



Norfolk Southern Corporation  
Communications and Signal Department  
1200 Peachtree Street, N.E., Box 123  
Atlanta, Georgia 30309

August 6, 2012  
CX0128867

Attn: Aaron T. Toliver

Please reference your email to Cayela Wimberly, regarding the installation of automatic warning devices at 1625E Road (TR-394), near Fairfield, Wayne County, Illinois, DOT: 724 725D, MP: 114.98-W.

We are providing to you, the detailed estimate, material list and preliminary engineering for this project. Form 3 was filed under ICC Docket T12-0062.

Please have the responsible governmental entity (state, county or city) make the necessary adjustments as noted on page one of our plans, (note 11 and 15) to the culverts and road, prior to the arrival of our construction gang for the installation of this project.

In order to protect state and railroad personnel the following is required: If state, city or county personnel and equipment will be within 25 feet of any track, prior notification to the railroad must be given before any work by these forces or their contractor can commence. To coordinate your work please contact Division Engineer, Mr. Bob Wright at 217-425-2063.

If you have any questions or concerns, please call Mike Rappatta at 404-582-6377 or email at [mike.rappatta@nscorp.com](mailto:mike.rappatta@nscorp.com) .

A handwritten signature in blue ink, appearing to read "Mike Rappatta". The signature is fluid and cursive, with a long horizontal stroke at the end.

STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

Petition for permission to make a major change in crossing protection, or to install new protection under 92 Illinois Administrative Code 1535.400 (d)

Date: August 2, 2012

To the Illinois Commerce Commission:

The petitioner Norfolk Southern Railway Company shows

- (1) That it is a railroad company operating a line of railroad in the State of Illinois.
- (2) That petitioner proposes and hereby makes application for authority to make a major change in crossing protection, or to install new protection, under 92 Illinois Administrative Code 1535.400 (d) adopted by this Commission.
- (3) That the location of the crossing, the nature of protection now established and proposed to be established, and other pertinent facts in connection therewith, are set forth in the statement attached to and forming part of this petition.
- (4) That petitioner's reasons and purpose, with reference to its said proposal are

**Modification of Grade Crossing Warning Devices requested by the Illinois Commerce Commission at: 1625E Road/TR 394 near Fairfield, Wayne County, Illinois DOT: 724725D, MP. 114.98-W File No. CX0128867 Project 04.0694**

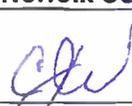
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- (5) That the facts set forth in this petition and in the statement and plans or plats attached thereto, are, all of them, true and correct to the best of petitioner's knowledge and belief.

WHEREFORE, the petitioner prays that the Commission will, if deemed desirable by the Commission, set the aforesaid matter for hearing, and that the Commission enter an order or adopt a resolution consenting to and granting authority for the making of the said proposed changes in or additions to crossing protection.

Norfolk Southern Railway Company

By

  
C.J. Wimberly, Administrator  
Highway Grade Crossings  
404-527-1234

Thomas W. Ambler  
(Attorney for Petitioner)

Norfolk Southern Corporation  
Three Commercial Place  
Norfolk, VA 23510-2191  
(Attorney's Address)

Statement, attached to and part of an application for permission to make a major change in crossing protection or to install new protection, under 92 Ill. Adm. Code 1535.400(d).

1. Name of Railroad Company Norfolk Southern Railway Company
2. Crossing Number 724725D
3. Village or City Near Fairfield
4. Name of Street or Highway 1625E/TR 394
5. Public Agency Maintaining Highway County
6. Protection now established: (Give full description. Indicate the hours of any manual protection.)  
Reflectorized crossbucks with stop signs.
7. Protection desired: (Give details)  
Flashing lights with gates and bell, controlled by constant warning time detection equipment.
8. Number of main tracks One Other tracks None
9. Number of passenger train movements: 6 a.m. to 6 p.m. None 6 p.m. to 6 a.m. None
10. Number of freight train movements: 6 a.m. to 6 p.m. Eight 6 p.m. to 6 a.m. Seven
11. Approximate number of switch movements: 6 a.m. to 6 p.m. None 6 p.m. to 6 a.m. None
12. Maximum speed of trains at crossing on each track in each direction  
Track 1 N/E Bound 50 mph S/W Bound 50 mph  
Track 2 N/E Bound \_\_\_\_\_ mph S/W Bound \_\_\_\_\_ mph  
Track 3 N/E Bound \_\_\_\_\_ mph S/W Bound \_\_\_\_\_ mph
13. Passenger platforms served by tracks within the limits of track circuits, if any None
14. Where automatic signals or gates are proposed, approximately number of train or engine movements daily which would cause false indications or operation None

15. Nature and approximate amount of street or highway traffic over crossing  
**150 AADT**

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16. In addition to the information listed hereinbefore in Form 3, attach a track plan or plat of the proposed crossing. This plan should show:

- (a) Width and surface of highway.
- (b) Highway intersections (including private driveways to be so indicated) and location of established highway signs or signals within 100 feet of crossing.
- (c) Location of tracks, switches and other railroad facilities such as block signals, etc. within limits of track circuits, present and/or proposed.
- (d) Where automatic protection is proposed, show proposed location of signals (sidelights, cantilevers, etc., if any).
- (e) Show the length of each operation track section within the control limits of the crossing protection and its function.

ADDITIONAL INFORMATION

**Drawings attached for question 16.**

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VERIFICATION

I, **C.J. Wimberly**, first being duly sworn upon oath depose and say that I am **Administrator - Highway Grade Crossings** of **Norfolk Southern Railway Company**, an **Virginia** corporation; that I have read the above and foregoing petition by me subscribed and know the contents thereof; that said contents are true in substance and in fact, except as to those matters stated upon information and belief, and as to those, I believe same to be true.

  
\_\_\_\_\_  
**Administrator - Highway Grade  
Crossings**



**Detailed Estimate for Grade Crossing Warning Devices**

City/State: FAIRFIELD, IL

Road: 1625E ROAD (TR 394)

MilePost: 114.98-W

DOT/AAR: 724725D

State Proj. No.:

County: WAYNE

S&E Proj. No.: 04.0694

File Number:

Man Days: 88

<b>***Purchases - Others***</b>		
Meals and Lodging:		\$11,827.20
Rental of Equipment:		\$12,320.00
(2 Trucks, 1 Backhoe w/ Trailer and 1 Pipe-Pusher for 22 Days)		
Construction Supervision Vehicle:		\$2,201.53
Purchases - Other Total:		\$26,348.73
<b>***Material And Additives***</b>		
Material Cost:		\$87,841.00
Sales and Use Tax:		\$4,392.00
Material Handling Freight:		\$4,392.03
Material Total:		\$96,625.03
<b>***Labor And Additives***</b>		
Labor Cost:		\$24,640.00
(4 man crew at \$1,120.00 a day for: 22 days)		
Payroll Tax & Overheads:		\$32,731.78
Preliminary Engineering:		\$9,898.29
Construction Supervision:		\$6,955.87
Labor Total:		\$74,225.94
	Project Cost:	\$197,199.70
	Scrap / Salvage Credit:	\$0.00
	<b>Project Total:</b>	<b>\$197,200.00</b>

Estimated on: 01-Aug-12

Estimated by: n5s2v

**Estimate valid for 1 year from date of estimate**



Highway Crossing Signalization Program - Material List

Do not substitute items without permission from S & E Engineering

City:	FAIRFIELD
Road:	1625E ROAD (TR 394)
Mile Post:	114.98-W
Drawing Number:	SE0215P
State ProjectNumber:	
County:	WAYNE
A A R Number:	724725D
Project Number:	04.0694
File Number:	
New File Number:	CX0128867
WBS:	F-00278
Store Number:	
Supervisor:	A.R. ETHERTON
Tax Code:	
Vendor to supply the following copies after pricing:  1 Set - Material Management with original Invoice 2 Sets - with plans shipped in car with material 1 Set - S&E Gen. Supt. Construction w/copy of invoice	

Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed			Quantity Returned (Credit)	Special Instructions
							Date Quan.	Date Quan.	Date Quan.		
3	670-360693-4	EA	\$5.55	\$16.65	AAR/DOT NUMBER PLATE/DECAL, ORDER 3 PER PROJECT. 60 DAY LEAD TIME. SUPPLIED BY S'TRAN.						
1	165-006505-4	EA	\$1,075.23	\$1,075.23	AC SERVICE, COMPLETE LESS METER BASE, ASSEMBLED ON 30' POLE						
13	105-288384-4	EA	\$271.16	\$3,525.08	BATTERY,GNB 368AH MODEL 50G15 SINGLE CELL 2.25 VOLTS, FOR USE WITH CROSSINGS DESIGNED AFTER 09/09						
1	001-000011-4	EA	\$5,000.00	\$5,000.00	BERM WALL						
2	670-980689-4	EA	\$75.48	\$150.96	BRACKET HIGH WIND, (RIGID 3'), WIG- 191036, WALRUS TUSK TYPE						
2	670-561375-4	EA	\$1,208.79	\$2,417.58	BRACKET, GATE SAVER, NEG385102GS, SPRING LOADED SWING AWAY ADAPTER FOR FIBERGLASS/ALUMINUM GATES, USE WITH GATE 38' AND LESS						
1	670-356949-4	EA	\$90.00	\$90.00	CABLE, 10' GENERATOR HOOK UP, SERRMI P/N 40524. FEMALE CONNECTOR						
350	465-939422-4	LF	\$2.92	\$1,022.00	CABLE, UG 12 CONDUCTOR NO 14 AWG SOLID EACH CONDUCTOR WITH 5/64 IN INSULATION 10 MIL						
350	465-292862-4	LF	\$1.36	\$476.00	CABLE, UG 2-6 TWISTED, S-23 OKONITE 113-12-3933 SOLID TINNED CONDUCTOR						
350	465-292929-4	LF	\$4.13	\$1,445.50	CABLE, UG 5 COND. NO. 6 AWG SOLID COPPER CABLE TO MEET NS CORP. SPEC. FOR SIGNAL						
300	465-791835-4	FT	\$3.54	\$1,062.00	CABLE, UG AC ENTRANCE 3C#6-7X OKONITE FMPF-L 094-078 TR W/G 1 X 8 7X W010 BRZ TAPE 600V PRODUCT CODE 206-11-6070						
80	165-544477-4	FT	\$2.61	\$208.80	CONDUIT, 4"x10' PVC, SCHEDULE 80 BELL CONNECTOR AT ONE END, 1/2 PT. GLUE IN KIT 670-123298-4						
2	670-664917-4	EA	\$90.11	\$180.22	CONNECTOR KIT, WELDED FAR RAIL, CONSISTING OF RUBBER HOSE PROPERLY DRILLED, BONDSTRAND, 1 SPLICING SLEEVE, 1 REDUCING SLEEVE, 3 CLAMPS, 1 TRACK CLIP, 1 WEB WELDED TRACK CONNECTOR, 1 WELD METAL, SAFETRAN 111359-2X						
2	670-632520-4	EA	\$79.69	\$159.38	CONNECTOR KIT, WELDED NEAR RAIL, CONSISTING OF, RUBBER HOSE PROPERLY DRILLED, BONDSTRAND, SPLICING SLEEVE, 1 REDUCING SLEEVE, 5 CLAMPS, 1 TRACK CLIP, 1 WEB WELDED TRACK CONNECTOR, 1 WELD METAL, SAFETRAN 111359-1X						

APPROVED BY STATE	APPROVED BY RAILROAD	CAR NUMBER	SEAL NUMBER
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Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed			Quantity Returned (Credit)	Special Instructions
							Date Quan.	Date Quan.	Date Quan.		
2	670-793404-4	EA	\$1,159.00	\$2,318.00	COUNTERWEIGHT PKAGE, 17-24'GATE S'TRAN S- MECH ONLY, STAINLESS, TO INCLUDE HUB, SUPPORT ARMS						
1	670-986650-4	EA	\$354.27	\$354.27	DISPOSAL, CONSTRUCTION DEBRIS AND CLEANING X'ING EQUIPMENT CONTAINER						
1	670-000004-4	EA	\$700.00	\$700.00	FCC LICENSE FOR MONITOR/RADIO						
8	670-000003-4	EA	\$255.85	\$2,046.80	FILL/STONE #57, QUANTITY IS BASED ON TRUCK LOAD PLUS DELIVERY COST						
2	670-015231-4	EA	\$599.40	\$1,198.80	FOUNDATION, DIXIE,S-2 GATE 2'6"X2'6"X5'6" ASSEMBLED						
2	670-257031-4	EA	\$422.36	\$844.72	GATE ARM, FIBERGLASS-ALUMINUM, 17-24 FT, INCLUDES GATE GUARD FOR GATE LIGHT CABLE. HIGH INTENSITY VERTICAL STRIPES. NEG P/N 8003-244NFS/CG, SSC T18115						
1	670-675667-4	EA	\$30,238.53	\$30,238.53	GCP4000 - 1 TRK (2TC) - REDUNDANT - 40/40 AMP WIRED RACK EQUIP. FOR 6X8 XING SHELTER, (INCL. 2 TRK CHASSIS A80465, 2 TRK MODS. A80418, 2-SSCC A80405, 2 CPU A80403, 1 SEAR A80410, 1 DISPLAY A80407, , 2-40 AMP CHARGERS) IPN: 003131-1X						
1	670-477991-4	EA	\$410.00	\$410.00	KIT, GROUNDING ASSY FOR AL I/S INCLUDES 8 GRD RDS,200'#4WIRE,12 4 WIRE ONE-SHOTS. ERICO SBK206						
1	670-123298-4	EA	\$345.97	\$345.97	KIT, HARDWARE SUPPLIES REQUIRED X'ING P'CKAGES. WEB CONNECTORS FOR SHUNT(8EA) TAPE, AMPS,P'GUM PAINT,SLEEVES,TAGS,GLUE, 100 EA WHITE TAGS, )NE CAN BLUE MARKING PAINT ETC...						
2	670-764166-4	EA	\$1,240.19	\$2,480.38	LAMP ASSY, 5" MAST MTG. 2W IND. 20" BKGRD, FLX-12 W/BULB S'TRAN #042003-487XNS						
6	165-643547-4	EA	\$5.97	\$35.82	LAMP, 18 WATT 10 VOLT S-11 SC BAY 18S11/1SC CLEAR RWY SIGNAL UJ-71463 GE						
4	255-590880-4	EA	\$16.72	\$66.88	LOCK, AMERICAN LOCK MODEL H-10KA KEYED ALIKE TO PRIVATE KEYWAY D456 AND STAMPED "NS SIG"						
2	670-637778-4	EA	\$1,325.00	\$2,650.00	MAST, 5" ALUMINUM 13'10" WITH DOUBLE JCT. BOX BASE. S'TRAN P# 070519-11AX.						
2	670-850933-4	EA	\$3,925.01	\$7,850.02	MECHANISM, GATE MODEL S-60, WITH DEFROSTER AND MINI TRACKSIDE SENSOR S'TRAN # 0740007-X002B3						
1	000-000000-4	EA	\$5,000.00	\$5,000.00	MISC. EXPENSE, UNDERGROUND BORING						

