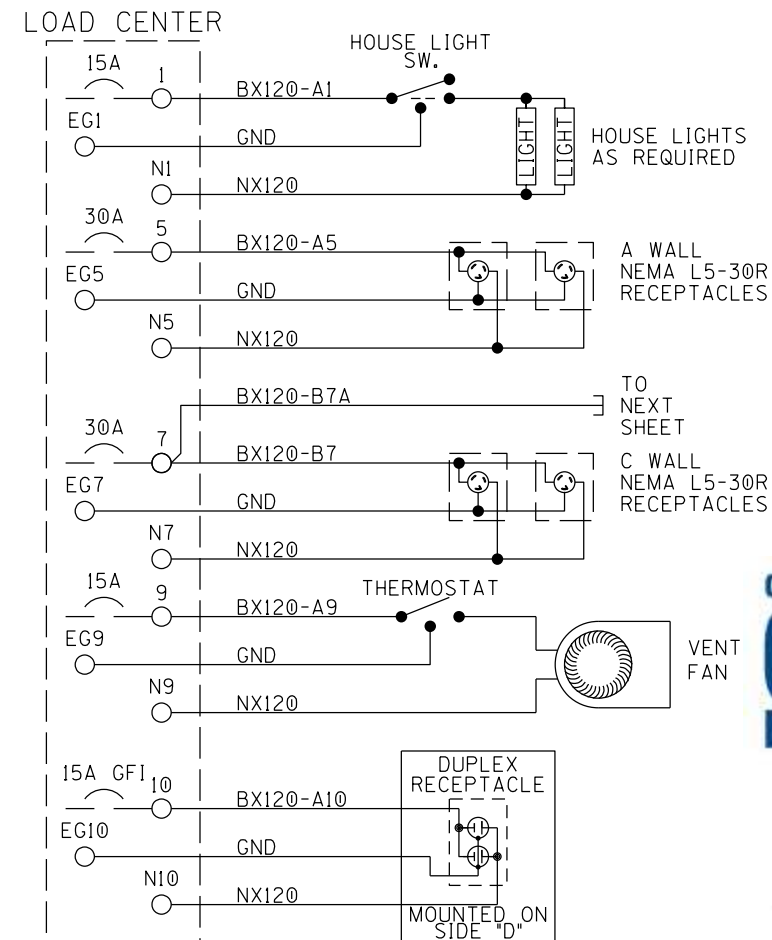
100A 2P CIR BKR — Q02100

MECH INTERLOCK — PK4DTJM4LA

NOTE: ALL AC WIRING IS TO BE IN METALLIC CONDUIT WITH NO EXPOSED TERMINALS. ALL AC 120V AND 240V EQUIPMENT IS TO BE PROPERLY GROUNDED.

ALL WIRING TO BE #16AWG UNLESS NOTED OTHERWISE.

DO NOT USE OR INSTALL 240VAC EQUIPMENT IN THIS HOUSE.



Ohio Utilities Protection Service

Call 811 before you dig



CONSTRUCTION NOTE:
"X" OUT THIS SHEET ON AS BUILT MARK UP IF 240VAC SERVICE PROVIDED.

LOAD CENTER WIRING (120V)

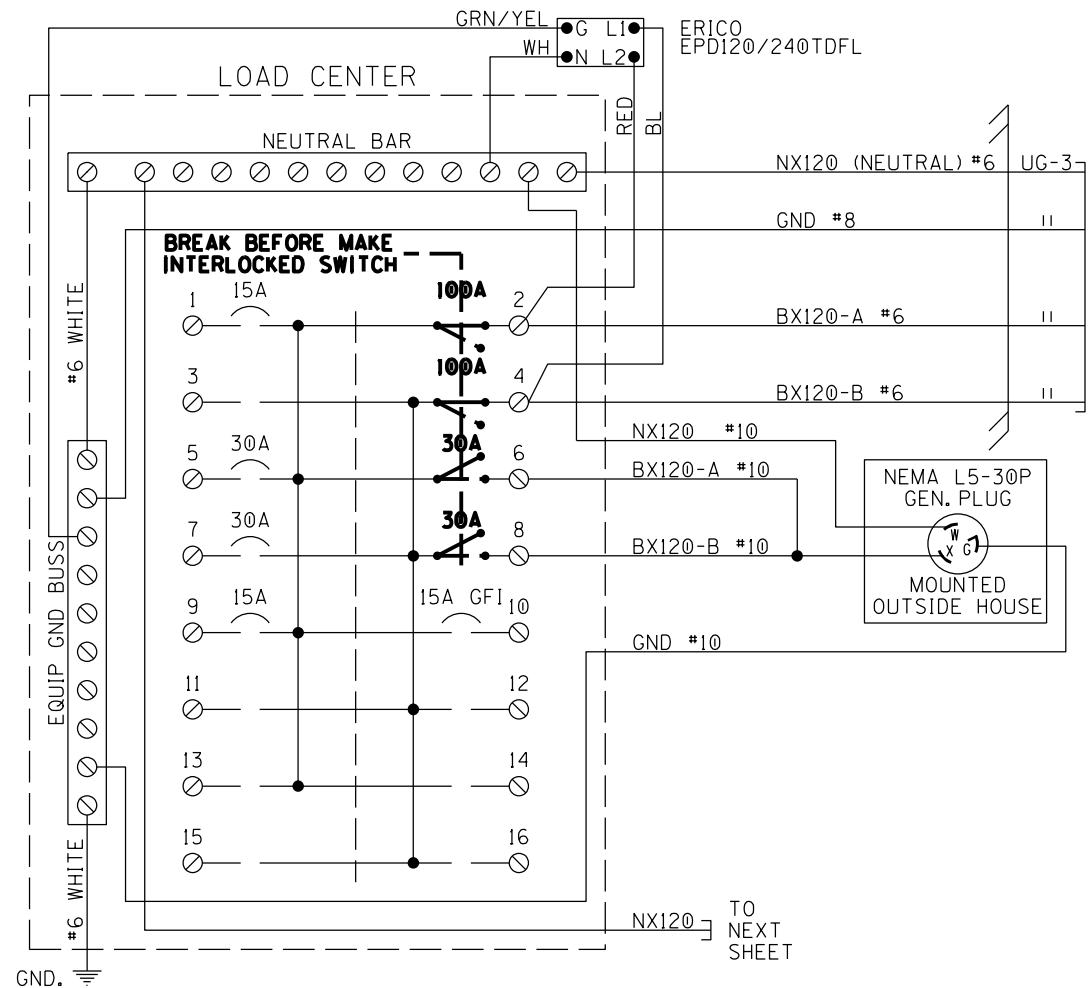
RJ CORMAN RAILROAD



DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

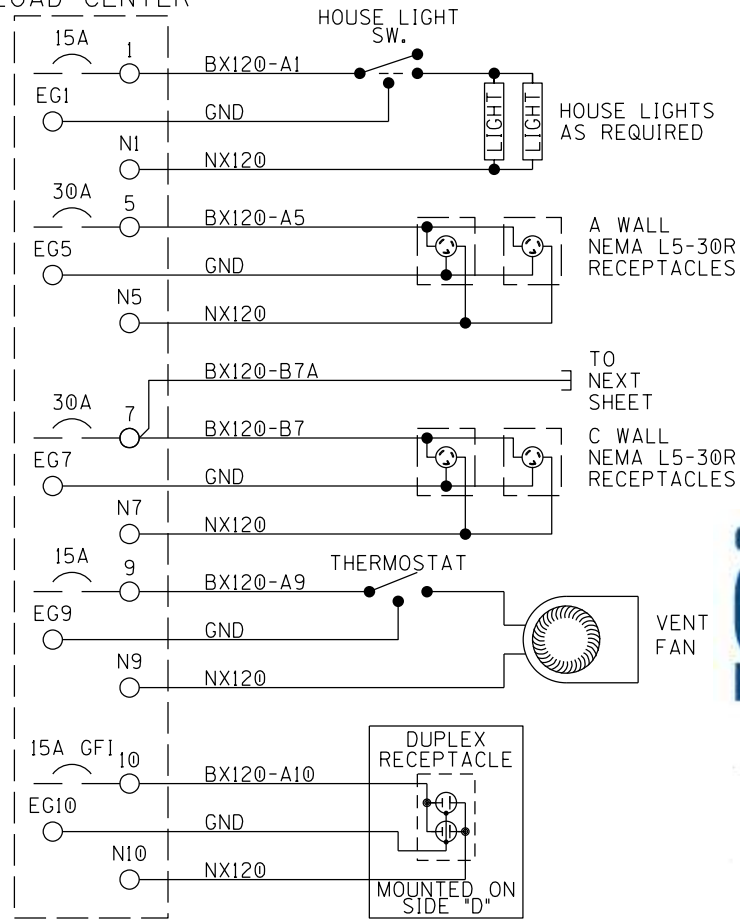
STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.04
SHEET 04



FROM METER
POWER SERVICE
120/240 VAC

LOAD CENTER



- SQUARE "D" PART NUMBERS:
- LOAD CENTER — Q0116L125G
 - 10A 1P CIR BKR — Q0110
 - 10A 2P CIR BKR — Q0210
 - 15A 1P GFI CIR BKR — Q0115GFI
 - 15A 1P CIR BKR — Q0115
 - 20A 1P CIR BKR — Q0120
 - 30A 1P CIR BKR — Q0130
 - 30A 2P CIR BKR — Q0230
 - 60A 2P CIR BKR — Q0260
 - 100A 2P CIR BKR — Q02100
 - MECH INTERLOCK — PK4DTJM4LA

NOTE: ALL AC WIRING IS TO BE IN METALLIC CONDUIT WITH NO EXPOSED TERMINALS. ALL AC 120V AND 240V EQUIPMENT IS TO BE PROPERLY GROUNDED.

ALL WIRING TO BE #16AWG UNLESS NOTED OTHERWISE.

DO NOT USE OR INSTALL 240VAC EQUIPMENT IN THIS HOUSE.

