



Rj Corman Railroad Group



A Limited Liability Holding Company
101 RJ Corman Drive • PO Box 788 • Nicholasville, KY 40340-0788
(859) 881-7521 • Fax: (859) 885-7804 • www.rjcorman.com

November 27, 2018

Vendors,

You are invited to submit a bid to provide a crossing materials package for the highway grade crossing listed below:

Horatio-Harris Creek Road, Greenville, OH, DOT# 523 347E, as shown on attached signal plans

Enclosed bid package also includes material requirements, as well as bidding guidelines. All bids must be submitted on company letterhead and received by **12/19/2018, 5PM EST**. Please submit via email to James.Kelley@RJCorman.com.

If you have any questions regarding this bid request, please don't hesitate to contact me.

Vendor to provide material delivery to 401 Enterprise Drive, Nicholasville, KY 40356.

RJ CORMAN WILL PROVIDE WIRING AND INSTALLATION.

Shipping to begin as soon as possible but no later than 90 days ARO.

Sincerely,

Jimmy Kelley
RJ Corman Railroad Group
PO Box 788
Nicholasville, KY 40340
O: 859-881-6637
www.rjcorman.com

R. J. Corman Equipment Company, LLC • R. J. Corman Railroad/Ashland, LLC • R. J. Corman Railroad Company/Allentown Lines, Inc.
R. J. Corman Railroad Company/Bardstown Line • R. J. Corman Railroad Company/Carolina Lines, LLC • R. J. Corman Railroad Company/Central Kentucky Lines, LLC
R. J. Corman Railroad Company/Cleveland Line, Inc. • R. J. Corman Railroad Company/Material Sales • R. J. Corman Railroad Company/Memphis Line
R. J. Corman Railroad Company/Pennsylvania Lines, Inc. • R. J. Corman Railroad Company/Tennessee Terminal, LLC • R. J. Corman Railroad Company/Texas Lines, LLC
R. J. Corman Railroad Company/Western Ohio Line, Inc. • R. J. Corman Railroad Services, LLC • R. J. Corman Distribution Centers, LLC • R. J. Corman Railroad Group, LLC
R. J. Corman Railroad Switching Company, LLC • R. J. Corman Real Estate, LLC • R. J. Corman Restaurant Corporation • R. J. Corman Signaling, LLC

Scope:

Vendor will provide all necessary equipment, inside and outside, of the shelter per the attached Signal drawing.

General Design Guidelines:

1. Material shall comply with all applicable FRA and state regulations and follow current AREMA C&S Manual for Recommended Practices.
2. All material provided shall be new.

Material Requirements:

1. Bungalow should be PTMW 6x6 Aluminum – 91000539 C-1
2. Train detection will be provided by Siemens MS-4000 Dual Single-Track System with user reference manual.
3. Flasher control will be provided by the Siemens 40amp Crossing Controller. Provide associated Lightning/Surge Arrester panel(s). *See plans for details.*
4. On the main terminal board, no equipment or terminals (other than ground buss) will be lower than 12" above floor
5. Relays will be GRS/Alstom Style "B" (if needed)
6. Chargers – NRS ELC 12/20 or 12/40 as applicable
7. Batteries – Sealed, Maintenance Free, Lead Acid Batteries
8. Crossing bell to be Electronic Loud Tone without sensor
9. Emergency Switch Box Assembly – L&W 2 Position – 3A900436
10. Gate mechanisms to use *WCH 3593-E-131. Shall include the following as designed per mast:*
 - a. 19' - 24' GATE ARMS W/ LED LIGHTS
 - b. 5" BASE (DOUBLE JUNCTION BOX) & 16'5" MAST
 - c. 2-WAY LED FLASHER ASSEMBLIES
 - d. COUNTERWEIGHT KIT
 - e. CROSSBUCK AND ASSOCIATED MOUNTING HARDWARE
 - f. CONVERSION BRACKET
 - g. HIGH WIND BRACKET
 - h. ELECTRONIC BELL (if needed)
 - i. GATE HEATERS (WCH)
11. Foundations to be precast concrete by Dixie Precast.
12. Flashing light signals to be 12" LED heads (Miller Felpax) with aluminum visors and backgrounds.
13. Rail Shunt Augmenter – Genesis P/N 08033-2000
14. Vendor to provide all field equipment, including track wire, shunts, rail bonding material, etc.
15. Jointed Rail to be Bonded within approaches please include all associated field materials required.
16. RJ Corman will be responsible for crossing surface replacement.

Performance & Bidding Guidelines:

Bids should be detailed in the following format:

LOCATION: _____

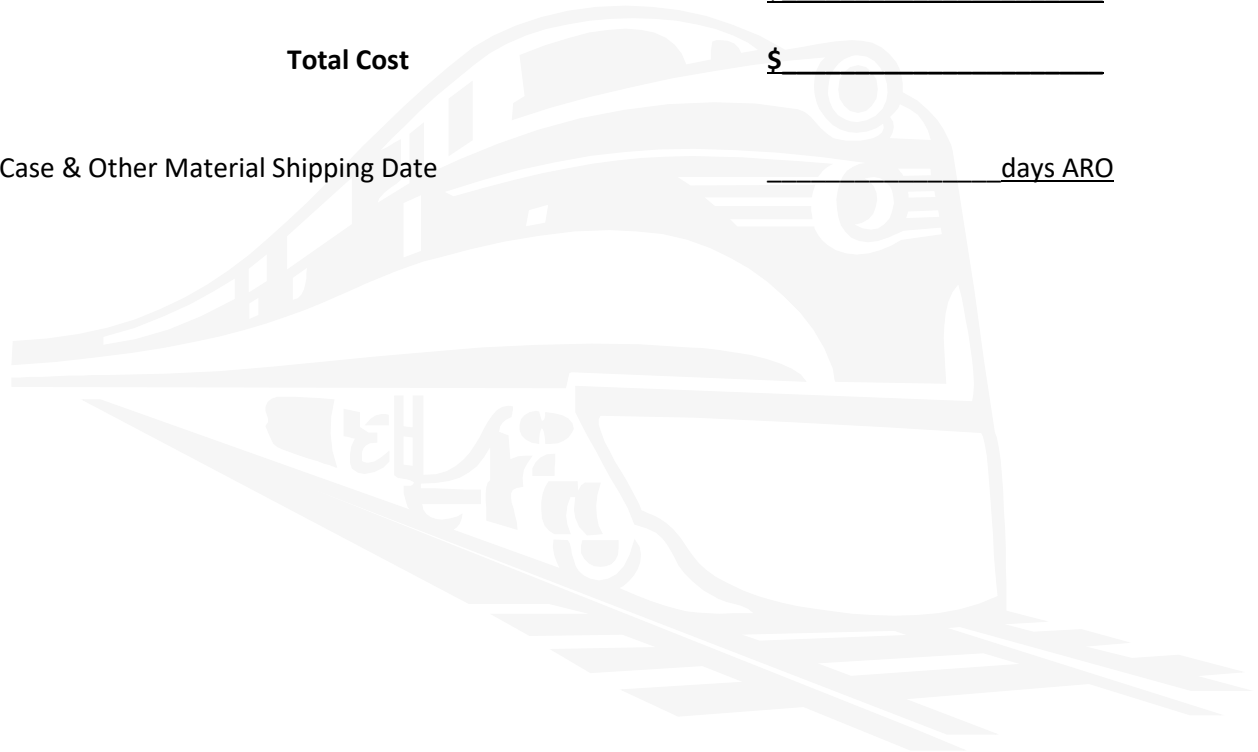
Material Cost \$ _____

Estimated Freight/Shipping Cost \$ _____

Estimated Taxes Cost \$ _____

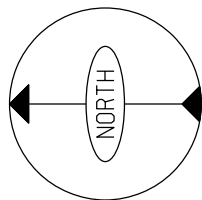
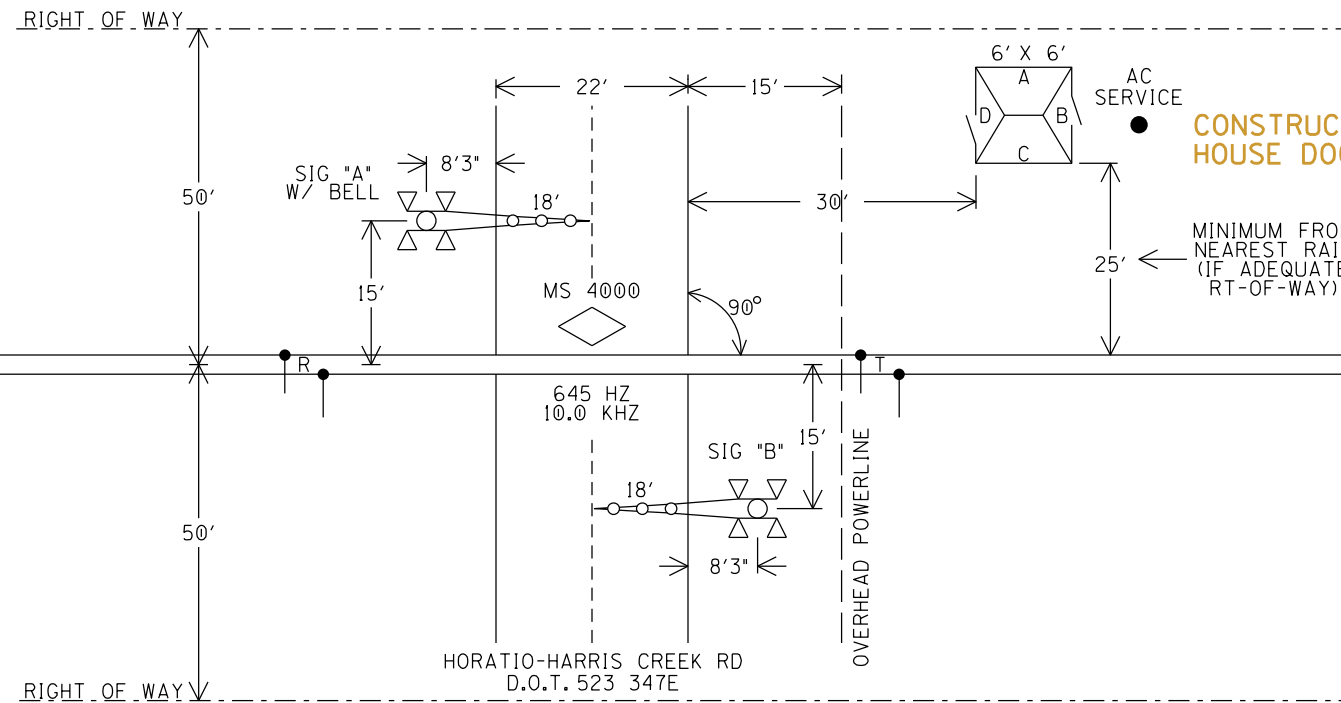
Total Cost \$ _____