APPROVED BY STATE	APPROVED BY RAILROAD	CAR NUMBER	SEAL NUMBER
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Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed			Quantity Returned (Credit)	Special Instructions
							Date Quan.	Date Quan.	Date Quan.		
2	210-863404-4	EA	\$4.38	\$8.76	NUT, RACO 408-1 SAFETLAN PART NO. 023408-1X INSULATED CR 02-316121						
2	670-001347-4	EA	\$57.10	\$114.20	PACKAGE, HARDWARE SIGN 5 IN. MOUNTING, SERRMI A1250-5, HARMON @200965-000, OR						
1	255-646807-4	EA	\$31.19	\$31.19	PADLOCK, SAFETLAN PART NO. 030399-29X SCREW TYPE FOR CIR CONTROLLER AND BTY. BOX						
1	670-514605-4	EA	\$11.11	\$11.11	PINNACLE, W-C SECT 1-11, 4" & 5" REF K1 110-8 OR SAFETLAN NO. @035045-503X						
1	165-902002-4	EA	\$303.43	\$303.43	PROTECTOR, SURGE 120/240VAC, ERICO P/N EPD120/240TDFL						
4	465-002899-4	EA	\$40.24	\$160.96	REEL, CABLE DISPOSABLE FOR CROSSING SIGNAL PACKAGES						
2	435-805560-4	EA	\$2.78	\$5.56	SAND, 25LB BAG FOR CABLE ENTRANCE INTO THE SHELTER						
1	670-027556-4	EA	\$2,629.77	\$2,629.77	SEARIII, ACCESSORY PACKAGE, W/2-ILOD, 1-E-BELL, 2-GTS, 1-GFT, 1-VHFC, WITHOUT MTSS/SEAR UNIT						
1	670-749325-4	EA	\$226.97	\$226.97	SHELF, FOLDING, FOR LAPTOP USE IN FARADAY 6X8 SHELTER, SAFETLAN 052852-128X						
1	670-755523-4	EA	\$9,325.16	\$9,325.16	SHELTER, 6'X8' ALUMN FARADAY W/CABLE CHUTES BEHIND TERMINAL BOARD, W/1EA EQUIPMENT RACK, W/GEN RECEPTICAL, BREAKER BOX GFI OUTLET FOR LAPTOP SHELF SAFETLAN 058400-68-85						
2	670-586967-4	EA	\$42.98	\$85.96	SHUNT COVER W/LAG SCREWS, 19"X19", SERRMI #40271, ORDER 1 PER SHUNT						
2	670-645460-4	EA	\$575.56	\$1,151.12	SHUNT, MULTI-FREQ. #62775-8621 SAFETLAN NARROW BAND						
3	670-393331-4	EA	\$37.43	\$112.29	SIGN CROSSING MALFUNCTION ASSEMBLY FOR 4" AND 5" MAST, SAFETLAN #T17215						
2	670-016346-4	EA	\$143.23	\$286.46	SIGN, X-BUCK, HI-INTENSIVE REFLECTIVE FRT. & BACK FOR ALL STATES, SAFETLAN# 035200-91X						
1	670-330382-4	RL	\$18.06	\$18.06	TAPE, THOR 3" DURATEC, ORANGE 1000' LENGTHS. "WARNING STOP DIGGING"						

Total Material: \$87,840.59

APPROVED BY STATE	APPROVED BY RAILROAD	CAR NUMBER	SEAL NUMBER
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TO LOUISVILLE

TO ST. LOUIS

75#

NOTES:

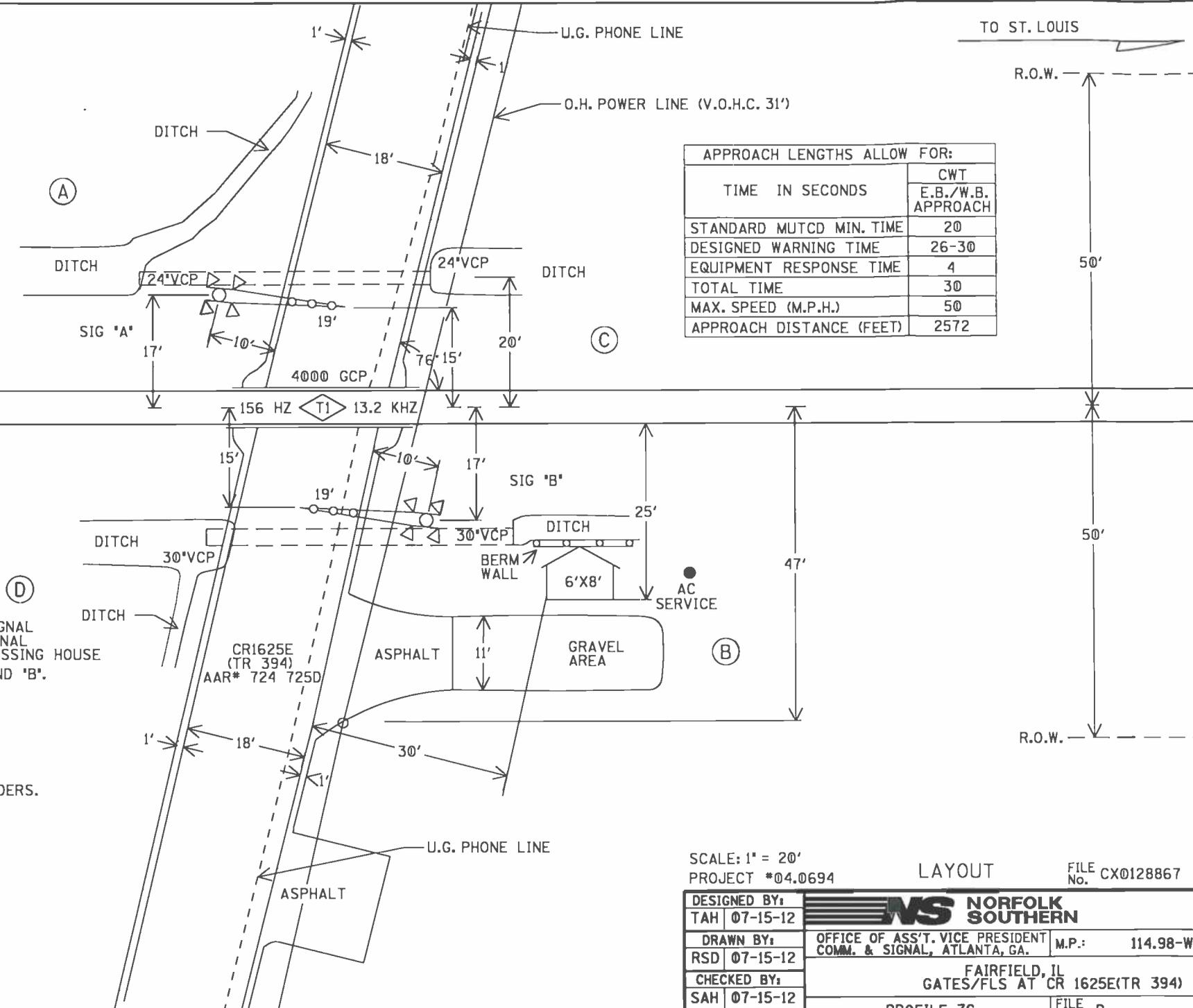
- 1. MAX. TRAIN SPEED 50 M.P.H.
- 2. LATITUDE N 38° 22' 05" LONGITUDE W 88° 24' 04" ELEVATION 454'
- 3. SIGNAL 'A' TO HAVE BELL.



APPROACH LENGTHS ALLOW FOR:		
TIME IN SECONDS	CWT	
	E.B./W.B. APPROACH	
STANDARD MUTCD MIN. TIME	20	
DESIGNED WARNING TIME	26-30	
EQUIPMENT RESPONSE TIME	4	
TOTAL TIME	30	
MAX. SPEED (M.P.H.)	50	
APPROACH DISTANCE (FEET)	2572	

MAINLINE 132\*RE CWR

- 4. LOCATE U/G UTILITIES & CABLE BEFORE DIGGING.
- 5. CROSSING LOCATED IN WAYNE COUNTY.
- 6. NEAREST STREET ADDRESS IS (NOT POSTED) CR800N 650' (NORTH)
- 7. NEAREST INTERSECTING STREET IS CR800N (NORTH)
- 8. DISTANCE TO NEAREST INTERSECTING STREET IS 500 FT.
- 9. FIELD FORCES TO TRIM/CUT DOWN SCRUB IN QUAD 'B'.
- 10. 25 CU. YRDS. OF FILL REQUIRED IN QUADRANT 'A' - FOR NEW SIGNAL  
35 CU. YRDS. OF FILL REQUIRED IN QUADRANT 'B' - FOR NEW SIGNAL  
15 CU. YRDS. OF FILL REQUIRED IN QUADRANT 'B' - FOR NEW CROSSING
- 11. COUNTY FORCES TO EXTEND CULVERTS 20' IN QUADRANT'S 'A' AND 'B'.
- 12. FIELD FORCES TO INSTALL BERM WALL IN QUADRANT 'B' FOR NEW CROSSING HOUSE.
- 13. RAISE/RELOCATE OVERHEAD LINE IN QUAD 'B'-CONTACT: POWER-WAYNE-WHITE ELEC. CO-OP (618) 842-2196
- 14. UTILITY IN THE AREA - CONTACT: PHONE-FRONTIER COMM. (800) 921-8101
- 15. COUNTY FORCES TO WIDEN ROAD TO 18' WITH 1' ASPHALT SHOULDERS.
- 16. FIELD FORCES TO WIDEN CROSSING PAD TO 24'.