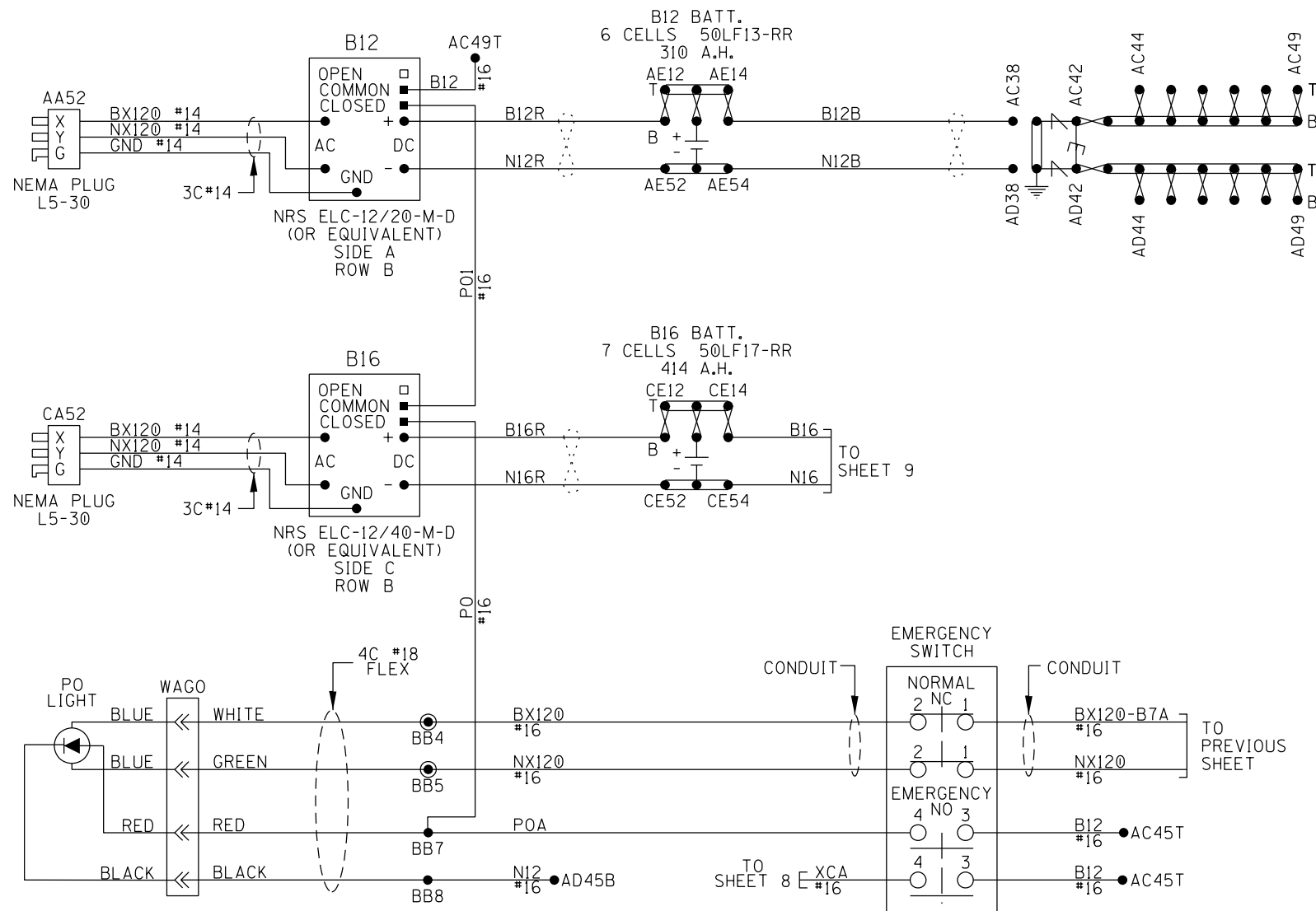
CONSTRUCTION NOTE:
"X" OUT THIS SHEET ON AS BUILT MARK UP IF 120VAC SERVICE PROVIDED.

LOAD CENTER WIRING (240V)

RJ CORMAN RAILROAD




DESIGNED BY: DEW	STAEGER RD	DATE: 04/20/17
DIGITIZED BY: RJC	CELINA, OH	FILE: ST11740.04A
CHECKED BY: RJJ	ST. MARYS SUBDIVISION	SHEET 04A



NOTES:

1. ALL WIRING TO BE #6AWG UNLESS NOTED OTHERWISE.
2. DO NOT INSTALL 240VAC CHARGERS.

 = 1 INCH TEST LINK

 = TWIST



DC POWER

RJ CORMAN RAILROAD

DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.05
SHEET 05



MAIN PROGRAM MENU

**	PARAMETER	VALUE
1	TEMPLATE	↓ MTF-MS MOTION SENSOR
1A	SET TEMPLATE DEFAULTS	(YES ON INITIAL SETUP)
MS 4000 CONFIGURATION		
2	APPR FREQUENCY	↓ 645 HZ
3	APPR TRANSMIT LEVEL	# ☆ MED
4	UNI/BI/SEM-BIDIRNL	↓ BIDIRNL
5	DIRECTIONALLY WIRED	↓ ☆ NO
6	MS PICKUP DELAY	↓ ☆ 15 SEC
7	UAX USED	↓ NO
7A	* PRIME UAX PICKUP	↓ ☆
8	ISLAND USED	↓ ☆ INTERNAL
8A	* ISL FREQUENCY	↓ 10.0 KHZ
8B	* ISL PICKUP DELAY	↓ (2s+) 3 SECONDS
9	IN 1.1	↓ OUT OF SERVICE IP 1
10	IN 1.2	↓ NOT USED
11	PRIME MS/GCP MODE	↓ PRED
11A	* PRIME WARNING TIME	↓ 30 SEC
ADVANCED		
12	POSITIVE START	↓ ☆ OFF
13	SUDDEN SHUNT DET USED	↓ ☆ NO
14	LOW EZ DET USED	↓ ☆ NO
15	MS SENSITIVITY LEVEL	# ☆ 36
16	COMPENSATION LEVEL	# ☆ 1300
17	LOW EX ADJUSTMENT	# ☆ 39
18	INBOUND PS SENSITIVITY	# ☆ HIGH
19	SPEED LIMITING USED	# ☆ YES
20	OUTBOUND FALSE ACT LVL	# ☆ NORMAL
OTHER		
21	OOS TIMEOUT	# ☆ 1 HRS
22	DAYLIGHT SAVINGS TIME	# ☆ ON
23	EZ/EX LOGGING	# ☆ CHANGE
24	EZ/EX POINT CHANGE	# ☆ 3
25	ATCS SITE ID	↓ ☆ 76201010016

CONTINUE MAIN PROGRAM MENU

**	PARAMETER	VALUE
26	LOCATION	
26A	* DOT NUMBER	# 477 009F
26B	* MILE POST	# 117.40
26C	* SITE NAME	# STAEGE RD

MCF AND OCCN

MCF NAME	GCP-T6X-02-8.mcf
OCCN	- - - - -

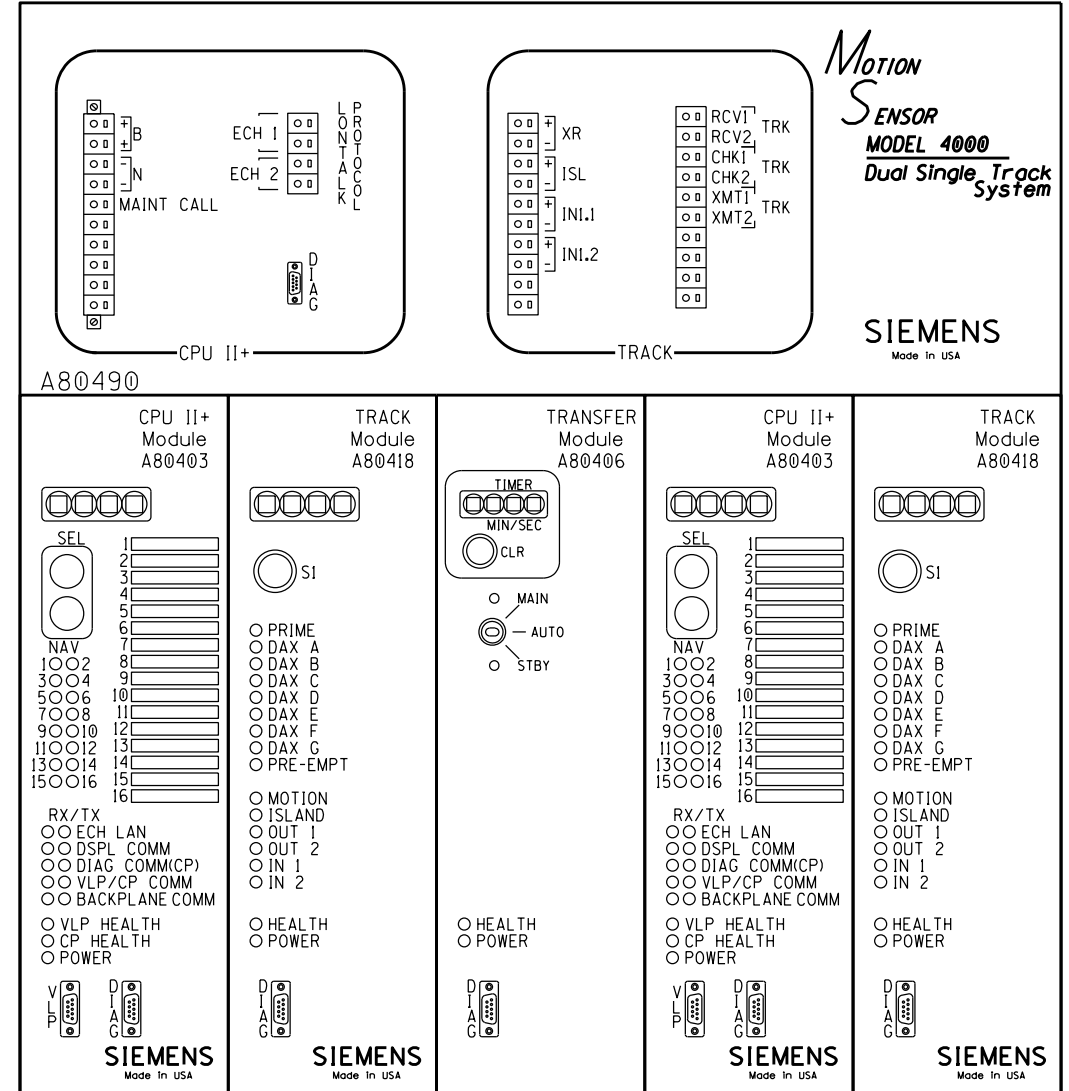
SHOP TO FILL IN OCCN ON AS WIRED.
VERIFY MCF IS AS NOTED,
IF OTHERWISE CONTACT ENGINEERING.

Ohio Utilities Protection Service
Call 811
before you dig



NOTES:

- * AVAILABLE WHEN PRIOR PARAMETER SELECTED
- # SET BY FIELD AS REQUIRED
- ☆ DEFAULT SETTING
- ↓ IMPACTS OCCN
- ** STEP SEQUENCE WHEN USING DIAGNOSTIC TERMINAL (DT) VER. 5.7.3 TO SET PROGRAM PARAMETERS. ALPHA NUMERIC STEPS ARE SUB MENUS OF PREVIOUS STEP.



