Public Utilities Commission of Ohio

Memo

To: Docketing Division

From: Jill Henry, Rail Specialist, Rail Division

Cc: PUCO Legal Department

Date: 6/12/17

Re: PUCO Case No. 17-1424-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices at the Norfolk Southern Railway Crossing, Walbridge East Road/TR 68 DOT#473-833E, in Ottawa County, Ohio.

On November 1, 2016, the Ohio Rail Development Commission (ORDC) authorized funding for Norfolk Southern Railway to install active warning devices at Walbridge East Road/TR 68 DOT#473-833E, in Ottawa County, Ohio. The crossing was surveyed on April 17, 2015 and found to warrant the upgrades. The electric utility provider for this crossing is Toledo Edison- First Energy.

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amount of \$299,178.00 have been approved. Construction may commence at once. **Staff requests a Finding & Order with completion of the project in nine months.** Staff requests that the following language be incorporated in the Finding & Order:

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the <u>railroad will be responsible</u> for this work. This work includes, but is not limited to:

- Any ancillary work to make the warning devices function as designed and visible to the roadway user, and
- MUTCD compliance, including minor roadway work if necessary.

Please serve the following parties of record:

Norfolk Southern Railway Company Stephen Klinger Public Projects Engineer 1200 Peachtree Street NE Atlanta, GA 30309-3597

Norfolk Southern Railway Company Cayela Wimberly Director Grade Crossing Safety 1200 Peachtree Street NE Atlanta, GA 30309-3597

Eastman & Smith LTD. Mr. Casey Talbott Attorney for Norfolk Southern One SeaGate 24th Floor P.O. Box 10032 Toledo, Ohio 43699-0032

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

Allen Township, Ottawa County Mr. Craig Blausey, Chairman/Trustee 21030 W. Toledo Street P.O. Box 440 Williston, Ohio 34368

Toledo Edison- First Energy

OHIO RAIL DEVELOPMENT COMMISSION INTER-OFFICE COMMUNICATION

TO: Randall Schumacher, Supervisor, Rail Division, PUCO

FROM: Cathy Stout, Manager, Safety Section, ORDC

BY: Don Damron, Project Manager, ORDC

SUBJECT: Ottawa County, TR 68, Walbridge E. Rd. / Norfolk Southern

DOT# 473833E, PID# 101712

DATE: April 11, 2017

The Public Utilities Commission of Ohio (PUCO) established a Diagnostic Review Team Survey at the subject highway/railroad crossing location on 4/17/15 and the Ohio rail Development Commission (ORDC) attended the Diagnostic.

The Diagnostic Review Team recommended the installation of new active warning devices, flashing lights and gates. The Diagnostic Review Team Survey form is attached.

The proposed Crossing Site Layout and Cost Estimates for this project have already been provided by Norfolk Southern and ORDC approved the plans and estimates as provided. Please issue a construction-only order for the project outlined above. This authorization is made with the stipulation and understanding that an approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit.

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the <u>railroad will be responsible</u> for this work. This work includes, but is not limited to:

- any ancillary work to make warning devices function as designed and visible to the roadway user, and
- MUTCD compliance including minor roadway work if necessary.

Thank you for your assistance with these matters.

Attachments:

Diagnostic Review Team Survey dated 4/17/2015 NS Plans and Estimates dated 2/15/2017

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



Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223 John R. Kasich, Governor • James G. Bradley, Chairman

April 11, 2017

Mr. Stephen Klinger Norfolk Southern Corporation Administrator Grade Crossing Program 1200 Peachtree St. NE, Box 123 Atlanta, GA 30309

RE: Automatic Grade Crossing Warning System – Construction Authorization TR 68, Wallbridge E. Rd., Ottawa County, DOT# 473833E Ohio PID# 101712, NS S&E Project # 10.2193

Dear Mr. Klinger:

The plan and estimate dated 2/15/2017 for the referenced project has been reviewed and is acceptable. This project is authorized for construction under the master agreement between Ohio Rail Development Commission, Public Utilities Commission of Ohio and Norfolk Southern executed on December 19, 2012. Norfolk Southern may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan.