(A) (B) (C) (D) = QUADRANT MARKERS

SCALE: 1" = 20'  
PROJECT #04.0694

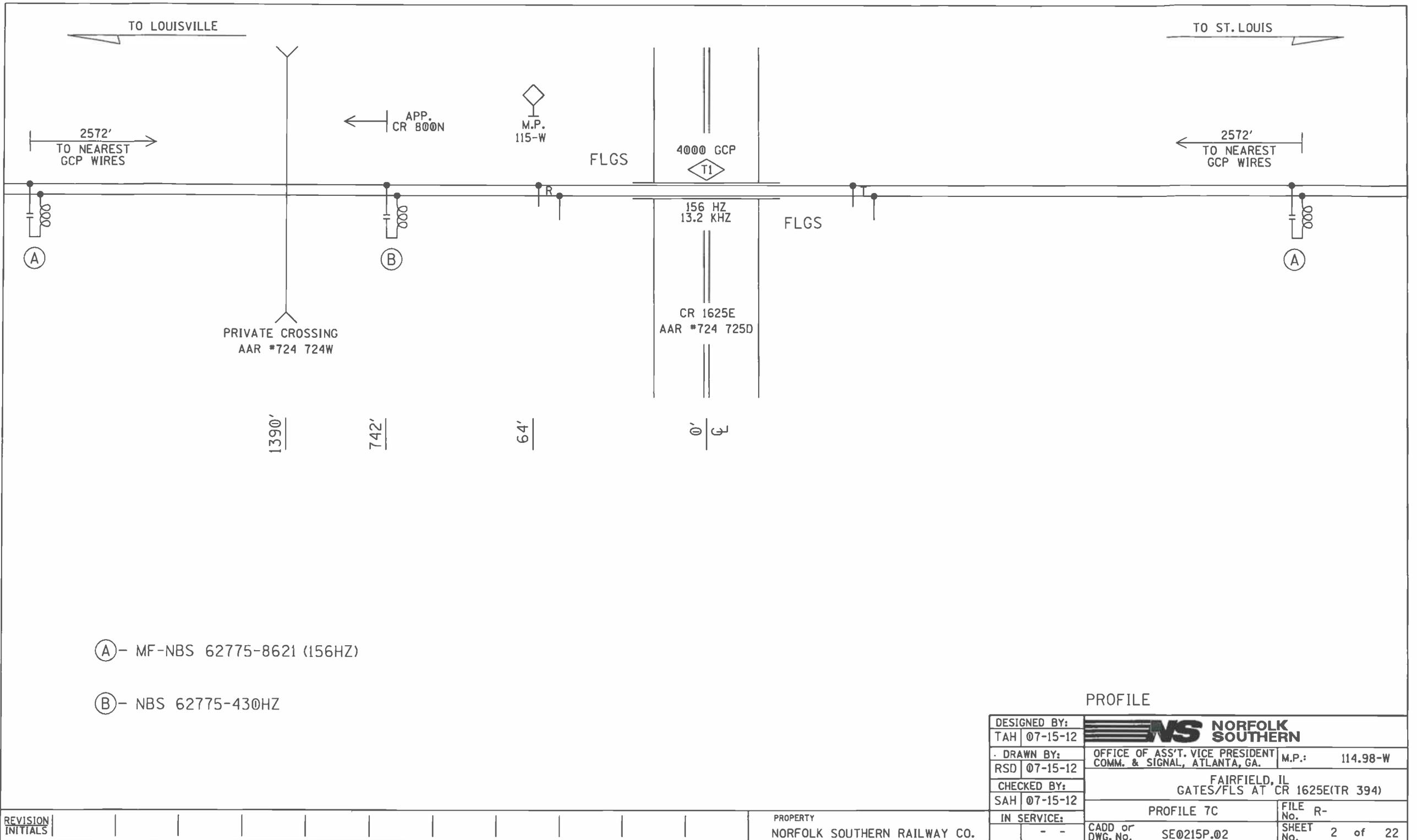
LAYOUT

FILE No. CX0128867

DESIGNED BY:	<b>NS NORFOLK SOUTHERN</b>	
TAH 07-15-12	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: 114.98-W
DRAWN BY:	FAIRFIELD, IL GATES/FLS AT CR 1625E(TR 394)	
RSD 07-15-12	PROFILE 7C	FILE No. R-
CHECKED BY:	CADD or DWG. No. SE0215P.01	SHEET No. 1 of 22
SAH 07-15-12		
IN SERVICE:		

REVISION INITIALS

PROPERTY NORFOLK SOUTHERN RAILWAY CO.



PROFILE

DESIGNED BY:	NS NORFOLK SOUTHERN		
TAH 07-15-12	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.		M.P.: 114.98-W
DRAWN BY:	FAIRFIELD, IL		
RSD 07-15-12	GATES/FLS AT CR 1625E(TR 394)		
CHECKED BY:	PROFILE 7C		
SAH 07-15-12	IN SERVICE:		FILE No. R-
	- -	CADD or DWG. No. SE0215P.02	SHEET 2 of 22

REVISION																			
INITIALS																			

PROPERTY  
NORFOLK SOUTHERN RAILWAY CO.









Program Report

Location and SIN

DOT Number: 724725D  
 Milepost Number: 114.98-W  
 Site Name: CR1625E

SIN: 755053305416

MCF and Template Selection

MCF Name: GCP-T6X-02-1.mcf  
 MCF Revision: 021  
 MCFCRC: 6076E435

Template = 1A:6 Trk BI

Check Numbers

Office Check No. (DT 4.6.0): 6B629F84  
 Office Check Number: 6B629F84  
 Config. Check Number: 3C86E8BD  
 (Based on MCF Revision 021)

Program

BASIC: module configuration  
 Track 1 Slot = Track  
 Track 2/RIO 1 Slot = Not Used  
 Track 3 Slot = Not Used  
 Track 4 Slot = Not Used  
 Track 5/RIO 2 Slot = Not Used  
 Track 6/RIO 3 Slot = Not Used  
 SSCC-1 Slot = SSCC31  
 SSCC-2 Slot = SSCC31  
 SEAR Used = Yes

BASIC: MS/GCP operation  
 Track 1: MS/GCP Operation = Yes

BASIC: island operation  
 Track 1: Island Used = Internal

BASIC: preemption  
 Preempt Logic = No

BASIC: radio Dax links  
 Radio DAX link A Used = No  
 Radio DAX link B Used = No

BASIC: Vital Comms links  
 Vital Comms link 1 Used = No  
 Vital Comms link 2 Used = No

PREDICTORS: track 1  
 Track 1: Prime Used = Yes  
 Track 1: Dax A Used = No  
 Track 1: Dax B Used = No  
 Track 1: Dax C Used = No  
 Track 1: Dax D Used = No  
 Track 1: Dax E Used = No  
 Track 1: Dax F Used = No  
 Track 1: Dax G Used = No

GCP: track 1  
 Track 1: GCP Freq Category = Standard  
 Track 1: GCP Frequency = 156 Hz  
 Track 1: Approach Distance = 2572 ft  
 Track 1: Uni/Bi/Sim-Bidirnl = Bidirnl  
 Track 1: GCP Transmit Level = High  
 Track 1: Island Connection = Isl1  
 Track 1: Island Distance = 124 ft  
 Track 1: Computed Distance = 9999 ft  
 Track 1: Linearization Steps = 100

GCP: track 1 enhanced det  
 Track 1: Inbound PS Sensitivity = Off  
 Track 1: Speed Limiting Used = Yes  
 Track 1: Outbound False Act Lvl = Normal  
 Track 1: Outbound PS Timer = 20 sec  
 Track 1: Trailing Switch Logic = Off  
 Track 1: Post Joint Detn Time = 15 sec  
 Track 1: Adv Appr Predn = No  
 Track 1: Cancel Pickup Delay = This Isl

GCP: track 1 prime  
 Track 1: Prime Warning Time = 30 sec  
 Track 1: Prime Offset Distance = 0 ft  
 Track 1: Switch MS EZ Level = 10  
 Track 1: Prime MS/GCP Mode = Pred  
 Track 1: Prime Pickup Delay = 15 sec  
 Track 1: Prime UAX = Not Used