SIDE A
ROW B

MS 4000 GCP

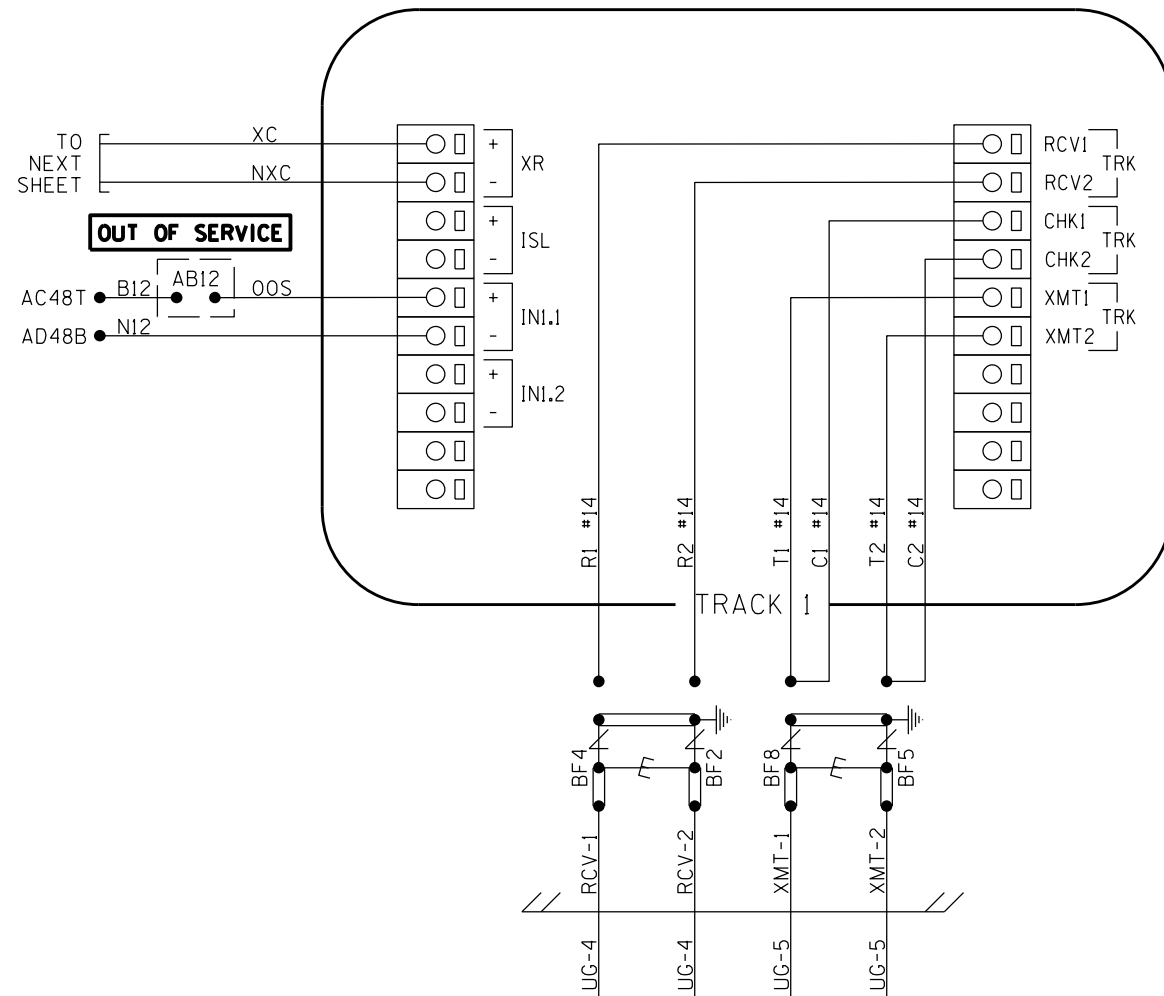
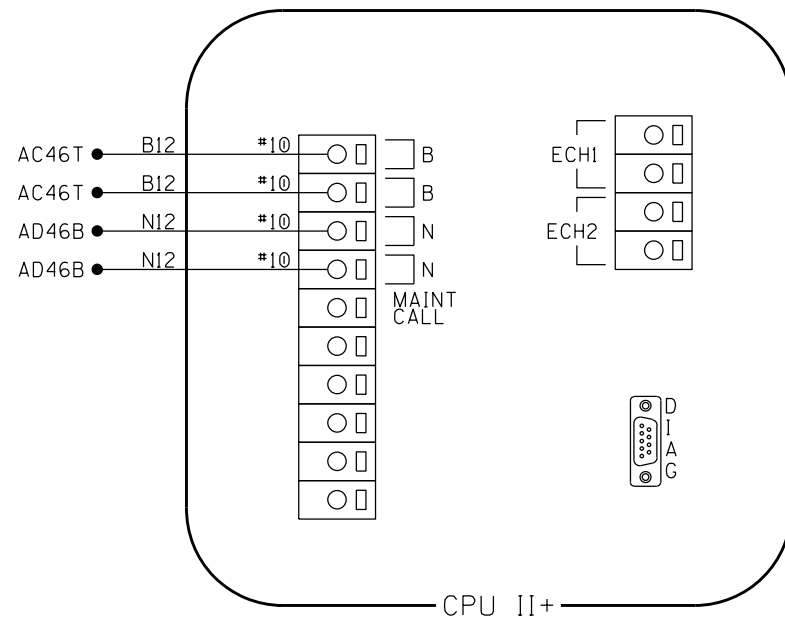
RJ CORMAN RAILROAD

DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGE RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.06
SHEET 06





NOTES:
ALL WIRING TO BE #16AWG
UNLESS NOTED OTHERWISE.



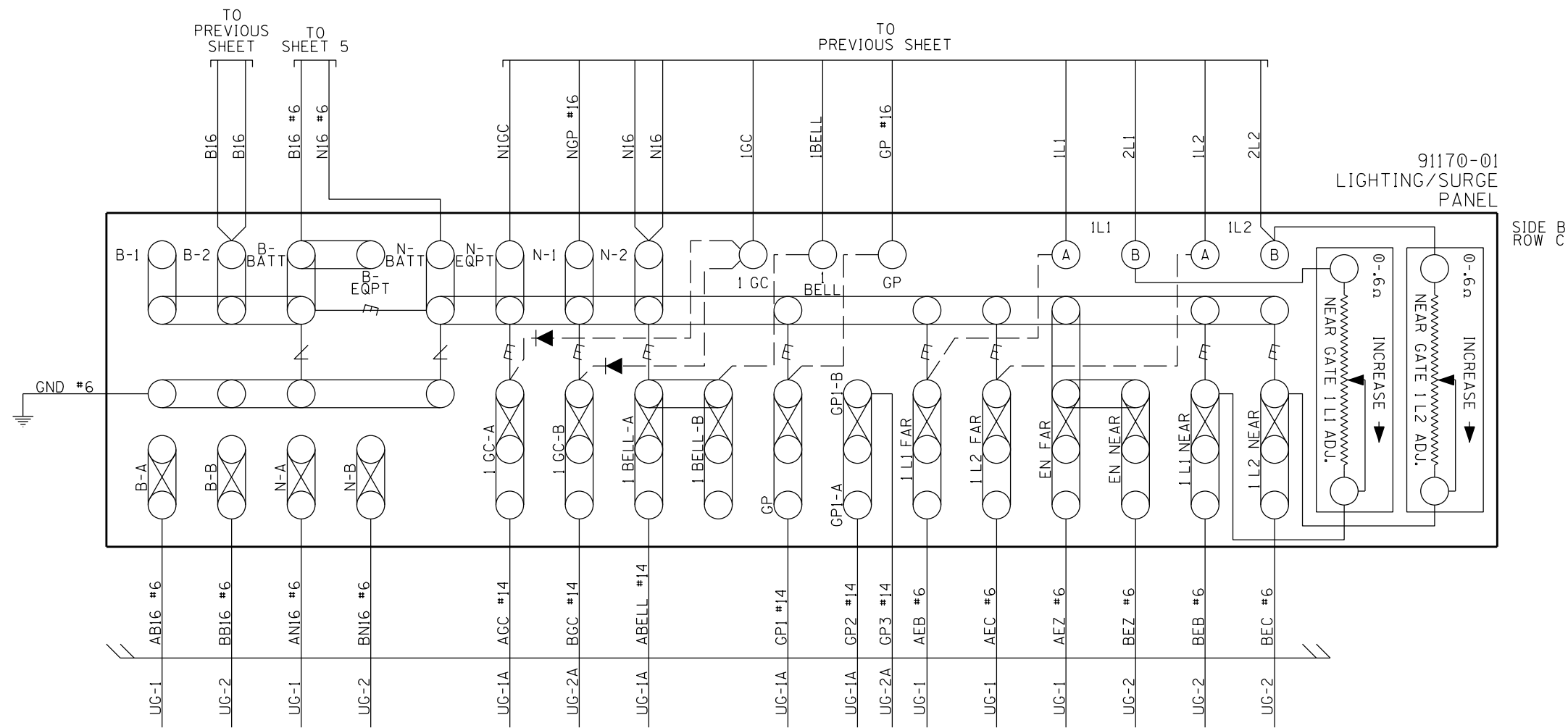
CONNECTORS FOR TRACK MODULE

RJ CORMAN RAILROAD

DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.07
SHEET 07



NOTE:

⚡ = HEAVY DUTY EQUALIZER 022700-1X

⌄ = HEAVY DUTY CLEARVIEW ARRESTER 022585-1X

1. ALL WIRING TO BE #10AWG UNLESS NOTED OTHERWISE.



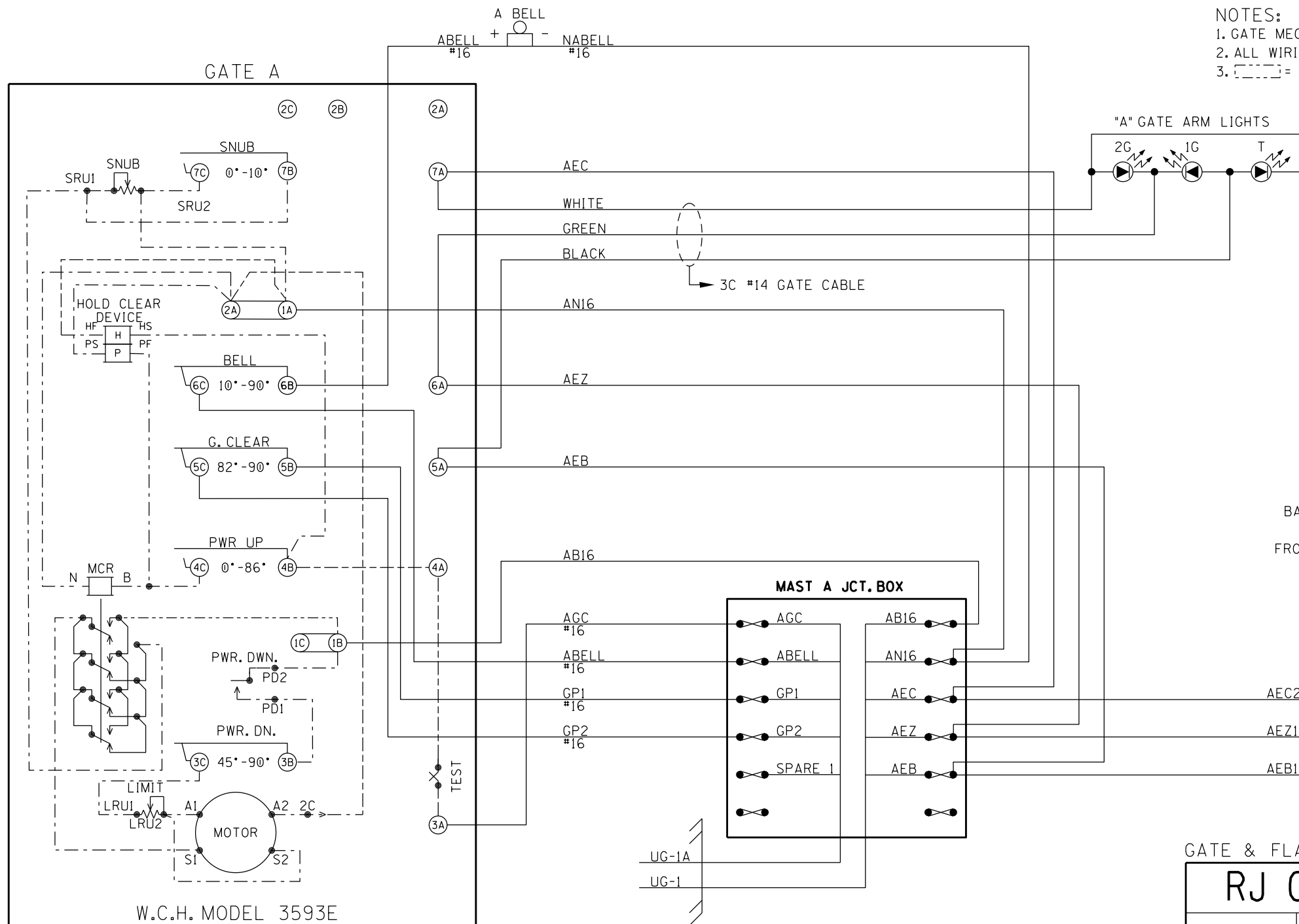
LIGHTING/SURGE PANEL HOOK-UP

RJ CORMAN RAILROAD

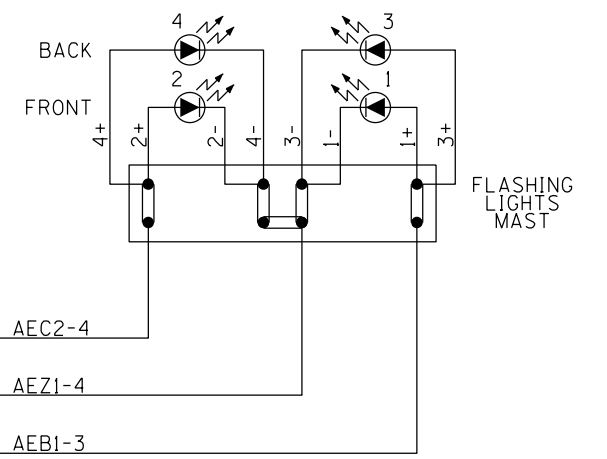
DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.09
SHEET 09



- NOTES:
1. GATE MECH. SHOWN IN CLEAR POSITION
 2. ALL WIRING TO BE #10AWG UNLESS OTHERWISE NOTED.
 3. [] = INTERNAL GATE WIRING



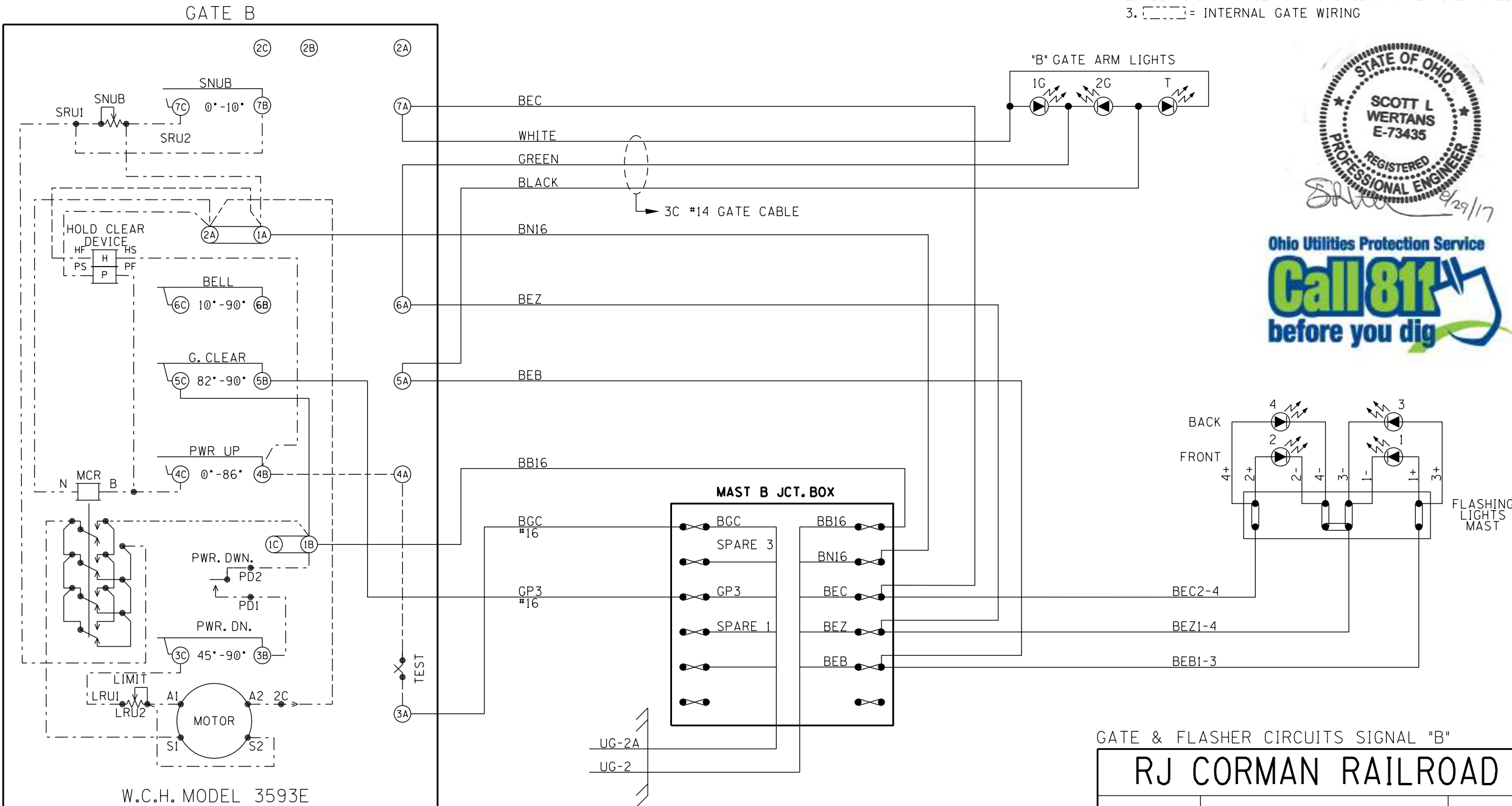
GATE & FLASHER CIRCUITS SIGNAL "A"

RJ CORMAN RAILROAD



DESIGNED BY: DEW	STAEGER RD	DATE: 04/20/17
DIGITIZED BY: RJC	CELINA, OH	FILE: ST11740.10
CHECKED BY: RJJ	ST. MARYS SUBDIVISION	SHEET 10

- NOTES:
- 1. GATE MECH. SHOWN IN CLEAR POSITION
 - 2. ALL WIRING TO BE #10AWG UNLESS OTHERWISE NOTED.
 - 3. [] = INTERNAL GATE WIRING



GATE & FLASHER CIRCUITS SIGNAL "B"

RJ CORMAN RAILROAD		
DESIGNED BY: DEW	STAEGER RD	DATE: 04/20/17
DIGITIZED BY: RJC	CELINA, OH	FILE: ST11740.11
CHECKED BY: RJJ	ST. MARYS SUBDIVISION	SHEET 11



NOTE: INSTALL TEST LINKS ON ALL TRACK WIRES AND ON ALL LOW VOLTAGE UNDERGROUND CABLE TERMINATIONS.

⎓ = Heavy Duty Equalizer
(022700-1X)

∠ = Clearview
Lightning Arrester
(022585-1X)

