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Partner

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July 30, 2025

VIA ELECTRONIC FILING

Matthew L. Homsher, Secretary
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA 17120

**Re: Application of the Pennsylvania Department of Transportation for approval to alter three (3) public crossings by the installation of new warning devices where Main Street, Galley Street and Stauffer Street (DOT Nos. 145 454 B, 145 457 W and 145 462 T, respectively) cross, at grade, two (2) tracks of CSX Transportation Inc. in Dawson Borough, Fayette County, all in accordance with the Federal Grade Crossing Program and the allocation of costs incident thereto
Docket No. A-2024-3049275**

Dear Secretary Homsher:

Enclosed for filing in the above-referenced matter please find the Circuitry Plans of CSX Transportation, Inc, as ordered in paragraph 3 of the Secretarial Letter dated September 27, 2024, for the review of all parties and approval by the Pennsylvania Public Utility Commission. Copies have been served upon all interested parties as indicated on the Certificate of Service.

Sincerely yours,



Benjamin C. Dunlap, Jr.

BCDjr:ino
Enclosures
cc: All Parties of Record

Eric Teeter
Breezeline
320 Bailey Ave.
Uniontown, PA 15401
eteeter@breezeline.com

Mike Zavatchen
Columbia Gas
12 Sandstone Way
Dunbar, PA 15431
mzavatac@nisource.com

Frank McLaughlin
First Energy Corp.
300 Pleasant Valley Road
Connellsville, PA 15425
fmclaug@firstenergycorp.com

Daniel Leonard
Grade Crossing Manager
PennDOT
PO Box 3362
400 North Street
Harrisburg, PA 17105-3362
danleonard@pa.gov

Jeremy Hughes, P.E.
Assistant District Executive - Design
District Bridge Engineer
Engineering District 12-0
Department of Transportation
825 North Gallatin Avenue
Uniontown, PA 15401
jerhughes@pa.gov

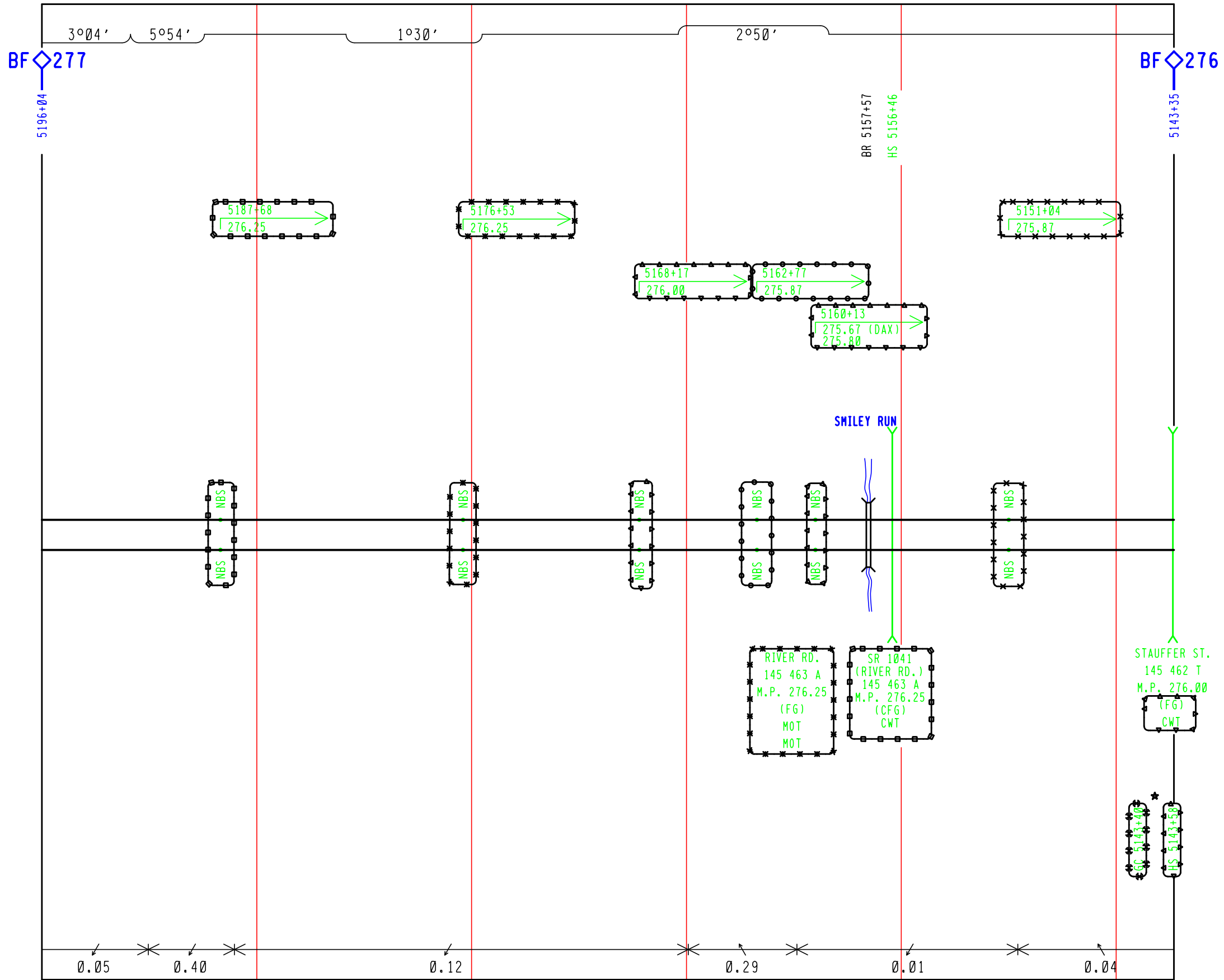
Via U.S. Mail:

CT Corporation
600 N. Second Street, Suite 601
Harrisburg, PA 17101

/s/ Ijeoma Okereke

Ijeoma Okereke

Date: July 30, 2025



★ = DRAFTING ERROR CORRECTION

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019555

PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE: 04-23-25
 CSX # PA2023021
 PRS/AHJ/SAF

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019555

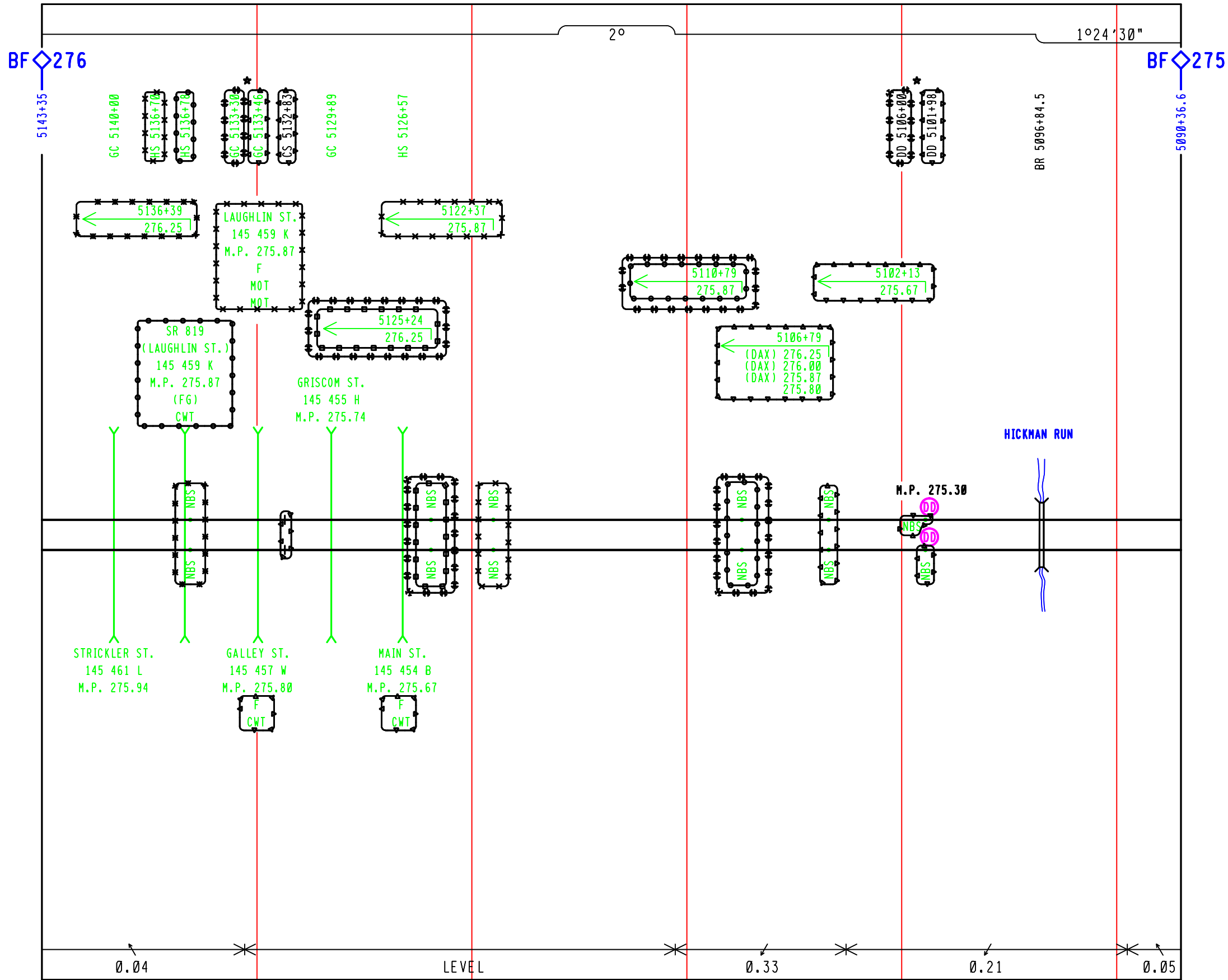
PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE: 03-10-23
 CSX # PA2019555
 PRS/CDT/SAF

PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE: 03-10-23
 CSX # PA2019555
 PRS/TG6/SAF

REVISIONS
11-22-06 IRS PA2006028A
09-21-09 IRS PA2006028

TRACK PLAN HORIZONTAL SCALE: 1 INCH = 500 FEET							
DESIGNED	DIGITIZED	CHECKED	DATE	NEXT FILE	NEXT SH	FILE	SHEET
IRS/LLK	IRS/LLK	IRS/JEK	11-22-06	BF27700	T01	BF27600	T01

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS



THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019555

★ = DRAFTING ERROR CORRECTION
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
 DATE: 04-23-25
 CSX # PA2023021
 PRS/ANJ/SAF

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019555

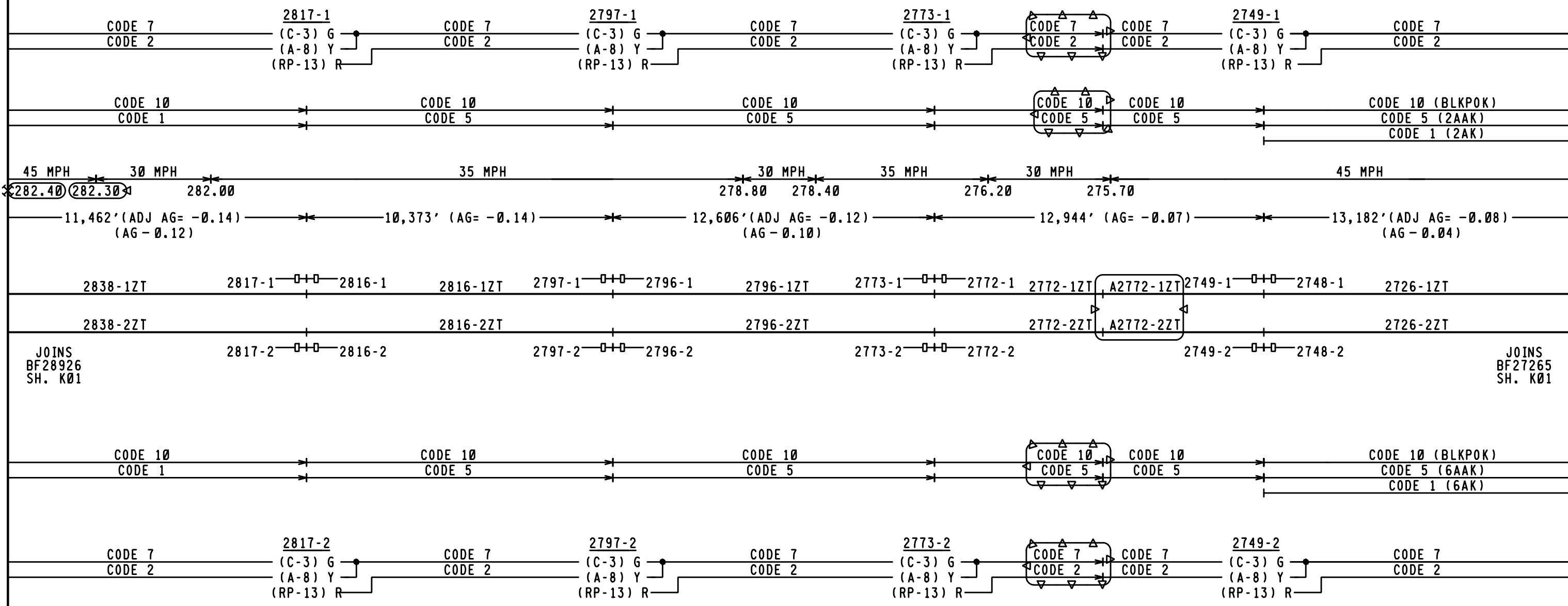
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
 DATE: 03-10-23
 CSX # PA2019555
 PRS/CDT/SAF

PROGRESS
 RAIL SERVICES
 A Caterpillar Company
 DATE: 03-10-23
 CSX # PA2019559
 PRS/TGG/SAF

REVISIONS
11-22-06 IRS PA2006028A
09-21-09 IRS PA2006028
09-22-09 IRS PA2022023

TRACK PLAN HORIZONTAL SCALE, 1 INCH = 500 FEET							
DESIGNED	DIGITIZED	CHECKED	DATE	NEXT FILE	NEXT SH	FILE	SHEET
IRS/LLK	IRS/LLK	IRS/JEK	11-22-06	BF27600	T01	BF27500	T01

← WESTBOUND ASPECTS



SIGNAL ASPECT RULES 1281-1298

GENERAL NOTES:

- ADJ. AG = ADJUSTED AVERAGE GRADE
- AG = AVERAGE GRADE
- EQ = EQUATED DISTANCE
- FS = FOLLOWING STICK
- ERS = ENGINE RETURN STICK
- G = GREEN
- FG = FLASHING GREEN
- Y = YELLOW
- FY = FLASHING YELLOW
- R = RED
- LW = LUNAR WHITE
- DWF = DWARF SIGNAL
- (C-3) = CLEAR
- (AL-4) = APPROACH LIMITED
- (AM-6) = APPROACH MEDIUM
- (AA-5) = ADVANCE APPROACH
- (AS-19) = APPROACH SLOW
- (A-8) = APPROACH
- (R-13) = RESTRICTING
- (RP-13) = RESTRICTED PROCEED
- (S-15) = STOP

- (LC-18) = LIMITED CLEAR
- (LA-10) = LIMITED APPROACH
- (MAA-9) = MEDIUM ADVANCE APPROACH
- (MC-2) = MEDIUM CLEAR
- (MAM-11) = MEDIUM APPROACH MEDIUM
- (MAS-26) = MEDIUM APPROACH SLOW
- (MA-17) = MEDIUM APPROACH
- (SC-24) = SLOW CLEAR
- (SAS-12) = SLOW APPROACH SLOW
- (SA-20) = SLOW APPROACH
- (N) = P.O. SWITCH NORMAL
- (R) = P.O. SWITCH REVERSE

NOTE:
 (1) RESTRICTING ASPECTS FOR FOLLOWING MOVES & ENGINE RETURNS AVAILABLE FOR ALL SIGNALLED ROUTES.

45 MPH MAXIMUM AUTHORIZED SPEED FREIGHT. AUTHORITY FOR MOVEMENT CP/TC#1 TIMETABLE #1 DATED 01-16-25

REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2006028	07-23-07	04-18-09	09-21-09
2	PA2013018	08-17-13	08-16-16	01-05-17
3	PA2019584	10-17-19	03-07-22	07-01-22
4	PA2023021	04-23-25		

PROGRESS
RAIL SERVICES
A Caterpillar Company

DATE: 04-23-25
CSX#, PA2023021
PRS/AMJ/SAF

▽▽ = IN
✕✕ = OUT

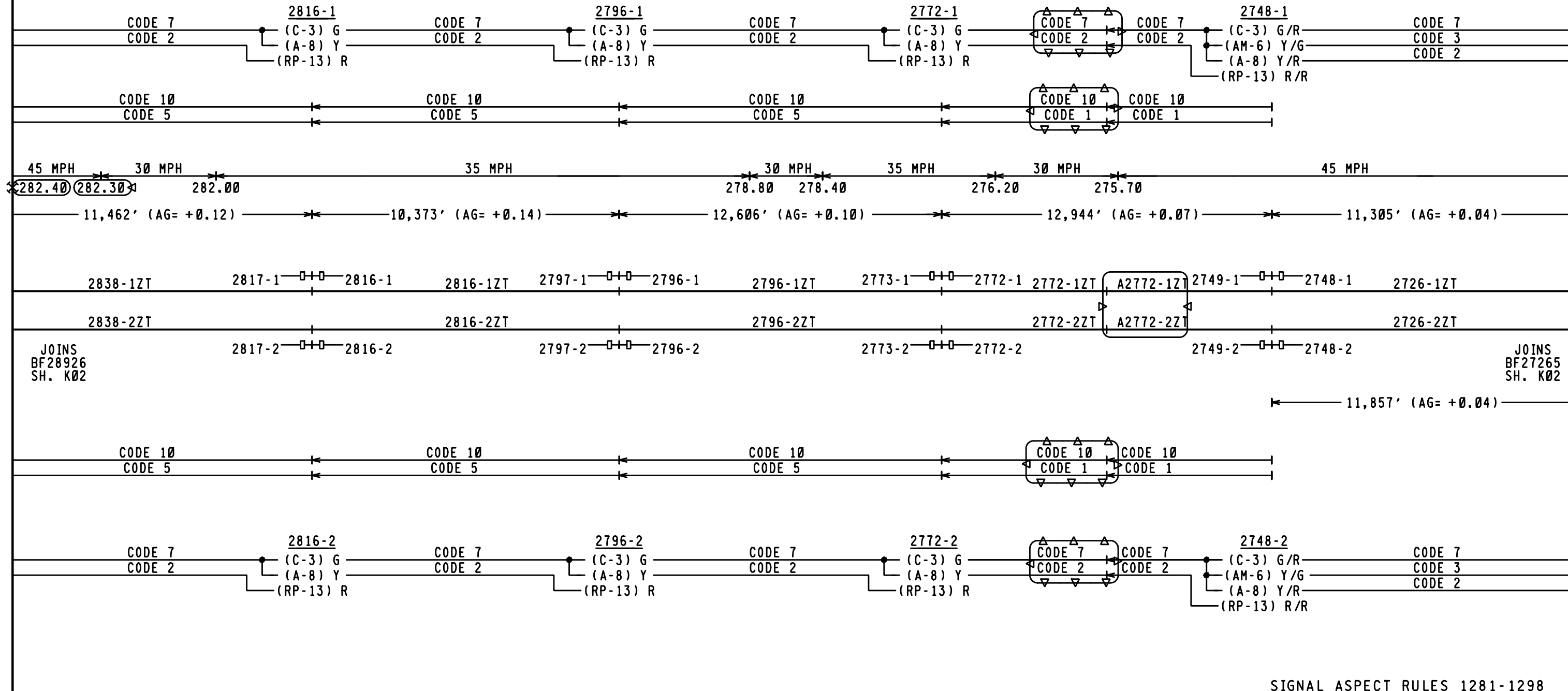
CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

SIG. 2016 & 2017 TO SIG. 2748 & 2749

ASPECT CHART
M.P. BF-281.60 TO M.P. BF-274.81

DESIGNED IRS/JEK	DIGITIZED IRS/JEK	CHECKED IRS/JFK	DATE 07-23-07
DRAWING -----	SHEET NO -----	FILE BF20160	SHEET K01

EASTBOUND ASPECTS →



GENERAL NOTES:
 ADJ. AG = ADJUSTED AVERAGE GRADE
 AG = AVERAGE GRADE
 EQ = EQUATED DISTANCE
 FS = FOLLOWING STICK
 ERS = ENGINE RETURN STICK
 G = GREEN
 FG = FLASHING GREEN
 Y = YELLOW
 FY = FLASHING YELLOW
 R = RED
 LW = LUNAR WHITE
 DWF = DWARF SIGNAL

(C-3) = CLEAR
 (AL-4) = APPROACH LIMITED
 (AM-6) = APPROACH MEDIUM
 (AA-5) = ADVANCE APPROACH
 (AS-19) = APPROACH SLOW
 (A-8) = APPROACH
 (R-13) = RESTRICTING
 (RP-13) = RESTRICTED PROCEED
 (S-15) = STOP

NOTE:
 (1) RESTRICTING ASPECTS FOR FOLLOWING MOVES & ENGINE RETURNS AVAILABLE FOR ALL SIGNALLED ROUTES.
 45 MPH MAXIMUM AUTHORIZED SPEED FREIGHT. AUTHORITY FOR MOVEMENT CP/IC#1
 TIMETABLE #1 DATED 01-16-25

REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2006028	07-23-07	04-18-09	09-21-09
2	PA2013018	08-17-13	08-16-16	01-05-17
3	PA2019584	10-17-19	03-07-22	07-01-22
4	PA2023021	04-23-25		

PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE: 04-23-25
 CSX#, PA2023021
 PRS/AMJ/SAF

SIGNAL ASPECT RULES 1281-1298

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS

SIG. 2816 & 2817 TO SIG. 2748 & 2749

ASPECT CHART
 M.P. BF-281.60 TO M.P. BF-274.81

DESIGNED IRS/JEK	DIGITIZED IRS/JEK	CHECKED IRS/JFK	DATE 07-23-07
DRAWING -----	SHEET NO -----	FILE BF28160	SHEET K02

INDEX CONTENTS

SH. NO.	CONTENTS	REVISION NO.								
		1	2	3	4	5	6	7	8	9
I01	TITLE, NOTES, INDEX AND REVISIONS	X	X	X	X	X				
S01	TRACK AND SIGNAL PLAN	X	X	X						
E01	POWER DISTRIBUTION (LOCATION A)	X	X	X						
E02	POWER DISTRIBUTION (LOCATION B)	X	X	X						
C01	ELECTRO CODE 5 UNIT 1TZX TRACK I/O (LOCATION A)	X	X	X	X	X				
C02	ELECTRO CODE 5 UNIT 2TZX TRACK I/O (LOCATION A)	X	X	X	X	X				
C03	ELECTRO CODE 5 UNIT 1TZX LAMP OUTPUTS (LOCATION A)	X	X	X						
C04	ELECTRO CODE 5 UNIT 2TZX LAMP OUTPUTS (LOCATION A)	X	X	X						
C05	ELECTRO CODE 5 UNIT 1TZX COLORLIGHT BACKPLANE (BP-1) (LOCATION A)	X	X	X						
C06	ELECTRO CODE 5 UNIT 1TZX PROGRAM (LOCATION A)	X	X	X						
C07	ELECTRO CODE 5 UNIT 2TZX COLORLIGHT BACKPLANE (BP-1) (LOCATION A)	X	X	X						
C08	ELECTRO CODE 5 UNIT 2TZX PROGRAM (LOCATION A)	X	X	X						

 = DESIGN COMPLETED
 = REVISION COMPLETED

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED, 03-10-23
 CSX PROJECT # PA2019555

PRELIMINARY

 = NOTE



A Caterpillar Company DATE: 04-23-25
CSX # PA2023021

 = OUT
 = IN
 = IN



A Caterpillar Company DATE: 03-10-23
CSX # PA2019555

 = OUT
 = IN

REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2006028	07-23-07	04-18-09	09-21-09
2	PA2013018	08-17-13	08-16-16	01-05-17
3	PA2019584	10-17-19	03-07-22	07-01-22
4	PA2019555	03-10-23		
5	PA2023021	04-23-25		

TO BE COMPLETED
ON A.I.S.

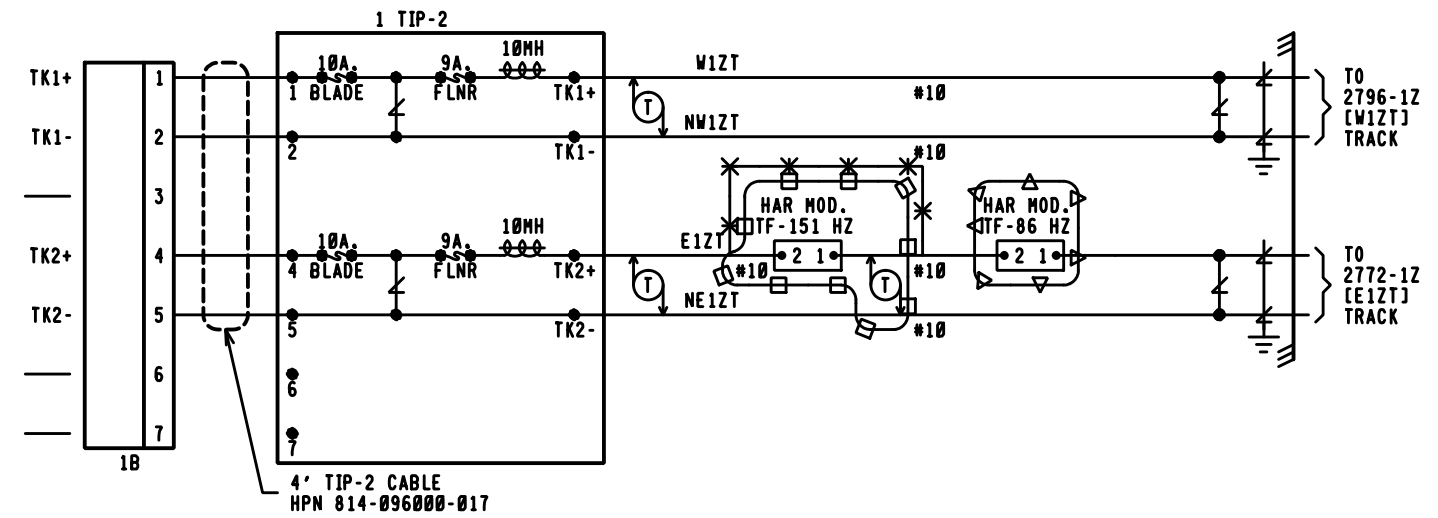
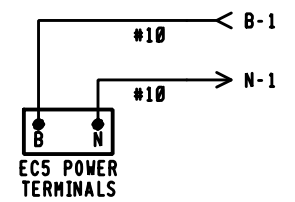
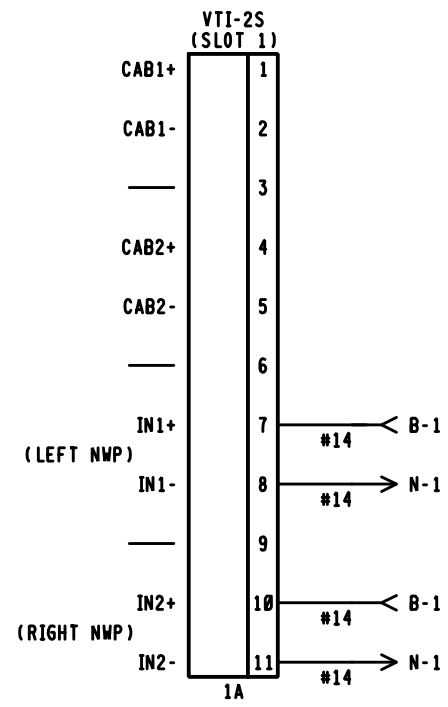

 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

SIGNALS 2772/2773

TITLE, NOTES, INDEX AND REVISIONS
LAUREL RUN, PA H.P. BF-277.27

DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
DRAWING -----	SHEET NO -----	FILE BF27727	SHEET 101

DESIGN DATE *10-17-19*	REV. NO. *3*
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THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019555

PRELIMINARY

PROGRESS
RAIL SERVICES
A Caterpillar Company

DATE: 04-23-25
 CSX #: PA2023021
 PRS/AMJ/SAF

= OUT
 = IN

PROGRESS
RAIL SERVICES
A Caterpillar Company

DATE: 03-10-23
 CSX #: PA2019555
 PRS/CDT/SAF

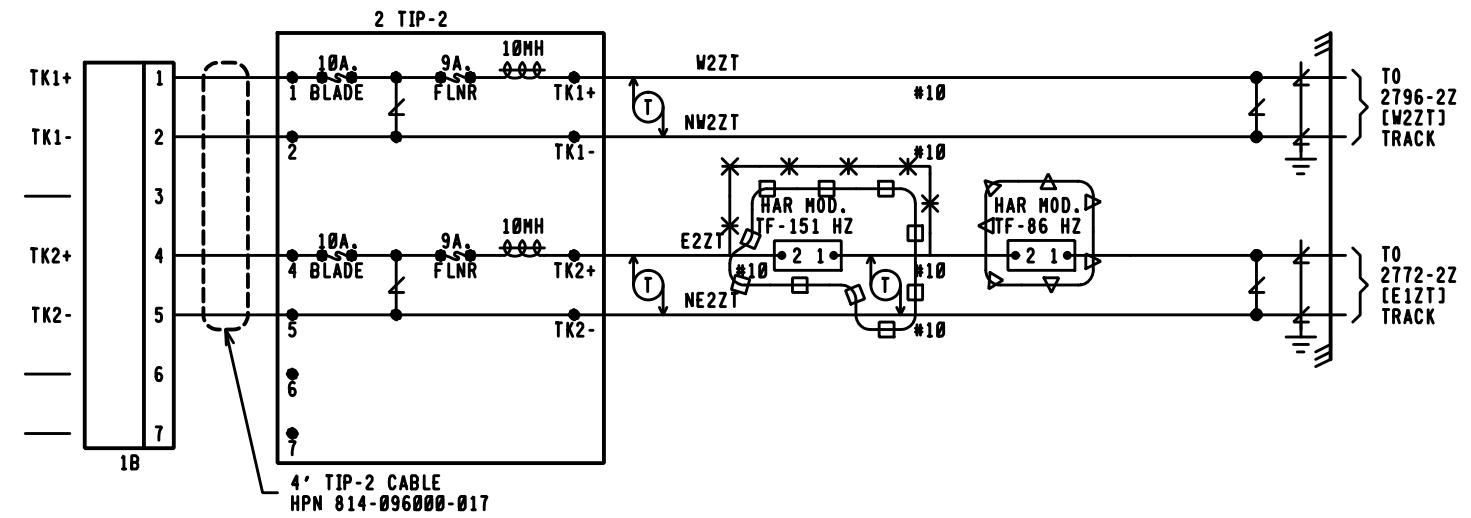
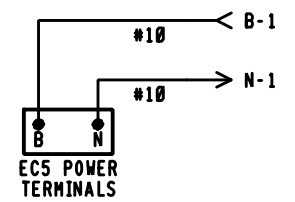
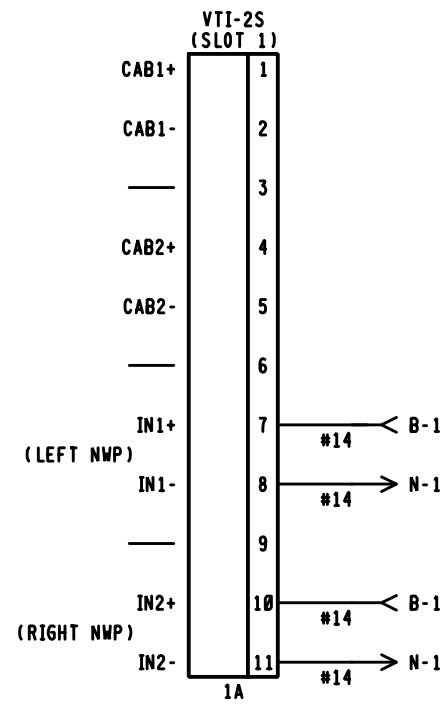
= OUT
 = IN

NOTE:
 [] = TAGGING PURPOSES ONLY

LOCATION A
 EC5 UNIT 1T2U TRACK I/O

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
SIGNALS 2772/2773			
ELECTRO CODE 5 UNIT 1T2U TRACK I/O LAUREL RUN, PA M.P. BF-277.27			
DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
DRAWING -----	SHEET NO -----	FILE BF27727	SHEET C01

DESIGN DATE 08-17-13	REV. NO. 2
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THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019555

PRELIMINARY

PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE: 04-23-25
 CSX #: PA2023021
 PRS/AMJ/SAF

Legend:
 * = OUT
 ▽ = IN

PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE: 03-10-23
 CSX #: PA2019555
 PRS/CDT/SAF

Legend:
 * = OUT
 ▽ = IN

NOTE:
 [] = TAGGING PURPOSES ONLY

LOCATION A
 EC5 UNIT 2TZU TRACK I/O

CSX TRANSPORTATION			
RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
SIGNALS 2772/2773			
ELECTRO CODE 5 UNIT 2TZU TRACK I/O LAUREL RUN, PA M.P. BF-277.27			
DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
DRAWING -----	SHEET NO -----	FILE BF27727	SHEET C02

DESIGN DATE 08-17-13	REV. NO. 2
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REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2006028	07-23-07	04-18-09	09-21-09
2	PA2019559	03-10-23		
3	PA2019555	03-10-23		
4	PA2023021	04-23-25		

TO BE COMPLETED ON A.I.S.

INDEX CONTENTS

SH. NO.	DESCRIPTION	REVISION NO.								
		1	2	3	4	5	6	7	8	9
I01	INDEX AND REVISIONS	X	X	X	X					
S01	TRACK AND SIGNAL PLAN	X	X	X	X					
E01	POWER DISTRIBUTION	X	X	X	X					
C01	CROSSING DETECTION CIRCUITRY	X	X	X	X					
C02	DETECTION DEVICE PROGRAM	X	X	X	X					
C03	CROSSING WARNING DEVICE CIRCUITRY	X	X	X	X					
C04	CROSSING WARNING DEVICE CIRCUITRY	X	X	X	X					
C05	RECORDER CIRCUITS	X	X	X	X					
C06	RECORDER PROGRAM	X	X	X	X					

X = DESIGN COMPLETED
 X = REVISION COMPLETED

E02	ELECTROLOGIXS XP4 MODULE LAYOUT									
C01	XP4 CROSSING DETECTION AND I/O CIRCUITS									
C02	XP4 SET UP INFORMATION									
C03	CROSSING WARNING DEVICE GATE CIRCUITRY									
C04	CROSSING WARNING DEVICE LIGHT CIRCUITRY									
C05	SEAR II CIRCUITS									
C06	SEAR II CONFIGURATION AND FUNCTIONS									
C07	SEAR II CHANNELS									
C08	WAYSIDE ACCESS GATEWAY									
C09	CROSSING COMMUNICATIONS EQUIPMENT									

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED, 03-10-23
 CSX PROJECT # PA2019559

PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE, 03-10-23
 CSX#, PA2019555
 PRS/CDT/SAF

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED, 03-10-23
 CSX PROJECT # PA2019555

PRELIMINARY

△ = NOTE

PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE, 04-23-25
 CSX#, PA2023021
 PRS/AMJ/SAF

PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE, 03-10-23
 CSX#, PA2019559
 PRS/TG6/SAF

RIVER RD. 145463A

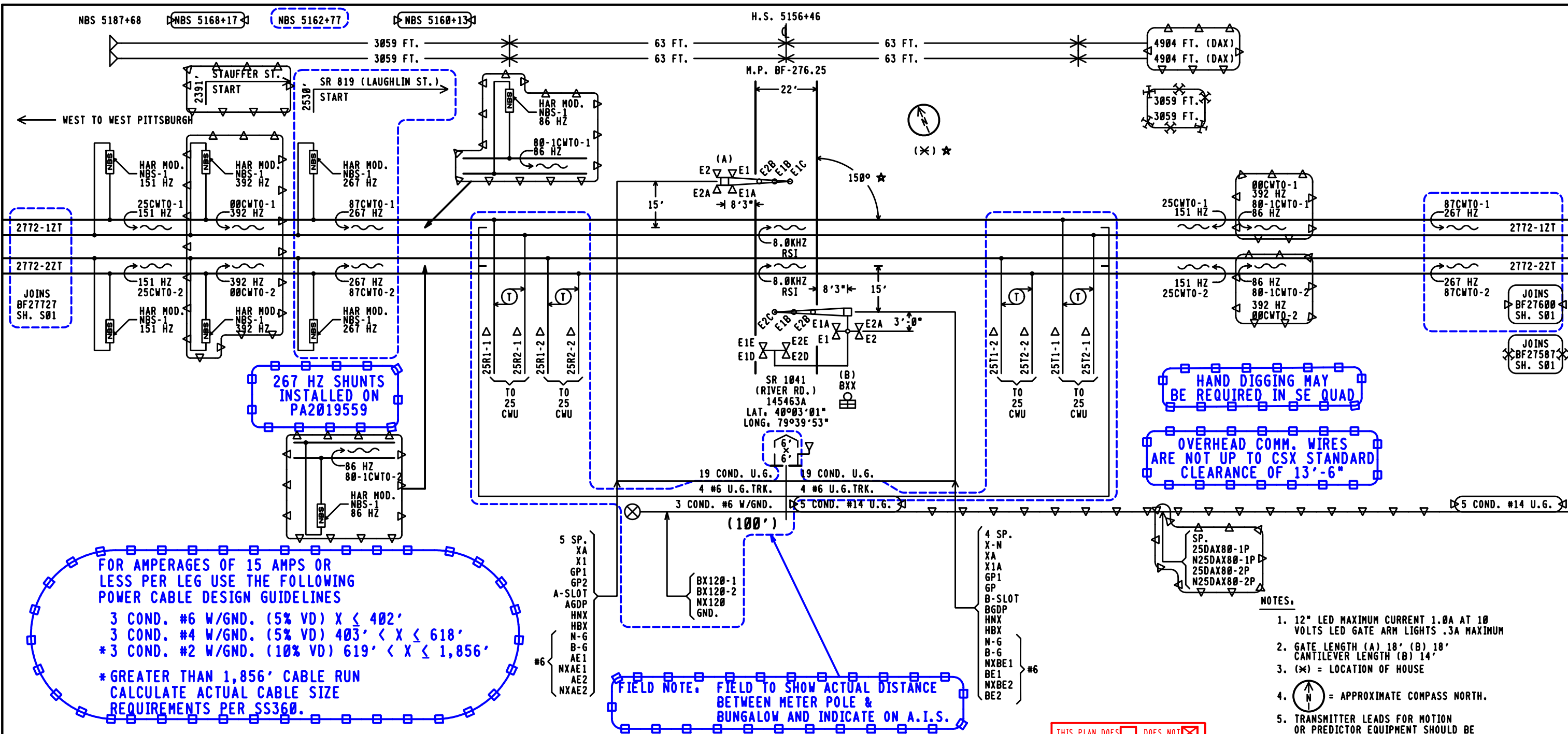
CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

SR 1041 (RIVER RD.) 145463A

INDEX AND REVISIONS
 DAWSON, PA M.P. BF-276.25

DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
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DESIGN DATE -----	REV. NO. 1	DRAWING -----	SHEET NO -----	FILE BF27625	SHEET 101
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FOR AMPERAGES OF 15 AMPS OR LESS PER LEG USE THE FOLLOWING POWER CABLE DESIGN GUIDELINES

3 COND. #6 W/GND. (5% VD) $X \leq 402'$
 3 COND. #4 W/GND. (5% VD) $403' < X \leq 618'$
 * 3 COND. #2 W/GND. (10% VD) $619' < X \leq 1,856'$

* GREATER THAN 1,856' CABLE RUN CALCULATE ACTUAL CABLE SIZE REQUIREMENTS PER SS360.

APPROACH LENGTHS TABLE	EASTBOUND #1 MAIN CWT	WESTBOUND #1 MAIN CWT	EASTBOUND #2 MAIN CWT	WESTBOUND #2 MAIN CWT
DC, AFO, TYPE C, MOTION, CWT, OR OTHER	25	25	25	25
STANDARD MINIMUM WARNING TIME IN SECONDS	5	5	5	5
ROADWAY GATE TIME IN SECONDS	9	9	9	9
CLEARANCE TIME IN SECONDS	0	0	0	0
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS *	39 SEC.	39 SEC.	39 SEC.	39 SEC.
PRESCRIBED WARNING TIME FOR TRAINS AT TIME TABLE SPEED	0	0	0	0
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	4	4	4	4
CONTROL EQUIPMENT DECISION TIME IN SECONDS	43 SEC.	43 SEC.	43 SEC.	43 SEC.
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	45	45	45	45
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	5	5	5	5
BUFFER SPEED IN MILES PER HOUR	50	50	50	50
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	3059	3059	3059	3059
APPROACH DISTANCE TO ISLAND EDGE IN FEET	63	63	63	63
HALF WIDTH OF ISLAND IN FEET	276.84	275.66	276.84	275.66
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT				

* AUTHORIZING AGENCY: "NONE"
 * DATE OF REQUIREMENT: "NONE"
 * AMOUNT OF TIME (SEC.): "NONE"

FIELD NOTE: FIELD TO SHOW ACTUAL DISTANCE BETWEEN METER POLE & BUNGALOW AND INDICATE ON A.I.S.

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED, XX/XX/XX
 CSX PROJECT # PA2019559

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED, 03-10-23
 CSX PROJECT # PA2019555

PRELIMINARY
PROGRESS RAIL SERVICES
 A Caterpillar Company
 DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

* = EXISTING PER SURVEY
 Δ = NOMENCLATURE CHANGE ONLY
 [Symbol] = EXISTING
 [Symbol] = NOTE
PROGRESS RAIL SERVICES
 A Caterpillar Company
NEW WORK
 DATE: 03-10-23
 CSX#: PA2019555
 PRS/CDT/SAF

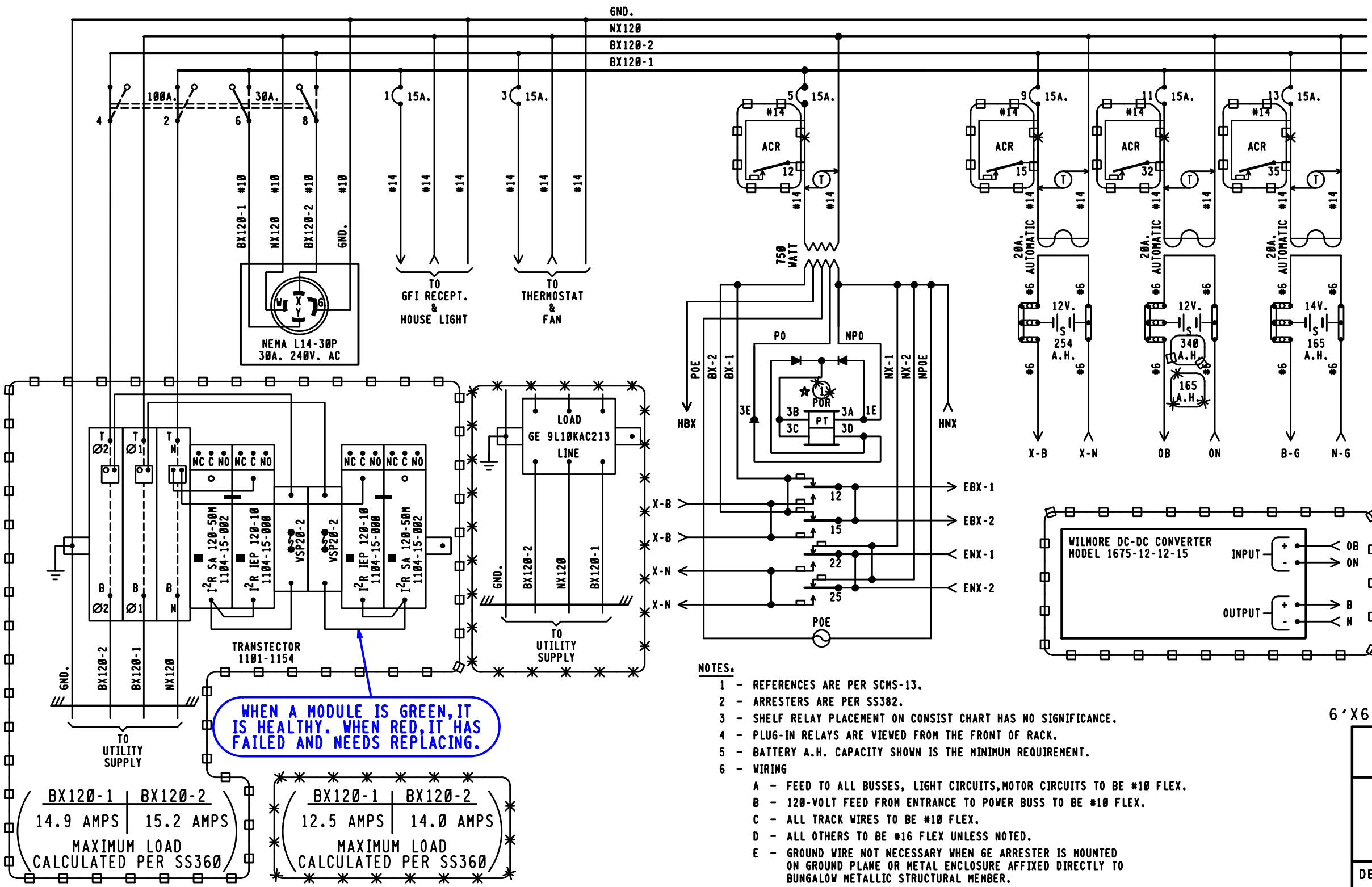
- NOTES:**
- 12" LED MAXIMUM CURRENT 1.0A AT 10 VOLTS LED GATE ARM LIGHTS .3A MAXIMUM
 - GATE LENGTH (A) 18' (B) 18' CANTILEVER LENGTH (B) 14'
 - (*) = LOCATION OF HOUSE
 - [Symbol] = APPROXIMATE COMPASS NORTH.
 - TRANSMITTER LEADS FOR MOTION OR PREDICTOR EQUIPMENT SHOULD BE CONNECTED ON THE BUNGALOW OR SHORT LEAD SIDE OF THE CROSSING.
 - ISLAND TRACK LEADS SHOULD BE CONNECTED 50 FEET FROM ROAD EDGE BUT ON NARROW ROADS (20' OR LESS) ISLAND LENGTH SHALL BE 120 FEET.
 - WARNING SYSTEM APPROACH CIRCUIT DISTANCES ARE TO BE MEASURED FROM THE ISLAND TRACK CONNECTIONS.

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS
SR 1041 (RIVER RD.) 145463A
 TRACK AND SIGNAL PLAN
 DAWSON, PA H.P. BF-276.25

DESIGNED PRS/CDT	DIGITIZED PRS/CDT	CHECKED PRS/SAF	DATE 03-10-23
DRAWING	SHEET NO	FILE BF27625	SHEET S01(A)

DESIGN DATE 03-10-23	REV. NO. 3
04-23-25	4

TOP ROW																				
25DAX80-1PR			25DAX80-2PR			XR		XPR		GPR		EOR		POR		ACR				
12			12		B8	12	FB	B8	22	F	B36	12	FB	B81	12	FB	B62	12	B	B77
15		C30	15		C30	15	FB	C30	25	F	C30	15	FB	C30	15	FB	C30	15	B	C30
22			22			22						32	FB		22	FB		22		
23	F		23	F		23						35	FB		25	FB		25		
25	F		25	F		25	F								32	F		32	B	
32			32			32									35			35	B	
35	F		35	F		35														



WHEN A MODULE IS GREEN, IT IS HEALTHY. WHEN RED, IT HAS FAILED AND NEEDS REPLACING.

BX120-1 | BX120-2
14.9 AMPS | 15.2 AMPS
MAXIMUM LOAD
CALCULATED PER SS360

BX120-1 | BX120-2
12.5 AMPS | 14.0 AMPS
MAXIMUM LOAD
CALCULATED PER SS360

NOTES:

- REFERENCES ARE PER SCMS-13.
- ARRESTERS ARE PER SS382.
- SHELF RELAY PLACEMENT ON CONSIST CHART HAS NO SIGNIFICANCE.
- PLUG-IN RELAYS ARE VIEWED FROM THE FRONT OF RACK.
- BATTERY A.H. CAPACITY SHOWN IS THE MINIMUM REQUIREMENT.
- WIRING
 - A - FEED TO ALL BUSSES, LIGHT CIRCUITS, MOTOR CIRCUITS TO BE #10 FLEX.
 - B - 120-VOLT FEED FROM ENTRANCE TO POWER BUSS TO BE #10 FLEX.
 - C - ALL TRACK WIRES TO BE #10 FLEX.
 - D - ALL OTHERS TO BE #16 FLEX UNLESS NOTED.
 - E - GROUND WIRE NOT NECESSARY WHEN GE ARRESTER IS MOUNTED ON GROUND PLANE OR METAL ENCLOSURE AFFIXED DIRECTLY TO BUNGALOW METALLIC STRUCTURAL MEMBER.
- CIRCUIT INTERRUPTERS 2 & 4 ARE MECHANICALLY INTERLOCKED WITH CIRCUIT INTERRUPTERS 6 & 8.

THIS PLAN DOES DOES NOT
SUPERSEDE PLAN DATED, 03-10-23
CSX PROJECT # PA2019555

PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company

DATE: 04-23-25
CSX # PA2023021
PRS/AMJ/SAF

★ = DRAFTING ERROR CORRECTION
PROGRESS
RAIL SERVICES
A Caterpillar Company
DATE: 03-10-23
CSX # PA2019555
PRS/CDT/SAF

RIVER RD. 145463A

6'X6' RELAY HOUSE W/FARADAY SHIELD

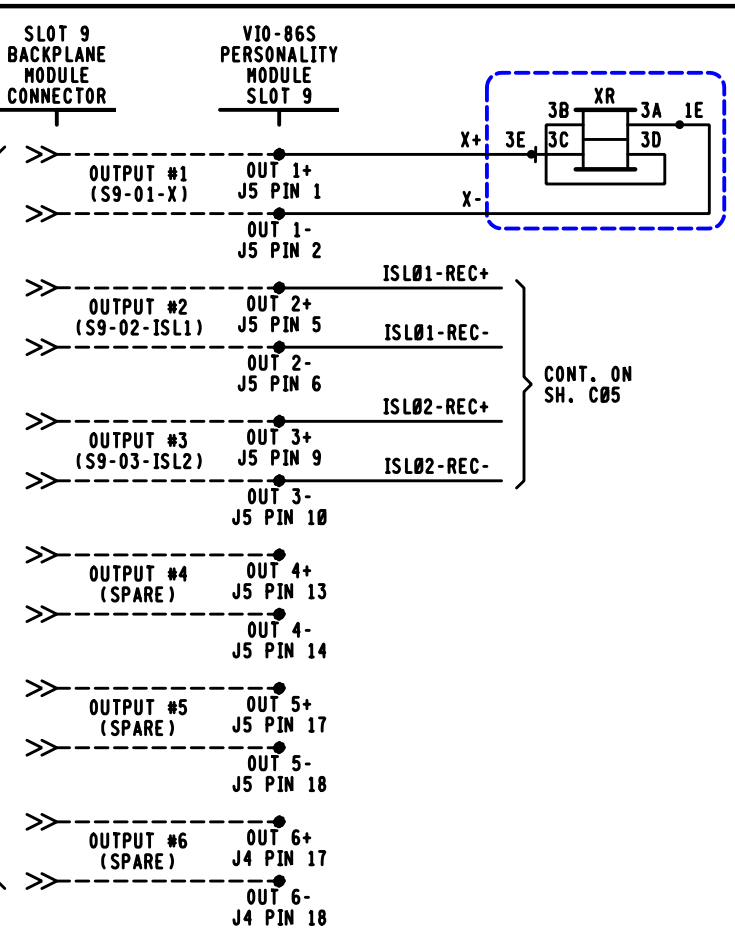
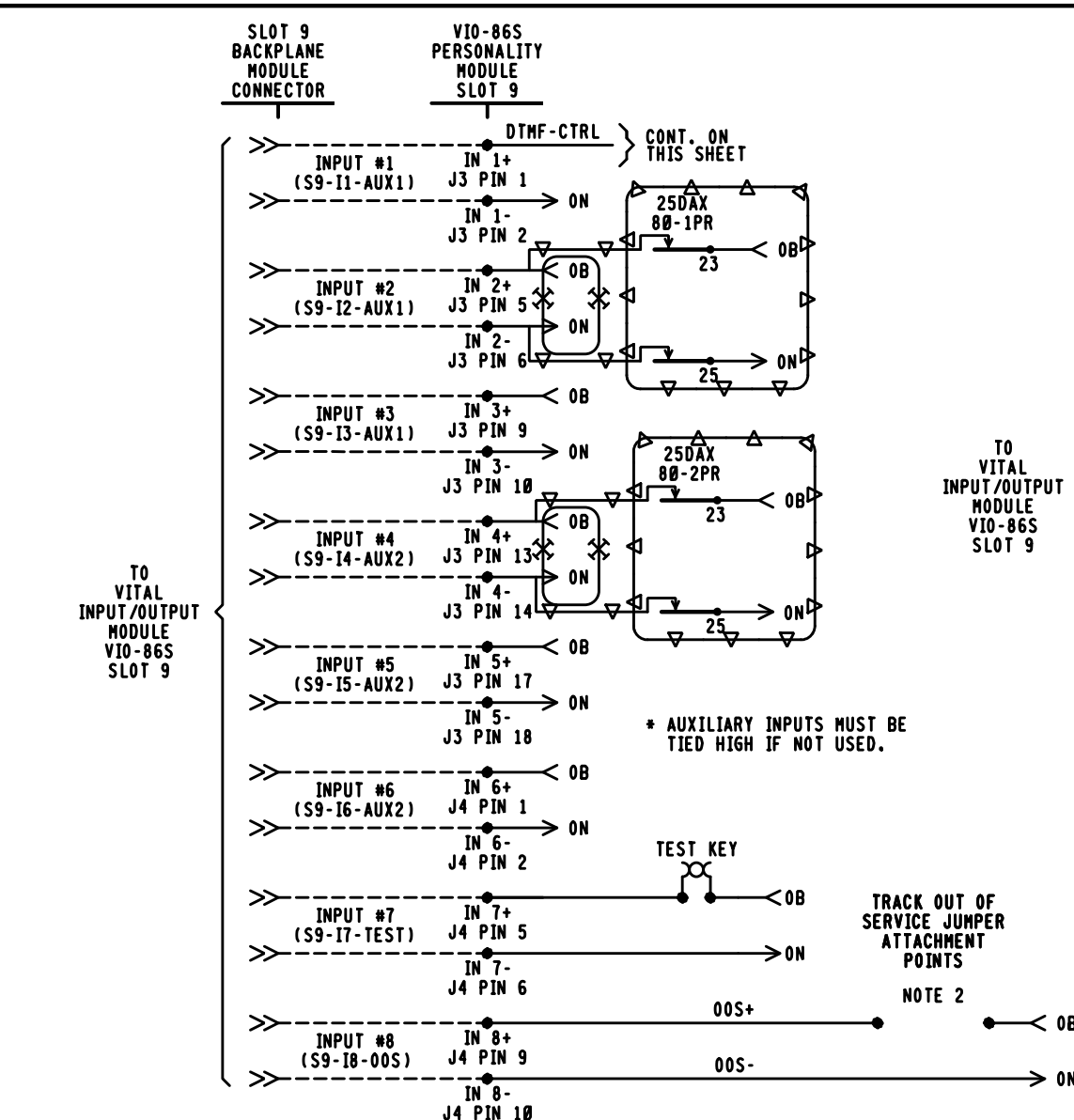
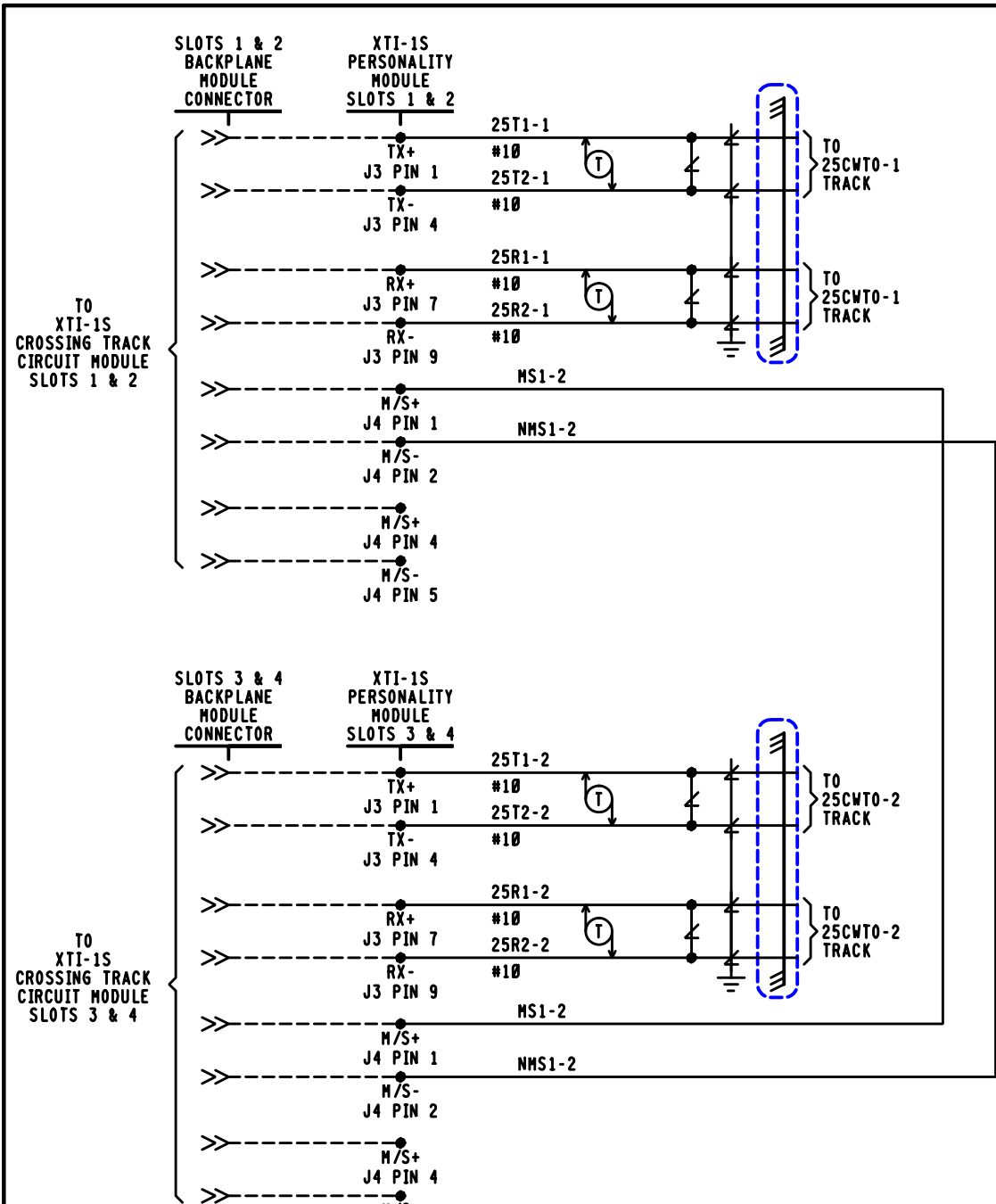
CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

SR 1041 (RIVER RD.) 145463A

POWER DISTRIBUTION
DAWSON, PA M.P. BF-276.25

DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
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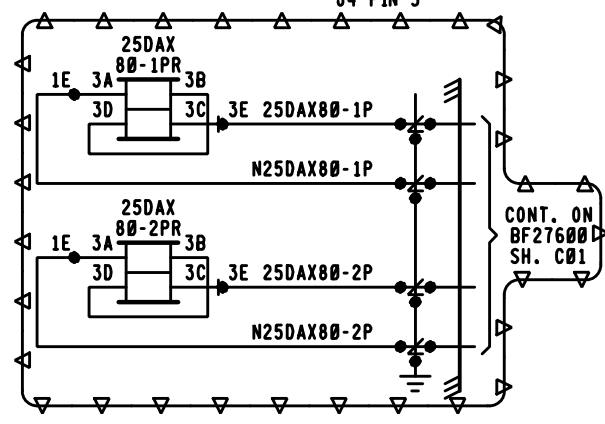
DESIGN DATE -----	REV. NO. 1	DRAWING -----	SHEET NO -----	FILE BF27625	SHEET E01
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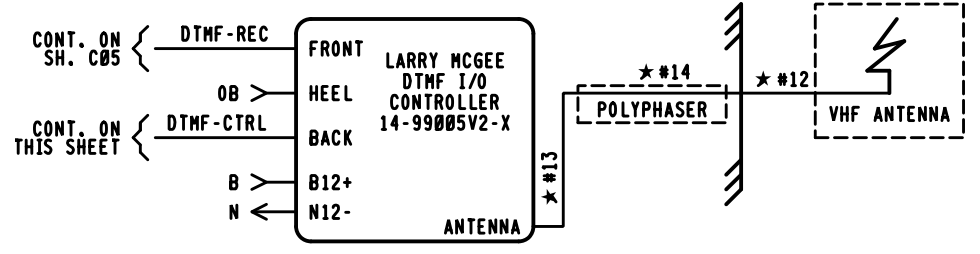
THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019555

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
 CSX # PA2023021 PRS/AMJ/SAF

- NOTES
- ALL WIRE THIS SHEET #16 AWG UNLESS NOTED.
 - APPROACH DISABLE JUMPER INPUT. THIS INPUT IS USED IN COMBINATION WITH THE SOFT APPROACH DISABLE ACCESSED THROUGH THE CDU-2 KEYPAD. BOTH BITS MUST BE HIGH TO DISABLE AN APPROACH. THE OPERATOR IS SOLELY RESPONSIBLE FOR CROSSING PROTECTION WHEN THE APPROACH DISABLE FUNCTION IS ACTIVATED.
 - DTMF USES LAST 3 DIGITS (NUMBERS) OF THE CROSSING DOT# TO OPERATE CROSSING PROTECTION DEVICES.
 - * = REFER TO SH. C09



PROGRAMMING FOR DTMF RADIO
 REMOTE DTMF CROSSING ACTIVATION
 (ACTIVATES ENTIRE CROSSING)
 TO ACTIVATE PRESS: 463 *
 TO DE-ACTIVATE PRESS: 463 #
 (ACTIVATION WILL TIME OUT AFTER 60 SEC.)