GCP: track 1 pos start  
 Track 1: Positive Start = Off  
 Track 1: Sudden Shnt Det Used = No  
 Track 1: Low EZ Detection Used = No

GCP: track 1 MS Control  
 Track 1: MS/GCP CtrlIP Used = No  
 Track 1: MS Sensitivity Level = 0  
 Track 1: Compensation Level = 1300  
 Track 1: Warn Time-Ballast Comp = High  
 Track 1: Low EX Adjustment = 39  
 Track 1: Bidirn Dax Passthru = No  
 Track 1: False Act on Train Stop = No  
 Track 1: EX Limiting Used = Yes  
 Track 1: EZ Correction Used = Yes

ISLAND: track 1  
 Track 1: Isl Frequency = 13.2 kHz  
 Track 1: Pickup Delay (2s +) = 0 sec  
 Track 1: IslEnable IP Used = No

AND: track Anding  
 AND 1 XR Used = Yes  
 AND 2 Used = No  
 AND 3 Used = No  
 AND 4 Used = No  
 AND 5 Used = No  
 AND 6 Used = No  
 AND 7 Used = No  
 AND 8 Used = No

AND: AND 1 XR  
 AND 1 XR Track 1 = Prime  
 AND 1 Enable Used = Yes  
 AND 1 Enable Pickup = 5 sec  
 AND 1 Enable Drop = 0 sec  
 AND 1 Wrap Used = No

ADVANCED: MS restart  
 MS/GCP Restart Used = No

ADVANCED: out of service  
 OOS Control = Display+OOS IPs  
 OOS Timeout = Yes  
 OOS Timeout = 1 hrs

ADVANCED: out of service 2  
 TI OOS Control = OOS Input 1

ADVANCED: track wrap circuits  
 Wrap LOS Timer = 5 sec  
 Track 1 Wrap Used = No

ADVANCED: trk 1 overrides  
 Track 1: All Predictors Override Used = No

ADVANCED: OR logic  
 OR 1 Used = No  
 OR 2 Used = No  
 OR 3 Used = No  
 OR 4 Used = No

ADVANCED: internal I/O 1  
 Pass Thrus = No  
 Int.1 Sets = Not Used  
 Int.1 Set by = Not Used  
 Int.2 Sets = Not Used  
 Int.2 Set by = Not Used  
 Int.3 Sets = Not Used  
 Int.3 Set by = Not Used  
 Int.4 Sets = Not Used  
 Int.4 Set by = Not Used

ADVANCED: internal I/O 2  
 Int.5 Sets = Not Used  
 Int.5 Set by = Not Used  
 Int.6 Sets = Not Used  
 Int.6 Set by = Not Used  
 Int.7 Sets = Not Used  
 Int.7 Set by = Not Used  
 Int.8 Sets = Not Used  
 Int.8 Set by = Not Used

ADVANCED: internal I/O 3  
 Int.9 Sets = Not Used  
 Int.9 Set by = Not Used  
 Int.10 Sets = Not Used  
 Int.10 Set by = Not Used  
 Int.11 Sets = Not Used  
 Int.11 Set by = Not Used  
 Int.12 Sets = Not Used  
 Int.12 Set by = Not Used

ADVANCED: internal I/O 4  
 Int.13 Sets = Not Used  
 Int.13 Set by = Not Used  
 Int.14 Sets = Not Used  
 Int.14 Set by = Not Used  
 Int.15 Sets = Not Used  
 Int.15 Set by = Not Used  
 Int.16 Sets = Not Used  
 Int.16 Set by = Not Used

4000 GCP PROGRAMMING SETUP

DESIGNED BY:			
TAH   07-15-12	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.:	114.98-W
DRAWN BY:	FAIRFIELD, IL GATES/FLS AT CR 1625E (TR 394)		
RSD   07-15-12	PROFILE 7C		
CHECKED BY:	FILE R-		
SAH   07-15-12	SHEET 7 of 22		
IN SERVICE:	CADD or DWG. No.	SE0215P.07	

REVISION INITIALS										PROPERTY NORFOLK SOUTHERN RAILWAY CO.
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ADVANCED: site options  
 Daylight Savings = On  
 Units = Standard  
 Maint CallRpt IP Used = No  
 Emergency Activate IP = No  
 EZ/EX Logging = Change  
 EZ/EX Point Change = 3

SSCC  
 Gates Used = Yes  
 SSCCI+2 GPs Coupled = Yes  
 Min Activation = 0 sec  
 Rmt Activation Cancel= 2 min  
 Bell On Gate Rising = No  
 Mute Bell On Gate Down = No  
 SSCCIV Controller Used = No

SSCC: 1  
 SSCC-1 Activation = AND 1 XR  
 SSCC-1 Gate Delay = 4 sec  
 SSCC-1 Number of GPs = 1  
 SSCC-1 Number of GDs = 2  
**SSCC 1: Flash Rate = 40**  
 SSCC 1: Low Battery Detection = No  
 SSCC 1: Flash Sync = master  
 SSCC 1: Invert Gate Output = No  
**SSCC 1: Lamp Neutral Test = On**  
 Aux-1 Xng CtrlUsed = No

SSCC: 2  
 SSCC-2 Activation = AND 1 XR  
 SSCC-2 Gate Delay = 4 sec  
 SSCC-2 Number of GPs = 0  
 SSCC-2 Number of GDs = 0  
**SSCC 2: Flash Rate = 40**  
 SSCC 2: Low Battery Detection = No  
 SSCC 2: Flash Sync = slave  
 SSCC 2: Invert Gate Output = No  
**SSCC 2: Lamp Neutral Test = On**  
 Aux-2 Xng CtrlUsed = No

OUTPUT: assignment page 1  
 OUT 1.1 = Not Used  
 OUT 1.2 = Not Used

INPUT: assignment page 1  
 IN 1.1 = Not Used  
 IN 1.2 = Not Used

IO: assignment SSCC  
 OUT GC 1 = Gate Output 1  
 OUT GC 2 = Gate Output 2  
 IN 7.1 = Not Used  
 IN 7.2 = GD 1.2  
**IN 7.3 = AND 1 XR Enable**  
 IN 7.4 = GD 1.1  
 IN 7.5 = GP 1.1  
 IN 8.1 = Not Used  
**IN 8.2 = Out Of Service IP 1**  
 IN 8.3 = Not Used  
 IN 8.4 = Not Used  
 IN 8.5 = Not Used

SEAR  
 SEAR Subnode = 3  
 DI 1 = Gnd Fit Tester 1  
 DI 2 = Not Used  
**Rly 1 = Ground Fault Test**  
**Rly 2 = AC Control**

SEAR: inputs  
 SP 2.1 = POK 1  
 SP 3.1 = Not Used  
 SP 4.1 = Not Used  
 SP 5.1 = Not Used  
 SP 6.1 = Not Used

SEAR: slot 1-4 inputs  
 IN 1.1 = Not Used  
 IN 1.2 = Not Used  
 IN 2.1 = Not Used  
 IN 2.2 = Not Used  
 IN 3.1 = Not Used  
 IN 3.2 = Not Used  
 IN 4.1 = Not Used  
 IN 4.2 = Not Used

SEAR: inputs slot 5  
 IN 5.1 = Not Used  
 IN 5.2 = Not Used

SEAR: inputs slot 6  
 IN 6.1 = Not Used  
 IN 6.2 = Not Used

SEAR: slot 7-8 inputs  
 IN 7.1 = TSS 1  
 IN 8.1 = TSS 2  
**IN 8.3 = POK 2**  
 IN 8.4 = Not Used  
 IN 8.5 = Not Used

SITE: programming  
 Radio Subnode = 1  
 Field Password = Off  
 Low Battery Enabled = Off

Configuration Package File

Filename: SE0215.pac

4000 GCP PROGRAMMING SETUP

DESIGNED BY:		
TAH 07-15-12	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: 114.98-W
DRAWN BY:	FAIRFIELD, IL	
RSD 07-15-12	GATES/FLS AT CR 1625E(TR 394)	
CHECKED BY:	PROFILE 7C	
SAH 07-15-12	FILE No. R-	
IN SERVICE:	CADD or DWG. No. SE0215P.08	SHEET 8 of 22

REVISION INITIALS

PROPERTY  
 NORFOLK SOUTHERN RAILWAY CO.





