READING & NORTHERN RAILROAD

2011 Regional Railroad of the Year

1 Railroad Blvd, P.O. Box 218, Port Clinton, PA 19549

Phone: 610.562.2100 Fax: 610.562.1920 www.READINGNORTHERN.COM

July 20, 2015

A-2015-2475025

TO ALL PARTIES

To Whom It May Concern:

In accordance to the June 25, 2015 letter regarding the alteration of the Foote Ave crossing, *Reading Blue Mountain and Northern Railroad (RBMN) is submitting a situational plan and circuitry plan.* Both plans are for all parties to review. RBMN is requesting the Commission's approval on both the situational plan and circuitry plan.

A copy of this letter, situational plan, and circuitry plan is being sent to all parties of record simultaneously with this submission to the Public Utility Commission.

Regards,

Erik Yoder
Assistant VP Maintenance of Way
Reading Blue Mountain and Northern Railroad
610-562-2100

RECEIVED
2015 JUL 22 AM 10: 32
PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

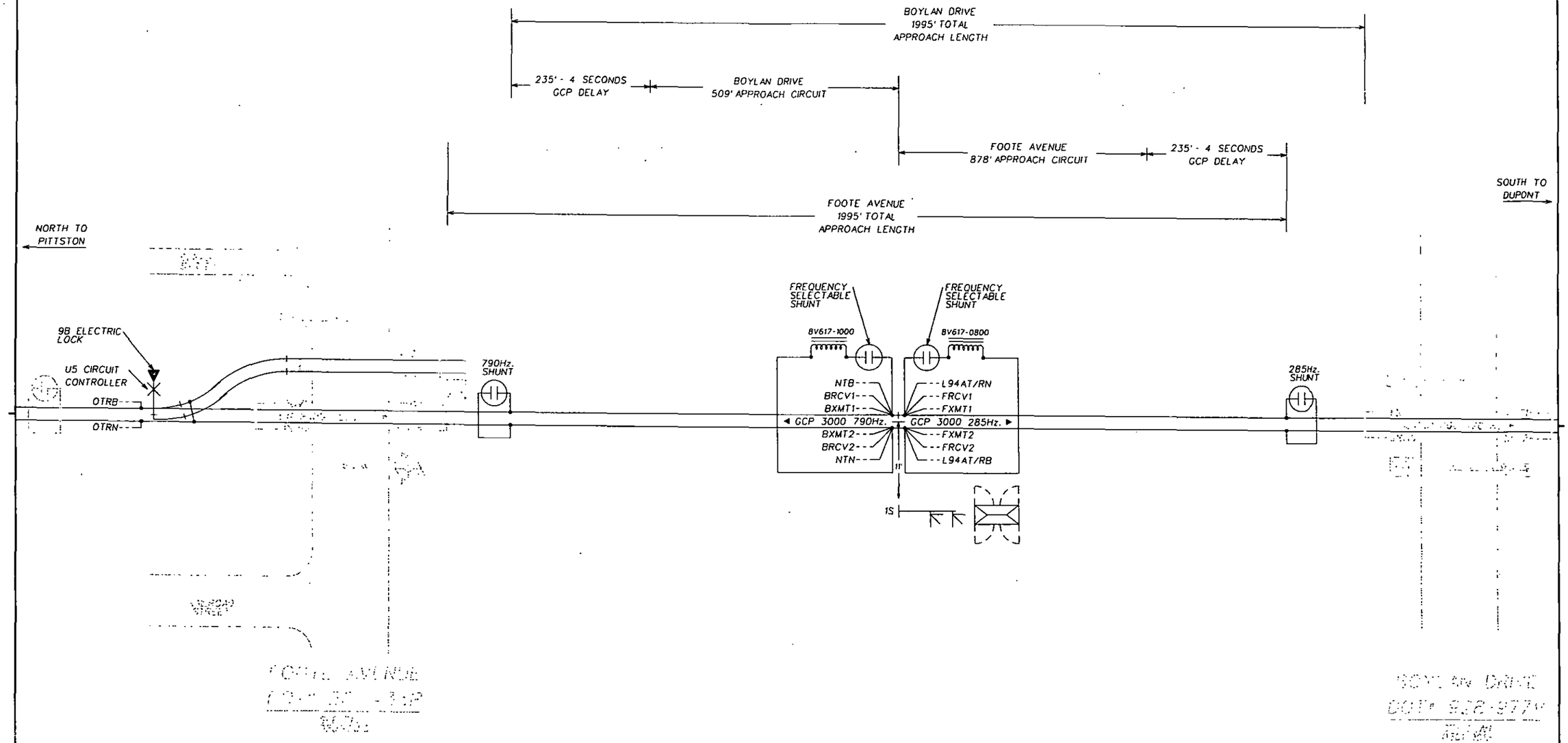
INDEX		REVISIONS									
		1	2	3	4	5	6	7	8	9	10
1	TITLE, INDEX & REVISIONS	✓									
2	LOCATION PLAN	✓									
3	POWER DISTRIBUTION	✓									
4	SIGNAL AND CROSSING INTERCONNECT CIRCUITS	✓									
5	GENRAKODE AND SIGNAL CIRCUITS	✓									
6	FOOTE AVENUE CROSSING CONTROL CIRCUITS	✓									
7	GCP 3000 PARAMETERS - FOOTE AVENUE	✓									
8	BOYLAN DRIVE CROSSING CONTROL CIRCUITS	✓									
9	GCP 3000 PARAMETERS - BOYLAN DRIVE	✓									
10	CASE LAYOUT (FRONT)	✓									
11	CASE LAYOUT (REAR)										
12											
13											
14											
15											

REVISIONS			
1	DATE	JMB	
	AUTOMATIC SIGNAL IS INSTALLED		

FILED
2015 JUL 22 AM 10: 32
SECRETARY'S OFFICE
P.U.C.

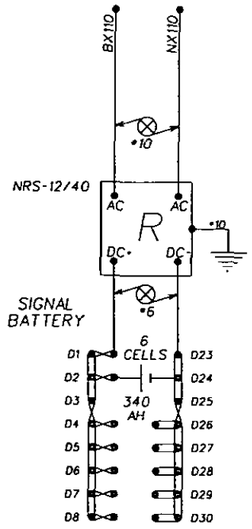
0501.0018.001.dgn

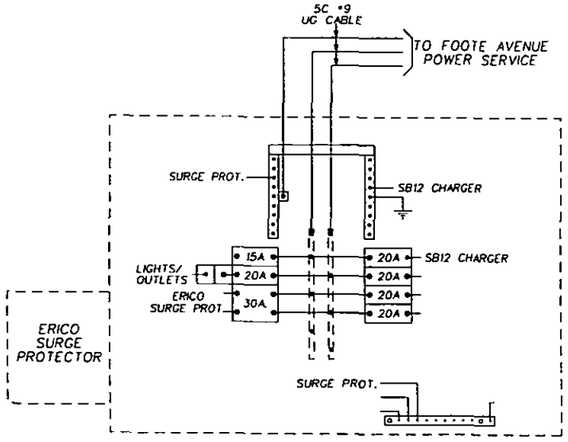
TRAFFIC CONTROL SYSTEM CIRCUITS 1S SIGNAL	TITLE, INDEX & REVISIONS	LOCATION:	DURYEA, PA	ISSUE DATE:	"The Road of Anthracite" The Reading & Northern RR
		LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1	
		MILEPOST:	1.8	PLAN: 0501-0018	
				SHEET 1	

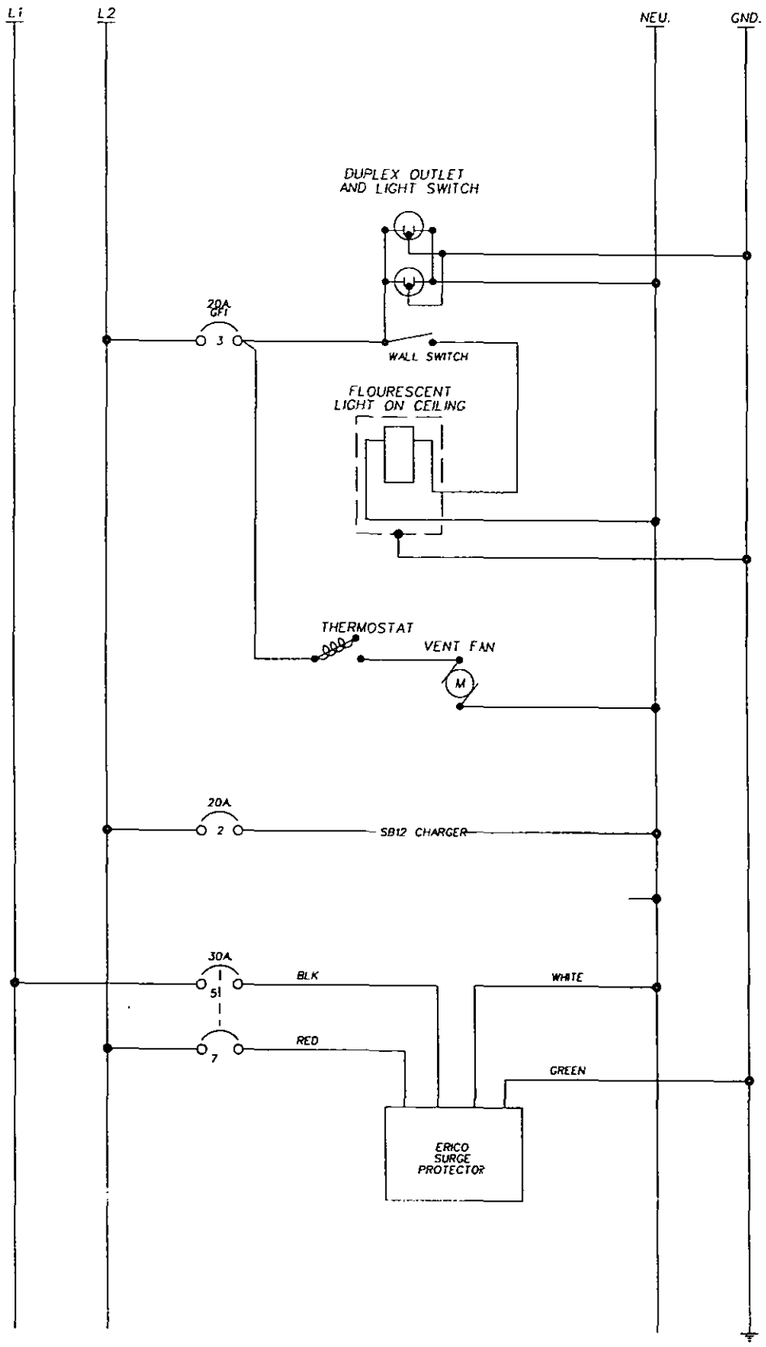


TRAFFIC CONTROL SYSTEM CIRCUITS 1S SIGNAL	LOCATION PLAN	LOCATION:	DURYEA, PA	ISSUE DATE:	"The Road of Anthracite" The Reading & Northern RR
		LINE/BRANCH:	SUSQUEHANNA	REV. 1	
		MILEPOST:	1.8	PLAN: 0501-0018	
				SHEET 2	