SLOT 9 I/O	
INPUT 1	POSITIVE CONTROL AUXILIARY INPUT 1 (AUX1)
INPUT 2	POSITIVE CONTROL AUXILIARY INPUT 2 (AUX1)
INPUT 3	POSITIVE CONTROL AUXILIARY INPUT 3 (AUX1)
INPUT 4	POSITIVE CONTROL AUXILIARY INPUT 4 (AUX2)
INPUT 5	POSITIVE CONTROL AUXILIARY INPUT 5 (AUX2)
INPUT 6	POSITIVE CONTROL AUXILIARY INPUT 6 (AUX2)
INPUT 7	CROSSING ACTIVATION TEST
INPUT 8	OUT OF SERVICE JUMPER INPUT (OOS)
OUTPUT 1	X OUTPUT
OUTPUT 2	ISL01 OUTPUT
OUTPUT 3	ISL02 OUTPUT
OUTPUT 4	(NOT USED)
OUTPUT 5	(NOT USED)
OUTPUT 6	(NOT USED)

PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 03-10-23
 CSX # PA2019555 PRS/CDT/SAF
 * * = OUT

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
 SR 1041 (RIVER RD.) 145463A
 XP4 CROSSING DETECTION AND I/O CIRCUITS
 DAWSON, PA M.P. BF-276.25

DESIGNED PRS/CDT	DIGITIZED PRS/CDT	CHECKED PRS/SAF	DATE 03-10-23
DRAWING -----	SHEET NO -----	FILE BF27625	SHEET C01(A)

DESIGN DATE: 03-10-23
 REV. NO.: 3

SITE SPECIFIC MDR DESCRIPTIONS AND SETTINGS				
NAME	MDR1		MDR2	
FUNCTION	XR		XR	
WARNING TIME	39		39	
CW/MD	CW		CW	
AP TIME(PREEMPT)	NA		NA	
CWE-WT	80		80	
AUX RECOVERY DELAY	5		5	
TRACK	TK 1	TK 2	TK 1	TK 2
TRACK ASSIGNED	ASSIGNED	UNASSIGNED	UNASSIGNED	ASSIGNED
OFFSET DISTANCE	0'	NA	NA	0'
MD RESTART	0*	NA	NA	0*
SUDDEN SHUNT ZONE	0*	NA	NA	0*
POSITIVE START	PSEN	DISABLE	NA	DISABLE
	PSRX	NA	NA	NA
	PST	NA	NA	NA
POST JOINT DETECT	PJEN	ENABLE	NA	ENABLE
	PJRX	15	NA	15
	PJDT	15	NA	15
CLEAR JOINT LOS	CJ-LOS MODE	STANDARD	NA	STANDARD
	CJ-LOS RX	15	NA	15
	CJ-LOS TIME	99	NA	99

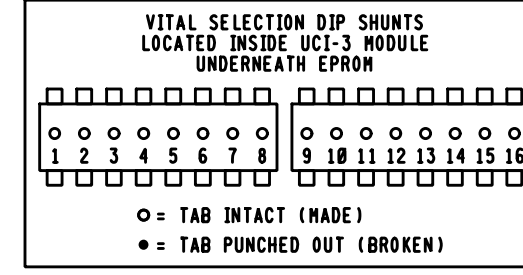
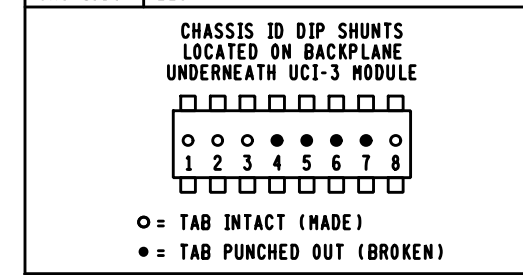
BASIC TRACK SETUP		
	TRACK 1	TRACK 2
FREQUENCY	151 HZ	151 HZ
MASTER/SLAVE	MASTER	SLAVE
RX ADJUST	100 *	100 *
TCA	*	*
DIRECTION MODE	BI	BI
LIA	*	*
ADVANCED APPROACH	*	*
NBS COMP RX	*	*
TRK ISLAND ASSIGN	ISL1	ISL2
APPROACH LENGTH	3059'	3059'
AUTO RX	ENABLE	ENABLE

ADVANCED TRACK SETUP			
		TRACK 1	TRACK 2
MOTION DET TIMER	MDEN	ENABLE	ENABLE
	MDTT	10 MIN	10 MIN
FALSE SHUNT	FSEN	DISABLE	DISABLE
	FSRX	NA	NA
	FST	NA	NA
APPROACH RELEASE	AREN	DISABLE	DISABLE
	ARRX	NA	NA
	ART	NA	NA
LOS TIME		16 SEC	16 SEC
IJ-LOS TIME		5 SEC	5 SEC
NRML*SHRT*VRYSHRT		*	*

ISLAND SETUP		
	TRACK 1	TRACK 2
ENABLE /DISABLE	ENABLE	ENABLE
FREQUENCY	8.0 KHZ	8.0 KHZ
LOSS OF SHUNT	2 SEC.	2 SEC.
FAULT DELAY	1	1

✕✕ DISABLE ✕✕

APPLICATION SOFTWARE INFORMATION	
NAME	9XXS-2.01
REV.	1.0
CHECKSUM	E49B
CRC	FF9E
CH. I.D.	225



VPM3 ETHERNET SETUP	
	IP ADDRESS
ETHERNET PORT 1 (TOP)	192.168.0.11
ETHERNET PORT 2 (BOTTOM)	192.168.1.12

VITAL SELECTION DIP SHUNTS		
#	NAME	STATE
1	MI_BELL_SW	PUNCHED OUT
2	NA	INTACT (NOT USED)
3	NA	INTACT (NOT USED)
4	NA	INTACT (NOT USED)
5	NA	INTACT (NOT USED)
6	NA	INTACT (NOT USED)
7	NA	INTACT (NOT USED)
8	NA	INTACT (NOT USED)
9	NA	INTACT (NOT USED)
10	NA	INTACT (NOT USED)
11	NA	INTACT (NOT USED)
12	NA	INTACT (NOT USED)
13	NA	INTACT (NOT USED)
14	NA	INTACT (NOT USED)
15	NA	INTACT (NOT USED)
16	NA	INTACT (NOT USED)

THIS PLAN DOES DOES NOT
SUPERSEDE PLAN DATED ~~03-10-23~~
CSX PROJECT # ~~PA2019555~~

PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company
DATE: 04-23-25
CSX #: PA2023021
PRS/AHJ/SAF

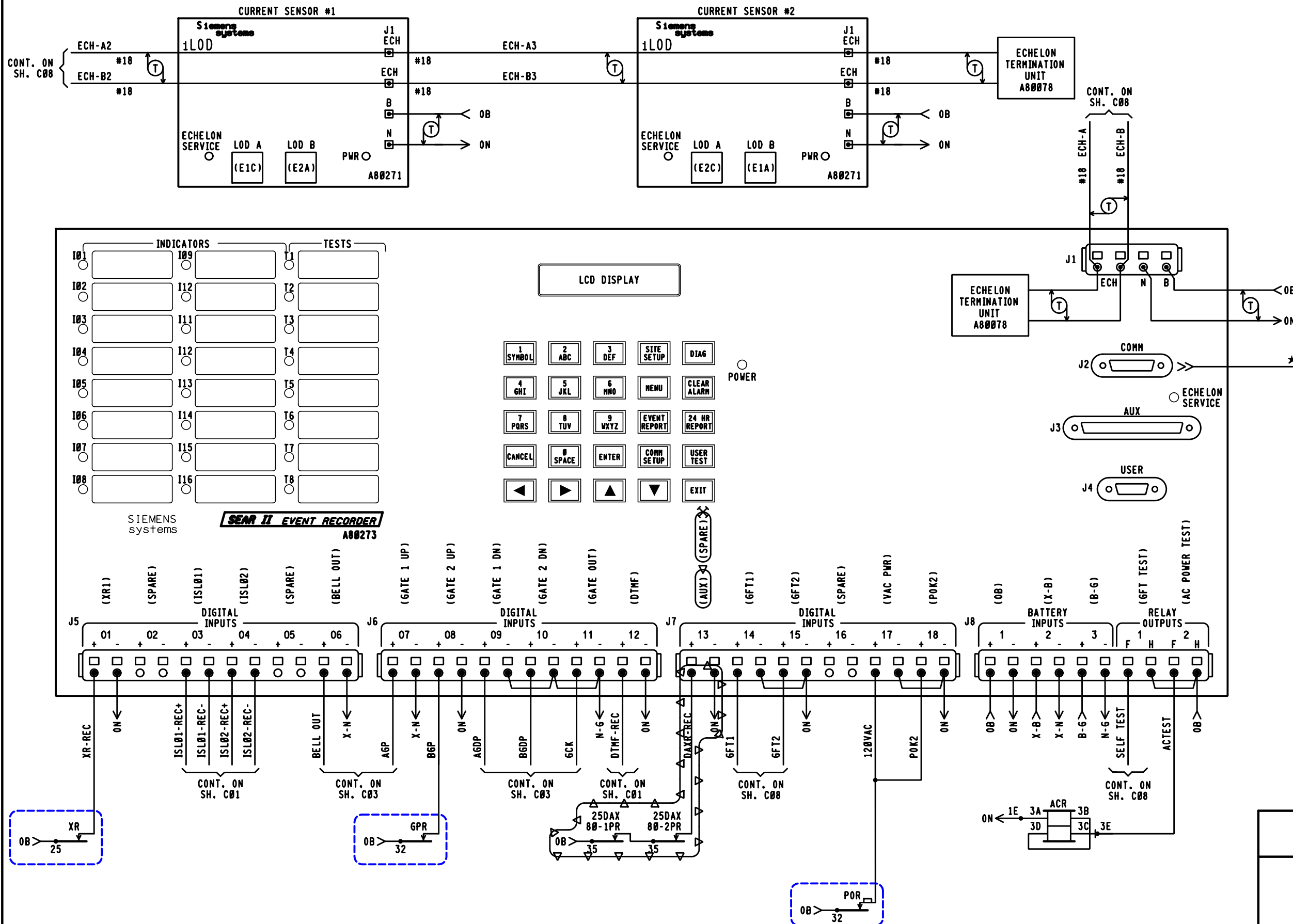
PROGRESS
RAIL SERVICES
A Caterpillar Company
DATE: 03-10-23
CSX #: PA2019555
PRS/CDT/SAF
NEW WORK
* * = OUT

NOTES:
• = FIELD ADJUSTMENT
NA = NOT APPLICABLE

CSX TRANSPORTATION
RAIL GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS
SR 1041 (RIVER RD.) 145463A
XP4 SET UP INFORMATION
DAWSON, PA M.P. BF-276.25

DESIGNED PRS/CDT	DIGITIZED PRS/CDT	CHECKED PRS/SAF	DATE 03-10-23
DRAWING -----	SHEET NO -----	FILE BF27625	SHEET C02A

DESIGN DATE 03-10-23	REV. NO. 3
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THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019555

PRELIMINARY
PROGRESS RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
 CSX # PA2023021 PRS/AMJ/SAF

PROGRESS RAIL SERVICES
 A Caterpillar Company DATE: 03-10-23
NEW WORK CSX # PA2019555 PRS/CDT/SAF

NOTES:
 1. * = REFER TO SH. C09.
 2. () DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS
SR 1041 (RIVER RD.) 145463A

SEAR II CIRCUITS
 DAWSON, PA M.P. BF-276.25

DESIGNED PRS/CDT	DIGITIZED PRS/CDT	CHECKED PRS/SAF	DATE 03-10-23
DESIGN DATE 03-10-23	REV. NO. 3	DRAWING -----	SHEET NO -----
FILE BF27625	SHEET C05A		

DESIGN DATE ~~03-10-23~~ REV. NO. ~~3~~
~~04-23-25~~ ~~4~~

	DEFAULTS AND/OR STYLE	FIELD RECORD
SEAR II EXECUTIVE PROGRAM	VERSION: 9V645A01Y	VERSION:
APPLICATION PROGRAM (IF LOADED)	VERSION: _____	VERSION:

FIELD TO PROVIDE SEARII PROGRAM INFORMATION ON AIS

SITE SET UP OPTIONS	
OPTION	SELECTION
DATE	XX-XX-XXXX
TIME	XX:XX:XX
DAYLIGHT SAVINGS TIME	YES <input type="checkbox"/> NO <input type="checkbox"/>
TIME ZONE	<input checked="" type="checkbox"/> EST <input type="checkbox"/> CST
SITE NAME	SR 1041 (RIVER RD.)
MILEPOST	BF-276.25
DOT NUMBER	145463A
TESTER TYPE	<input checked="" type="checkbox"/> CROSSING <input type="checkbox"/> WAYSIDE
DATE FORMAT	<input checked="" type="checkbox"/> MM-DD-YYYY <input type="checkbox"/> DD-MM-YYYY
TEMP FORMAT	<input checked="" type="checkbox"/> FAHRENHEIT <input type="checkbox"/> CELSIUS
INDICATE HOLDOFF	0
INDICATE REFRESH	60
SITE TYPE	<input type="checkbox"/> NO COMMUNICATION <input type="checkbox"/> DIAL-UP <input checked="" type="checkbox"/> COLLECTOR <input type="checkbox"/> NODE <input type="checkbox"/> BULLHORN/MODE <input type="checkbox"/> CDS902X
SITE ATCS ADDRESS	7.125.304.016.99.01
OFFICE ADDRESS	2.125.00.0000 (2.RRR.NN.DDDD)
OFFICE SITE ADDRESS	NA
BACK UP SITE ADDRESS 1	NA
BACK UP SITE ADDRESS 2	NA
POLL ID (1-99)	1
GEN/ATCS MODE	<input type="checkbox"/> GENISYS <input checked="" type="checkbox"/> GEN/ATCS
XID DISABLED	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
OFFICE COM. DEVICE	<input type="checkbox"/> DIRECT <input type="checkbox"/> MCM (RS232) <input type="checkbox"/> MCM (ECH) <input checked="" type="checkbox"/> WAG (ECHELON) <input type="checkbox"/> DIAL UP <input type="checkbox"/> S200 RADIO (RS232) <input type="checkbox"/> S200 RADIO (RS422)
RADIO ATCS ADDRESS	7.125.304.016.01.01
OFFICE PHONE NUMBER	1-XXX-XXX-XXXX
INIT. STRING	
FIELD COM	<input type="checkbox"/> VHF (ECH) <input type="checkbox"/> VHF (RS232) <input type="checkbox"/> WAG (ECH) <input type="checkbox"/> SS (RS232) <input checked="" type="checkbox"/> NONE
USER PORT	BAUD RATE (9600)
AUX PORT	BAUD RATE (9600)
COMM PORT	BAUD RATE (9600)

NOTE 5

NOTE 6

NOTE 7

NOTES:

1. LARGE CONFIGURATION ASSIGNS RECORDER INPUTS FOR USE WHEN DIGITAL I/O MODULE REQUIRED.
2. IF WARNING DEVICE = NONE MAIN/STANDBY OPTION NOT SHOWN.
3. IF VHF COMMUNICATIONS = NO THEN DTMF ACTIVATION AND CHANNEL OPTIONS ARE NOT SHOWN.
4. LAST 3 DIGITS OF DOT NO. FOR FIRST ACTIVATION CODE.
5. DEFAULT ADDRESS 7.125.100.100.99.01 USED FOR STAND ALONE LOCATIONS.
6. OPTIONS NOT SHOWN IF SITE TYPE = NO COMMUNICATIONS.
7. FORMAT AS: BAUD, DATA BITS, PARITY STOP BITS, FLOW CONTROL.

FIELD TO PROVIDE BATTERY VOLTAGES ON AIS

LIT BULB COUNT ON EACH CIRCUIT	NO.	TYPE OF BULB	CURRENT READING IN AMP. AT APPROX. 10.0 V BULB VOLTAGE
CURRENT SENSOR (1) E1C, LAMP SET UP	4	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (1) E2A, LAMP SET UP	4	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (2) E2C, LAMP SET UP	6	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (2) E1A, LAMP SET UP	6	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X

MEASURE BATTERY VOLTAGE AT INPUT	
BATTERY VOLTAGE 0B	XXXX VOLTS
BATTERY VOLTAGE X-B	XXXX VOLTS
BATTERY VOLTAGE B-6	XXXX VOLTS

THIS PLAN DOES DOES NOT
SUPERSEDE PLAN DATED, 03-10-23
CSX PROJECT # PA2019555

PRELIMINARY
PROGRESS RAIL SERVICES
A Caterpillar Company
DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

PROGRESS RAIL SERVICES
A Caterpillar Company
DATE: 03-10-23
CSX#: PA2019555
PRS/CDT/SAF

SITE SET UP OPTIONS CONT.	
OPTION	SELECTION
RAILROAD NUMBER	125
CROSSING CONFIGURATION	STANDARD <input checked="" type="checkbox"/> LARGE <input type="checkbox"/> REMOTE <input type="checkbox"/> SPLIT GATE <input type="checkbox"/> ISL ONLY <input type="checkbox"/> CP COLLECTOR <input type="checkbox"/>
NUMBER OF XR INPUTS	0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
NUMBER OF ISL INPUTS	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CONSTANT WARNING DEVICE	GCP3K <input type="checkbox"/> HS4K <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> NONE <input type="checkbox"/>
TOTAL NUMBER OF GCP NODES	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>
NUMBER OF REDUNDANT GCP	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CROSSING CONTROLLER 1	SSCC IIIA / PLUS <input type="checkbox"/> SSCC IV <input type="checkbox"/> OTHER <input type="checkbox"/> NONE <input checked="" type="checkbox"/>
POK2	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
MAIN / STANDBY	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
AUXILIARY TRACKS	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/>
ENTRANCE GATE	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>
EXIT GATES	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
GATE POSITION FAIL 10-60 SEC	25
NUMBER OF UAX INPUTS	0 <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/>
BATTERY BANKS	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
0B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/>
X-B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/> NOT PRESENT <input type="checkbox"/>
B-6 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/> NOT PRESENT <input type="checkbox"/>
X-B2 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
B-62 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
X-B3 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
PREEMPTION	NORMAL <input type="checkbox"/> ADVANCED <input type="checkbox"/> NO <input checked="" type="checkbox"/>
KDR INPUT	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
VHF COMMUNICATOR	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ACTIVATION CODE 1	XXX
ACTIVATION CODE 2	XXX
ACTIVATION CODE 3	XXX
ACTIVATION TIMEOUT (30 TO 600 SECONDS)	60
LOD MODULES	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
ANY LED BULBS	NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>
AUTO INSPECTIONS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BELL ON	GATES LOWERING <input checked="" type="checkbox"/> GATES MOVING <input type="checkbox"/> ALWAYS <input type="checkbox"/>
GROUND FAULT DETECTORS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BATTERIES ON GFT1	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/>
FULL APPROACH MOVE ALARMS	ACTIVATED <input checked="" type="checkbox"/> DO NOT ACTIVATE <input type="checkbox"/>

NOTE 1

NOTE 2

NOTE 3

NOTE 4

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

SR 1041 (RIVER RD.) 145463A

SEAR II CONFIGURATION AND FUNCTIONS
DAWSON, PA M.P. BF-276.25

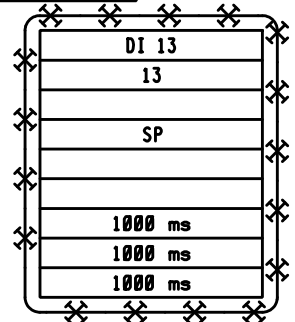
DESIGNED PRS/CDT	DIGITIZED PRS/CDT	CHECKED PRS/SAF	DATE 03-10-23
DRAWING	SHEET NO	FILE BF27625	SHEET C06A

DESIGN DATE 03-10-23	REV. NO. 3
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DISCRETE INPUTS	DI 01	DI 02	DI 03	DI 04	DI 05	DI 06
CHANNEL	1	2	3	4	5	6
NAME	XR1		ISLAND 1 (TRACK)	ISLAND 2 (TRACK)		BELL OUT (BELL PWR)
TAG	XR1 (XR)	SP	ISL1	ISL2	SP	BELL OUT (BELL PWR)
OFF NAME	DOWN (XR)		DOWN (ISL1)	DOWN (ISL2)		OFF (BELL PWR)
ON NAME	UP (XR)		UP (ISL1)	UP (ISL2)		ON (BELL PWR)
ON DEBOUNCE TIME	100 ms	1000 ms	100 ms	100 ms	1000 ms	100 ms
OFF DEBOUNCE TIME	100 ms	1000 ms	100 ms	100 ms	1000 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms

TSS INPUTS	DI 07	DI 08	DI 09	DI 10
CHANNEL	7	8	9	10
NAME	AGP	BGP	AGDP	BGDP
TAG	AGP (GP)	BGP (GP)	AGDP	BGDP
OFF NAME	LIGHTS FLASH	LIGHTS FLASH	NOT HORIZ	NOT HORIZ
ON NAME	GATE VERTICAL	GATE VERTICAL	GATE HORIZ	GATE HORIZ
ON DEBOUNCE TIME	100 ms	100 ms	100 ms	100 ms
OFF DEBOUNCE TIME	100 ms	100 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms

DISCRETE INPUTS	DI 11	DI 12	DI 13
CHANNEL	11	12	13
NAME	GATE CONTROL	DTMF	AUX
TAG	GCOU1 (GCK)	DTMF-REC	AUX (DAXPR)
OFF NAME	OFF (DESCENT)	OFF (NO GATE KEYED)	DOWN (DAXPR)
ON NAME	ON (ASCENT ON)	ON (ACTIVATE)	UP (DAXPR)
ON DEBOUNCE TIME	100 ms	100 ms	100 ms
OFF DEBOUNCE TIME	100 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms



GFT INPUTS	DI 14	DI 15
CHANNEL	14	15
NAME	GND FAULT TESTER 1 (GFT1,2)	GND FAULT TESTER 2 (GFT3,4)
TAG	GFT1 (GFT1 DATA)	GFT2 (GFT2 DATA)
BATTERY 1 NAME	OB (GND FAULT)	B-G (GND FAULT)
BATTERY 1 TAG	OB (GND FAULT)	B-G (GND FAULT)
BATTERY 2 NAME	X-B (GND FAULT)	SP.
BATTERY 2 TAG	X-B (GND FAULT)	SP.

DISCRETE INPUTS	DI 16	DI 17	DI 18
CHANNEL	16	17	18
NAME		120 VAC	POK2
TAG	SP	120 VAC	POK2
OFF NAME		OFF (ALL POWER OFF)	OFF (ALL POWER OFF)
ON NAME		ON (ALL POWER ON)	ON (ALL POWER ON)
ON DEBOUNCE TIME	1000 ms	100 ms	100 ms
OFF DEBOUNCE TIME	1000 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms

BATTERY INPUTS	BI1	BI2	BI3
CHANNEL	1	2	3
NAME	OB (ELECTRONIC BATT)	X-B (BULB BATT)	B-G (GATE BATT)
TAG	OB	X-B	B-G
SAMPLE PERIOD (ms)	500 (ms)	500 (ms)	500 (ms)
RESOLUTION (V)	1.0 (VOLTS)	1.0 (VOLTS)	1.0 (VOLTS)
AVGERAGING SAMPLES	32 SAMPLES	32 SAMPLES	32 SAMPLES

RELAYS	RO1	RO2
CHANNEL	1	2
NAME	GFT TEST	AC POWER TEST (ACRLY)
TAG	SELF TEST	AC POWER TEST (ACRLY)
OFF STATE NAME	NOT TESTING	OFF (ACR DN)
ON STATE NAME	TESTING	ON (ACR UP)
UNKNOWN STATE NAME	PULSE	PULSE
ON PULSE TIME (s)	1 (s)	1 (s)
OFF PULSE TIME (s)	1 (s)	1 (s)
TOGGLE PERIOD (s)	1 (s)	1 (s)
DUTY CYCLE	50	50

NOTE:
() DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

THIS PLAN DOES DOES NOT
SUPERSEDE PLAN DATED 03-10-23
CSX PROJECT # PA2019555

PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company
DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

PROGRESS
RAIL SERVICES
A Caterpillar Company
NEW WORK
DATE: 03-10-23
CSX#: PA2019555
PRS/CDT/SAF

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS
SR 1041 (RIVER RD.) 145463A
SEAR II CHANNELS
DAWSON, PA M.P. BF-276.25

DESIGNED PRS/CDT	DIGITIZED PRS/CDT	CHECKED PRS/SAF	DATE 03-10-23
DRAWING -----	SHEET NO -----	FILE BF27625	SHEET C07

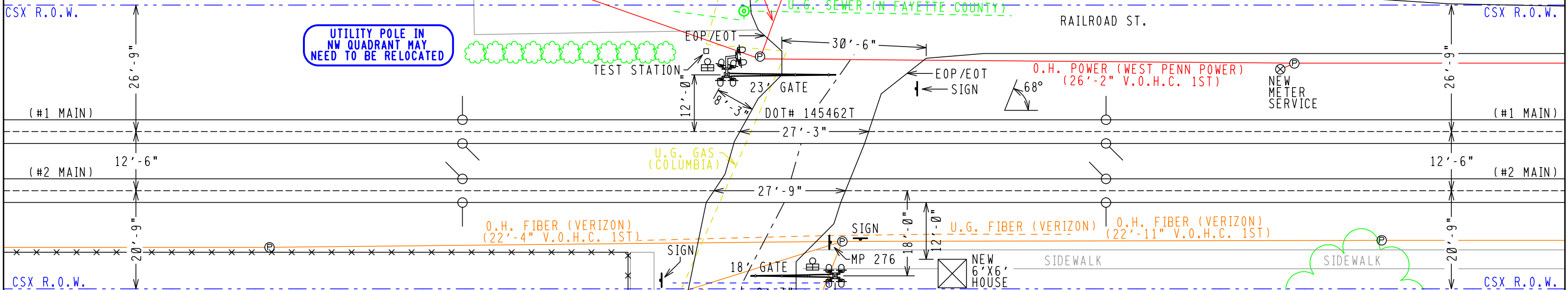
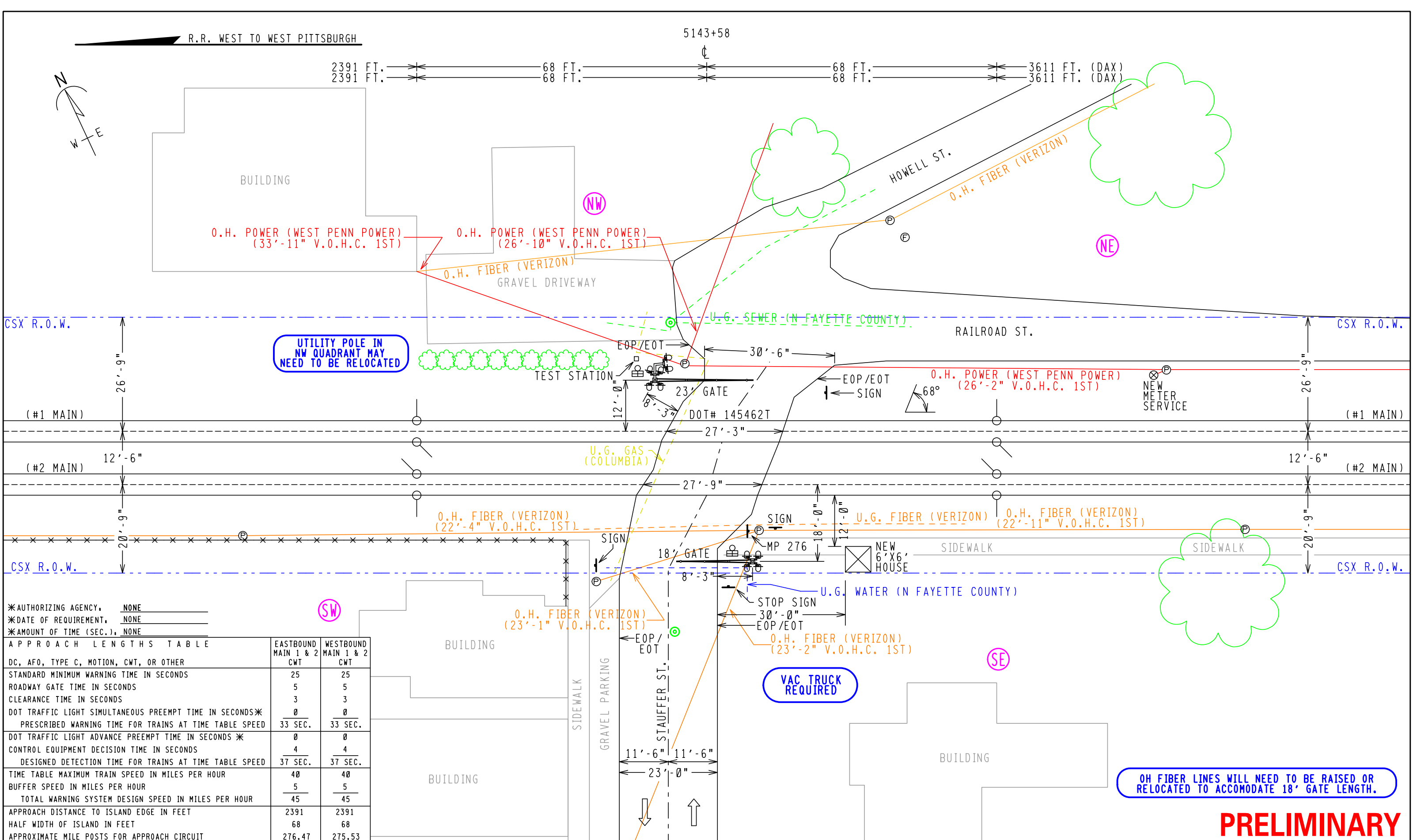
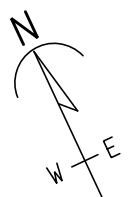
DESIGN DATE 03-10-23 REV. NO. 3

04-23-25 4

R.R. WEST TO WEST PITTSBURGH

5143+58

2391 FT. 68 FT. 68 FT. 3611 FT. (DAX)
 2391 FT. 68 FT. 68 FT. 3611 FT. (DAX)



* AUTHORIZING AGENCY, NONE
 * DATE OF REQUIREMENT, NONE
 * AMOUNT OF TIME (SEC.), NONE

APPROACH LENGTHS TABLE	EASTBOUND MAIN 1 & 2	WESTBOUND MAIN 1 & 2
DC, AFO, TYPE C, MOTION, CWT, OR OTHER	CWT	CWT
STANDARD MINIMUM WARNING TIME IN SECONDS	25	25
ROADWAY GATE TIME IN SECONDS	5	5
CLEARANCE TIME IN SECONDS	3	3
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS*	0	0
PRESCRIBED WARNING TIME FOR TRAINS AT TIME TABLE SPEED	33 SEC.	33 SEC.
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	0	0
CONTROL EQUIPMENT DECISION TIME IN SECONDS	4	4
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	37 SEC.	37 SEC.
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	40	40
BUFFER SPEED IN MILES PER HOUR	5	5
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	45	45
APPROACH DISTANCE TO ISLAND EDGE IN FEET	2391	2391
HALF WIDTH OF ISLAND IN FEET	68	68
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT	276.47	275.53

FILE NAME: BF27600.H01 REVISION DATES
 DATE DRAWN: 01-22-25 02-27-25
 DRAWN BY: JMD 04-02-25
 CHECKED BY: SAF
 PRS #: 34P004256

PRODUCED FOR:

 RAIL TRANSPORT GROUP ENGINEERING AND SIGNALS

PRODUCED BY:

 A Caterpillar Company

LEGEND:
 CSX ROW ---
 R/R POLELINE ---
 GAS ---
 FIBER OPTIC ---

GUARD RAIL ---
 O.H. POWER ---
 FENCE ---
 WATER ---
 SEWER ---
 METER SERVICE ⊗
 POLE ⊙
 FIRE PLUG ⊕
 SEWER CAP ⊖
 GAS VENT ⊕

GPS COORDINATES
 STREET NAME, STAUFFER ST.
 CITY & STATE, DAWSON, (FAYETTE), PA
 DOT, 145462T
 PROJECT #: PA2023021
 OP #: PA0466

PROPOSED CROSSING LAYOUT
 SCALE = 20:1

PRELIMINARY

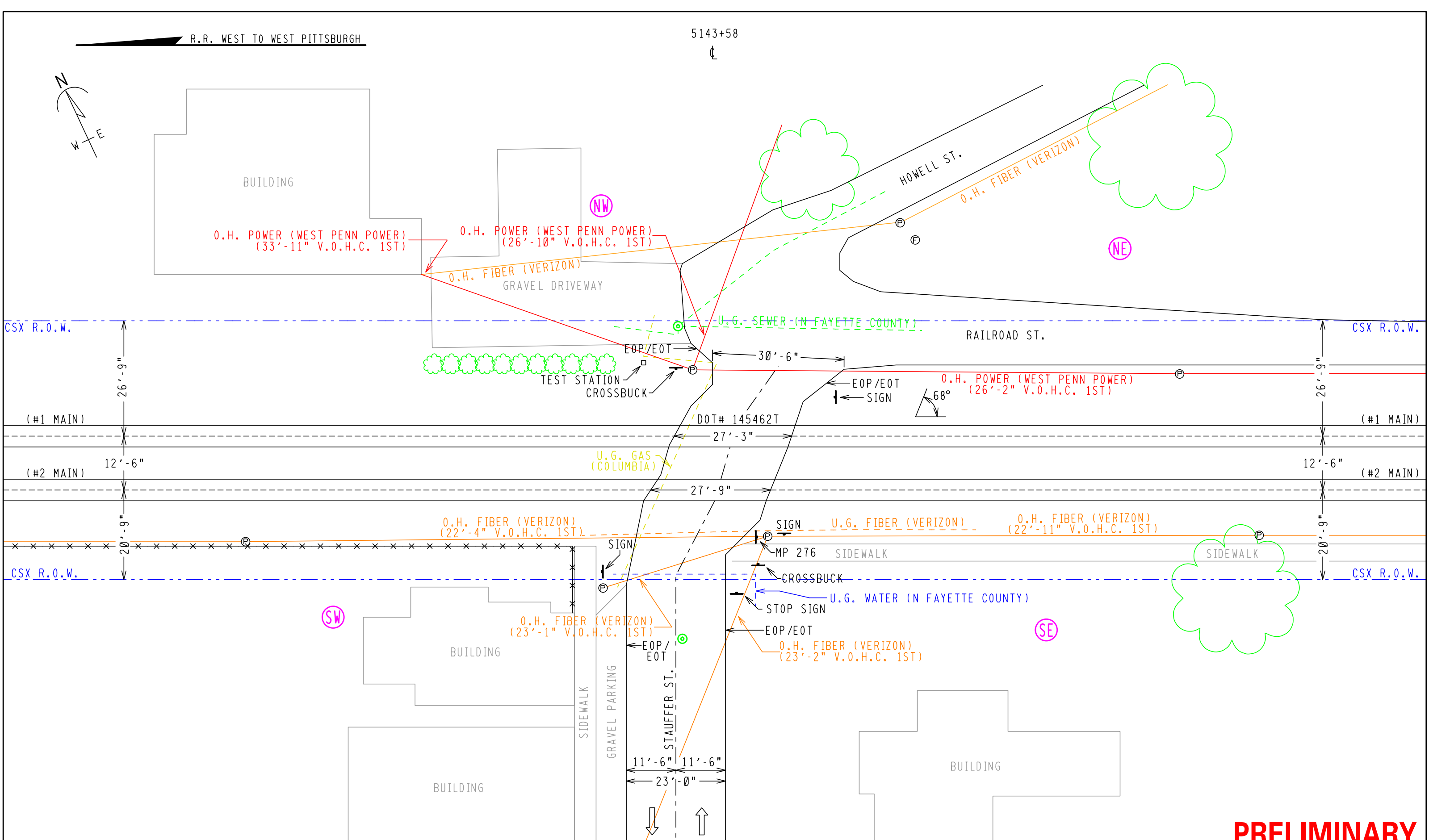
OH FIBER LINES WILL NEED TO BE RAISED OR RELOCATED TO ACCOMMODATE 18' GATE LENGTH.

VAC TRUCK REQUIRED

UTILITY POLE IN NW QUADRANT MAY NEED TO BE RELOCATED

R.R. WEST TO WEST PITTSBURGH

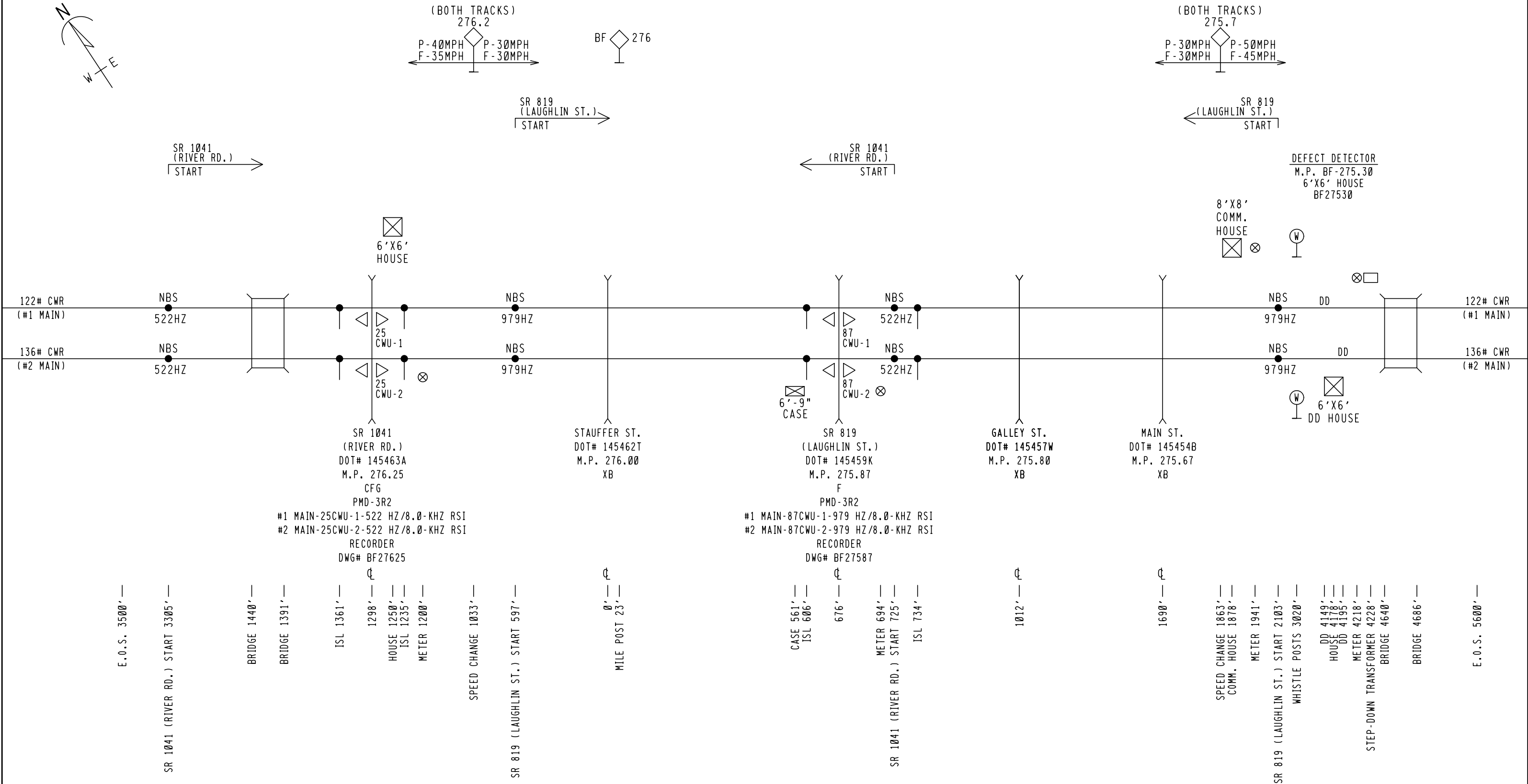
5143+58



PRELIMINARY

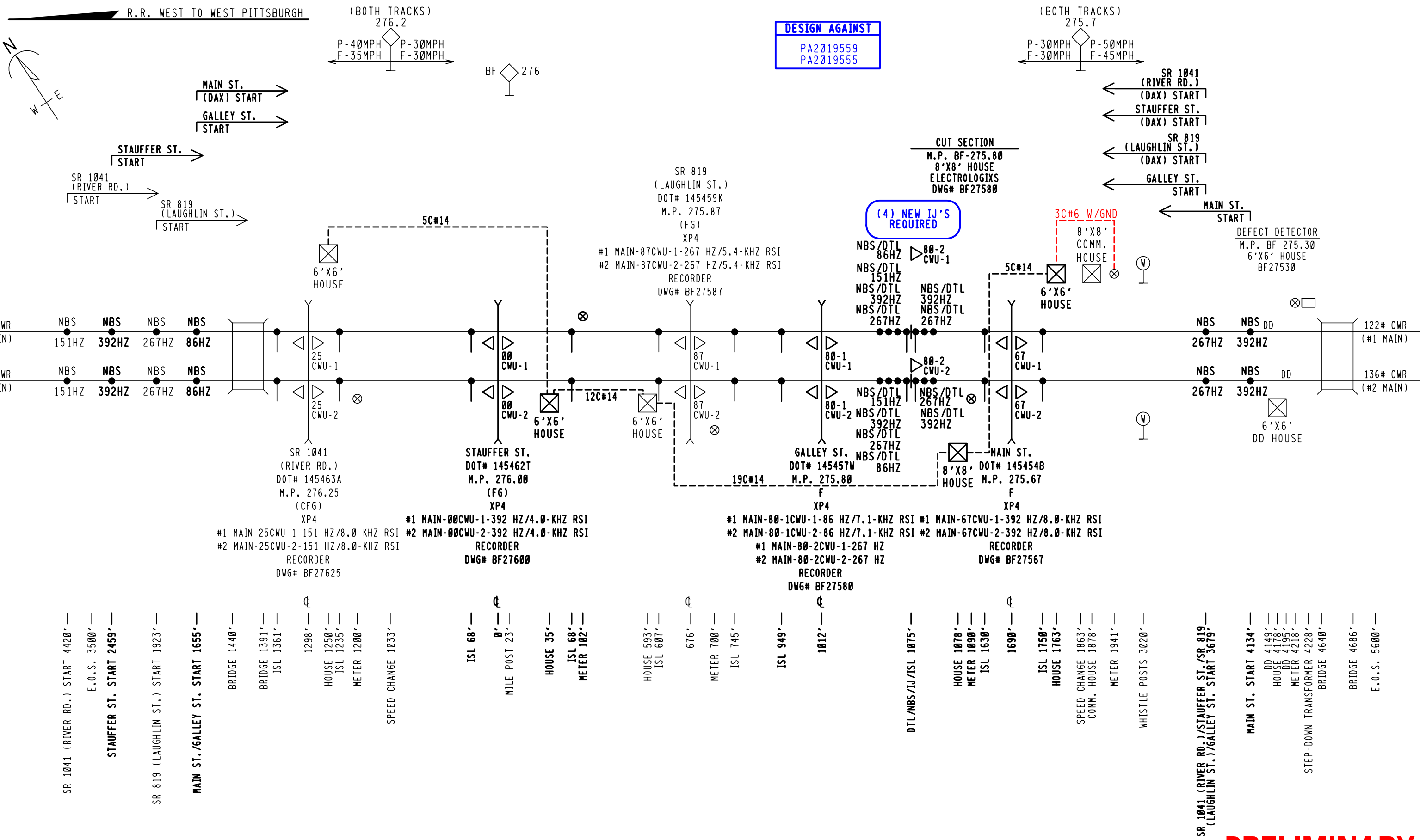
FILE NAME, BF27600.H02	REVISION DATES	PRODUCED FOR,	PRODUCED BY,	LEGEND,	GUARD RAIL	METER SERVICE	GPS COORDINATES	STREET NAME, STAUFFER ST.
DATE DRAWN, 01-22-25	02-27-25	 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	 A Caterpillar Company	CSX ROW	O.H. POWER	POLE	N40°02'54"	CITY & STATE, DAWSON, (FAYETTE), PA
DRAWN BY, JMD	-			R/R POLELINE	FENCE	FIRE PLUG	W79°39'38"	DOT, 145462T
CHECKED BY, SAF	-			GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #, PA2023021
PRS #, 34P004256	-			FIBER OPTIC	SEWER	GAS VENT	M.P., BF-276.00	EXISTING CROSSING LAYOUT SCALE = 20:1

R.R. WEST TO WEST PITTSBURGH



PRELIMINARY

FILE NAME: BF27600.H03	REVISION DATES	PRODUCED FOR:	PRODUCED BY:	LEGEND:	GUARD RAIL	METER SERVICE	GPS COORDINATES	STREET NAME, STAUFFER ST.
DATE DRAWN: 01-22-25	- -	 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	 A Caterpillar Company	CSX ROW	O.H. POWER	POLE	N40°02'54"	CITY & STATE, DAWSON, (FAYETTE), PA
DRAWN BY: JMD	- -			R/R POLELINE	FENCE	FIRE PLUG	W79°39'38"	DOT, 145462T
CHECKED BY: SAF	- -			GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #: PA2023021
PRS #: 34P004256	- -			FIBER OPTIC	SEWER	GAS VENT	M.P. BF-276.00	OP #: PA0466
								EXISTING TRACK LAYOUT




PRELIMINARY

FILE NAME: BF27600.H04	REVISION DATES	PRODUCED FOR:	PRODUCED BY:	LEGEND:	GUARD RAIL	METER SERVICE	GPS COORDINATES	STREET NAME, STAUFFER ST.
DATE DRAWN: 01-22-25	02-27-25	 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	 A Caterpillar Company	CSX ROW	O.H. POWER	POLE	N40°02'54"	CITY & STATE, DAWSON, (FAYETTE), PA
DRAWN BY: JMD	04-23-25			R/R POLELINE	FENCE	FIRE PLUG	W79°39'38"	DOT, 145462T
CHECKED BY: SAF	-			GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #: PA2023021
PRS #: 34P004256	-			FIBER OPTIC	SEWER	GAS VENT	M.P. BF-276.00	OP #: PA0466
								PROPOSED TRACK LAYOUT

INDEX CONTENTS

SH. NO.		REVISION NO.								
		1	2	3	4	5	6	7	8	9
I01	INDEX AND REVISIONS	/								
S01	TRACK AND SIGNAL PLAN	/								
E01	POWER DISTRIBUTION	/								
E02	RELAY CONSIST	/								
E03	ELECTROLOGIXS XP4 MODULE LAYOUT	/								
C01	XP4 CROSSING DETECTION AND I/O CIRCUITS	/								
C02	XP4 SETUP INFORMATION	/								
C03	CROSSING WARNING DEVICE GATE CIRCUITRY	/								
C04	CROSSING WARNING DEVICE LIGHT CIRCUITRY	/								
C05	SEAR II CIRCUITS	/								
C06	SEAR II CONFIGURATION AND FUNCTIONS	/								
C07	SEAR II CHANNELS	/								
C08	WAYSIDE ACCESS GATEWAY	/								
C09	CROSSING COMMUNICATIONS EQUIPMENT	/								


 = DESIGN COMPLETED
 = REVISION COMPLETED

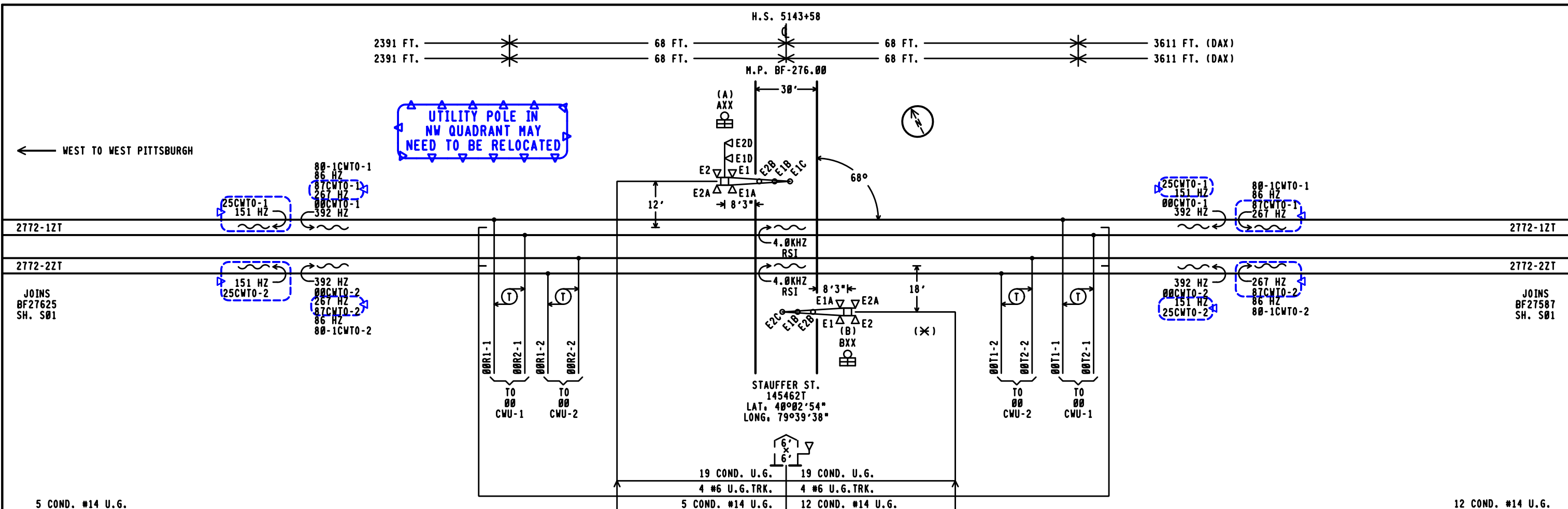
 = NOTE
PRELIMINARY

 A Caterpillar Company DATE: 04-23-25
NEW WORK CSX#: PA2023021
 PRS/AMJ/SAF

REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2023021	04-23-25		

TO BE COMPLETED
ON A.I.S.

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
STAUFFER ST. 145462T			
INDEX AND REVISIONS DAWSON, PA H.P. BF-276.00			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27600	SHEET I01



UTILITY POLE IN NW QUADRANT MAY NEED TO BE RELOCATED

VAC TRUCK REQUIRED

FIELD NOTE: FIELD TO SHOW ACTUAL DISTANCE BETWEEN METER POLE & BUNGALOW AND INDICATE ON A.I.S.

FOR AMPERAGES OF 15 AMPS OR LESS PER LEG USE THE FOLLOWING POWER CABLE DESIGN GUIDELINES
 3 COND. #6 W/GND. (5% VD) $X \leq 402'$
 3 COND. #4 W/GND. (5% VD) $403' < X \leq 618'$
 * 3 COND. #2 W/GND. (10% VD) $619' < X \leq 1,856'$
 * GREATER THAN 1,856' CABLE RUN CALCULATE ACTUAL CABLE SIZE REQUIREMENTS PER SS360.

PRELIMINARY
 = NOTE
 = EXISTING
PROGRESS RAIL SERVICES
 A Caterpillar Company
NEW WORK
 DATE: 04-23-25
 CSX#. PA2023021
 PRS/AMJ/SAF

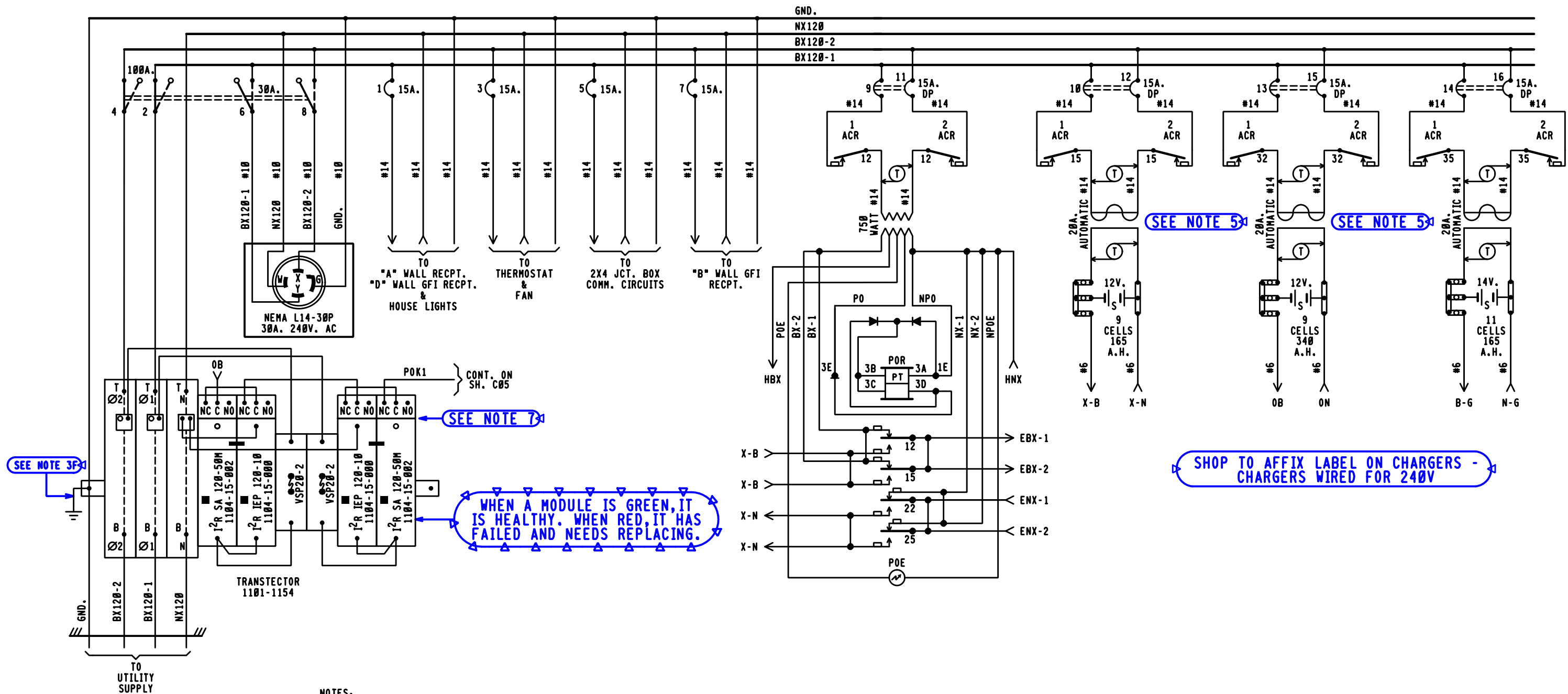
- NOTES:
- 12" LED MAXIMUM CURRENT 1.0A AT 10 VOLTS LED GATE ARM LIGHTS .3A MAXIMUM
 - GATE LENGTH (A) 23' (B) 18'
 - (*) = LOCATION OF HOUSE
 - (N) = APPROXIMATE COMPASS NORTH.
 - TRANSMITTER LEADS FOR MOTION OR PREDICTOR EQUIPMENT SHOULD BE CONNECTED ON THE BUNGALOW OR SHORT LEAD SIDE OF THE CROSSING.
 - ISLAND TRACK LEADS SHOULD BE CONNECTED 50 FEET FROM ROAD EDGE BUT ON NARROW ROADS (20' OR LESS) ISLAND LENGTH SHALL BE 120 FEET.
 - WARNING SYSTEM APPROACH CIRCUIT DISTANCES ARE TO BE MEASURED FROM THE ISLAND TRACK CONNECTIONS.

APPROACH LENGTHS TABLE	EASTBOUND TRACK 1 CWT	WESTBOUND TRACK 1 CWT	EASTBOUND TRACK 2 CWT	WESTBOUND TRACK 2 CWT
DC, AFO, TYPE C, MOTION, CWT, OR OTHER				
STANDARD MINIMUM WARNING TIME IN SECONDS	25	25	25	25
ROADWAY GATE TIME IN SECONDS	5	5	5	5
CLEARANCE TIME IN SECONDS	3	3	3	3
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS *	0	0	0	0
PRESCRIBED WARNING TIME FOR TRAINS AT TIME TABLE SPEED	33 SEC.	33 SEC.	33 SEC.	33 SEC.
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	0	0	0	0
CONTROL EQUIPMENT DECISION TIME IN SECONDS	4	4	4	4
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	37 SEC.	37 SEC.	37 SEC.	37 SEC.
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	40	40	40	40
BUFFER SPEED IN MILES PER HOUR	5	5	5	5
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	45	45	45	45
APPROACH DISTANCE TO ISLAND EDGE IN FEET	2391	2391	2391	2391
HALF WIDTH OF ISLAND IN FEET	68	68	68	68
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT	276.47	275.53	276.47	275.53

* AUTHORIZING AGENCY: NONE
 * DATE OF REQUIREMENT: NONE
 * AMOUNT OF TIME (SEC.): NONE

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
STAUFFER ST. 145462T
 TRACK AND SIGNAL PLAN
 DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING	SHEET NO
		FILE BF27600	SHEET S01



SEE NOTE 3F

SEE NOTE 7A

WHEN A MODULE IS GREEN, IT IS HEALTHY. WHEN RED, IT HAS FAILED AND NEEDS REPLACING.

SEE NOTE 5A

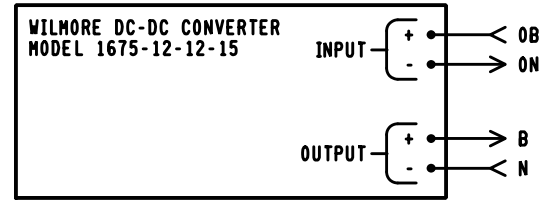
SEE NOTE 5A

SHOP TO AFFIX LABEL ON CHARGERS - CHARGERS WIRED FOR 240V

BX120-1 | BX120-2
 14.1 AMPS | 14.1 AMPS
 MAXIMUM LOAD
 CALCULATED PER SS360

NOTES:

- 1 - ARRESTERS ARE PER SS382.
- 2 - BATTERY A.H. CAPACITY SHOWN IS THE MINIMUM REQUIREMENT.
- 3 - WIRING
 - A - FEED TO ALL BUSSES, LIGHT CIRCUITS, MOTOR CIRCUITS TO BE #10 FLEX.
 - B - 120-VOLT FEED FROM ENTRANCE TO POWER BUSS TO BE #10 FLEX.
 - C - ALL TRACK WIRES TO BE #10 FLEX.
 - D - ALL OTHERS TO BE #16 FLEX UNLESS NOTED.
 - E - ALL BATTERY OUTPUTS TO BE #6 PER SS360.
 - F - GROUND WIRE NOT NECESSARY WHEN SURGE SUPPRESSOR IS MOUNTED ON GROUND PLANE OR METAL ENCLOSURE AFFIXED DIRECTLY TO BUNGALOW METALLIC STRUCTURAL MEMBER.
- 4 - CIRCUIT INTERRUPTERS 2 & 4 ARE MECHANICALLY INTERLOCKED WITH CIRCUIT INTERRUPTERS 6 & 8.
- 5 - CHARGERS WIRED FOR 240VAC
- 6 - CIRCUIT BREAKERS PANEL- Q0124L1256 (24 SPACES)
- 7 - FORM C DRY CONTACTS MOUNTED ON TOP OF TRANSECTOR WIRED TO ALERT A POK INDICATION WHEN A MODULE IS NOT HEALTHY.



PRELIMINARY

= NOTE

PROGRESS
 RAIL SERVICES
 A Caterpillar Company

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

NEW WORK

6'X 6' PTC RELAY HOUSE

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

STAUFFER ST. 145462T

POWER DISTRIBUTION
 DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27600	SHEET E01		

TOP ROW

XR			XPR			GPR			EOR			00DAX80-1PR		00DAX80-2PR		POR			1ACR			2ACR							
12	FB	B8	22	F	B36	12	B	B82	12	FB	B81	12		B8	12		B8	12	FB	B62	12	B	B77	12	B	B77			
15	FB	C30	25	F	C30	15	B	C30	15	FB	C30	15		C30	15	FB	C30	15	B	C30	15	B	C30	15	B	C30			
22						22			22			22			22			22			22			22			22		
23						25			32	FB		23	F		23	F		23			25	FB		25			25		
25	F					32	F		35	FB		25	F		25	F		32	F		32	B		32	B		32	B	
32						35	B					32			32			35			35	B		35	B		35	B	
35												35	F		35	F													

NOTES:

- 1 - REFERENCES ARE PER SS713.
- 2 - RELAY PLACEMENT ON CONSIST CHART HAS NO SIGNIFICANCE.
- 3 - PLUG-IN RELAYS ARE VIEWED FROM THE FRONT OF RACK.