This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to \$299,178.00. Additional costs must be approved in writing by the Ohio Rail Development Commission (ORDC) prior to being incurred. Emergency verbal authorizations by ORDC may be permitted and will be confirmed by ORDC in writing within ten (10) business days of the verbal approval. This authorization is contingent upon Norfolk Southern Corporation accepting the following instructions:

- 1. Norfolk Southern's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Don Damron, ORDC, Mail Stop #3140, 1980 West Broad Street, 2nd Floor, Columbus Ohio 43223, or email don.damron@dot.state.oh.us, or by cell phone at 614-917-8466, office phone at 614-466-2509); and to the Public Utilities Commission of Ohio at George.martin@puc.state.oh.us (phone 614-752-9107). The Norfolk Southern project foreman will also notify the same of any stops and re-starts of the work activity and of the date work was completed for the project.
- 2. Norfolk Southern will arrange for utilities to be located at the project site by the Ohio Utilities Protection Service (OUPS) prior to any construction activities at the site. Utilities that are not participating members of the service must be contacted directly by Norfolk Southern.



www.rail.ohio.gov phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

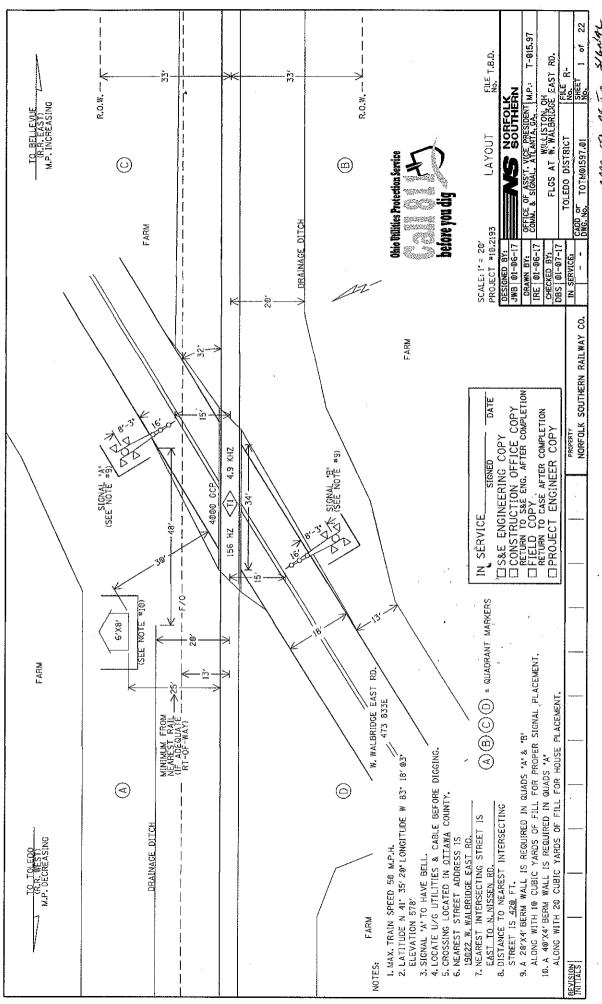
- 3. Norfolk Southern's project foremen will notify Don Damron at 614-917-8466 (cell) or don.damron@dot.state.oh.us (email) of any changes in the scope of work, cost overruns, material changes, etc. which are not included in the approved plan and estimate and secure approval of same before the work is performed.
- 4. Open cut of roadways is not permitted except in unusual circumstances and must be coordinated with the local highway authority and preapproved by ORDC.
- 5. Norfolk Southern will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
- 6. Norfolk Southern will furnish two (2) copies of the final all-inclusive bill to ORDC stating the exact dates of starting and completing work, the initial and final dates of construction and location where the accounts may be audited.
- 7. The installation of the new warning device system will include any ancillary work needed to make the warning devices function as designed and to satisfy MUTCD requirements.