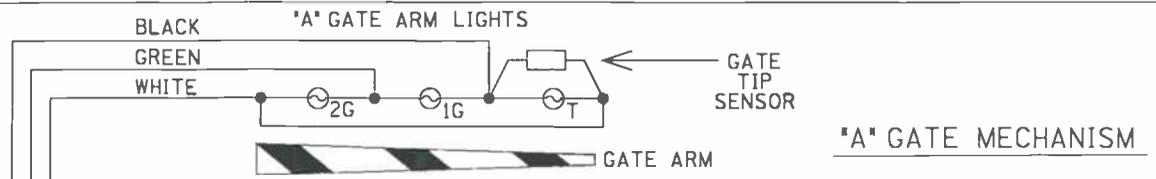




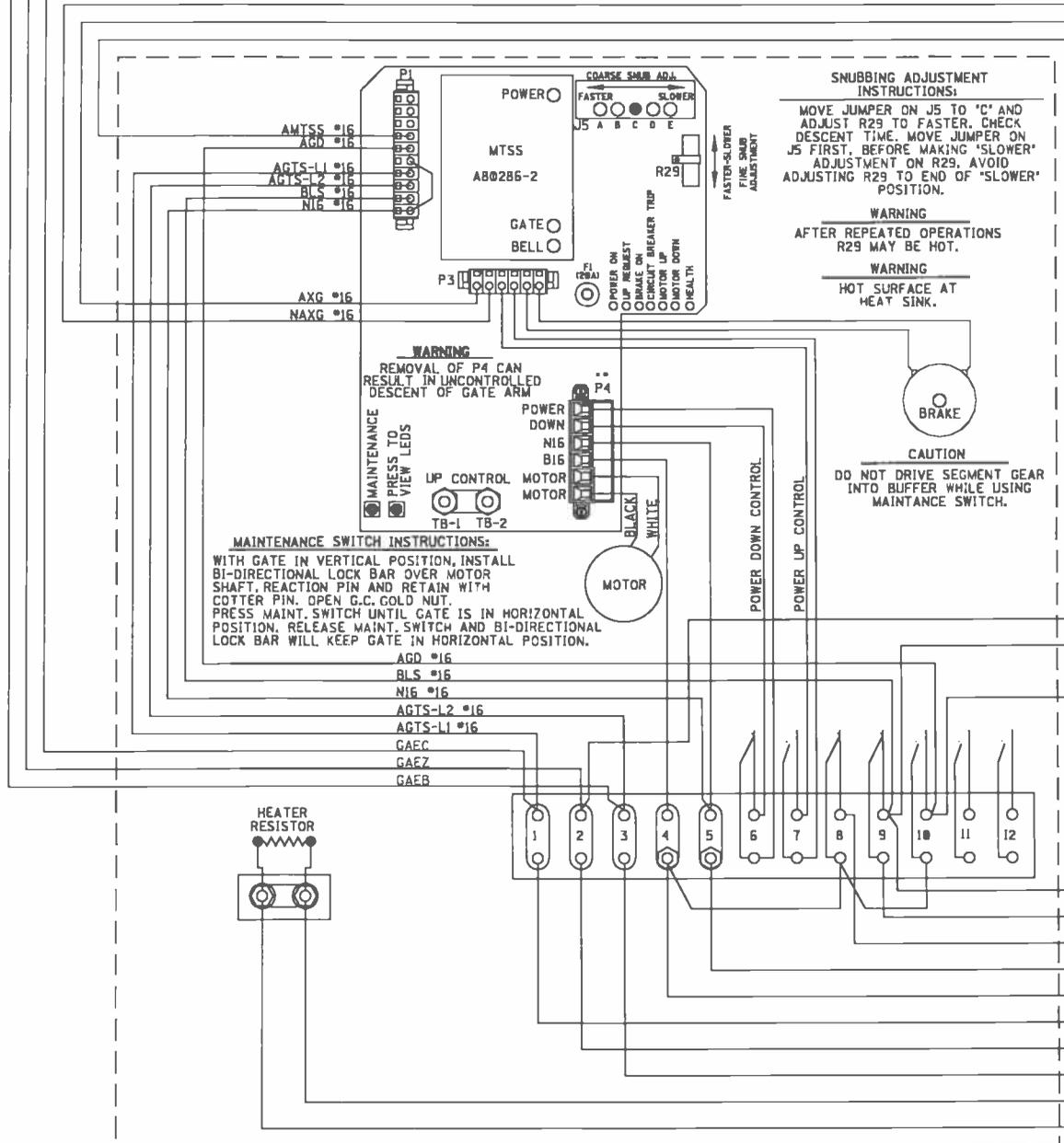


**SAFETRAN MODEL "S60" GATE**

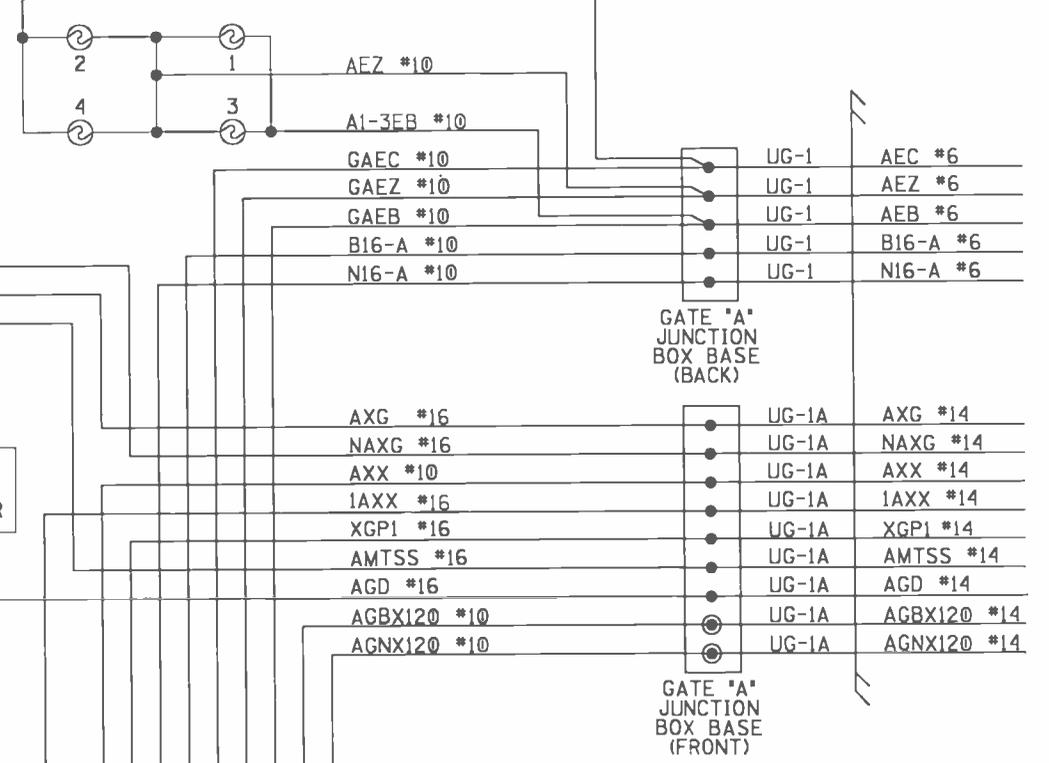
CONTACT SPACE	CONTACT CLOSED AT	FUNCTION OF CONTACT
6	70° - 90°	POWER DOWN CONTROL
7	0° - 89°	POWER UP CONTROL
8	83° - 90°	FLASHING LGT. CONTROL
9	5° - 90°	BELL CONTROL
10	0° - 5°	GATE DOWN INDICATION
11		SPARE
12		SPARE