6' X 6' PTC RELAY HOUSE

PRELIMINARY

 A Caterpillar Company
NEW WORK

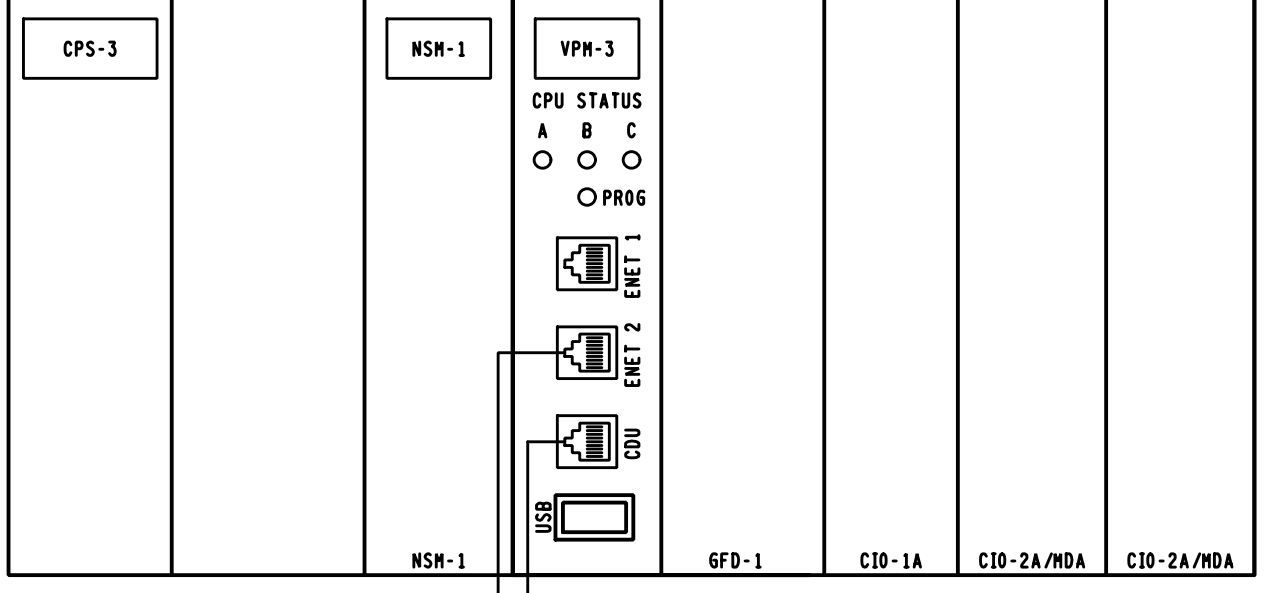
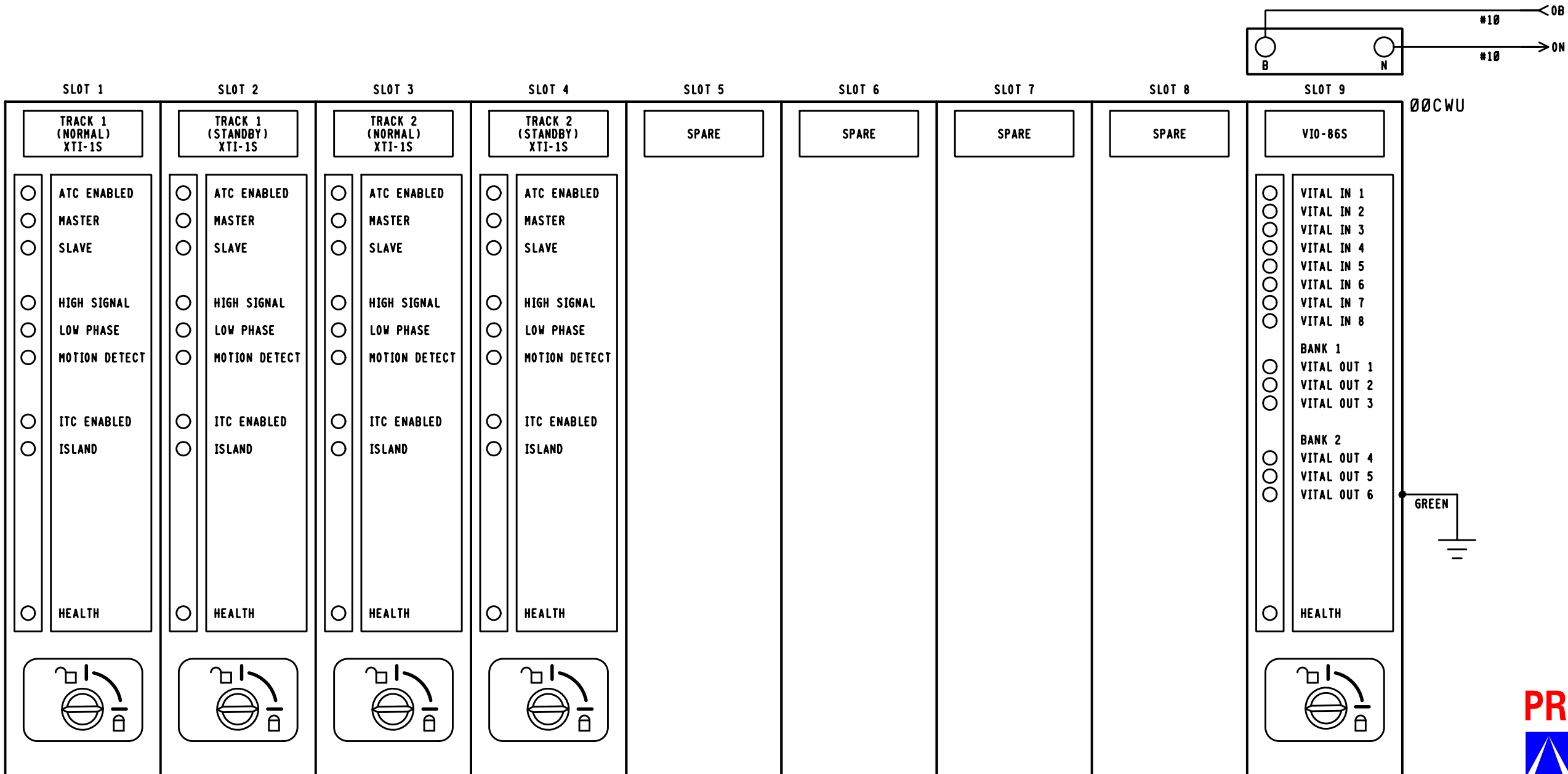
DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF


 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

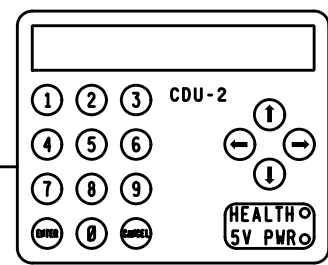
STAUFFER ST. 145462T

RELAY CONSIST
 DAWSON, PA M.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27600	SHEET E02		



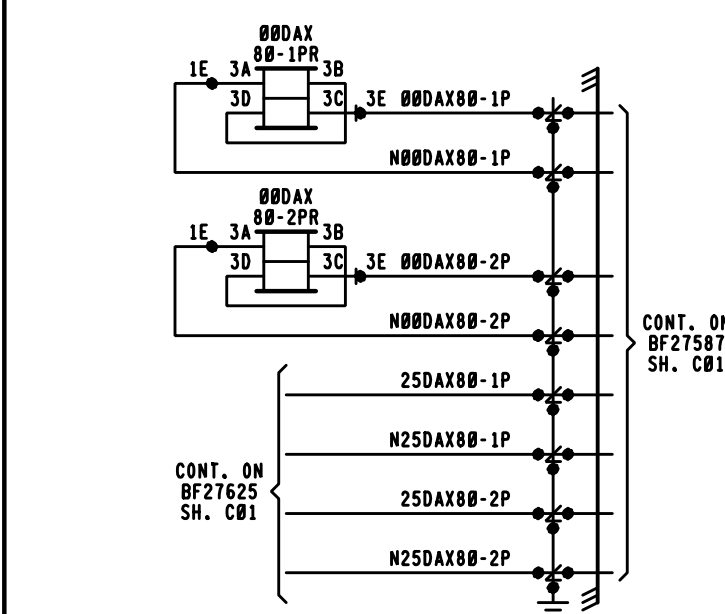
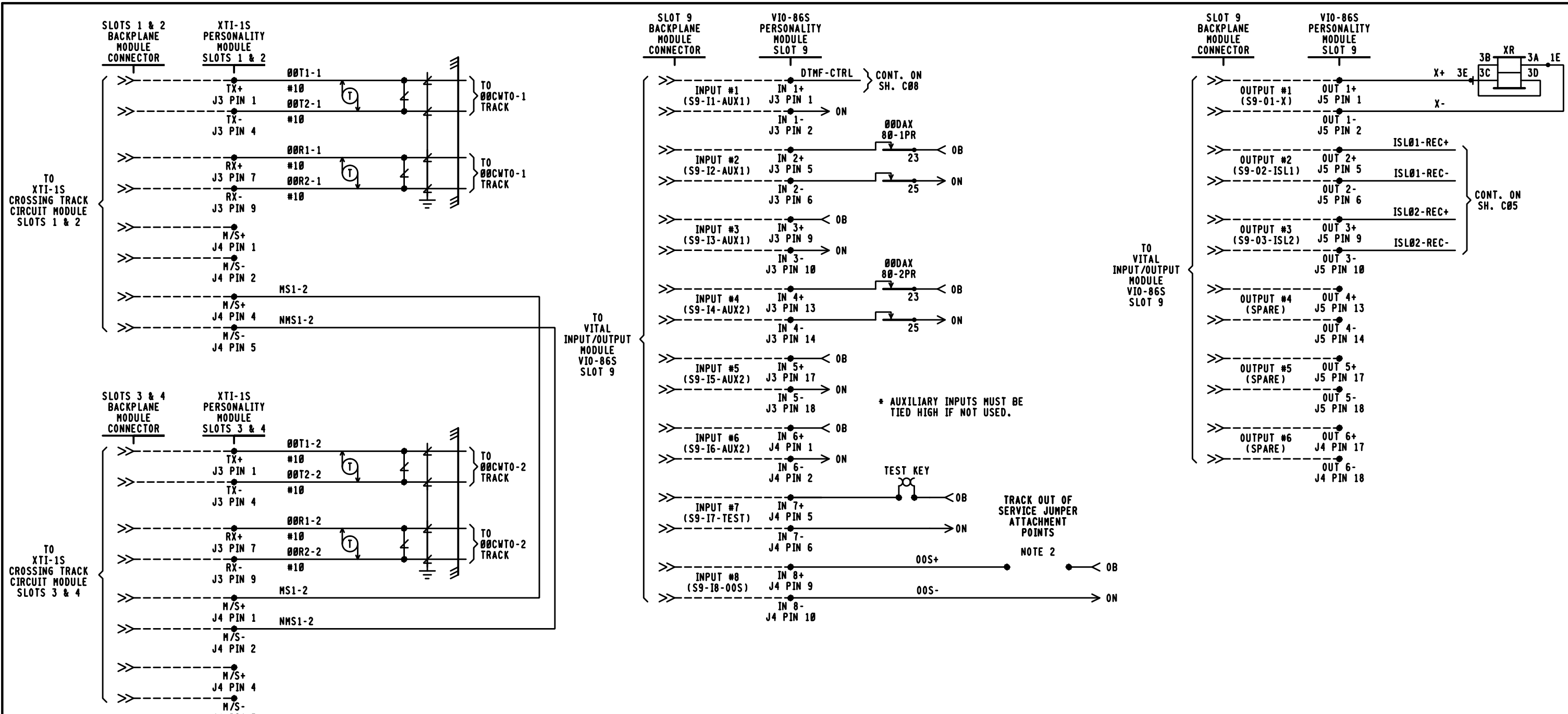
#17 * "H" } CONT. ON SH. C09



PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
NEW WORK CSX#: PA2023021 PRS/AMJ/SAF

NOTE:
 * = REFER TO SH. C09 FOR PART NUMBER.

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
STAUFFER ST. 145462T			
ELECTROLOGIXS XP4 MODULE LAYOUT DAWSON, PA H.P. BF-276.00			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27600	SHEET E03		



SLOT 9 I/O	
INPUT 1	POSITIVE CONTROL AUXILIARY INPUT 1 (AUX1)
INPUT 2	POSITIVE CONTROL AUXILIARY INPUT 2 (AUX1)
INPUT 3	POSITIVE CONTROL AUXILIARY INPUT 3 (AUX1)
INPUT 4	POSITIVE CONTROL AUXILIARY INPUT 4 (AUX2)
INPUT 5	POSITIVE CONTROL AUXILIARY INPUT 5 (AUX2)
INPUT 6	POSITIVE CONTROL AUXILIARY INPUT 6 (AUX2)
INPUT 7	CROSSING ACTIVATION TEST
INPUT 8	OUT OF SERVICE JUMPER INPUT (OOS)
OUTPUT 1	X OUTPUT
OUTPUT 2	ISL01 OUTPUT
OUTPUT 3	ISL02 OUTPUT
OUTPUT 4	(NOT USED)
OUTPUT 5	(NOT USED)
OUTPUT 6	(NOT USED)

* AUXILIARY INPUTS MUST BE TIED HIGH IF NOT USED.

TRACK OUT OF SERVICE JUMPER ATTACHMENT POINTS
NOTE 2

- NOTES
1. ALL WIRE THIS SHEET #16 AWG UNLESS NOTED.
 2. APPROACH DISABLE JUMPER INPUT. THIS INPUT IS USED IN COMBINATION WITH THE SOFT APPROACH DISABLE ACCESSED THROUGH THE CDU-2 KEYPAD. BOTH BITS MUST BE HIGH TO DISABLE AN APPROACH. THE OPERATOR IS SOLELY RESPONSIBLE FOR CROSSING PROTECTION WHEN THE APPROACH DISABLE FUNCTION IS ACTIVATED.
 3. = HLVA2-1675-01 HYBRID LOW VOLTAGE ARRESTER, UNLESS NOTED.

PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company
NEW WORK

DATE: 04-23-25
CSX*: PA2023021
PRS/AMJ/SAF

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

STAUFFER ST. 145462T

XP4 CROSSING DETECTION AND I/O CIRCUITS
DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DRAWING -----	SHEET NO -----	FILE BF27600	SHEET C01

DESIGN DATE
04-23-25

REV. NO.
1

SITE SPECIFIC MDR DESCRIPTIONS AND SETTINGS		
NAME	MDR1	MDR2
FUNCTION	XR	XR
WARNING TIME	33	33
CW/MD	CW	CW
AP TIME(PREEMPT)	NA	NA
CWE-WT	80	80
AUX RECOVERY DELAY	5	5
TRACK	TK 1	TK 2
TRACK ASSIGNED	ASSIGNED	ASSIGNED
OFFSET DISTANCE	0'	0'
MD RESTART	0*	0*
SUDDEN SHUNT ZONE	0*	0*
POSITIVE START	PSEN	DISABLE
	PSRX	NA
	PST	NA
POST JOINT DETECT	PJEN	ENABLE
	PJRX	15
	PJDT	15
CLEAR JOINT LOS	CJ-LOS MODE	STANDARD
	CJ-LOS RX	15
	CJ-LOS TIME	99

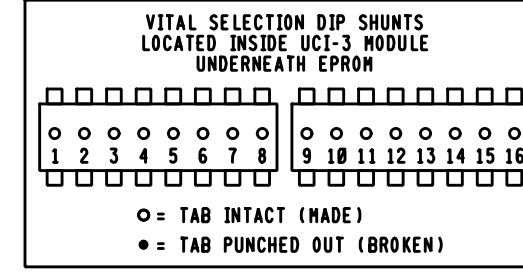
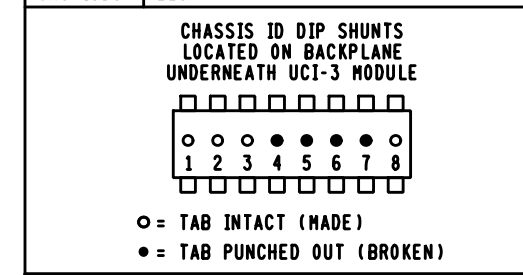
BASIC TRACK SETUP		
	TRACK 1	TRACK 2
FREQUENCY	392 HZ	392 HZ
MASTER/SLAVE	MASTER	SLAVE
RX ADJUST	100 *	100 *
TCA	*	*
DIRECTION MODE	BI	BI
LIA	*	*
ADVANCED APPROACH	*	*
NBS COMP RX	*	*
TRK ISLAND ASSIGN	ISL1	ISL2
APPROACH LENGTH	2391'	2391'
AUTO RX	ENABLE	ENABLE

ADVANCED TRACK SETUP			
		TRACK 1	TRACK 2
MOTION DET TIMER	MDEN	ENABLE	ENABLE
	MDTT	10 MIN	10 MIN
FALSE SHUNT	FSEN	DISABLE	DISABLE
	FSRX	NA	NA
	FST	NA	NA
APPROACH RELEASE	AREN	DISABLE	DISABLE
	ARRX	NA	NA
	ART	NA	NA
LOS TIME		16 SEC	16 SEC
IJ-LOS TIME		5 SEC	5 SEC
NRML*SHRT*VRYSHRT		*	*

ISLAND SETUP		
	TRACK 1	TRACK 2
ENABLE /DISABLE	ENABLE	ENABLE
FREQUENCY	4.0 KHZ	4.0 KHZ
LOSS OF SHUNT	2 SEC.	2 SEC.
FAULT DELAY	2	2

VPM3 ETHERNET SETUP	
	IP ADDRESS
ETHERNET PORT 1 (TOP)	192.168.0.11
ETHERNET PORT 2 (BOTTOM)	192.168.1.12

APPLICATION SOFTWARE INFORMATION	
NAME	9XXS-2.01V
REV.	1.0
CHECKSUM	E49B
CRC	FF9E
CH. I.D.	225



VITAL SELECTION DIP SHUNTS		
#	NAME	STATE
1	NA	INTACT (NOT USED)
2	NA	INTACT (NOT USED)
3	NA	INTACT (NOT USED)
4	NA	INTACT (NOT USED)
5	NA	INTACT (NOT USED)
6	NA	INTACT (NOT USED)
7	NA	INTACT (NOT USED)
8	NA	INTACT (NOT USED)
9	NA	INTACT (NOT USED)
10	NA	INTACT (NOT USED)
11	NA	INTACT (NOT USED)
12	NA	INTACT (NOT USED)
13	NA	INTACT (NOT USED)
14	NA	INTACT (NOT USED)
15	NA	INTACT (NOT USED)
16	NA	INTACT (NOT USED)

NOTES:
● = FIELD ADJUSTMENT
NA = NOT APPLICABLE

PRELIMINARY

PROGRESS
RAIL SERVICES
A Caterpillar Company

DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

NEW WORK

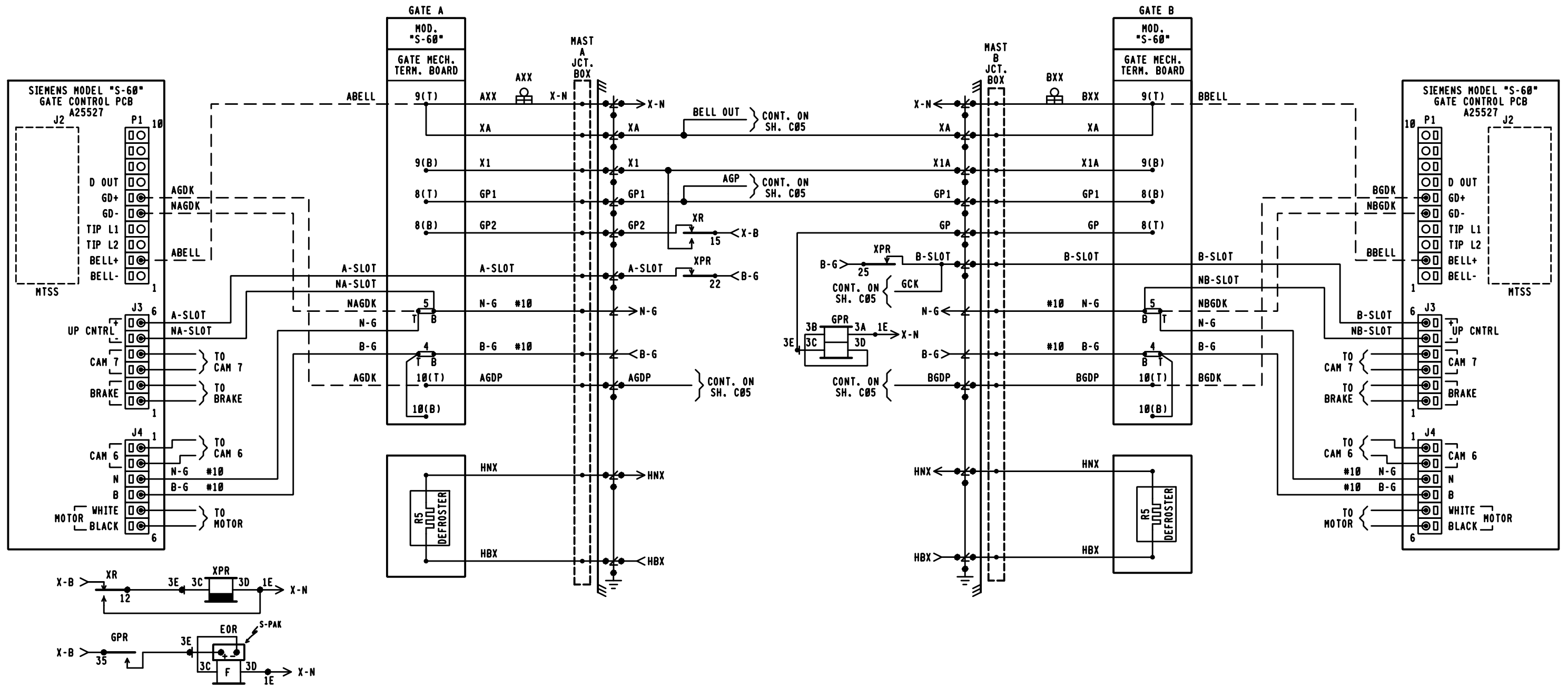
CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

STAUFFER ST. 145462T

XP4 SETUP INFORMATION
DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
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DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----	FILE BF27600	SHEET C02
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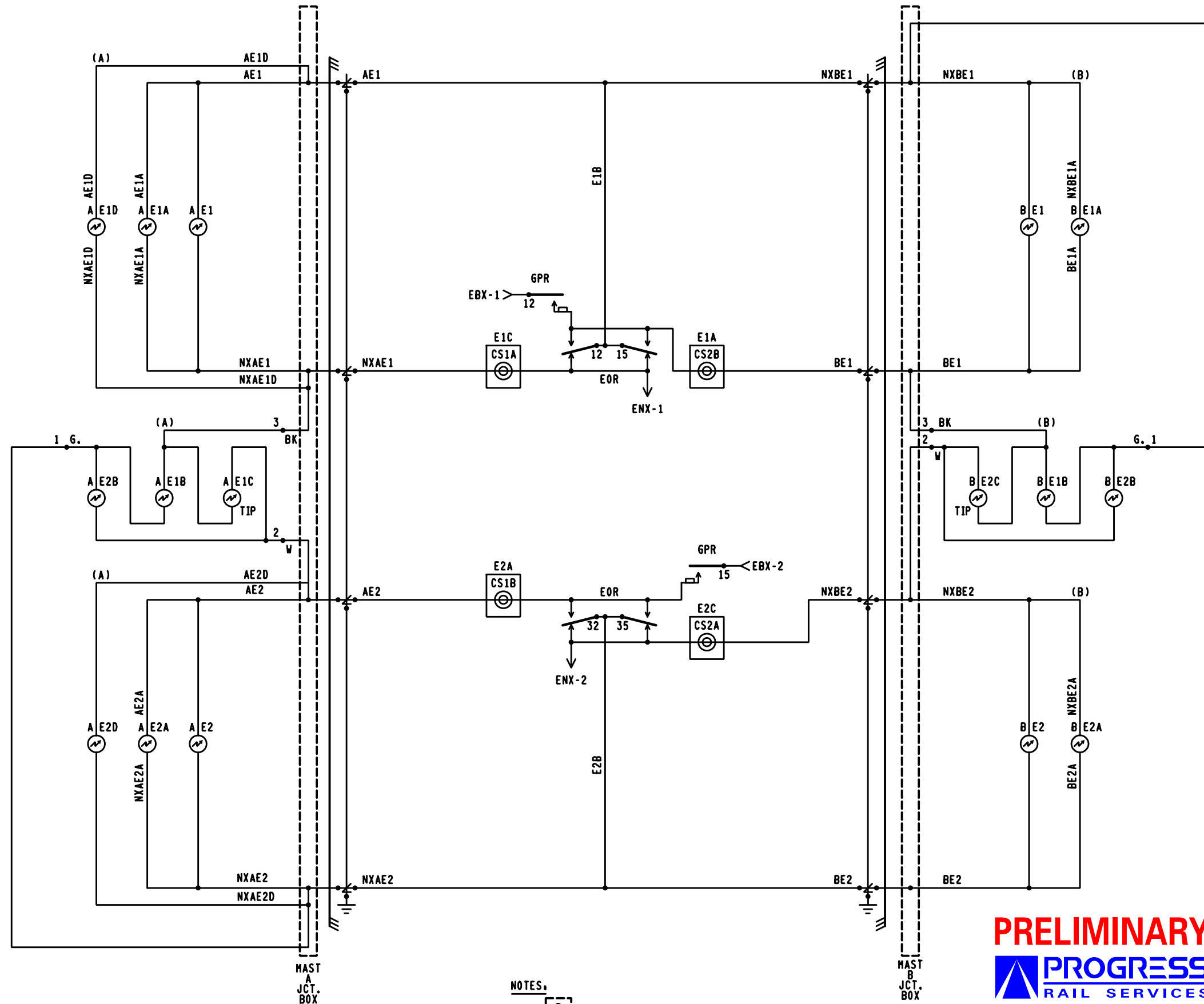


PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
STAUFFER ST. 145462T
 CROSSING WARNING DEVICE GATE CIRCUITRY
 DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27600	SHEET C03		



NOTES.

1. [Symbol] = TERMINAL IN JCT. BOX
2. WHEN 7 OR MORE LIGHTS ON A SINGLE STRUCTURE REFER TO SS-382 FOR REQUIRED ARRESTER RATING.

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

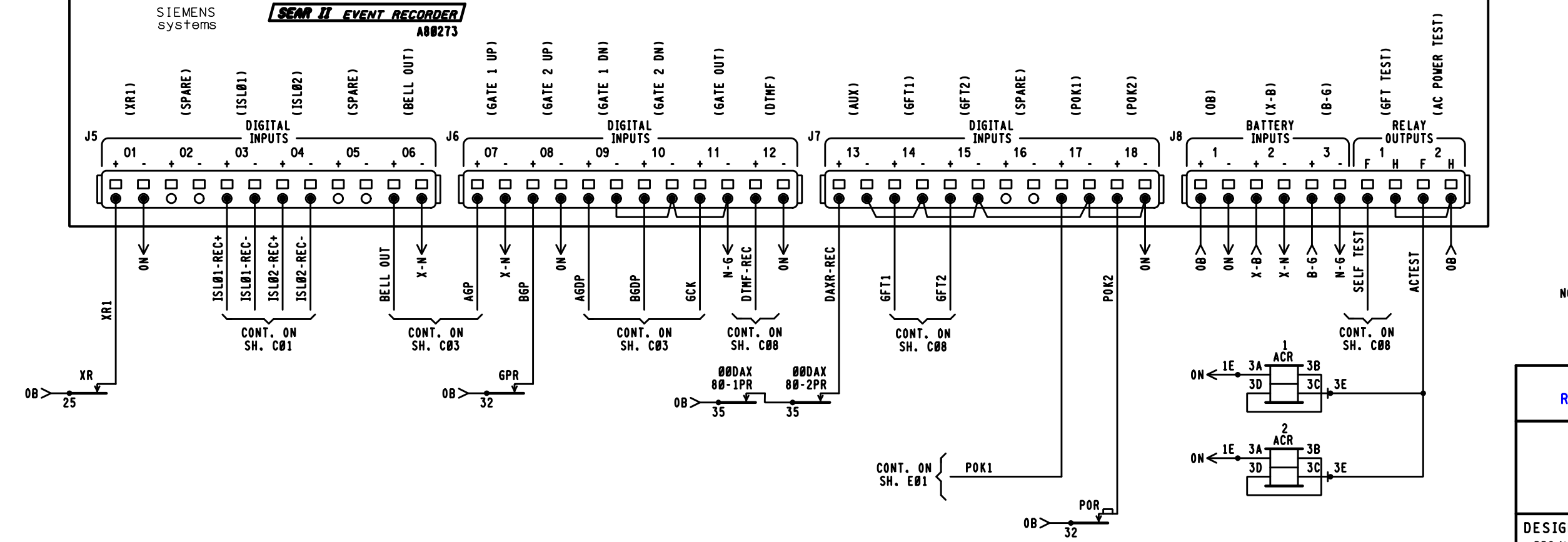
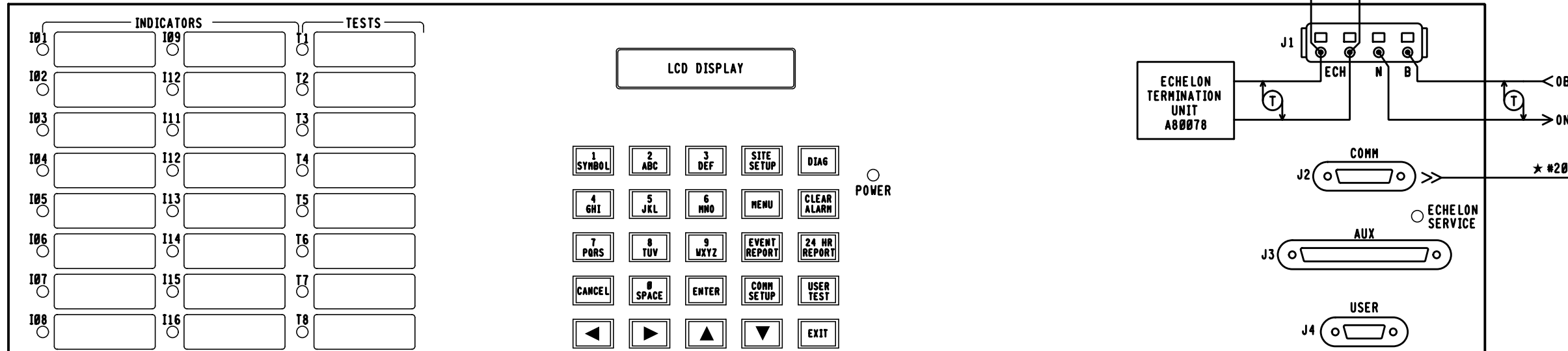
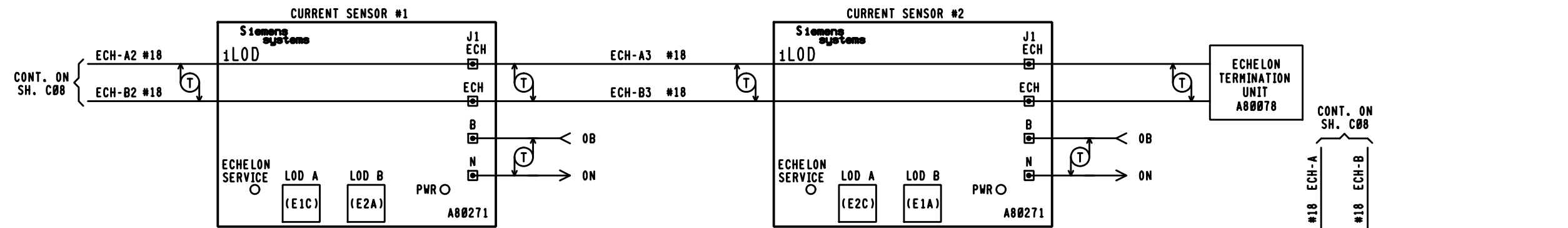
DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

STAUFFER ST. 145462T

CROSSING WARNING DEVICE LIGHT CIRCUITRY
 DAWSON, PA M.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27600	SHEET C04



PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
 DATE: 04-23-25
 NEW WORK CSX#: PA2023021
 PRS/AMJ/SAF

- NOTES:
 1. * = REFER TO SH. C09 FOR PART NUMBER.
 2. () DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
 STAUFFER ST. 145462T
 SEAR II CIRCUITS
 DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET C05
		FILE BF27600	

	DEFAULTS AND/OR STYLE	FIELD RECORD
SEAR II EXECUTIVE PROGRAM	VERSION: 9V645A01Y	VERSION:
APPLICATION PROGRAM (IF LOADED)	VERSION: _____	VERSION:

FIELD TO PROVIDE SEARII PROGRAM INFORMATION ON AIS

SITE SET UP OPTIONS	
OPTION	SELECTION
DATE	XX-XX-XXXX
TIME	XX:XX:XX
DAYLIGHT SAVINGS TIME	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
TIME ZONE	<input checked="" type="checkbox"/> EST <input type="checkbox"/> CST
SITE NAME	STAUFFER ST.
MILEPOST	BF-276.00
DOT NUMBER	145462T
TESTER TYPE	<input checked="" type="checkbox"/> CROSSING <input type="checkbox"/> WAYSIDE
DATE FORMAT	<input checked="" type="checkbox"/> MM-DD-YYYY <input type="checkbox"/> DD-MM-YYYY
TEMP FORMAT	<input checked="" type="checkbox"/> FAHRENHEIT <input type="checkbox"/> CELSIUS
INDICATE HOLDOFF	0
INDICATE REFRESH	60
SITE TYPE	<input type="checkbox"/> NO COMMUNICATION <input type="checkbox"/> DIAL-UP <input checked="" type="checkbox"/> COLLECTOR <input type="checkbox"/> NODE <input type="checkbox"/> BULLHORN/MODE <input type="checkbox"/> CDS902X
SITE ATCS ADDRESS	7.125.304.019.99.01 (7.RRR.LLL.666.99.01)
OFFICE ADDRESS	2.125.00.0000 (2.RRR.NN.DDDD)
OFFICE SITE ADDRESS	NA
BACK UP SITE ADDRESS 1	NA
BACK UP SITE ADDRESS 2	NA
POLL ID (1-99)	1
GEN/ATCS MODE	<input type="checkbox"/> GENISYS <input checked="" type="checkbox"/> GEN/ATCS
XID DISABLED	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
OFFICE COM. DEVICE	<input type="checkbox"/> DIRECT <input type="checkbox"/> MCM (RS232) <input type="checkbox"/> MCM (ECH) <input checked="" type="checkbox"/> WAG (ECHELON) <input type="checkbox"/> DIAL UP <input type="checkbox"/> S200 RADIO (RS232)
RADIO ATCS ADDRESS	7.125.304.019.01.01
OFFICE PHONE NUMBER	1-XXX-XXX-XXXX
INIT. STRING	
FIELD COMM	<input type="checkbox"/> VHF (ECH) <input type="checkbox"/> VHF (RS232) <input type="checkbox"/> WAG (ECH) <input type="checkbox"/> SS (RS232) <input checked="" type="checkbox"/> NONE
USER PORT	BAUD RATE (9600)
AUX PORT	BAUD RATE (9600)
COMM PORT	BAUD RATE (9600)

NOTE 5

NOTE 6

NOTE 7

NOTES.

1. LARGE CONFIGURATION ASSIGNS RECORDER INPUTS FOR USE WHEN DIGITAL I/O MODULE REQUIRED.
2. IF WARNING DEVICE = NONE MAIN/STANDBY OPTION NOT SHOWN.
3. IF VHF COMMUNICATIONS = NO THEN DTMF ACTIVATION AND CHANNEL OPTIONS ARE NOT SHOWN.
4. LAST 3 DIGITS OF DOT NO. FOR FIRST ACTIVATION CODE.
5. DEFAULT ADDRESS 7.125.100.100.99.01 USED FOR STAND ALONE LOCATIONS.
6. OPTIONS NOT SHOWN IF SITE TYPE = NO COMMUNICATIONS.
7. FORMAT AS, BAUD, DATA BITS, PARITY STOP BITS, FLOW CONTROL.

FIELD TO PROVIDE BATTERY VOLTAGES AND CURRENT READINGS ON AIS

LIT BULB COUNT ON EACH CIRCUIT	NO.	TYPE OF BULB	CURRENT READING IN AMP. AT APPROX. 10.0 V BULB VOLTAGE
CURRENT SENSOR (1) E1C, LAMP SET UP	5	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (1) E2A, LAMP SET UP	5	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (2) E2C, LAMP SET UP	4	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (2) E1A, LAMP SET UP	4	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X

MEASURE BATTERY VOLTAGE AT INPUT	
BATTERY VOLTAGE 0B	XXXX VOLTS
BATTERY VOLTAGE X-B	XXXX VOLTS
BATTERY VOLTAGE B-6	XXXX VOLTS

SITE SET UP OPTIONS CONT.	
OPTION	SELECTION
RAILROAD NUMBER	125
CROSSING CONFIGURATION	STANDARD <input checked="" type="checkbox"/> LARGE <input type="checkbox"/> REMOTE <input type="checkbox"/> SPLIT GATE <input type="checkbox"/> ISL ONLY <input type="checkbox"/> CP COLLECTOR <input type="checkbox"/>
NUMBER OF XR INPUTS	0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
NUMBER OF ISL INPUTS	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CONSTANT WARNING DEVICE	GCP <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> NONE <input type="checkbox"/>
TOTAL NUMBER OF GCP NODES	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>
NUMBER OF REDUNDANT GCP	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CROSSING CONTROLLER 1	SSCC IIIA / PLUS <input type="checkbox"/> SSCC IV <input type="checkbox"/> OTHER <input type="checkbox"/> NONE <input checked="" type="checkbox"/>
POK2	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
MAIN / STANDBY	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
AUXILIARY TRACKS	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/>
ENTRANCE GATE	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>
EXIT GATES	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
GATE POSITION FAIL 10-60 SEC	25
NUMBER OF UAX INPUTS	0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/>
BATTERY BANKS	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
0B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/>
X-B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/> NOT PRESENT <input type="checkbox"/>
B-6 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/> NOT PRESENT <input type="checkbox"/>
X-B2 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
B-62 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
X-B3 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
PREEMPTION	NORMAL <input type="checkbox"/> ADVANCED <input type="checkbox"/> NO <input checked="" type="checkbox"/>
KDR INPUT	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
VHF COMMUNICATOR	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ACTIVATION CODE 1	XXX
ACTIVATION CODE 2	XXX
ACTIVATION CODE 3	XXX
ACTIVATION TIMEOUT (30 TO 600 SECONDS)	60
LOD MODULES	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
ANY LED BULBS	NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>
AUTO INSPECTIONS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BELL ON	GATES LOWERING <input checked="" type="checkbox"/> GATES MOVING <input type="checkbox"/> ALWAYS <input type="checkbox"/>
GROUND FAULT DETECTORS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BATTERIES ON GFT1	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/>
FULL APPROACH MOVE ALARMS	ACTIVATED <input checked="" type="checkbox"/> DO NOT ACTIVATE <input type="checkbox"/>

NOTE 1

NOTE 2

NOTE 3

NOTE 4

PRELIMINARY

 A Caterpillar Company
NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

STAUFFER ST. 145462T

SEAR II CONFIGURATION AND FUNCTIONS
 DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27600	SHEET C06		

DISCRETE INPUTS	DI 01	DI 02	DI 03	DI 04	DI 05	DI 06
CHANNEL	1	2	3	4	5	6
NAME	XR1		ISLAND 1 (TRACK)	ISLAND 2 (TRACK)		BELL OUT (BELL PWR)
TAG	XR1 (XR)	SP	ISL1	ISL2	SP	BELL OUT (BELL PWR)
OFF NAME	DOWN (XR)		DOWN (ISL1)	DOWN (ISL2)		OFF (BELL PWR)
ON NAME	UP (XR)		UP (ISL1)	UP (ISL2)		ON (BELL PWR)
ON DEBOUNCE TIME	100 ms	1000 ms	100 ms	100 ms	1000 ms	100 ms
OFF DEBOUNCE TIME	100 ms	1000 ms	100 ms	100 ms	1000 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms

TSS INPUTS	DI 07	DI 08	DI 09	DI 10
CHANNEL	7	8	9	10
NAME	AGP	BGP	AGDP	BGDP
TAG	AGP (GP)	BGP (GP)	AGDP	BGDP
OFF NAME	LIGHTS FLASH	LIGHTS FLASH	NOT HORIZ	NOT HORIZ
ON NAME	GATE VERTICAL	GATE VERTICAL	GATE HORIZ	GATE HORIZ
ON DEBOUNCE TIME	100 ms	100 ms	100 ms	100 ms
OFF DEBOUNCE TIME	100 ms	100 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms

DISCRETE INPUTS	DI 11	DI 12	DI 13
CHANNEL	11	12	13
NAME	GATE CONTROL	DTMF	AUX
TAG	GCOU1 (GCK)	DTMF-REC	AUX (DAXPR)
OFF NAME	OFF (DESCENT)	OFF (NO GATE KEYED)	DOWN (DAXPR)
ON NAME	ON (ASCENT ON)	ON (ACTIVATE)	UP (DAXPR)
ON DEBOUNCE TIME	100 ms	100 ms	100 ms
OFF DEBOUNCE TIME	100 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms

GFT INPUTS	DI 14	DI 15
CHANNEL	14	15
NAME	GND FAULT TESTER 1 (GFT1,2)	GND FAULT TESTER 2 (GFT3,4)
TAG	GFT1 (GFT1 DATA)	GFT2 (GFT2 DATA)
BATTERY 1 NAME	OB (GND FAULT)	B-G (GND FAULT)
BATTERY 1 TAG	OB (GND FAULT)	B-G (GND FAULT)
BATTERY 2 NAME	X-B (GND FAULT)	SP.
BATTERY 2 TAG	X-B (GND FAULT)	SP.

DISCRETE INPUTS	DI 16	DI 17	DI 18
CHANNEL	16	17	18
NAME		POK1	POK2
TAG	SP	POK1	POK2
OFF NAME		OFF (ALL POWER OFF)	OFF (ALL POWER OFF)
ON NAME		ON (ALL POWER ON)	ON (ALL POWER ON)
ON DEBOUNCE TIME	1000 ms	100 ms	100 ms
OFF DEBOUNCE TIME	1000 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms

BATTERY INPUTS	BI1	BI2	BI3
CHANNEL	1	2	3
NAME	OB (ELECTRONIC BATT)	X-B (BULB BATT)	B-G (GATE BATT)
TAG	OB	X-B	B-G
SAMPLE PERIOD (ms)	500 (ms)	500 (ms)	500 (ms)
RESOLUTION (V)	0.2 (VOLTS)	0.2 (VOLTS)	1.0 (VOLTS)
AVGERAGING SAMPLES	32 SAMPLES	32 SAMPLES	32 SAMPLES


RELAYS	RO1	RO2
CHANNEL	1	2
NAME	GFT TEST	AC POWER TEST (ACRLY)
TAG	SELF TEST	AC POWER TEST (ACRLY)
OFF STATE NAME	NOT TESTING	OFF (ACR DN)
ON STATE NAME	TESTING	ON (ACR UP)
UNKNOWN STATE NAME	PULSE	PULSE
ON PULSE TIME (s)	1 (s)	1 (s)
OFF PULSE TIME (s)	1 (s)	1 (s)
TOGGLE PERIOD (s)	1 (s)	1 (s)
DUTY CYCLE	50	50

NOTE: () DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

PRELIMINARY

PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

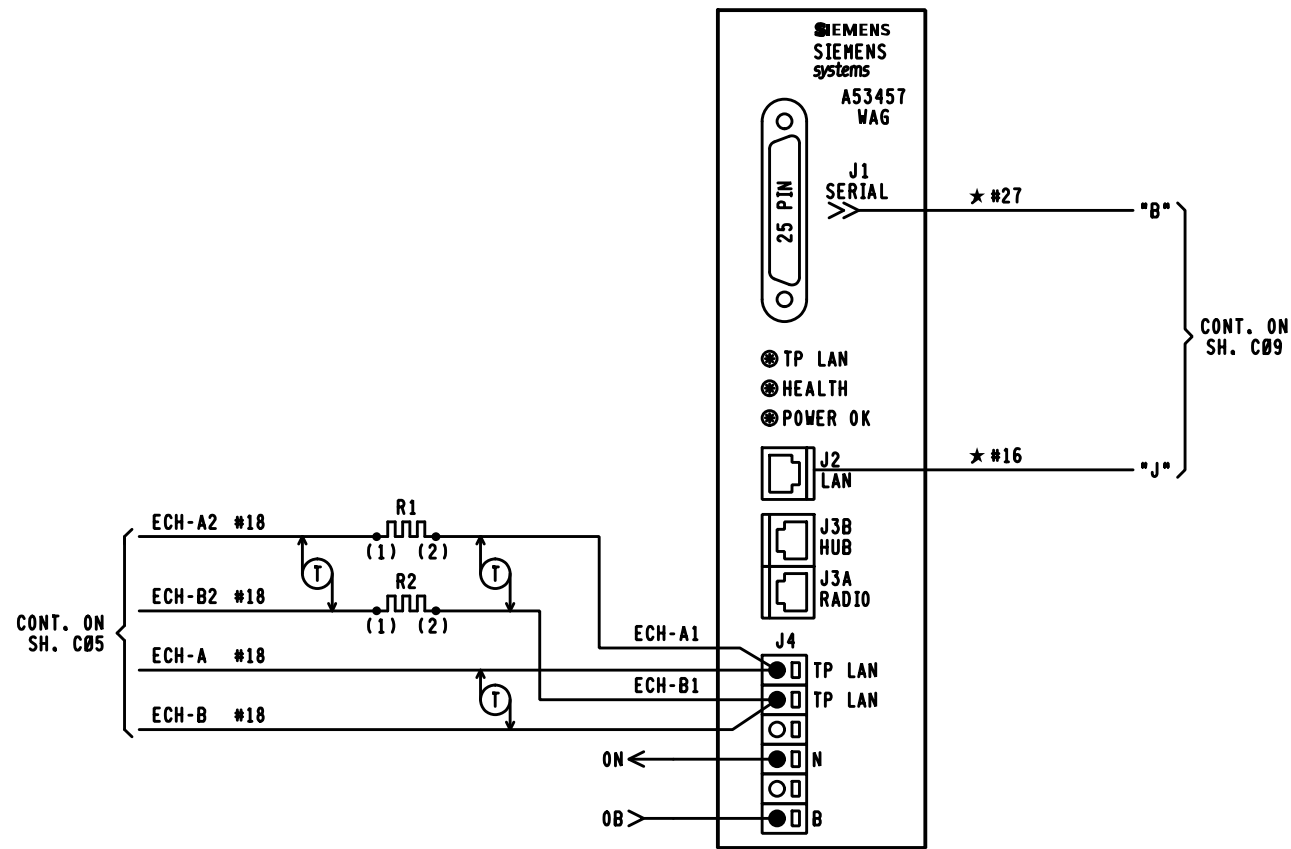
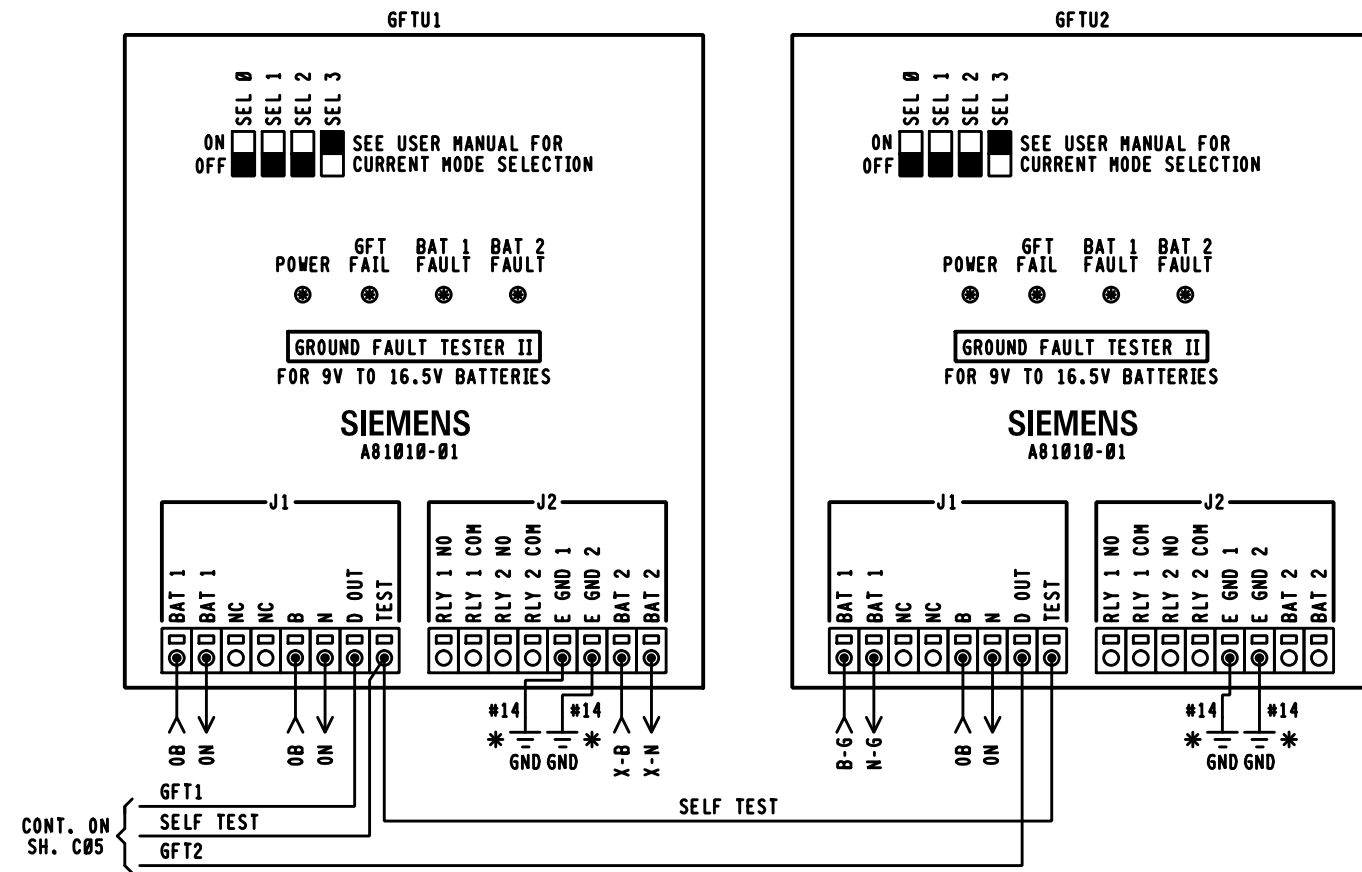
DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF


RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS
STAUFFER ST. 145462T
 SEAR II CHANNELS
 DAWSON, PA H.P. BF-276.00

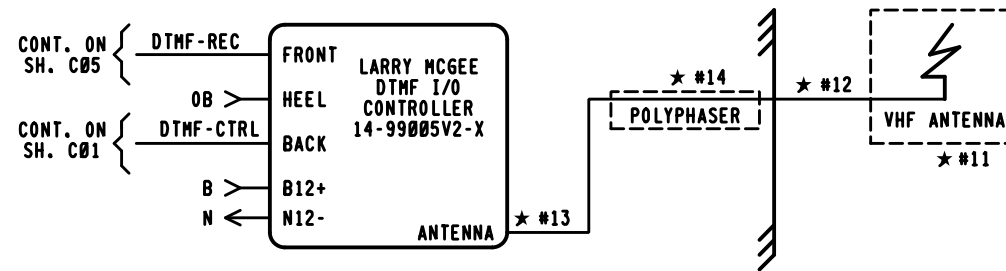
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27600	SHEET C07		

WAYSIDE ACCESS GATEWAY CONFIGURATION	
SITE ATCS ADDRESS	7.125.304.019.07.01
SERIAL INTERFACE	9600,NONE,8,1/NOFLOW
SERIAL FORMAT	RAW
WAG TEST MODE	DISABLED
ECHOLON ADDRESS	01.01
UDP PORTS	5000, 5001, 5002, 5003
ROUTE TABLE EXPIRY	5400 SEC
BROADCAST MEDIUM	IP ETHERNET
TCP PORTS	6001
DHCP SERVER	DISABLED
IP ADDRESS	192.168.13.1
TYPE 7 ROUTE LENGTH	12--7RRRLLG6SS
IP NETWORK MASK	255.255.255.000

NOTE TO INSPECTOR,
AT INSTALLATION OF CDMA BY COM,
MARK-UP CONFIGURATION TABLE FOR
AS IN SERVICE PLANS



COMM NOTE.
1. WAG J3A PINOUTS.
4 & 5 = +12VDC RADIO OUT
7 & 8 = GND RADIO RETURN



GCP PROGRAMMING FOR VHF RADIO
REMOTE DTMF CROSSING ACTIVATION
(ACTIVATES ENTIRE CROSSING)
TO ACTIVATE PRESS, 462*
TO DE-ACTIVATE PRESS, 462*
(ACTIVATION WILL TIME OUT AFTER 60 SEC.)

- NOTES.
- ★ = REFER TO SH. C09 FOR PART NUMBERS.
 - ALL WIRING #16 UNLESS NOTED OTHERWISE.
 - * = EARTH GROUND REF. TERMINALS REQUIRED FOR DETECTION. DO NOT JUMPER TERMINALS. MUST BE CONNECTED TO DIFFERENT POINTS OF BUNGALOW.
 - R1 & R2 = .5 WATT, 20Ω RESISTOR

PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company
NEW WORK
DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

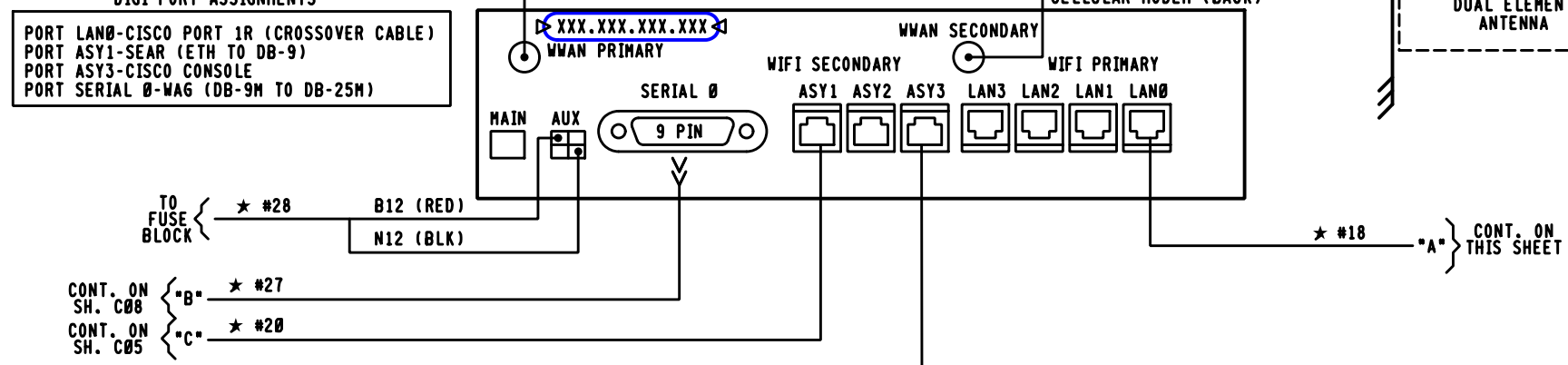
STAUFFER ST. 145462T

WAYSIDE ACCESS GATEWAY
DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27600	SHEET C08

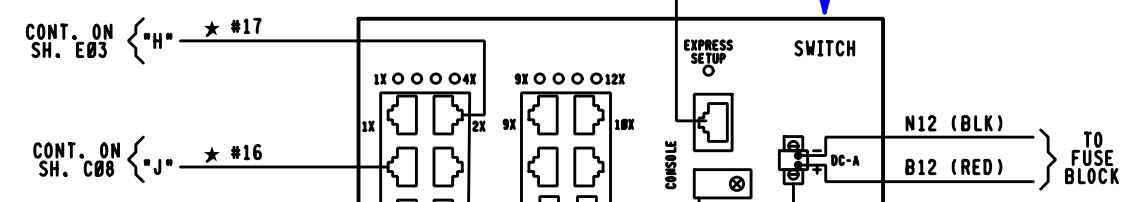
DIGI PORT ASSIGNMENTS
 PORT LAN0-CISCO PORT 1R (CROSSOVER CABLE)
 PORT ASY1-SEAR (ETH TO DB-9)
 PORT ASY3-CISCO CONSOLE
 PORT SERIAL 0-WAG (DB-9M TO DB-25M)

FIELD TO PROVIDE IP ADDRESS FOR AS IN SERVICE

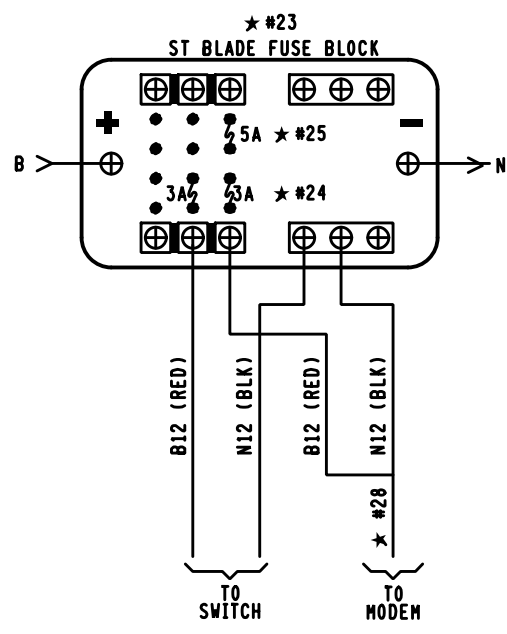


* CSDA-30348-KIT (020.0000493.1)		
REF.	DESCRIPTION	QTY
2	POLYPHASER, TSX-NFF	2 EA.
7	LHR-195, N-MALE TO SMA-MALE, 5 FT	2 EA.
9	MIMO ANTENNA, BLACK, 15FT, AP-HMF-CCG-Q-S222-BL ANTENNA MOUNTING ARM, CSDA-30309-BKTANT1	1 EA.
11	VHF OMNI ANTENNA	1 EA.
12	LHR-200, N-MALE TO N-MALE, 3 FT	1 EA.
13	LHR-240, N-MALE TO BNC-MALE, 10 FT	1 EA.
14	VHF SURGE PROTECTOR N-FEMALE TO FEMALE	1 EA.
16	CAT 6 PATCH CABLE UTP, BOOTED, YELLOW, 20 FT	1 EA.
17	CAT 6 PATCH CABLE UTP, BOOTED, ORANGE, 20 FT	1 EA.
18	CAT 6 PATCH CABLE UTP, BOOTED, RED, X-OVER, 20 FT	1 EA.
20	DIGI-TRANSPORT TO CISCO CABLE, BLUE, 20 FT	3 EA.
21	CAT 6 STP ROLL-OVER PATCH CABLE, BLACK, 20 FT	1 EA.
23	DC PDU WITH 5 FUSED CIRCUITS	1 EA.
24	INDICATOR FUSE, ATO STYLE, 3 AMP	4 EA.
25	INDICATOR FUSE, ATO STYLE, 5 AMP	1 EA.
27	SERIAL CABLE, DB9M TO DB25M, STRAIGHT WIRED, 20 FT	1 EA.
28	DIGI-TRANSPORT POWER CABLE, 4-PIN MOLEX TO OPEN END, 14 FT	1 EA.

NOTE 2



SWITCH PORT ASSIGNMENTS
 PORT #2-CWU
 PORT #3-WAG J2 LAN
 PORT #9-HYRDOGEN FUEL CELLS (0B)
 PORT #10-HYRDOGEN FUEL CELLS (X-B)
 PORT #11-HYRDOGEN FUEL CELLS (B-6)
 PORT #1R-DIGI PORT LAN 0 (CROSSOVER CABLE)
 CONSOLE-DIGI PORT ASY3



PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
 DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

- NOTES:
 1. WIRING TO BE #16 UNLESS NOTED.
 2. CISCO IE2000 SWITCH OR EQUIVALENT.

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
 STAUFFER ST. 145462T
 CROSSING COMMUNICATIONS EQUIPMENT
 DAWSON, PA H.P. BF-276.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27600	SHEET C09		

INDEX CONTENTS

SH. NO.	CONTENTS	REVISION NO.								
		1	2	3	4	5	6	7	8	9
I01	INDEX AND REVISIONS	✓	✓	✓						
S01	TRACK AND SIGNAL PLAN	✓	✓	✓						
E01	POWER DISTRIBUTION	✓	✓	✓						
E02	ELECTROLOGIXS XP4 MODULE LAYOUT	✓	✓	✓						
C01	XP4 CROSSING DETECTION AND I/O CIRCUITS	✓	✓	✓						
C02	XP4 SETUP INFORMATION	✓	✓	✓						
C03	CROSSING WARNING DEVICE GATE CIRCUITRY	✓	✓	✓						
C04	CROSSING WARNING DEVICE LIGHT CIRCUITRY	✓	✓	✓						
C05	SEAR II CIRCUITS	✓	✓	✓						
C06	SEAR II CONFIGURATION AND FUNCTIONS	✓	✓	✓						
C07	SEAR II CHANNELS	✓	✓	✓						
C08	WAYSIDE ACCESS GATEWAY	✓	✓	✓						
C09	CROSSING COMMUNICATIONS EQUIPMENT	✓	✓	✓						



 = DESIGN COMPLETED
 = REVISION COMPLETED



THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED, 03-10-23
 CSX PROJECT # PA2019559


 A Caterpillar Company DATE, 03-10-23
 CSX#, PA2019555
 PRS/CDT/SAF
 * * = OUT
 □ □ = IN

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED, 03-10-23
 CSX PROJECT # PA2019555

PRELIMINARY

 = NOTE

 A Caterpillar Company DATE, 04-23-25
 CSX#, PA2023021
 PRS/AMJ/SAF
 * * = OUT
 ▽ ▽ = IN


 = NOTE

 A Caterpillar Company DATE, 03-10-23
 CSX#, PA2019559
 PRS/TGG/SAF
 * * = OUT

REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2019559	03-10-23		
2	PA2019555	03-10-23		
3	PA2023021	04-23-25		

TO BE COMPLETED ON A.I.S.

TO BE COMPLETED ON A.I.S.

TO BE COMPLETED ON A.I.S.