EMERGENCY SWITCH
MOUNTED ON BACKSIDE
OF TERMINAL BOARD



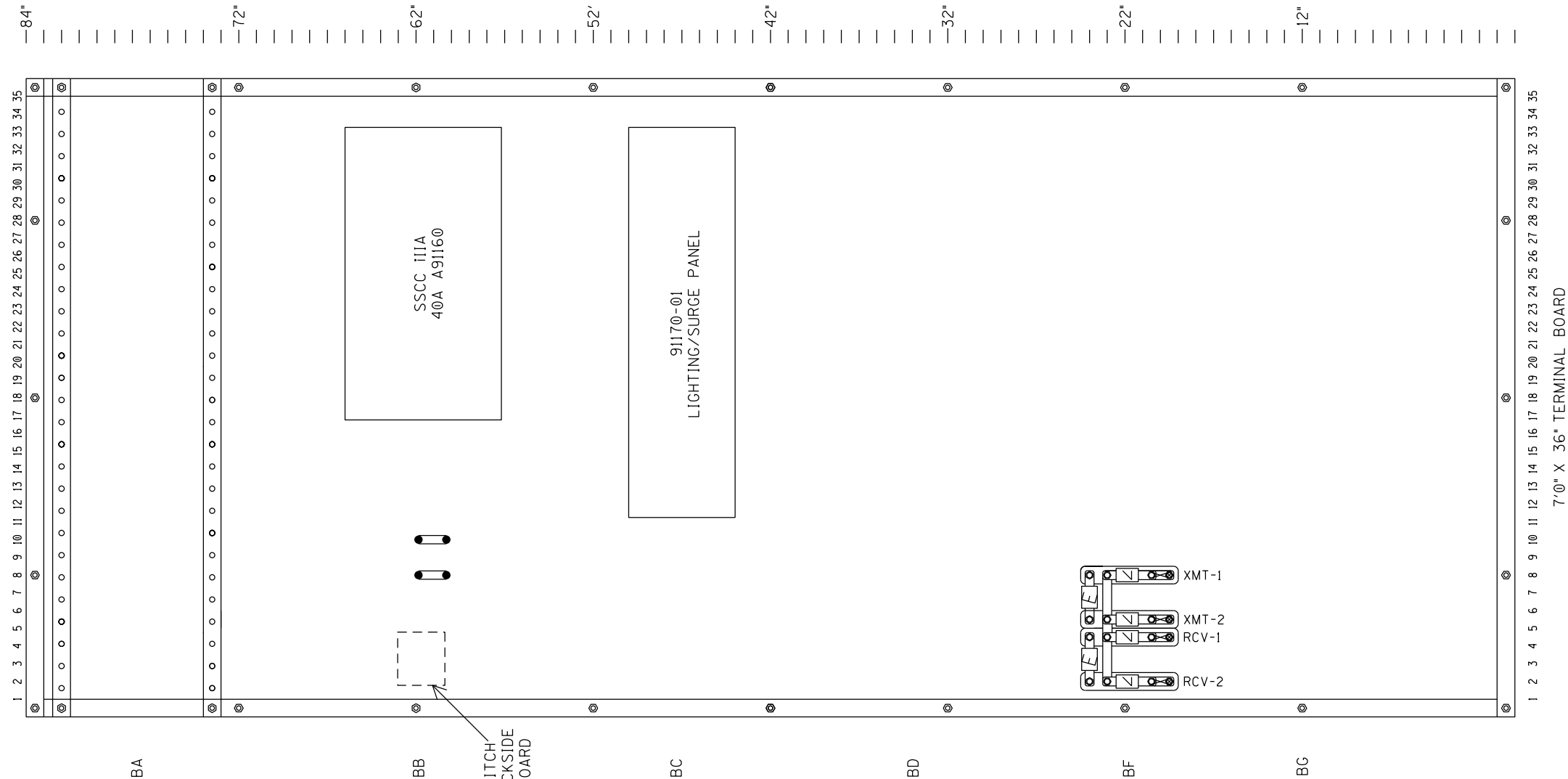
TERMINAL BOARD

RJ CORMAN RAILROAD

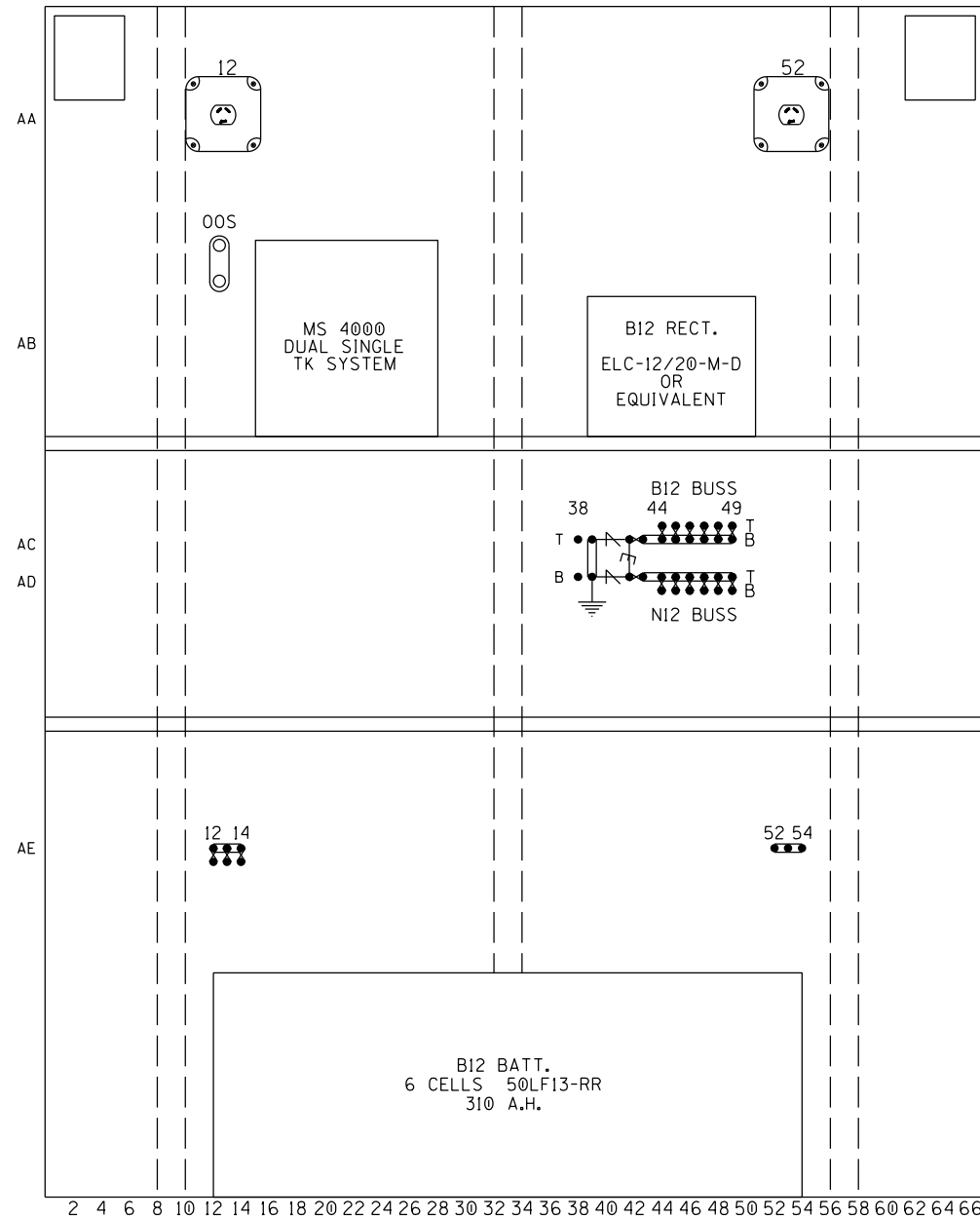
DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.12
SHEET 12



SIDE "A"



NOTE: NEMA RECEPTACLES
ARE L5-30.



6' X 6' HOUSE - SIDE "A"

RJ CORMAN RAILROAD

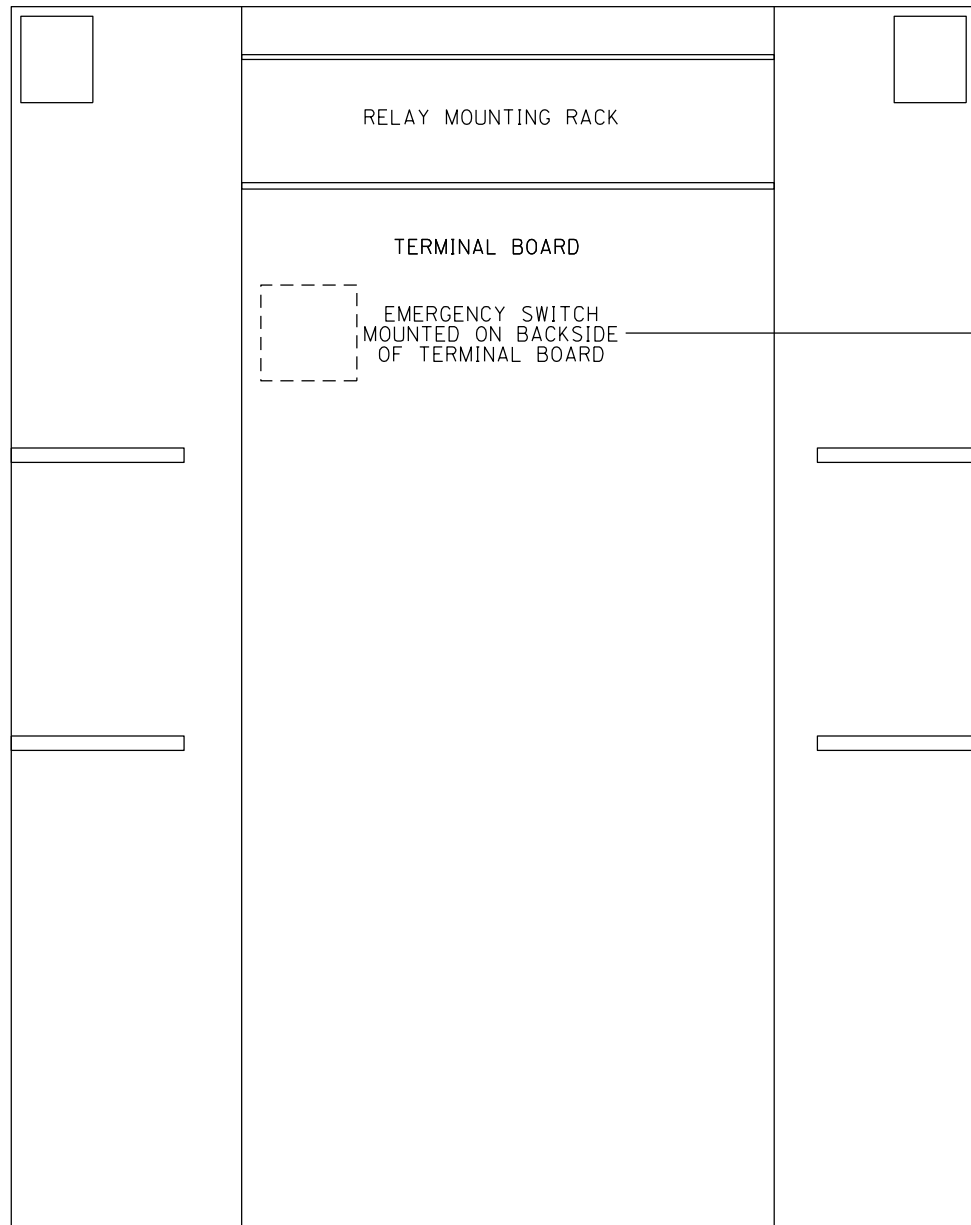
DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

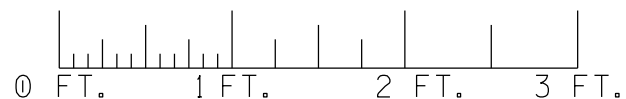
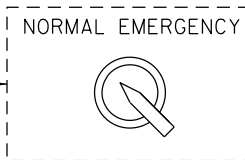
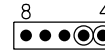
DATE: 04/20/17
FILE: ST11740.13
SHEET 13



SIDE "B"