0501.0018.002.dgn



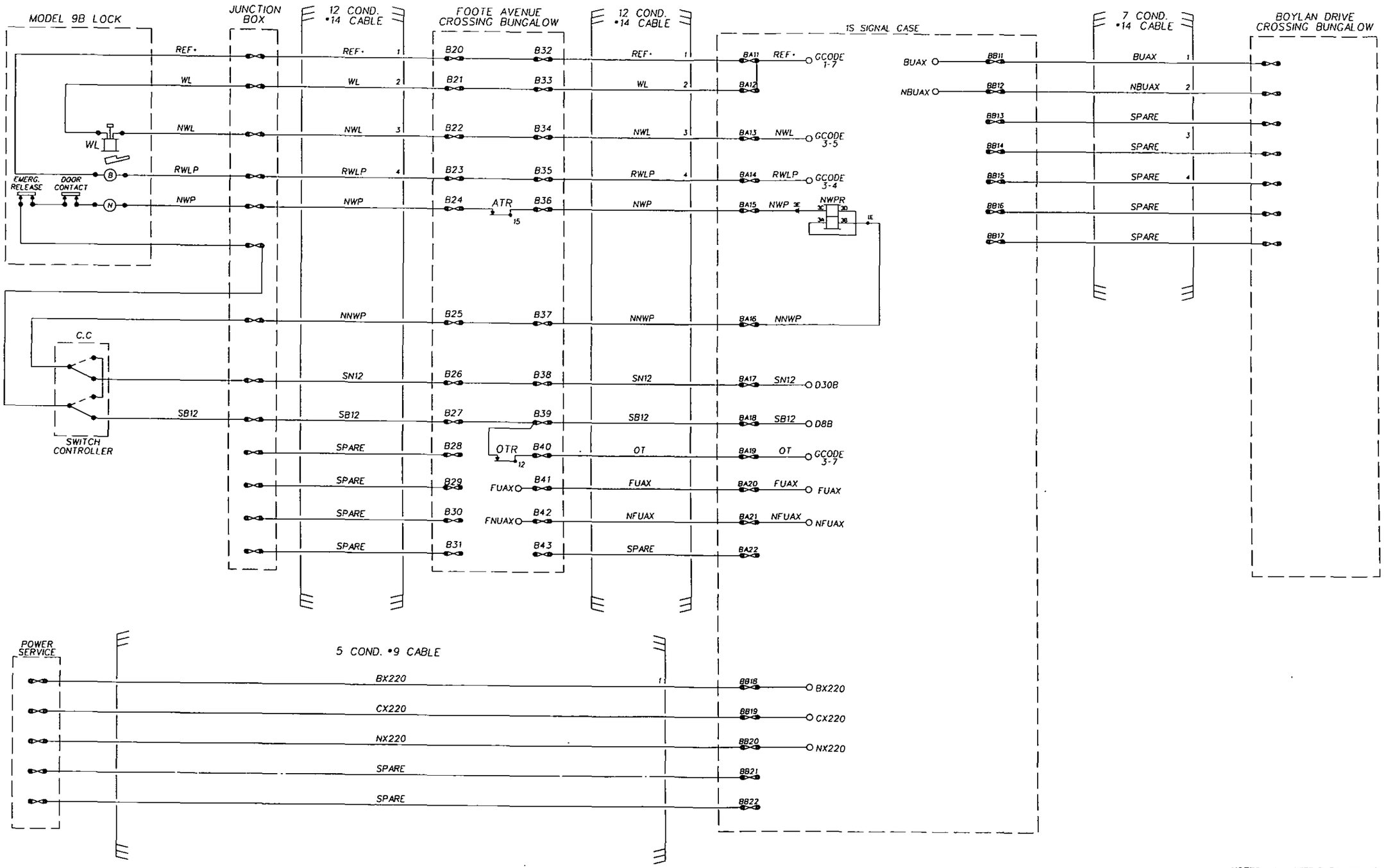




0501.0018.003.dgn

TRAFFIC CONTROL SYSTEM CIRCUITS 1S SIGNAL	POWER DISTRIBUTION	LOCATION:	DURYEA, PA	ISSUE DATE:
		LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1
		MILEPOST:	1.8	PLAN: 0501-0018
				SHEET 3

"The Road of Anthracite"
The Reading & Northern RR

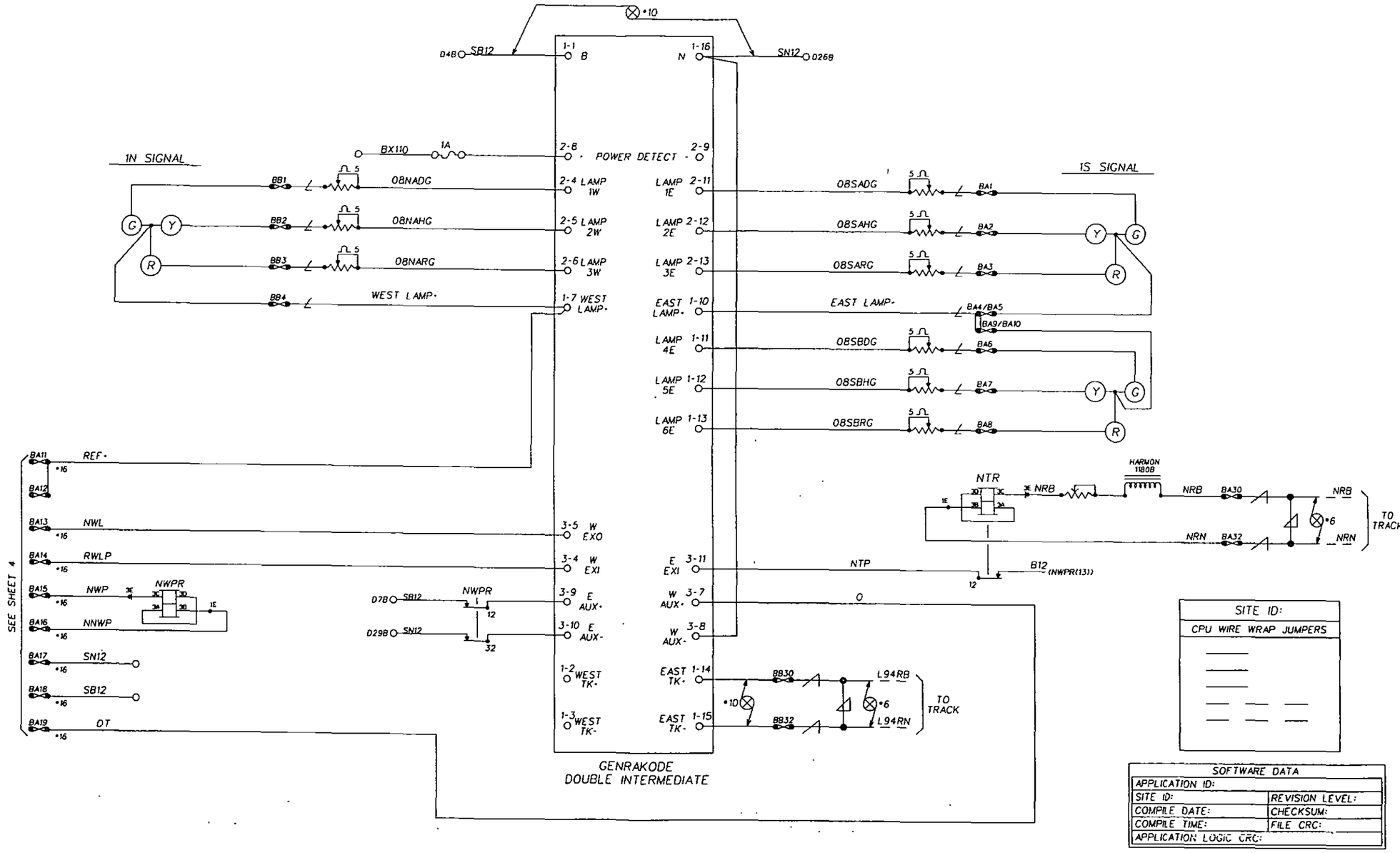


NOTES: ALL WIRING TO BE #16 UNLESS OTHERWISE NOTED

0501.0018.004.dgn

TRAFFIC CONTROL SYSTEM CIRCUITS 1S SIGNAL	SIGNAL AND CROSSING INTERCONNECT CIRCUITS	LOCATION:	DURYEA, PA	ISSUE DATE:	
		LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1	
		MILEPOST:	1.8	PLAN: 0501-0018	
				SHEET 4	

"The Road of Anthracite" The Reading & Northern RR



SITE ID:
CPU WIRE WRAP JUMPERS

SOFTWARE DATA	
APPLICATION ID:	
SITE ID:	REVISION LEVEL:
COMPILE DATE:	CHECKSUM:
COMPILE TIME:	FILE CRC:
APPLICATION LOGIC CRC:	

NOTE: CIRCUITS DESIGNATED AS "WEST" ARE NOW "NORTH" AND CIRCUITS DESIGNATED AS "EAST" ARE NOW "SOUTH".

ALL WIRING TO BE *16 UNLESS OTHERWISE NOTED

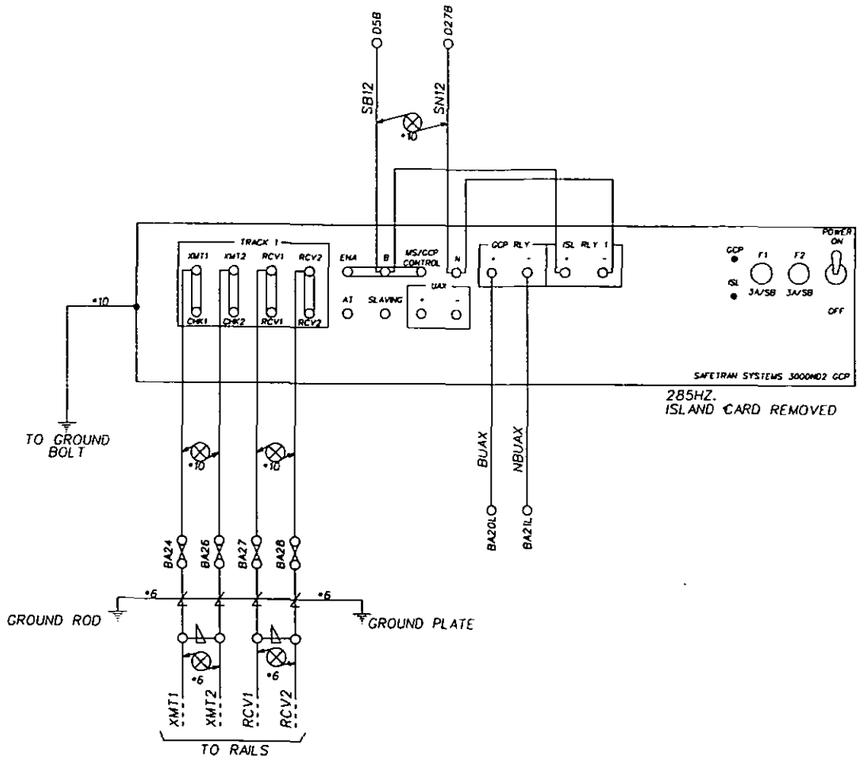
0501.0018.005.dgn

TRAFFIC CONTROL SYSTEM
CIRCUITS 1S SIGNAL

GENRAKODE AND SIGNAL CIRCUITS

LOCATION:	DURYEA, PA	ISSUE DATE:	
LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1	
MILEPOST:	1.8	PLAN:	0501-0018
		SHEET	5

"The Road of Anthracite"
The Reading & Northern RR



NOTES: ALL WIRING TO BE #16 UNLESS OTHERWISE NOTED

0501.0018.006.dgn

TRAFFIC CONTROL SYSTEM CIRCUITS 1S SIGNAL	FOOTE AVENUE CROSSING CRONTROL CIRCUITS	LOCATION:	DURYEA, PA	ISSUE DATE:	"The Road of Anthracite" The Reading & Northern RR
		LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1	
		MILEPOST:	1.8	PLAN: 0501-0018	
				SHEET 6	

3000 GCP APPLICATION HISTORY CARD
(For Units equipped with Processor Module 80014, 80044, or 80214)

Equipment: 3000☐ 3000D2☐ 3000D2L☐ 3000ND☐ 3000ND2■ 3008☐ 3008D2☐ DATE INSTALLED: XX-XX-XX
Unit/Serial No: XXXX Crossing No: 361-435P Island Frequency: T1: N/A kHz T2: ____ kHz
Crossing Name: FOOTE AVENUE City/Town: DURYEA State: PENNSYLVANIA

PROGRAMMING HISTORY

■ press PROGRAM key	Initial Programmed Value Date: XX/XX/XX	Program Change Date:	Program Change Date:
NUMBER OF TRACKS (Transceiver Modules)	1■ 2☐	1☐ 2☐	1☐ 2☐
C10 FREQUENCY (MS/GCP)	T1: 285 Hz T2: ____ Hz	T1: ____ Hz T2: ____ Hz	T1: ____ Hz T2: ____ Hz
UNIDIRECTIONAL/BIDIRECTIONAL	T1: UNI■ BI☐ T2: UNI☐ BI☐	T1: UNI☐ BI☐ T2: UNI☐ BI☐	T1: UNI☐ BI☐ T2: UNI☐ BI☐
XMIT LEVEL	T1: MAX☐ MED■ T2: MAX☐ MED☐	T1: MAX☐ MED☐ T2: MAX☐ MED☐	T1: MAX☐ MED☐ T2: MAX☐ MED☐
WARNING TIME SELECTED	T1: 30 Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
APPROACH DISTANCE → SELECTED	T1: 1995 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
APPROACH DISTANCE → COMPUTED	T1: 2168 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
UAX1 PICKUP DELAY (UAX) (0-OFF)	0-OFF Sec.	____ Sec.	____ Sec.
ENA/UAX2 DELAY (0-ENA)	____ Sec.	____ Sec.	____ Sec.
ISLAND DISTANCE (Between transmit & receive track wire connections)	T1: 120 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
NUMBER OF DAX'S (For 3000ND and 3000ND2 units, set to 0)	0■ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐	0☐ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐	0☐ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐
DAX A TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX A DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX A WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX B TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX B DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX B WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX C TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX C DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX C WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX D TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX D DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX D WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX E TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX E DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX E WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX F TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX F DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX F WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX G TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX G DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX G WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX H TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX H DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX H WARNING TIME	____ Sec.	____ Sec.	____ Sec.
SLAVING MASTER/SLAVE	MASTER:■ SLAVE:☐	MASTER:☐ SLAVE:☐	MASTER:☐ SLAVE:☐
PASSWORD ENABLED	DISABLED:■ ENABLED:☐	DISABLED:☐ ENABLED:☐	DISABLED:☐ ENABLED:☐
RECORDER INSTALLED	NOT INSTALLED:■ INSTALLED:☐ EXTERNAL NODE•____	NOT INSTALLED:☐ INSTALLED:☐ EXTERNAL NODE•____	NOT INSTALLED:☐ INSTALLED:☐ EXTERNAL NODE•____
RS-232-C BAUD RATE	____ bps	____ bps	____ bps
RS-232-C DATA BITS	7:☐ 8:☐	7:☐ 8:☐	7:☐ 8:☐
RS-232-C STOP BITS	1:☐ 2:☐	1:☐ 2:☐	1:☐ 2:☐
RS-232-C PARITY	NONE☐ ODD:☐ EVEN☐ SPACE:☐ MARK☐	NONE☐ ODD:☐ EVEN☐ SPACE:☐ MARK☐	NONE☐ ODD:☐ EVEN☐ SPACE:☐ MARK☐
DATE (eg. Thu 03 APR 1997)	____	____	____
TIME (eg. 11:25:43 AM)	____	____	____
DAYLIGHT SAVINGS	ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐

C10 DualFrequency operation available only in Dual-Frequency 3000 GCP's equipped with 80214 processors
C20 Applicable to 3008 and 3008D2 8-DAX GCP's only

EXPANDED PROGRAMMING HISTORY (Function Mode)

■ press PROGRAM key	Initial Programmed Value Date: 7/18/14	Program Change Date:	Program Change Date:
SWITCH TO MS (Enter EZ value)	T1: 10 EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ
TRANSFER DELAY MS TO GCP (0-OFF)	T1: 0-OFF Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
C70 TRANSFER MS TO GCP PRIME (when PRIME PREDICTION OFFSET is on)	T1: ON☐ OFF:■ T2: ON☐ OFF:■	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX A	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX B	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX C	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX D	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX E	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX F	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX G	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX H	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
PRIME PREDICTION OFFSET (0-OFF)	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
PICKUP DELAY PRIME	10 Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX A	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX B	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX C	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX D	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX E	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX F	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX G	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX H	____ Sec.	____ Sec.	____ Sec.
COMPENSATION VALUE	T1: 1300 T2: ____	T1: ____ T2: ____	T1: ____ T2: ____
C30 SPEED LIMITING	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐
C30 ENHANCED DETECTION (ED)	T1: ON☐ OFF:■ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐
C30 BACK TO BACK T1 AND T2 (When ED is on)	NO☐ YES:☐	NO☐ YES:☐	NO☐ YES:☐
C30 STATION STOP TIMER	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
NUMBER OF TRACK WIRES	T1: 4:■ 6:☐ T2: 4:■ 6:☐	T1: 4:☐ 6:☐ T2: 4:☐ 6:☐	T1: 4:☐ 6:☐ T2: 4:☐ 6:☐
C30 LOW EX ADJUSTMENT	T1: 0 T2: ____	T1: ____ T2: ____	T1: ____ T2: ____
C40 LOW EZ DETECTION	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐
C40 LOW EZ DETECTION TIMER (When low EZ detection is on)	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.
C40 POSITIVE START (0-OFF) (Enter EZ value)	T1: 0-OFF EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ
C40 POSITIVE START TIMEOUT (0-NONE) (When positive start is on)	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.
C40 SET AT OPERATION	NORMAL:■ DIAGNOSTIC:☐	NORMAL:☐ DIAGNOSTIC:☐	NORMAL:☐ DIAGNOSTIC:☐
C5,60 DIAGNOSTIC MESSAGES	ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C5,60 DAX MESSAGES	ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C50 ADVANCE PREEMPT TIMER	OFF Sec.	____ Sec.	____ Sec.
C70 MOTION SENSING LEVEL (0-NORMAL)	T1: 0-NORMAL % T2: ____ %	T1: ____ % T2: ____ %	T1: ____ % T2: ____ %

C30 Applicable only to 3000 GCP's equipped with 80044 or 80214 processors.
C40 Applicable only to 3000 GCP's equipped with 80214 processors with A01C revision and later
C50 Applicable only to 3000 GCP's equipped with 80214 processors with A01E revision and later
C60 Applicable only when a SEAR node has been programmed into the GCP from a SEAR
C70 Applicable only to 3000 GCP's equipped with 80214 processors with A01H revision and later

CALIBRATION HISTORY

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

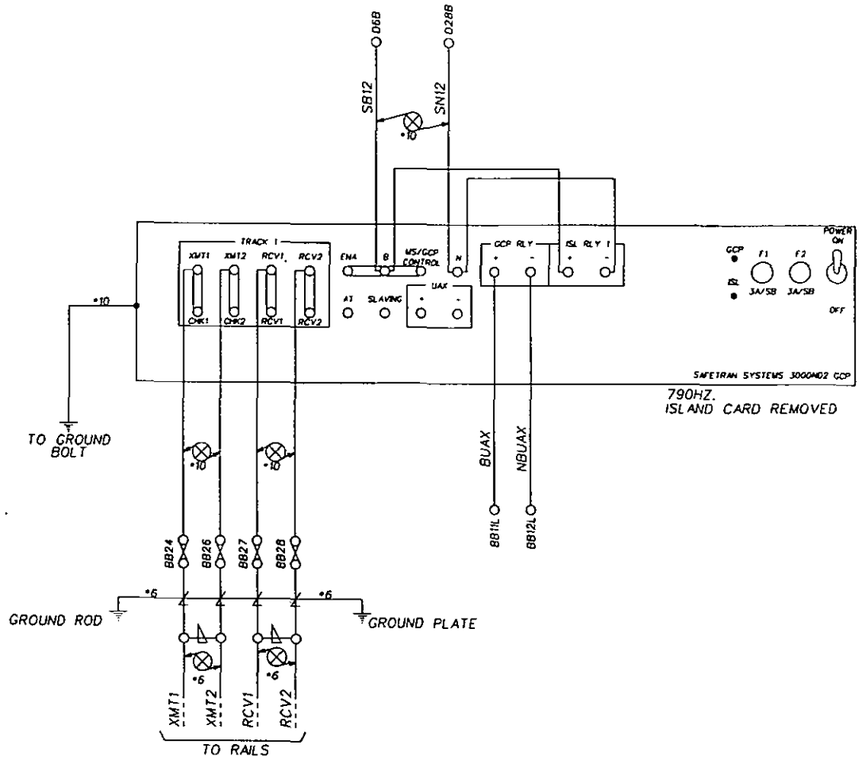
80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									



NOTES: ALL WIRING TO BE #16 UNLESS OTHERWISE NOTED

0501.0018.008.dgn

TRAFFIC CONTROL SYSTEM CIRCUITS 1S SIGNAL	BOYLAN DRIVE CROSSING CRONTROL CIRCUITS	LOCATION:	DURYEA, PA	ISSUE DATE:	"The Road of Anthracite" The Reading & Northern RR
		LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1	
		MILEPOST:	1.8	PLAN: 0501-0018	
				SHEET 8	

3000 GCP APPLICATION HISTORY CARD
(For Units equipped with Processor Module 80014, 80044, or 80214)

Equipment: 3000☐ 3000D2☐ 3000D2L☐ 3000ND☐ 3000ND2■ 3008☐ 3008D2☐ DATE INSTALLED: XX-XX-XX

Unit/Serial No: XXXX Crossing No: 361-435P Island Frequency: T1: N/A kHz T2: ____ kHz

Crossing Name: BOYLAN DRIVE City/Town: DURYEA State: PENNSYLVANIA

PROGRAMMING HISTORY

Press PROGRAM key	Initial Programmed Value Date: XX/XX/XX	Program Change Date:	Program Change Date:
NUMBER OF TRACKS (Transceiver Modules)	1■ 2☐	1☐ 2☐	1☐ 2☐
C10 FREQUENCY (MS/GCP)	T1: 790 Hz T2: ____ Hz	T1: ____ Hz T2: ____ Hz	T1: ____ Hz T2: ____ Hz
UNIDIRECTIONAL/BIDIRECTIONAL	T1: UNI■ BI☐ T2: UNI☐ BI☐	T1: UNI☐ BI☐ T2: UNI☐ BI☐	T1: UNI☐ BI☐ T2: UNI☐ BI☐
XMIT LEVEL	T1: MAX☐ MED■ T2: MAX☐ MED☐	T1: MAX☐ MED☐ T2: MAX☐ MED☐	T1: MAX☐ MED☐ T2: MAX☐ MED☐
WARNING TIME SELECTED	T1: 30 Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
APPROACH DISTANCE → SELECTED	T1: 1995 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
APPROACH DISTANCE → COMPUTED	T1: 2168 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
UAX1 PICKUP DELAY (UAX) (0-OFF)	0-OFF Sec.	____ Sec.	____ Sec.
ENA/UAX2 DELAY (0-ENA)	____ Sec.	____ Sec.	____ Sec.
ISLAND DISTANCE (Between transmit & receive track wire connections)	T1: 120 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
NUMBER OF DAX'S (For 3000ND and 3000ND2 units, set to 0)	0■ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐	0☐ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐	0☐ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐
DAX A TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX A DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX A WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX B TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX B DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX B WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX C TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX C DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX C WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX D TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX D DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX D WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX E TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX E DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX E WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX F TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX F DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX F WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX G TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX G DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX G WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX H TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX H DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX H WARNING TIME	____ Sec.	____ Sec.	____ Sec.
SLAVING MASTER/SLAVE	MASTER:■ SLAVE:☐	MASTER:☐ SLAVE:☐	MASTER:☐ SLAVE:☐
PASSWORD ENABLED	DISABLED:■ ENABLED:☐	DISABLED:☐ ENABLED:☐	DISABLED:☐ ENABLED:☐
RECORDER INSTALLED	NOT INSTALLED:■ INSTALLED:☐ EXTERNAL NODE#____	NOT INSTALLED:☐ INSTALLED:☐ EXTERNAL NODE#____	NOT INSTALLED:☐ INSTALLED:☐ EXTERNAL NODE#____
RS-232-C BAUD RATE	____ bps	____ bps	____ bps
RS-232-C DATA BITS	7:☐ 8:☐	7:☐ 8:☐	7:☐ 8:☐
RS-232-C STOP BITS	1:☐ 2:☐	1:☐ 2:☐	1:☐ 2:☐
RS-232-C PARITY	NONE:☐ ODD:☐ EVEN:☐ SPACE:☐ MARK:☐	NONE:☐ ODD:☐ EVEN:☐ SPACE:☐ MARK:☐	NONE:☐ ODD:☐ EVEN:☐ SPACE:☐ MARK:☐
DATE (eg. THU 03 APR 1997)	____	____	____
TIME (eg. 11:25:43 AM)	____	____	____
DAYLIGHT SAVINGS	ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐

C10 Dual Frequency operation available only in Dual-Frequency 3000 GCP's equipped with 80214 processors
C20 Applicable to 3008 and 3008D2 8-DAX GCP's only

EXPANDED PROGRAMMING HISTORY (Function Mode)

Press PROGRAM key	Initial Programmed Value Date: 7/18/14	Program Change Date:	Program Change Date:
SWITCH TO MS (Enter EZ value)	T1: 10 EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ
TRANSFER DELAY MS TO GCP (0-OFF)	T1: 0-OFF Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
C70 TRANSFER MS TO GCP PRIME (when PRIME PREDICTION OFFSET is on)	T1: ON:☐ OFF:■ T2: ON:☐ OFF:■	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐
C70 TRANSFER MS TO GCP DAX A	T1:☐ T2:☐ ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C70 TRANSFER MS TO GCP DAX B	T1:☐ T2:☐ ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C70 TRANSFER MS TO GCP DAX C	T1:☐ T2:☐ ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C70 TRANSFER MS TO GCP DAX D	T1:☐ T2:☐ ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C70 TRANSFER MS TO GCP DAX E	T1:☐ T2:☐ ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C70 TRANSFER MS TO GCP DAX F	T1:☐ T2:☐ ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C70 TRANSFER MS TO GCP DAX G	T1:☐ T2:☐ ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C70 TRANSFER MS TO GCP DAX H	T1:☐ T2:☐ ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
PRIME PREDICTION OFFSET (0-OFF)	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
PICKUP DELAY PRIME	10 Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX A	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX B	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX C	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX D	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX E	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX F	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX G	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX H	____ Sec.	____ Sec.	____ Sec.
COMPENSATION VALUE	T1: 1300 T2: ____	T1: ____ T2: ____	T1: ____ T2: ____
C30 SPEED LIMITING	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐
C30 ENHANCED DETECTION (ED)	T1: ON:☐ OFF:■ T2: ON:☐ OFF:☐	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐
C30 BACK TO BACK T1 AND T2 (When ED is on)	NO:☐ YES:☐	NO:☐ YES:☐	NO:☐ YES:☐
C30 STATION STOP TIMER	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
NUMBER OF TRACK WIRES	T1: 4:■ 6:☐ T2: 4:■ 6:☐	T1: 4:☐ 6:☐ T2: 4:☐ 6:☐	T1: 4:☐ 6:☐ T2: 4:☐ 6:☐
C30 LOW EX ADJUSTMENT	T1: 0 T2: ____	T1: ____ T2: ____	T1: ____ T2: ____
C40 LOW EZ DETECTION	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐	T1: ON:☐ OFF:☐ T2: ON:☐ OFF:☐
C40 LOW EZ DETECTION TIMER (When low EZ detection is on)	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.
C40 POSITIVE START (0-OFF) (Enter EZ value)	T1: 0-OFF EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ
C40 POSITIVE START TIMEOUT (0-NONE) (When positive start is on)	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.
C40 SET AT OPERATION	NORMAL:■ DIAGNOSTIC:☐	NORMAL:☐ DIAGNOSTIC:☐	NORMAL:☐ DIAGNOSTIC:☐
C5,60 DIAGNOSTIC MESSAGES	ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C5,60 DAX MESSAGES	ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐
C50 ADVANCE PREEMPT TIMER	OFF Sec.	____ Sec.	____ Sec.
C70 MOTION SENSING LEVEL (0-NORMAL)	T1: 0-NORMAL % T2: ____ %	T1: ____ % T2: ____ %	T1: ____ % T2: ____ %