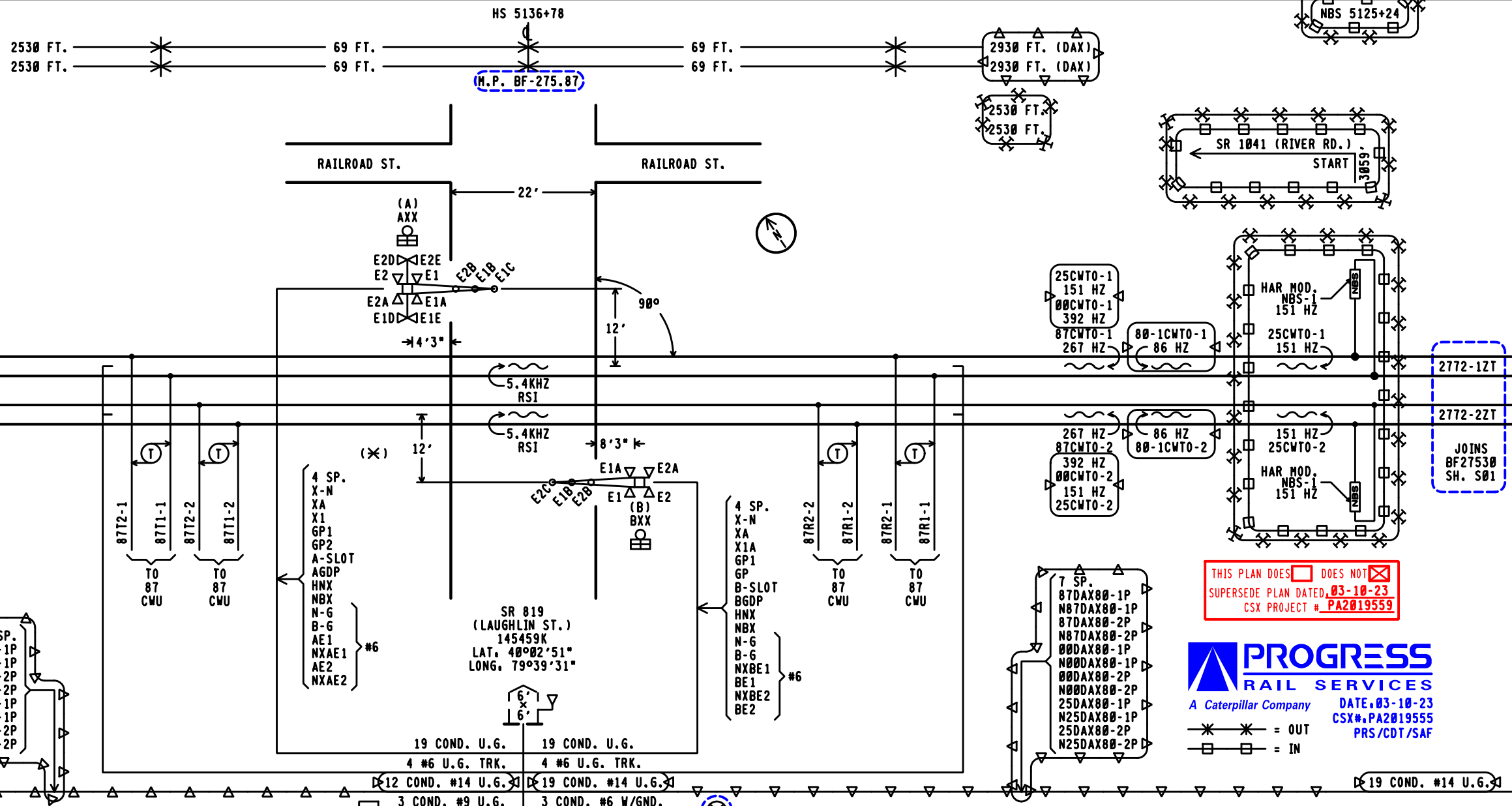

 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

SR 819 (LAUGHLIN ST.) 145459K

INDEX AND REVISIONS
DAWSON, PA M.P. BF-275.87

DESIGNED PRS/TGG	DIGITIZED PRS/TGG	CHECKED PRS/SAF	DATE 03-10-23
DRAWING -----	SHEET NO -----	FILE BF27587	SHEET 101(A)

DESIGN DATE 03-10-23	REV. NO. 1	DRAWING -----	SHEET NO -----	FILE BF27587	SHEET 101(A)
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PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
 CSX # PA2023021 PRS/ANJ/SAF

PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 03-10-23
 CSX # PA2019555 PRS/CDT/SAF

* AUTHORIZING AGENCY, PADOT
 * DATE OF REQUIREMENT, NA
 * AMOUNT OF TIME (SEC.), 0 SEC. (SIMULTANEOUS)

APPROACH LENGTHS TABLE	EASTBOUND MAIN 1 & 2 CWT	WESTBOUND MAIN 1 & 2 CWT
DC, AFO, TYPE C, MOTION, CWT, OR OTHER		
STANDARD MINIMUM WARNING TIME IN SECONDS	25	25
ROADWAY GATE TIME IN SECONDS	5	5
CLEARANCE TIME IN SECONDS	1	1
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS *	0	0
DESIGNED WARNING TIME FOR TRAINS AT TIME TABLE SPEED	31 SEC.	31 SEC.
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	0	0
CONTROL EQUIPMENT DECISION TIME IN SECONDS	4	4
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	35 SEC.	35 SEC.
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	45	45
BUFFER SPEED IN MILES PER HOUR	5	5
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	50	50
APPROACH DISTANCE TO ISLAND EDGE IN FEET	2530	2530
HALF WIDTH OF ISLAND IN FEET	69	69
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT	276.36	275.38

FIELD NOTE.
 FIELD TO SHOW ACTUAL DISTANCE BETWEEN METER POLE & BUNGALOW AND INDICATE ON A.I.S.

FOR AMPERAGES OF 15 AMPS OR LESS PER LEG USE THE FOLLOWING POWER CABLE DESIGN GUIDELINES
 3 COND. #6 W/GND. (5% VD) $X \leq 402'$
 3 COND. #4 W/GND. (5% VD) $403' < X \leq 618'$
 * 3 COND. #2 W/GND. (10% VD) $619' < X \leq 1,856'$
 * GREATER THAN 1,856' CABLE RUN CALCULATE ACTUAL CABLE SIZE REQUIREMENTS PER SS360.

- NOTES.**
- 12" LED MAXIMUM CURRENT 1.0A AT 10 VOLTS LED GATE ARM LIGHTS .3A MAXIMUM
 - GATE LENGTH (A) 15' (B) 19'
 - (*) = LOCATION OF HOUSE
 - (N) = APPROXIMATE COMPASS NORTH.
 - TRANSMITTER LEADS FOR MOTION OR PREDICTOR EQUIPMENT SHOULD BE CONNECTED ON THE BUNGALOW OR SHORT LEAD SIDE OF THE CROSSING.
 - ISLAND TRACK LEADS SHOULD BE CONNECTED 50 FEET FROM ROAD EDGE BUT ON NARROW ROADS (20' OR LESS) ISLAND LENGTH SHALL BE 120 FEET.
 - WARNING SYSTEM APPROACH CIRCUIT DISTANCES ARE TO BE MEASURED FROM THE ISLAND TRACK CONNECTIONS.

--- = EXISTING
 --- = NOTE

PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 03-10-23
NEW WORK CSX # PA2019555 PRS/T66/SAF

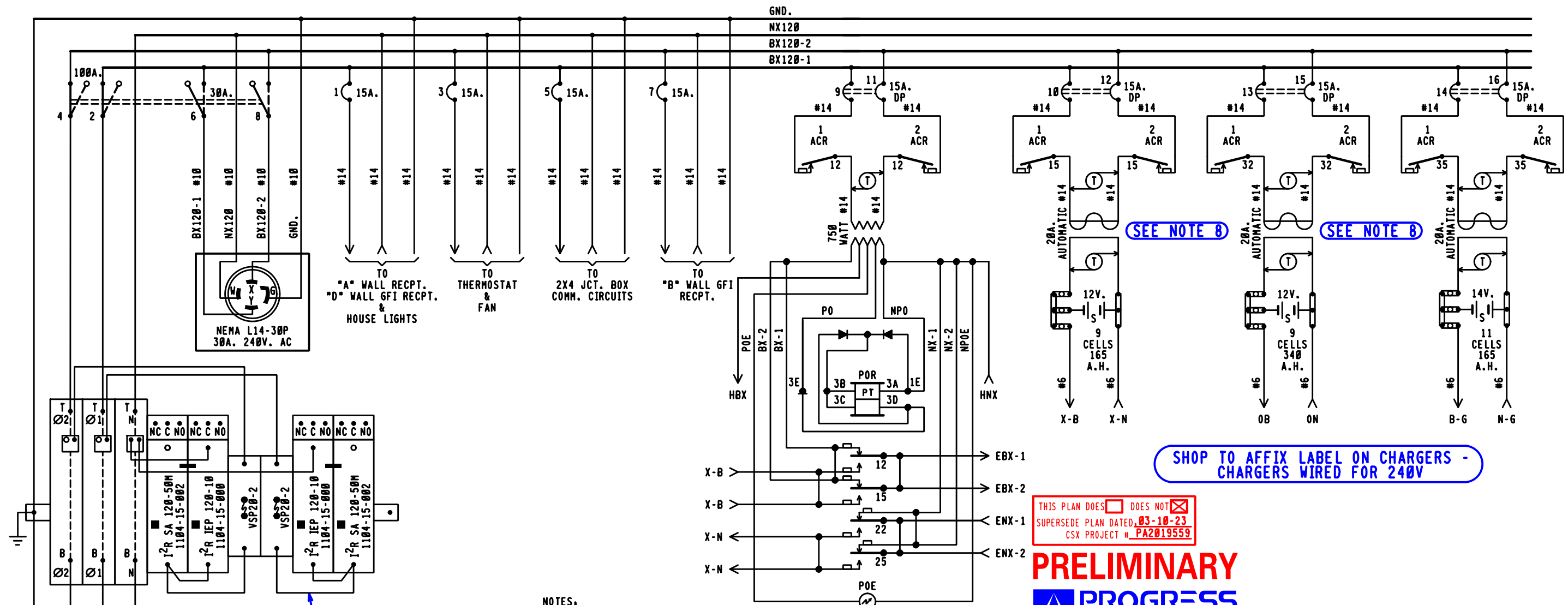
CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS

SR 819 (LAUGHLIN ST.) 145459K

TRACK AND SIGNAL PLAN
 DAWSON, PA M.P. BF-275.87

DESIGNED PRS/T66	DIGITIZED PRS/T66	CHECKED PRS/SAF	DATE 03-10-23
DESIGN DATE 03-10-23	REV. NO. 1	DRAWING	SHEET NO. FILE BF27587 SHEET S01(A)

XR		XPR		GPR		EOR		PER		87DAX80-1PR		87DAX80-2PR		POR		1ACR		2ACR		
12	FB	B8	22	F	B36	12	B	B82	12	F	B8	12	B	B8	12	FB	B62	12	B	B77
15	FB	C30	25	F	C30	15	B	C30	15	F	C30	15	B	C30	15	FB	C30	15	B	C30
22									22			22			22			22		
23	F					25			23	F		23	F		25	FB		25		
25	F					32	F		25			25	F		32	B		32	B	
32	F					35	B		32			32	B		35	B		35	B	
35									35	F		35	F							



SEE NOTE 8

SHOP TO AFFIX LABEL ON CHARGERS - CHARGERS WIRED FOR 240V

THIS PLAN DOES DOES NOT SUPERSEDE PLAN DATED 03-10-23 CSX PROJECT # PA2019559

PRELIMINARY

PROGRESS RAIL SERVICES
A Caterpillar Company
DATE: 04-23-25
CSX #: PA2023021
PRS/AMJ/SAF

PROGRESS RAIL SERVICES
A Caterpillar Company
NEW WORK
DATE: 03-10-23
CSX #: PA2019559
PRS/TGG/SAF

✕✕ = OUT

○ = NOTE

- NOTES:
- REFERENCES ARE PER SS713.
 - ARRESTERS ARE PER SS302.
 - SHELF RELAY PLACEMENT ON CONSIST CHART HAS NO SIGNIFICANCE.
 - PLUG-IN RELAYS ARE VIEWED FROM THE FRONT OF RACK.
 - BATTERY A.H. CAPACITY SHOWN IS THE MINIMUM REQUIREMENT.
 - WIRING
 - A - FEED TO ALL BUSES, LIGHT CIRCUITS, MOTOR CIRCUITS TO BE #10 FLEX.
 - B - 120-VOLT FEED FROM ENTRANCE TO POWER BUSS TO BE #10 FLEX.
 - C - ALL TRACK WIRES TO BE #10 FLEX.
 - D - ALL OTHERS TO BE #16 FLEX UNLESS NOTED.
 - E - ALL BATTERY OUTPUTS TO BE #6 PER SS360.
 - CIRCUIT INTERRUPTERS 2 & 4 ARE MECHANICALLY INTERLOCKED WITH CIRCUIT INTERRUPTERS 6 & 8.
 - CHARGERS WIRED FOR 240VAC
 - CIRCUIT BREAKERS PANEL- 00124L1256 (24 SPACES)

6' X 6' PTC RELAY HOUSE

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

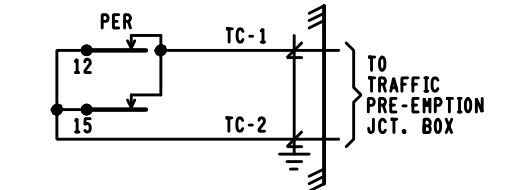
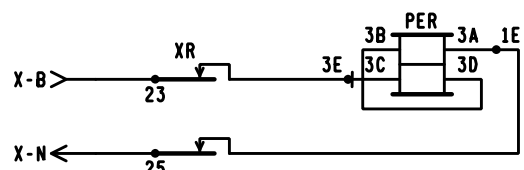
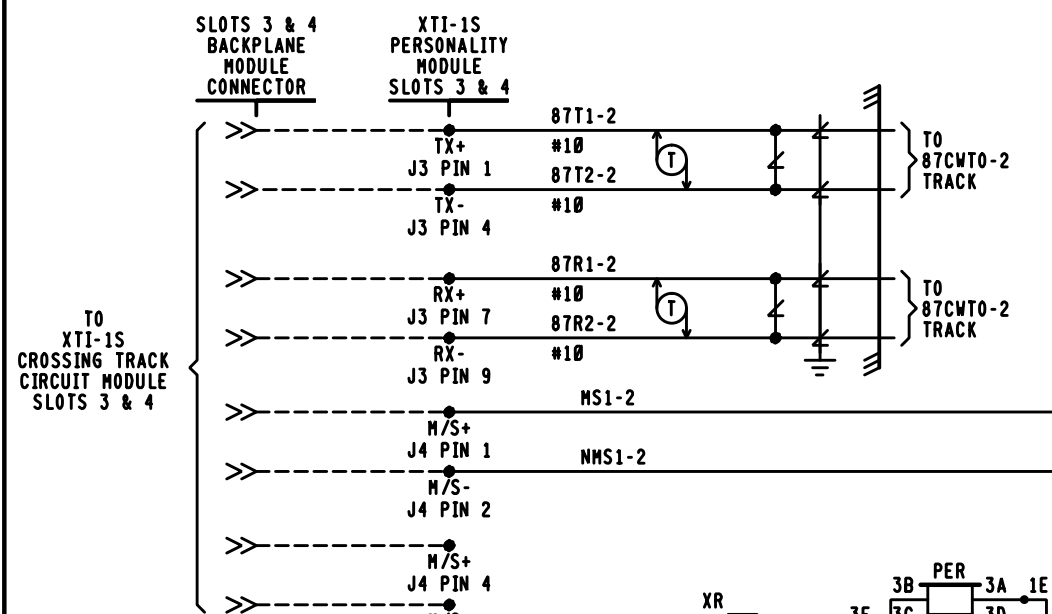
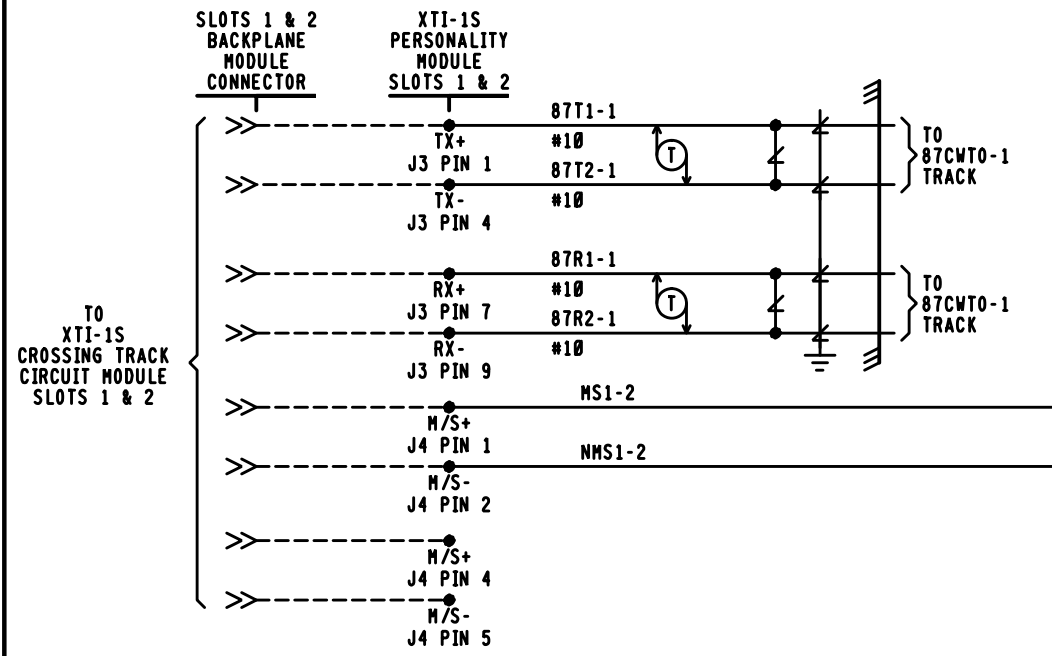
SR 819 (LAUGHLIN ST.) 145459K

POWER DISTRIBUTION
DAWSON, PA M.P. BF-275.87

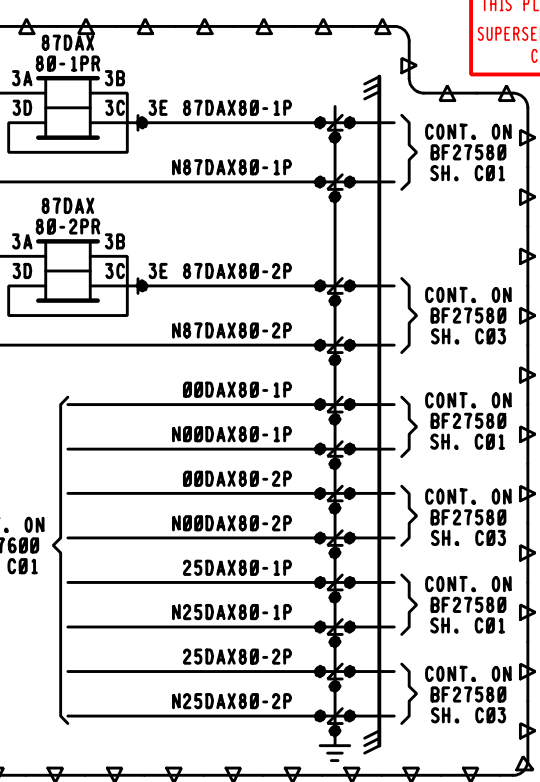
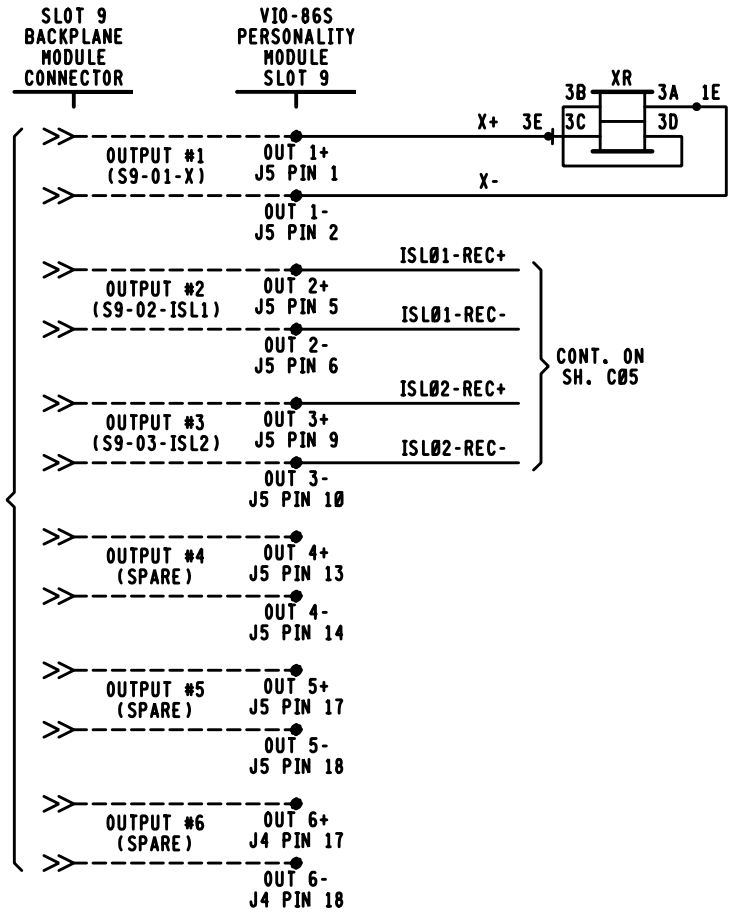
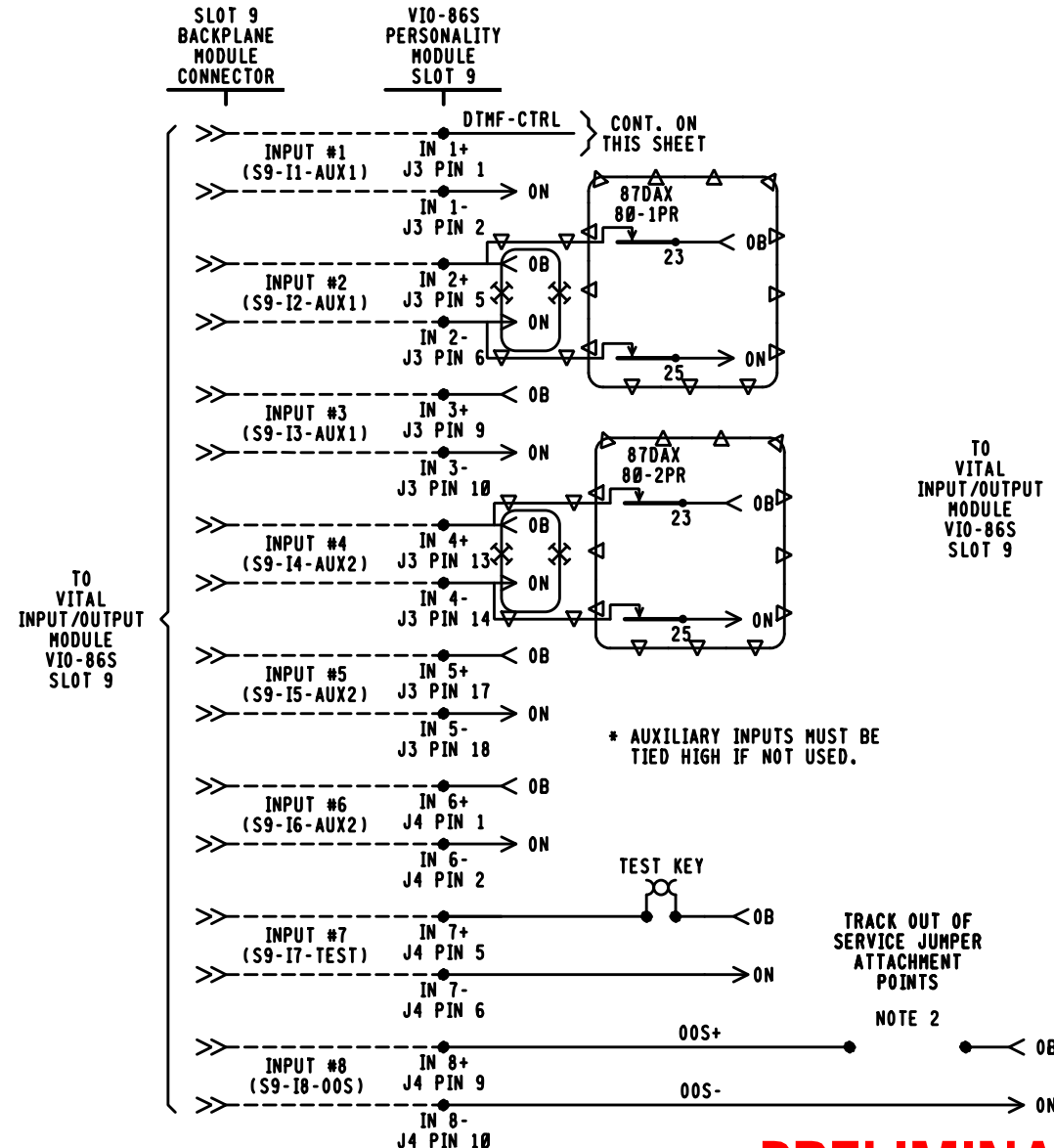
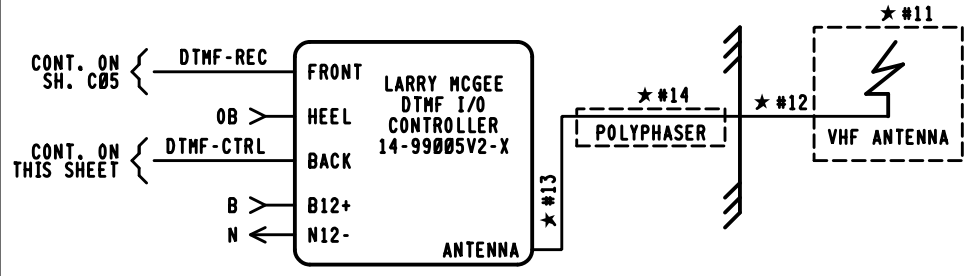
DESIGNED PRS/TGG	DIGITIZED PRS/TGG	CHECKED PRS/SAF	DATE 03-10-23
DRAWING -----	SHEET NO -----	FILE BF27587	SHEET E01(A)

BX120-1 | BX120-2
14.1 AMPS | 14.1 AMPS
MAXIMUM LOAD
CALCULATED PER SS360

WHEN A MODULE IS GREEN, IT IS HEALTHY. WHEN RED, IT HAS FAILED AND NEEDS REPLACING.



PROGRAMMING FOR DTMF RADIO
 REMOTE DTMF CROSSING ACTIVATION (ACTIVATES ENTIRE CROSSING)
 TO ACTIVATE PRESS, 459 *
 TO DE-ACTIVATE PRESS, 459 #
 (ACTIVATION WILL TIME OUT AFTER 60 SEC.)



THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019559

PRELIMINARY
PROGRESS RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
 CSX# PA2023021 PRS/AMJ/SAF

SLOT 9 I/O	
INPUT 1	POSITIVE CONTROL AUXILIARY INPUT 1 (AUX1)
INPUT 2	POSITIVE CONTROL AUXILIARY INPUT 2 (AUX1)
INPUT 3	POSITIVE CONTROL AUXILIARY INPUT 3 (AUX1)
INPUT 4	POSITIVE CONTROL AUXILIARY INPUT 4 (AUX2)
INPUT 5	POSITIVE CONTROL AUXILIARY INPUT 5 (AUX2)
INPUT 6	POSITIVE CONTROL AUXILIARY INPUT 6 (AUX2)
INPUT 7	CROSSING ACTIVATION TEST
INPUT 8	OUT OF SERVICE JUMPER INPUT (OOS)
OUTPUT 1	X OUTPUT
OUTPUT 2	ISL01 OUTPUT
OUTPUT 3	ISL02 OUTPUT
OUTPUT 4	(NOT USED)
OUTPUT 5	(NOT USED)
OUTPUT 6	(NOT USED)

- NOTES
- ALL WIRE THIS SHEET #16 AWG UNLESS NOTED.
 - APPROACH DISABLE JUMPER INPUT. THIS INPUT IS USED IN COMBINATION WITH THE SOFT APPROACH DISABLE ACCESSED THROUGH THE CDU-2 KEYPAD. BOTH BITS MUST BE HIGH TO DISABLE AN APPROACH. THE OPERATOR IS SOLELY RESPONSIBLE FOR CROSSING PROTECTION WHEN THE APPROACH DISABLE FUNCTION IS ACTIVATED.
 - DTMF USES LAST 3 DIGITS (NUMBERS) OF THE CROSSING DOT# TO OPERATE CROSSING PROTECTION DEVICES.
 - * = REFER TO SH. C09

PROGRESS RAIL SERVICES
 A Caterpillar Company DATE: 03-10-23
NEW WORK CSX# PA2019559
 PRS/TGG/SAF

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS

SR 819 (LAUGHLIN ST.) 145459K

XP4 CROSSING DETECTION AND I/O CIRCUITS
 DAWSON, PA M.P. BF-275.87

DESIGNED PRS/TGG	DIGITIZED PRS/TGG	CHECKED PRS/SAF	DATE 03-10-23
DRAWING -----	SHEET NO -----	FILE BF27587	SHEET C01(A)

DESIGN DATE 03-10-23 REV. NO. 1

SITE SPECIFIC MDR DESCRIPTIONS AND SETTINGS				
NAME	MDR1		MDR2	
FUNCTION	XR		XR	
WARNING TIME	31		31	
CW/MD	CW		CW	
AP TIME(PREEMPT)	NA		NA	
CWE-WT	80		80	
AUX RECOVERY DELAY	5		5	
TRACK	TK 1	TK 2	TK 1	TK 2
TRACK ASSIGNED	ASSIGNED	UNASSIGNED	UNASSIGNED	ASSIGNED
OFFSET DISTANCE	0'	NA	NA	0'
MD RESTART	0*	NA	NA	0*
SUDDEN SHUNT ZONE	0*	NA	NA	0*
POSITIVE START	PSEN	DISABLE	NA	DISABLE
	PSRX	NA	NA	NA
	PST	NA	NA	NA
POST JOINT DETECT	PJEN	ENABLE	NA	ENABLE
	PJRX	15	NA	15
	PJDT	15	NA	15
CLEAR JOINT LOS	CJ-LOS MODE	STANDARD	NA	STANDARD
	CJ-LOS RX	15	NA	15
	CJ-LOS TIME	99	NA	99

BASIC TRACK SETUP		
	TRACK 1	TRACK 2
FREQUENCY	267 HZ	267 HZ
MASTER/SLAVE	MASTER	MASTER
RX ADJUST	100 *	100 *
TCA	*	*
DIRECTION MODE	BI	BI
LIA	*	*
ADVANCED APPROACH	*	*
NBS COMP RX	*	*
TRK ISLAND ASSIGN	ISL1	ISL2
APPROACH LENGTH	2530'	2530'
AUTO RX	ENABLE	ENABLE

ADVANCED TRACK SETUP		
	TRACK 1	TRACK 2
MOTION DET TIMER	MDEN	ENABLE
	MDTT	10 MIN
FALSE SHUNT	FSEN	DISABLE
	FSRX	NA
	FST	NA
APPROACH RELEASE	AREN	DISABLE
	ARRX	NA
	ART	NA
LOS TIME	16 SEC	16 SEC
IJ-LOS TIME	5 SEC	5 SEC
NRML*SHRT*VRYSHRT	*	*

ISLAND SETUP		
	TRACK 1	TRACK 2
ENABLE /DISABLE	ENABLE	ENABLE
FREQUENCY	5.4 KHZ	5.4 KHZ
LOSS OF SHUNT	2 SEC.	2 SEC.
FAULT DELAY	1	1

~~DISABLE~~ ~~DISABLE~~

THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED, 03-10-23
 CSX PROJECT # PA2019559

PRELIMINARY
PROGRESS
 RAIL SERVICES

A Caterpillar Company DATE: 04-23-25
 CSX#: PA2023021 PRS/AMJ/SAF
 = OUT
 = IN

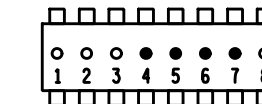
VPM3 ETHERNET SETUP	
	IP ADDRESS
ETHERNET PORT 1 (TOP)	192.168.0.11
ETHERNET PORT 2 (BOTTOM)	192.168.1.12

PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 03-10-23
 CSX#: PA2019559 PRS/TGG/SAF
 NEW WORK

~~---~~ ~~---~~ = OUT

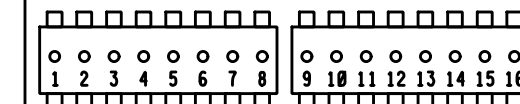
APPLICATION SOFTWARE INFORMATION	
NAME	9XXS-2.01
REV.	1.0
CHECKSUM	E49B
CRC	FF9E
CH. I.D.	225

CHASSIS ID DIP SHUNTS
 LOCATED ON BACKPLANE
 UNDERNEATH UCI-3 MODULE



○ = TAB INTACT (MADE)
 ● = TAB PUNCHED OUT (BROKEN)

VITAL SELECTION DIP SHUNTS
 LOCATED INSIDE UCI-3 MODULE
 UNDERNEATH EPROM



○ = TAB INTACT (MADE)
 ● = TAB PUNCHED OUT (BROKEN)

VITAL SELECTION DIP SHUNTS		
#	NAME	STATE
1	MI_BELL_SW	PUNCHED OUT
2	NA	INTACT (NOT USED)
3	NA	INTACT (NOT USED)
4	NA	INTACT (NOT USED)
5	NA	INTACT (NOT USED)
6	NA	INTACT (NOT USED)
7	NA	INTACT (NOT USED)
8	NA	INTACT (NOT USED)
9	NA	INTACT (NOT USED)
10	NA	INTACT (NOT USED)
11	NA	INTACT (NOT USED)
12	NA	INTACT (NOT USED)
13	NA	INTACT (NOT USED)
14	NA	INTACT (NOT USED)
15	NA	INTACT (NOT USED)
16	NA	INTACT (NOT USED)

NOTES:
 ● = FIELD ADJUSTMENT
 NA = NOT APPLICABLE

CSX TRANSPORTATION
 RAIL GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

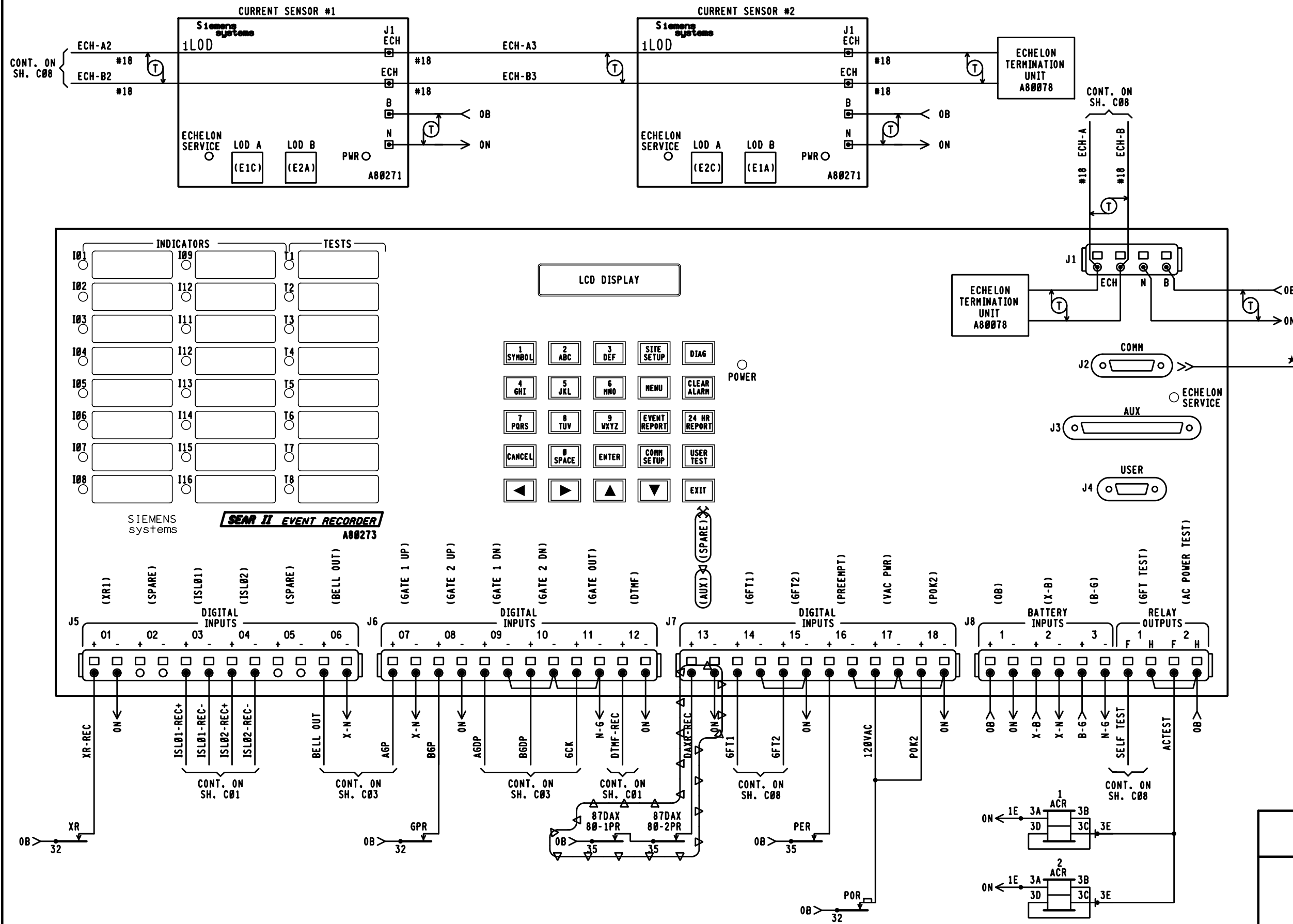
SR 819 (LAUGHLIN ST.) 145459K

XP4 SETUP INFORMATION
 DAWSON, PA M.P. BF-275.87

DESIGNED	DIGITIZED	CHECKED	DATE
PRS/TGG	PRS/TGG	PRS/SAF	03-10-23
DRAWING	SHEET NO	FILE	SHEET
-----	-----	BF27587	C02A

DESIGN DATE	REV. NO.
03-10-23	1

~~04-23-25~~ ~~3~~



THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED 03-10-23
 CSX PROJECT # PA2019559

PRELIMINARY

PROGRESS
RAIL SERVICES

A Caterpillar Company DATE: 04-23-25
 CSX #: PA2023021 PRS/AMJ/SAF

PROGRESS
RAIL SERVICES

A Caterpillar Company DATE: 03-10-23
 CSX #: PA2019559 PRS/TGG/SAF

* * = OUT

- NOTES:
 1. * = REFER TO SH. C09.
 2. () DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
 SR 819 (LAUGHLIN ST.) 145459K
 SEAR II CIRCUITS
 DAWSON, PA M.P. BF-275.87

DESIGNED PRS/TGG	DIGITIZED PRS/TGG	CHECKED PRS/SAF	DATE 03-10-23
DRAWING -----	SHEET NO -----	FILE BF27587	SHEET C09A

DESIGN DATE ~~03-10-23~~ 04-23-25
 REV. NO. ~~1~~ 3

	DEFAULTS AND/OR STYLE	FIELD RECORD
SEAR II EXECUTIVE PROGRAM	VERSION: 9V645A01Y	VERSION:
APPLICATION PROGRAM (IF LOADED)	VERSION: _____	VERSION:

FIELD TO PROVIDE SEARII PROGRAM INFORMATION ON AIS

SITE SET UP OPTIONS	
OPTION	SELECTION
DATE	XX-XX-XXXX
TIME	{XX.XX.XX}
DAYLIGHT SAVINGS TIME	YES <input type="checkbox"/> NO <input type="checkbox"/>
TIME ZONE	<input checked="" type="checkbox"/> EST <input type="checkbox"/> CST
SITE NAME	SR 819 (LAUGHLIN ST.)
MILEPOST	BF-275.87
DOT NUMBER	145459K
TESTER TYPE	<input checked="" type="checkbox"/> CROSSING <input type="checkbox"/> WAYSIDE
DATE FORMAT	<input checked="" type="checkbox"/> MM-DD-YYYY <input type="checkbox"/> DD-MM-YYYY
TEMP FORMAT	<input checked="" type="checkbox"/> FAHRENHEIT <input type="checkbox"/> CELSIUS
INDICATE HOLDOFF	0
INDICATE REFRESH	60
SITE TYPE	<input type="checkbox"/> NO COMMUNICATION <input type="checkbox"/> DIAL-UP <input checked="" type="checkbox"/> COLLECTOR <input type="checkbox"/> NODE <input type="checkbox"/> BULLHORN/MODE <input type="checkbox"/> CDS902X
SITE ATCS ADDRESS	7.125.304.015.99.01 (7.RRR.LLL.666.99.01)
OFFICE ADDRESS	2.125.00.0000 (2.RRR.NN.DDDD)
OFFICE SITE ADDRESS	NA
BACK UP SITE ADDRESS 1	NA
BACK UP SITE ADDRESS 2	NA
POLL ID (1-99)	1
GEN/ATCS MODE	<input type="checkbox"/> GENISYS <input checked="" type="checkbox"/> GEN/ATCS
XID DISABLED	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
OFFICE COM. DEVICE	<input type="checkbox"/> DIRECT <input type="checkbox"/> MCM (RS232) <input type="checkbox"/> MCM (ECH) <input checked="" type="checkbox"/> WAG (ECHELON) <input type="checkbox"/> DIAL UP (RS232) <input type="checkbox"/> S200 RADIO (RS422)
RADIO ATCS ADDRESS	7.125.304.015.01.01
OFFICE PHONE NUMBER	1-XXX-XXX-XXXX
INIT. STRING	
FIELD COMM	<input type="checkbox"/> VHF (ECH) <input type="checkbox"/> VHF (RS232) <input type="checkbox"/> WAG (ECH) <input type="checkbox"/> SS (RS232) <input checked="" type="checkbox"/> NONE
USER PORT	BAUD RATE (9600)
AUX PORT	BAUD RATE (9600)
COMM PORT	BAUD RATE (9600)

NOTE 5

NOTE 6

NOTE 7

NOTES.

1. LARGE CONFIGURATION ASSIGNS RECORDER INPUTS FOR USE WHEN DIGITAL I/O MODULE REQUIRED.
2. IF WARNING DEVICE = NONE MAIN/STANDBY OPTION NOT SHOWN.
3. IF VHF COMMUNICATIONS = NO THEN DTMF ACTIVATION AND CHANNEL OPTIONS ARE NOT SHOWN.
4. LAST 3 DIGITS OF DOT NO. FOR FIRST ACTIVATION CODE.
5. DEFAULT ADDRESS 7.620.100.100.99.01 USED FOR STAND ALONE LOCATIONS.
6. OPTIONS NOT SHOWN IF SITE TYPE = NO COMMUNICATIONS.
7. FORMAT AS, BAUD, DATA BITS, PARITY STOP BITS, FLOW CONTROL.

FIELD TO PROVIDE BATTERY VOLTAGES ON AIS

LIT BULB COUNT ON EACH CIRCUIT	NO.	TYPE OF BULB	CURRENT READING IN AMP. AT APPROX. 10.0 V BULB VOLTAGE
CURRENT SENSOR (1) E1C, LAMP SET UP	6	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (1) E2A, LAMP SET UP	6	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (2) E2C, LAMP SET UP	4	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (2) E1A, LAMP SET UP	4	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X

MEASURE BATTERY VOLTAGE AT INPUT	
BATTERY VOLTAGE 0B	XXXX VOLTS
BATTERY VOLTAGE X-B	XXXX VOLTS
BATTERY VOLTAGE B-6	XXXX VOLTS

SITE SET UP OPTIONS CONT.	
OPTION	SELECTION
RAILROAD NUMBER	125
CROSSING CONFIGURATION	STANDARD <input checked="" type="checkbox"/> LARGE <input type="checkbox"/> REMOTE <input type="checkbox"/> SPLIT GATE <input type="checkbox"/> ISL ONLY <input type="checkbox"/> CP COLLECTOR <input type="checkbox"/>
NUMBER OF XR INPUTS	0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
NUMBER OF ISL INPUTS	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CONSTANT WARNING DEVICE	GCP3K <input type="checkbox"/> HS4K <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> NONE <input type="checkbox"/>
TOTAL NUMBER OF GCP NODES	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>
NUMBER OF REDUNDANT GCP	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CROSSING CONTROLLER 1	SSCC IIIA / PLUS <input type="checkbox"/> SSCC IV <input type="checkbox"/> OTHER <input type="checkbox"/> NONE <input checked="" type="checkbox"/>
POK2	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
MAIN / STANDBY	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
AUXILIARY TRACKS	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/>
ENTRANCE GATE	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>
EXIT GATES	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
GATE POSITION FAIL 10-60 SEC	25
NUMBER OF UAX INPUTS	0 <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/>
BATTERY BANKS	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
0B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/>
X-B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/> NOT PRESENT <input type="checkbox"/>
B-6 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/> NOT PRESENT <input type="checkbox"/>
X-B2 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
B-62 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
X-B3 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
PREEMPTION	NORMAL <input checked="" type="checkbox"/> ADVANCED <input type="checkbox"/> NO <input type="checkbox"/>
KDR INPUT	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
VHF COMMUNICATOR	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ACTIVATION CODE 1	XXX
ACTIVATION CODE 2	XXX
ACTIVATION CODE 3	XXX
ACTIVATION TIMEOUT (30 TO 600 SECONDS)	60
LOD MODULES	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
ANY LED BULBS	NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>
AUTO INSPECTIONS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BELL ON	GATES LOWERING <input checked="" type="checkbox"/> GATES MOVING <input type="checkbox"/> ALWAYS <input type="checkbox"/>
GROUND FAULT DETECTORS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BATTERIES ON GFT1	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/>
FULL APPROACH MOVE ALARMS	ACTIVATED <input checked="" type="checkbox"/> DO NOT ACTIVATE <input type="checkbox"/>

NOTE 1

NOTE 2

NOTE 3

NOTE 4

= NOTE



THIS PLAN DOES DOES NOT
SUPERSEDE PLAN DATED 03-10-23
CSX PROJECT # PA2019559



= OUT
 = IN

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

SR 819 (LAUGHLIN ST.) 145459K

SEAR II CONFIGURATION AND FUNCTIONS
DAWSON, PA M.P. BF-275.87

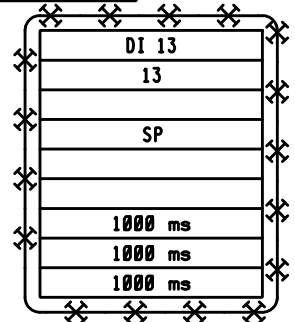
DESIGNED PRS/TGG	DIGITIZED PRS/TGG	CHECKED PRS/SAF	DATE 03-10-23
DRAWING -----	SHEET NO -----	FILE BF27587	SHEET C06

DESIGN DATE 03-10-23	REV. NO. 1
------------------------------------	--------------------------

DISCRETE INPUTS	DI 01	DI 02	DI 03	DI 04	DI 05	DI 06
CHANNEL	1	2	3	4	5	6
NAME	XR (TRACK)		ISLAND 1 (TRACK)	ISLAND 2 (TRACK)		BELL OUT (BELL PWR)
TAG	XR	SP	ISL1	ISL2	SP	BELL OUT (BELL PWR)
OFF NAME	DOWN (XR)		DOWN (ISL1)	DOWN (ISL2)		OFF (BELL PWR)
ON NAME	UP (XR)		UP (ISL1)	UP (ISL2)		ON (BELL PWR)
ON DEBOUNCE TIME	100 ms	1000 ms	100 ms	100 ms	1000 ms	100 ms
OFF DEBOUNCE TIME	100 ms	1000 ms	100 ms	100 ms	1000 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms

TSS INPUTS	DI 07	DI 08	DI 09	DI 10
CHANNEL	7	8	9	10
NAME	AGP	BGP	AGDP	BGDP
TAG	AGP (GP)	BGP (GP)	AGDP	BGDP
OFF NAME	LIGHTS FLASH	LIGHTS FLASH	NOT HORIZ	NOT HORIZ
ON NAME	GATE VERTICAL	GATE VERTICAL	GATE HORIZ	GATE HORIZ
ON DEBOUNCE TIME	100 ms	100 ms	100 ms	100 ms
OFF DEBOUNCE TIME	100 ms	100 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms

DISCRETE INPUTS	DI 11	DI 12	DI 13
CHANNEL	11	12	13
NAME	GATE CONTROL	DTMF	AUX
TAG	GCOUT1 (GCK)	DTMF-REC	AUX (DAXPR)
OFF NAME	OFF (DESCENT)	OFF (NO GATE KEYED)	DOWN (DAXPR)
ON NAME	ON (ASCENT ON)	ON (ACTIVATE)	UP (DAXPR)
ON DEBOUNCE TIME	100 ms	100 ms	100 ms
OFF DEBOUNCE TIME	100 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms



GFT INPUTS	DI 14	DI 15
CHANNEL	14	15
NAME	GND FAULT TESTER 1 (GFT1,2)	GND FAULT TESTER 2 (GFT3,4)
TAG	GFT1 (GFT1 DATA)	GFT2 (GFT2 DATA)
BATTERY 1 NAME	OB (GND FAULT)	B-G (GND FAULT)
BATTERY 1 TAG	OB (GND FAULT)	B-G (GND FAULT)
BATTERY 2 NAME	X-B (GND FAULT)	SP.
BATTERY 2 TAG	X-B (GND FAULT)	SP.

DISCRETE INPUTS	DI 16	DI 17	DI 18
CHANNEL	16	17	18
NAME	PREEMPT	120 VAC	POK2
TAG	PREEMPT (PER)	120 VAC	POK2
OFF NAME	DOWN (PER)	OFF (ALL POWER OFF)	OFF (ALL POWER OFF)
ON NAME	UP (PER)	ON (ALL POWER ON)	ON (ALL POWER ON)
ON DEBOUNCE TIME	100 ms	100 ms	100 ms
OFF DEBOUNCE TIME	100 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms

BATTERY INPUTS	BI1	BI2	BI3
CHANNEL	1	2	3
NAME	OB (ELECTRONIC BATT)	X-B (BULB BATT)	B-G (GATE BATT)
TAG	OB	X-B	B-G
SAMPLE PERIOD (ms)	500 (ms)	500 (ms)	500 (ms)
RESOLUTION (V)	1.0 (VOLTS)	1.0 (VOLTS)	1.0 (VOLTS)
AVERAGING SAMPLES	32 SAMPLES	32 SAMPLES	32 SAMPLES

RELAYS	RO1	RO2
CHANNEL	1	2
NAME	GFT TEST	AC POWER TEST (ACRLY)
TAG	SELF TEST	AC POWER TEST (ACRLY)
OFF STATE NAME	NOT TESTING	OFF (ACR DN)
ON STATE NAME	TESTING	ON (ACR UP)
UNKNOWN STATE NAME	PULSE	PULSE
ON PULSE TIME (s)	1 (s)	1 (s)
OFF PULSE TIME (s)	1 (s)	1 (s)
TOGGLE PERIOD (s)	1 (s)	1 (s)
DUTY CYCLE	50	50



NOTE:
() DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

THIS PLAN DOES DOES NOT
SUPERSEDE PLAN DATED: 03-10-23
CSX PROJECT #: PA2019559



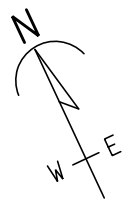
CSX TRANSPORTATION RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
SR 819 (LAUGHLIN ST.) 145459K			
SEAR II CHANNELS DAWSON, PA M.P. BF-275.87			
DESIGNED PRS/TGG	DIGITIZED PRS/TGG	CHECKED PRS/SAF	DATE 03-10-23
DESIGN DATE 03-10-23	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27587	SHEET C07		

DESIGN DATE: 03-10-23
REV. NO.: 1
DATE: 04-23-25

R.R. WEST TO WEST PITTSBURGH

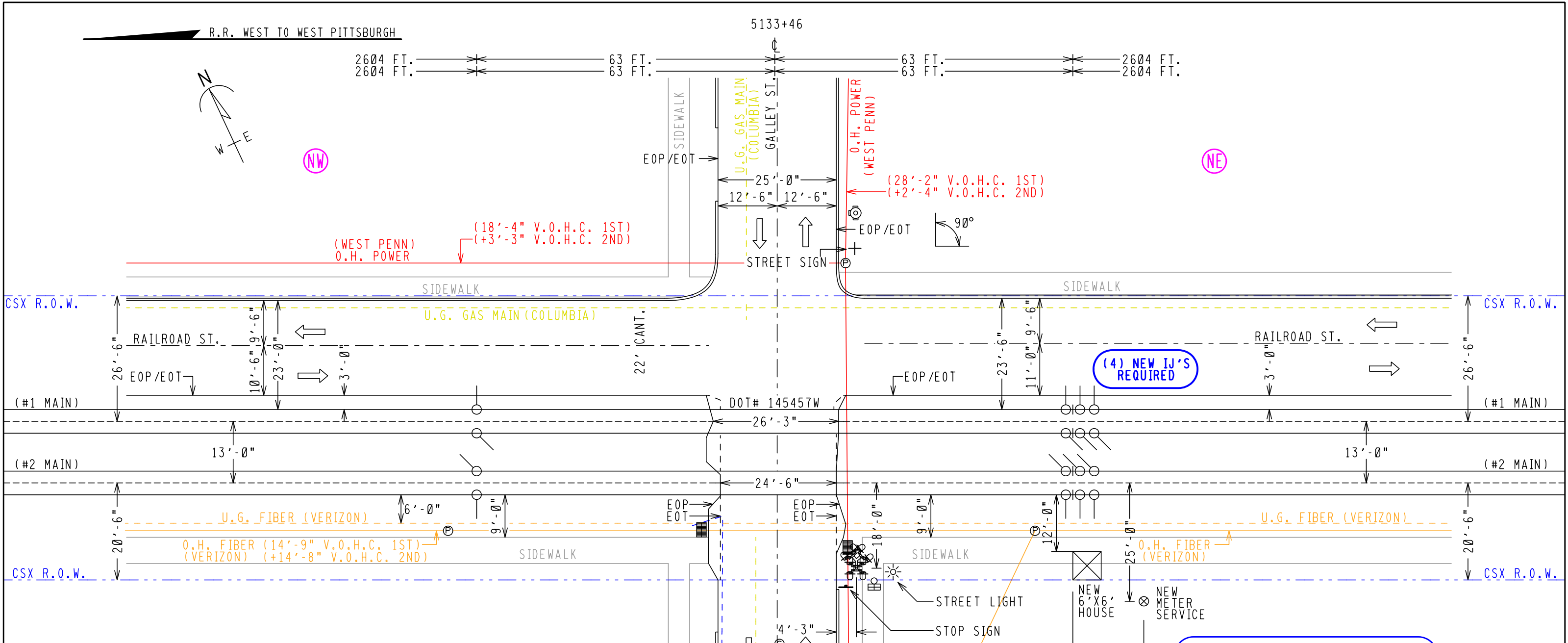
5133+46

2604 FT. 63 FT. 63 FT. 2604 FT.



NW

NE



* AUTHORIZING AGENCY, NONE
 * DATE OF REQUIREMENT, NONE
 * AMOUNT OF TIME (SEC.), NONE

SW

APPROACH LENGTHS TABLE	EASTBOUND MAIN 1 & 2 CWT	WESTBOUND MAIN 1 & 2 CWT
DC, AFO, TYPE C, MOTION, CWT, OR OTHER		
STANDARD MINIMUM WARNING TIME IN SECONDS	25	25
ROADWAY GATE TIME IN SECONDS	0	0
CLEARANCE TIME IN SECONDS	4	4
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS*	0	0
PRESCRIBED WARNING TIME FOR TRAINS AT TIME TABLE SPEED	29 SEC.	29 SEC.
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	0	0
CONTROL EQUIPMENT DECISION TIME IN SECONDS	4	4
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	33 SEC.	33 SEC.
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	50	50
BUFFER SPEED IN MILES PER HOUR	5	5
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	55	55
APPROACH DISTANCE TO ISLAND EDGE IN FEET	2604	2604
HALF WIDTH OF ISLAND IN FEET	63	63
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT	276.31	275.29

NOTES:
 1. RAISE CURB FOR 4'-3" OFFSET.