**"A" GATE MECHANISM**



**"A" FLASHING LIGHTS**



**"A" FLASHER AND GATE LIGHTS WITH GATE TIP SENSOR & MODEL "S60" GATE MECHANISM WITH MINI TRACKSIDE SENSOR**

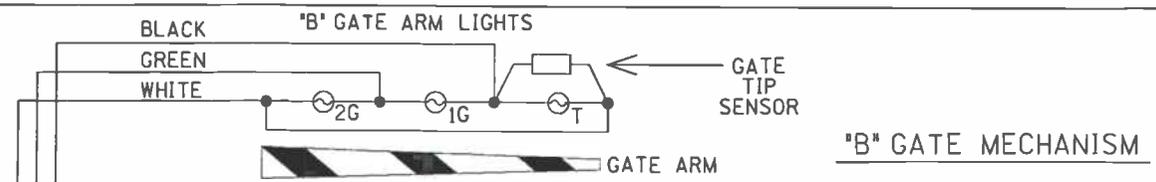
DESIGNED BY:	<b>NS NORFOLK SOUTHERN</b>	
TAH 07-15-12	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: 114.98-W
DRAWN BY:	FAIRFIELD, IL GATES/FLS AT CR 1625E(TR 394)	
RSD 07-15-12	PROFILE 7C	FILE No. R-
CHECKED BY:	IN SERVICE:	CADD or DWG. No. SE0215P.14
SAH 07-15-12		SHEET No. 14 of 22

REVISION INITIALS

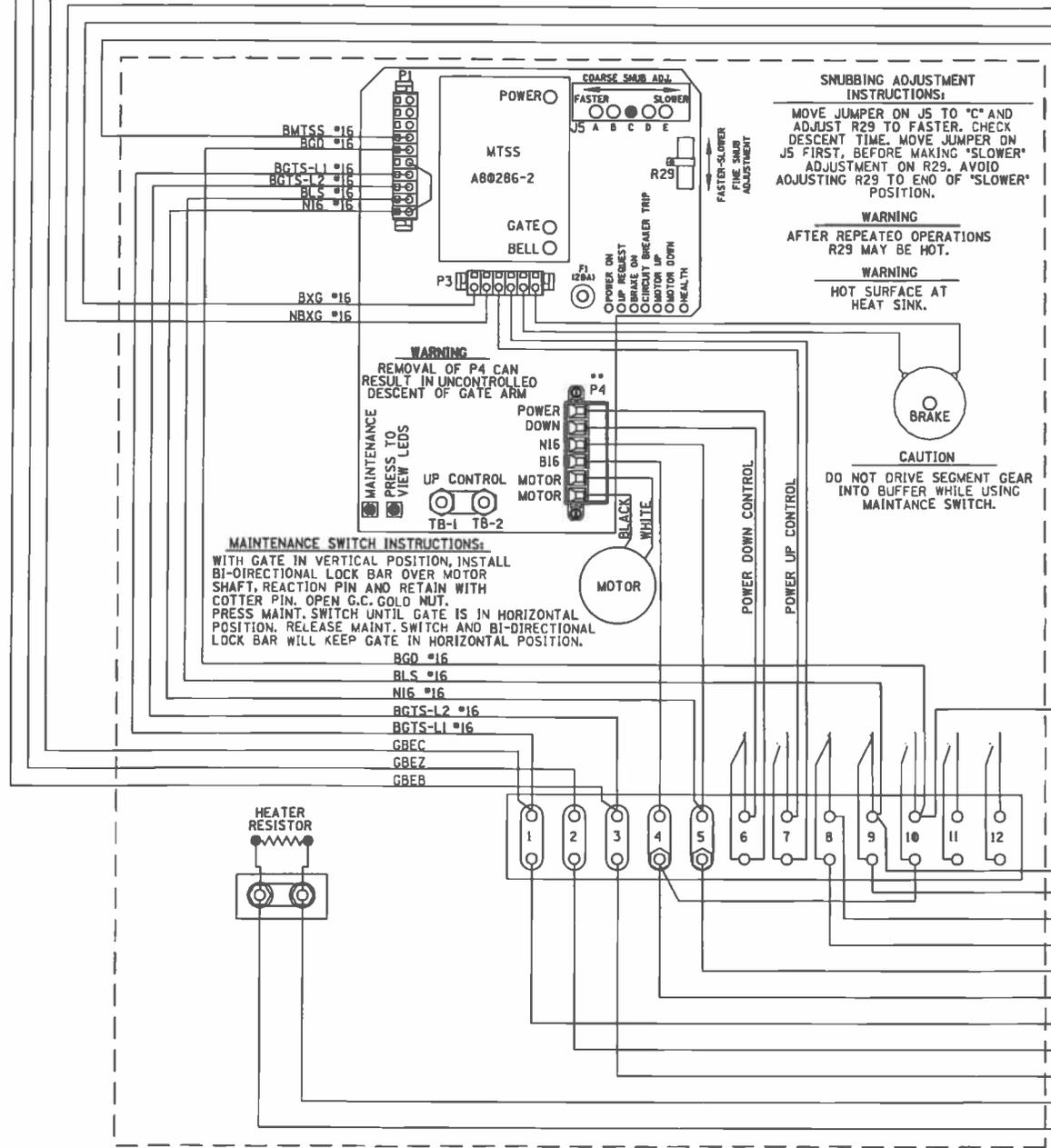
PROPERTY NORFOLK SOUTHERN RAILWAY CO.

**SAFETRAN MODEL 'S60' GATE**

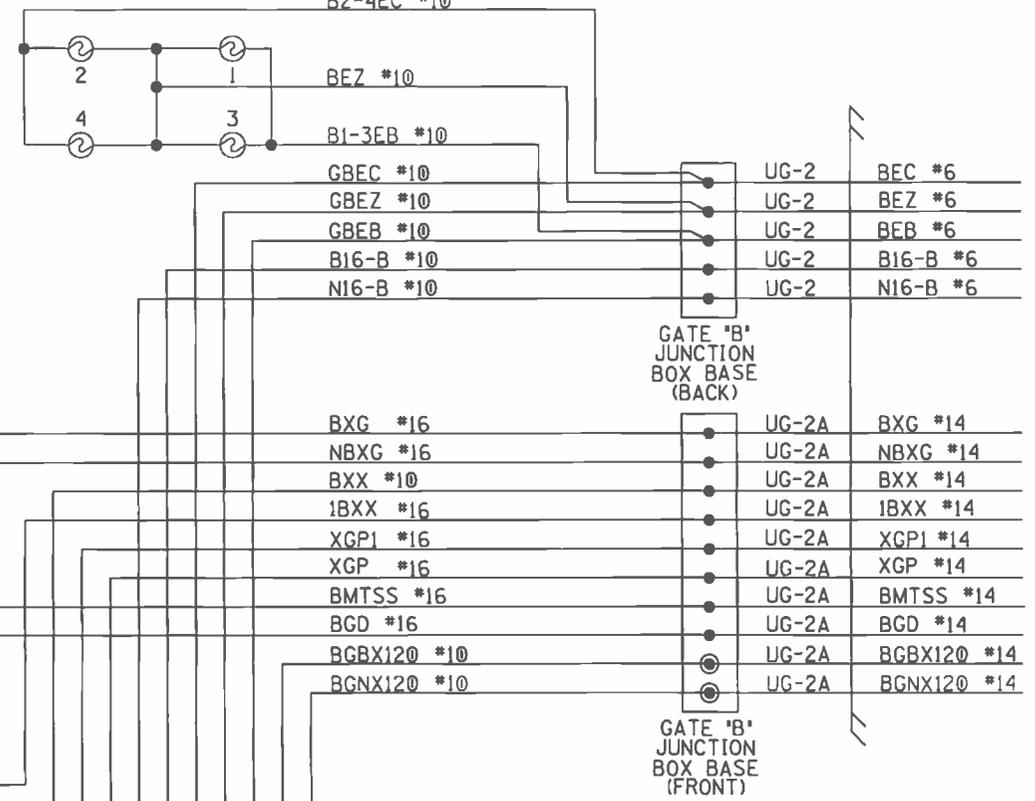
CONTACT SPACE	CONTACT CLOSED AT	FUNCTION OF CONTACT
6	70° - 90°	POWER DOWN CONTROL
7	0° - 89°	POWER UP CONTROL
8	83° - 90°	FLASHING LGT. CONTROL
9	5° - 90°	BELL CONTROL
10	0° - 5°	GATE DOWN INDICATION
11		SPARE
12		SPARE



**'B' GATE MECHANISM**



**'B' FLASHING LIGHTS**



**'B' FLASHER AND GATE LIGHTS WITH GATE TIP SENSOR & MODEL 'S60' GATE MECHANISM WITH MINI TRACKSIDE SENSOR**

DESIGNED BY:	NS NORFOLK SOUTHERN	
TAH 07-15-12	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: 114.98-W
DRAWN BY:	FAIRFIELD, IL GATES/FLS AT CR 1625E(TR 394)	
RSD 07-15-12	PROFILE 7C	FILE No. R-
CHECKED BY:		
SAH 07-15-12	CADD or DWG. No. SE0215P.15	SHEET No. 15 of 22
IN SERVICE:		