Case & Other Material Shipping Date _____ days ARO



TO CSXT ANSONIA TRACKAGE
(NORTH)
M.P. (DECREASING)

TO THE ANDERSONS PLANT
(SOUTH)
M.P. (INCREASING)



- CONSTRUCTION NOTE:
1. T-RX7100 SHUNT AUGMENTER TO BE INSTALLED DUE TO RAIL CONDITIONS.
 2. NEW INSULATED JOINTS TO BE ADDED ON EAST RAIL OUTSIDE THE APPROACHES.
 3. DOUBLE BOND ALL JOINTED TRACK INSIDE APPROACH.

Ohio Utilities Protection Service



TRACK PLAN

	RJ Corman Railroad	
DESIGNED BY: DEW DIGITIZED BY: RJC CHECKED BY: RJJ REV 01	P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356 HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION	DATE: 07/19/18 FILE: GV00430.01 SHEET 01

TO CSXT ANSONIA TRACKAGE
(NORTH)
M.P. (DECREASING)

TO THE ANDERSONS PLANT
(SOUTH)
M.P. (INCREASING)

1544'
TO NEAREST
GCP WIRES

1544'
TO NEAREST
GCP WIRES

FLGS
W/ BELL

MS 4000

645 HZ
10.0 KHZ

FLGS

HORATIO-HARRIS CREEK RD
D.O.T. 523 347E

61'
TO

0'
TO

61'
TO

(A) — NBS-1 (645HZ)



PROFILE



RJ Corman Railroad

P.O. BOX 788 101 RJ CORMAN DR
NICHOLASVILLE, KY 40356

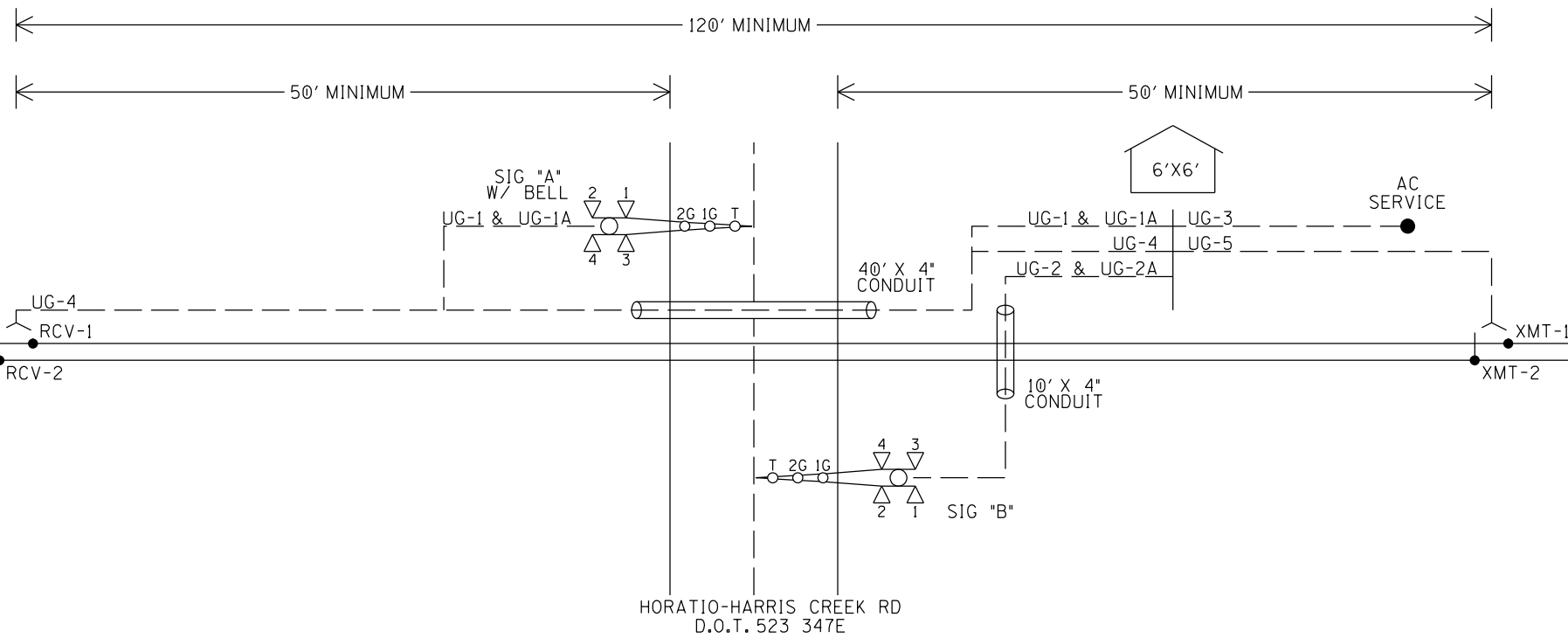


DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ
REV 01

HORATIO-HARRIS CREEK RD
GREENVILLE, OHIO
M.P. 004.30 D.O.T. 523 347E
GREENVILLE SUBDIVISION

DATE: 07/19/18
FILE: GV00430.02
SHEET 02

APPROACH CALCULATION INFORMATION	
STANDARD MINIMUM WARNING TIME IN SECONDS	25
ROADWAY GATE TIME ON SECONDS	05
CLEARANCE TIME IN SECONDS	00
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT IN SECS	00
DESIGNED WARNING TIME FOR TRAINS AT T.T. SPEED	30
DOT TRAFFIC LIGHT ADVANCE PREEMPT IN SECS	00
CONTROL EQUIPMENT REACTION TIME IN SECONDS	05
DESIGNED DETECTION TIME FOR TRAINS AT T.T. SPEED	35
TIME TABLE MAXIMUM TRAIN SPEED IN MILE PER HOUR	25
BUFFER IN MILE PER HOUR	05
APPROACH DISTANCE TO ISLAND EDGE IN FEET	1544'



HORATIO-HARRIS CREEK RD
D.O.T. 523 347E

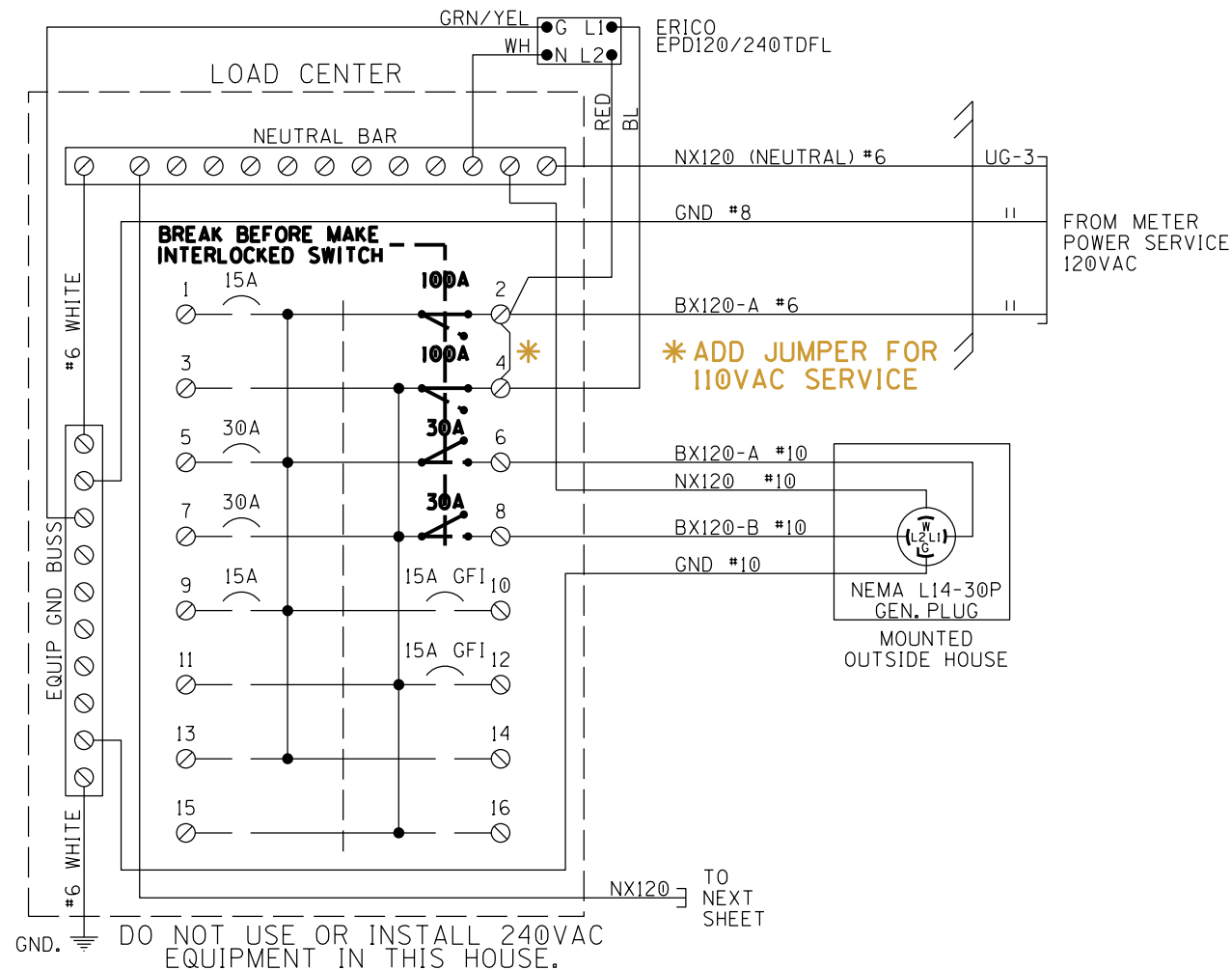
UG-1-5CUG #6	UG-2-5CUG #6	UG-3-3CUG #6 W/#8 GND	UG-4-TW, PR. #6
AEC AEZ AEB AB16 AN16	BEC BEZ BEB BB16 BN16	BX120-A BX120-B NX120 GND BX120-A NX120 SPARE GND **	RCV-1 RCV-2
UG-1A-7CUG #14	UG-2A-7CUG #14	UG-5-TW, PR. #6	XMT-1 XMT-2
AGC ABELL GP GP1 BX110 NX110 SPARE 1	BGC GP2 GP3 BX110 NX110 SPARE 1-2		