NOTE 1

VAC TRUCK REQUIRED

SE

PRELIMINARY

FILE NAME: BF27580.H01 REVISION DATES
 DATE DRAWN: 01-22-25 02-27-25
 DRAWN BY: JMD 04-02-25
 CHECKED BY: SAF 07-26-25
 PRS #: 34P004256

PRODUCED FOR:

 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

PRODUCED BY:

 PROGRESS RAIL SERVICES
 A Caterpillar Company

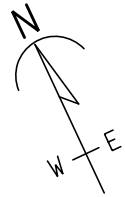
LEGEND	GUARD RAIL	METER SERVICE	GPS COORDINATES
CSX ROW	O.H. POWER	POLE	N40°02'49"
R/R POLELINE	FENCE	FIRE PLUG	W79°39'27"
GAS	WATER	SEWER CAP	ELEV. 851'
FIBER OPTIC	SEWER	GAS VENT	M.P. BF-275.80

STREET NAME, GALLEY ST.
 CITY & STATE, DAWSON, (FAYETTE), PA
 DOT, 145457W
 PROJECT #, PA2023021
 OP #, PA0466

PROPOSED CROSSING LAYOUT
 SCALE = 20:1

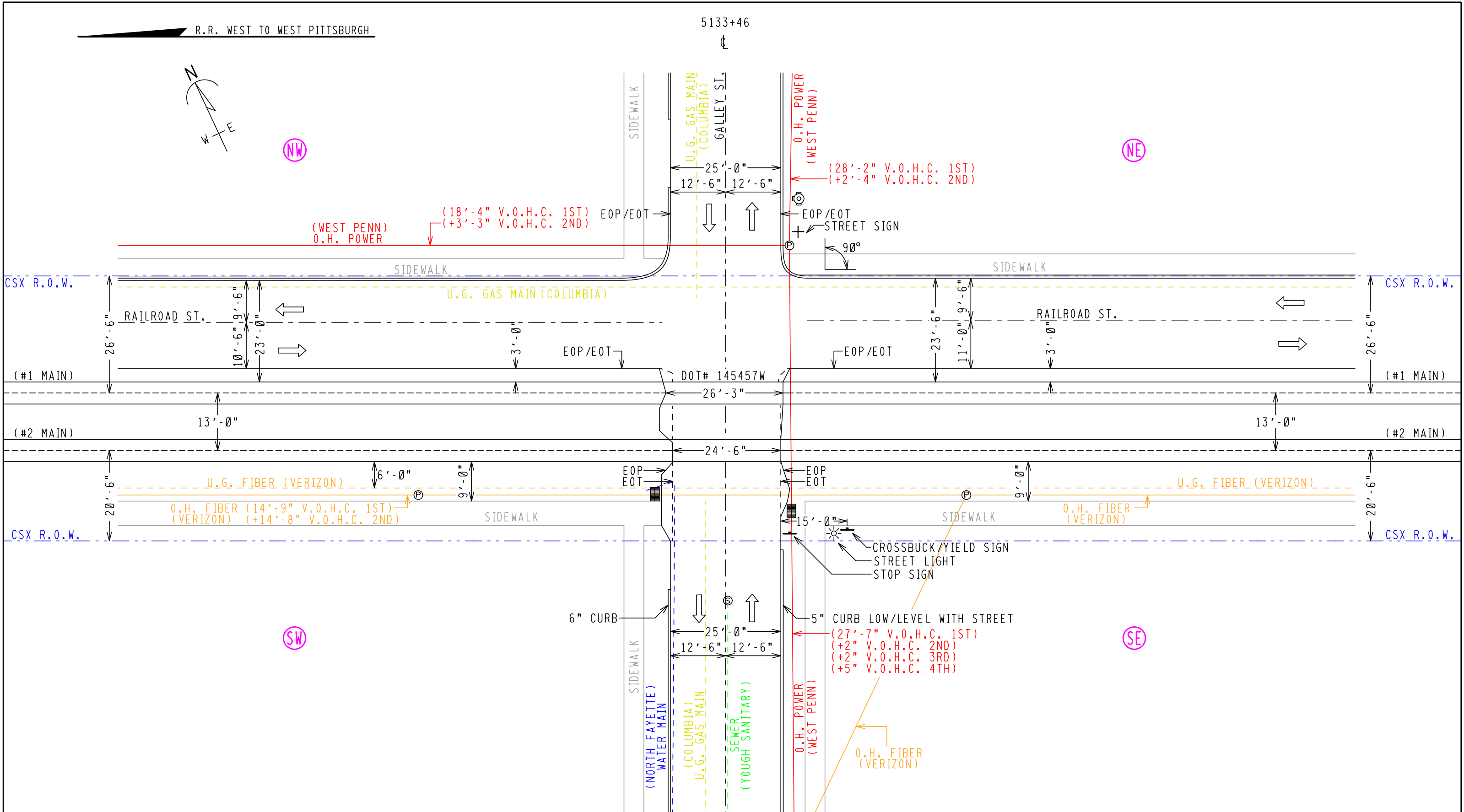
R.R. WEST TO WEST PITTSBURGH

5133+46



NW

NE



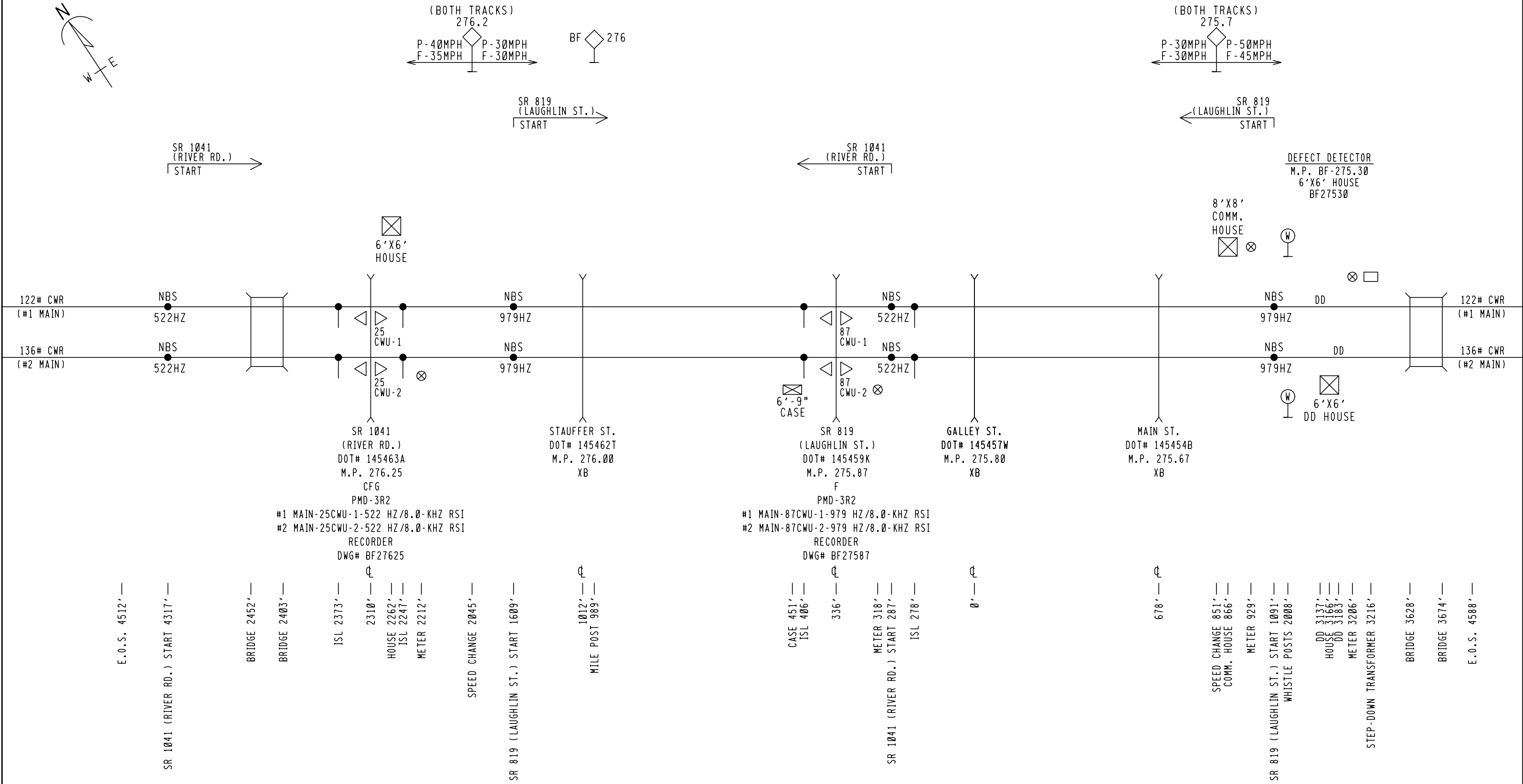
SW

SE

PRELIMINARY

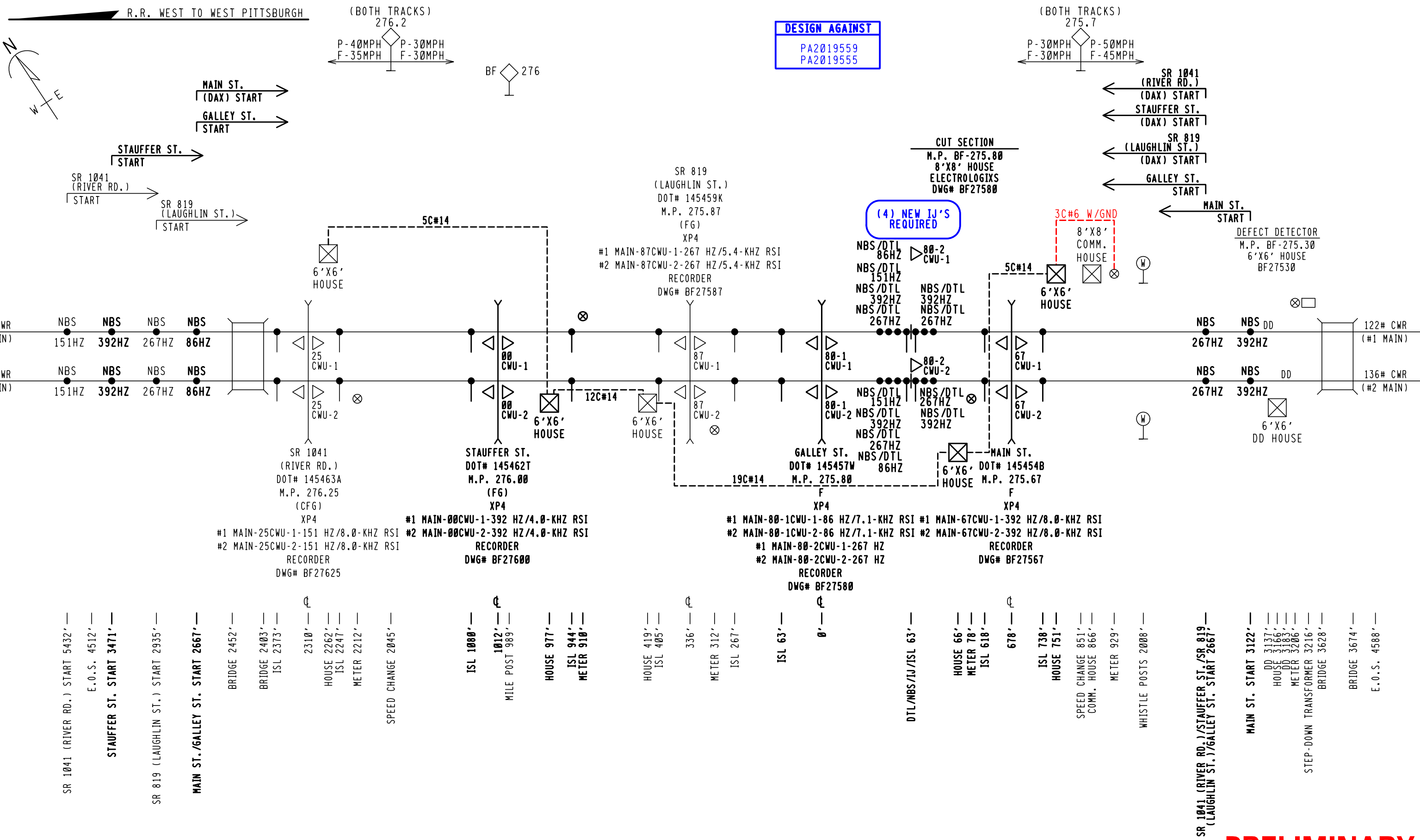
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DATE DRAWN: 01-22-25	02-27-25	 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	 A Caterpillar Company	CSX ROW	O.H. POWER	POLE	N40°02'49"	CITY & STATE, DAWSON, (FAYETTE), PA
DRAWN BY: JMD				R/R POLELINE	FENCE	FIRE PLUG	W79°39'27"	DOT, 145457W
CHECKED BY: SAF				GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #: PA2023021
PRS #: 34P004256				FIBER OPTIC	SEWER	GAS VENT	M.P. BF-275.80	OP #: PA0466
								EXISTING CROSSING LAYOUT
								SCALE = 20:1

R.R. WEST TO WEST PITTSBURGH



PRELIMINARY

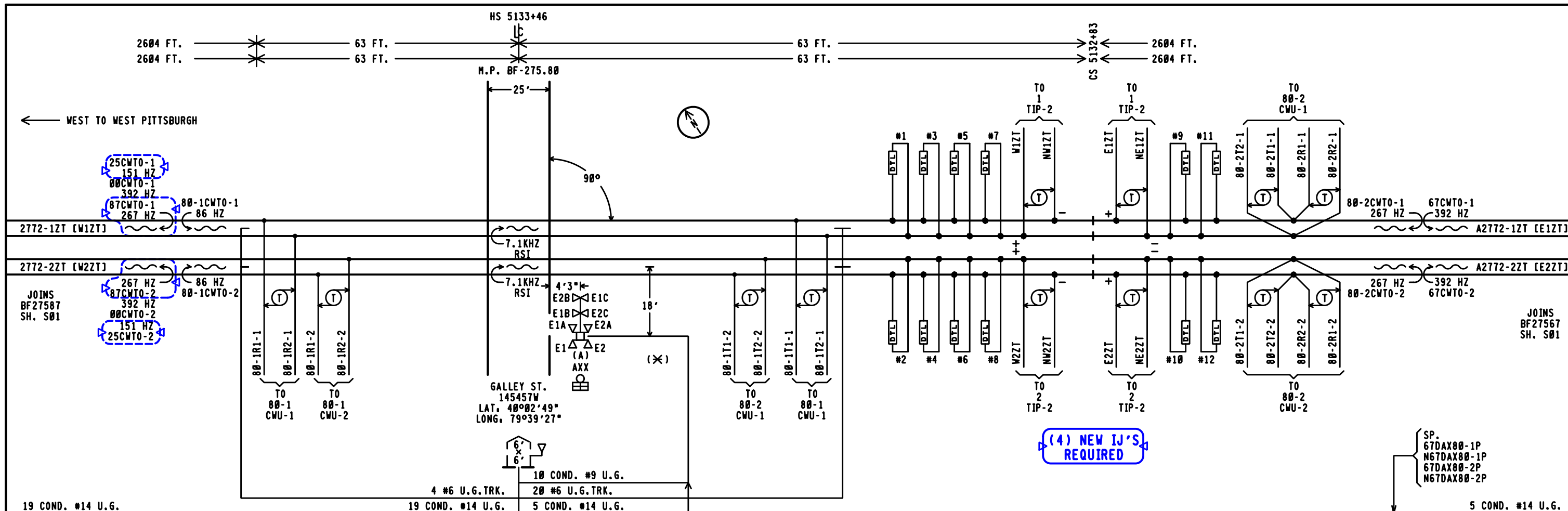
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DATE DRAWN: 01-22-25	- -	 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	 A Caterpillar Company	CSX ROW	O.H. POWER	POLE	N40°02'49"	CITY & STATE, DAWSON, (FAYETTE), PA
DRAWN BY: JMD	- -			R/R POLELINE	FENCE	FIRE PLUG	W79°39'27"	DOT, 145457W
CHECKED BY: SAF	- -			GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #: PA2023021
PRS #: 34P004256	- -			FIBER OPTIC	SEWER	GAS VENT	M.P. BF-275.80	OP #: PA0466
								EXISTING TRACK LAYOUT



PRELIMINARY

FILE NAME: BF27580.H04	REVISION DATES	PRODUCED FOR:	PRODUCED BY:	LEGEND:	GUARD RAIL	METER SERVICE	GPS COORDINATES	STREET NAME: GALLEY ST.
DATE DRAWN: 01-22-25	02-27-25	 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	 A Caterpillar Company	CSX ROW	O.H. POWER	POLE	N40°02'49"	CITY & STATE: DAWSON, (FAYETTE), PA
DRAWN BY: JMD	04-23-25			R/R POLELINE	FENCE	FIRE PLUG	W79°39'27"	DOT: 145457W
CHECKED BY: SAF	07-26-25			GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #: PA2023021
PRS #: 34P004256	-			FIBER OPTIC	SEWER	GAS VENT	M.P. BF-275.80	OP #: PA0466

PROPOSED TRACK LAYOUT



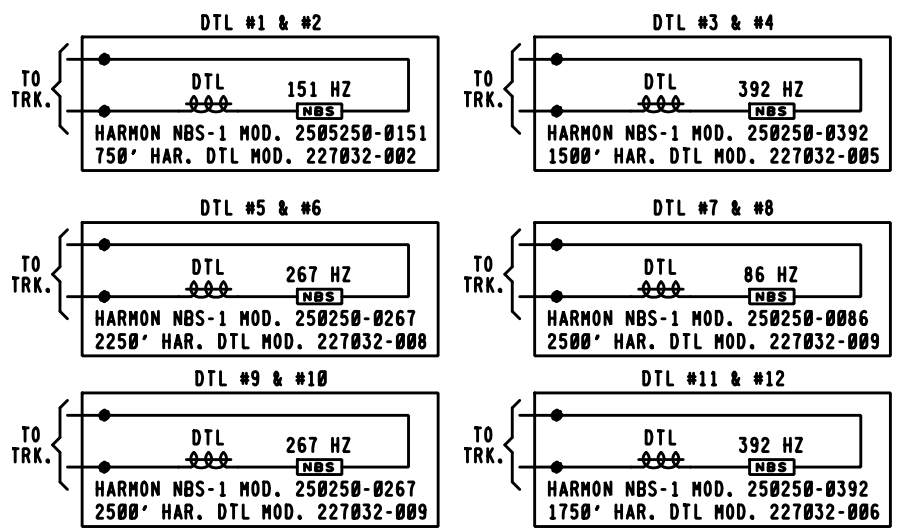
(4) NEW IJ'S REQUIRED

SP. 67DAX80-1P, N67DAX80-1P, 67DAX80-2P, N67DAX80-2P

VAC TRUCK REQUIRED

FIELD NOTE: FIELD TO SHOW ACTUAL DISTANCE BETWEEN METER POLE & BUNGALOW AND INDICATE ON A.I.S.

FOR AMPERAGES OF 15 AMPS OR LESS PER LEG USE THE FOLLOWING POWER CABLE DESIGN GUIDELINES:
 3 COND. #6 W/GND. (5% VD) $X < 402'$
 3 COND. #4 W/GND. (5% VD) $403' < X < 618'$
 *3 COND. #2 W/GND. (10% VD) $619' < X < 1,856'$
 *GREATER THAN 1,856' CABLE RUN CALCULATE ACTUAL CABLE SIZE REQUIREMENTS PER S5368



	EASTBOUND TRACK 1 CWT	WESTBOUND TRACK 1 CWT	EASTBOUND TRACK 2 CWT	WESTBOUND TRACK 2 CWT
DC, AFO, TYPE C, MOTION, CWT, OR OTHER	25	25	25	25
STANDARD MINIMUM WARNING TIME IN SECONDS	0	0	0	0
ROADWAY GATE TIME IN SECONDS	4	4	4	4
CLEARANCE TIME IN SECONDS	0	0	0	0
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS *	29 SEC.	29 SEC.	29 SEC.	29 SEC.
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	0	0	0	0
CONTROL EQUIPMENT DECISION TIME IN SECONDS	4	4	4	4
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	33 SEC.	33 SEC.	33 SEC.	33 SEC.
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	50	50	50	50
BUFFER SPEED IN MILES PER HOUR	5	5	5	5
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	55	55	55	55
APPROACH DISTANCE TO ISLAND EDGE IN FEET	2604	2604	2604	2604
HALF WIDTH OF ISLAND IN FEET	63	63	63	63
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT	276.31	275.29	276.31	275.29

- NOTES:
- 12" LED MAXIMUM CURRENT 1.0A AT 10 VOLTS LED GATE ARM LIGHTS .3A MAXIMUM
 - (*) = LOCATION OF HOUSE
 - (N) = APPROXIMATE COMPASS NORTH.
 - TRANSMITTER LEADS FOR MOTION OR PREDICTOR EQUIPMENT SHOULD BE CONNECTED ON THE BUNGALOW OR SHORT LEAD SIDE OF THE CROSSING.
 - ISLAND TRACK LEADS SHOULD BE CONNECTED 50 FEET FROM ROAD EDGE BUT ON NARROW ROADS (20' OR LESS) ISLAND LENGTH SHALL BE 120 FEET.
 - WARNING SYSTEM APPROACH CIRCUIT DISTANCES ARE TO BE MEASURED FROM THE ISLAND TRACK CONNECTIONS.
 - [] = TAGGING PURPOSE ONLY
 - INSULATED JOINT (IJ) PLACEMENTS ARE PER S5503. IF CONSTRAINTS PROHIBIT THEIR PLACEMENT PER S5503 CONTACT THE OFFICE OF ASSISTANT CHIEF ENGINEER OF SIGNALS FOR REVIEW AND DIRECTION.

PRELIMINARY

EXISTING = [Symbol]
 NOTE = [Symbol]

PROGRESS RAIL SERVICES
 A Caterpillar Company
 NEW WORK

DATE: 04-23-25
 CSX# PA2023021
 PRS/AMJ/SAF

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W &
 CUT SECTION TRACK AND SIGNAL PLAN
 DAWSON, PA M.P. BF-275.80

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DRAWING	SHEET NO	FILE BF27580	SHEET S01

DESIGN DATE 04-23-25	REV. NO. 1
----------------------	------------

GENERAL CONFIGURATION	
ITEM	SETTING
SITE ID	CUT SECTION BF-275.80
CHASSIS ID	224

VITAL APPLICATION INFORMATION	
ITEM	SETTING
NAME	CSX2RPT4_V1V
EPT CRC	E2F7
EPT CHECKSUM	6795

FIELD TO PROVIDE ON A.I.S.

TRACK 1 VITAL SELECTION SETTINGS

SETT.	BIT NAME	TRUE	FALSE	BIT MEANING	
1	N_W1MCODE	X		TRUE IF MAINTENANCE CODE WILL BE RECEIVED FROM THE NORTH/WEST AND WILL BE PASSED SOUTH/EAST. FALSE IF NO MAINTENANCE CODE IS RECEIVED FROM THE NORTH/WEST AND IT IS TO BE INITIATED TO THE SOUTH/EAST.	X
2	S_E1MCODE	X		TRUE IF MAINTENANCE CODE WILL BE RECEIVED FROM THE SOUTH/EAST AND WILL BE PASSED NORTH/WEST. FALSE IF NO MAINTENANCE CODE IS RECEIVED FROM THE SOUTH/EAST AND IT IS TO BE INITIATED TO THE NORTH/WEST.	X
3	N_W1C1SW		X	(FOR SETTING, SEE CHART BELOW)	X
4	N_W1C5SW		X	(FOR SETTING, SEE CHART BELOW)	X
5	S_E1C1SW		X	(FOR SETTING, SEE CHART BELOW)	X
6	S_E1C5SW	X		(FOR SETTING, SEE CHART BELOW)	X
7	BDE0_MODE1		X	TRUE WHEN LIMITED TUMBLEDOWN (BDE0) MODE REQUIRED. FALSE WHEN TRADITIONAL TUMBLEDOWN (TMDAT) MODE REQUIRED.	X
8	SLOT3_ON		X	TRUE WHEN SLOT 3 IS USED FOR ELECTRIC LOCK. FALSE WHEN SLOT 3 NOT USED.	X
9	S_EPOK	X		SETTING 9 TRUE AND SETTING 10 FALSE MAINTENANCE CODE FOR BLOCK POWER-OFF INDICATION WILL BE TRANSMITTED INTO THE SOUTH/EAST TRACK. IF BOTH SETTING ARE TRUE OR BOTH FALSE MAINTENANCE CODE WILL NOT BE TRANSMITTED IN EITHER DIRECTION.	X
10	N_WPOK		X	SETTING 9 FALSE AND SETTING 10 TRUE MAINTENANCE CODE FOR BLOCK POWER-OFF INDICATION WILL BE TRANSMITTED INTO THE NORTH/WEST TRACK. IF BOTH SETTING ARE TRUE OR BOTH FALSE MAINTENANCE CODE WILL NOT BE TRANSMITTED IN EITHER DIRECTION.	X

TRACK 2 VITAL SELECTION SETTINGS

SETT.	BIT NAME	TRUE	FALSE	BIT MEANING	
11	N_W2MCODE	X		TRUE IF MAINTENANCE CODE WILL BE RECEIVED FROM THE NORTH/WEST AND WILL BE PASSED SOUTH/EAST. FALSE IF NO MAINTENANCE CODE IS RECEIVED FROM THE NORTH/WEST AND IT IS TO BE INITIATED TO THE SOUTH/EAST.	X
12	S_E2MCODE	X		TRUE IF MAINTENANCE CODE WILL BE RECEIVED FROM THE SOUTH/EAST AND WILL BE PASSED NORTH/WEST. FALSE IF NO MAINTENANCE CODE IS RECEIVED FROM THE SOUTH/EAST AND IT IS TO BE INITIATED TO THE NORTH/WEST.	X
13	N_W2C1SW		X	(FOR SETTING, SEE CHART BELOW)	X
14	N_W2C5SW		X	(FOR SETTING, SEE CHART BELOW)	X
15	S_E2C1SW		X	(FOR SETTING, SEE CHART BELOW)	X
16	S_E2C5SW	X		(FOR SETTING, SEE CHART BELOW)	X
17	BDE0_MODE2		X	TRUE WHEN LIMITED TUMBLEDOWN (BDE0) MODE REQUIRED. FALSE WHEN TRADITIONAL TUMBLEDOWN (TMDAT) MODE REQUIRED.	X
18	SLOT4_ON		X	TRUE WHEN SLOT 4 IS USED FOR ELECTRIC LOCK. FALSE WHEN SLOT 4 NOT USED.	X

GFD-1 SETTINGS

ITEM	SETTING	
BATTERY 1 NAME	B-1	X
BATTERY 1 FAULT STATUS	NO FAULT	X
BATTERY 1 CALIBRATED VOLTAGE	13.5	X
BATTERY 1 GROUND FAULT THRESHOLD	8	X
BATTERY 1 GROUND FAULT TIME	30	X
BATTERY 1 LOW BATTERY ALARM VOLTAGE	8.0	X
BATTERY 1 HIGH BATTERY ALARM VOLTAGE	16.5	X
BATTERY 2 NAME	WHEN APPLICABLE	X
BATTERY 2 FAULT STATUS	NO FAULT	X
BATTERY 2 CALIBRATED VOLTAGE	13.5	X
BATTERY 2 GROUND FAULT THRESHOLD	8	X
BATTERY 2 GROUND FAULT TIME	30	X
BATTERY 2 LOW BATTERY ALARM VOLTAGE	8.0	X
BATTERY 2 HIGH BATTERY ALARM VOLTAGE	16.5	X
BATTERY 3 NAME	WHEN APPLICABLE	X
BATTERY 3 FAULT STATUS	NO FAULT	X
BATTERY 3 CALIBRATED VOLTAGE	13.5	X
BATTERY 3 GROUND FAULT THRESHOLD	8	X
BATTERY 3 GROUND FAULT TIME	30	X
BATTERY 3 LOW BATTERY ALARM VOLTAGE	8.0	X
BATTERY 3 HIGH BATTERY ALARM VOLTAGE	16.5	X

NOTES:

- X = STATUS SET/CHANGED USING THE CDU-2, ALL OTHERS SET IN THE ACE PROGRAM.
- VPM-3 ETHERNET PORT ENET1 IP ADDRESS IS 192.168.0.11, ENET2 IS 192.168.1.12.
- POK SETTINGS 9 AND 10 ARE FOR BOTH TRACKS.
- X = TO BE FILLED OUT DURING FIELD/FACORY TESTING.

CHART FOR SETTING CODE 5	
SETTING COMBINATION	RESULTANT
N_WC1SW - TRUE AND N_WC5SW - FALSE	CODE 1 IN SOUTH/EAST, CODE 5 OUT NORTH/WEST
N_WC1SW - FALSE AND N_WC5SW - TRUE	CODE 5 IN SOUTH/EAST, CODE 5 OUT NORTH/WEST
N_WC1SW - FALSE AND N_WC5SW - FALSE	CODE 5 NOT TRANSMITTED NORTH/WEST
N_WC1SW - TRUE AND N_WC5SW - TRUE	CODE 5 TRANSMITTED NORTH/WEST CONTINUOUSLY
S_EC1SW - TRUE AND S_EC5SW - FALSE	CODE 1 IN NORTH/WEST, CODE 5 OUT SOUTH/EAST
S_EC1SW - FALSE AND S_EC5SW - TRUE	CODE 5 IN NORTH/WEST, CODE 5 OUT SOUTH/EAST
S_EC1SW - FALSE AND S_EC5SW - FALSE	CODE 5 NOT TRANSMITTED SOUTH/EAST
S_EC1SW - TRUE AND S_EC5SW - TRUE	CODE 5 TRANSMITTED SOUTH/EAST CONTINUOUSLY

PRELIMINARY

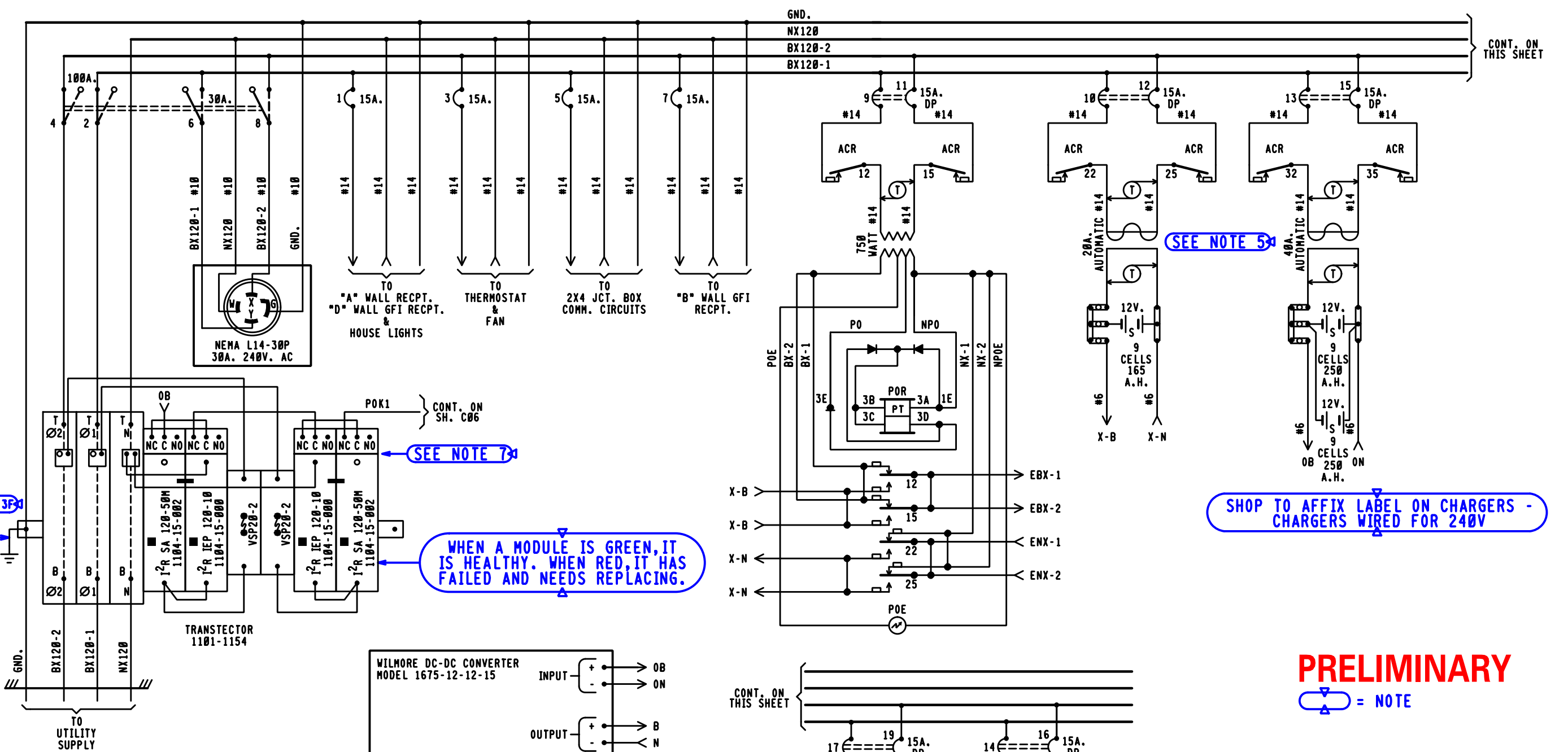


CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W &

CUT SECTION
ELECTROLOGIX PROGRAM
DAWSON, PA H.P. BF-275.80

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27580	SHEET P01



SEE NOTE 3F

SEE NOTE 7

WHEN A MODULE IS GREEN, IT IS HEALTHY. WHEN RED, IT HAS FAILED AND NEEDS REPLACING.

SEE NOTE 5

SHOP TO AFFIX LABEL ON CHARGERS - CHARGERS WIRED FOR 240V

PRELIMINARY

NOTE

SEE NOTE 5

SEE NOTE 8

BX120-1 | BX120-2
19.1 AMPS | 17.1 AMPS
MAXIMUM LOAD
CALCULATED PER SS360

- NOTES:**
- ARRESTERS ARE PER SS382.
 - BATTERY A.H. CAPACITY SHOWN IS THE MINIMUM REQUIREMENT.
 - WIRING
 - A - FEED TO ALL BUSSES, LIGHT CIRCUITS, MOTOR CIRCUITS TO BE #10 FLEX.
 - B - 120-VOLT FEED FROM ENTRANCE TO POWER BUSS TO BE #10 FLEX.
 - C - ALL TRACK WIRES TO BE #10 FLEX.
 - D - ALL OTHERS TO BE #16 FLEX UNLESS NOTED.
 - E - ALL BATTERY OUTPUTS TO BE #6 PER SS360.
 - F - GROUND WIRE NOT NECESSARY WHEN SURGE SUPPRESSOR IS MOUNTED ON GROUND PLANE OR METAL ENCLOSURE AFFIXED DIRECTLY TO BUNGALOW METALLIC STRUCTURAL MEMBER.
 - CIRCUIT INTERRUPTERS 2 & 4 ARE MECHANICALLY INTERLOCKED WITH CIRCUIT INTERRUPTERS 6 & 8.
 - CHARGERS WIRED FOR 240VAC
 - CIRCUIT BREAKERS PANEL- Q0124L1256 (24 SPACES)
 - FORM C DRY CONTACTS MOUNTED ON TOP OF TRANSESTER WIRED TO ALERT A POK INDICATION WHEN A MODULE IS NOT HEALTHY.
 - (X) = SOLID STATE VOLTAGE MONITOR CRYDOM DC60SA3 WALL (020-0386003-1) WITH COVER (020-0300101-1).

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27500	SHEET E01		

6' X 6' PTC RELAY HOUSE

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W
CUT SECTION
POWER DISTRIBUTION
DAWSON, PA M.P. BF-275.00


TOP ROW

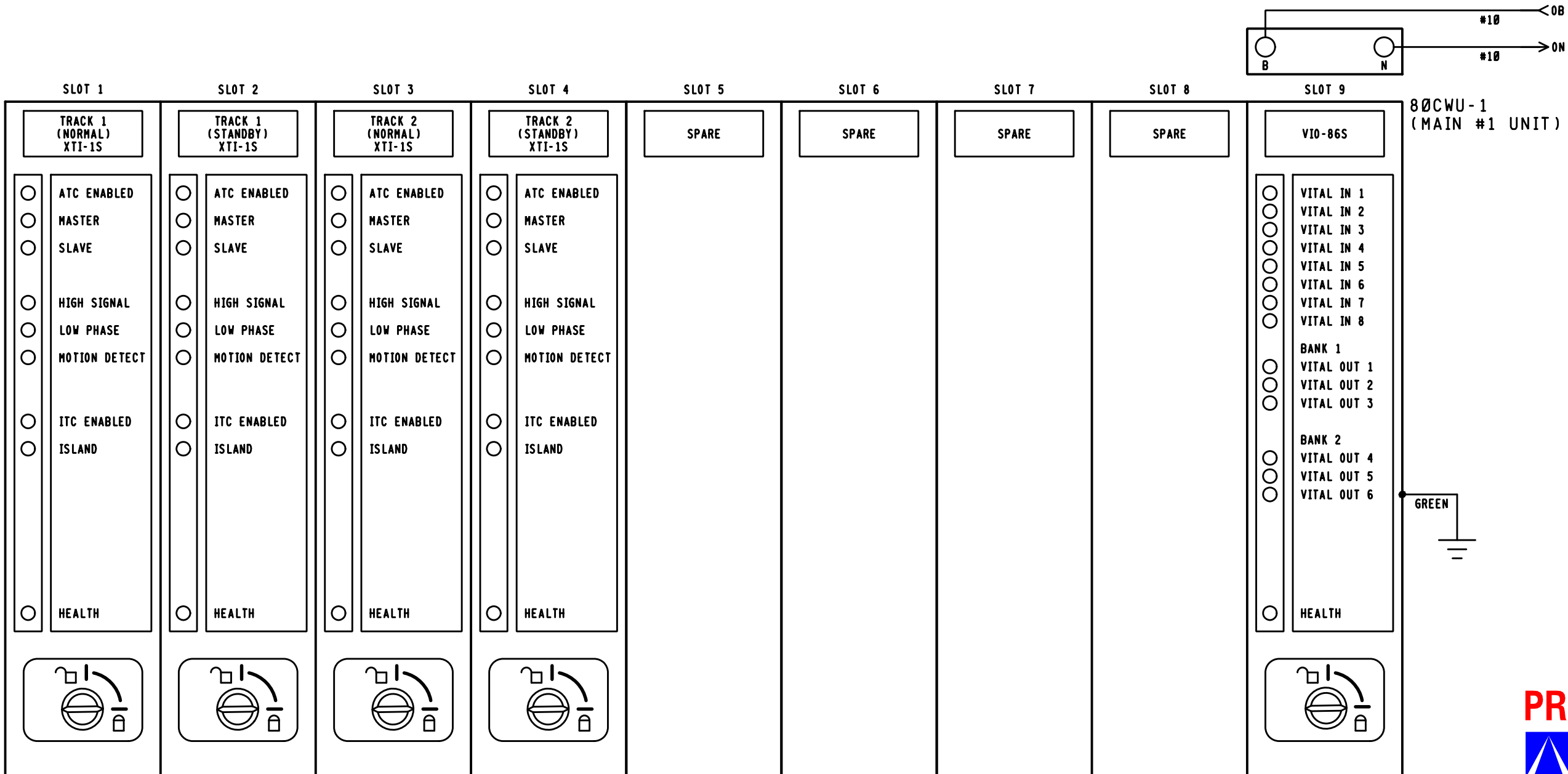
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12	B	B02	12	B	B02	12	FB	B01	12	FB	B62	12	B	B77	12		B8	12		B8	12		B8	12		B8	12		B8	12		B8	12		B8			
15	B	C30	15	B	C30	15		C30	15	FB	C30	15	B	C30	15		C30	15		C30	15		C30	15		C30	15		C30	15		C30	15		C30			
22	B		22	B		32	FB		22	FB		22	B		22			22			22			22			22			22			22			22		
23			23			35			25	FB		25	B		23	F		23	F		23	F		23	F		23	F		23	F		23	F		23	F	
25			25						32	F		32	B		25	F		25	F		25	F		25	F		25	F		25	F		25	F		25	F	
32	F		32	F					35			35	B		32			32			32			32			32			32			32			32		
35	B		35	B											35			35			35			35			35			35			35			35		
67DAX80-1R			67DAX80-2R																																			
12		B8	12		B8																																	
15		C30	15		C30																																	
22			22																																			
23	F		23	F																																		
25	F		25	F																																		
32			32																																			
35			35																																			

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

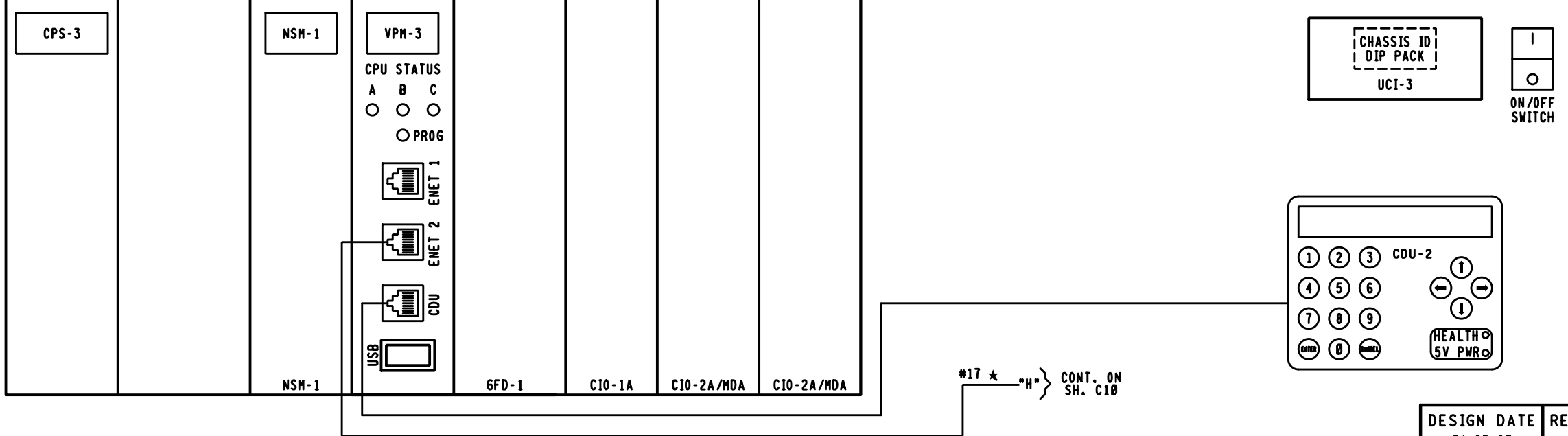
DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

6' X 6' PTC RELAY HOUSE

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
GALLEY ST. 145457M & CUT SECTION RACK 1 LAYOUT AND RELAY DETAIL DAWSON, PA H.P. BF-275.00			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27500	SHEET E02



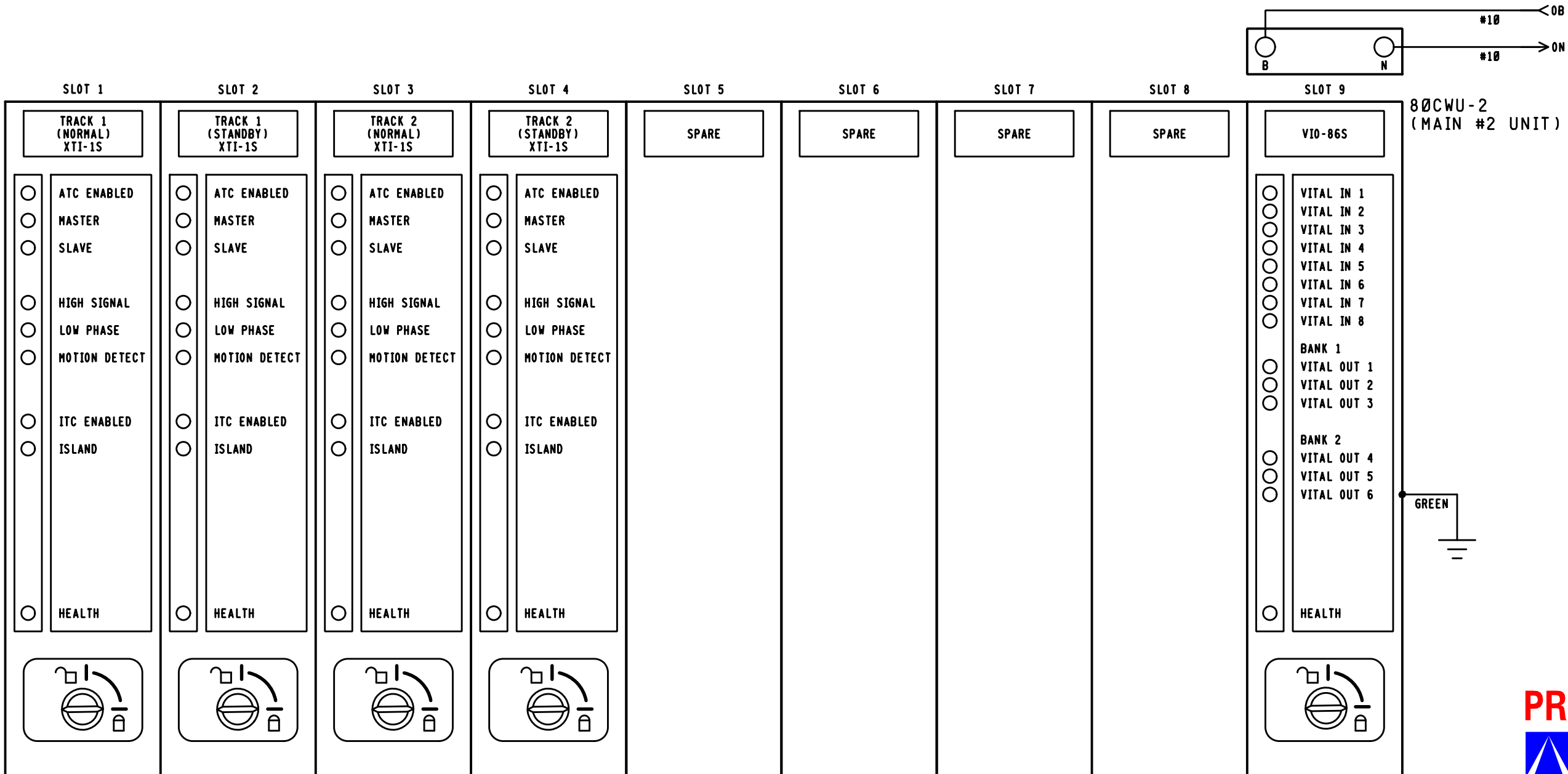
80CWU-1
(MAIN #1 UNIT)



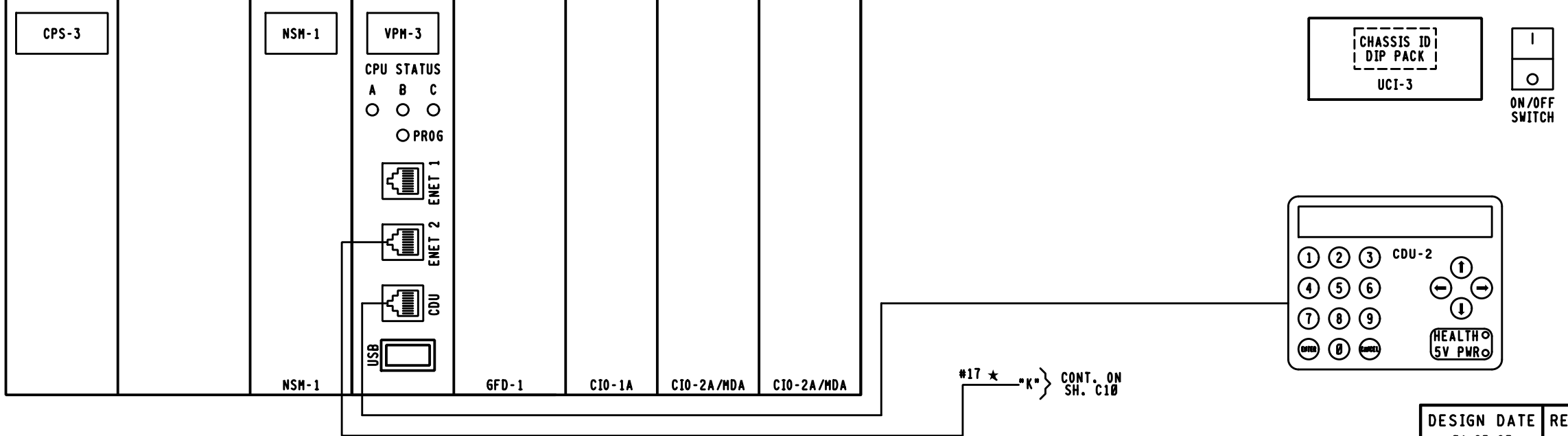
PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
NEW WORK CSX # PA2023021 PRS/AMJ/SAF

NOTE:
 * = REFER TO SH. C10 FOR PART NUMBER.

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
GALLEY ST. 145457W & CUT SECTION ELECTROLOGIXS XP4 MODULE LAYOUT DAWSON, PA M.P. BF-275.00			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27500	SHEET E03		



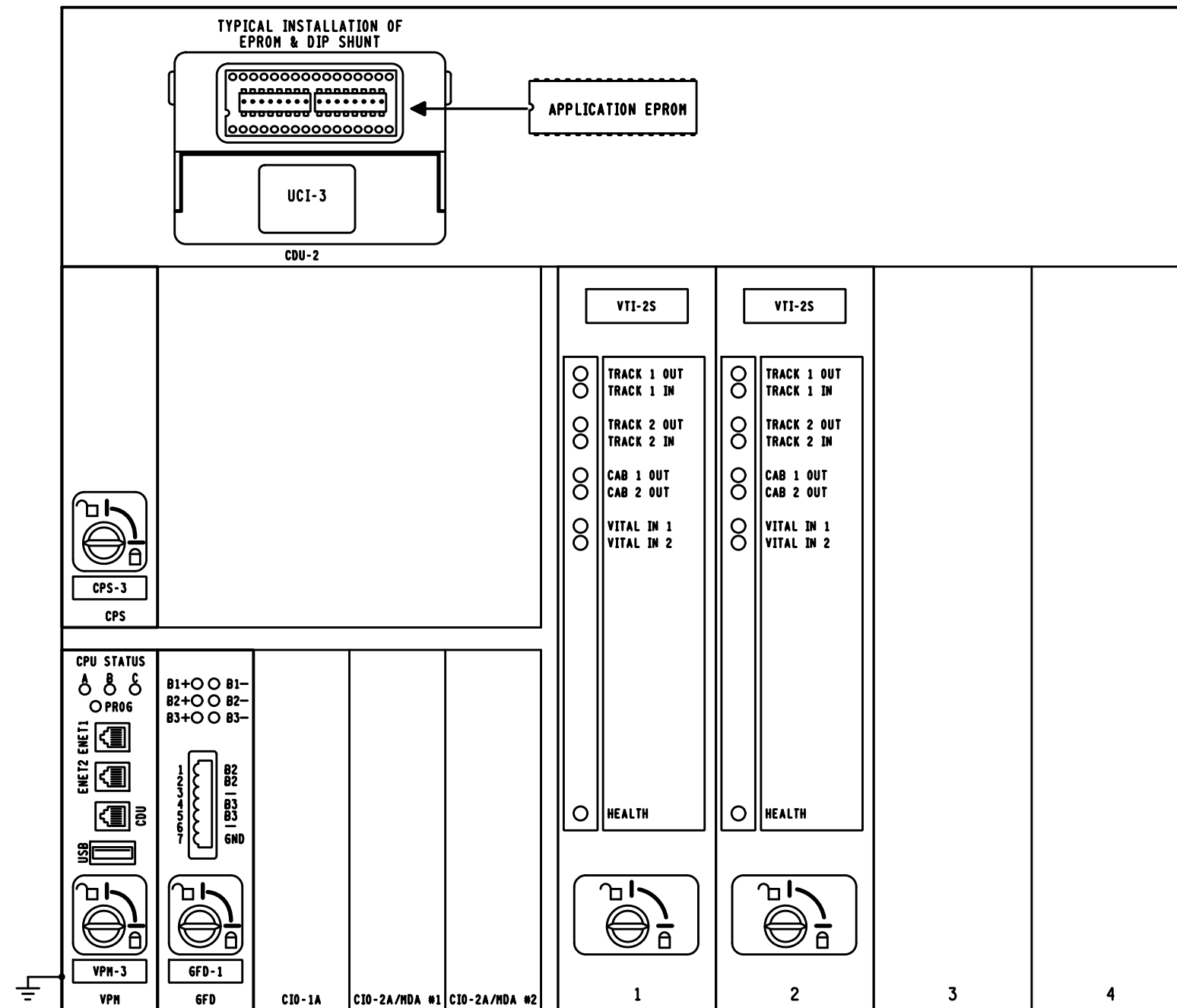
80CWU-2
(MAIN #2 UNIT)



PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company DATE: 04-23-25
NEW WORK CSX # PA2023021
PRS/AMJ/SAF

NOTE:
★ = REFER TO SH. C10 FOR PART NUMBER.

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
GALLEY ST. 145457W & CUT SECTION ELECTROLOGIXS XP4 MODULE LAYOUT DAWSON, PA H.P. BF-275.00			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27500	SHEET E04		

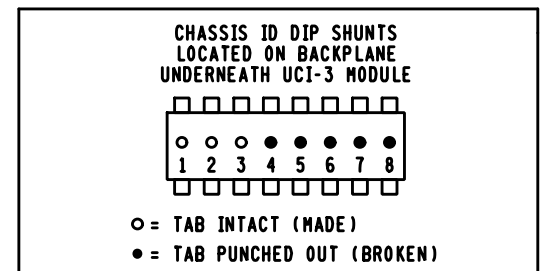


ELECTROLOGIXS 4-SLOT CHASSIS

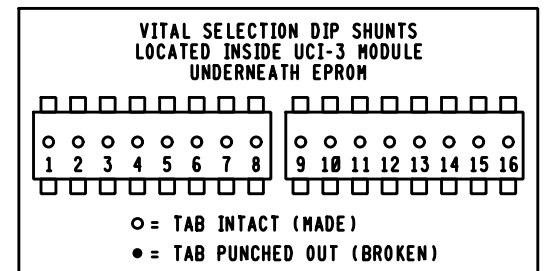
MODULE LEGEND:

- CDU-2 = CONTROL DISPLAY UNIT
- CPS-3 = CENTRAL POWER SUPPLY
- VPM-3 = VITAL PERIPHERAL MASTER
- GFD-1 = GROUND FAULT DETECTOR
- CIO-1A = COMMUNICATION INPUT/OUTPUT
- CIO-2A = COMMUNICATION INPUT/OUTPUT
- CIO-CLA = COMMUNICATION INPUT/OUTPUT - CLA
- CIO-MDA = COMMUNICATION INPUT/OUTPUT
- UCI-3 = CHASSIS INFORMATION
- VTI-2S = VITAL TRACK INTERFACE
- VLD-R16S = VITAL LAMP DRIVER
- VIO-86S = VITAL INPUTS/OUTPUTS
- WSDMM = WAYSIDE SYSTEM DATA MANAGEMENT MODULE

CHASSIS ID - 224



VITAL SELECTION ID - N/A



PRELIMINARY



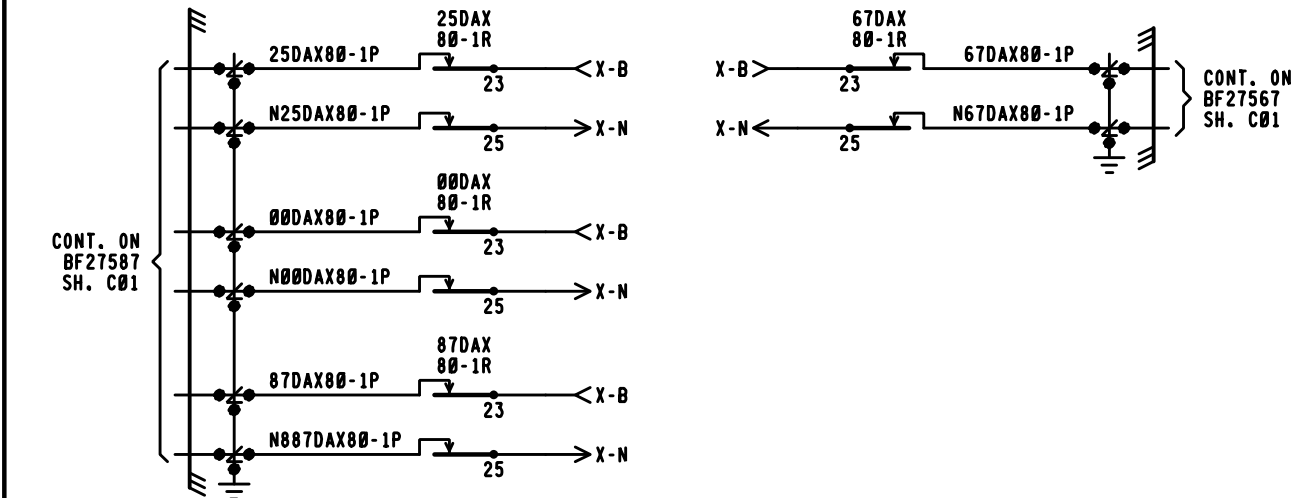
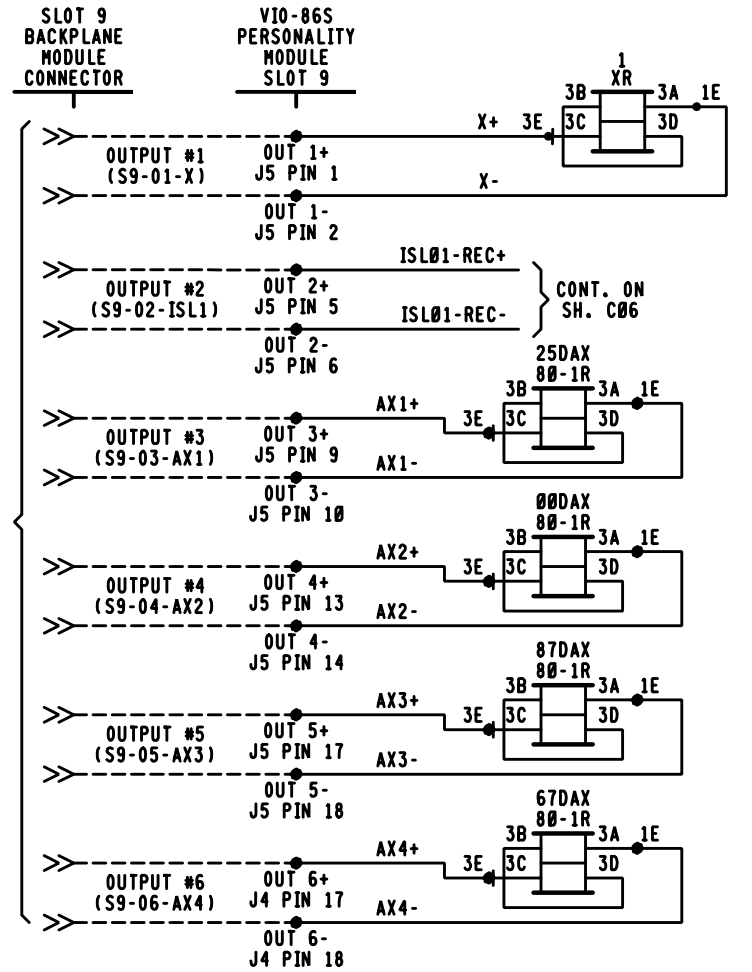
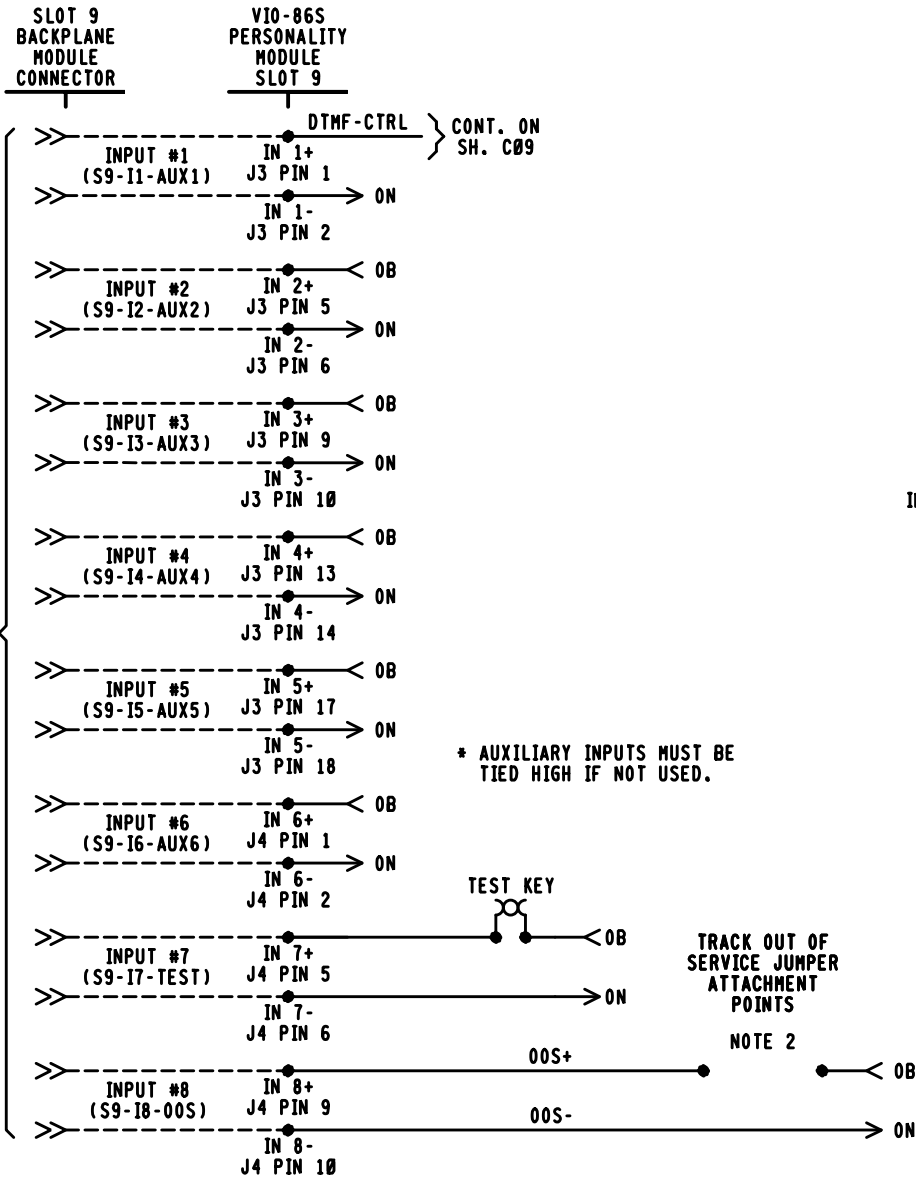
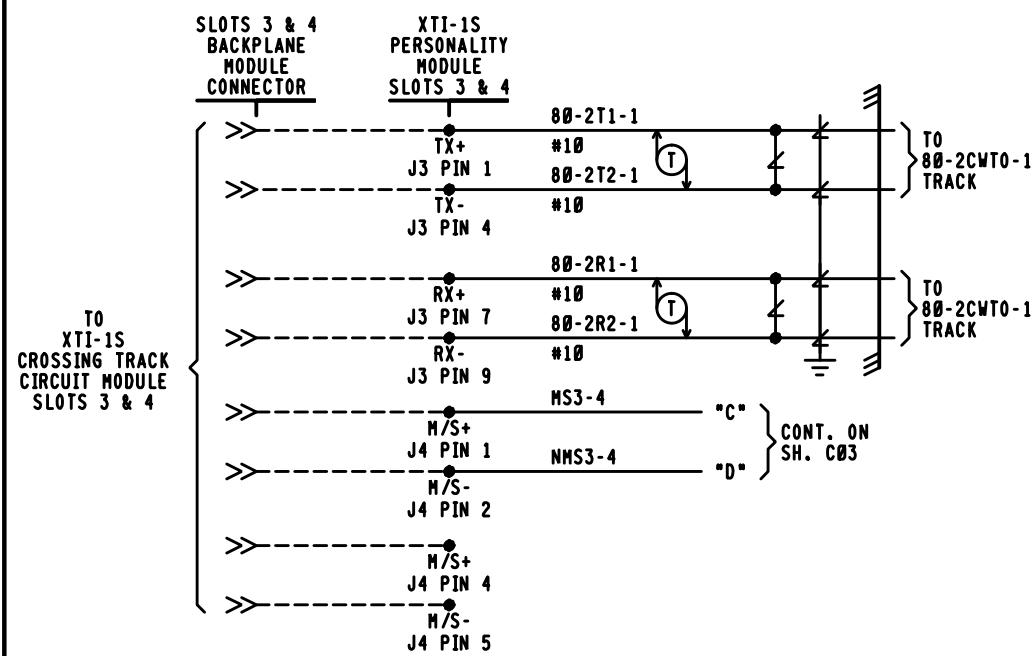
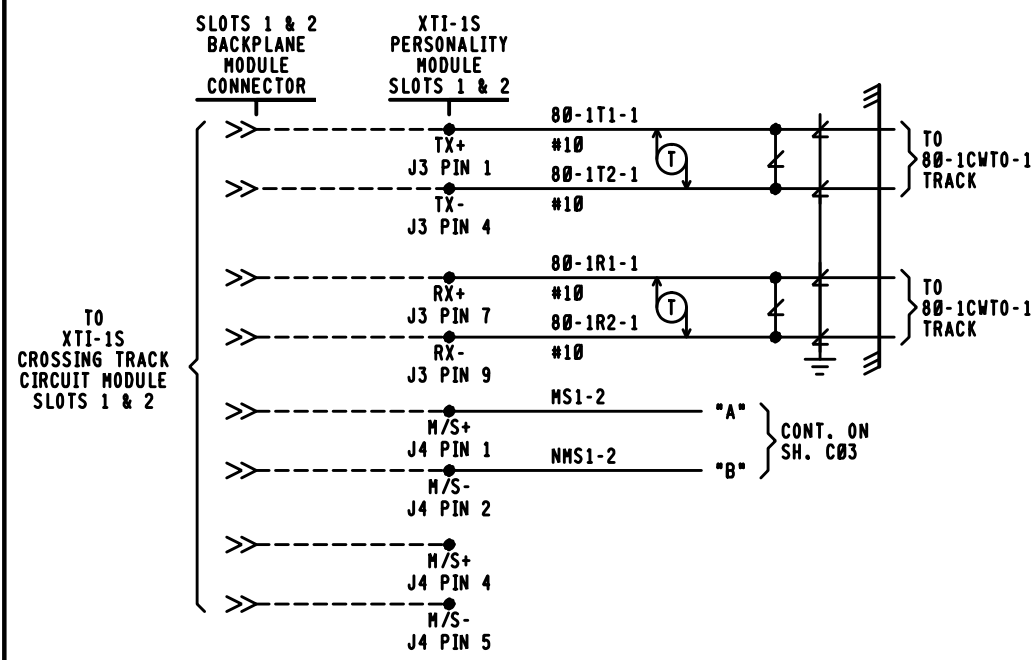
DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W &

CUT SECTION
ELECTROLOGIXS MODULE CONFIGURATION
DAWSON, PA H.P. BF-275.80

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27580	SHEET E05		



SLOT 9 I/O	
INPUT 1	POSITIVE CONTROL AUXILIARY INPUT 1 (AUX1)
INPUT 2	POSITIVE CONTROL AUXILIARY INPUT 2 (AUX2)
INPUT 3	POSITIVE CONTROL AUXILIARY INPUT 3 (AUX3)
INPUT 4	POSITIVE CONTROL AUXILIARY INPUT 4 (AUX4)
INPUT 5	POSITIVE CONTROL AUXILIARY INPUT 5 (AUX5)
INPUT 6	POSITIVE CONTROL AUXILIARY INPUT 6 (AUX6)
INPUT 7	CROSSING ACTIVATION TEST
INPUT 8	OUT OF SERVICE JUMPER INPUT (OOS)
OUTPUT 1	X OUTPUT
OUTPUT 2	ISL01 OUTPUT
OUTPUT 3	AX1 OUTPUT
OUTPUT 4	AX2 OUTPUT
OUTPUT 5	AX3 OUTPUT
OUTPUT 6	AX4 OUTPUT

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

- NOTES
- ALL WIRE THIS SHEET #16 AWG UNLESS NOTED.
 - APPROACH DISABLE JUMPER INPUT. THIS INPUT IS USED IN COMBINATION WITH THE SOFT APPROACH DISABLE ACCESSED THROUGH THE CDU-2 KEYPAD. BOTH BITS MUST BE HIGH TO DISABLE AN APPROACH. THE OPERATOR IS SOLELY RESPONSIBLE FOR CROSSING PROTECTION WHEN THE APPROACH DISABLE FUNCTION IS ACTIVATED.
 - HLVA2-1675-01 HYBRID LOW VOLTAGE ARRESTER, UNLESS NOTED.