Thank you for your assistance with these matters.

Sincerely,

Donald J. Damron Project Manager

C: Randall Schumacher, Supervisor, Rail Division, PUCO George Martin, Grade Crossing Planner, PUCO ORDC (file)



Stender 0180 Afflores



Norfolk Southern Corporation Communications and Signal Department 1200 Peachtree Street, N.E. Atlanta, Georgia 30309-3579

> February 15, 2017 CX1112474

Re: Ottawa County, Williston, NS Lake Division, Toledo District, regarding the modification of the automatic grade crossing warning devices at Walbridge East Road, DOT# 473833E, Milepost T-015.97, PID# 101712

Don Damron
Ohio Rail Development Commission
Project Manager
1980 W. Broad Street
Mail Stop 3140
Columbus, Ohio 43223

Dear Mr. Damron:

Attached for your review and approval are electronic copies of the detailed cost estimate, material list and engineering plans for this crossing.

Although we cannot give you an exact date of installation at this time we can provide our average installation time, which is 6 months after authorization from the state. After this project is authorized, we will order material and schedule for installation once we have received approvals from ODOT's District Office.

Please note this will be a new signalized crossing and will get AC power service for this location from an existing power feed at Nissen Road via underground cable.

If you have any questions or concerns, please contact Mike Rappatta at 404-582-6377 or mike.rappatta@nscorp.com.

Sincerely,

B.L. Sykes

(mlr)



Detailed Estimate for Grade Crossing Warning Devices

City/State: WILLISTON, OH Road: WALBRIDGE EAST RD

(TR 68)

MilePost: T-15.97 DOT/AAR: 473833E

State Proj. No.: PID #: 101712 County: OTTAWA

S&E Proj. No.: 10.2193 File Number:

Man Days: 150

Meals and Lodging: \$20,517.84

Rental of Equipment: \$28,047.81

(2 Trucks, 1 Backhoe w/ Trailer and 1 Pipe-Pusher for 25 Days)

Construction Supervision Vehicle: \$4,290.37

Purchases - Other Total: \$52,856.02

Material And Additives

Material Cost: \$107,130.00

Sales and Use Tax: \$8,570.00

Material Handling Freight: \$10,713.04

Material Total: \$126,413.04

Labor And Additives

Labor Cost: \$48,300.00

(6 man crew at \$1,932.00 a day for: 25 days)

Payroll Tax & Overheads: \$41,180.58
Preliminary Engineering: \$16,320.20
Construction Supervision: \$14,108.43

Labor Total: \$119,909.21

Project Cost: \$299,178.27

Scrap / Salvage Credit: \$0.00

Project Total: \$299,178.00

Estimated on: 15-Feb-17 Estimated by: n5s2v

Estimate valid for 1 year from date of estimate



Norfolk Southern Railway



<u>Highway Crossing Signalization Program - Material List</u>

Do not substitute items without permission from S & E Engineering

City:	WILLISTON
Road:	WALBRIDGE EAST RD (TR 68)
Mile Post:	T-15.97
Drawing Number:	TOTM01597
State ProjectNumber:	PID #: 101712
County:	OTTAWA
A A R Number:	473833E
Project Number:	10.2193
File Number:	
New File Number:	CX1112474
WBS:	F-03770
Store Number:	
Supervisor:	Z. McCARTNEY
Tax Code:	
Vendor to supply the follow	ving copies after pricing:
1 Set - Material Managem 2 Sets - with plans shipped 1 Set - S&EGen. Supt. Co	

Location: WILLISTON ОН S&E Proj. No.: 10.2193 AFE No.: F-03770 Drawing No.: TOTM01597

P.O.Number: Vendor: Interrail Engineering, INC Store No.: Date Required: Date Shipped:

			Price			Quantity	Date	ntity Insta Date	Date	Quantity Returned	Special
Qty.	Class-Item-CD	UI	per Item		Item Description	Shipped	Quan.	Quan.	Quan.	(Credit)	Instructions
3	670-360693-4	EA	\$5.80		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		AC SERVICE, COMPLETE LESS METER BASE, ASSEMBLED ON 30' POLE						
4	670-119241-4	EA	\$25.01		ARRESTOR, LIGHTNING HEAVY DUTY CLEAR VIEW SAFETRAN 022585-1X						
20	105-002620-4	EA	\$302.42	\$6,048.40	BATTERY, NICAD 340AH, MODEL SPL340						
1	670-503047-4	EA	\$181.50		BELL, CROSSING ELECTRONIC GENERL SIGNAL, EB-3-360-5 CR 02-044350						
3	001-000011-4	EA	\$5,000.00	\$15,000.00	BERM WALL, 4' HIGH X 5' WIDE, 35LF						
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		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		CABLE, 10' GENERATOR HOOK UP, SERRMI P/N 40524. FEMALE CONNECTOR						
350	465-939422-4	LF	\$2.93		CABLE, UG 12 CONDUCTOR NO 14 AWG SOLID EACH CONDUCTOR WITH 5/64 IN INSULATION 10 MIL						
350	465-292862-4	LF	\$1.49	\$521.50	CABLE, UG 2-6 TWISTED, S-23 OKONITE 113-12-3933 SOLID TINNED CONDUCTOR						
350	465-292929-4	LF	\$4.55		CABLE, UG 5 COND. NO. 6 AWG SOLID COPPER CABLE TO MEET NS CORP. SPEC. FOR SIGNAL						
600	465-292945-4	LF	\$1.63	\$978.00	CABLE, UG 5-14, S-54 OKONITE 206-14-6885						
600	465-791835-4	FT	\$3.84		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						
2	670-010671-4	EA	\$738.15		CHARGER, BATTERY CRAGG MODEL 40 DTC-12V, 40 AMP, P/N 520940						
80	165-544477-4	FT	\$3.22		CONDUIT, 4"x10' PVC, SCHEDULE 80 BELL CONNECTOR AT ONE END, 1/2 PT. GLUE IN KIT 670-123298-4						

APPROVED BY STATE APPROVED BY RAILROAD CAR NUMBER SEAL NUMBER Location: WILLISTON ОН S&E Proj. No.: 10.2193 AFE No.: F-03770 Drawing No.: TOTM01597

P.O.Number: Vendor: Interrail Engineering, INC Store No.: Date Required: Date Shipped:

								ntity Insta	alled	Quantity	
Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Date Quan.	Date	Date Quan.	Returned (Credit)	Special Instructions
2	670-664917-4	EA	\$87.64	\$175.28	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		Quan.	Quan.	Quan.	(Gredit)	manuctions
2	670-632520-4	EA	\$79.69		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						
2	670-793404-4	EA	\$1,205.32		COUNTERWEIGHT PKAGE, 17-24'GATE S'TRAN S- MECH ONLY, STAINLESS, TO INCLUDE HUB, SUPPORT ARMS						
4	670-760012-4	EA	\$9.95		COVER, FOR 1 WAY FLASHING LIGHT ASSY. 18 OZ. BLACK VINYL COATED NYLON. ====TO COVER 2 LAMPS====						
1	670-986650-4	EA	\$370.21		DISPOSAL, CONSTRUCTION DEBRIS AND CLEANING X'ING EQUIPMENT CONTAINER						
1	670-000004-4	EA	\$700.00	\$700.00	FCC LICENSE FOR MONITOR/RADIO						
1	670-012724-4	EA	\$359.64	\$359.64	FILTER, ELECTRO CODE 156HZ REJECTION PART # TF-156						
2	670-015231-4	EA	\$599.40	\$1,198.80	FOUNDATION, DIXIE,S-2 GATE 2'6"X2'6"X5'6" ASSEMBLED						
2	670-005377-4	EA	\$338.00		GATE ARM, ALUMINUM, 17-24 FT, ARM ASSEMBLY, INCLUDES GATE GUARD FOR GATE LIGHT CABLE. HIGH INTENSITY VERTICAL STRIPES.						
1	670-675667-4	EA	\$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	670-974821-4	EA	\$45.20	\$45.20	INDUCTOR, SIMULATED TRACK SAFETRAN 8V617-2200						
1	670-477991-4	EA	\$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		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						