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



TRACK LAYOUT

		RJ Corman Railroad P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356	
DESIGNED BY: DEW	HORATIO-HARRIS CREEK RD		DATE: 07/19/18
DIGITIZED BY: RJC	GREENVILLE, OHIO		FILE: GV00430.03
CHECKED BY: RJJ	M.P. 004.30	D.O.T. 523 347E	SHEET 03
REV 01	GREENVILLE SUBDIVISION		



- 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

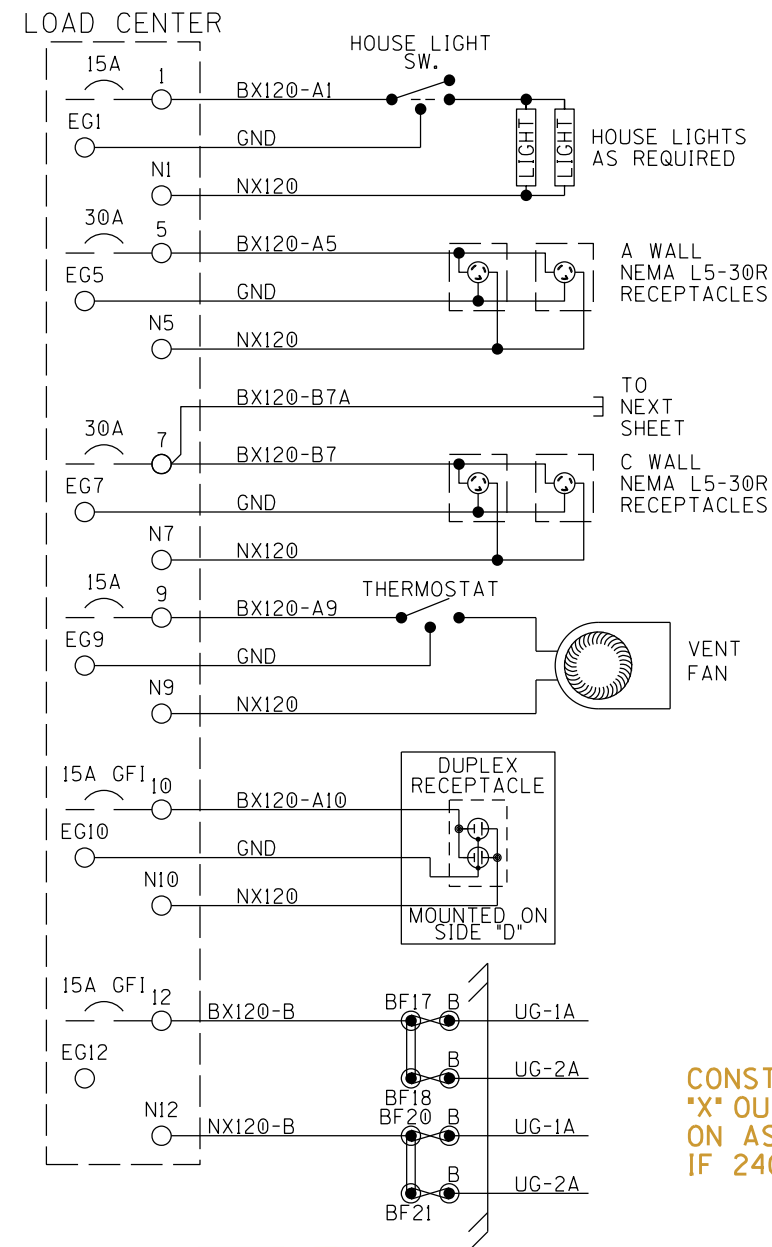
NOTE:

— = 1 INCH TEST LINK

● = INSULATED NUT

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 #10AWG UNLESS NOTED OTHERWISE.



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 REV 01	P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356 HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION	DATE: 07/19/18 FILE: GV00430.04 SHEET 04

NOTE:

 = 1 INCH TEST LINK

 = INSULATED NUT

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 #10AWG UNLESS NOTED OTHERWISE.

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



LOAD CENTER WIRING (240V)



RJ Corman Railroad

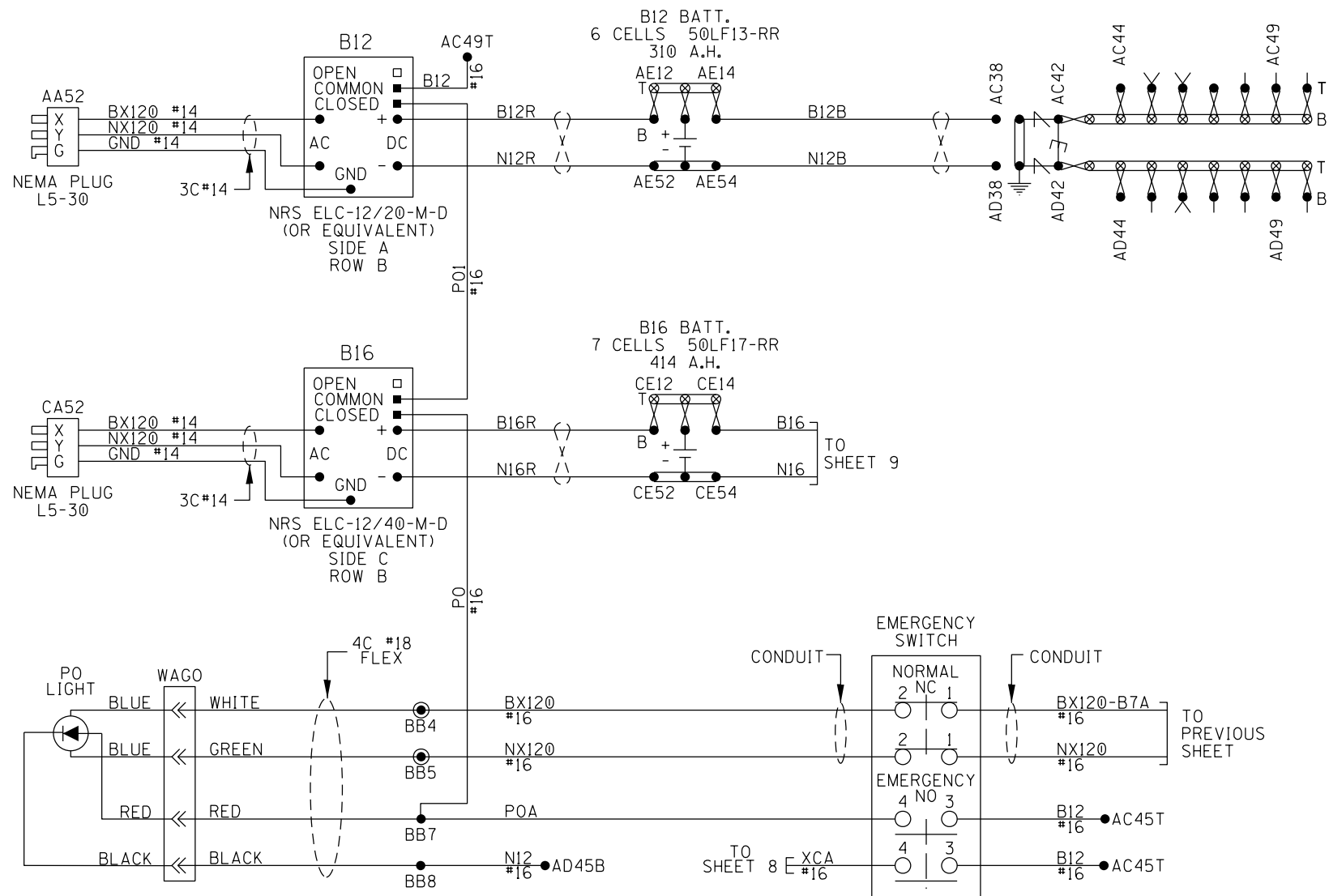
P.O. BOX 788 101 RJ CORMAN DR
NICHOLASVILLE, KY 40356

DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ
REV 01

HORATIO-HARRIS CREEK RD
GREENVILLE, OHIO
M.P. 004.30 D.O.T. 523 347E
GREENVILLE SUBDIVISION



DATE: 07/19/18
FILE: GV00430.04A
SHEET 04A



NOTES:

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

⊗ = 1 INCH TEST LINK

⊃ > ⊂ = TWIST

● = INSULATED NUT



DC POWER



RJ Corman Railroad

P.O. BOX 788 101 RJ CORMAN DR
NICHOLASVILLE, KY 40356



DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ
REV 01

HORATIO-HARRIS CREEK RD
GREENVILLE, OHIO
M.P. 004.30 D.O.T. 523 347E
GREENVILLE SUBDIVISION

DATE: 07/19/18
FILE: GV00430.05
SHEET 05

**	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	# ☆ HIGH
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

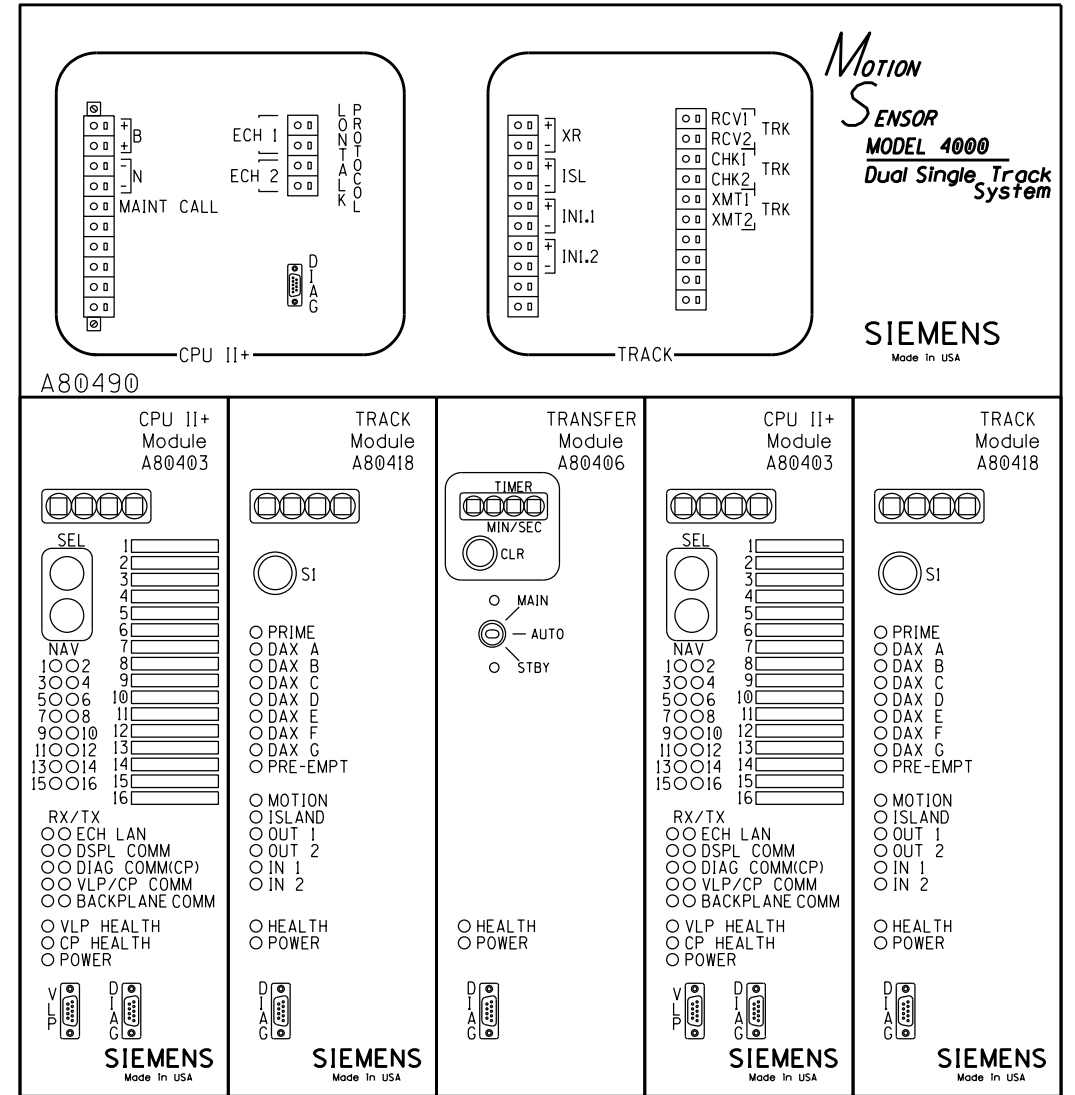
**	PARAMETER	VALUE
26	LOCATION	
26A	*DOT NUMBER	# 523347E
26B	*MILE POST	# 4.30
26C	*SITE NAME	# HORATIO-HARRIS CREEK

MCF NAME	GCP-T6X-02-8.mcf
OCCN	3F28902A

MCF AND OCCN	
MCF NAME	GCP-T6X-02-8.mcf
OCCN	3F28902A

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

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



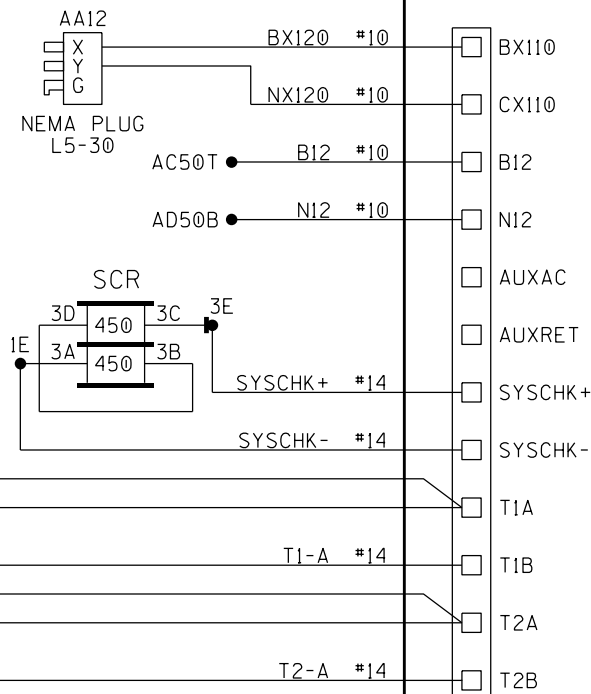
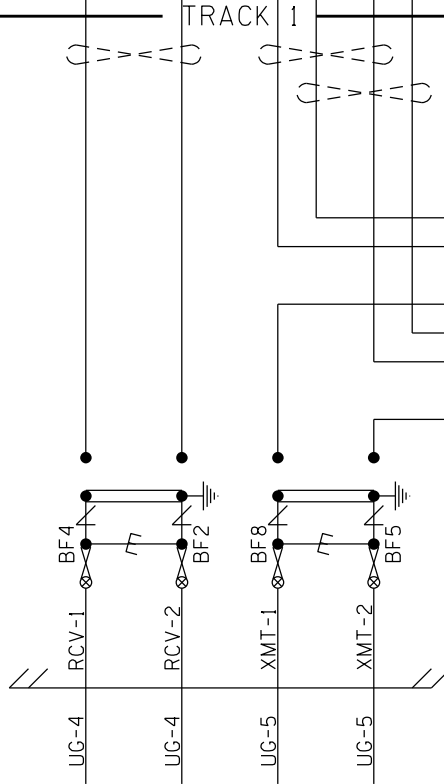
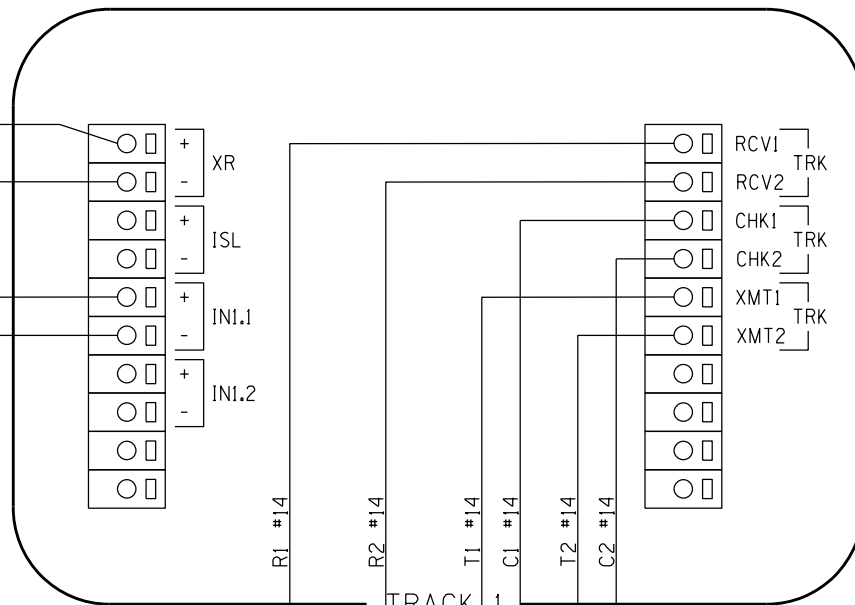
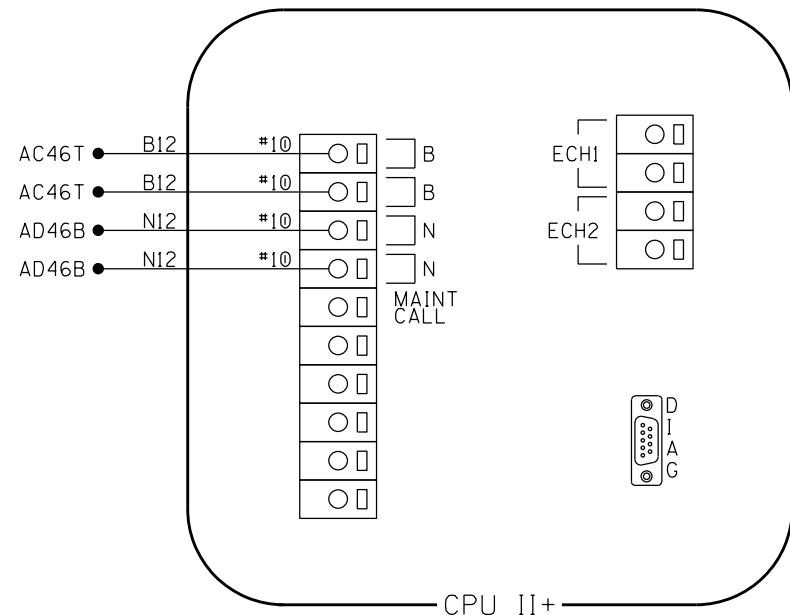
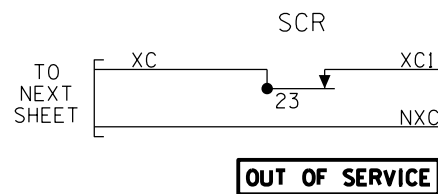
SIDE	A
ROW	B