80CWU-1 (MAIN TRACK #1)

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W &
 CUT SECTION
 XP4 CROSSING DETECTION & I/O CIRCUITS
 DAWSON, PA H.P. BF-275.80

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DRAWING -----	SHEET NO -----	FILE BF27580	SHEET C01

DESIGN DATE 04-23-25	REV. NO. 1
-------------------------	---------------

SITE SPECIFIC MDR DESCRIPTIONS AND SETTINGS										
NAME	MDR1	MDR2	MDR3	MDR4	MDR5	MDR6				
FUNCTION	XR	XR	AX1	AX2	AX3	AX4				
WARNING TIME	29	29	39	33	31	26				
CW/HD	CW	CW	CW	CW	CW	CW				
AP TIME(PREEMPT)	NA	NA	NA	NA	NA	NA				
CWE-WT	80	80	80	80	80	80				
AUX RECOVERY DELAY	5	5	5	5	5	5				
TRACK	TK 1 [1]	TK 2 [3]	TK 1 [1]	TK 2 [3]	TK 1 [1]	TK 2 [3]	TK 1 [1]	TK 2 [3]	TK 1 [1]	TK 2 [3]
TRACK ASSIGNED	ASSIGNED	ASSIGNED	UNASSIGNED	ASSIGNED	UNASSIGNED	ASSIGNED	UNASSIGNED	ASSIGNED	ASSIGNED	UNASSIGNED
OFFSET DISTANCE	0'	0'	NA	2310'	NA	1007'	NA	330'	555'	NA
HD RESTART	0	0	NA	0	NA	0	NA	0	0	NA
SUDDEN SHUNT ZONE	0	0	NA	0	NA	0	NA	0	0	NA
POSITIVE START	PSEN	DISABLE	DISABLE	NA	DISABLE	NA	DISABLE	NA	DISABLE	DISABLE
	PSRX	0	0	NA	0	NA	0	NA	0	NA
	PST	0	0	NA	0	NA	0	NA	0	NA
POST JOINT DETECT	PJEN	ENABLE	ENABLE	NA	ENABLE	NA	ENABLE	NA	ENABLE	ENABLE
	PJRX	15	15	NA	15	NA	15	NA	15	NA
	PJDT	15	15	NA	15	NA	15	NA	15	NA
CLEAR JOINT LOS	CJ-LOS MODE	STANDARD	STANDARD	NA	STANDARD	NA	STANDARD	NA	STANDARD	STANDARD
	CJ-LOS RX	15	15	NA	15	NA	15	NA	15	NA
	CJ-LOS TIME	99	99	NA	99	NA	99	NA	99	NA

BASIC TRACK SETUP		
	TRACK 1 [1]	TRACK 2 [3]
FREQUENCY	86 HZ	267 HZ
MASTER/SLAVE	MASTER	MASTER
RX ADJUST	100 *	100 *
TCA	*	*
DIRECTION MODE	BI	BI
LIA	*	*
ADVANCED APPROACH	*	*
NBS COMP RX	*	*
TRK ISLAND ASSIGN	ISL1 ASSIGN	ISL2 ASSIGN
APPROACH LENGTH	2604'	2604'
AUTO RX	ENABLE	ENABLE

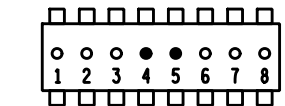
ADVANCED TRACK SETUP			
		TRACK 1 [1]	TRACK 2 [3]
MOTION DET TIMER	MDEN	ENABLE	ENABLE
	MDTT	10 MIN	10 MIN
FALSE SHUNT	FSEN	DISABLE	DISABLE
	FSRX	NA	NA
APPROACH RELEASE	FST	NA	NA
	AREN	DISABLE	DISABLE
	ARRX	NA	NA
	ART	NA	NA
LOS TIME		16 SEC	16 SEC
IJ-LOS TIME		5 SEC	5 SEC
NRML*SHRT*VRYSHRT		*	*

ISLAND SETUP		
	TRACK 1 [1]	TRACK 2 [3]
ENABLE/DISABLE	ENABLE	NA
FREQUENCY	7.1 KHZ	NA
LOSS OF SHUNT	2 SEC.	NA
FAULT DELAY	2	NA

VPM3 ETHERNET SETUP	
	IP ADDRESS
ETHERNET PORT 1 (TOP)	192.168.0.11
ETHERNET PORT 2 (BOTTOM)	192.168.1.12

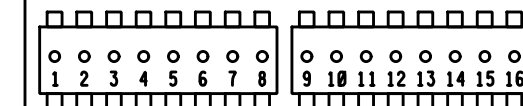
APPLICATION SOFTWARE INFORMATION	
NAME	9XXS-2.04A
REV.	1.0
CHECKSUM	CF59
CRC	5F06
CH. I.D.	231

CHASSIS ID DIP SHUNTS
LOCATED ON BACKPLANE
UNDERNEATH UCI-3 MODULE



○ = TAB INTACT (MADE)
● = TAB PUNCHED OUT (BROKEN)

VITAL SELECTION DIP SHUNTS
LOCATED INSIDE UCI-3 MODULE
UNDERNEATH EPROM



○ = TAB INTACT (MADE)
● = TAB PUNCHED OUT (BROKEN)

VITAL SELECTION DIP SHUNTS		
#	NAME	STATE
1	NA	INTACT (NOT USED)
2	NA	INTACT (NOT USED)
3	NA	INTACT (NOT USED)
4	NA	INTACT (NOT USED)
5	NA	INTACT (NOT USED)
6	NA	INTACT (NOT USED)
7	NA	INTACT (NOT USED)
8	NA	INTACT (NOT USED)
9	NA	INTACT (NOT USED)
10	NA	INTACT (NOT USED)
11	NA	INTACT (NOT USED)
12	NA	INTACT (NOT USED)
13	NA	INTACT (NOT USED)
14	NA	INTACT (NOT USED)
15	NA	INTACT (NOT USED)
16	NA	INTACT (NOT USED)

NOTES:
● = FIELD ADJUSTMENT
NA = NOT APPLICABLE

80CWU-1 (MAIN TRACK #1)

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W &

CUT SECTION
XP4 SETUP INFORMATION
DAWSON, PA H.P. BF-275.80

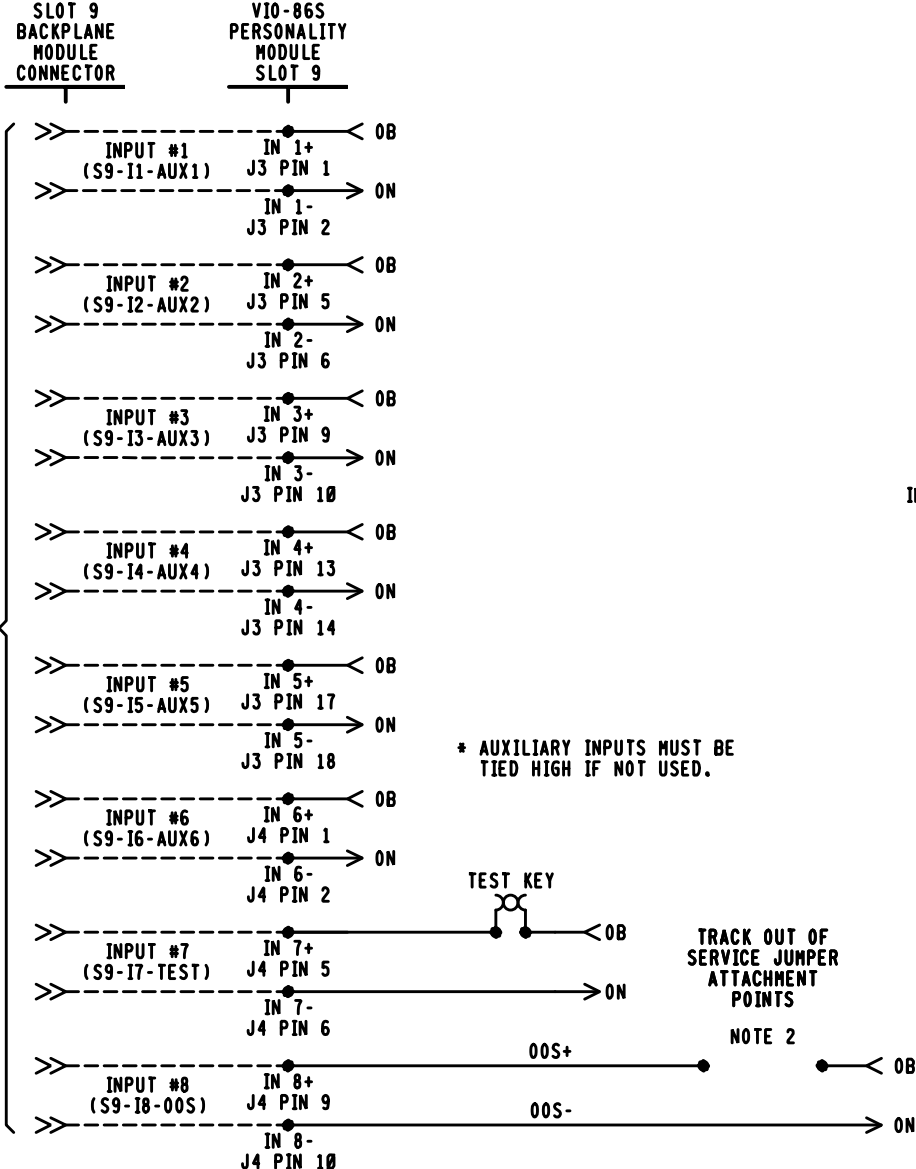
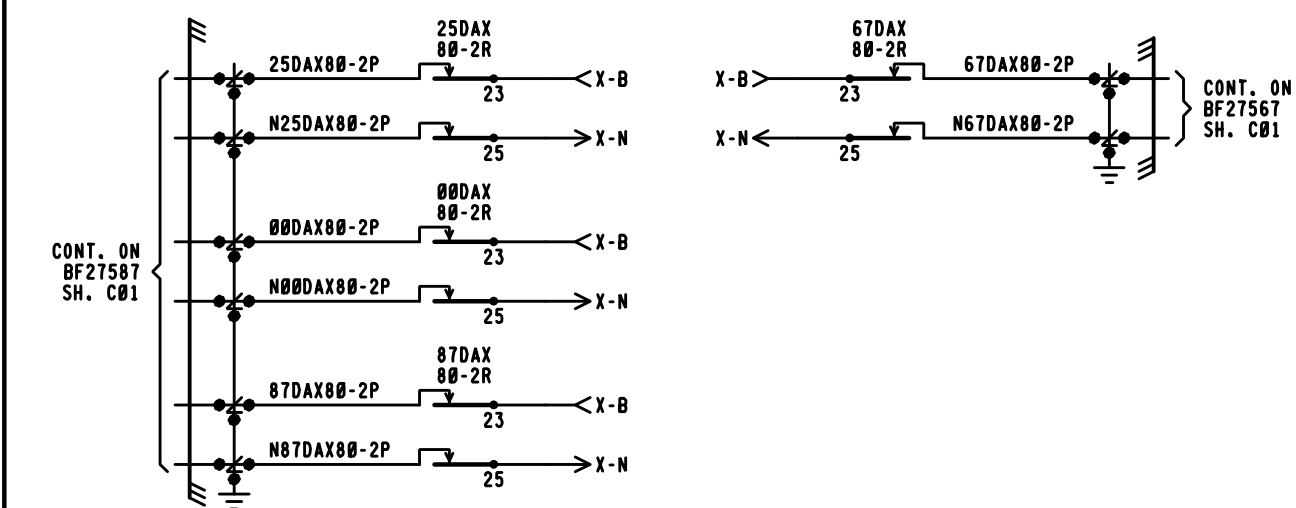
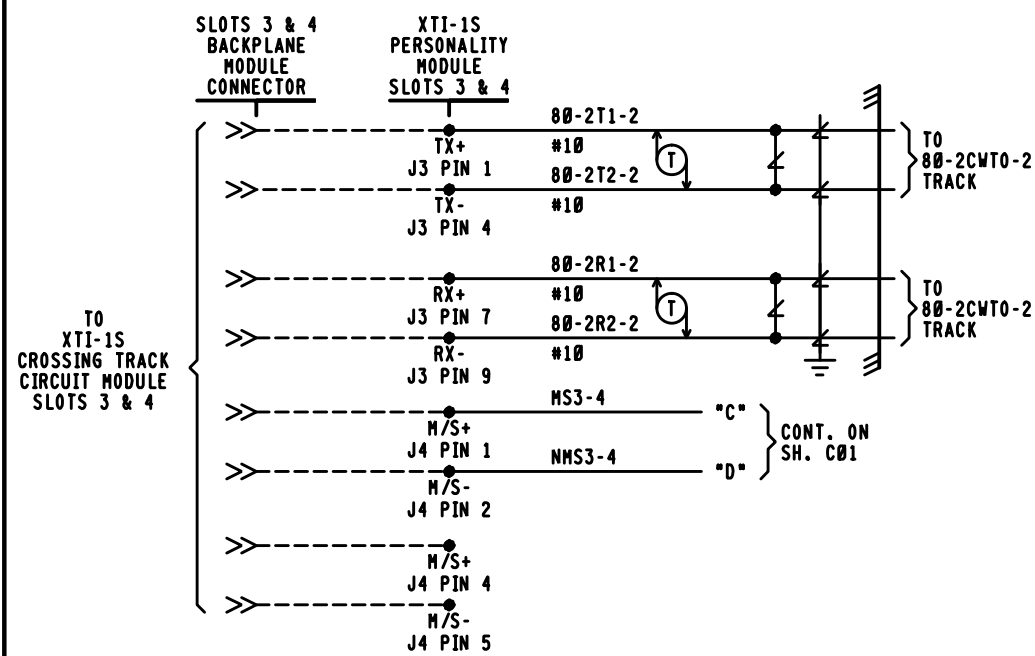
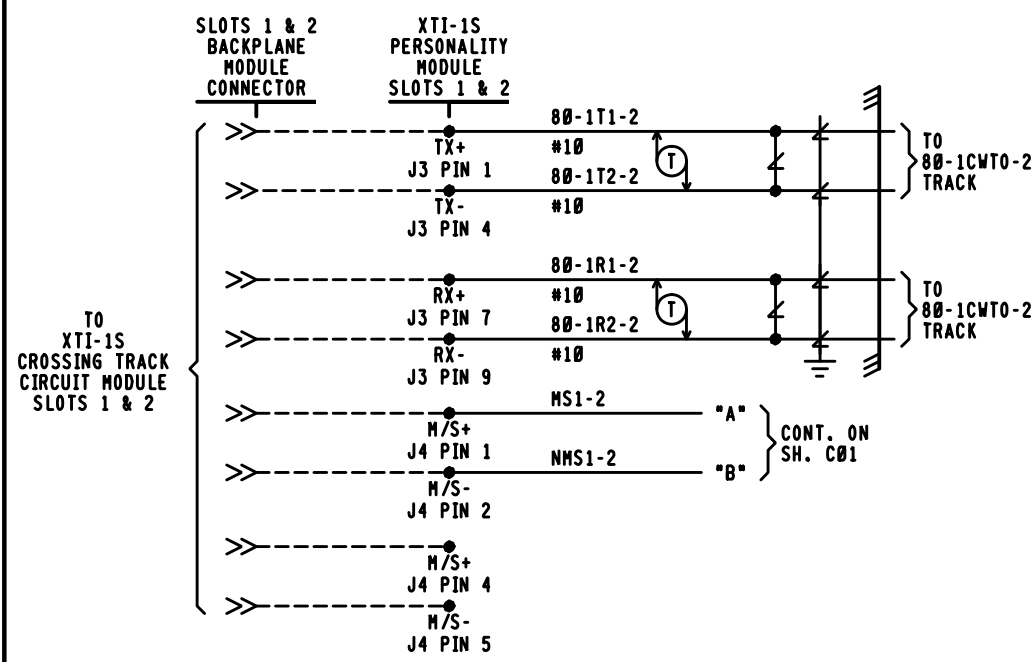
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DRAWING -----	SHEET NO -----	FILE BF27580	SHEET C02

PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company
NEW WORK

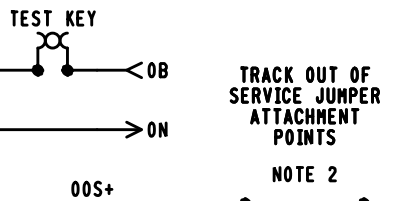
DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

DESIGN DATE
04-23-25

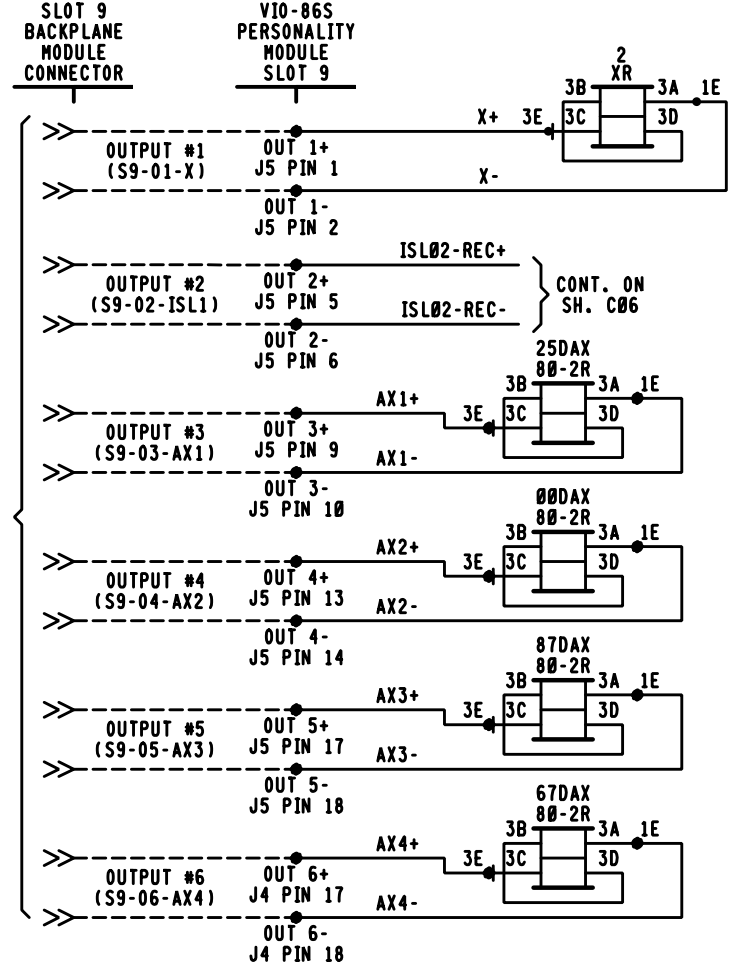
REV. NO.
1



* AUXILIARY INPUTS MUST BE TIED HIGH IF NOT USED.



TO VITAL INPUT/OUTPUT MODULE VIO-86S SLOT 9



SLOT 9 I/O	
INPUT 1	POSITIVE CONTROL AUXILIARY INPUT 1 (AUX1)
INPUT 2	POSITIVE CONTROL AUXILIARY INPUT 2 (AUX2)
INPUT 3	POSITIVE CONTROL AUXILIARY INPUT 3 (AUX3)
INPUT 4	POSITIVE CONTROL AUXILIARY INPUT 4 (AUX4)
INPUT 5	POSITIVE CONTROL AUXILIARY INPUT 5 (AUX5)
INPUT 6	POSITIVE CONTROL AUXILIARY INPUT 6 (AUX6)
INPUT 7	CROSSING ACTIVATION TEST
INPUT 8	OUT OF SERVICE JUMPER INPUT (OOS)
OUTPUT 1	X OUTPUT
OUTPUT 2	ISL OUTPUT
OUTPUT 3	AX1 OUTPUT
OUTPUT 4	AX2 OUTPUT
OUTPUT 5	AX3 OUTPUT
OUTPUT 6	AX4 OUTPUT

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
 NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

DESIGN DATE	REV. NO.	DRAWING	SHEET NO	FILE	SHEET
04-23-25	1	-----	-----	BF27500	C03

- NOTES
- ALL WIRE THIS SHEET #16 AWG UNLESS NOTED.
 - APPROACH DISABLE JUMPER INPUT. THIS INPUT IS USED IN COMBINATION WITH THE SOFT APPROACH DISABLE ACCESSED THROUGH THE CDU-2 KEYPAD. BOTH BITS MUST BE HIGH TO DISABLE AN APPROACH. THE OPERATOR IS SOLELY RESPONSIBLE FOR CROSSING PROTECTION WHEN THE APPROACH DISABLE FUNCTION IS ACTIVATED.
 - = HLVA2-1675-01 HYBRID LOW VOLTAGE ARRESTER, UNLESS NOTED.

80CWU-2 (MAIN TRACK #2)

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W &
 CUT SECTION
 XP4 CROSSING DETECTION & I/O CIRCUITS
 DAWSON, PA H.P. BF-275.00

DESIGNED	DIGITIZED	CHECKED	DATE
PRS/AMJ	PRS/AMJ	PRS/SAF	04-23-25

SITE SPECIFIC MDR DESCRIPTIONS AND SETTINGS											
NAME	MDR1	MDR2	MDR3	MDR4	MDR5	MDR6					
FUNCTION	XR	XR	AX1	AX2	AX3	AX4					
WARNING TIME	29	29	39	33	31	26					
CW/HD	CW	CW	CW	CW	CW	CW					
AP TIME(PREEMPT)	NA	NA	NA	NA	NA	NA					
CWE-WT	80	80	80	80	80	80					
AUX RECOVERY DELAY	5	5	5	5	5	5					
TRACK	TK 1 [1]	TK 2 [3]	TK 1 [1]	TK 2 [3]	TK 1 [1]	TK 2 [3]	TK 1 [1]	TK 2 [3]	TK 1 [1]	TK 2 [3]	
TRACK ASSIGNED	ASSIGNED	ASSIGNED	UNASSIGNED	ASSIGNED	UNASSIGNED	ASSIGNED	UNASSIGNED	ASSIGNED	ASSIGNED	UNASSIGNED	
OFFSET DISTANCE	0'	0'	NA	2310'	NA	1007'	NA	330'	555'	NA	
HD RESTART	0	0	NA	0	NA	0	NA	0	0	NA	
SUDDEN SHUNT ZONE	0	0	NA	0	NA	0	NA	0	0	NA	
POSITIVE START	PSEN	DISABLE	DISABLE	NA	DISABLE	NA	DISABLE	NA	DISABLE	DISABLE	NA
	PSRX	0	0	NA	0	NA	0	NA	0	0	NA
	PST	0	0	NA	0	NA	0	NA	0	0	NA
POST JOINT DETECT	PJEN	ENABLE	ENABLE	NA	ENABLE	NA	ENABLE	NA	ENABLE	ENABLE	NA
	PJRX	15	15	NA	15	NA	15	NA	15	15	NA
	PJDT	15	15	NA	15	NA	15	NA	15	15	NA
CLEAR JOINT LOS	CJ-LOS MODE	STANDARD	STANDARD	NA	STANDARD	NA	STANDARD	NA	STANDARD	STANDARD	NA
	CJ-LOS RX	15	15	NA	15	NA	15	NA	15	15	NA
	CJ-LOS TIME	99	99	NA	99	NA	99	NA	99	99	NA

BASIC TRACK SETUP		
	TRACK 1 [1]	TRACK 2 [3]
FREQUENCY	86 HZ	267 HZ
MASTER/SLAVE	SLAVE	SLAVE
RX ADJUST	100 *	100 *
TCA	*	*
DIRECTION MODE	BI	BI
LIA	*	*
ADVANCED APPROACH	*	*
NBS COMP RX	*	*
TRK ISLAND ASSIGN	ISL1 ASSIGN	ISL2 ASSIGN
APPROACH LENGTH	2604'	2604'
AUTO RX	ENABLE	ENABLE

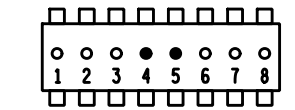
ADVANCED TRACK SETUP			
		TRACK 1 [1]	TRACK 2 [3]
MOTION DET TIMER	MDEN	ENABLE	ENABLE
	MDTT	10 MIN	10 MIN
FALSE SHUNT	FSEN	DISABLE	DISABLE
	FSRX	NA	NA
APPROACH RELEASE	FST	NA	NA
	AREN	DISABLE	DISABLE
	ARRX	NA	NA
	ART	NA	NA
LOS TIME		16 SEC	16 SEC
IJ-LOS TIME		5 SEC	5 SEC
NRML*SHRT*VRYSHRT		*	*

ISLAND SETUP		
	TRACK 1 [1]	TRACK 2 [3]
ENABLE/DISABLE	ENABLE	NA
FREQUENCY	7.1 KHZ	NA
LOSS OF SHUNT	2 SEC.	NA
FAULT DELAY	2	NA

VPM3 ETHERNET SETUP	
	IP ADDRESS
ETHERNET PORT 1 (TOP)	192.168.0.11
ETHERNET PORT 2 (BOTTOM)	192.168.1.12

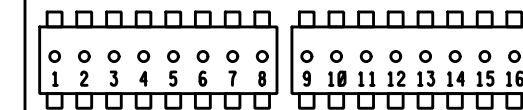
APPLICATION SOFTWARE INFORMATION	
NAME	9XXS-2.04A
REV.	1.0
CHECKSUM	CF59
CRC	5F06
CH. I.D.	231

CHASSIS ID DIP SHUNTS
LOCATED ON BACKPLANE
UNDERNEATH UCI-3 MODULE



O = TAB INTACT (MADE)
• = TAB PUNCHED OUT (BROKEN)

VITAL SELECTION DIP SHUNTS
LOCATED INSIDE UCI-3 MODULE
UNDERNEATH EPROM



O = TAB INTACT (MADE)
• = TAB PUNCHED OUT (BROKEN)

VITAL SELECTION DIP SHUNTS		
#	NAME	STATE
1	NA	INTACT (NOT USED)
2	NA	INTACT (NOT USED)
3	NA	INTACT (NOT USED)
4	NA	INTACT (NOT USED)
5	NA	INTACT (NOT USED)
6	NA	INTACT (NOT USED)
7	NA	INTACT (NOT USED)
8	NA	INTACT (NOT USED)
9	NA	INTACT (NOT USED)
10	NA	INTACT (NOT USED)
11	NA	INTACT (NOT USED)
12	NA	INTACT (NOT USED)
13	NA	INTACT (NOT USED)
14	NA	INTACT (NOT USED)
15	NA	INTACT (NOT USED)
16	NA	INTACT (NOT USED)

NOTES:
• = FIELD ADJUSTMENT
NA = NOT APPLICABLE

80CWU-2 (MAIN TRACK #2)

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W &

CUT SECTION
XP4 SETUP INFORMATION
DAWSON, PA H.P. BF-275.80

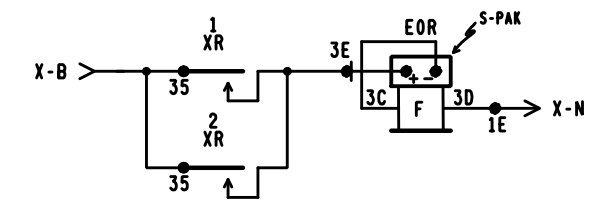
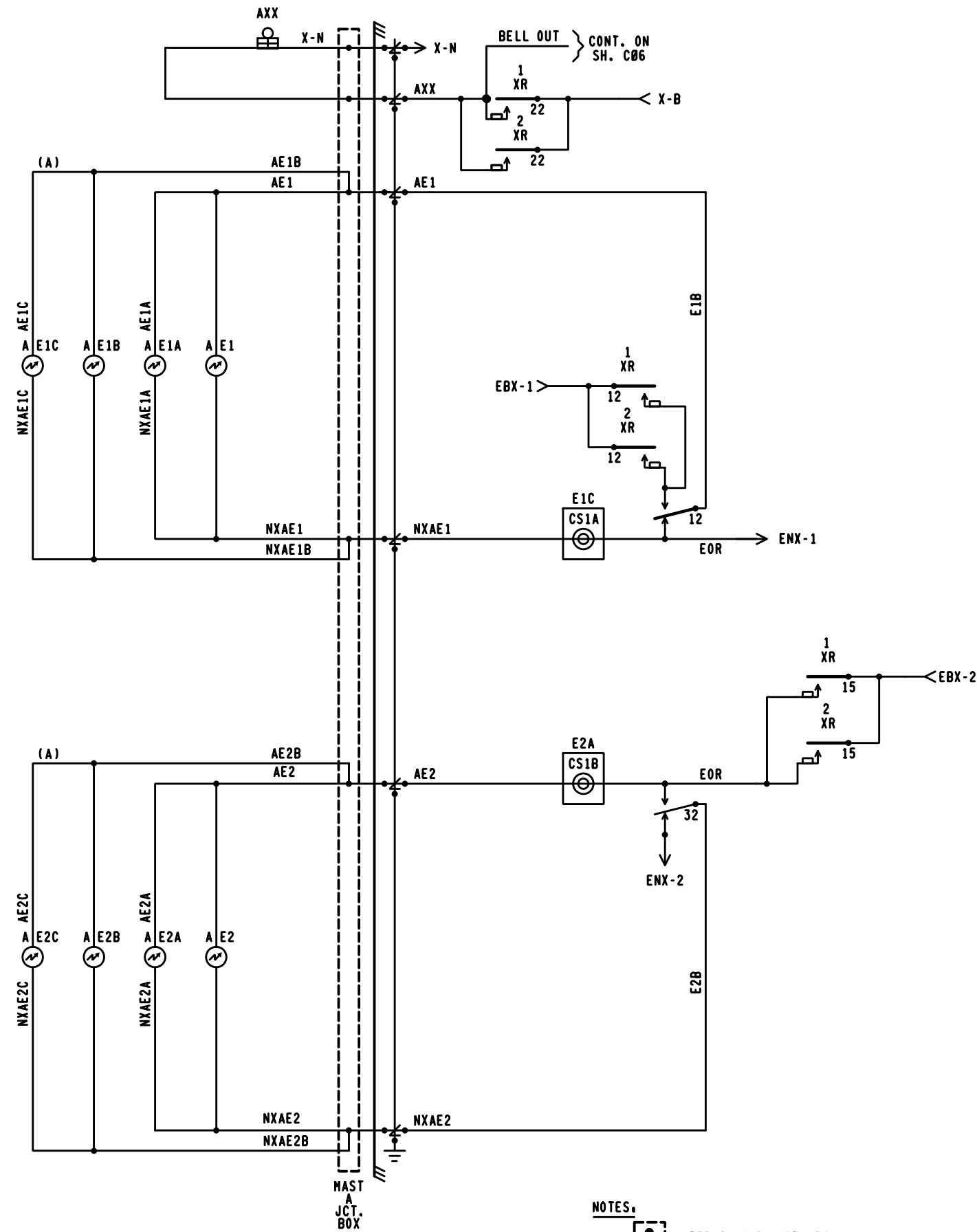
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DRAWING -----	SHEET NO -----	FILE BF27580	SHEET C04

PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company
NEW WORK

DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

DESIGN DATE
04-23-25

REV. NO.
1



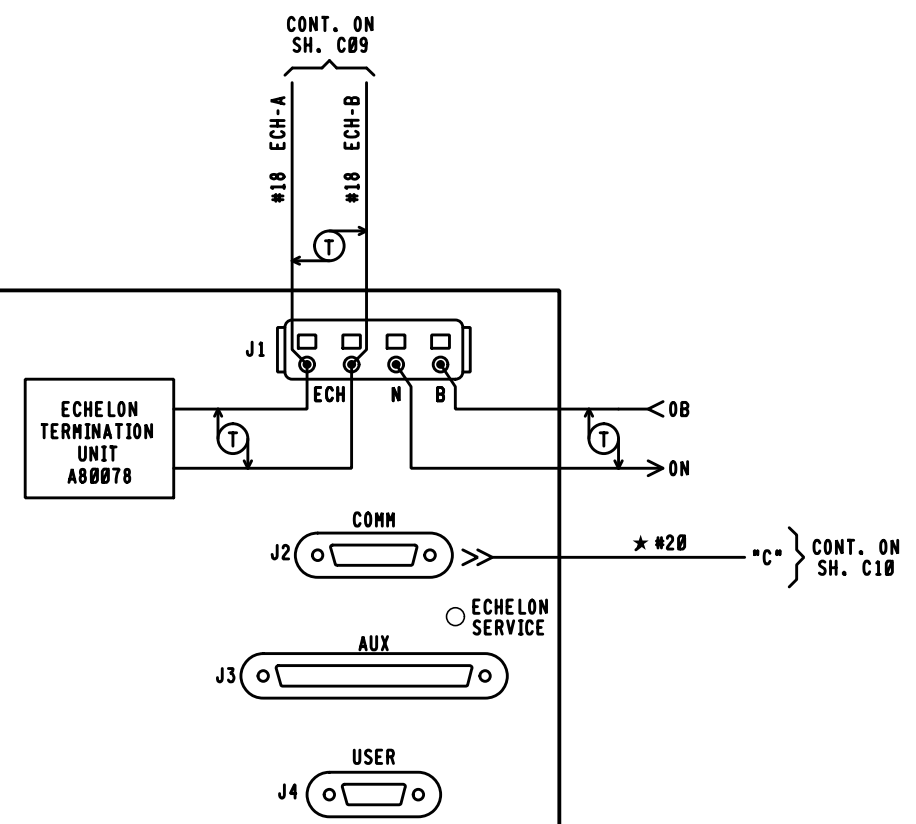
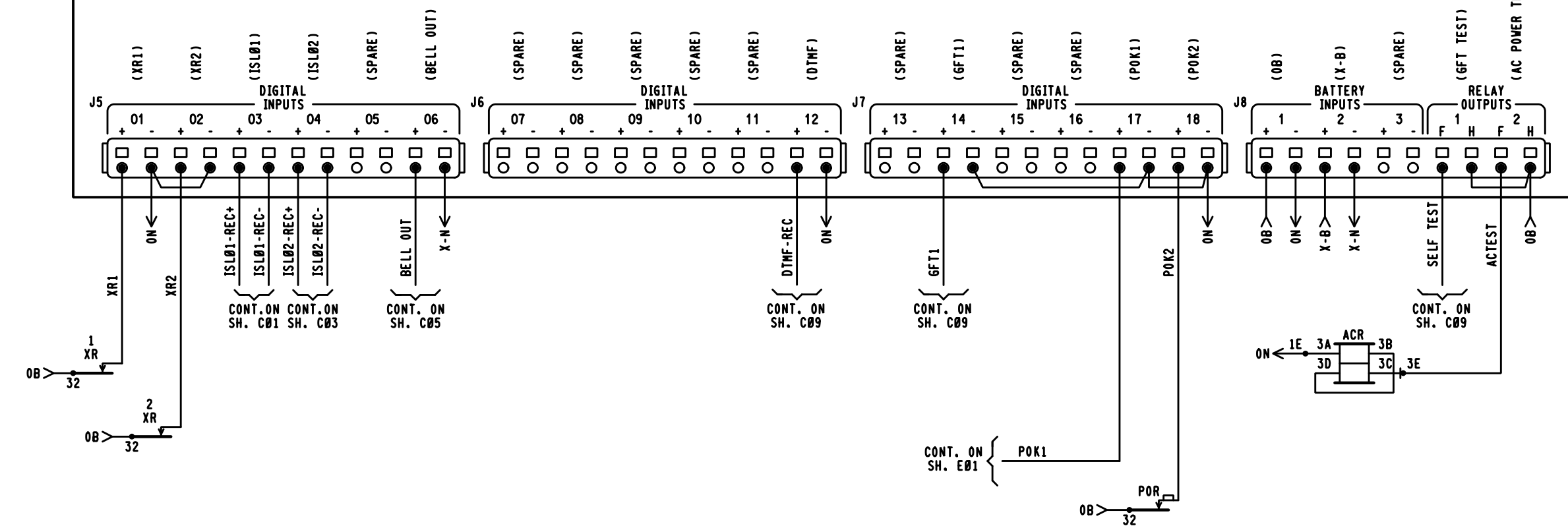
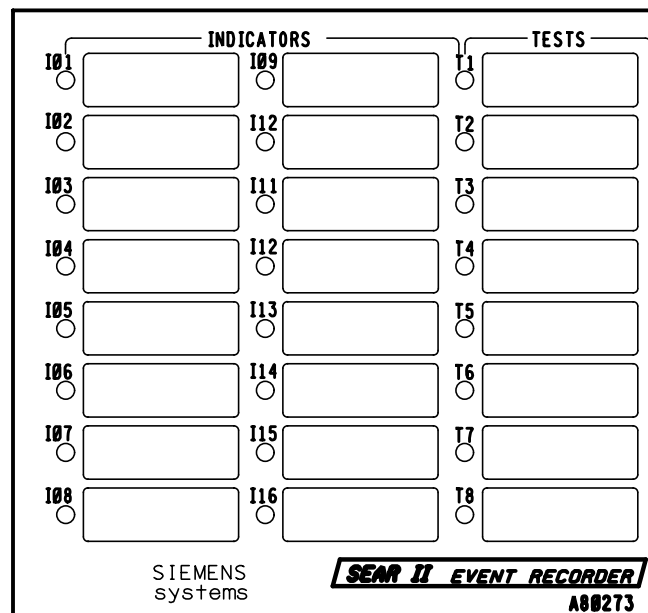
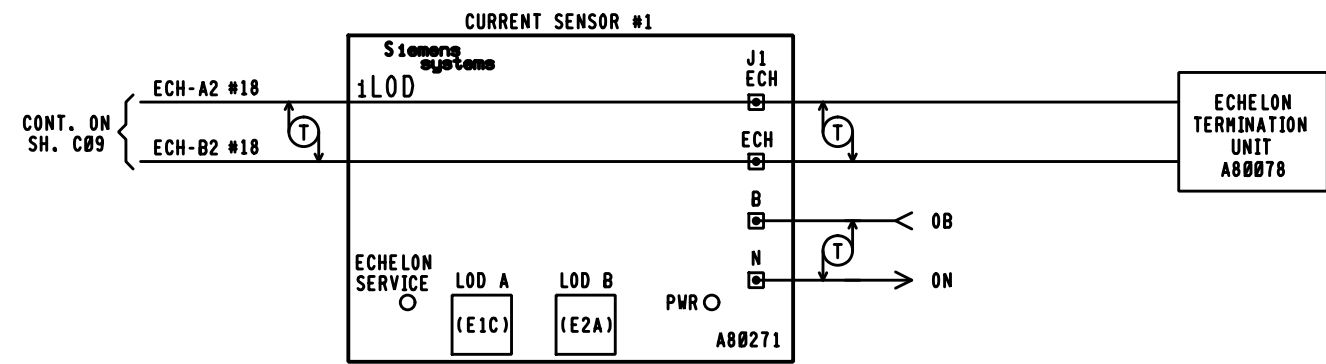
- NOTES:
1. [Symbol] = TERMINAL IN JCT. BOX
 2. WHEN 7 OR MORE LIGHTS ON A SINGLE STRUCTURE REFER TO SS-382 FOR REQUIRED ARRESTER RATING.

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
GALLEY ST. 145457W &
 CUT SECTION
 CROSSING WARNING DEVICE LIGHT CIRCUITRY
 DAWSON, PA M.P. BF-275.80

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27580	SHEET C05		



PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
 NEW WORK CSX#: PA2023021
 PRS/AMJ/SAF

- NOTES:
 1. * = REFER TO SH. C10 FOR PART NUMBER.
 2. () DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS				
GALLEY ST. 145457W & CUT SECTION SEAR II CIRCUITS DAWSON, PA M.P. BF-275.00				
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25	
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----	SHEET C06

	DEFAULTS AND/OR STYLE	FIELD RECORD
SEAR II EXECUTIVE PROGRAM	VERSION: 9V645A01Y	VERSION:
APPLICATION PROGRAM (IF LOADED)	VERSION: _____	VERSION:

FIELD TO PROVIDE SEARII PROGRAM INFORMATION ON AIS

SITE SET UP OPTIONS	
OPTION	SELECTION
DATE	XX-XX-XXXX
TIME	XX:XX:XX
DAYLIGHT SAVINGS TIME	YES <input type="checkbox"/> NO <input type="checkbox"/>
TIME ZONE	<input checked="" type="checkbox"/> EST <input type="checkbox"/> CST
SITE NAME	GALLEY ST.
MILEPOST	BF-275.80
DOT NUMBER	145457W
TESTER TYPE	<input checked="" type="checkbox"/> CROSSING <input type="checkbox"/> WAYSIDE
DATE FORMAT	<input checked="" type="checkbox"/> MM-DD-YYYY <input type="checkbox"/> DD-MM-YYYY
TEMP FORMAT	<input checked="" type="checkbox"/> FAHRENHEIT <input type="checkbox"/> CELSIUS
INDICATE HOLDOFF	0
INDICATE REFRESH	60
SITE TYPE	<input type="checkbox"/> NO COMMUNICATION <input type="checkbox"/> DIAL-UP <input checked="" type="checkbox"/> COLLECTOR <input type="checkbox"/> NODE <input type="checkbox"/> BULLHORN/MODE <input type="checkbox"/> CDS902X
SITE ATCS ADDRESS	7.125.304.018.99.01 (7.RRR.LLL.666.99.01)
OFFICE ADDRESS	2.125.00.0000 (2.RRR.NN.DDDD)
OFFICE SITE ADDRESS	NA
BACK UP SITE ADDRESS 1	NA
BACK UP SITE ADDRESS 2	NA
POLL ID (1-99)	1
GEN/ATCS MODE	<input type="checkbox"/> GENISYS <input checked="" type="checkbox"/> GEN/ATCS
XID DISABLED	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
OFFICE COM. DEVICE	<input type="checkbox"/> DIRECT <input type="checkbox"/> MCM (RS232) <input type="checkbox"/> MCM (ECH) <input checked="" type="checkbox"/> WAG (ECHELON) <input type="checkbox"/> DIAL UP <input type="checkbox"/> S200 RADIO (RS232) <input type="checkbox"/> S200 RADIO (RS422)
RADIO ATCS ADDRESS	7.125.304.018.01.01
OFFICE PHONE NUMBER	1-XXX-XXX-XXXX
INIT. STRING	
FIELD COM	<input type="checkbox"/> VHF (ECH) <input type="checkbox"/> VHF (RS232) <input type="checkbox"/> WAG (ECH) <input type="checkbox"/> SS (RS232) <input checked="" type="checkbox"/> NONE
USER PORT	BAUD RATE (9600)
AUX PORT	BAUD RATE (9600)
COMM PORT	BAUD RATE (9600)

NOTE 5

NOTE 6

NOTE 7

NOTES.

1. LARGE CONFIGURATION ASSIGNS RECORDER INPUTS FOR USE WHEN DIGITAL I/O MODULE REQUIRED.
2. IF WARNING DEVICE = NONE MAIN/STANDBY OPTION NOT SHOWN.
3. IF VHF COMMUNICATIONS = NO THEN DTMF ACTIVATION AND CHANNEL OPTIONS ARE NOT SHOWN.
4. LAST 3 DIGITS OF DOT NO. FOR FIRST ACTIVATION CODE.
5. DEFAULT ADDRESS 7.125.100.100.99.01 USED FOR STAND ALONE LOCATIONS.
6. OPTIONS NOT SHOWN IF SITE TYPE = NO COMMUNICATIONS.
7. FORMAT AS, BAUD, DATA BITS, PARITY STOP BITS, FLOW CONTROL.

FIELD TO PROVIDE BATTERY VOLTAGES AND CURRENT READINGS ON AIS

LIT BULB COUNT ON EACH CIRCUIT	NO.	TYPE OF BULB	CURRENT READING IN AMP. AT APPROX. 10.0 V BULB VOLTAGE
CURRENT SENSOR (1) E1C, LAMP SET UP	4	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (1) E2A, LAMP SET UP	4	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X

MEASURE BATTERY VOLTAGE AT INPUT	
BATTERY VOLTAGE 0B	XXXX VOLTS
BATTERY VOLTAGE X-B	XXXX VOLTS

SITE SET UP OPTIONS CONT.	
OPTION	SELECTION
RAILROAD NUMBER	125
CROSSING CONFIGURATION	STANDARD <input checked="" type="checkbox"/> LARGE <input type="checkbox"/> REMOTE <input type="checkbox"/> SPLIT GATE <input type="checkbox"/> ISL ONLY <input type="checkbox"/> CP COLLECTOR <input type="checkbox"/>
NUMBER OF XR INPUTS	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
NUMBER OF ISL INPUTS	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CONSTANT WARNING DEVICE	GCP <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> NONE <input type="checkbox"/>
TOTAL NUMBER OF GCP NODES	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>
NUMBER OF REDUNDANT GCP	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CROSSING CONTROLLER 1	SSCC IIIA / PLUS <input type="checkbox"/> SSCC IV <input type="checkbox"/> OTHER <input type="checkbox"/> NONE <input checked="" type="checkbox"/>
POK2	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
MAIN / STANDBY	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
AUXILIARY TRACKS	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/>
ENTRANCE GATE	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>
EXIT GATES	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
GATE POSITION FAIL 10-60 SEC	25
NUMBER OF UAX INPUTS	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/>
BATTERY BANKS	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
OB RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/>
X-B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/> NOT PRESENT <input type="checkbox"/>
B-G RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
X-B2 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
B-G2 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
X-B3 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
PREEMPTION	NORMAL <input type="checkbox"/> ADVANCED <input type="checkbox"/> NO <input checked="" type="checkbox"/>
KDR INPUT	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
VHF COMMUNICATOR	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ACTIVATION CODE 1	XXX
ACTIVATION CODE 2	XXX
ACTIVATION CODE 3	XXX
ACTIVATION TIMEOUT (30 TO 600 SECONDS)	60
LOD MODULES	0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
ANY LED BULBS	NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>
AUTO INSPECTIONS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BELL ON	GATES LOWERING <input type="checkbox"/> GATES MOVING <input type="checkbox"/> ALWAYS <input checked="" type="checkbox"/>
GROUND FAULT DETECTORS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BATTERIES ON GFT1	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/>
FULL APPROACH MOVE ALARMS	ACTIVATED <input checked="" type="checkbox"/> DO NOT ACTIVATE <input type="checkbox"/>

NOTE 1

NOTE 2

NOTE 3

NOTE 4

PRELIMINARY

= NOTE

PROGRESS RAIL SERVICES

A Caterpillar Company DATE: 04-23-25
NEW WORK CSX#: PA2023021 PRS/AMJ/SAF

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

GALLEY ST. 145457W &

CUT SECTION

SEAR II CONFIGURATION AND FUNCTIONS
DAWSON, PA H.P. BF-275.80

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
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DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----	FILE BF27580	SHEET C07
-------------------------	---------------	------------------	-------------------	-----------------	--------------

DISCRETE INPUTS	DI 01	DI 02	DI 03	DI 04	DI 05	DI 06
CHANNEL	1	2	3	4	5	6
NAME	XR1	XR2	ISLAND 1 (TRACK)	ISLAND 2 (TRACK)		BELL OUT (BELL PWR)
TAG	XR1 (XR)	XR2 (XR)	ISL1	ISL2	SP	BELL OUT (BELL PWR)
OFF NAME	DOWN (XR)	DOWN (XR)	DOWN (ISL1)	DOWN (ISL1)		OFF (BELL PWR)
ON NAME	UP (XR)	UP (XR)	UP (ISL1)	UP (ISL1)		ON (BELL PWR)
ON DEBOUNCE TIME	100 ms	100 ms	100 ms	100 ms	1000 ms	100 ms
OFF DEBOUNCE TIME	100 ms	100 ms	100 ms	100 ms	1000 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms

TSS INPUTS	DI 07	DI 08	DI 09	DI 10
CHANNEL	7	8	9	10
NAME				
TAG	SP	SP	SP	SP
OFF NAME				
ON NAME				
ON DEBOUNCE TIME	1000 ms	1000 ms	1000 ms	1000 ms
OFF DEBOUNCE TIME	1000 ms	1000 ms	1000 ms	1000 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms

DISCRETE INPUTS	DI 11	DI 12	DI 13
CHANNEL	11	12	13
NAME		DTMF	
TAG	SP	DTMF-REC	SP
OFF NAME		OFF (NO GATE KEYED)	
ON NAME		ON (ACTIVATE)	
ON DEBOUNCE TIME	1000 ms	100 ms	1000 ms
OFF DEBOUNCE TIME	1000 ms	100 ms	1000 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms

GFT INPUTS	DI 14	DI 15
CHANNEL	14	15
NAME	GND FAULT TESTER 1 (GFT1,2)	
TAG	GFT1 (GFT1 DATA)	SP.
BATTERY 1 NAME	OB (GND FAULT)	
BATTERY 1 TAG	OB (GND FAULT)	
BATTERY 2 NAME	X-B (GND FAULT)	
BATTERY 2 TAG	X-B (GND FAULT)	

DISCRETE INPUTS	DI 16	DI 17	DI 18
CHANNEL	16	17	18
NAME		POK1	POK2
TAG	SP	POK1	POK2
OFF NAME		OFF (ALL POWER OFF)	OFF (ALL POWER OFF)
ON NAME		ON (ALL POWER ON)	ON (ALL POWER ON)
ON DEBOUNCE TIME	1000 ms	100 ms	100 ms
OFF DEBOUNCE TIME	1000 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms

BATTERY INPUTS	BI1	BI2	BI3
CHANNEL	1	2	3
NAME	OB (ELECTRONIC BATT)	X-B (BULB BATT)	
TAG	OB	X-B	SP
SAMPLE PERIOD (ms)	500 (ms)	500 (ms)	
RESOLUTION (V)	0.2 (VOLTS)	0.2 (VOLTS)	
AVGERAGING SAMPLES	32 SAMPLES	32 SAMPLES	


RELAYS	RO1	RO2
CHANNEL	1	2
NAME	GFT TEST	AC POWER TEST (ACRLY)
TAG	SELF TEST	AC POWER TEST (ACRLY)
OFF STATE NAME	NOT TESTING	OFF (ACR DN)
ON STATE NAME	TESTING	ON (ACR UP)
UNKNOWN STATE NAME	PULSE	PULSE
ON PULSE TIME (s)	1 (s)	1 (s)
OFF PULSE TIME (s)	1 (s)	1 (s)
TOGGLE PERIOD (s)	1 (s)	1 (s)
DUTY CYCLE	50	50

NOTE: () DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

PRELIMINARY

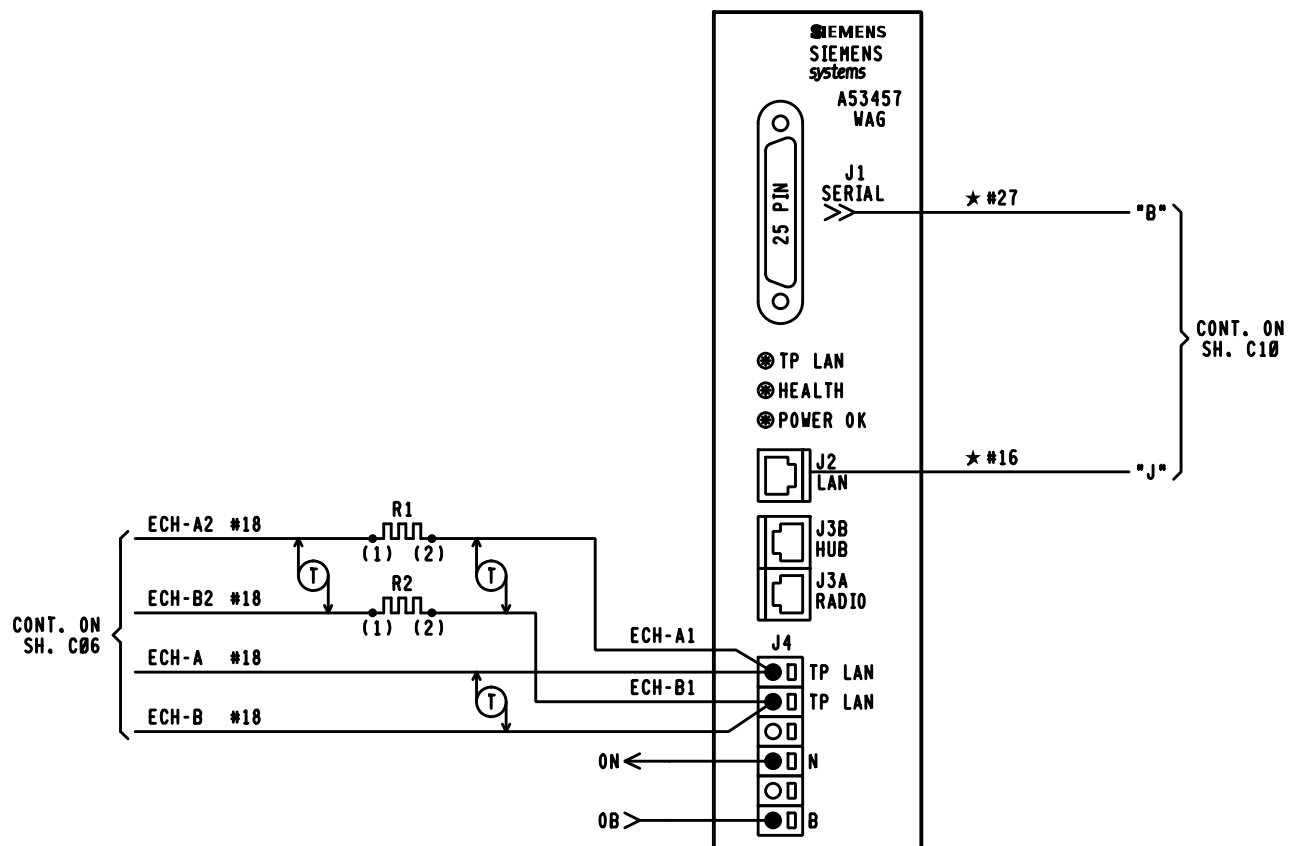
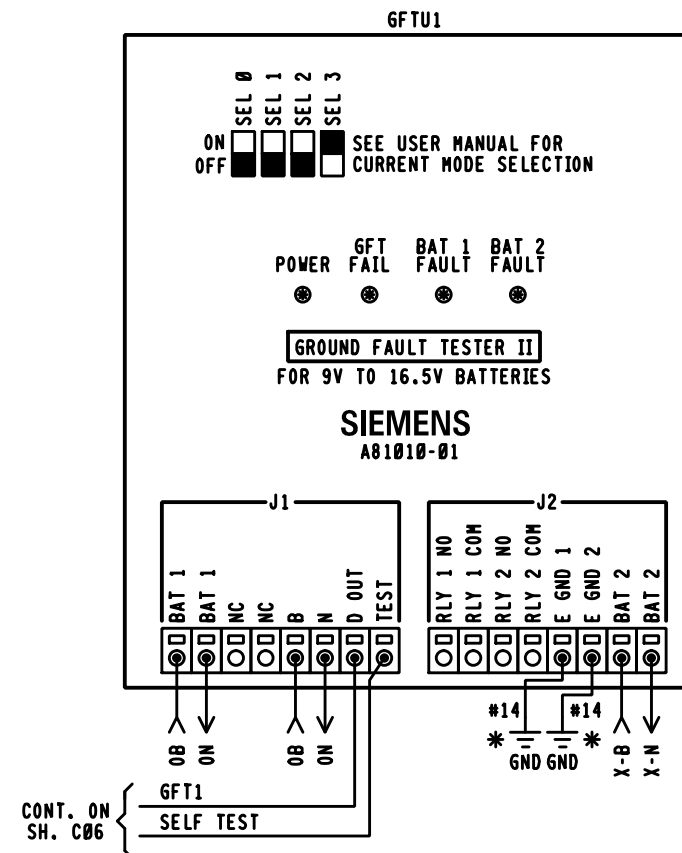
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

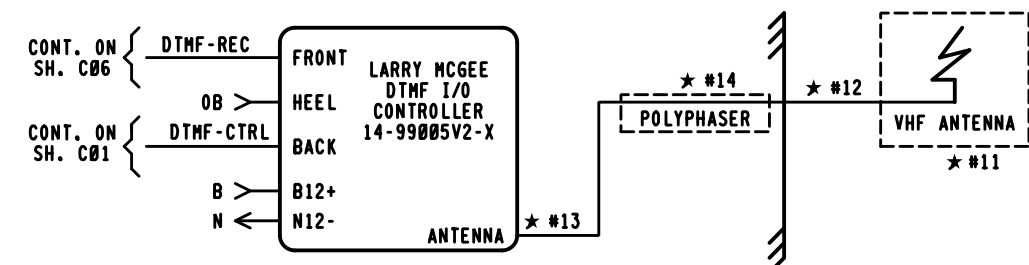
 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
GALLEY ST. 145457W & CUT SECTION SEAR II CHANNELS DAWSON, PA H.P. BF-275.00			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27500	SHEET C08

WAYSIDE ACCESS GATEWAY CONFIGURATION	
SITE ATCS ADDRESS	7.125.304.010.07.01
SERIAL INTERFACE	9600,NONE,8,1/NOFLOW
SERIAL FORMAT	RAW
WAG TEST MODE	DISABLED
ECHELON ADDRESS	01.01
UDP PORTS	5000, 5001, 5002, 5003
ROUTE TABLE EXPIRY	5400 SEC
BROADCAST MEDIUM	IP ETHERNET
TCP PORTS	6001
DHCP SERVER	DISABLED
IP ADDRESS	192.168.13.1
TYPE 7 ROUTE LENGTH	12--7RRRLLG6GSS
IP NETWORK MASK	255.255.255.000

NOTE TO INSPECTOR,
AT INSTALLATION OF CDMA BY COM.
MARK-UP CONFIGURATION TABLE FOR
AS IN SERVICE PLANS



COMM NOTE.
1. WAG J3A PINOUTS.
4 & 5 = +12VDC RADIO OUT
7 & 8 = GND RADIO RETURN



GCP PROGRAMMING FOR VHF RADIO
REMOTE DTMF CROSSING ACTIVATION
(ACTIVATES ENTIRE CROSSING)
TO ACTIVATE PRESS, 457*
TO DE-ACTIVATE PRESS, 457*
(ACTIVATION WILL TIME OUT AFTER 60 SEC.)

- NOTES:
1. * = REFER TO SH. C10 FOR PART NUMBERS.
 2. ALL WIRING #16 UNLESS NOTED OTHERWISE.
 3. * = EARTH GROUND REF. TERMINALS REQUIRED FOR DETECTION. DO NOT JUMPER TERMINALS. MUST BE CONNECTED TO DIFFERENT POINTS OF BUNGALOW.
 4. R1 & R2 = .5 WATT, 20Ω RESISTOR

PRELIMINARY
= NOTE
PROGRESS
RAIL SERVICES
A Caterpillar Company
DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

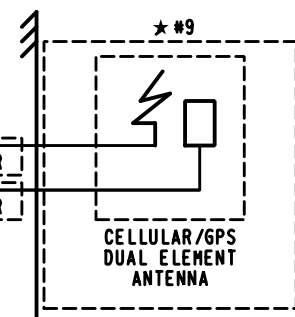
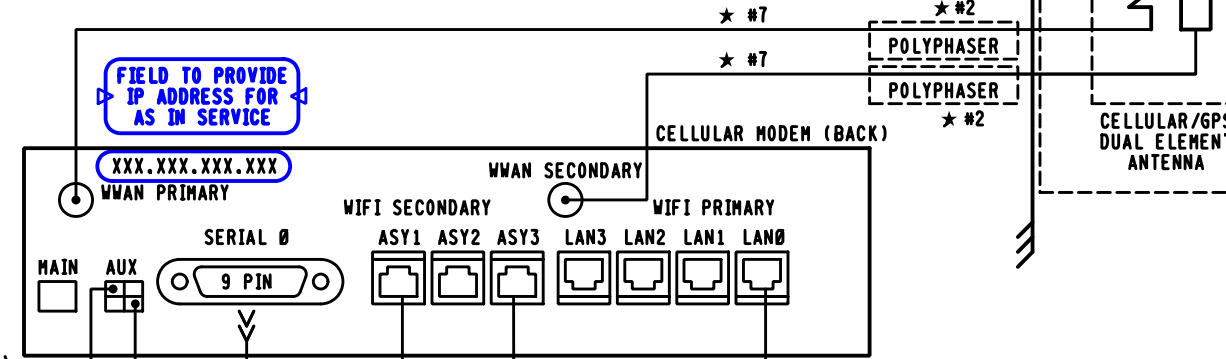
CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS
GALLEY ST. 145457W &
CUT SECTION
WAYSIDE ACCESS GATEWAY
DAWSON, PA M.P. BF-275.80

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27580	SHEET C09

DIGI PORT ASSIGNMENTS
 PORT LAN0-CISCO PORT 1R (CROSSOVER CABLE)
 PORT ASY1-SEAR (ETH TO DB-9)
 PORT ASY3-CISCO CONSOLE
 PORT SERIAL 0-WAG (DB-9M TO DB-25M)

TO FUSE BLOCK { * #28 B12 (RED)
 N12 (BLK)
 CONT. ON SH. C09 { "B" * #27
 CONT. ON SH. C06 { "C" * #20

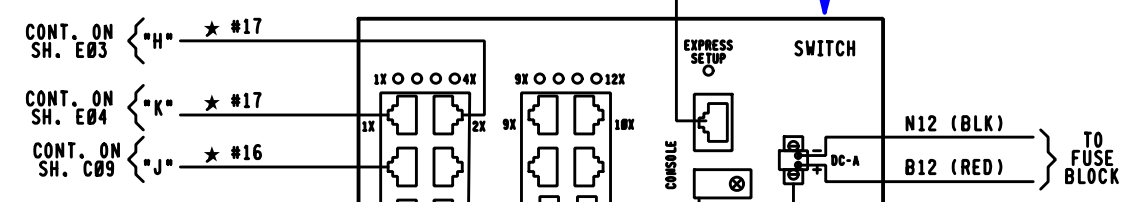
FIELD TO PROVIDE IP ADDRESS FOR AS IN SERVICE
 XXX.XXX.XXX.XXX



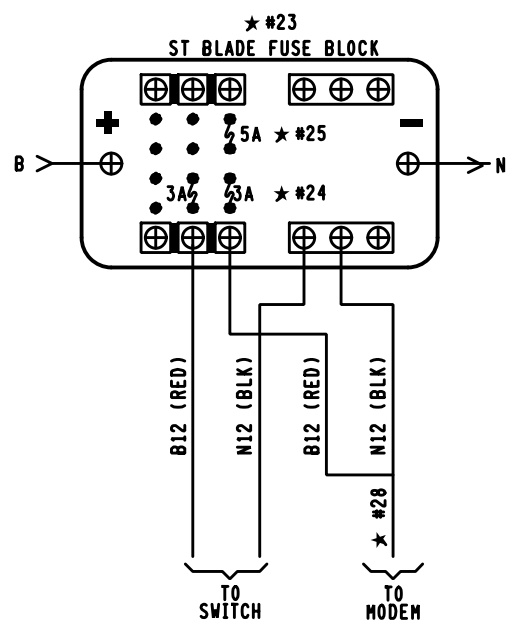
* CSDA-30348-KIT (020.0000493.1)		
REF.	DESCRIPTION	QTY
2	POLYPHASER, TSX-NFF	2 EA.
7	LHR-195, N-MALE TO SMA-MALE, 5 FT	2 EA.
9	MIMO ANTENNA, BLACK, 15FT, AP-HMF-CCG-Q-S222-BL ANTENNA MOUNTING ARM, CSDA-30309-BKTANT1	1 EA.
11	VHF OMNI ANTENNA	1 EA.
12	LHR-200, N-MALE TO N-MALE, 3 FT	1 EA.
13	LHR-240, N-MALE TO BNC-MALE, 10 FT	1 EA.
14	VHF SURGE PROTECTOR N-FEMALE TO FEMALE	1 EA.
16	CAT 6 PATCH CABLE UTP, BOOTED, YELLOW, 20 FT	1 EA.
17	CAT 6 PATCH CABLE UTP, BOOTED, ORANGE, 20 FT	2 EA.
18	CAT 6 PATCH CABLE UTP, BOOTED, RED, X-OVER, 20 FT	1 EA.
20	DIGI-TRANSPORT TO CISCO CABLE, BLUE, 20 FT	3 EA.
21	CAT 6 STP ROLL-OVER PATCH CABLE, BLACK, 20 FT	1 EA.
23	DC PDU WITH 5 FUSED CIRCUITS	1 EA.
24	INDICATOR FUSE, ATO STYLE, 3 AMP	4 EA.
25	INDICATOR FUSE, ATO STYLE, 5 AMP	1 EA.
27	SERIAL CABLE, DB9M TO DB25M, STRAIGHT WIRED, 20 FT	1 EA.
28	DIGI-TRANSPORT POWER CABLE, 4-PIN MOLEX TO OPEN END, 14 FT	1 EA.