REAR VIEW
TERMINAL BOARD



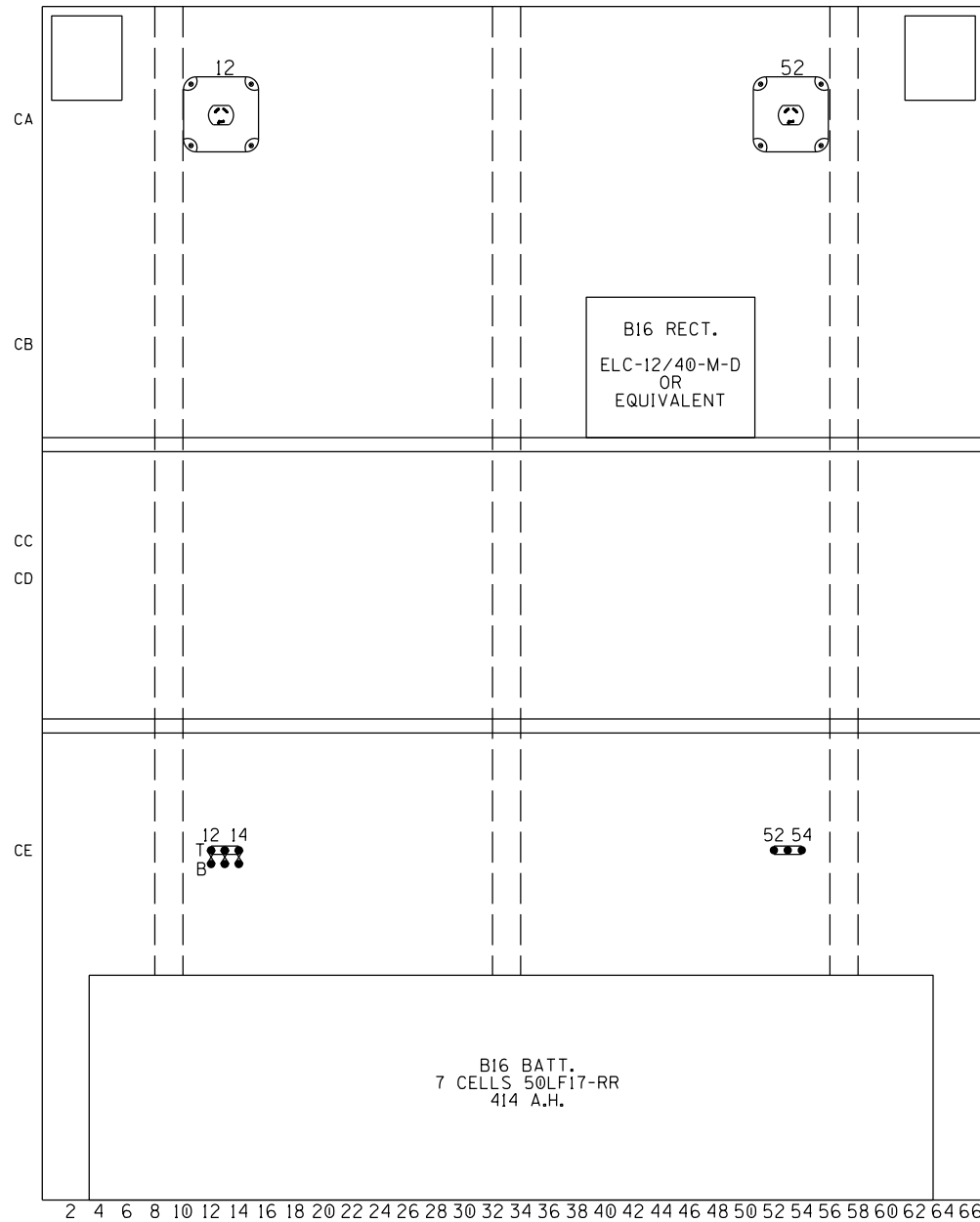
6' X 6' HOUSE - SIDE "B"

RJ CORMAN RAILROAD



DESIGNED BY: DEW	STAEGER RD	DATE: 04/20/17
DIGITIZED BY: RJC	CELINA, OH	FILE: ST11740.14
CHECKED BY: RJJ	ST. MARYS SUBDIVISION	SHEET 14

SIDE "C"



NOTE: NEMA RECEPTACLES
ARE L5-30.



6' X 6' HOUSE - SIDE "C"

RJ CORMAN RAILROAD

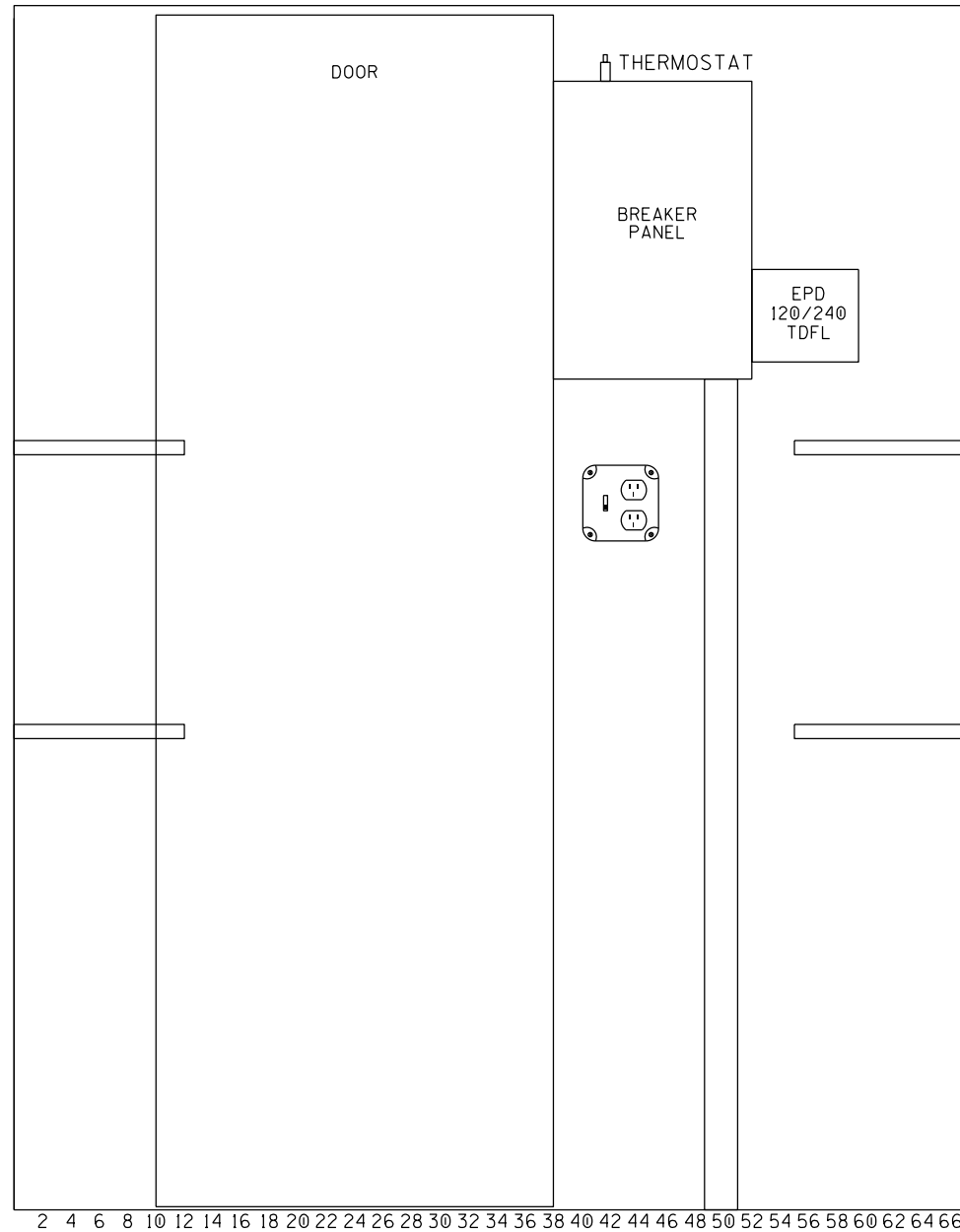
DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.15
SHEET 15

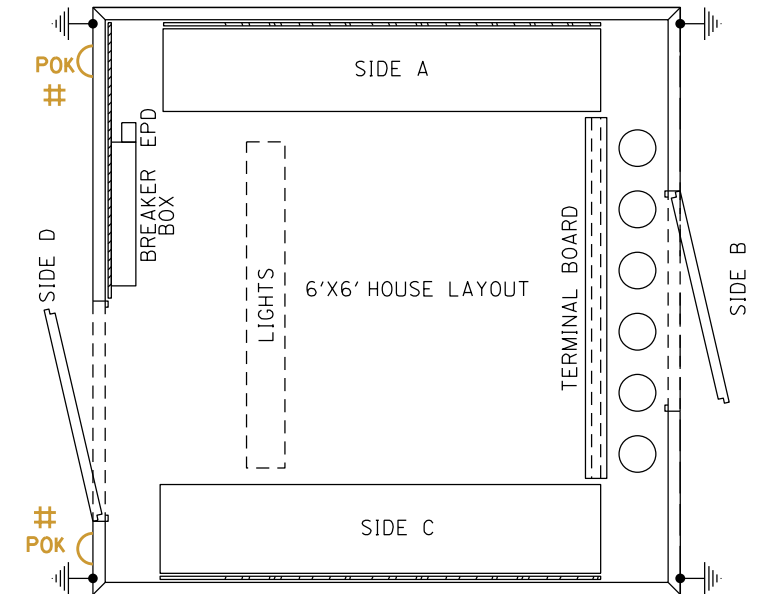


SIDE "D"



TOP VIEW*

6'X6' HOUSE
(INSULATED)
NOT TO SCALE



- * = SIDE D TO TO FACE TRACKS
- # = FIELD TO VERIFY PLACEMENT OF POK.
REMOVE LIGHT NOT NEEDED.



6' X 6' HOUSE - SIDE "D" & TOP VIEW

RJ CORMAN RAILROAD



DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ

STAEGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: ST11740.16
SHEET 16

RJ Corman Railroad Company / Western Ohio Lines

County: Mercer
Location: Steager Road
DOT#: 477009F
MP: 117.4

Estimate for Grade Crossing Surface

Material	Quantity	Unit	Description	Unit Price	Extension
	36	TF	4' Concrete Crossing Module (Tub Type 5.5)	\$ 335.00	\$ 12,060.00
	120	Ft	115 RE New Rail (60 Ft Pieces)	\$ 30.00	\$ 3,600.00
	35	Tons	Stone	\$ 28.00	\$ 980.00
	2	Keg	Spikes (50#)	\$ 45.00	\$ 90.00
	20	Each	Ties (7x9 Grade 5)	\$ 75.00	\$ 1,500.00
	80	Each	Anchors (115 RE)	\$ 2.30	\$ 184.00
	40	Each	Plates	\$ 17.00	\$ 680.00
	4	Each	Field Welds (115 RE)	\$ 140.00	\$ 560.00
	1	Keg	Track Bolts w/ Washers (50/keg)	\$ 175.00	\$ 175.00
	90	Tons	Asphalt Paving	\$ 275.00	\$ 24,750.00
	1	LS	Traffic Control and Sign Upgrade	\$ 2,500.00	\$ 2,500.00
	1	LS	Asphalt/Tie Disposal	\$ 3,000.00	\$ 3,000.00

Material Subtotal \$ 50,079.00

Labor	Hours	Qty.			
	20	1	Supervisor	\$ 55.00	\$ 1,100.00
	20	4	Laborers	\$ 35.00	\$ 2,800.00
	20	2	Operator	\$ 40.00	\$ 1,600.00
	20	1	Welder	\$ 45.00	\$ 900.00
	10	1	Inspector	\$ 55.00	\$ 550.00