P.O. BOX 788 101 RJ CORMAN DR
NICHOLASVILLE, KY 40356



DATE: 07/19/18
FILE: GV00430.06
SHEET 06



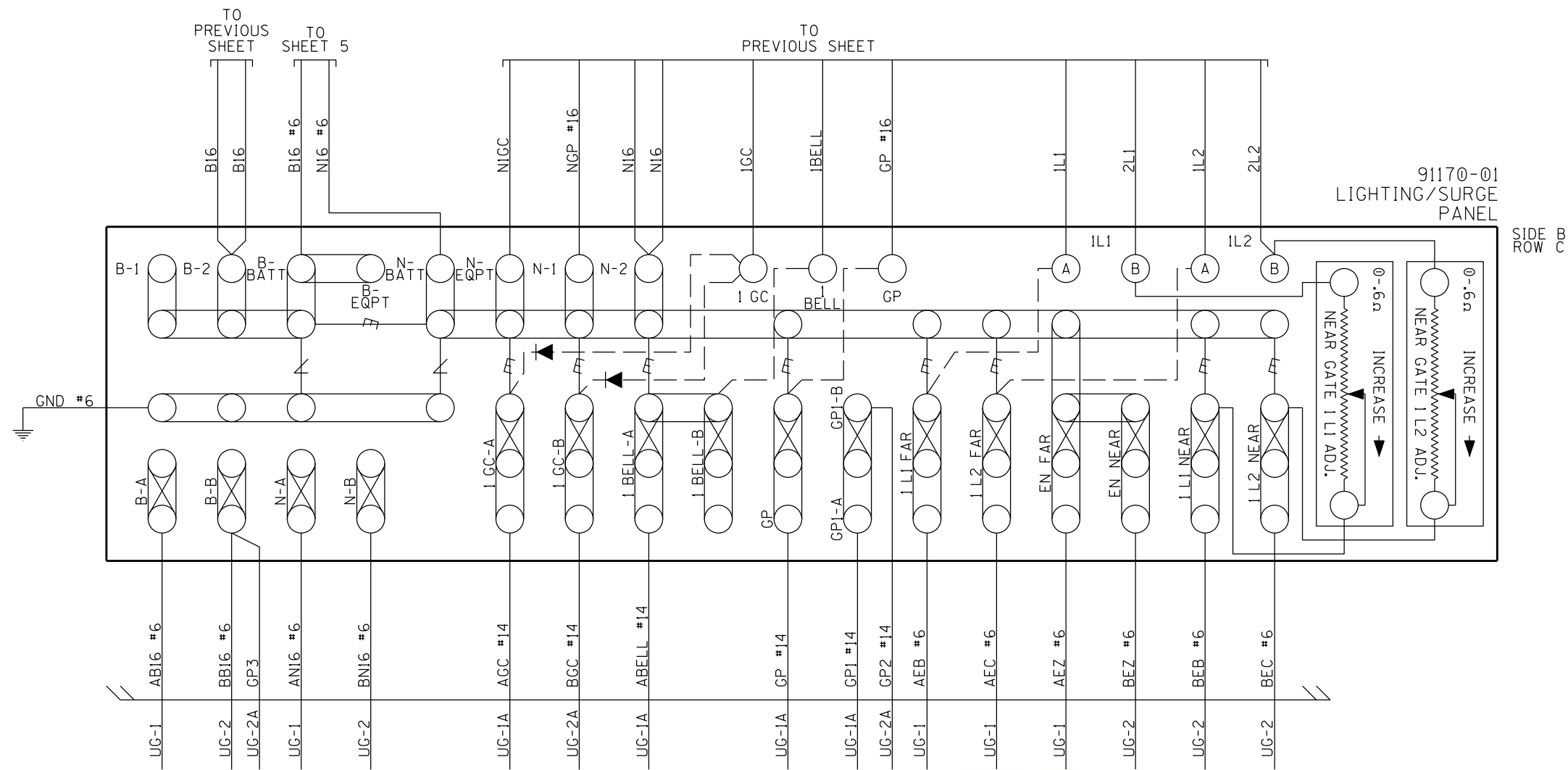
GENESIS
+ - R x 7100
RAIL SHUNT AUGMENTER
P/N 08033-2000



NOTES:
ALL WIRING TO BE #16AWG
UNLESS NOTED OTHERWISE.
⊗ = 1 INCH TEST LINK
⌋ ⌋ ⌋ = TWIST

CONNECTORS FOR TRACK MODULE

DESIGNED BY: DEW DIGITIZED BY: RJC CHECKED BY: RJJ REV 01		
HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION		
DATE: 07/19/18 FILE: GV00430.07 SHEET 07		

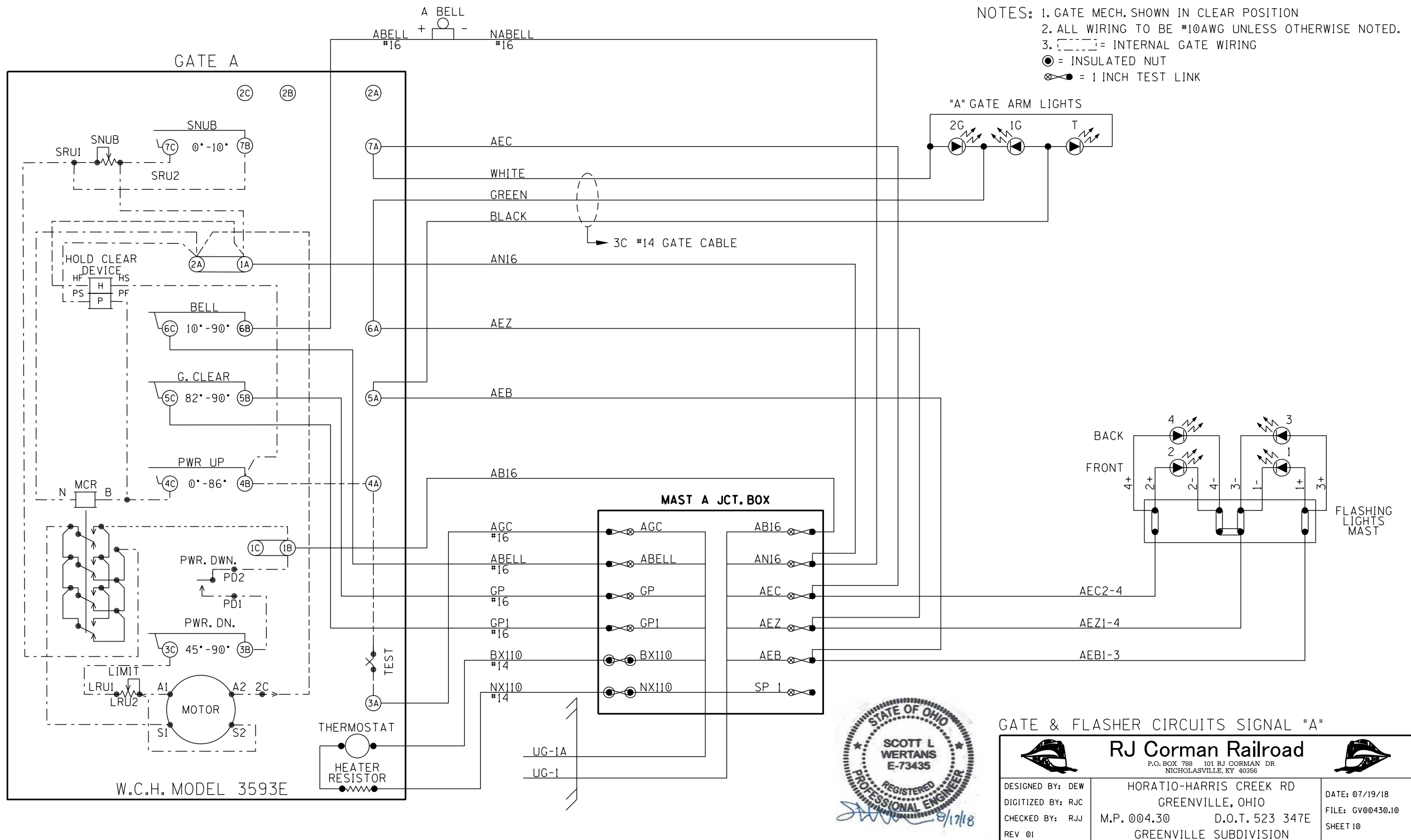


NOTE:
 ALL WIRING TO BE #10AWG
 UNLESS NOTED OTHERWISE.
 — = HEAVY DUTY EQUALIZER 022700-1X
 / = HEAVY DUTY CLEARVIEW ARRESTER 022585-1X