C30 Applicable only to 3000 GCP's equipped with 80044 or 80214 processors.
C40 Applicable only to 3000 GCP's equipped with 80214 processors with A01C revision and later
C50 Applicable only to 3000 GCP's equipped with 80214 processors with A01E revision and later
C60 Applicable only when a SEAR node has been programmed into the GCP from a SEAR
C70 Applicable only to 3000 GCP's equipped with 80214 processors with A01H revision and later

CALIBRATION HISTORY

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			LINEARIZATION HISTORY: HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK			
							NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1+	Z1+									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			LINEARIZATION HISTORY: HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK			
							NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			LINEARIZATION HISTORY: HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK			
							NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2+	Z2+									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			LINEARIZATION HISTORY: HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK			
							NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2+	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY: EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			LINEARIZATION HISTORY: HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK			
							NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2+	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

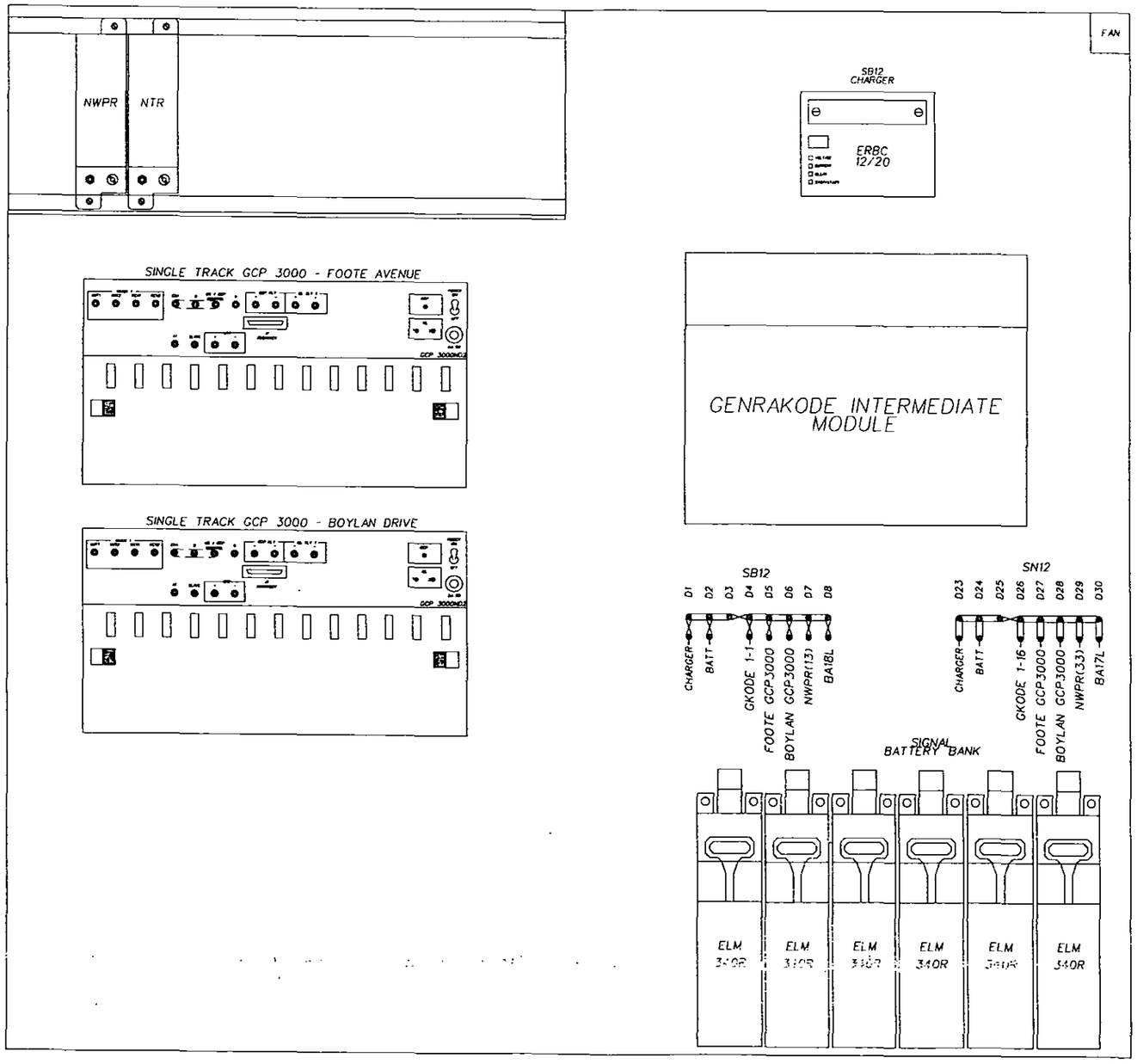
0501.0018.009.dgn

TRAFFIC CONTROL SYSTEM
CIRCUITS 1S SIGNAL

GCP 3000 PARAMETERS
BOYLAN DRIVE

LOCATION:	DURYEA, PA	ISSUE DATE:	
LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1	
MILEPOST:	1.8	PLAN:	0501-0018
		SHEET	9

"The Road of Anthracite"
The Reading & Northern RR



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TRAFFIC CONTROL SYSTEM
CIRCUITS 1S SIGNAL

CASE LAYOUT (FRONT)

LOCATION:	DURYEA, PA
LINE/BRANCH:	SUSQUEHANNA BRANCH
MILEPOST:	1.8

ISSUE DATE:

REV.	1
PLAN	0501-0018
SHEET	10

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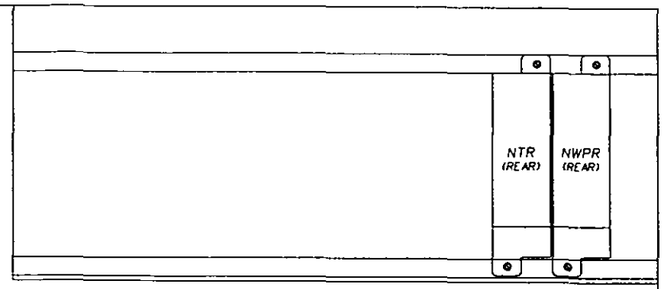
FAN



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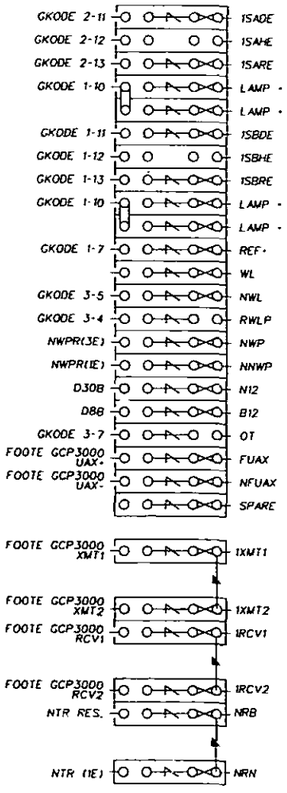

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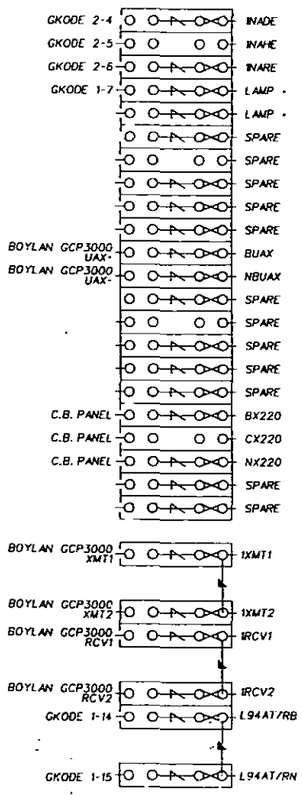

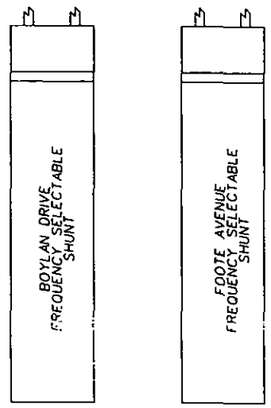

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TRAFFIC CONTROL SYSTEM
CIRCUITS 1S SIGNAL

CASE LAYOUT (REAR)

LOCATION:	DURYEA, PA
LINE/BRANCH:	SUSQUEHANNA BRANCH
MILEPOST:	1.8

ISSUE DATE:

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PLAN	0501-0018
SHEET	11

"The Road of Anthracite"
The Reading & Northern RR

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INDEX		REVISIONS								
		1	2	3	4	5	6	7	8	9	10
1	TITLE, INDEX & REVISIONS	✓									
2	LOCATION PLAN	✓									
3	POWER DISTRIBUTION	✓									
4	TRAIN DETECTION CIRCUITS	✓									
5	GENRAKODE AND SIGNAL CIRCUITS	✓									
6	GCP 3000 PARAMETERS - TRACK 1	✓									
7	FLASHING LIGHT & GATE CIRCUITS	✓									
8	GATE CONTROL CIRCUITS	✓									
9	BACKBOARD LAYOUT	✓									
10	BUNGALOW LAYOUT - LEFT SIDE	✓									
11	BUNGALOW LAYOUT - RIGHT SIDE	✓									
12											
13											
14											
15											

REVISIONS

1 MARCH 1, 1997 SWE

PLAN REDRAWN FROM A.I.S. LVRR
PLAN ST-288

2 DATE JMB

NEW BUNGALOW & WIRING INSTALLED

IN SERVICE:
PER:

0501.0019.001.dgn

FOOTE AVENUE - DURYEA, PA.
AUTOMATIC HIGHWAY CROSSING
WARNING DEVICES

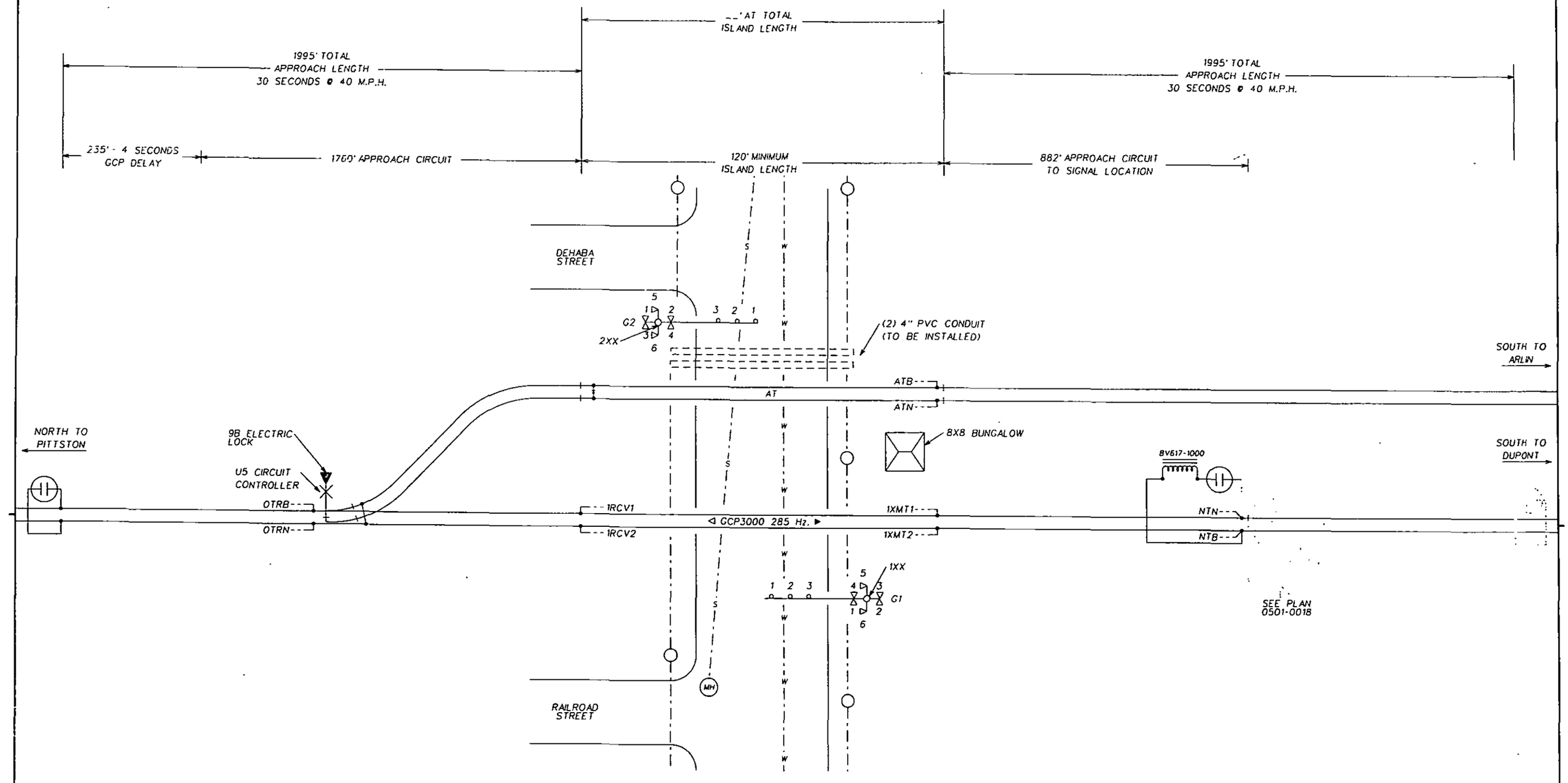
TITLE, INDEX & REVISIONS

LOCATION:	DURYEA, PA
LINE/BRANCH:	SUSQUEHANNA BRANCH
MILEPOST:	1.91

ISSUE DATE:

REV.	1
PLAN:	0501-0019
SHEET	1

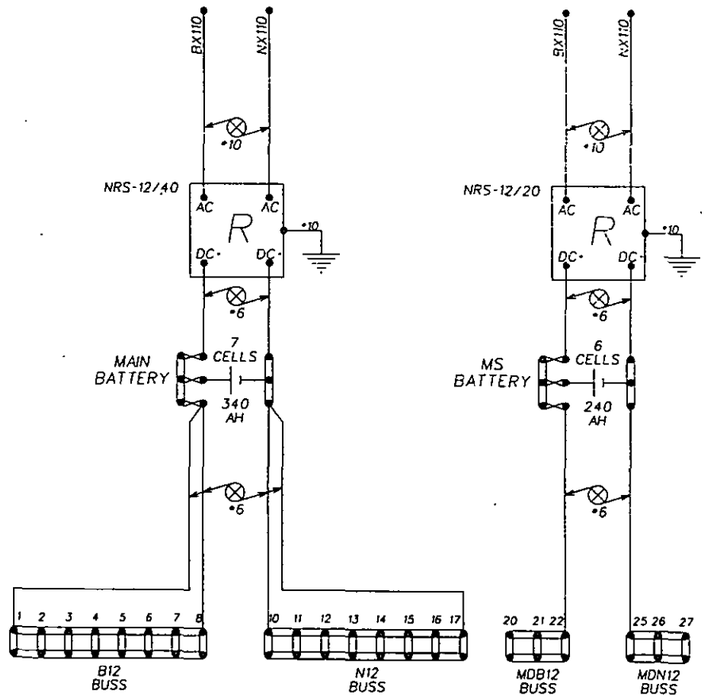
"The Road of Anthracite"
The Reading & Northern RR

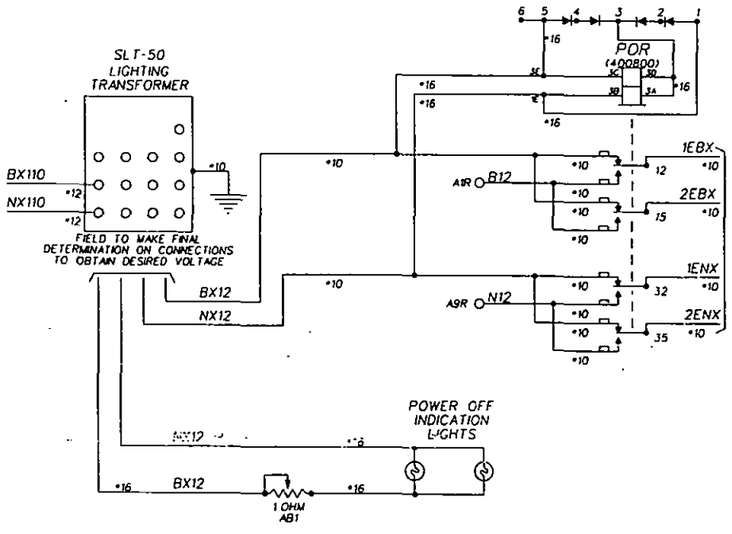


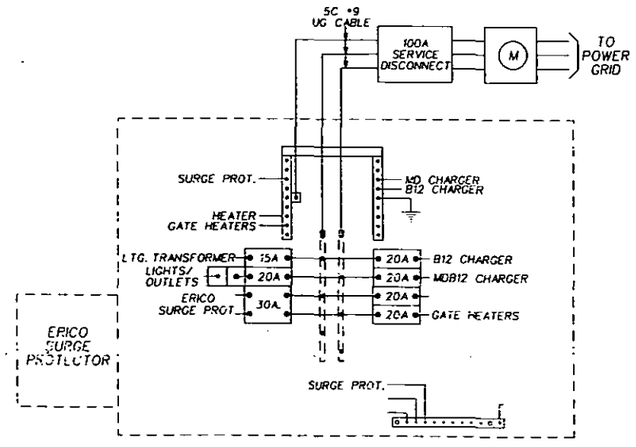
FOOTE AVENUE
DOT# 361-435P

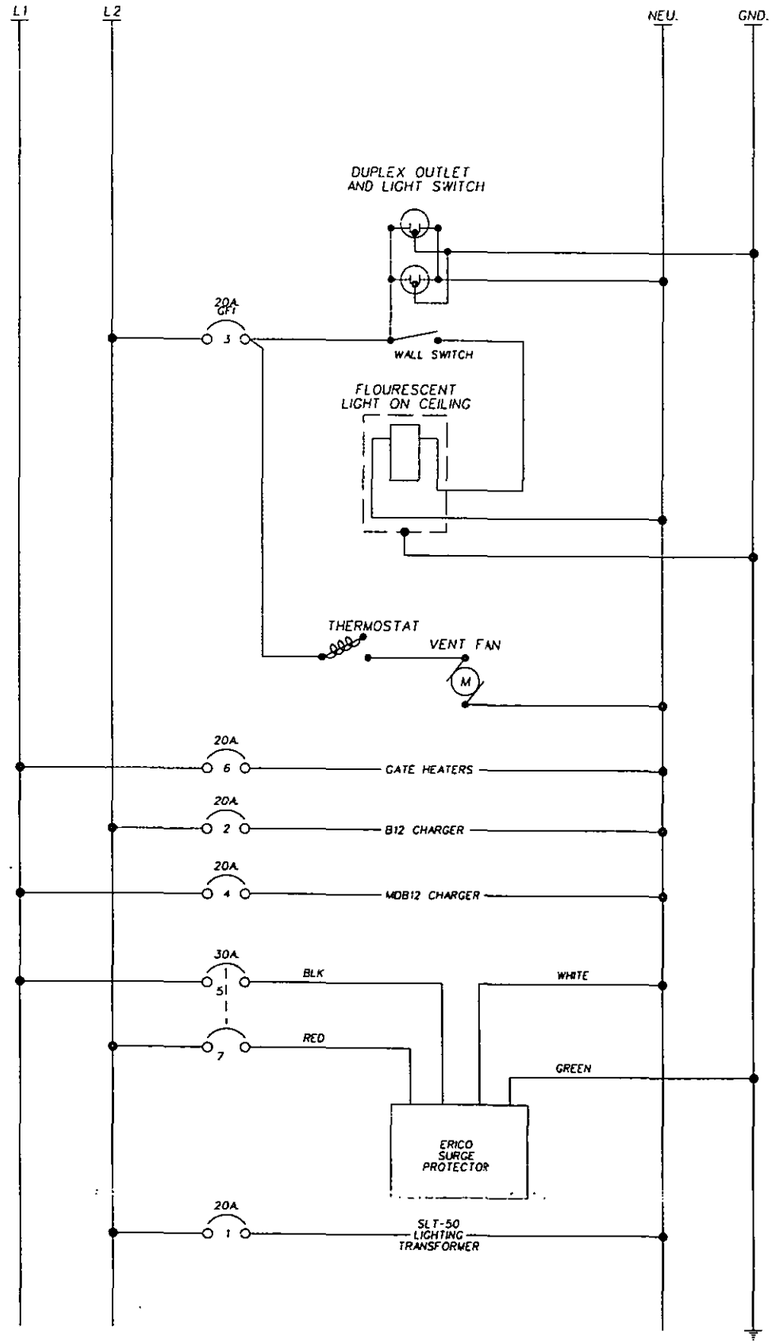
0501.0019.002.dgn

FOOTE AVENUE - DURYEA, PA. AUTOMATIC HIGHWAY CROSSING WARNING DEVICES	LOCATION PLAN	LOCATION:	DURYEA, PA	ISSUE DATE:	"The Road of Anthracite" The Reading & Northern RR
		LINE/BRANCH:	SUSQUEHANNA	REV. 1	
		MILEPOST:	1.91	PLAN: 0501-0019	
				SHEET 2	









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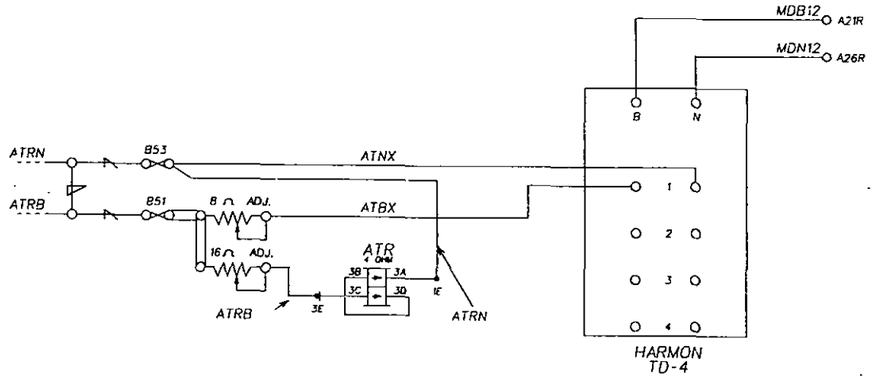
FOOTE AVENUE - DURYEA, PA
AUTOMATIC HIGHWAY CROSSING
WARNING DEVICES

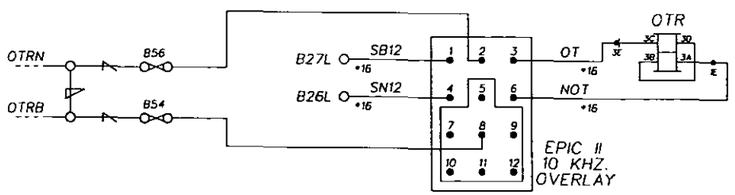
POWER DISTRIBUTION

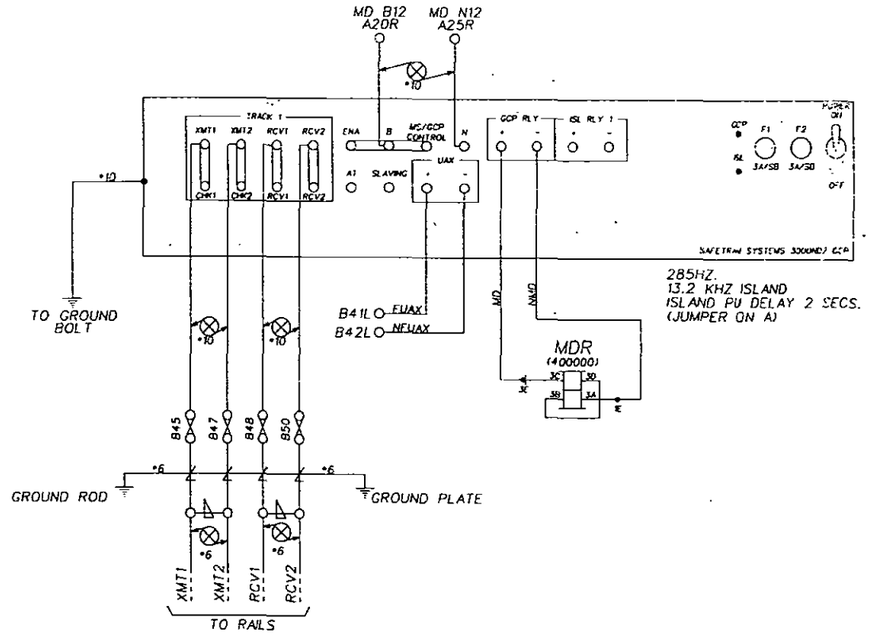
LOCATION:	DURYEA, PA
LINE/BRANCH:	SUSQUEHANNA BRANCH
MILEPOST:	1.91

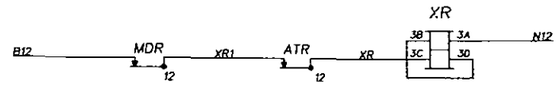
ISSUE DATE:
REV. 1
PLAN: 0501-0019
SHEET 3