ORDER ADDITIONAL CABLE #17

NOTE 2



SWITCH PORT ASSIGNMENTS
 PORT #1-CWU
 PORT #2-CWU
 PORT #3-WAG J2 LAN
 PORT #9-HYRDOGEN FUEL CELLS (0B)
 PORT #10-HYRDOGEN FUEL CELLS (X-B)
 PORT #11-HYRDOGEN FUEL CELLS (B-G)
 PORT #1R-DIGI PORT LAN 0 (CROSSOVER CABLE)
 CONSOLE-DIGI PORT ASY3

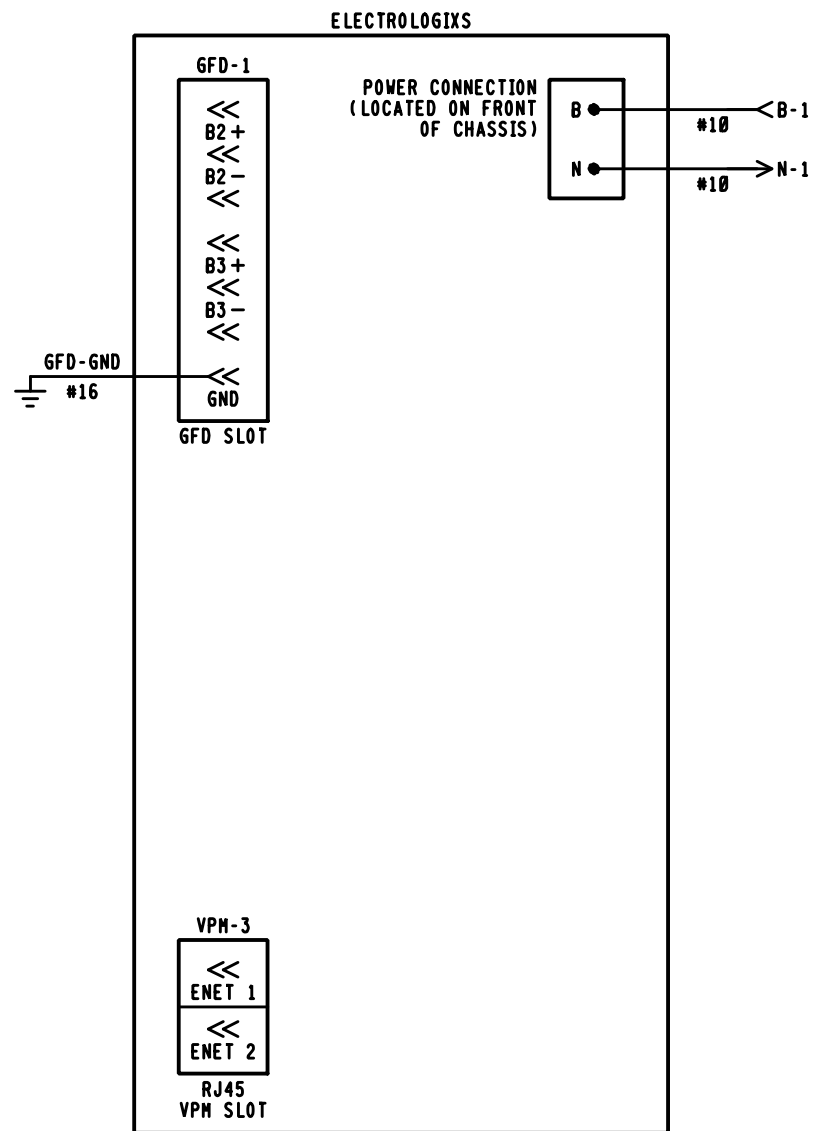


- NOTES:
 1. WIRING TO BE #16 UNLESS NOTED.
 2. CISCO IE2000 SWITCH OR EQUIVALENT.

PRELIMINARY
 = NOTE
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK
 DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
 GALLEY ST. 145457W &
 CUT SECTION
 CROSSING COMMUNICATIONS EQUIPMENT
 DAWSON, PA H.P. BF-275.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27500	SHEET C10



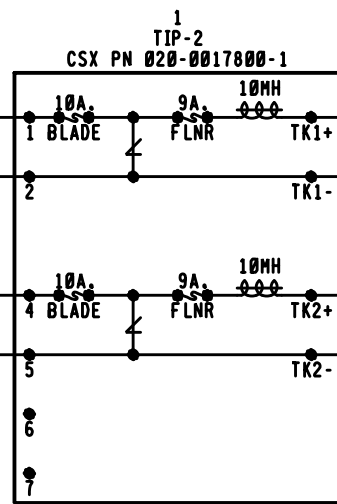
PRELIMINARY



 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
GALLEY ST. 145457M & CUT SECTION ELECTROLOGIXS CIRCUITS DAWSON, PA M.P. BF-275.00			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27500	SHEET C11

ELECTROLOGIXS
VITAL TRACK
INTERFACE CONNECTOR
SLOT 1

VTI-2S
PERSONALITY
MODULE
SLOT 1



1 EA. 8' TIP-2 CABLE
CSX PN 020-0017814-1

THE ROUTING OF TRACK WIRES WITHIN THE BUNGALOW SHOULD BE AS SHORT AND DIRECT AS POSSIBLE, ESPECIALLY FOR THE LONGER TRACK CIRCUITS.

HAR MOD. TF-86 HZ
HAR MOD. TF-151 HZ

HAR MOD. TF-267 HZ

TO 2772-1ZT [W1ZT] TRACK
TO A2772-1ZT [E1ZT] TRACK

TO VITAL TRACK INTERFACE MODULE

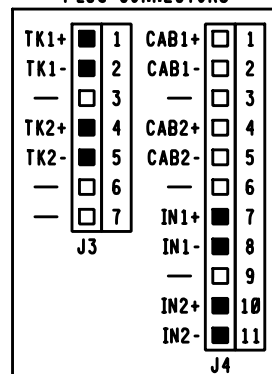
CAB ENABLE #1 CAB1/J4-1 (SPARE)

CAB ENABLE #2 CAB2/J4-4 (SPARE)

POP } CONT. ON SH. E01
INPUT #1 (POPR) IN1+/J4-7
IN1-/J4-8 → N-1

INPUT #2 (1NWPR) IN2+/J4-10 ← B-1
IN2-/J4-11 → N-1

VTI-2S
PERSONALITY MODULE
SLOT 1
PLUG CONNECTORS



■ = WIRE PRESENT

NOTES:

1. ---- = INTERNAL CONNECTION
2. [] = TAGGING PURPOSE ONLY
3. POK INPUT PROGRAM TO ACTIVATE CODE 10 ON BOTH TRACKS

PRELIMINARY

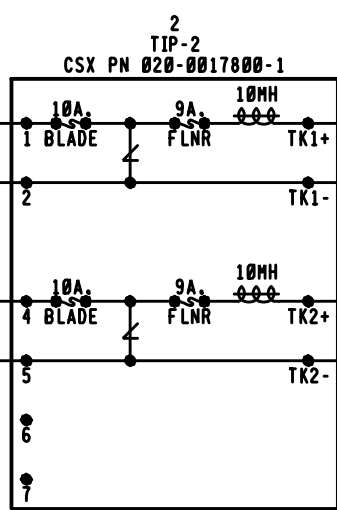


TRACK 1

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
GALLEY ST. 145457M & CUT SECTION ELECTROLOGIXS TRACK CIRCUITS DAWSON, PA H.P. BF-275.00			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27500	SHEET C12

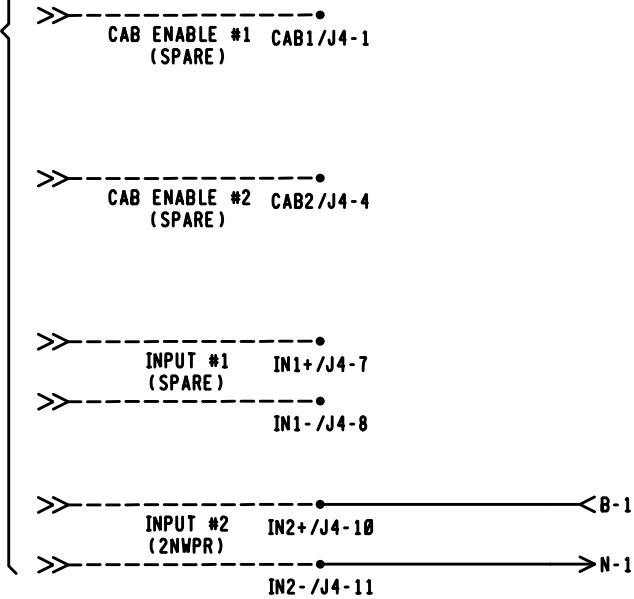
ELECTROLOGIXS
VITAL TRACK
INTERFACE CONNECTOR
SLOT 2

VTI-2S
PERSONALITY
MODULE
SLOT 2

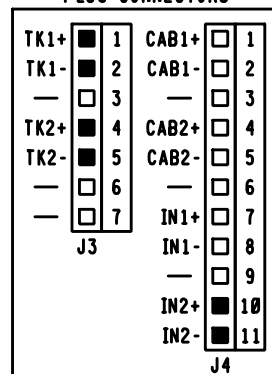


THE ROUTING OF TRACK WIRES WITHIN THE BUNGALOW SHOULD BE AS SHORT AND DIRECT AS POSSIBLE, ESPECIALLY FOR THE LONGER TRACK CIRCUITS.

TO
VITAL TRACK
INTERFACE
MODULE



VTI-2S
PERSONALITY MODULE
SLOT 2
PLUG CONNECTORS



NOTES:

1. ---- = INTERNAL CONNECTION
2. [] = TAGGING PURPOSE ONLY

PRELIMINARY

PROGRESS
RAIL SERVICES
A Caterpillar Company
NEW WORK

DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

TRACK 2

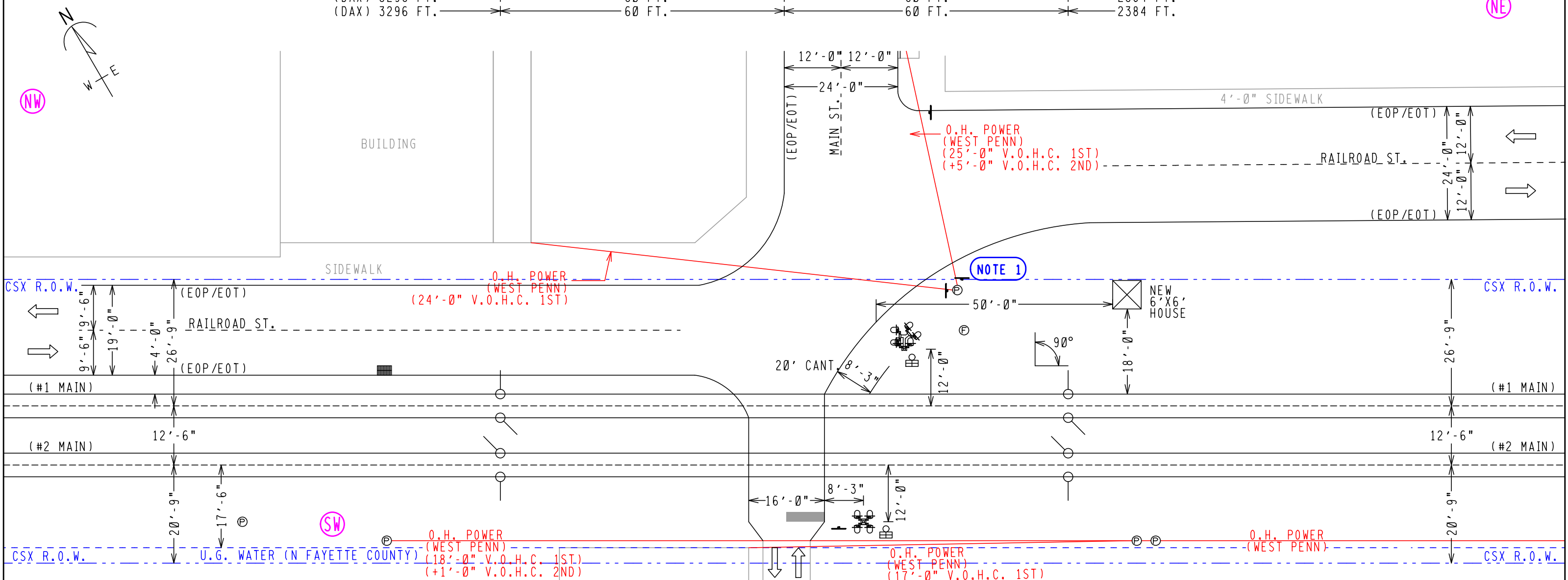
CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS
GALLEY ST. 145457M &
CUT SECTION
ELECTROLOGIXS TRACK CIRCUITS
DAWSON, PA H.P. BF-275.00

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27500	SHEET C13

R.R. WEST TO WEST PITTSBURGH

5126+57

(DAX) 3296 FT. 60 FT. 60 FT. 2384 FT.
 (DAX) 3296 FT. 60 FT. 60 FT. 2384 FT.



*AUTHORIZING AGENCY, NONE
 *DATE OF REQUIREMENT, NONE
 *AMOUNT OF TIME (SEC.), NONE

APPROACH LENGTHS TABLE	EASTBOUND MAIN 1 & 2	WESTBOUND MAIN 1 & 2
DC, AFO, TYPE C, MOTION, CWT, OR OTHER	CWT	CWT
STANDARD MINIMUM WARNING TIME IN SECONDS	25	25
ROADWAY GATE TIME IN SECONDS	0	0
CLEARANCE TIME IN SECONDS	1	1
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS*	0	0
PRESCRIBED WARNING TIME FOR TRAINS AT TIME TABLE SPEED	26 SEC.	26 SEC.
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	0	0
CONTROL EQUIPMENT DECISION TIME IN SECONDS	4	4
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	30 SEC.	30 SEC.
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	50	50
BUFFER SPEED IN MILES PER HOUR	5	5
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	55	55
APPROACH DISTANCE TO ISLAND EDGE IN FEET	2384	2384
HALF WIDTH OF ISLAND IN FEET	60	60
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT	276.13	275.21

NOTES:
 1. RELOCATE UTILITY POLE.

PRELIMINARY

FILE NAME: BF27567.H01	REVISION DATES	PRODUCED FOR:	PRODUCED BY:	LEGEND:	GUARD RAIL	METER SERVICE	GPS COORDINATES	STREET NAME, MAIN ST.
DATE DRAWN: 01-27-25	02-27-25	RAIL TRANSPORT GROUP ENGINEERING AND SIGNALS	PROGRESS RAIL SERVICES	CSX ROW	O.H. POWER	POLE	N40°02'46"	CITY & STATE, DAWSON, (FAYETTE), PA
DRAWN BY: JMD	05-20-25			R/R POLELINE	FENCE	FIRE PLUG	W79°39'20"	DOT, 145454B
CHECKED BY: SAF	-			GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #: PA2023021
PRS #: 34P004256	-			FIBER OPTIC	SEWER	GAS VENT	M.P. BF-275.67	OP #: PA0466

R.R. WEST TO WEST PITTSBURGH

5126+57



NW



NE

BUILDING

BUILDING

12'-0" 12'-0" 24'-0" (EOP/EOT) MAIN ST.

4'-0" SIDEWALK

O.H. POWER (WEST PENN) (25'-0" V.O.H.C. 1ST) (+5'-0" V.O.H.C. 2ND)

RAILROAD ST.

SIDEWALK

O.H. POWER (WEST PENN) (24'-0" V.O.H.C. 1ST)

CSX R.O.W.

CSX R.O.W.

RAILROAD ST.

CROSSBUCK



(#1 MAIN)

(#1 MAIN)

(#2 MAIN)

(#2 MAIN)

12'-6"

12'-6"

CSX R.O.W.

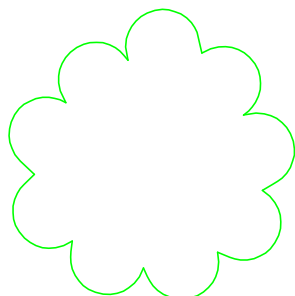
CSX R.O.W.

U.G. WATER (N FAYETTE COUNTY)

O.H. POWER (WEST PENN) (18'-0" V.O.H.C. 1ST) (+1'-0" V.O.H.C. 2ND)

O.H. POWER (WEST PENN) (17'-0" V.O.H.C. 1ST) (+1'-0" V.O.H.C. 2ND) (+4'-0" V.O.H.C. 3RD)

O.H. POWER (WEST PENN)



GRAVEL DRIVEWAY

BUILDING

BUILDING

SW

SE

PRELIMINARY

FILE NAME: BF27567.H02	REVISION DATES
DATE DRAWN: 01-22-25	02-27-25
DRAWN BY: JMD	-
CHECKED BY: SAF	-
PRS #: 34P004256	-

PRODUCED FOR:

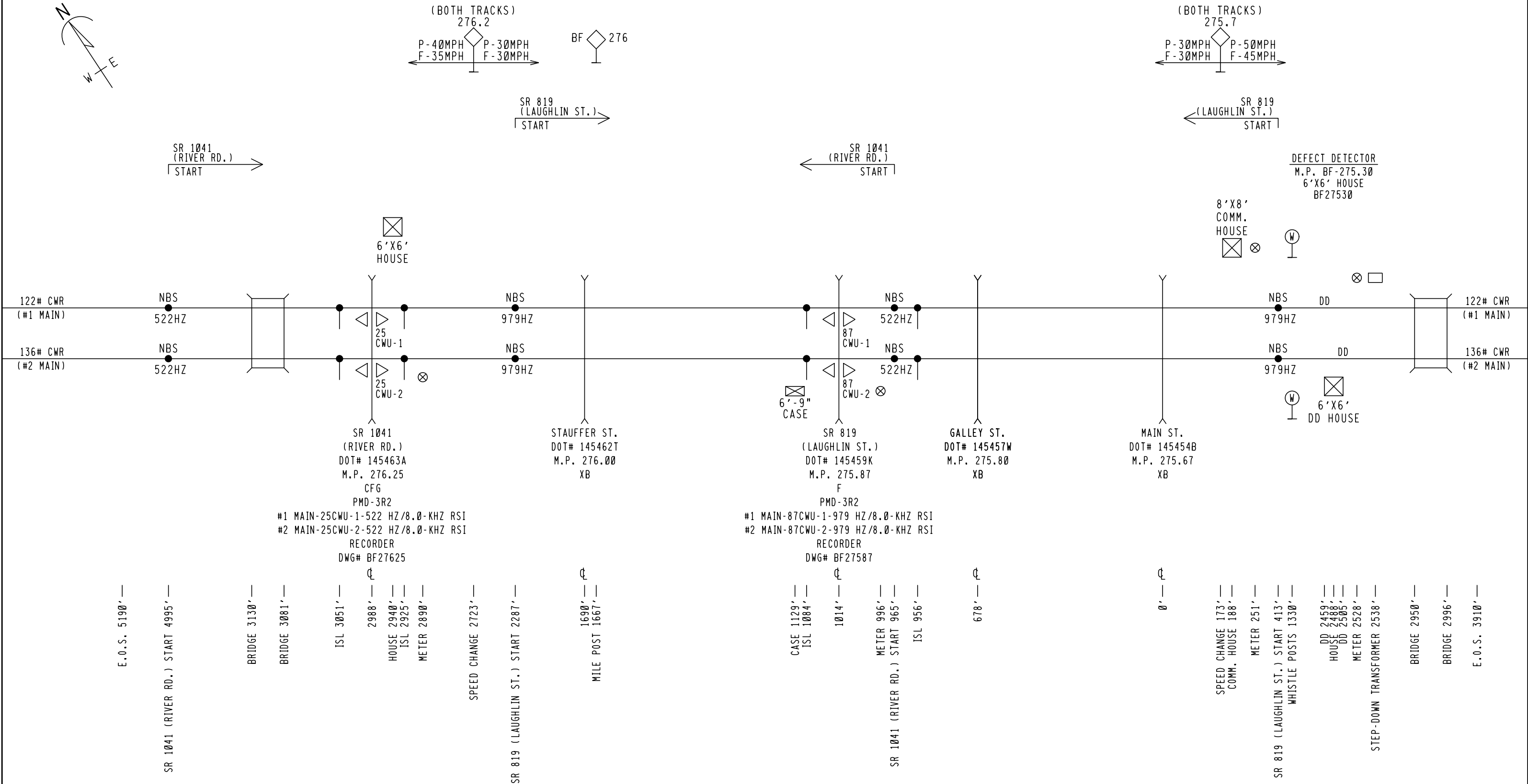
RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS

PRODUCED BY:

A Caterpillar Company

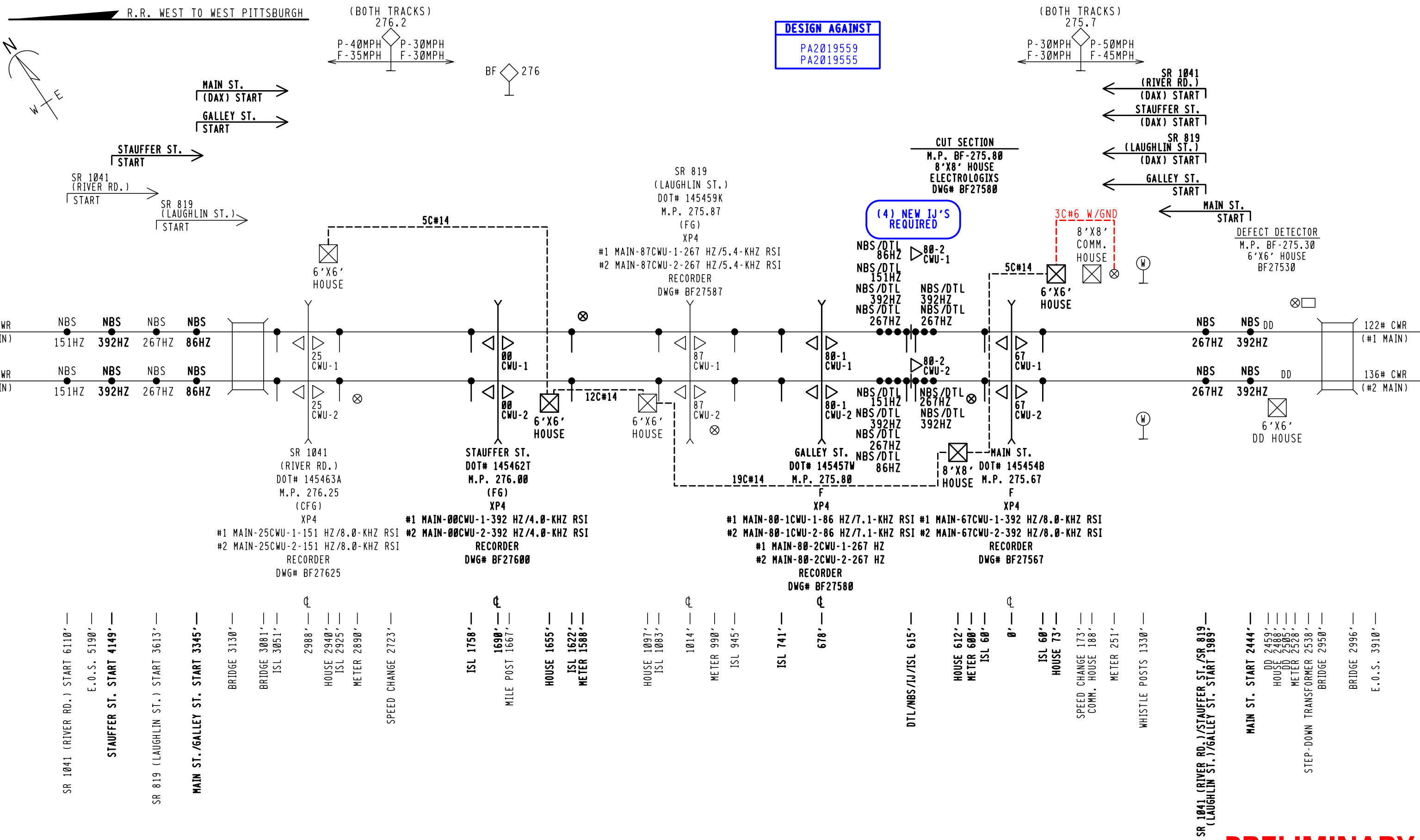
LEGEND	GUARD RAIL	METER SERVICE	GPS COORDINATES
CSX ROW	O.H. POWER	POLE	N40°02'46"
R/R POLELINE	FENCE	FIRE PLUG	W79°39'20"
GAS	WATER	SEWER CAP	ELEV. 851'
FIBER OPTIC	SEWER	GAS VENT	M.P. BF-275.67

STREET NAME, MAIN ST.	CITY & STATE, DAWSON, (FAYETTE), PA
DOT, 145454B	PROJECT #, PA2023021
OP #, PA0466	EXISTING CROSSING LAYOUT
	SCALE = 20:1



PRELIMINARY

FILE NAME: BF27567.H03	REVISION DATES	PRODUCED FOR:	PRODUCED BY:	LEGEND:	GUARD RAIL	METER SERVICE	GPS COORDINATES	STREET NAME, MAIN ST.
DATE DRAWN: 01-22-25	- -	 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	 A Caterpillar Company	CSX ROW	O.H. POWER	POLE	N40°02'46"	CITY & STATE, DAWSON, (FAYETTE), PA
DRAWN BY: JMD	- -			R/R POLELINE	FENCE	FIRE PLUG	W79°39'20"	DOT, 145454B
CHECKED BY: SAF	- -			GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #: PA2023021
PRS #: 34P004256	- -			FIBER OPTIC	SEWER	GAS VENT	M.P. BF-275.67	OP #: PA0466
								EXISTING TRACK LAYOUT



PRELIMINARY

FILE NAME: BF27567.H04	REVISION DATES	PRODUCED FOR:	PRODUCED BY:	LEGEND:	GUARD RAIL	METER SERVICE	GPS COORDINATES	STREET NAME, MAIN ST.	
DATE DRAWN: 01-22-25	02-27-25	 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	 A Caterpillar Company	CSX ROW	O.H. POWER	POLE	N40°02'46"	CITY & STATE, DAWSON, (FAYETTE), PA	
DRAWN BY: JMD	04-23-25			R/R POLELINE	FENCE	FIRE PLUG	W79°39'20"	DOT, 145454B	
CHECKED BY: SAF	-			GAS	WATER	SEWER CAP	ELEV. 851'	PROJECT #: PA2023021	
PRS #: 34P004256	-			FIBER OPTIC	SEWER	GAS VENT	M.P. BF-275.67	OP #: PA0466	
								PROPOSED TRACK LAYOUT	

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E01	POWER DISTRIBUTION	/								
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E03	ELECTROLOGIXS XP4 MODULE LAYOUT	/								
C01	XP4 CROSSING DETECTION AND I/O CIRCUITS	/								
C02	XP4 SETUP INFORMATION	/								
C03	CROSSING WARNING DEVICE LIGHT CIRCUITRY	/								
C04	SEAR II CIRCUITS	/								
C05	SEAR II CONFIGURATION AND FUNCTIONS	/								
C06	SEAR II CHANNELS	/								
C07	WAYSIDE ACCESS GATEWAY	/								
C08	CROSSING COMMUNICATIONS EQUIPMENT	/								

 = DESIGN COMPLETED
 = REVISION COMPLETED

PRELIMINARY

 = NOTE
 **PROGRESS**
 RAIL SERVICES
A Caterpillar Company

NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2023021	04-23-25		

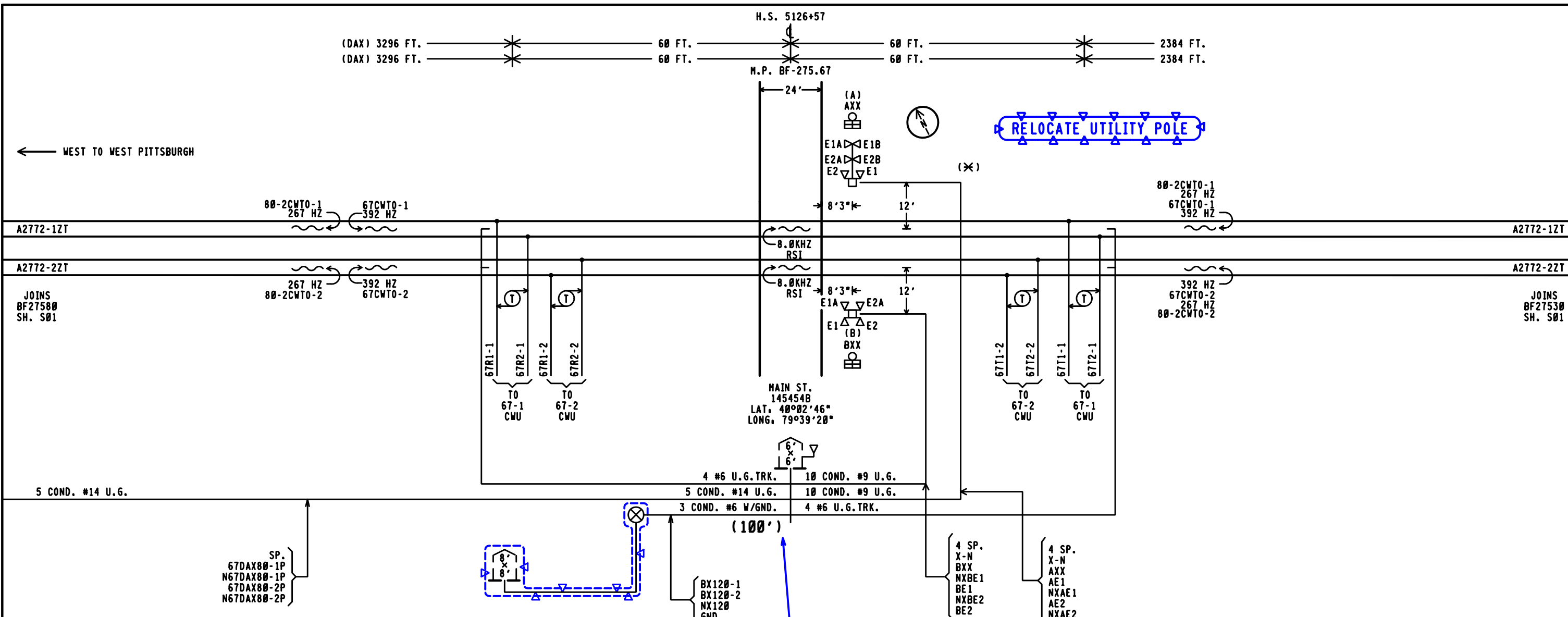
TO BE COMPLETED
 ON A.I.S.


 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

MAIN ST. 145454B

INDEX AND REVISIONS
 DAWSON, PA M.P. BF-275.67

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27567	SHEET I01



RELOCATE UTILITY POLE

PRELIMINARY
 = EXISTING
 = NOTE
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

- NOTES:**
- 12" LED MAXIMUM CURRENT 1.0A AT 10 VOLTS LED GATE ARM LIGHTS .3A MAXIMUM
 - (*) = LOCATION OF HOUSE
 - (N) = APPROXIMATE COMPASS NORTH.
 - TRANSMITTER LEADS FOR MOTION OR PREDICTOR EQUIPMENT SHOULD BE CONNECTED ON THE BUNGALOW OR SHORT LEAD SIDE OF THE CROSSING.
 - ISLAND TRACK LEADS SHOULD BE CONNECTED 50 FEET FROM ROAD EDGE BUT ON NARROW ROADS (20' OR LESS) ISLAND LENGTH SHALL BE 120 FEET.
 - WARNING SYSTEM APPROACH CIRCUIT DISTANCES ARE TO BE MEASURED FROM THE ISLAND TRACK CONNECTIONS.

FIELD NOTE: FIELD TO SHOW ACTUAL DISTANCE BETWEEN METER POLE & BUNGALOW AND INDICATE ON A.I.S.

FOR AMPERAGES OF 15 AMPS OR LESS PER LEG USE THE FOLLOWING POWER CABLE DESIGN GUIDELINES

3 COND. #6 W/GND. (5% VD) $X \leq 402'$
 3 COND. #4 W/GND. (5% VD) $403' < X \leq 618'$
 * 3 COND. #2 W/GND. (10% VD) $619' < X \leq 1,856'$

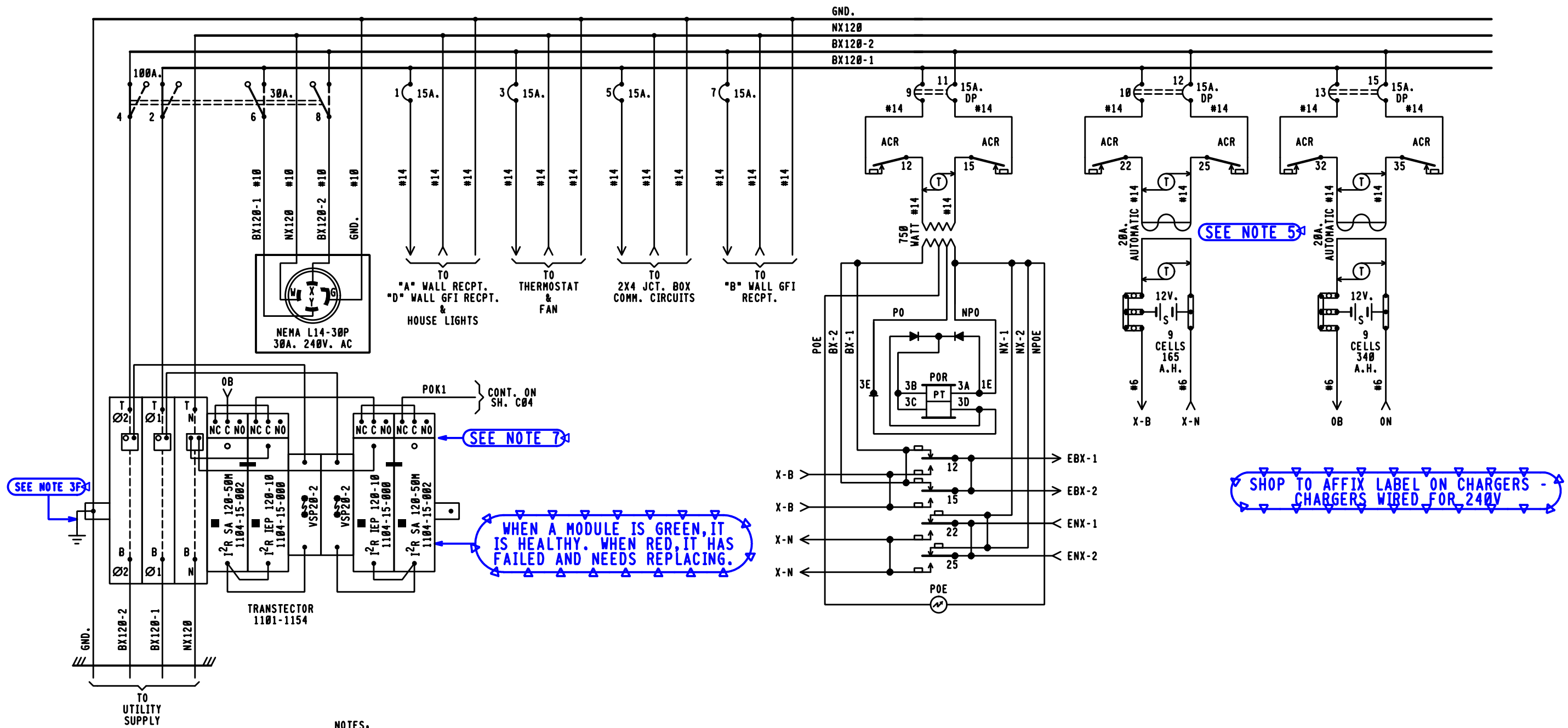
* GREATER THAN 1,856' CABLE RUN CALCULATE ACTUAL CABLE SIZE REQUIREMENTS PER SS360.

APPROACH LENGTHS TABLE	EASTBOUND TRACK 1 CWT	WESTBOUND TRACK 1 CWT	EASTBOUND TRACK 2 CWT	WESTBOUND TRACK 2 CWT
DC, AFO, TYPE C, MOTION, CWT, OR OTHER	25	25	25	25
STANDARD MINIMUM WARNING TIME IN SECONDS	0	0	0	0
ROADWAY GATE TIME IN SECONDS	1	1	1	1
CLEARANCE TIME IN SECONDS	0	0	0	0
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS *	26 SEC.	26 SEC.	26 SEC.	26 SEC.
PREScribed WARNING TIME FOR TRAINS AT TIME TABLE SPEED	0	0	0	0
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	4	4	4	4
CONTROL EQUIPMENT DECISION TIME IN SECONDS	30 SEC.	30 SEC.	30 SEC.	30 SEC.
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	50	50	50	50
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	5	5	5	5
BUFFER SPEED IN MILES PER HOUR	55	55	55	55
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	2384	2384	2384	2384
APPROACH DISTANCE TO ISLAND EDGE IN FEET	60	60	60	60
HALF WIDTH OF ISLAND IN FEET	276.13	275.21	276.13	275.21
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT				

* AUTHORIZING AGENCY, NONE
 * DATE OF REQUIREMENT, NONE
 * AMOUNT OF TIME (SEC.), NONE

DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----	FILE BF27567	SHEET S01
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CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS
MAIN ST. 145454B
 TRACK AND SIGNAL PLAN
 DAWSON, PA H.P. BF-275.67



SEE NOTE 3F

SEE NOTE 7A

WHEN A MODULE IS GREEN, IT IS HEALTHY. WHEN RED, IT HAS FAILED AND NEEDS REPLACING.

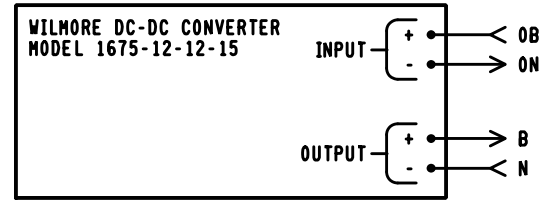
SEE NOTE 5

SHOP TO AFFIX LABEL ON CHARGERS - CHARGERS WIRED FOR 240V

BX120-1 | BX120-2
 11.1 AMPS | 11.1 AMPS
 MAXIMUM LOAD
 CALCULATED PER SS360

NOTES:

- ARRESTERS ARE PER SS382.
- BATTERY A.H. CAPACITY SHOWN IS THE MINIMUM REQUIREMENT.
- WIRING
 - A - FEED TO ALL BUSSES, LIGHT CIRCUITS, MOTOR CIRCUITS TO BE #10 FLEX.
 - B - 120-VOLT FEED FROM ENTRANCE TO POWER BUSS TO BE #10 FLEX.
 - C - ALL TRACK WIRES TO BE #10 FLEX.
 - D - ALL OTHERS TO BE #16 FLEX UNLESS NOTED.
 - E - ALL BATTERY OUTPUTS TO BE #6 PER SS360.
 - F - GROUND WIRE NOT NECESSARY WHEN SURGE SUPPRESSOR IS MOUNTED ON GROUND PLANE OR METAL ENCLOSURE AFFIXED DIRECTLY TO BUNGALOW METALLIC STRUCTURAL MEMBER.
- CIRCUIT INTERRUPTERS 2 & 4 ARE MECHANICALLY INTERLOCKED WITH CIRCUIT INTERRUPTERS 6 & 8.
- CHARGERS WIRED FOR 240VAC
- CIRCUIT BREAKERS PANEL- Q0124L1256 (24 SPACES)
- FORM C DRY CONTACTS MOUNTED ON TOP OF TRANSECTOR WIRED TO ALERT A POK INDICATION WHEN A MODULE IS NOT HEALTHY.



PRELIMINARY

= NOTE

PROGRESS
 RAIL SERVICES
 A Caterpillar Company

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

NEW WORK

6' X 6' PTC RELAY HOUSE

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

MAIN ST. 145454B

POWER DISTRIBUTION
 DAWSON, PA M.P. BF-275.67

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27567	SHEET E01		

XR			TOP ROW													
			EOR			67DAX80-1PR		67DAX80-2PR		POR			ACR			
12	B	B02	12	FB	B01	12	B8	12	B8	12	FB	B62	12	B	B77	
15	B	C30	15	FB	C30	15	C30	15	C30	15	FB	C30	15	B	C30	
22	B		32	FB		22		22		22	FB		22	B		
23			35	FB		23	F	23	F	25	FB		25	B		
25	B					25	F	25	F	32	F		32	B		
32	F					32		32		35			35	B		
35	B					35	F	35	F							

NOTES:

- 1 - REFERENCES ARE PER SS713.
- 2 - RELAY PLACEMENT ON CONSIST CHART HAS NO SIGNIFICANCE.
- 3 - PLUG-IN RELAYS ARE VIEWED FROM THE FRONT OF RACK.

PRELIMINARY

PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

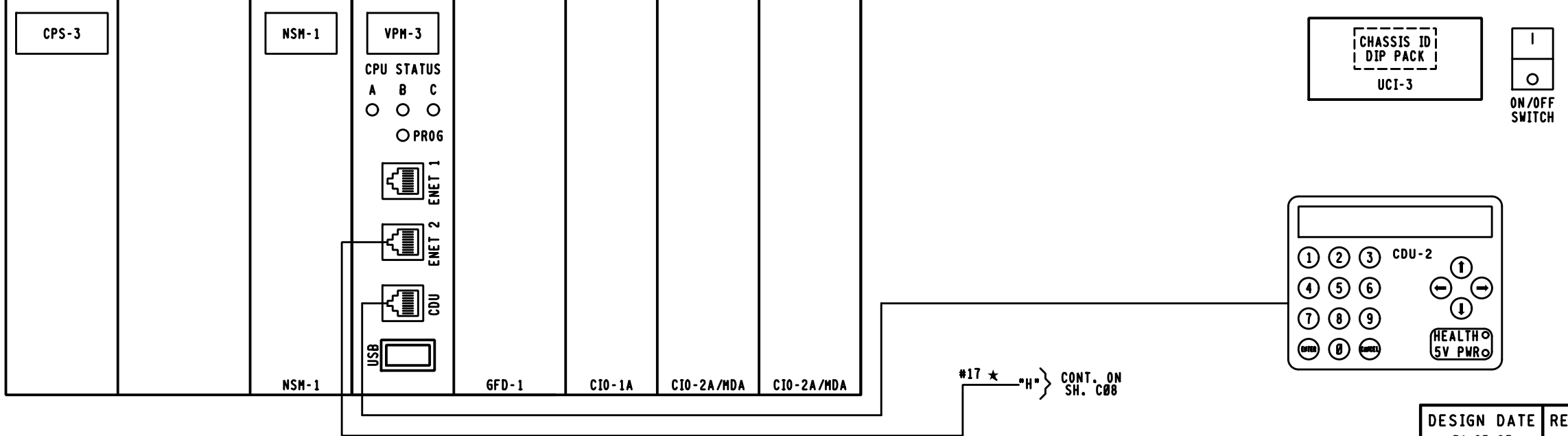
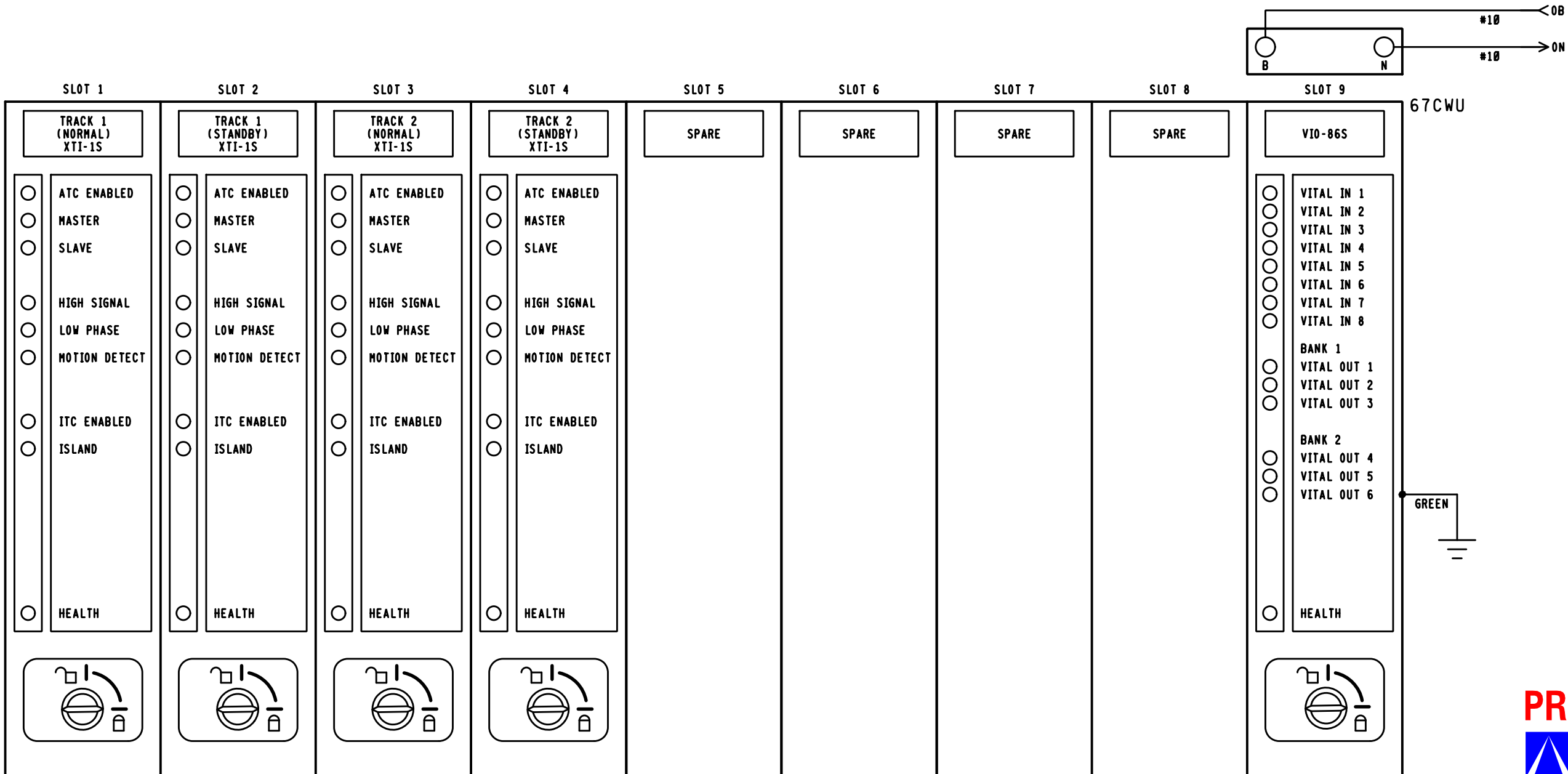
6' X 6' PTC RELAY HOUSE


 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

MAIN ST. 145454B

RELAY CONSIST
 DAWSON, PA M.P. BF-275.67

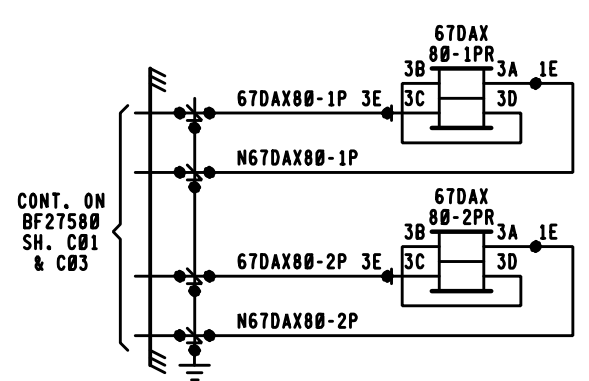
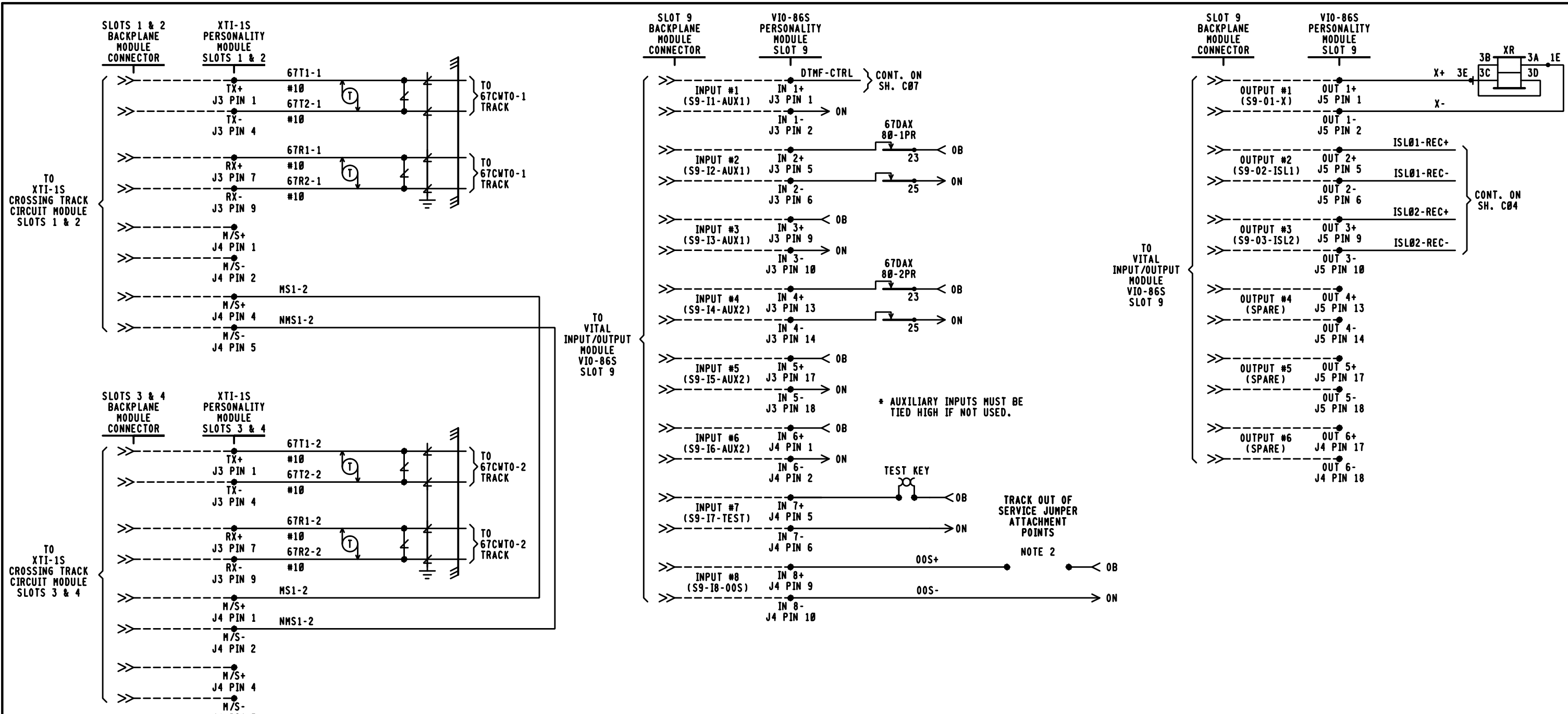
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27567	SHEET E02



PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
NEW WORK CSX#: PA2023021
 PRS/AMJ/SAF

NOTE:
 * = REFER TO SH. C08 FOR PART NUMBER.

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
MAIN ST. 145454B			
ELECTROLOGIXS XP4 MODULE LAYOUT DAWSON, PA M.P. BF-275.67			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27567	SHEET E03		



SLOT 9 I/O	
INPUT 1	POSITIVE CONTROL AUXILIARY INPUT 1 (AUX1)
INPUT 2	POSITIVE CONTROL AUXILIARY INPUT 2 (AUX1)
INPUT 3	POSITIVE CONTROL AUXILIARY INPUT 3 (AUX1)
INPUT 4	POSITIVE CONTROL AUXILIARY INPUT 4 (AUX2)
INPUT 5	POSITIVE CONTROL AUXILIARY INPUT 5 (AUX2)
INPUT 6	POSITIVE CONTROL AUXILIARY INPUT 6 (AUX2)
INPUT 7	CROSSING ACTIVATION TEST
INPUT 8	OUT OF SERVICE JUMPER INPUT (OOS)
OUTPUT 1	X OUTPUT
OUTPUT 2	ISL01 OUTPUT
OUTPUT 3	ISL02 OUTPUT
OUTPUT 4	(NOT USED)
OUTPUT 5	(NOT USED)
OUTPUT 6	(NOT USED)

- NOTES
1. ALL WIRE THIS SHEET #16 AWG UNLESS NOTED.
 2. APPROACH DISABLE JUMPER INPUT. THIS INPUT IS USED IN COMBINATION WITH THE SOFT APPROACH DISABLE ACCESSED THROUGH THE CDU-2 KEYPAD. BOTH BITS MUST BE HIGH TO DISABLE AN APPROACH. THE OPERATOR IS SOLELY RESPONSIBLE FOR CROSSING PROTECTION WHEN THE APPROACH DISABLE FUNCTION IS ACTIVATED.
 3. = HLVA2-1675-01 HYBRID LOW VOLTAGE ARRESTER, UNLESS NOTED.

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
 NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

MAIN ST. 145454B

XP4 CROSSING DETECTION AND I/O CIRCUITS
 DAWSON, PA M.P. BF-275.67

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DRAWING -----	SHEET NO -----	FILE BF27567	SHEET C01

DESIGN DATE 04-23-25
 REV. NO. 1

SITE SPECIFIC MDR DESCRIPTIONS AND SETTINGS			
NAME	MDR1	MDR2	
FUNCTION	XR	XR	
WARNING TIME	26	26	
CW/MD	CW	CW	
AP TIME(PREEMPT)	NA	NA	
CWE-WT	80	80	
AUX RECOVERY DELAY	5	5	
TRACK	TK 1	TK 2	
TRACK ASSIGNED	ASSIGNED	ASSIGNED	
OFFSET DISTANCE	0'	0'	
MD RESTART	0*	0*	
SUDDEN SHUNT ZONE	0*	0*	
POSITIVE START	PSEN	DISABLE	DISABLE
	PSRX	NA	NA
	PST	NA	NA
POST JOINT DETECT	PJEN	ENABLE	ENABLE
	PJRX	15	15
	PJDT	15	15
CLEAR JOINT LOS	CJ-LOS MODE	STANDARD	STANDARD
	CJ-LOS RX	15	15
	CJ-LOS TIME	99	99

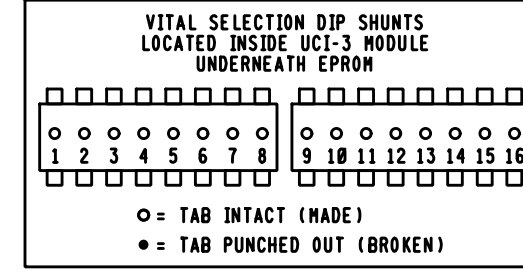
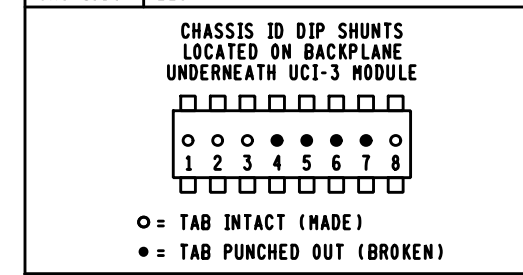
BASIC TRACK SETUP		
	TRACK 1	TRACK 2
FREQUENCY	392 HZ	392 HZ
MASTER/SLAVE	MASTER	SLAVE
RX ADJUST	100 *	100 *
TCA	*	*
DIRECTION MODE	BI	BI
LIA	*	*
ADVANCED APPROACH	*	*
NBS COMP RX	*	*
TRK ISLAND ASSIGN	ISL1	ISL2
APPROACH LENGTH	2384'	2384'
AUTO RX	ENABLE	ENABLE

ADVANCED TRACK SETUP			
	TRACK 1	TRACK 2	
MOTION DET TIMER	MDEN	ENABLE	ENABLE
	MDTT	10 MIN	10 MIN
FALSE SHUNT	FSEN	DISABLE	DISABLE
	FSRX	NA	NA
	FST	NA	NA
APPROACH RELEASE	AREN	DISABLE	DISABLE
	ARRX	NA	NA
	ART	NA	NA
LOS TIME	16 SEC	16 SEC	
IJ-LOS TIME	5 SEC	5 SEC	
NRML*SHRT*VRYSHRT	*	*	

ISLAND SETUP		
	TRACK 1	TRACK 2
ENABLE /DISABLE	ENABLE	ENABLE
FREQUENCY	8.0 KHZ	8.0 KHZ
LOSS OF SHUNT	2 SEC.	2 SEC.
FAULT DELAY	2	2

VPM3 ETHERNET SETUP	
	IP ADDRESS
ETHERNET PORT 1 (TOP)	192.168.0.11
ETHERNET PORT 2 (BOTTOM)	192.168.1.12

APPLICATION SOFTWARE INFORMATION	
NAME	9XXS-2.01V
REV.	1.0
CHECKSUM	E49B
CRC	FF9E
CH. I.D.	225



VITAL SELECTION DIP SHUNTS		
#	NAME	STATE
1	NA	INTACT (NOT USED)
2	NA	INTACT (NOT USED)
3	NA	INTACT (NOT USED)
4	NA	INTACT (NOT USED)
5	NA	INTACT (NOT USED)
6	NA	INTACT (NOT USED)
7	NA	INTACT (NOT USED)
8	NA	INTACT (NOT USED)
9	NA	INTACT (NOT USED)
10	NA	INTACT (NOT USED)
11	NA	INTACT (NOT USED)
12	NA	INTACT (NOT USED)
13	NA	INTACT (NOT USED)
14	NA	INTACT (NOT USED)
15	NA	INTACT (NOT USED)
16	NA	INTACT (NOT USED)

NOTES:
● = FIELD ADJUSTMENT
NA = NOT APPLICABLE

PRELIMINARY

PROGRESS
RAIL SERVICES
A Caterpillar Company

DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

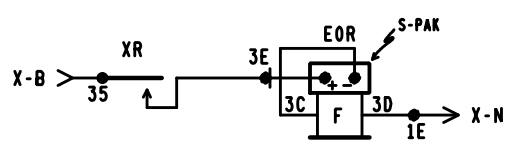
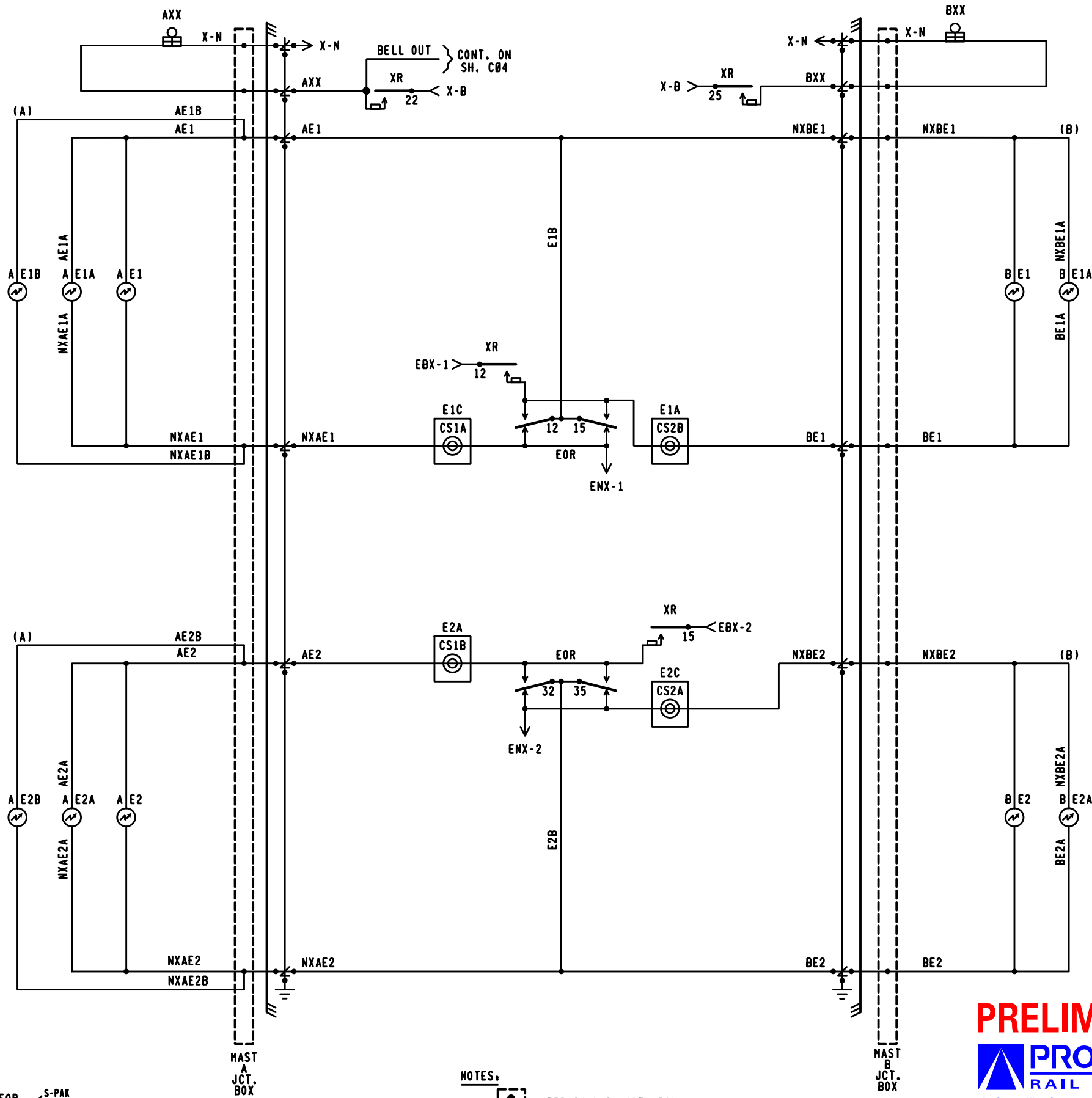
NEW WORK

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

MAIN ST. 145454B

XP4 SETUP INFORMATION
DAWSON, PA M.P. BF-275.67

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27567	SHEET C02		

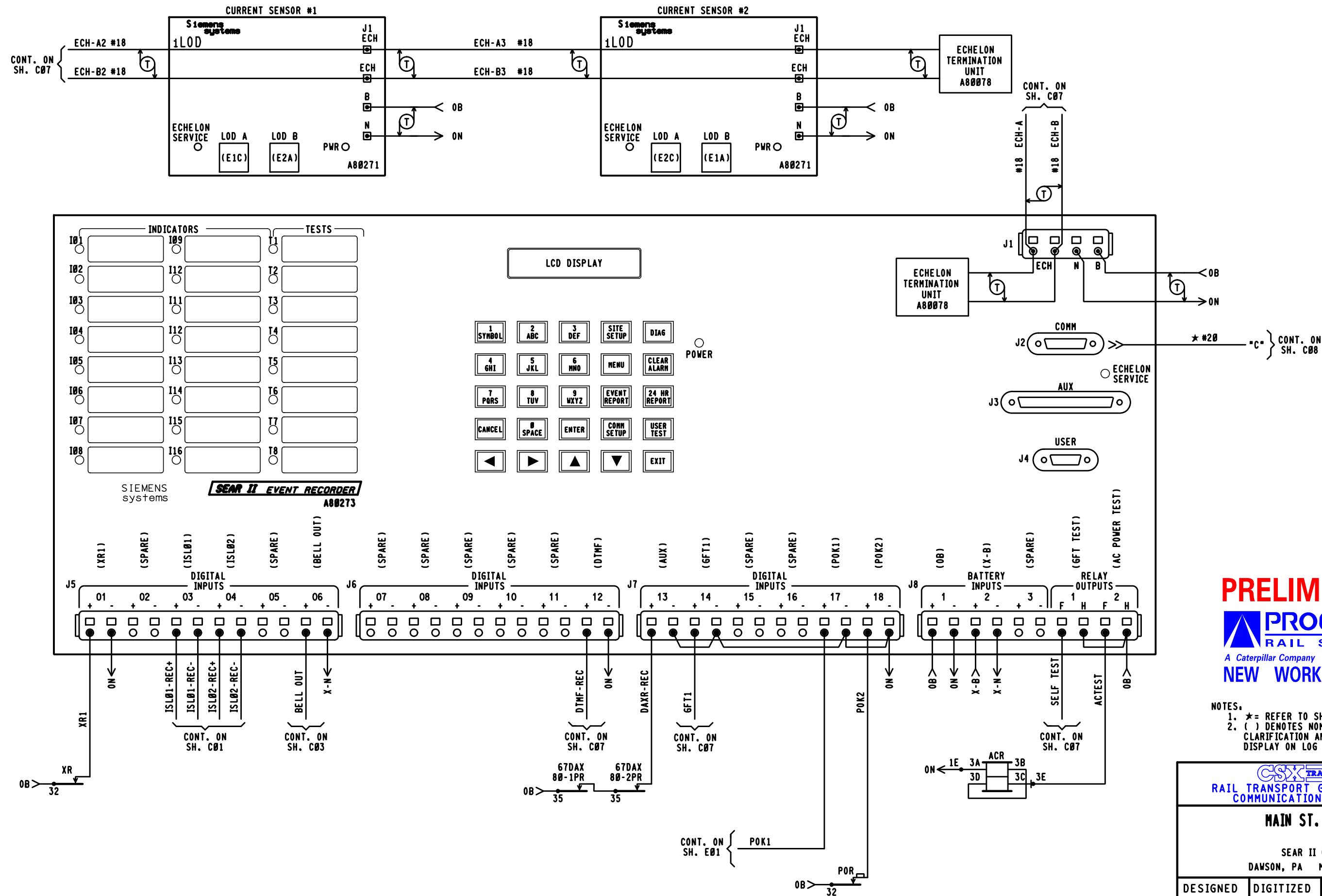


- NOTES.**
1. [Symbol] = TERMINAL IN JCT. BOX
 2. WHEN 7 OR MORE LIGHTS ON A SINGLE STRUCTURE REFER TO SS-382 FOR REQUIRED ARRESTER RATING.