LIGHTING/SURGE PANEL HOOK-UP

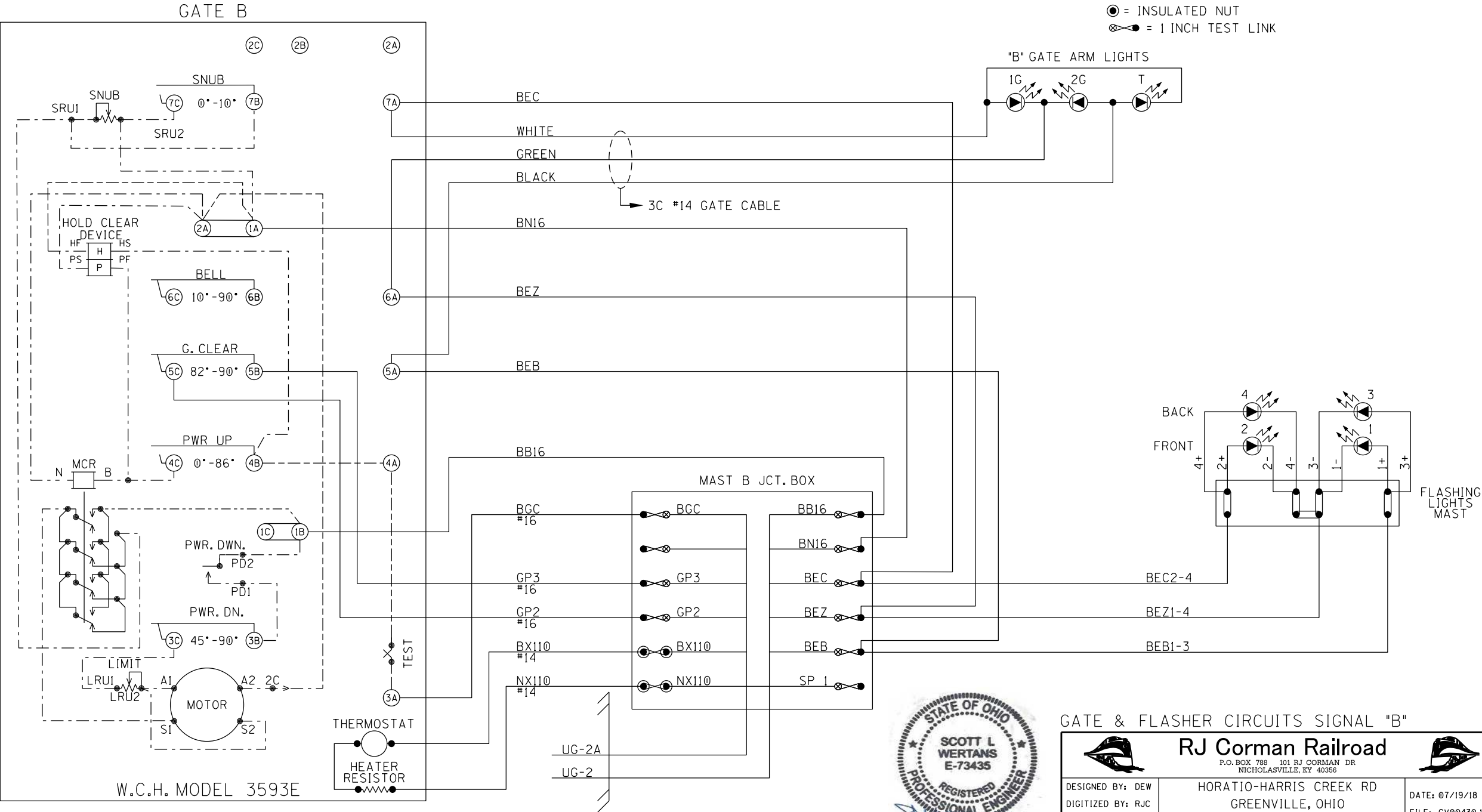
RJ Corman Railroad P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356		
DESIGNED BY: DEW DIGITIZED BY: RJC CHECKED BY: RJJ REV 01	HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION	DATE: 07/19/18 FILE: CV00430.09 SHEET 09



GATE & FLASHER CIRCUITS SIGNAL "A"

RJ Corman Railroad P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356		
DESIGNED BY: DEW DIGITIZED BY: RJC CHECKED BY: RJJ REV 01	HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION	DATE: 07/19/18 FILE: GV00430.10 SHEET 10

- NOTES: 1. GATE MECH. SHOWN IN CLEAR POSITION
 2. ALL WIRING TO BE #10AWG UNLESS OTHERWISE NOTED.
 3. [---] = INTERNAL GATE WIRING
 ● = INSULATED NUT
 ⊗ = 1 INCH TEST LINK



GATE & FLASHER CIRCUITS SIGNAL "B"

 RJ Corman Railroad P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356		
DESIGNED BY: DEW DIGITIZED BY: RJC CHECKED BY: RJJ REV 01	HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION	DATE: 07/19/18 FILE: GV00430.11 SHEET 11

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

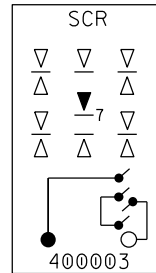
 = Heavy Duty Equalizer
(022700-1X)

 = Clearview
Lightning Arrester
(022585-1X)

 = 1 INCH TEST LINK

 = INSULATED NUT

* = CLOSED DURING WINTER MONTHS



EMERGENCY SWITCH
MOUNTED ON BACKSIDE
OF TERMINAL BOARD

SAFETRAN, ALSTOM (GRS)
RELAY CROSS REFERENCE LIST

SAFETRAN	ALSTOM (GRS)
400003	A62-308

TERMINAL BOARD



RJ Corman Railroad

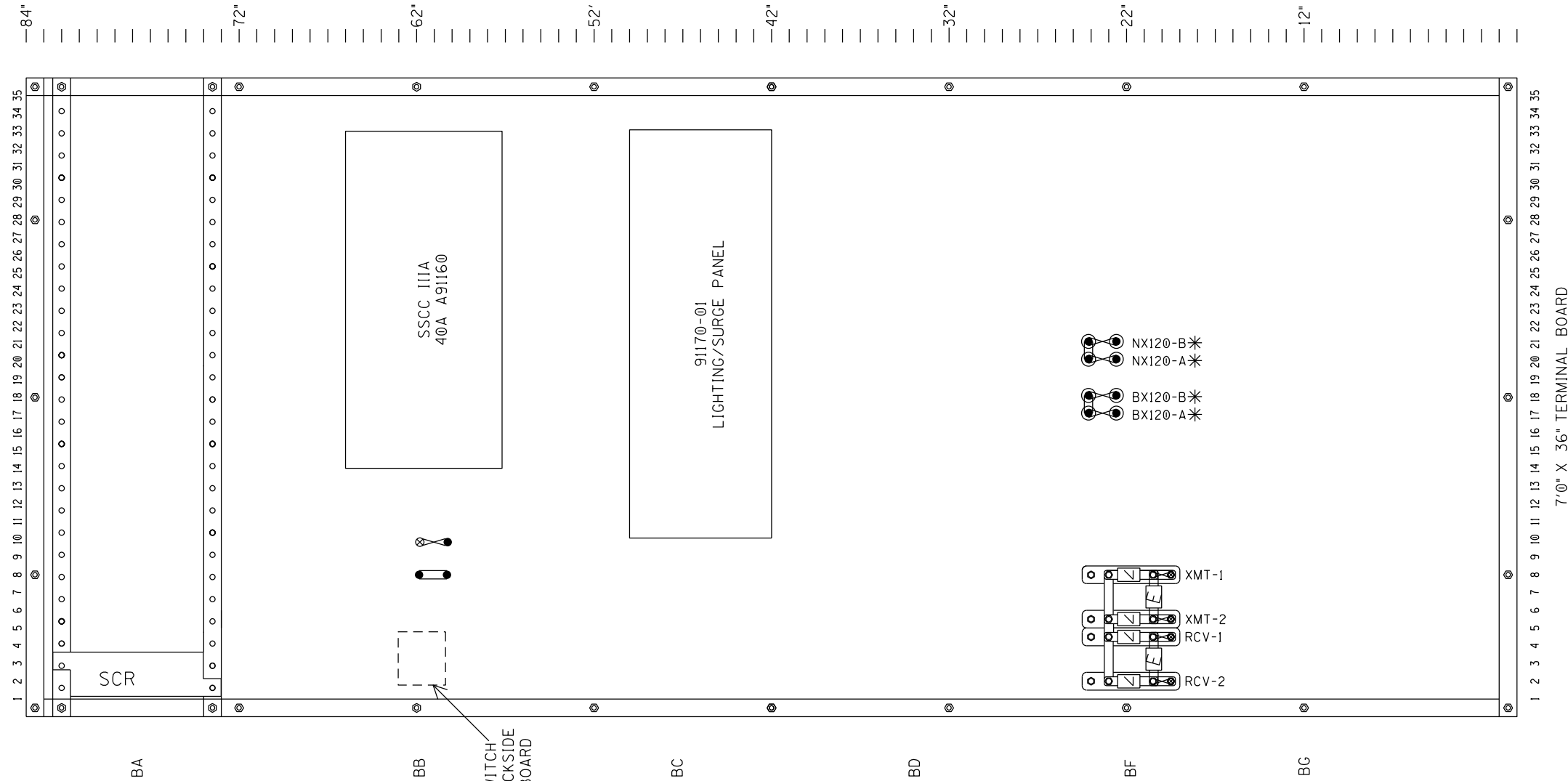
P.O. BOX 788 101 RJ CORMAN DR
NICHOLASVILLE, KY 40356