"The Road of Anthracite"
The Reading & Northern RR







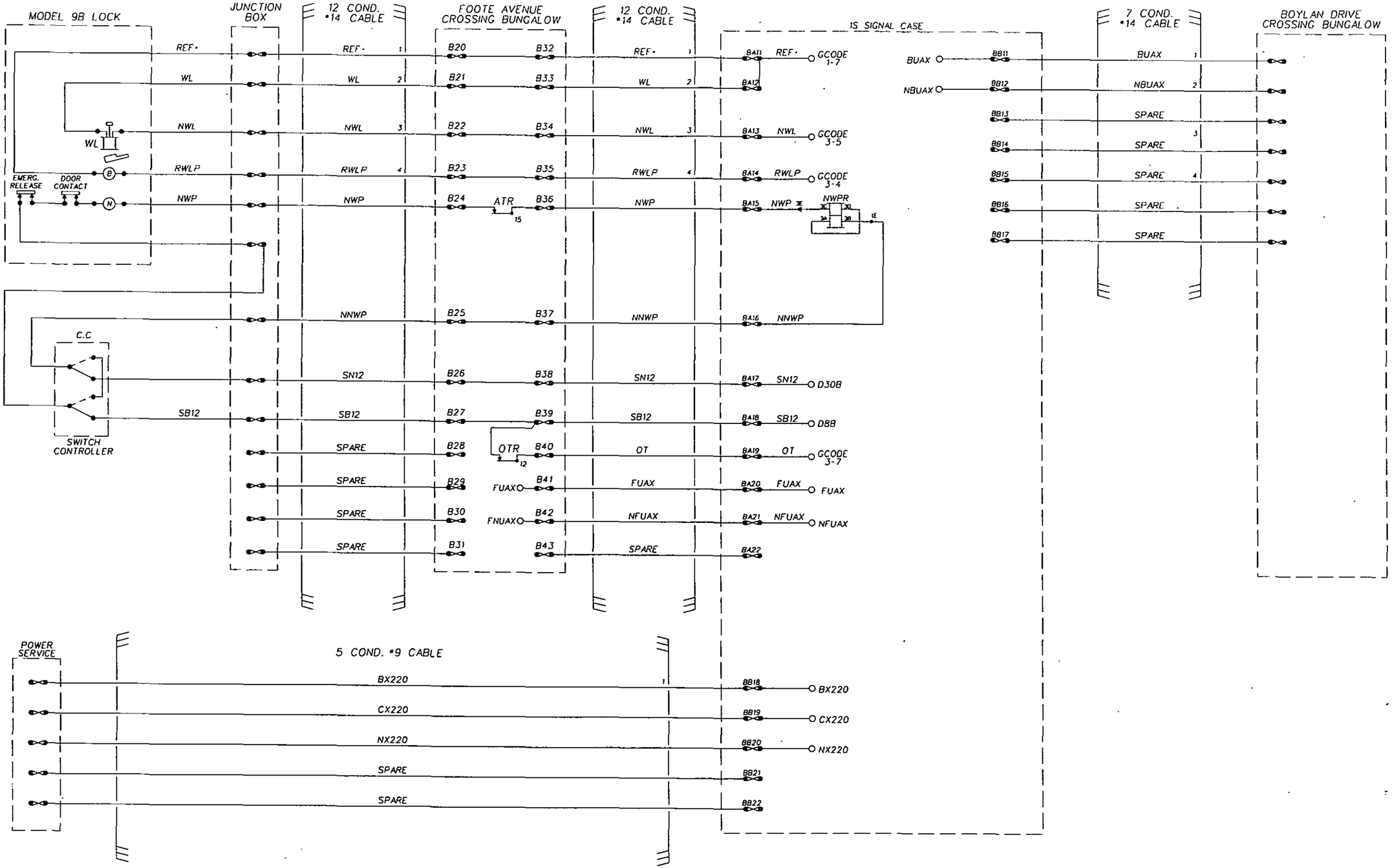


NOTES: ALL WIRING TO BE *16
UNLESS OTHERWISE NOTED

0501.0019.004.dgn

FOOTE AVENUE - DURYEA, PA AUTOMATIC HIGHWAY CROSSING WARNING DEVICES	TRAIN DETECTION CIRCUITS	LOCATION:	DURYEA, PA	ISSUE DATE:
		LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1
		MILEPOST:	1.91	PLAN: 0501-0019 SHEET 4

"The Road of Anthracite"
The Reading & Northern RR



NOTES: ALL WIRING TO BE #16
UNLESS OTHERWISE NOTED

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FOOTE AVENUE - DURYEA, PA AUTOMATIC HIGHWAY CROSSING WARNING DEVICES	ELECTRIC LOCK AND SIGNAL CIRCUITS	LOCATION:	DURYEA, PA	ISSUE DATE:
		LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1
		MILEPOST:	1.91	PLAN: 0501-0019
				SHEET 5

"The Road of Anthracite"
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3000 GCP APPLICATION HISTORY CARD
(For Units equipped with Processor Module 80014, 80044, or 80214)

Equipment: 3000☐ 3000D2☐ 3000D2L☐ 3000ND☐ 3000ND2■ 3008☐ 3008D2☐ DATE INSTALLED: XX-XX-XX
Unit/Serial No: XXXX Crossing No: 361-435P Island Frequency: T1: 13.2 kHz T2: ____ kHz
Crossing Name: FOOTE AVENUE City/Town: DURYEA State: PENNSYLVANIA

PROGRAMMING HISTORY

■ press PROGRAM key	Initial Programmed Value Date: XX/XX/XX	Program Change Date: ____	Program Change Date: ____
NUMBER OF TRACKS (Transceiver Modules)	1■ 2☐	1☐ 2☐	1☐ 2☐
C10 FREQUENCY (MS/GCP)	T1: 430 Hz T2: ____ Hz	T1: ____ Hz T2: ____ Hz	T1: ____ Hz T2: ____ Hz
UNIDIRECTIONAL/BIDIRECTIONAL	T1: UNI☐ BI■ T2: UNI☐ BI☐	T1: UNI☐ BI☐ T2: UNI☐ BI☐	T1: UNI☐ BI☐ T2: UNI☐ BI☐
XMIT LEVEL	T1: MAX☐ MED■ T2: MAX☐ MED☐	T1: MAX☐ MED☐ T2: MAX☐ MED☐	T1: MAX☐ MED☐ T2: MAX☐ MED☐
WARNING TIME SELECTED	T1: 30 Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
APPROACH DISTANCE → SELECTED	T1: 1995 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
APPROACH DISTANCE → COMPUTED	T1: 2168 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
UAX1 PICKUP DELAY (UAX) (0-OFF)	0-OFF Sec.	____ Sec.	____ Sec.
ENA/UAX2 DELAY (0-ENA)	____ Sec.	____ Sec.	____ Sec.
ISLAND DISTANCE (Between transmit & receive track wire connections)	T1: 120 Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
NUMBER OF DAX'S (For 3000ND and 3000ND2 units, set to 0)	0■ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐	0☐ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐	0☐ 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐
DAX A TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX A DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX A WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX B TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX B DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX B WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX C TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX C DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX C WARNING TIME	____ Sec.	____ Sec.	____ Sec.
DAX D TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
DAX D DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
DAX D WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX E TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX E DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX E WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX F TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX F DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX F WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX G TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX G DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX G WARNING TIME	____ Sec.	____ Sec.	____ Sec.
C20 DAX H TRACK ASSIGNMENT	T1:☐ T2:☐	T1:☐ T2:☐	T1:☐ T2:☐
C20 DAX H DISTANCE (0-PREEMPT)	____ Ft.	____ Ft.	____ Ft.
C20 DAX H WARNING TIME	____ Sec.	____ Sec.	____ Sec.
SLAVING MASTER/SLAVE	MASTER:■ SLAVE:☐	MASTER:☐ SLAVE:☐	MASTER:☐ SLAVE:☐
PASSWORD ENABLED	DISABLED:■ ENABLED:☐	DISABLED:☐ ENABLED:☐	DISABLED:☐ ENABLED:☐
RECORDER INSTALLED	NOT INSTALLED:■ INSTALLED:☐ EXTERNAL NODE•____	NOT INSTALLED:☐ INSTALLED:☐ EXTERNAL NODE•____	NOT INSTALLED:☐ INSTALLED:☐ EXTERNAL NODE•____
RS-232-C BAUD RATE	____ bps	____ bps	____ bps
RS-232-C DATA BITS	7:☐ 8:☐	7:☐ 8:☐	7:☐ 8:☐
RS-232-C STOP BITS	1:☐ 2:☐	1:☐ 2:☐	1:☐ 2:☐
RS-232-C PARITY	NONE☐ ODD:☐ EVEN☐ SPACE:☐ MARK☐	NONE☐ ODD:☐ EVEN☐ SPACE:☐ MARK☐	NONE☐ ODD:☐ EVEN☐ SPACE:☐ MARK☐
DATE (eg. THU 03 APR 1997)	____	____	____
TIME (eg. 11:25:43 AM)	____	____	____
DAYLIGHT SAVINGS	ON:☐ OFF:☐	ON:☐ OFF:☐	ON:☐ OFF:☐

C10 DualFrequency operation available only in Dual-Frequency 3000 GCP's equipped with 80214 processors
C20 Applicable to 3008 and 3008D2 8-DAX GCP's only

EXPANDED PROGRAMMING HISTORY (Function Mode)

■ press PROGRAM key	Initial Programmed Value Date: 7/18/14	Program Change Date: ____	Program Change Date: ____
SWITCH TO MS (Enter EZ value)	T1: 10 EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ
TRANSFER DELAY MS TO GCP (0-OFF)	T1: 0-OFF Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
C70 TRANSFER MS TO GCP PRIME (when PRIME PREDICTION OFFSET is on)	T1: ON☐ OFF:■ T2: ON☐ OFF:■	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX A	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX B	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX C	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX D	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX E	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX F	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX G	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C70 TRANSFER MS TO GCP DAX H	T1:☐ T2:☐ ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
PRIME PREDICTION OFFSET (0-OFF)	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.	T1: ____ Ft. T2: ____ Ft.
PICKUP DELAY PRIME	10 Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX A	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX B	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX C	____ Sec.	____ Sec.	____ Sec.
PICKUP DELAY DAX D	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX E	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX F	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX G	____ Sec.	____ Sec.	____ Sec.
C20 PICKUP DELAY DAX H	____ Sec.	____ Sec.	____ Sec.
COMPENSATION VALUE	T1: 1300 T2: ____	T1: ____ T2: ____	T1: ____ T2: ____
C30 SPEED LIMITING	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐
C30 ENHANCED DETECTION (ED)	T1: ON☐ OFF:■ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐
C30 BACK TO BACK T1 AND T2 (When ED is on)	NO☐ YES:☐	NO☐ YES:☐	NO☐ YES:☐
C30 STATION STOP TIMER	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.	T1: ____ Sec. T2: ____ Sec.
NUMBER OF TRACK WIRES	T1: 4:■ 6:☐ T2: 4:■ 6:☐	T1: 4:☐ 6:☐ T2: 4:☐ 6:☐	T1: 4:☐ 6:☐ T2: 4:☐ 6:☐
C30 LOW EX ADJUSTMENT	T1: 0 T2: ____	T1: ____ T2: ____	T1: ____ T2: ____
C40 LOW EZ DETECTION	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐	T1: ON☐ OFF:☐ T2: ON☐ OFF:☐
C40 LOW EZ DETECTION TIMER (When low EZ detection is on)	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.
C40 POSITIVE START (0-OFF) (Enter EZ value)	T1: 0-OFF EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ	T1: ____ EZ T2: ____ EZ
C40 POSITIVE START TIMEOUT (0-NONE) (When positive start is on)	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.	T1: ____ Min. T2: ____ Min.
C40 SET AT OPERATION	NORMAL:■ DIAGNOSTIC:☐	NORMAL:☐ DIAGNOSTIC:☐	NORMAL:☐ DIAGNOSTIC:☐
C5,60 DIAGNOSTIC MESSAGES	ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C5,60 DAX MESSAGES	ON☐ OFF:☐	ON☐ OFF:☐	ON☐ OFF:☐
C50 ADVANCE PREEMPT TIMER	OFF Sec.	____ Sec.	____ Sec.
C70 MOTION SENSING LEVEL (0-NORMAL)	T1: 0-NORMAL % T2: ____ %	T1: ____ % T2: ____ %	T1: ____ % T2: ____ %

C30 Applicable only to 3000 GCP's equipped with 80044 or 80214 processors.
C40 Applicable only to 3000 GCP's equipped with 80214 processors with A01C revision and later
C50 Applicable only to 3000 GCP's equipped with 80214 processors with A01E revision and later
C60 Applicable only when a SEAR node has been programmed into the GCP from a SEAR
C70 Applicable only to 3000 GCP's equipped with 80214 processors with A01H revision and later

CALIBRATION HISTORY

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

CALIBRATION DATE:

80012 DC VOLTAGE READINGS AFTER CALIBRATION		CALIBRATION HISTORY EZ/EX VALUES (TRACK UNOCCUPIED)		LINEARIZATION HISTORY: HARDWIRE SHUNT AT TERMINATION SHUNT			HARDWIRE SHUNT AT 50 PERCENT POINT OF TRACK: NO LINEARIZATION		LINEARIZATION COMPLETE	
MAIN	STANDBY	EZ	EX	EZ VALUE	EX VALUE	EZ/2 VALUE	EZ	EX	STEP - -	EZ
Z1-	Z1-									
Z2-	Z2-									
EAST/NORTH	MAIN									
WEST/SOUTH	MAIN									
EAST/NORTH	STANDBY									
WEST/SOUTH	STANDBY									

FOOTE AVENUE - DURYEA, PA
AUTOMATIC HIGHWAY CROSSING WARNING DEVICES

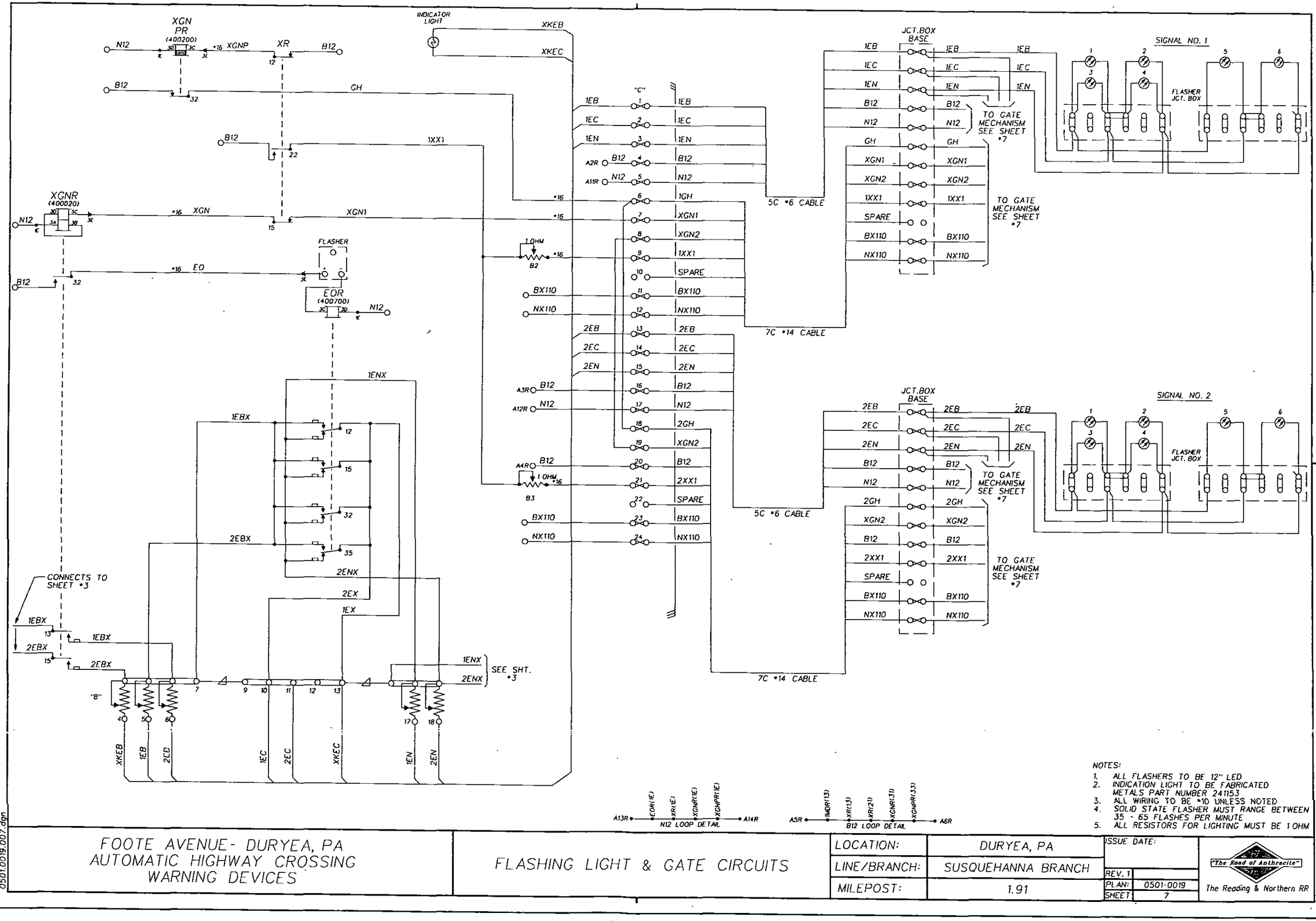
GCP 3000 PARAMETERS

LOCATION:	DURYEA, PA
LINE/BRANCH:	SUSQUEHANNA BRANCH
MILEPOST:	1.91

ISSUE DATE:
REV. 1
PLAN: 0501-0019
SHEET 6

"The Road of Anthracite"
The Reading & Northern RR

0501.0019.006.dgn



NOTES:

1. ALL FLASHERS TO BE 12" LED
2. INDICATION LIGHT TO BE FABRICATED METALS PART NUMBER 24115J
3. ALL WIRING TO BE #10 UNLESS NOTED
4. SOLID STATE FLASHER MUST RANGE BETWEEN 35 - 65 FLASHES PER MINUTE
5. ALL RESISTORS FOR LIGHTING MUST BE 1 OHM

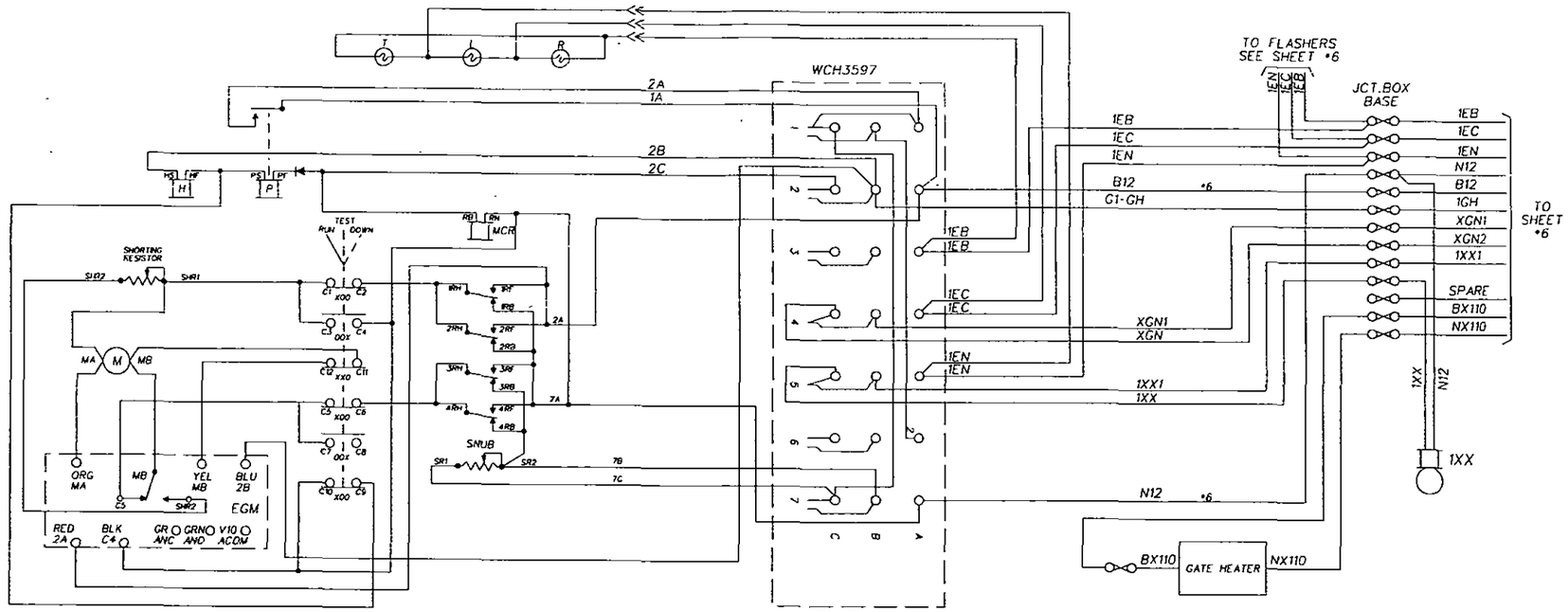
0501.0019.007.dgn

FOOTE AVENUE - DURYEA, PA
AUTOMATIC HIGHWAY CROSSING
WARNING DEVICES

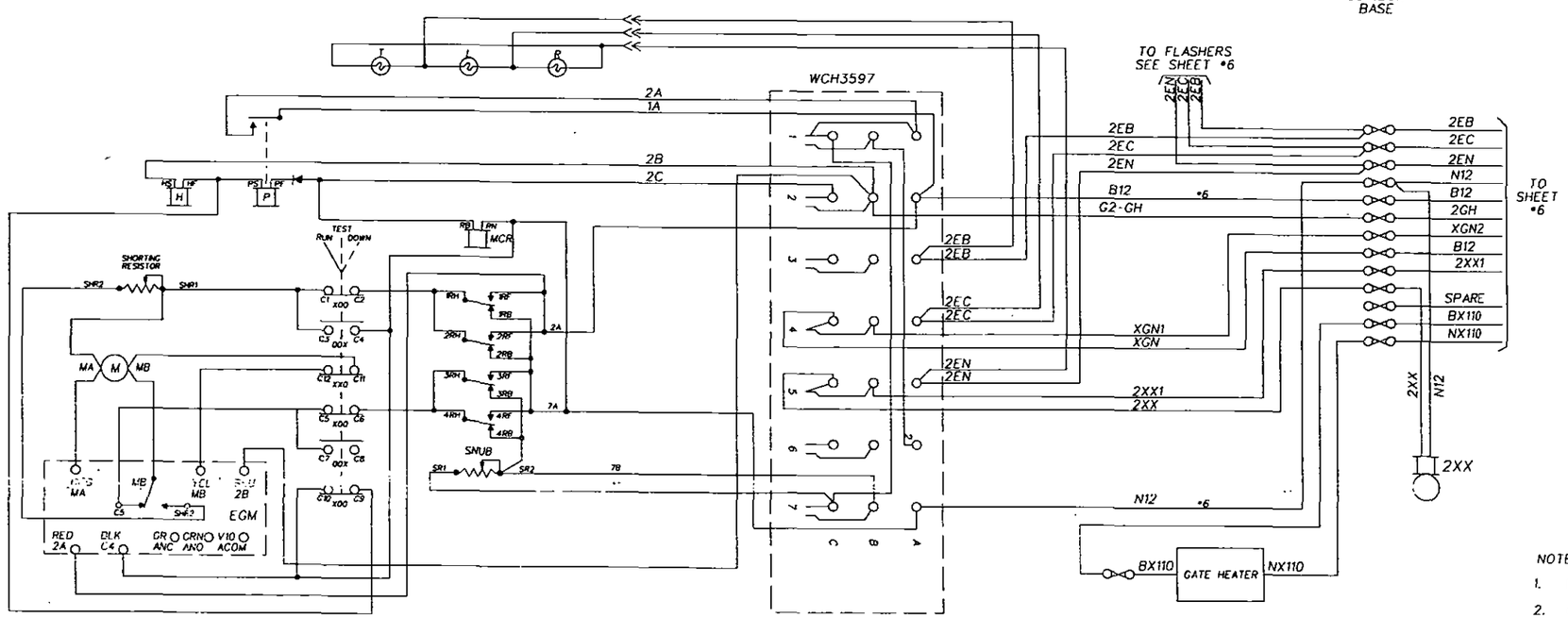
FLASHING LIGHT & GATE CIRCUITS

LOCATION:	DURYEA, PA	ISSUE DATE:	
LINE/BRANCH:	SUSQUEHANNA BRANCH	REV.	1
MILEPOST:	1.91	PLAN:	0501-0019
		SHEET	7

"The Road of Anthracite"
The Reading & Northern RR



GATE #1



GATE #2

NOTES:

1. BELLS TO BE ELECTRONIC VERSION
2. GATE MECHANISMS TO BE WESTERN CULLEN HAYES 3597

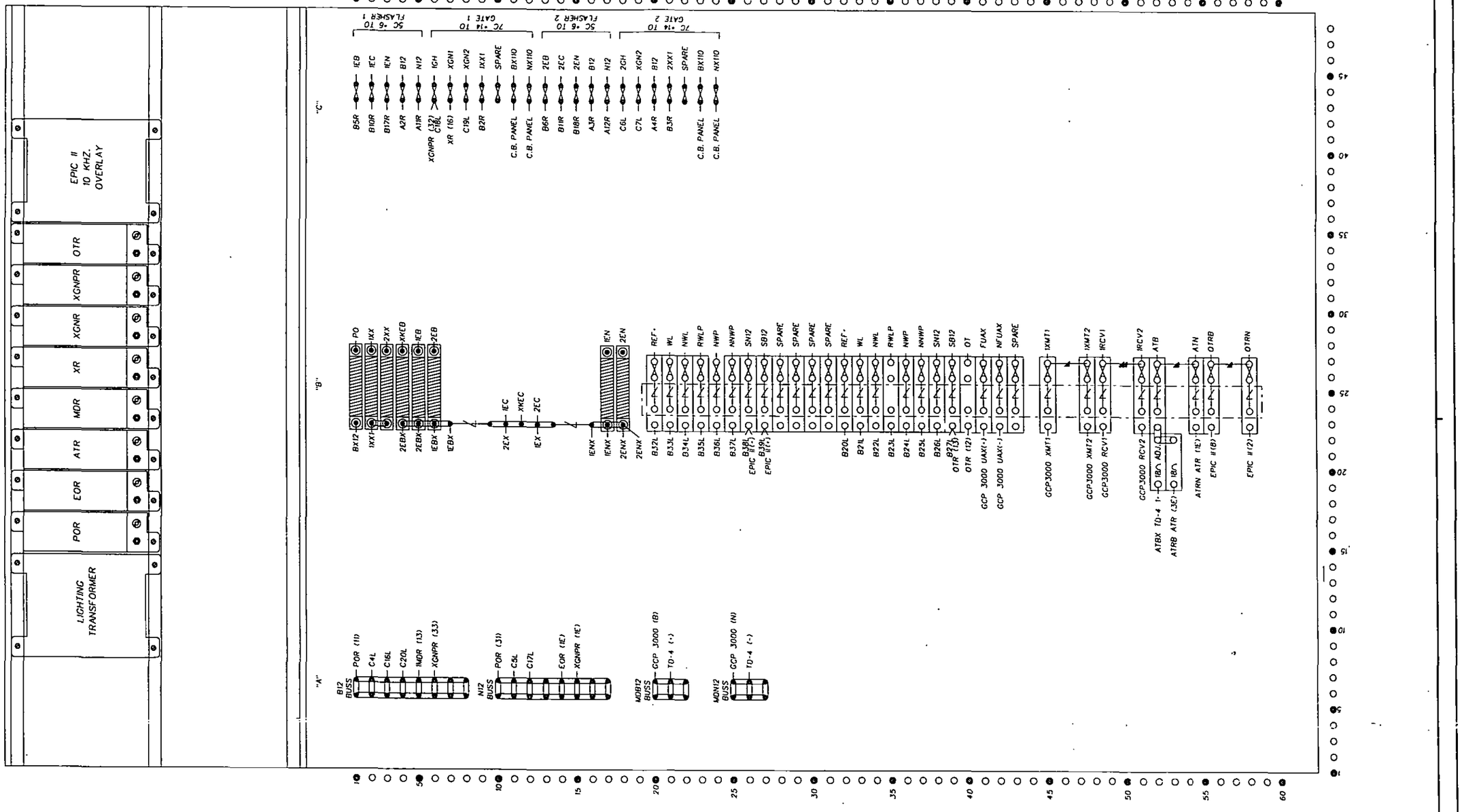
0501.0019.008.dgn

FOOTE AVENUE- DURYEA, PA
AUTOMATIC HIGHWAY CROSSING
WARNING DEVICES

GATE CONTROL CIRCUITS

LOCATION:	DURYEA, PA	ISSUE DATE:	
LINE/BRANCH:	SUSQUEHANNA BRANCH	REV. 1	
MILEPOST:	1.91	PLAN:	0501-0019
		SHEET	8

"The Road of Anthracite"
The Reading & Northern RR



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FOOTE AVENUE - DURYEA, PA AUTOMATIC HIGHWAY CROSSING WARNING SYSTEM	TERMINAL BOARD ARRANGEMENT	LOCATION:	DURYEA, PA
		LINE/BRANCH:	SUSQUEHANNA BRANCH
		MILEPOST:	1.91

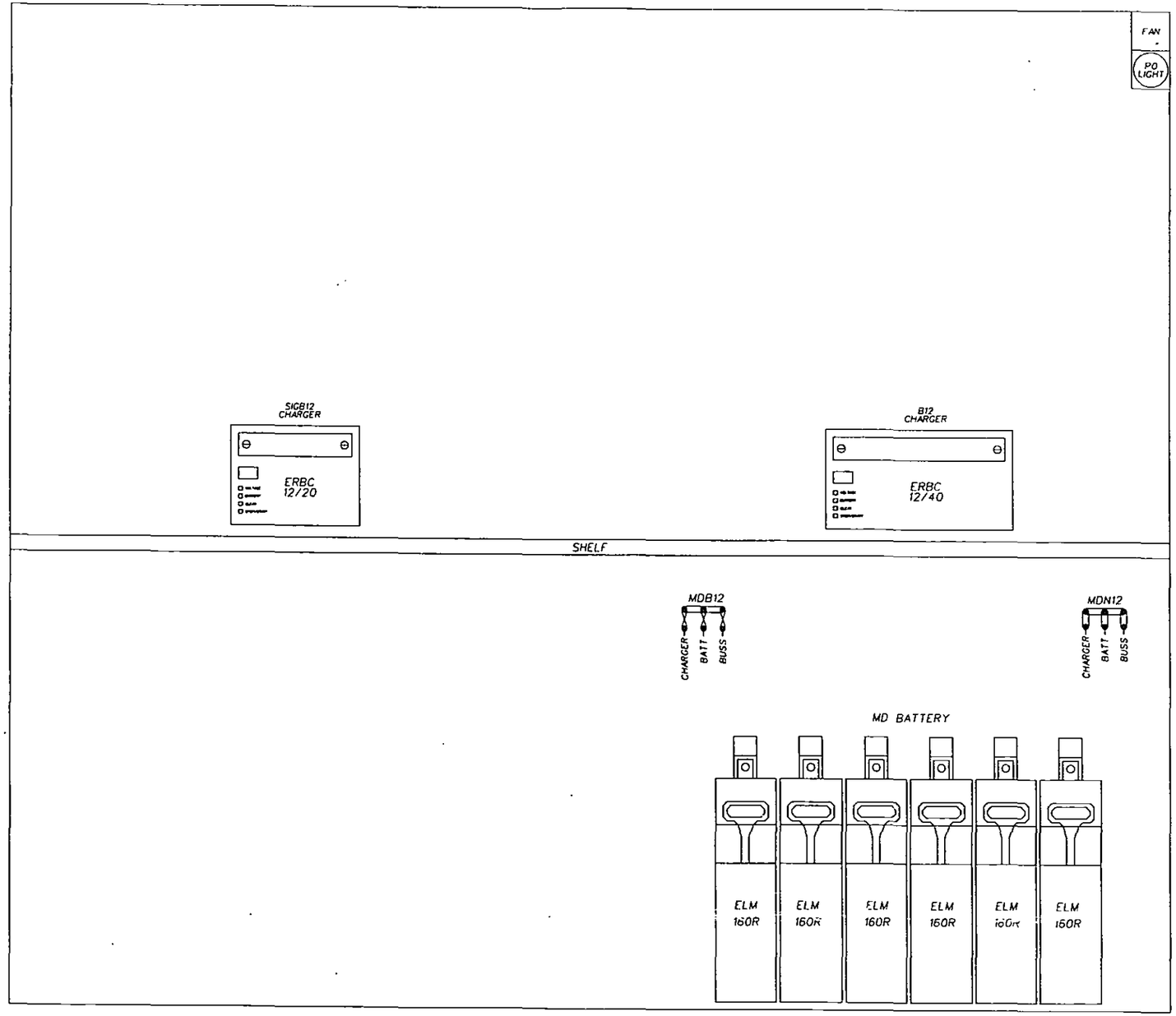
ISSUE DATE:

REV. 1

PLAN 0501-0019

SHEET 9

"The Road of Anthracite"
The Reading & Northern RR



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FOOTE AVENUE - DURYEA, PA
AUTOMATIC HIGHWAY CROSSING
WARNING SYSTEM

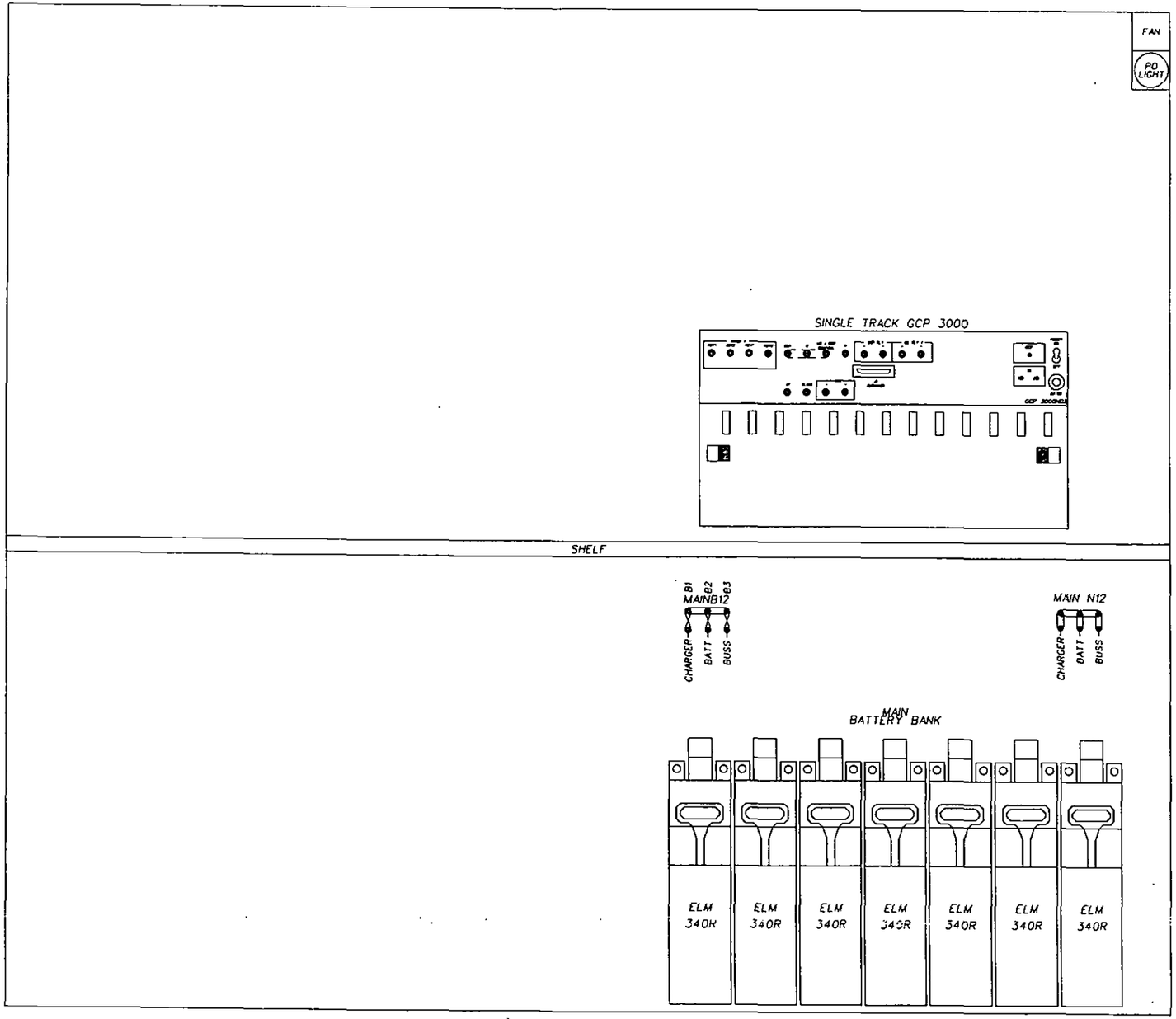
BUNGALOW LAYOUT - LEFT SIDE

LOCATION:	DURYEA, PA
LINE/BRANCH:	SUSQUEHANNA BRANCH
MILEPOST:	1.91

ISSUE DATE:

REV. 1	
PLAN	0501-0019
SHEET	10

"The Road of Anthracite"
The Reading & Northern RR



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FOOTE AVENUE - DURYEA, PA
AUTOMATIC HIGHWAY CROSSING
WARNING SYSTEM

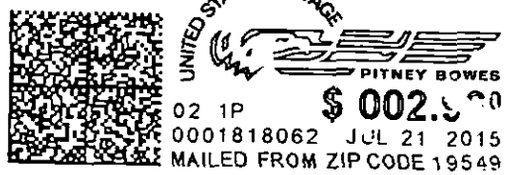
BUNGALOW LAYOUT - RIGHT SIDE

LOCATION:	DURYEA, PA
LINE/BRANCH:	SUSQUEHANNA BRANCH
MILEPOST:	1.91

ISSUE DATE:

REV. 1	
PLAN	0501-0019
SHEET	11

"The Road of Anthracite"
The Reading & Northern RR



READING BLUE MOUNTAIN
& NORTHERN RAILROAD COMPANY
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PORT CLINTON, PA 19549
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PA PUBLIC UTILITIES COMMISSION
P.O. BOX 3265
HARRISBURG, PA 17105