Labor Subtotal \$ 6,950.00

Equipment	Hours	Qty.			
	20	1	Backhoe	\$ 42.00	\$ 840.00
	20	1	Prentice Truck	\$ 70.00	\$ 1,400.00
	20	1	P/U Truck (F-250)	\$ 22.00	\$ 440.00
	20	1	Dump Truck	\$ 83.00	\$ 1,660.00
	20	1	Work Truck (F-550)	\$ 35.00	\$ 700.00
	20	1	Backhoe Trailer	\$ 8.00	\$ 160.00
	20	1	Trackhoe	\$ 90.00	\$ 1,800.00
	10	1	Tamper	\$ 300.00	\$ 3,000.00
	10	1	Ballast Regulator	\$ 120.00	\$ 1,200.00
	10	1	Inspector Truck	\$ 24.00	\$ 240.00

Equipment Subtotal \$ 11,440.00

Project Total: \$ 68,469.00

RJ Corman Railroad Company / Western Ohio Lines**County: Mercer****Location: Steager Road****DOT #: 477009F****MP: 117.4****Estimate for Signal Warning System & Installation**

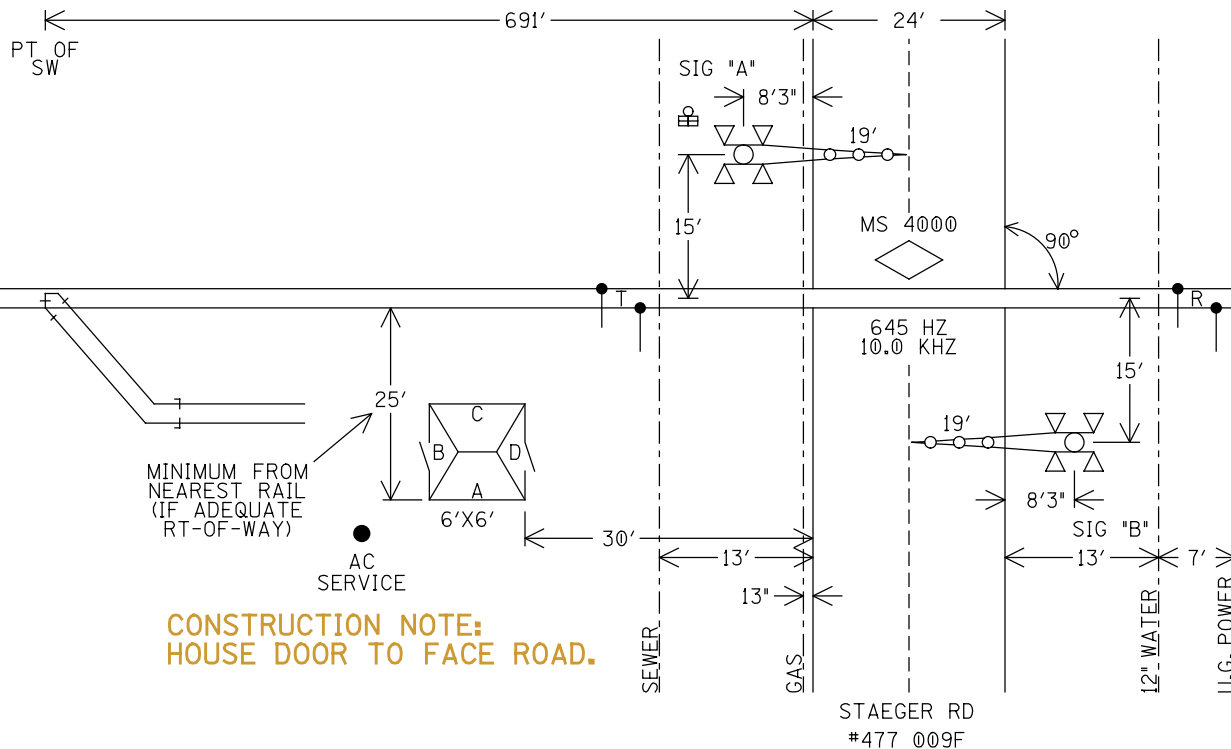
Signal	Qty.	Description	Extension
	1	Materials	\$ 78,062.32
	1	Engineering	\$ 6,109.00
	1	Shop Wiring	\$ 5,280.00
	1	Field Installation	\$ 77,787.50
	1	Distribution	\$ 1,478.75
Inspection		Description	Extension
	1	Railroad Inspector	\$ 1,430.00
Project Total			<u><u>\$ 170,147.57</u></u>

TO SOUTH LIMA YARD
(EAST)
M.P. (DECREASING)

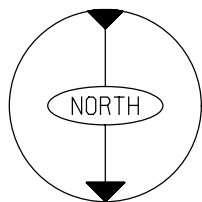
TO MUNCIE EAST YARD
(WEST)
M.P. (INCREASING)

1287'
TO NEAREST
GCP WIRES

1287'
TO NEAREST
GCP WIRES



CONSTRUCTION NOTE:
HOUSE DOOR TO FACE ROAD.



(A) — HARD WIRE SHUNT

- CONSTRUCTION NOTE:
1. CROSSING SURFACE TO BE REPLACED.
 2. APPROACHES REQUIRE BONDING.
 3. SWITCH REQUIRES INSULATION:
 - A) 2 INSULATED JOINTS.
 - B) REPLACE INSULATION #1 & 2 HORIZONTAL RODS.
 4. REMOVE OBSOLETE GUAGE PLATE WEST OF CROSSING.

PRELIMINARY ONLY

RJ CORMAN RAILROAD

- NOTES:
1. MAX TRAIN SPEED 25 MPH
 2. SIGNAL "A" TO HAVE BELL



DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: XXX

STAAGER RD
CELINA, OH
ST. MARYS SUBDIVISION

DATE: 04/20/17
FILE: PRELIM.01
SHEET 01

April 17, 2017

RJ Corman Railroad
Ms. Deborah Hawley
Real Estate & Funded Projects Manager
PO Box 788
101 R. J. Corman Drive
Nicholasville, KY 40340

RE: Mercer County, Steager Road/CR145, DOT # 477009F, PID 104282

Dear Ms. Hawley:

A diagnostic review was held at the above grade crossing on October 12, 2016. The crossing has been recommended for the installation of lights and gates.

RJ Corman Railroad is authorized to proceed with the site plans and cost estimates (PE) 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.

The diagnostic review form is attached. Please note any recommendations (page 5), if any, made by the team with regard to 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) 395-1824, or Greg.Gronbach@dot.ohio.gov, if you have any questions.

Sincerely,



Greg Gronbach
Project Manager

C: Randall Schumacher, Supervisor, Rail Division, PUCO
Jill Henry, Rail Specialist, PUCO
Cathy Stout, ORDC
Susan Arduini, ORDC
ORDC (file)

Attachment: 1 (diagnostic review form)



**Public Utilities
Commission**

Asim Z. Haque, Chairman

Commissioners

Lynn Slaby
M. Beth Trombold
Thomas W. Johnson
Vacant

January 24, 2017

RJ Corman Railroad
Ms. Deborah Hawley
Real Estate & Funded Projects Manager
PO Box 788
101 R. J. Corman Drive
Nicholasville, KY 40340

Re: 1) Mercer County, Steager Road,
DOT#477-009F, hereinafter
referred to as the "Project"

Dear Ms. Hawley:

The Public Utilities Commission of Ohio (PUCO) has identified and the Ohio Rail Development Commission (ORDC) surveyed, on October 12, 2016, the above mentioned grade crossing for warning device upgrades. The location has been approved for flashing lights and roadway gates. Surface reconstruction has also been approved for this location.

The Project shall comply with Agreement No. 004-A, dated May 29, 1991 and Reconstruction Agreement No. 6962, dated April 23, 1992, entered into by the State of Ohio and RJ Corman Railroad (RJC). Furthermore, the RAILROAD shall comply with all applicable state and federal laws governing grade crossing safety programs.

Reimbursable costs will be limited by ORDC based upon approved estimates and bid tabulations, if applicable. These limits will be quantified by the ORDC in its construction authorization to the RAILROAD and may be amended by the ORDC based upon revised estimates and bid tabulations. Additional costs must be approved in writing by the ORDC prior to being incurred. Emergency verbal authorizations by ORDC may be permitted but must be confirmed in writing within ten (10) business days of the verbal approval.

The RAILROAD shall complete plans and estimates for the Project within ninety (90) days after the RAILROAD is notified of authorization to proceed unless otherwise agreed by ORDC/PUCO and the RAILROAD.

The RAILROAD shall not commence construction prior to PUCO's Order or ORDC's construction authorization. The RAILROAD shall provide written notification of the construction start date to PUCO and ORDC no later than five (5) business days prior to such date.

Please indicate your acceptance of the terms and conditions of this Letter of Agreement by signing and returning one (1) copy to Ms. Jill Henry, Rail Specialist, Rail Division, Public Utilities Commission of Ohio, 180 E. Broad Street, Columbus, Ohio 43215-3793.

Sincerely,



Milan Orbovich
Director of Transportation
Public Utilities Commission of Ohio

Date 1/24/17

RJ Corman Railroad

By Brian Miller

Title President

Date 3/28/17



Matthew Dietrich
Executive Director
Ohio Rail Development Commission

Date 1-27-17

Diagnostic Review Team Survey

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

Formula

Date: 10/12/2016

Location Data

Street or Road Name: Staeger Road			
Route/Road Number (i.e. Twp., Co., SR or US) CR 145		US DOT No.: 477009F	
County: MER	Township:	City: (In or Near) Near Celina	
Railroad Name: R.J. Corman	Railroad Division: Western	Branch/Line Name: St. Mary's	
Nearest RR Timetable Station: Celina		RR Milepost: 117.4	

On-Site Review Team

(Include: Name – Organization – Phone Number – Email)

1. GREG GRONBACH ORDC 614-395-1824 GREG.GRONBACH@DOT.OHIO.GOV
2. Guy Dennings RJCorman 859-221-2634 guy.dennings@rjcorman.com
3. DAVID Albright RJCorman 859-314-8841 DAVID.Albright@RJCorman.com
4. Chris Clark RJCorman 859-361-7824 chris.clark@rjcorman.com
5. Jim Wiechart Mercer Co. 419-586-7759 Jim.Wiechart@mercercountyohio.org
6. MIKE BURNS " " MIKE.BURNS " "
7. _____
8. _____
9. _____

Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	GOOD
'Stop' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'Stop Ahead' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Pavement Markings (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	GOOD
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Number of Tracks Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Interconnected Highway Traffic Signal	<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	
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 Gate Arms	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'No Turn' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Illumination	<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 type="checkbox"/> Yes	<input type="checkbox"/> No	

Safety Data (Obtain crash reports, if possible, prior to review)

	Initial Information (from database)	Revised
Number & dates of crashes in previous 5 years	1 1/4/2016	
Hazard Ranking	192 Date Run: 9/30/16	230 10/22/16