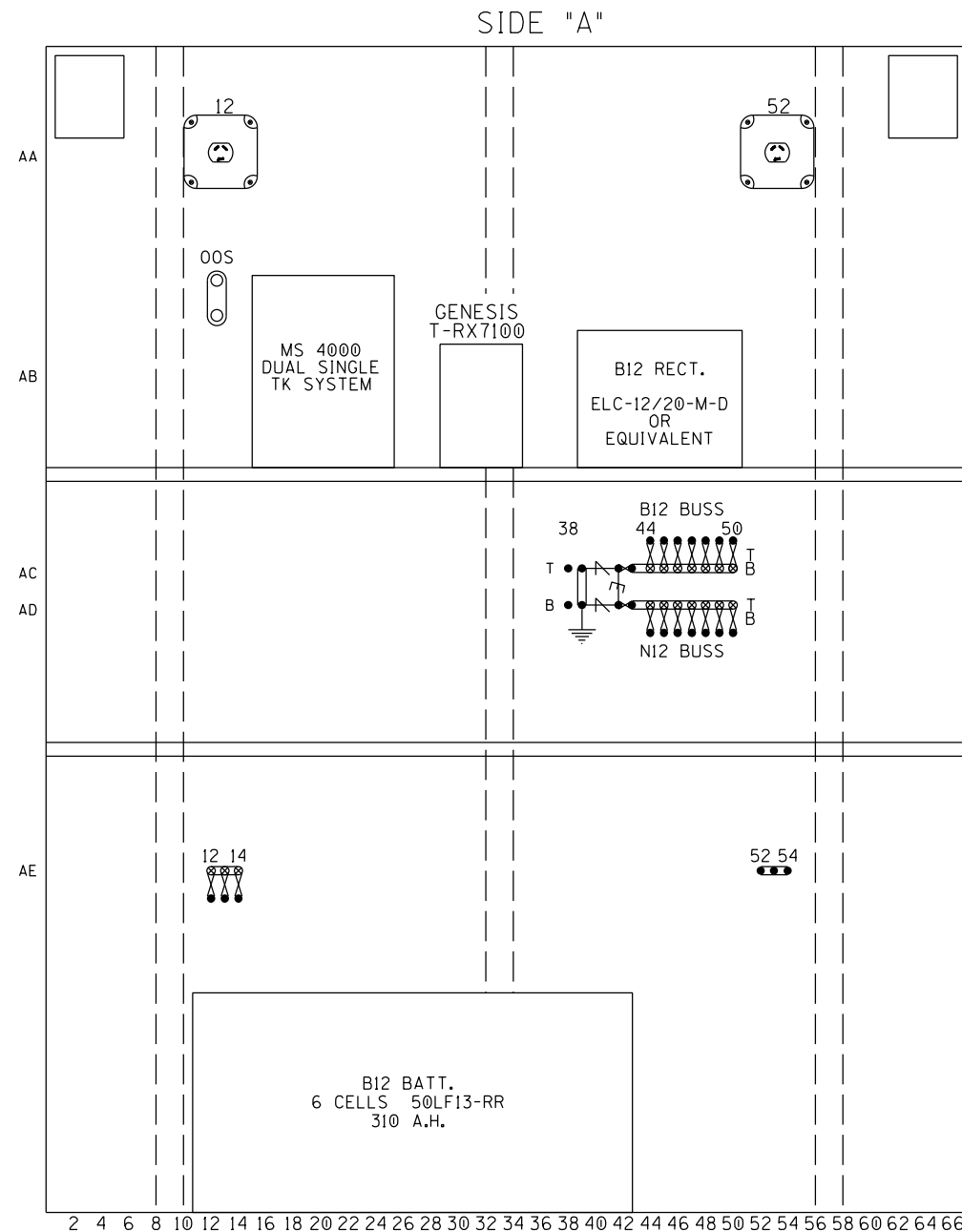
DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ
REV 01

HORATIO-HARRIS CREEK RD
GREENVILLE, OHIO
M.P. 004.30 D.O.T. 523 347E
GREENVILLE SUBDIVISION



DATE: 07/19/18
FILE: GV00430.12
SHEET 12





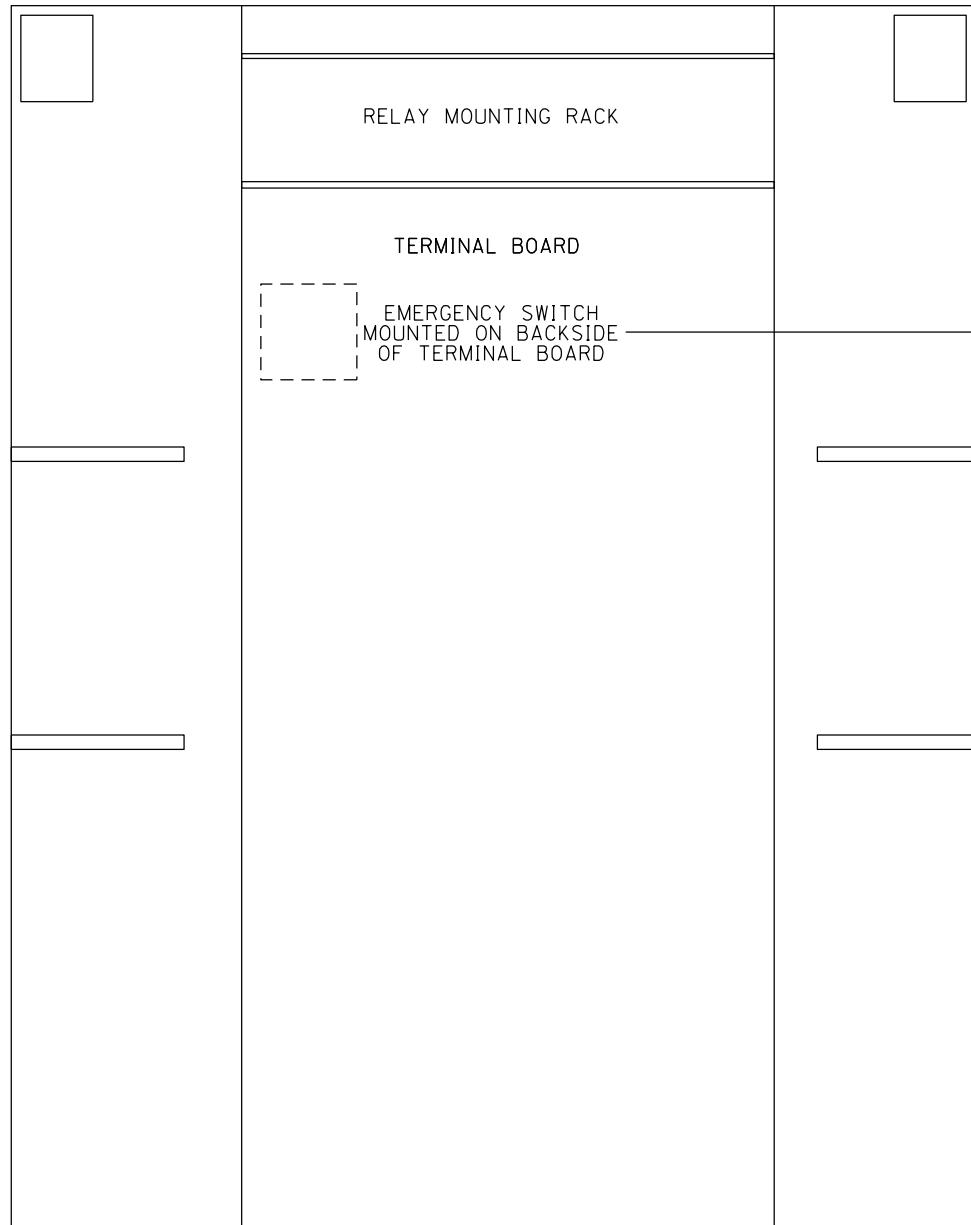
NOTE:
NEMA RECEPTACLES ARE L5-30.
= 1 INCH TEST LINK



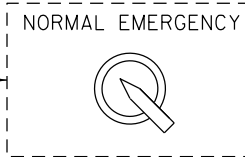
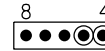
6' X 6' HOUSE - SIDE "A"

	RJ Corman Railroad P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356	
DESIGNED BY: DEW DIGITIZED BY: RJC CHECKED BY: RJJ REV 01	HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION	
		DATE: 07/19/18 FILE: GV00430.13 SHEET 13

SIDE "B"



REAR VIEW
TERMINAL BOARD



6' X 6' HOUSE - SIDE "B"