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
MAIN ST. 145454B			
CROSSING WARNING DEVICE LIGHT CIRCUITRY DAWSON, PA M.P. BF-275.67			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27567	SHEET C03



PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company DATE: 04-23-25
 NEW WORK CSX#: PA2023021
 PRS/AMJ/SAF

- NOTES:
 1. * = REFER TO SH. C08 FOR PART NUMBER.
 2. () DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS				
MAIN ST. 145454B SEAR II CIRCUITS DAWSON, PA M.P. BF-275.67				
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25	
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----	SHEET C04

	DEFAULTS AND/OR STYLE	FIELD RECORD
SEAR II EXECUTIVE PROGRAM	VERSION: 9V645A01Y	VERSION:
APPLICATION PROGRAM (IF LOADED)	VERSION: _____	VERSION:

FIELD TO PROVIDE SEARII PROGRAM INFORMATION ON AIS

SITE SET UP OPTIONS	
OPTION	SELECTION
DATE	XX-XX-XXXX
TIME	XX:XX:XX
DAYLIGHT SAVINGS TIME	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
TIME ZONE	<input checked="" type="checkbox"/> EST <input type="checkbox"/> CST
SITE NAME	MAIN ST.
MILEPOST	BF-275.67
DOT NUMBER	145454B
TESTER TYPE	<input checked="" type="checkbox"/> CROSSING <input type="checkbox"/> WAYSIDE
DATE FORMAT	<input checked="" type="checkbox"/> MM-DD-YYYY <input type="checkbox"/> DD-MM-YYYY
TEMP FORMAT	<input checked="" type="checkbox"/> FAHRENHEIT <input type="checkbox"/> CELSIUS
INDICATE HOLDOFF	0
INDICATE REFRESH	60
SITE TYPE	<input type="checkbox"/> NO COMMUNICATION <input type="checkbox"/> DIAL-UP <input checked="" type="checkbox"/> COLLECTOR <input type="checkbox"/> NODE <input type="checkbox"/> BULLHORN/MODE <input type="checkbox"/> CDS902X
SITE ATCS ADDRESS	7.125.304.017.99.01 (7.RRR.LLL.666.99.01)
OFFICE ADDRESS	2.125.00.0000 (2.RRR.NN.DDDD)
OFFICE SITE ADDRESS	NA
BACK UP SITE ADDRESS 1	NA
BACK UP SITE ADDRESS 2	NA
POLL ID (1-99)	1
GEN/ATCS MODE	<input type="checkbox"/> GENISYS <input checked="" type="checkbox"/> GEN/ATCS
XID DISABLED	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
OFFICE COM. DEVICE	<input type="checkbox"/> DIRECT <input type="checkbox"/> MCM (RS232) <input type="checkbox"/> MCM (ECH) <input checked="" type="checkbox"/> WAG (ECHELON) <input type="checkbox"/> DIAL UP <input type="checkbox"/> S200 RADIO (RS232) <input type="checkbox"/> S200 RADIO (RS422)
RADIO ATCS ADDRESS	7.125.304.017.01.01
OFFICE PHONE NUMBER	1-XXX-XXX-XXXX
INIT. STRING	
FIELD COMM	<input type="checkbox"/> VHF (ECH) <input type="checkbox"/> VHF (RS232) <input type="checkbox"/> WAG (ECH) <input type="checkbox"/> SS (RS232) <input checked="" type="checkbox"/> NONE
USER PORT	BAUD RATE (9600)
AUX PORT	BAUD RATE (9600)
COMM PORT	BAUD RATE (9600)

NOTE 5

NOTE 6

NOTE 7

NOTES.

1. LARGE CONFIGURATION ASSIGNS RECORDER INPUTS FOR USE WHEN DIGITAL I/O MODULE REQUIRED.
2. IF WARNING DEVICE = NONE MAIN/STANDBY OPTION NOT SHOWN.
3. IF VHF COMMUNICATIONS = NO THEN DTMF ACTIVATION AND CHANNEL OPTIONS ARE NOT SHOWN.
4. LAST 3 DIGITS OF DOT NO. FOR FIRST ACTIVATION CODE.
5. DEFAULT ADDRESS 7.125.100.100.99.01 USED FOR STAND ALONE LOCATIONS.
6. OPTIONS NOT SHOWN IF SITE TYPE = NO COMMUNICATIONS.
7. FORMAT AS, BAUD, DATA BITS, PARITY STOP BITS, FLOW CONTROL.

FIELD TO PROVIDE BATTERY VOLTAGES AND CURRENT READINGS ON AIS

LIT BULB COUNT ON EACH CIRCUIT	NO.	TYPE OF BULB	CURRENT READING IN AMP. AT APPROX. 10.0 V BULB VOLTAGE
CURRENT SENSOR (1) E1C, LAMP SET UP	3	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (1) E2A, LAMP SET UP	3	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (2) E2C, LAMP SET UP	2	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X
CURRENT SENSOR (2) E1A, LAMP SET UP	2	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	X.X

MEASURE BATTERY VOLTAGE AT INPUT	
BATTERY VOLTAGE 0B	XXXX VOLTS
BATTERY VOLTAGE X-B	XXXX VOLTS

SITE SET UP OPTIONS CONT.	
OPTION	SELECTION
RAILROAD NUMBER	125
CROSSING CONFIGURATION	STANDARD <input checked="" type="checkbox"/> LARGE <input type="checkbox"/> REMOTE <input type="checkbox"/> SPLIT GATE <input type="checkbox"/> ISL ONLY <input type="checkbox"/> CP COLLECTOR <input type="checkbox"/>
NUMBER OF XR INPUTS	0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
NUMBER OF ISL INPUTS	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CONSTANT WARNING DEVICE	GCP <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> NONE <input type="checkbox"/>
TOTAL NUMBER OF GCP NODES	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>
NUMBER OF REDUNDANT GCP	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
CROSSING CONTROLLER 1	SSCC IIIA / PLUS <input type="checkbox"/> SSCC IV <input type="checkbox"/> OTHER <input type="checkbox"/> NONE <input checked="" type="checkbox"/>
POK2	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
MAIN / STANDBY	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
AUXILIARY TRACKS	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/>
ENTRANCE GATE	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>
EXIT GATES	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>
GATE POSITION FAIL 10-60 SEC	25
NUMBER OF UAX INPUTS	0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/>
BATTERY BANKS	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
0B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/>
X-B RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/> NOT PRESENT <input type="checkbox"/>
B-6 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
X-B2 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
B-62 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
X-B3 RESOLUTION	.2 <input type="checkbox"/> .5 <input type="checkbox"/> 1.0 <input type="checkbox"/> NOT PRESENT <input checked="" type="checkbox"/>
PREEMPTION	NORMAL <input type="checkbox"/> ADVANCED <input type="checkbox"/> NO <input checked="" type="checkbox"/>
KDR INPUT	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
VHF COMMUNICATOR	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ACTIVATION CODE 1	XXX
ACTIVATION CODE 2	XXX
ACTIVATION CODE 3	XXX
ACTIVATION TIMEOUT (30 TO 600 SECONDS)	60
LOD MODULES	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
ANY LED BULBS	NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>
AUTO INSPECTIONS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BELL ON	GATES LOWERING <input type="checkbox"/> GATES MOVING <input type="checkbox"/> ALWAYS <input checked="" type="checkbox"/>
GROUND FAULT DETECTORS	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
BATTERIES ON GFT1	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/>
FULL APPROACH MOVE ALARMS	ACTIVATED <input checked="" type="checkbox"/> DO NOT ACTIVATE <input type="checkbox"/>

NOTE 1

NOTE 2

NOTE 3

NOTE 4

PRELIMINARY

= NOTE

PROGRESS RAIL SERVICES

A Caterpillar Company DATE: 04-23-25
NEW WORK CSX#: PA2023021 PRS/AMJ/SAF

CSX TRANSPORTATION
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

MAIN ST. 145454B

SEAR II CONFIGURATION AND FUNCTIONS
DAWSON, PA M.P. BF-275.67

DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27567	SHEET C05

DISCRETE INPUTS	DI 01	DI 02	DI 03	DI 04	DI 05	DI 06
CHANNEL	1	2	3	4	5	6
NAME	XR1		ISLAND 1 (TRACK)	ISLAND 2 (TRACK)		BELL OUT (BELL PWR)
TAG	XR1 (XR)	SP	ISL1	ISL2	SP	BELL OUT (BELL PWR)
OFF NAME	DOWN (XR)		DOWN (ISL1)	DOWN (ISL2)		OFF (BELL PWR)
ON NAME	UP (XR)		UP (ISL1)	UP (ISL2)		ON (BELL PWR)
ON DEBOUNCE TIME	100 ms	1000 ms	100 ms	100 ms	1000 ms	100 ms
OFF DEBOUNCE TIME	100 ms	1000 ms	100 ms	100 ms	1000 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms	1000 ms

TSS INPUTS	DI 07	DI 08	DI 09	DI 10
CHANNEL	7	8	9	10
NAME				
TAG	SP	SP	SP	SP
OFF NAME				
ON NAME				
ON DEBOUNCE TIME	1000 ms	1000 ms	1000 ms	1000 ms
OFF DEBOUNCE TIME	1000 ms	1000 ms	1000 ms	1000 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms	1000 ms

DISCRETE INPUTS	DI 11	DI 12	DI 13
CHANNEL	11	12	13
NAME		DTMF	AUX
TAG	SP	DTMF-REC	AUX (DAXPR)
OFF NAME		OFF (NO GATE KEYED)	DOWN (DAXPR)
ON NAME		ON (ACTIVATE)	UP (DAXPR)
ON DEBOUNCE TIME	1000 ms	100 ms	100 ms
OFF DEBOUNCE TIME	1000 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms

GFT INPUTS	DI 14	DI 15
CHANNEL	14	15
NAME	GND FAULT TESTER 1 (GFT1,2)	
TAG	GFT1 (GFT1 DATA)	SP.
BATTERY 1 NAME	OB (GND FAULT)	
BATTERY 1 TAG	OB (GND FAULT)	
BATTERY 2 NAME	X-B (GND FAULT)	
BATTERY 2 TAG	X-B (GND FAULT)	

DISCRETE INPUTS	DI 16	DI 17	DI 18
CHANNEL	16	17	18
NAME		POK1	POK2
TAG	SP	POK1	POK2
OFF NAME		OFF (ALL POWER OFF)	OFF (ALL POWER OFF)
ON NAME		ON (ALL POWER ON)	ON (ALL POWER ON)
ON DEBOUNCE TIME	1000 ms	100 ms	100 ms
OFF DEBOUNCE TIME	1000 ms	100 ms	100 ms
TOGGLE PERIOD	1000 ms	1000 ms	1000 ms

BATTERY INPUTS	BI1	BI2	BI3
CHANNEL	1	2	3
NAME	OB (ELECTRONIC BATT)	X-B (BULB BATT)	
TAG	OB	X-B	SP
SAMPLE PERIOD (ms)	500 (ms)	500 (ms)	
RESOLUTION (V)	0.2 (VOLTS)	0.2 (VOLTS)	
AVGERAGING SAMPLES	32 SAMPLES	32 SAMPLES	


RELAYS	RO1	RO2
CHANNEL	1	2
NAME	GFT TEST	AC POWER TEST (ACRLY)
TAG	SELF TEST	AC POWER TEST (ACRLY)
OFF STATE NAME	NOT TESTING	OFF (ACR DN)
ON STATE NAME	TESTING	ON (ACR UP)
UNKNOWN STATE NAME	PULSE	PULSE
ON PULSE TIME (s)	1 (s)	1 (s)
OFF PULSE TIME (s)	1 (s)	1 (s)
TOGGLE PERIOD (s)	1 (s)	1 (s)
DUTY CYCLE	50	50

NOTE: () DENOTES NOMENCLATURE FOR CLARIFICATION AND WILL NOT DISPLAY ON LOG REPORTS.

PRELIMINARY

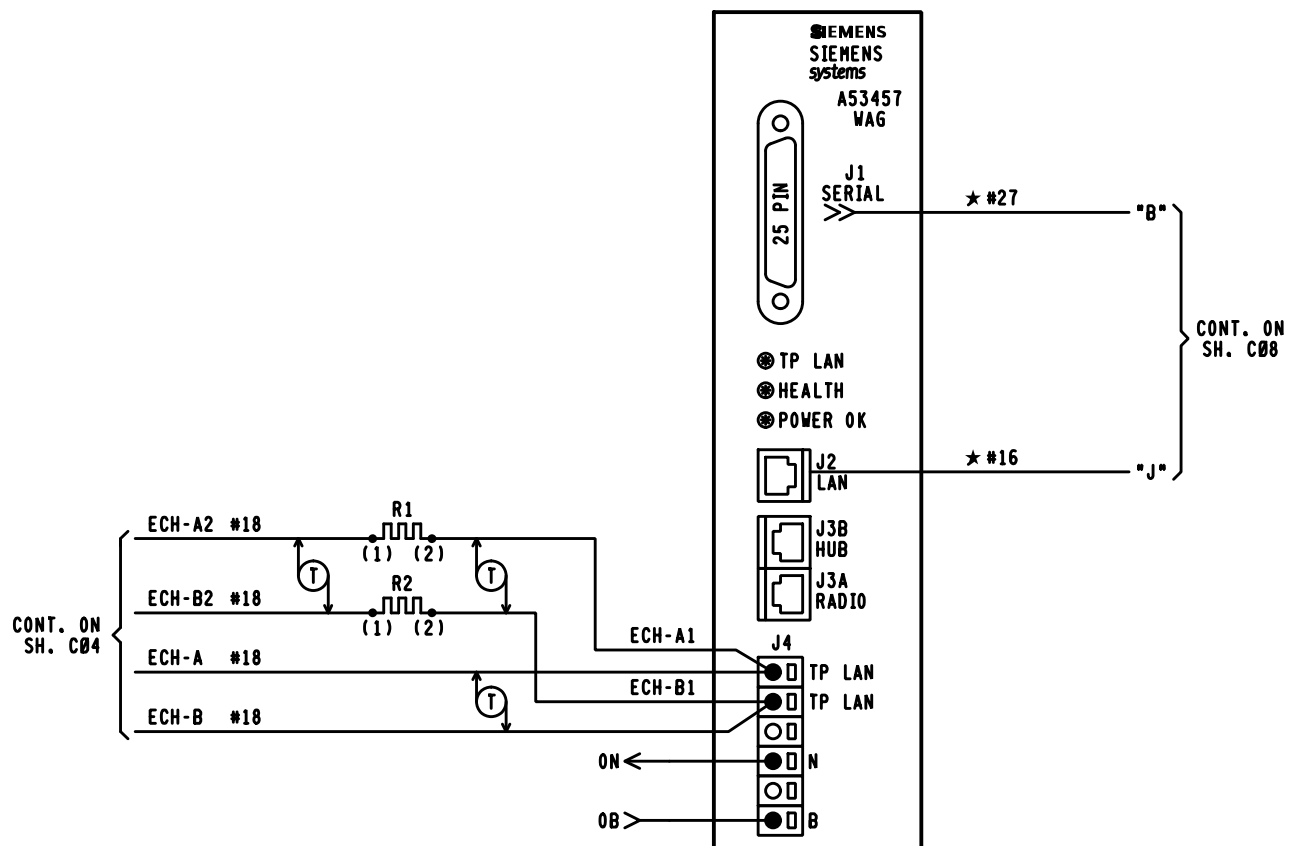
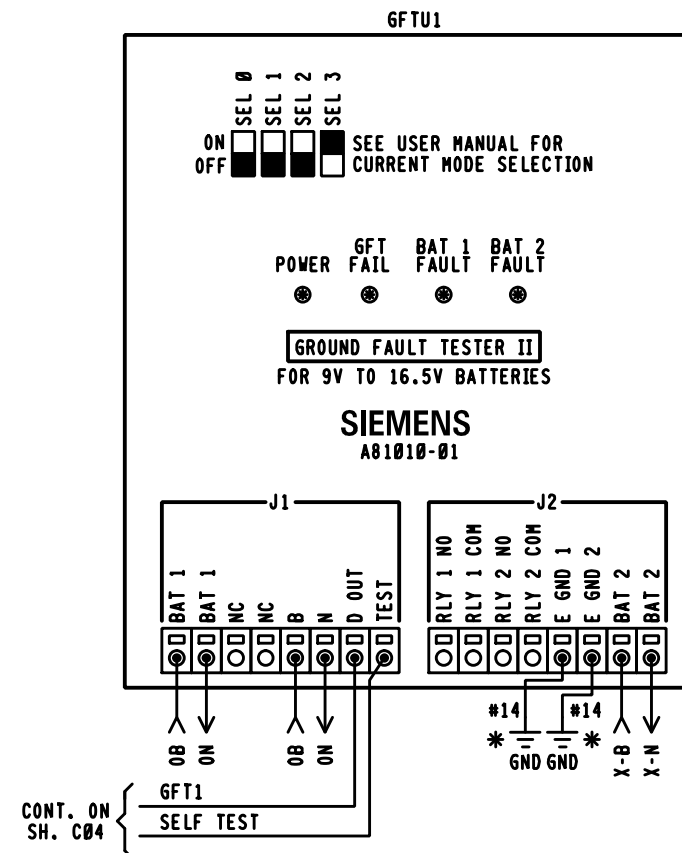
PROGRESS
 RAIL SERVICES
 A Caterpillar Company
NEW WORK

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

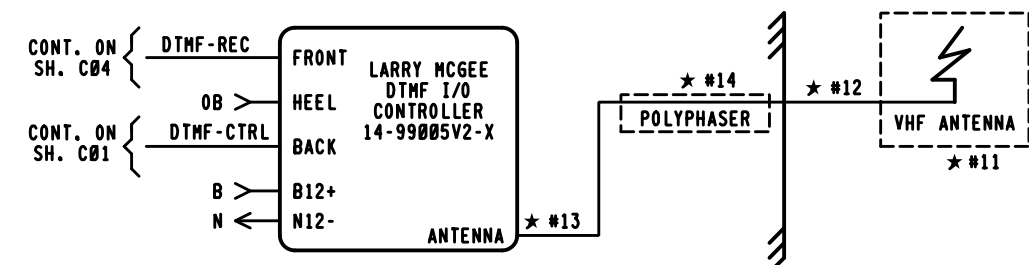
 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
MAIN ST. 145454B			
SEAR II CHANNELS DAWSON, PA M.P. BF-275.67			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27567	SHEET C06

WAYSIDE ACCESS GATEWAY CONFIGURATION	
SITE ATCS ADDRESS	7.125.304.017.07.01
SERIAL INTERFACE	9600,NONE,8,1/NOFLOW
SERIAL FORMAT	RAW
WAG TEST MODE	DISABLED
ECHELON ADDRESS	01.01
UDP PORTS	5000, 5001, 5002, 5003
ROUTE TABLE EXPIRY	5400 SEC
BROADCAST MEDIUM	IP ETHERNET
TCP PORTS	6001
DHCP SERVER	DISABLED
IP ADDRESS	192.168.13.1
TYPE 7 ROUTE LENGTH	12--7RRRLLG6GSS
IP NETWORK MASK	255.255.255.000

NOTE TO INSPECTOR,
AT INSTALLATION OF CDMA BY COM.
MARK-UP CONFIGURATION TABLE FOR
AS IN SERVICE PLANS



COMM NOTE.
1. WAG J3A PINOUTS.
4 & 5 = +12VDC RADIO OUT
7 & 8 = GND RADIO RETURN



GCP PROGRAMMING FOR VHF RADIO
REMOTE DTMF CROSSING ACTIVATION
(ACTIVATES ENTIRE CROSSING)
TO ACTIVATE PRESS, 454#
TO DE-ACTIVATE PRESS, 454*
(ACTIVATION WILL TIME OUT AFTER 60 SEC.)

- NOTES:
- ★ = REFER TO SH. C08 FOR PART NUMBERS.
 - ALL WIRING #16 UNLESS NOTED OTHERWISE.
 - * = EARTH GROUND REF. TERMINALS REQUIRED FOR DETECTION. DO NOT JUMPER TERMINALS. MUST BE CONNECTED TO DIFFERENT POINTS OF BUNGALOW.
 - R1 & R2 = .5 WATT, 20Ω RESISTOR

PRELIMINARY

= NOTE

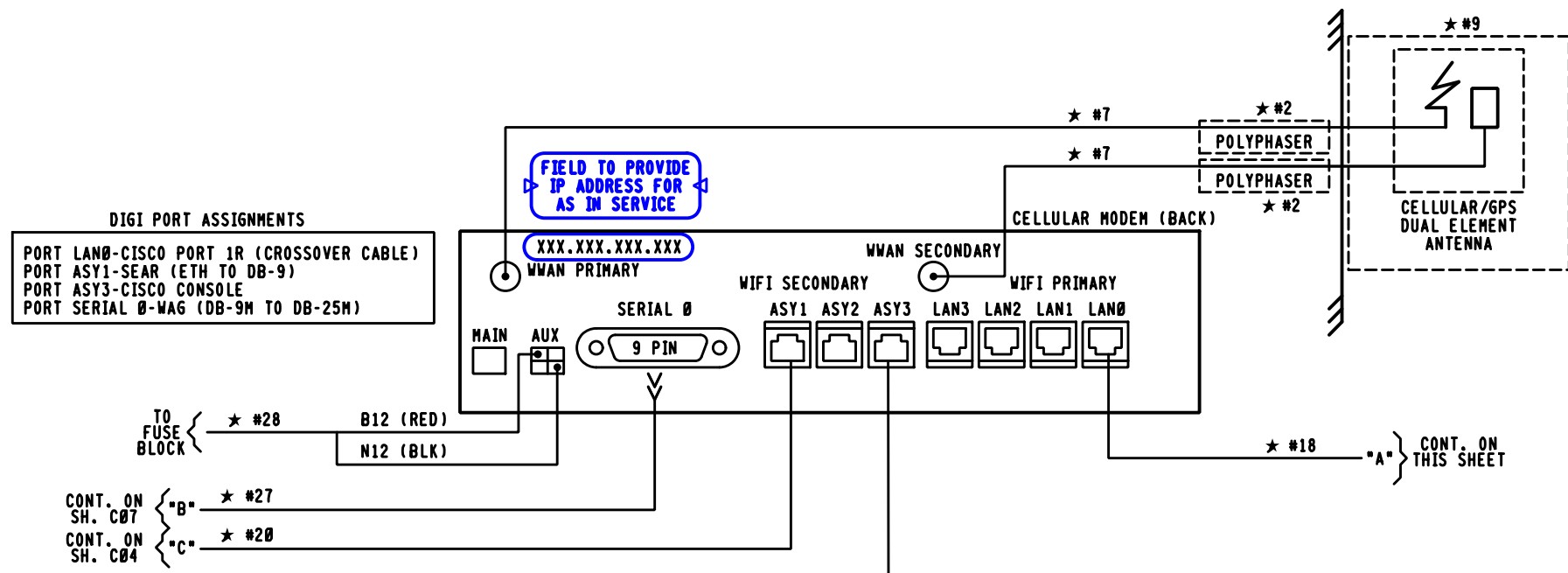
PROGRESS
RAIL SERVICES

A Caterpillar Company DATE: 04-23-25
NEW WORK CSX#: PA2023021 PRS/AMJ/SAF

CSX TRANSPORTATION RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
MAIN ST. 145454B			
WAYSIDE ACCESS GATEWAY DAWSON, PA M.P. BF-275.67			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27567		SHEET C07	

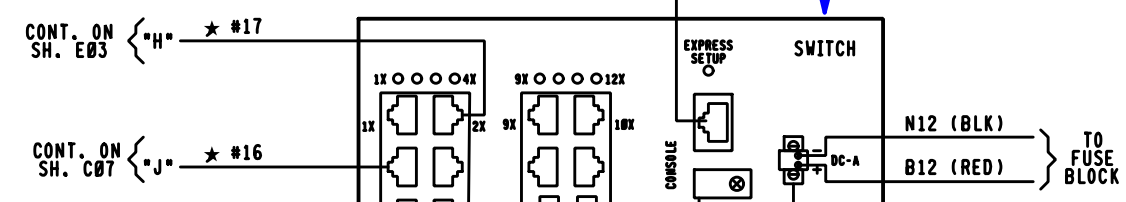
DIGI PORT ASSIGNMENTS
 PORT LAN0-CISCO PORT 1R (CROSSOVER CABLE)
 PORT ASY1-SEAR (ETH TO DB-9)
 PORT ASY3-CISCO CONSOLE
 PORT SERIAL 0-WAG (DB-9M TO DB-25M)

FIELD TO PROVIDE IP ADDRESS FOR AS IN SERVICE
 XXX.XXX.XXX.XXX

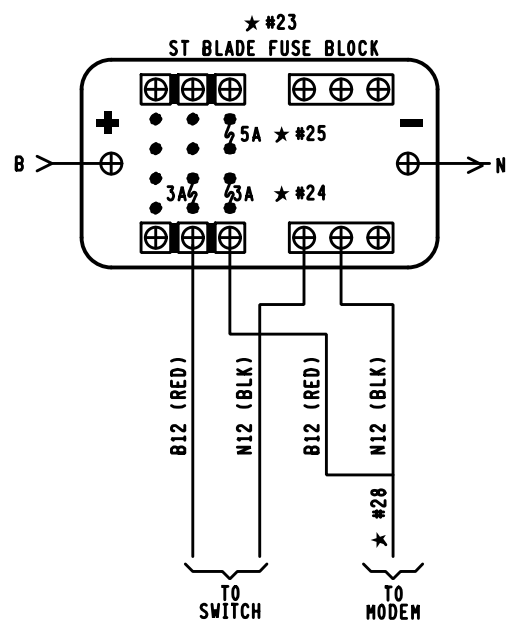


* CSDA-30348-KIT (020.0000493.1)		
REF.	DESCRIPTION	QTY
2	POLYPHASER, TSX-NFF	2 EA.
7	LHR-195, N-MALE TO SMA-MALE, 5 FT	2 EA.
9	MIMO ANTENNA, BLACK, 15FT, AP-HMF-CCG-Q-S222-BL ANTENNA MOUNTING ARM, CSDA-30309-BKTANT1	1 EA.
11	VHF OMNI ANTENNA	1 EA.
12	LHR-200, N-MALE TO N-MALE, 3 FT	1 EA.
13	LHR-240, N-MALE TO BNC-MALE, 10 FT	1 EA.
14	VHF SURGE PROTECTOR N-FEMALE TO FEMALE	1 EA.
16	CAT 6 PATCH CABLE UTP, BOOTED, YELLOW, 20 FT	1 EA.
17	CAT 6 PATCH CABLE UTP, BOOTED, ORANGE, 20 FT	1 EA.
18	CAT 6 PATCH CABLE UTP, BOOTED, RED, X-OVER, 20 FT	1 EA.
20	DIGI-TRANSPORT TO CISCO CABLE, BLUE, 20 FT	3 EA.
21	CAT 6 STP ROLL-OVER PATCH CABLE, BLACK, 20 FT	1 EA.
23	DC PDU WITH 5 FUSED CIRCUITS	1 EA.
24	INDICATOR FUSE, ATO STYLE, 3 AMP	4 EA.
25	INDICATOR FUSE, ATO STYLE, 5 AMP	1 EA.
27	SERIAL CABLE, DB9M TO DB25M, STRAIGHT WIRED, 20 FT	1 EA.
28	DIGI-TRANSPORT POWER CABLE, 4-PIN MOLEX TO OPEN END, 14 FT	1 EA.

NOTE 2



SWITCH PORT ASSIGNMENTS
 PORT #2-CWU
 PORT #3-WAG J2 LAN
 PORT #9-HYRDOGEN FUEL CELLS (0B)
 PORT #10-HYRDOGEN FUEL CELLS (X-B)
 PORT #11-HYRDOGEN FUEL CELLS (B-6)
 PORT #1R-DIGI PORT LAN 0 (CROSSOVER CABLE)
 CONSOLE-DIGI PORT ASY3



- NOTES:
1. WIRING TO BE #16 UNLESS NOTED.
 2. CISCO IE2000 SWITCH OR EQUIVALENT.

PRELIMINARY

PROGRESS RAIL SERVICES
 A Caterpillar Company

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
MAIN ST. 145454B			
CROSSING COMMUNICATIONS EQUIPMENT DAWSON, PA M.P. BF-275.67			
DESIGNED PRS/AMJ	DIGITIZED PRS/AMJ	CHECKED PRS/SAF	DATE 04-23-25
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27567	SHEET C08

INDEX CONTENTS

SH. NO.	CONTENTS	REVISION NO.								
		1	2	3	4	5	6	7	8	9
I01	INDEX AND REVISIONS	⊗	⊗	⊗						
S01	SITE LAYOUT - PR MicroHBD 2 TRACK	⊗	⊗	⊗						
G01	POWER DISTRIBUTION	⊗								
G02	DEFECT DETECTOR CIRCUITS - TRACK 1	⊗								
G03	DEFECT DETECTOR CIRCUITS - TRACK 2	⊗								
G04	TIS FIELD INTERFACE PANEL - TRACK 1	⊗								
G05	HBD1 WIRING - TRACK 1	⊗								
G06	HBD2 WIRING - TRACK 2	⊗								
G07	IN-TIE DRAGGING EQUIPMENT - TRACK 1	⊗								
G08	IN-TIE DRAGGING DIAGRAM - TRACK 1	⊗								
G09	DRAGGER WOOD TIE APPLICATION - TRACK 2	⊗								

 = DESIGN COMPLETED
 = REVISION COMPLETED



THIS PLAN DOES DOES NOT
 SUPERSEDE PLAN DATED **03-10-23**
 CSX PROJECT # **PA2019559**

PRELIMINARY

 A Caterpillar Company DATE: 04-23-25
 CSX #: PA2023021 PRS/AMJ/SAF
 ⊗ ⊗ = OUT
 ⊗ ⊗ = IN

REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2022023	-----	05-09-22	09-22-22
2	PA2019559	03-10-23		
3	PA2023021	04-23-25		

TO BE COMPLETED
ON A.I.S.

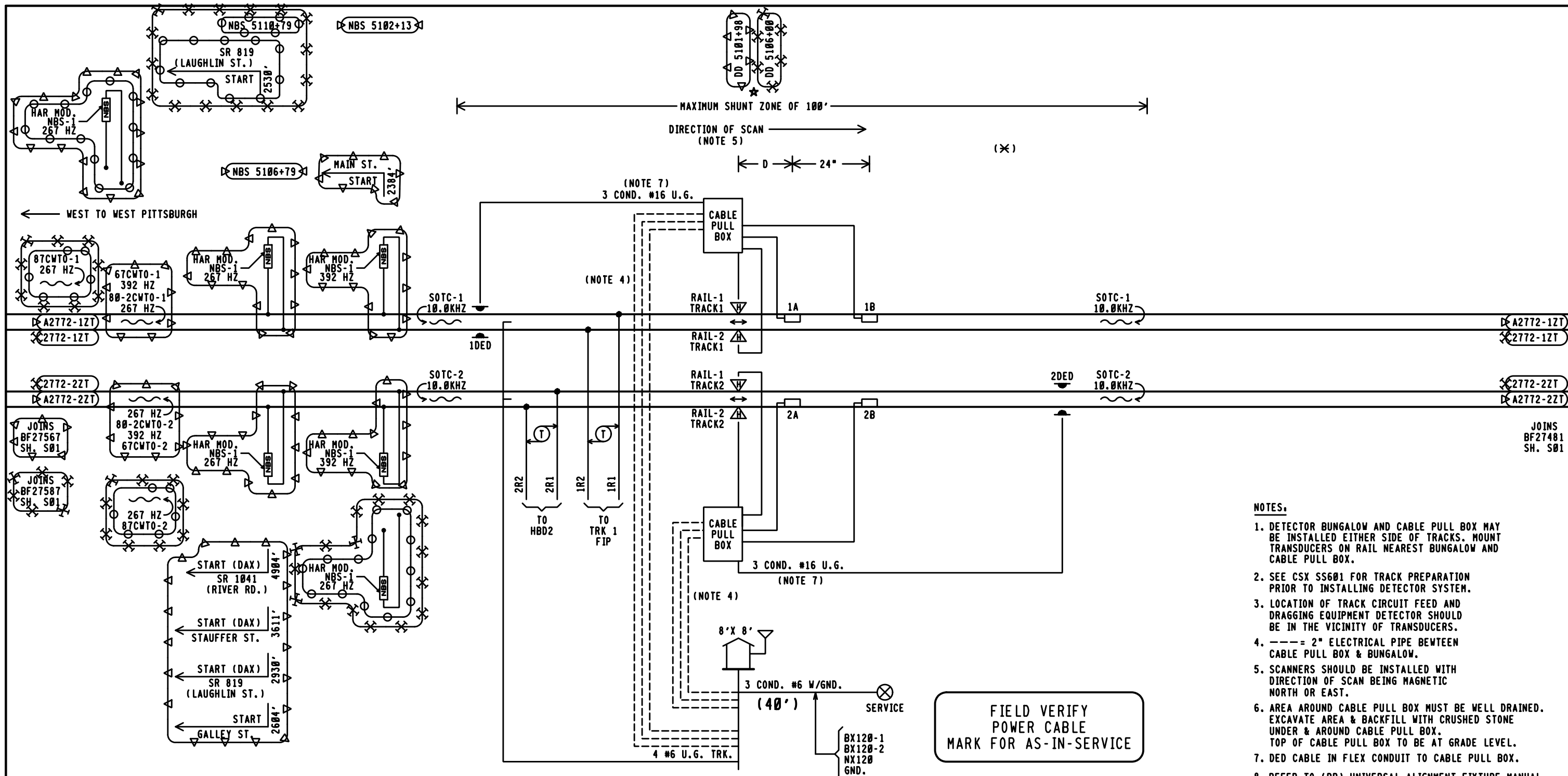
 = NOTE

 A Caterpillar Company DATE: 03-10-23
 CSX #: PA2019559 PRS/TGG/SAF
 ⊗ ⊗ = OUT
 ⊗ ⊗ = IN


 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

DAWSON DEFECT DETECTOR

INDEX AND REVISIONS
 DAWSON, PA H.P. BF-275.30

DESIGNED CSX	DIGITIZED IRS/DI	CHECKED IRS/LLB	DATE 09-22-22
DESIGN DATE -----	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27530	SHEET 101



- NOTES:**
1. DETECTOR BUNGALOW AND CABLE PULL BOX MAY BE INSTALLED EITHER SIDE OF TRACKS. MOUNT TRANSDUCERS ON RAIL NEAREST BUNGALOW AND CABLE PULL BOX.
 2. SEE CSX SS601 FOR TRACK PREPARATION PRIOR TO INSTALLING DETECTOR SYSTEM.
 3. LOCATION OF TRACK CIRCUIT FEED AND DRAGGING EQUIPMENT DETECTOR SHOULD BE IN THE VICINITY OF TRANSDUCERS.
 4. --- = 2" ELECTRICAL PIPE BETWEEN CABLE PULL BOX & BUNGALOW.
 5. SCANNERS SHOULD BE INSTALLED WITH DIRECTION OF SCAN BEING MAGNETIC NORTH OR EAST.
 6. AREA AROUND CABLE PULL BOX MUST BE WELL DRAINED. EXCAVATE AREA & BACKFILL WITH CRUSHED STONE UNDER & AROUND CABLE PULL BOX. TOP OF CABLE PULL BOX TO BE AT GRADE LEVEL.
 7. DED CABLE IN FLEX CONDUIT TO CABLE PULL BOX.
 8. REFER TO (PR) UNIVERSAL ALIGNMENT FIXTURE MANUAL TR83-02-08 TO DETERMINE THE SCANNER ALIGNMENT POINT.
 9. (X) = LOCATION OF BUNGALOW

FIELD VERIFY
POWER CABLE
MARK FOR AS-IN-SERVICE

THIS PLAN DOES DOES NOT
SUPERSEDE PLAN DATED 03-10-23
CSX PROJECT # PA2019559

PRELIMINARY

PROGRESS RAIL SERVICES
A Caterpillar Company
DATE: 04-23-25
CSX #: PA2023021
PRS/AMJ/SAF

☆ = DRAFTING ERROR CORRECTION

PROGRESS RAIL SERVICES
A Caterpillar Company
DATE: 03-10-23
CSX #: PA2019559
PRS/TG6/SAF

CSX TRANSPORTATION			
RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
DAWSON DEFECT DETECTOR			
SITE LAYOUT - PR M10rdHBD 2 TRACK DAWSON, PA M.P. BF-275.30			
DESIGNED CSX	DIGITIZED IRS/DI	CHECKED IRS/LLB	DATE 09-22-22
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
		FILE BF27530	SHEET S01

REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2006028	07-23-07	04-18-09	09-21-09
2	PA2013018	08-17-13	08-16-16	01-05-17
3	PA2019584	10-17-19	03-07-22	07-01-22
4	PA2023021	04-23-25		


TO BE COMPLETED ON A.I.S.

INDEX CONTENTS

SH. NO.	CONTENTS	REVISION NO.												
		1	2	3	4	5	6	7	8	9				
I01	TITLE, NOTES, INDEX AND REVISIONS	X	X	X	X									
S01	TRACK AND SIGNAL PLAN	X	X	X	X									
E01	POWER DISTRIBUTION (LOCATION A)	X	X	X	X									
E02	POWER DISTRIBUTION (LOCATION B)	X	X	X	X									
C01	ELECTRO CODE 5 UNIT 1TZU TRACK I/O (LOCATION A)	X	X	X	X									
C02	ELECTRO CODE 5 UNIT 2TZU TRACK I/O (LOCATION A)	X	X	X	X									
C03	ELECTRO CODE 5 UNIT 1TZU LAMP OUTPUTS (LOCATION A)	X	X	X	X									
C04	ELECTRO CODE 5 UNIT 2TZU LAMP OUTPUTS (LOCATION A)	X	X	X	X									
C05	ELECTRO CODE 5 UNIT 1TZU COLORLIGHT BACKPLANE (BP-1) (LOCATION A)	X	X	X	X									
C06	ELECTRO CODE 5 UNIT 1TZU PROGRAM (LOCATION A)	X	X	X	X									
C07	ELECTRO CODE 5 UNIT 2TZU COLORLIGHT BACKPLANE (BP-1) (LOCATION A)	X	X	X	X									
C08	ELECTRO CODE 5 UNIT 2TZU PROGRAM (LOCATION A)	X	X	X	X									



 = DESIGN COMPLETED
 = REVISION COMPLETED

PRELIMINARY

 = NOTE

PROGRESS
RAIL SERVICES

A Caterpillar Company
 DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

 = OUT
 = IN


 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

SIGNALS 2748 /2749

TITLE, NOTES, INDEX AND REVISIONS
 DAWSON, PA M.P. BF-274.81

DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
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DESIGN DATE 10-17-19	REV. NO. 3	DRAWING -----	SHEET NO -----	FILE BF27481	SHEET 101
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SIGS 5080+60

WEST TO SINNS
WEST TO WEST PITTSBURGH

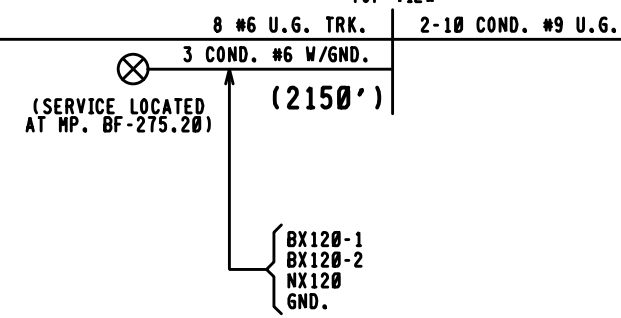
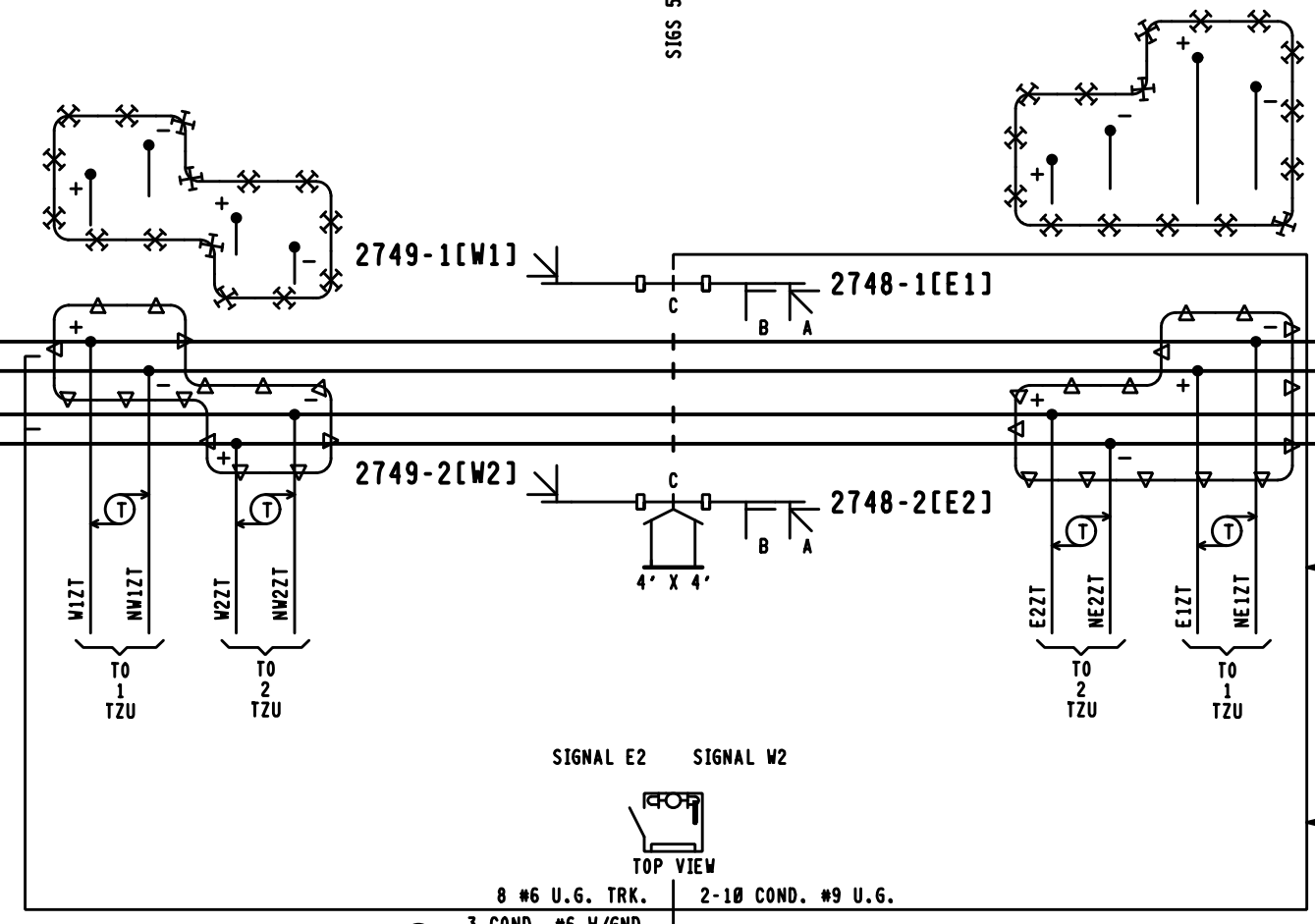
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JOINS
BF27530
SH. S01

2726-1ZT [E1ZT]

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JOINS
BF27265
SH. S01



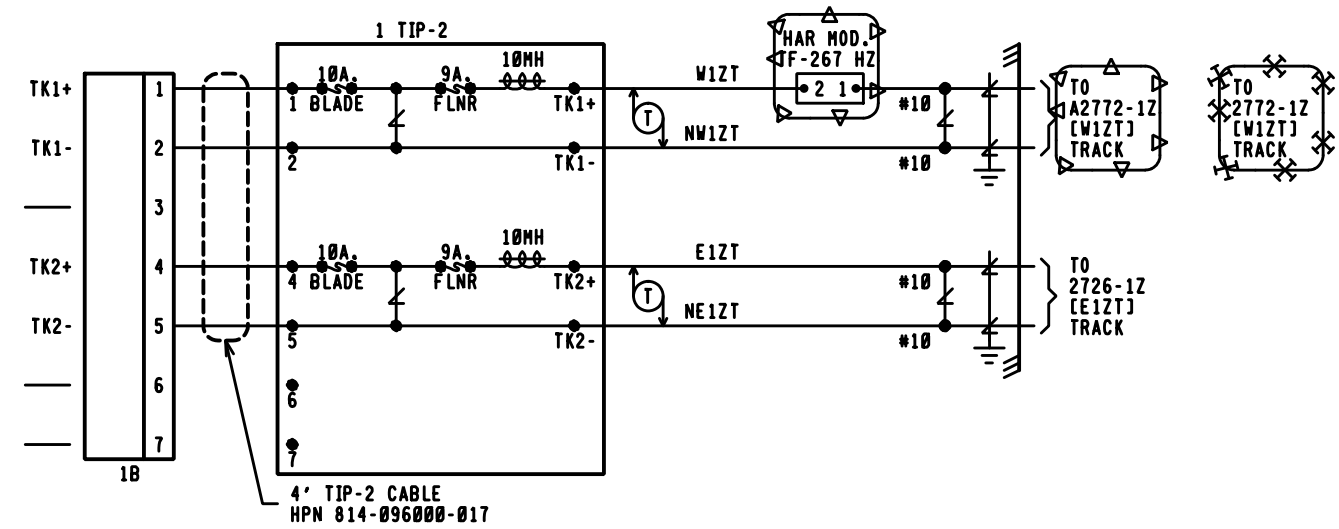
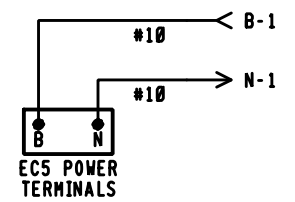
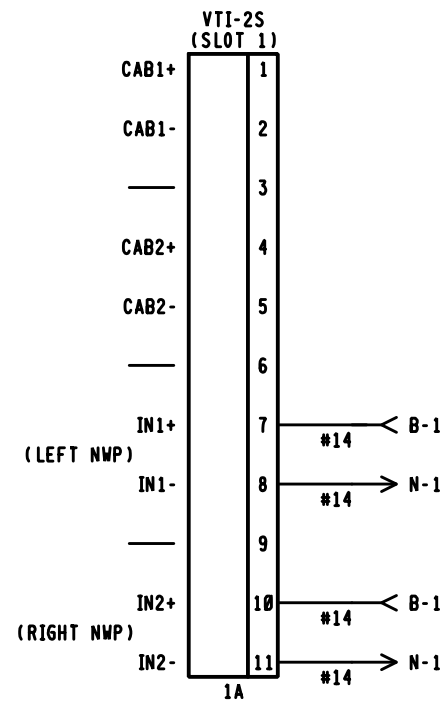
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- W1YE
- W1RE
- W1EN
- SPARE
- SPARE
- EA1GE
- EA1YE
- EA1RE
- EA1EN
- EB1GE
- EB1RE
- EB1EN

NOTE:
[] = TAGGING PURPOSES ONLY

PRELIMINARY
PROGRESS
RAIL SERVICES
A Caterpillar Company
DATE: 04-23-25
CSX#: PA2023021
PRS/AMJ/SAF

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
SIGNALS 2748 & 2749			
TRACK AND SIGNAL PLAN DAWSON, PA M.P. BF-274.81			
DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF27481		SHEET S01	

DESIGN DATE 04-23-25	REV. NO. 1	DRAWING -----	SHEET NO -----	FILE BF27481	SHEET S01
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PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company

DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

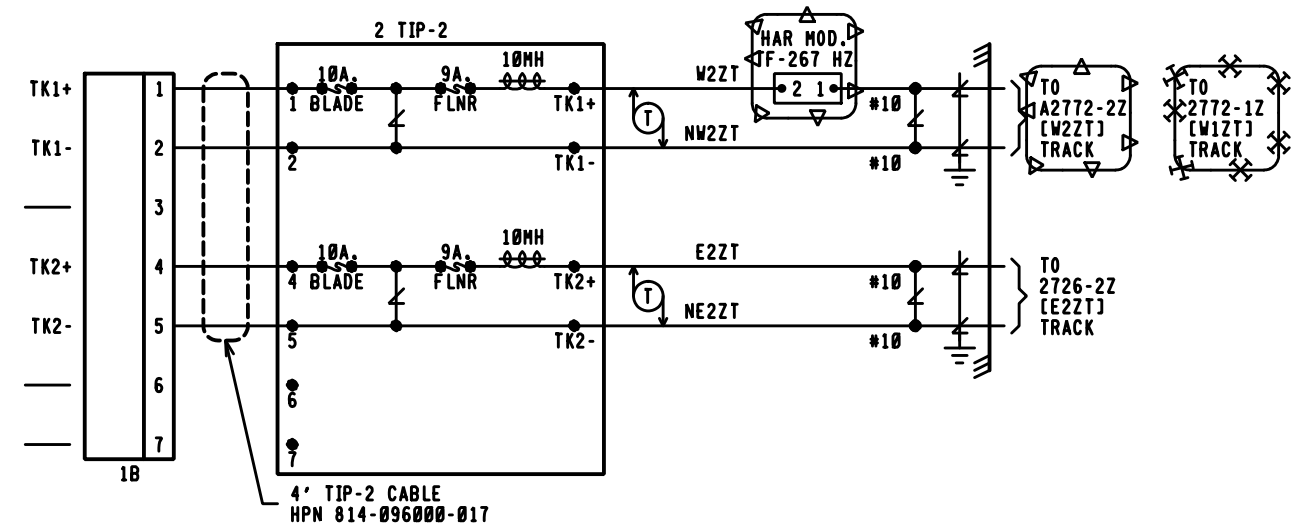
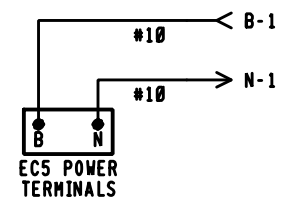
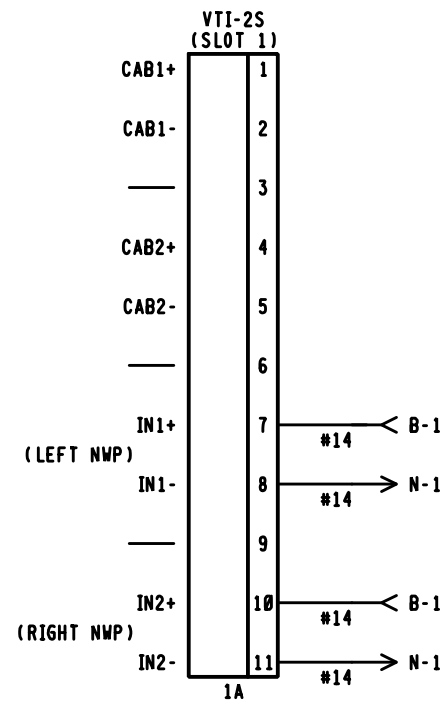
⊗ ⊗ = OUT
 ⊙ ⊙ = IN

NOTE:
 [] = TAGGING PURPOSES ONLY

LOCATION A
 EC5 UNIT 1TZU TRACK I/O

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
SIGNALS 2748 /2749			
ELECTRO CODE 5 UNIT 1TZU TRACK I/O DAWSON, PA M.P. BF-274.81			
DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
DRAWING -----	SHEET NO -----	FILE BF27481	SHEET C01

DESIGN DATE 08-17-13	REV. NO. 2
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NOTE:
 [] = TAGGING PURPOSES ONLY

LOCATION A
 EC5 UNIT 2TZU TRACK I/O

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company

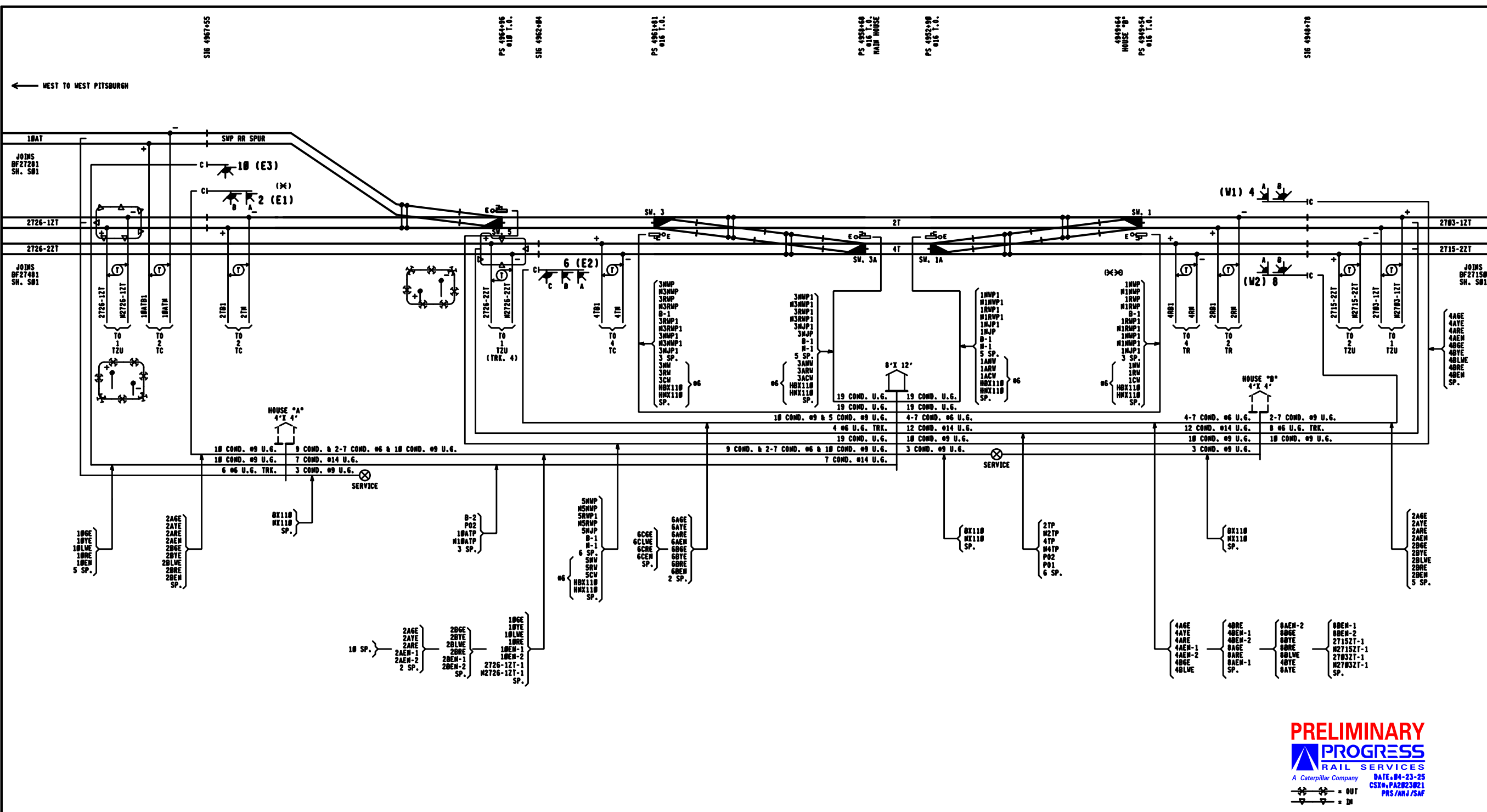
DATE: 04-23-25
 CSX#: PA2023021
 PRS/AMJ/SAF

⊗ ⊗ = OUT
 ⊙ ⊙ = IN

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
SIGNALS 2748 /2749			
ELECTRO CODE 5 UNIT 2TZU TRACK I/O DAWSON, PA M.P. BF-274.81			
DESIGNED IRS/JEK	DIGITIZED IRS/JLM	CHECKED IRS/JFK	DATE 07-23-07
DESIGN DATE 08-17-13	REV. NO. 2	DRAWING -----	SHEET NO -----
FILE BF27481	SHEET C02		

DESIGN DATE: 08-17-13
 REV. NO.: 2

04-23-25 4



REVISIONS	
04-29-90 SWE	PA1990000
09-21-09 IRS PA2006020	
01-09-17 XRL	PA2013010

NOTE:
 (X) = LOCATION OF HOUSE "A"
 (M) = LOCATION OF HOUSE "B"

PRELIMINARY
PROGRESS
 RAIL SERVICES
 A Caterpillar Company

DATE: 04-23-25
 CSX: PA2023021
 PRS/ANJ/SAP

CSX TRANSPORTATION
 RAIL TRANSPORT GROUP ENGINEERING
 COMMUNICATIONS AND SIGNALS

BROADFORD

TRACK AND SIGNAL PLAN
 BROADFORD, PA R.P. BF-272.65

DESIGNED	DIGITIZED	CHECKED	DATE
SWE	SWE	SWE	01-03-90

DRAWING	SHEET NO	NEXT SH	NEXT FILE	NEXT SH	FILE	SHEET
----	----	----	BF27265	E01	BF27265	S01