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	2	6 / WEEK = 1 day.
< 1 per day		
Day thru trains	1	
Night thru trains	1	
Daytime switching movements		
Nighttime switching movements		
Total number of tracks	1	
Number of main tracks	1	
Number of other tracks		
Maximum train speed	25	
Typical train speed	25	
Amtrak		

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

If multiple tracks, can two trains occupy crossing at the same time? ☐ Yes ☒ No

Can one train block the motorists' view of another train at crossing? ☐ Yes (Explain below) ☒ No

Can one or more tracks be eliminated through the crossing? ☐ Yes ☐ No

Are there other track(s) crossing this same roadway within 100 ft of this crossing? ☐ Yes ☒ No

If yes, Crossing DOT # (if different) _____

If yes, distance _____ (take measurement between track centerlines at closest point along roadway)

Roadway Data

Local Highway Authority:		Mercer County	
Roadway Characteristics	Initial Information (from database)	Revised	
Average daily traffic	1950 (2007)		
Highway paved	X 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 <input type="checkbox"/> Other _____			
Roadway width: 27 ft.			
Number of highway lanes	2		
Urban or Rural	Rural		
Vehicle Speed: 55 MPH 35			
School Bus Operation: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes _____ Amount			
Hazardous Materials Trucks: <input type="checkbox"/> No X Yes .05 Amount			
Shoulders: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes			
Is the shoulder surfaced? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			
Is there existing guardrail along roadway in crossing vicinity? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			
Is stopping site distance adequate? (See Table 2) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, deficient approach(es) _____			

Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None	Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None
Pedestrians: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is sidewalk present? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is there a nearby intersection that could cause queuing over the crossing? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, Distance _____ Is this intersection signalized? <input type="checkbox"/> No <input type="checkbox"/> Yes Are the signals currently interconnected with the existing crossing warning devices? <input type="checkbox"/> No <input type="checkbox"/> Yes Is there a 'Do not Stop on Track' sign? <input type="checkbox"/> No <input type="checkbox"/> Yes	
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 checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, Improvement type _____ Lead Agency _____ Timeline/completion - _____	
Is it the consensus of the Diagnostic Review Team that this is a potential closure project? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Explain reasons: <div style="text-align: center; font-family: cursive; font-size: 1.2em;">MAIN ROAD BETWEEN STATE ROUTE - DELIVERY TO BUSINESS.</div>	
Type of Development	
<input checked="" type="checkbox"/> Open Space <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Residential	<input checked="" type="checkbox"/> Institutional <input checked="" type="checkbox"/> Commercial Location of nearby schools: _____
Utility Information	
Is commercial power available? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Utility Provider (Company Name) <u>CITY OF CELINA</u> Phone Number _____ Nearest Available Power Source <u>AT CROSSING</u>	
What other utilities are present? (add locations to sketch) <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Cable <input type="checkbox"/> Telephone <input type="checkbox"/> Fiber Optic Cable <input type="checkbox"/> Petroleum <input checked="" type="checkbox"/> Water <input checked="" type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Other _____	
Is(are) there potential utility conflict(s) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Comments: <div style="text-align: center; font-family: cursive; font-size: 1.2em;">UNDERGROUND GAS + SEWER IN SE QUAD</div>	

Diagnostic Team Recommendations

Quadrants Needed

- ☐ Install/upgrade active devices
- ☐ Automatic Flashing Lights (AFLS)
- ☐ AFLS / Cants
- ☒ AFLS / Gates
- ☐ AFLS / Gates / Cants
- ☒ Bells / number
- ☐ Upgrade circuitry / type
- ☐ Sidelights
- ☐ Guardrail Needed
- ☐ Install/Replace curb
- ☐ Bungalow placement & offset from rail & highway
- ☐ Other (define)

Comments:

☐ Install/upgrade traffic signal preemption

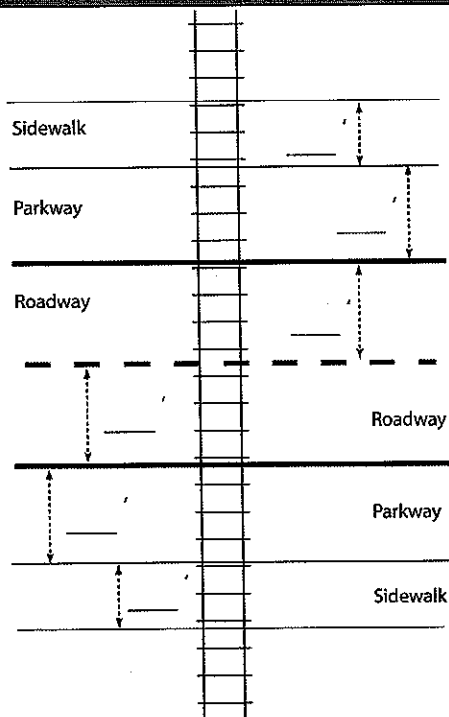
☐ No improvements needed

☒ Other (define) **SURFACE NEEDS REPLACED WITH LIGHT + GATES
INSTALL. (CURRENT CONDITION IS POOR)**

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

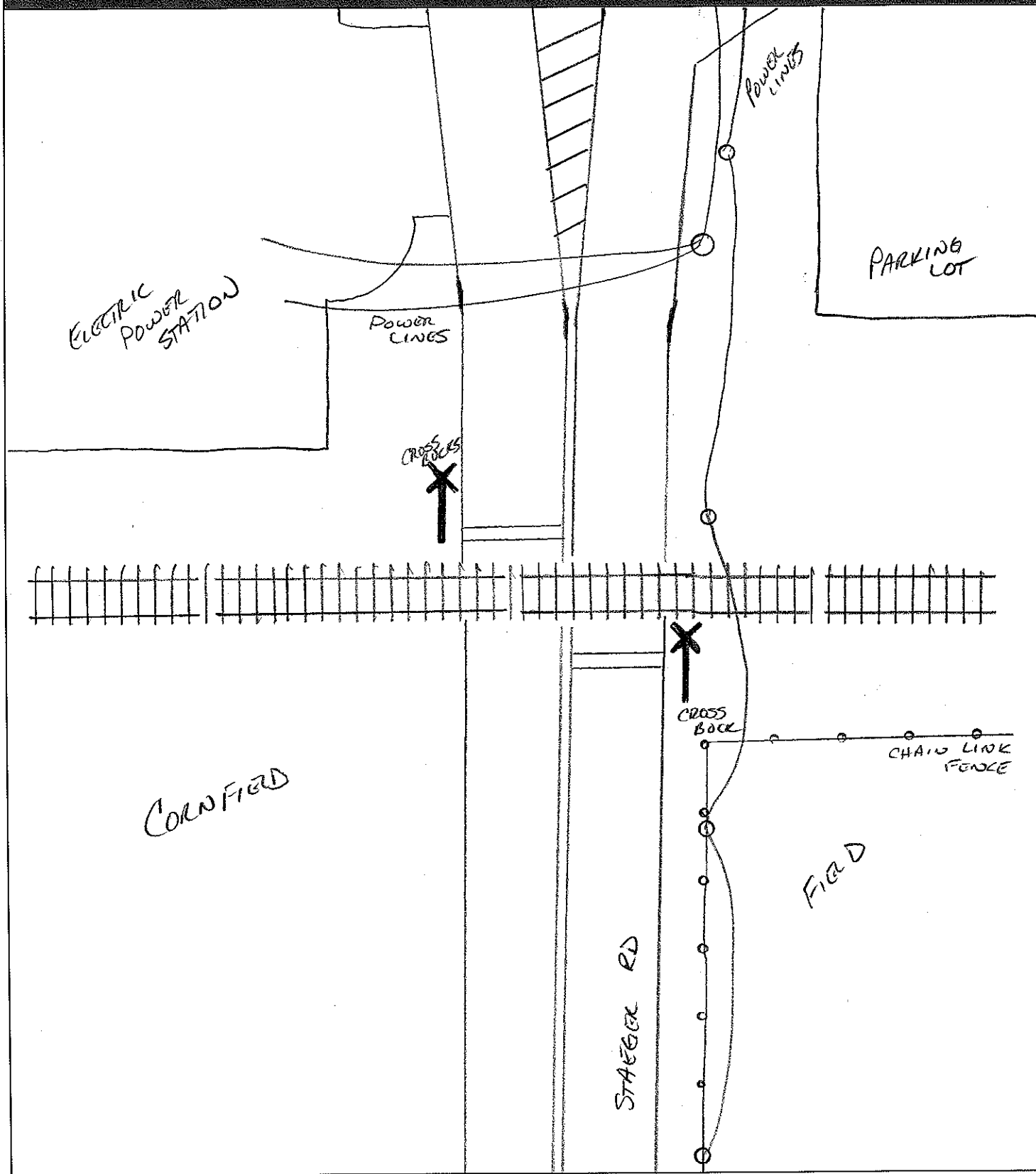
AWB TEB Jaw cc
ARD

Field Dimensions



PROJECT = YES

Field Sketch



Crossing Angle ☐ 0-29° ☐ 30-59° ☒ 60-90° Measured in _____ Quadrant?

Sketch by: Gwky

County: MER Route: STAEGER RD DOT#: 477009F

Surface type <input type="checkbox"/> Rubber seal and asphalt <input checked="" type="checkbox"/> Timber and asphalt <input type="checkbox"/> Asphalt <input type="checkbox"/> Composite <input type="checkbox"/> Concrete panel <input type="checkbox"/> Full-depth timber <input type="checkbox"/> Full-depth rubber <input type="checkbox"/> Other _____	Condition <input type="checkbox"/> Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Poor Comments: <u>MULTIPLE HOLES,</u> <u>TRAFFIC SLOWS TO CROSS</u>
Is the surface good and sufficient? Yes / <u>(NO)</u>	
Vehicle type (cars, trucks, etc.): <u>CARS/TRUCKS</u>	
Surface conditions: Can vehicles cross at posted speed? <u>YES</u> Local observations/driver behaviors: <u>TRAFFIC SPEED IS ALOT</u> <u>HIGHER THAN 35MPH POSTED SPEED LIMIT.</u> Relevant crash history: <u>1/2016</u>	
Do existing surface conditions have negative effects on the current or proposed warning devices? Explain: <u>RR BELIEVES SURFACE WILL NEED TO BE</u> <u>APPLACED, DUE TO JOINTS BEING SO CLOSE TO</u> <u>SURFACE.</u>	
Comments:	

Form completed by: GREG GRONBACH

Date: 10/12/16

TABLE I

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.

Table 2

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.

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

11/17/2017 10:00:32 AM

in

Case No(s). 17-2373-RR-FED

Summary: Application In the Matter of a Request for the Installation of Active Warning Devices and Crossing Surface at the RJ Corman Railroad Crossing, Staeger Road/CR 145 DOT#477-009F in Mercer County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division