⦿ = INSULATED NUT



RJ Corman Railroad

P.O. BOX 788 101 RJ CORMAN DR
NICHOLASVILLE, KY 40356

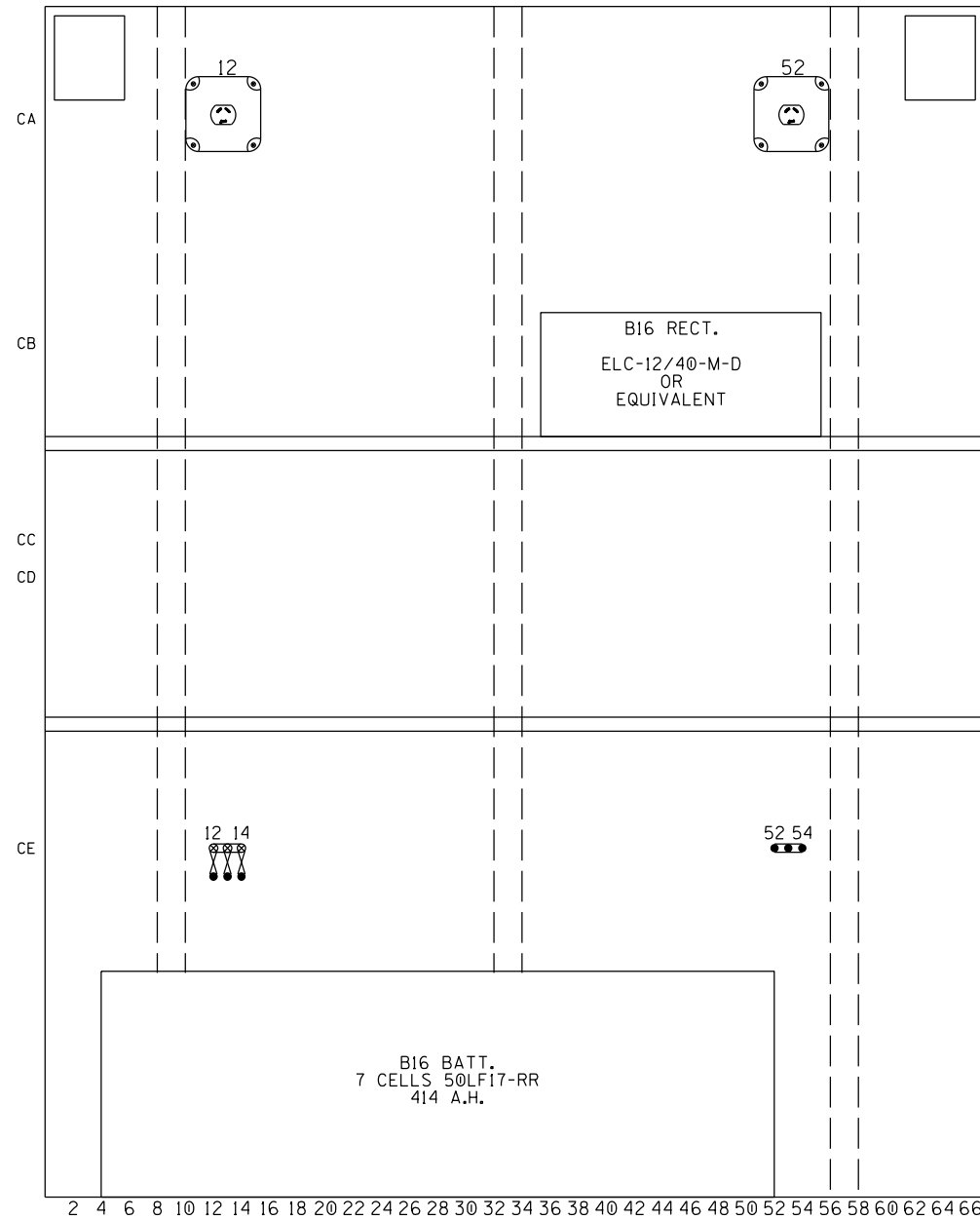


DESIGNED BY: DEW
DIGITIZED BY: RJC
CHECKED BY: RJJ
REV 01

HORATIO-HARRIS CREEK RD
GREENVILLE, OHIO
M.P. 004.30 D.O.T. 523 347E
GREENVILLE SUBDIVISION

DATE: 07/19/18
FILE: GV00430.14
SHEET 14

SIDE "C"



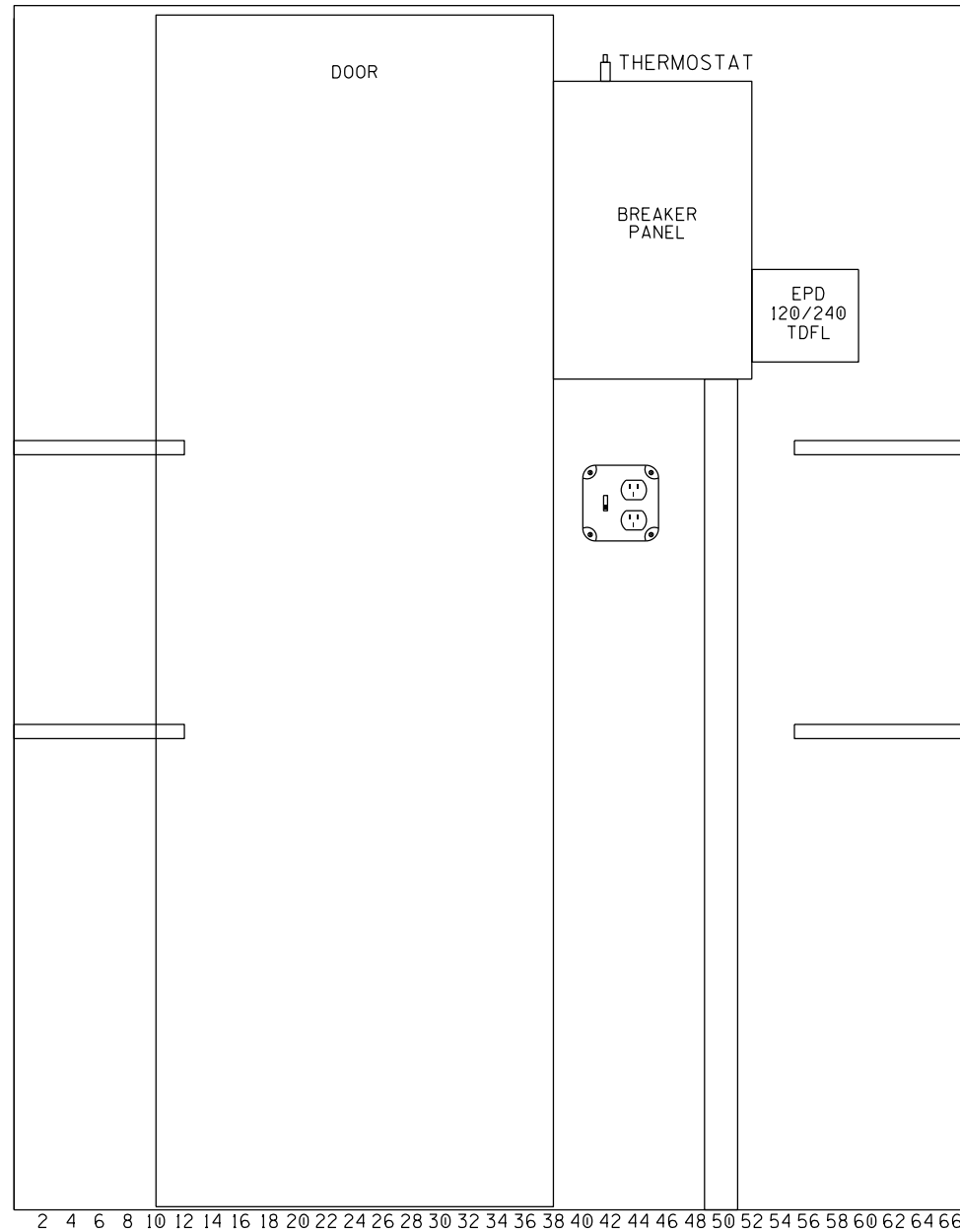
NOTE:
NEMA RECEPTACLES ARE L5-30.
⊗ = 1 INCH TEST LINK



6' X 6' HOUSE - SIDE "C"

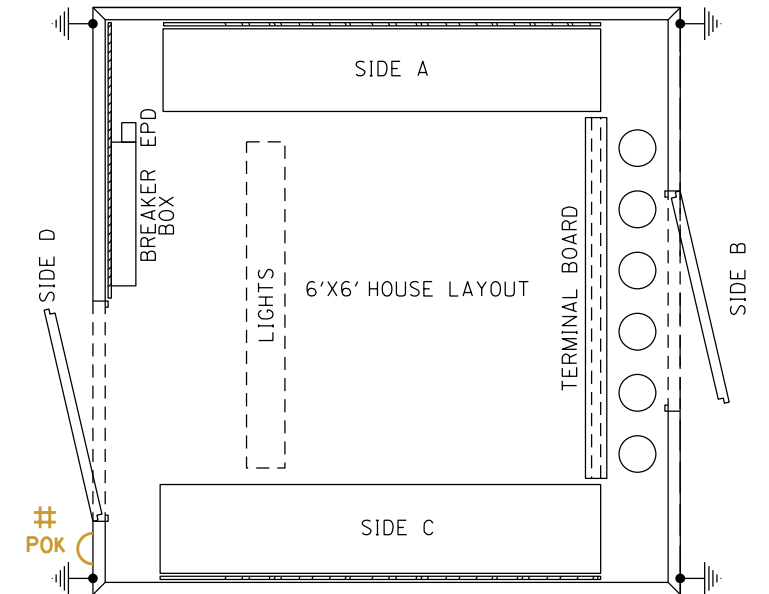
	RJ Corman Railroad P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356		
DESIGNED BY: DEW DIGITIZED BY: RJC CHECKED BY: RJJ REV 01	HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION		
	DATE: 07/19/18 FILE: GV00430.15 SHEET 15		

SIDE "D"



TOP VIEW*

6'X6' HOUSE
(INSULATED)
NOT TO SCALE



* = SIDE D TO TO FACE ROAD

= FIELD TO VERIFY PLACEMENT OF POK.



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

	RJ Corman Railroad P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356	
DESIGNED BY: DEW DIGITIZED BY: RJC CHECKED BY: RJJ REV 01	HORATIO-HARRIS CREEK RD GREENVILLE, OHIO M.P. 004.30 D.O.T. 523 347E GREENVILLE SUBDIVISION	DATE: 07/19/18 FILE: GV00430.16 SHEET 16