REVISION INITIALS

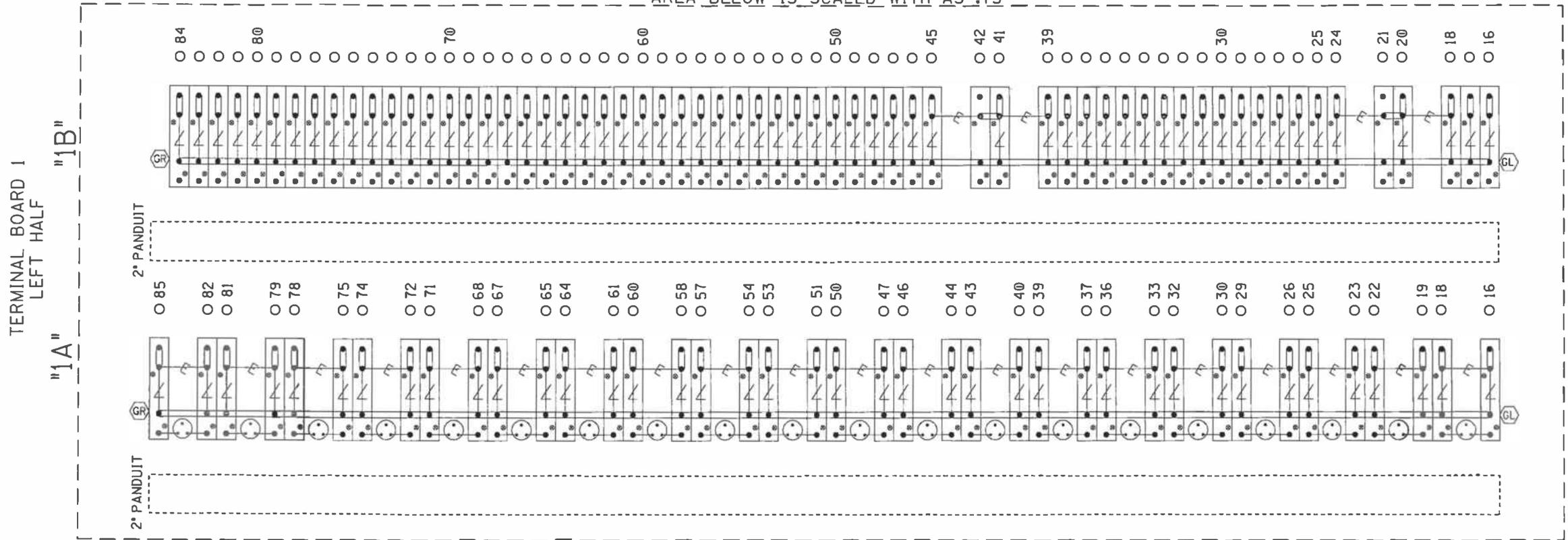
PROPERTY NORFOLK SOUTHERN RAILWAY CO.





NOTE: IF THE FARADAY SHIELD WOULD EVER NEED TO BE DRILLED IN THE FIELD, PROPER PRECAUTIONS MUST BE TAKEN TO INSURE METAL SHAVINGS DO NOT GET INTO EXISTING TERMINALS/WIRES.

AREA BELOW IS SCALED WITH AS=.75



TERMINAL BOARD 1  
LEFT HALF

"1B"

"1A"

2" PANDUIT

2" PANDUIT

⚡ = Heavy Duty Equalizer  
(022700-1X)

⚡ = Clearview  
Lightning Arrester  
(022585-1X)

⊙ = LPC-10560-51

⊕ = TERMINALS GROUNDED TO SHIELD.  
4 POST BLOCKS USE EITHER -  
GR - SERMMI PART NO. 61278  
GL - SERMMI PART NO. 61278-1.

TERMINAL BOARD 1  
LEFT TWO ROWS  
FARADAY SHIELD DETAIL - 1A & 1B

- INDICATES PLACEMENT  
OF PANDUIT

THIS SHEET IS FOR REFERENCE ONLY,  
TO REFLECT HOW THE FARADAY SHIELD  
IS PREDRILLED. ONLY INSTALL AND USE  
THE TERMINALS NEEDED.

DESIGNED BY:	NS NORFOLK SOUTHERN	
TAH 07-15-12	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: 114.98-W
DRAWN BY:	FAIRFIELD, IL	
RSD 07-15-12	GATES/FLS AT CR 1625E(TR 394)	
CHECKED BY:	PROFILE 7C	FILE No. R-
SAH 07-15-12	CADD or DWG. No. SE0215P.18	SHEET No. 18 of 22
IN SERVICE:	- -	

REVISION  
INITIALS

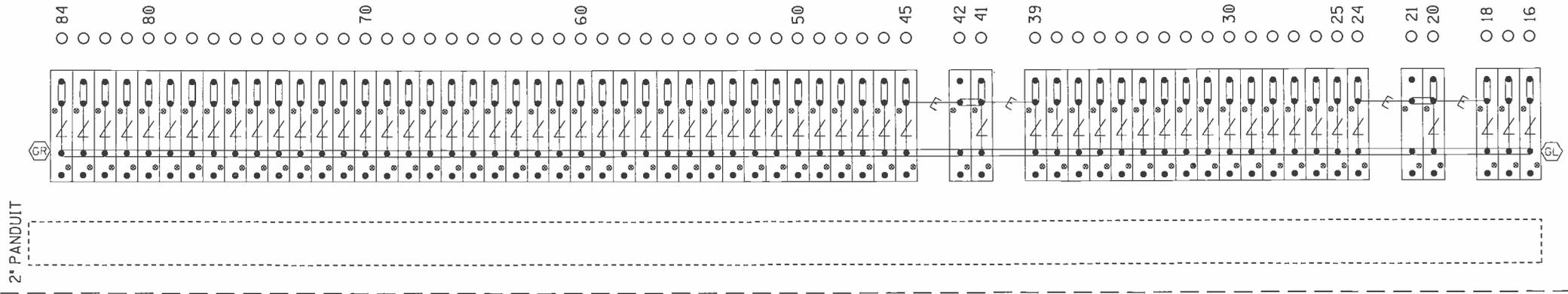
PROPERTY  
NORFOLK SOUTHERN RAILWAY CO.

NOTE: IF THE FARADAY SHIELD WOULD EVER NEED TO BE DRILLED IN THE FIELD, PROPER PRECAUTIONS MUST BE TAKEN TO INSURE METAL SHAVINGS DO NOT GET INTO EXISTING TERMINALS/WIRES.

AREA BELOW IS SCALED WITH AS=.75

TERMINAL BOARD 1  
RIGHT HALF

"1C"



⚡ = Heavy Duty Equalizer  
(022700-1X)

∠ = Clearview Lightning Arrester  
(022585-1X)

⊙ = LPC-10560-51

⊙ GR = TERMINALS GROUNDED TO SHIELD.  
4 POST BLOCKS USE EITHER -  
GR - SERMMI PART NO. 61278  
GL - SERMMI PART NO. 61278-1.

TERMINAL BOARD 1  
RIGHT ROW  
FARADAY SHIELD DETAIL - 1C

⊞ = INDICATES PLACEMENT  
OF PANDUIT

THIS SHEET IS FOR REFERENCE ONLY,  
TO REFLECT HOW THE FARADAY SHIELD  
IS PREDRILLED. ONLY INSTALL AND USE  
THE TERMINALS NEEDED.

DESIGNED BY:	<b>NS NORFOLK SOUTHERN</b>	
TAH 07-15-12	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: 114.98-W
DRAWN BY:	FAIRFIELD, IL	
RSD 07-15-12	GATES/FLS AT CR 1625E(TR 394)	
CHECKED BY:	PROFILE 7C	FILE No. R-
SAH 07-15-12	CADD or DWG. No. SE0215P.19	SHEET No. 19 of 22
IN SERVICE:	-	

REVISION  
INITIALS

PROPERTY  
NORFOLK SOUTHERN RAILWAY CO.