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Location: WILLISTON OH S&E Proj. No.: 10.2193 AFE No.: F-03770 Drawing No.: TOTM01597

Store No.: Date Required: Date Shipped: Vendor: Interrail Engineering, INC

								ntity Insta		Quantity	
Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Date Quan.	Date Quan.	Date Quan.	Returned (Credit)	Special Instructions
2	670-092155-4	EA	\$160.00		LAMP ASSY, LED GATE ARM KIT (INCLUDES 3 LAMPS COMPLETE WITH CABLES AND MTG. HARDWARE) REC #: 9298-1120						
2	670-005058-4	EA	\$1,786.08		LAMP ASSY, LED, 5" MAST BACK TO BACK LIGHTS (IPN: 042003-L487XNS)						
4	670-440826-4	EA	\$2.22		LINK, SAFETRAN 024620-1X INSL TESTING COMP 1 IN CENTER SIGNAL CIRCUITS CR 02-286662						
4	255-590880-4	EA	\$16.72		LOCK, AMERICAN LOCK MODEL H-10KA KEYED ALIKE TO PRIVATE KEYWAY D456 AND STAMPED "NS SIG"						
2	670-637778-4	EA	\$1,384.63		MAST, 5" ALUMINUM 13'10" WITH DOUBLE JCT. BOX BASE. S'TRAN P# 070519-11AX.						
2	670-875060-4	EA	\$2,596.32	\$5,192.64	MECHANISM, GATE MODEL S-60, WITH DEFROSTER , WITHOUT MINI TRACKSIDE SENSOR S'TRAN # 0740007-X002A3						
4	670-000001-4	EA	\$726.23	\$2,904.92	MISC. EXPENSE, MATERAIL/FILL						
1	000-000000-4	EA	\$5,000.00	\$5,000.00	MISC. EXPENSE, UNDERGROUND BORING						
2	670-014233-4	EA	\$1,087.52	\$2,175.04	MODULE, DAX FOR 3000 GCP SAFETRAN #80016						
2	670-001347-4	EA	\$59.67		PACKAGE, HARDWARE SIGN 5 IN. MOUNTING, SERRMI A1250-5, HARMON @200965-000, OR						
1	255-646807-4	EA	\$32.59		PADLOCK, SAFETRAN PART NO. 030399-29X SCREW TYPE FOR CIR CONTROLLER AND BTY. BOX						
1	670-514605-4	EA	\$11.11		PINNACLE, W-C SECT 1-11, 4"& 5" REF K1 110-8 OR SAFETRAN NO. @035045-503X						
2	670-259211-4	EA	\$47.25		PLUG BOARD KIT, TYPE B-1 & VOLTAGE TEST TERMINAL, SAFETRAN 420000-75X						
1	165-902002-4	EA	\$303.43	\$303.43	PROTECTOR, SURGE 120/240VAC, ERICO P/N EPD120/240TDFL						
5	465-002899-4	EA	\$22.24	\$111.20	REEL, CABLE DISPOSABLE FOR CROSSING SIGNAL PACKAGES						
2	670-456936-4	EA	\$145.69		RELAY RACK, SWING, FARADAY SHELTER FOR ONE RELAY, SSFETRAN P/N T15331						
2	670-707995-4	EA	\$510.12	\$1,020.24	RELAY, TYPE B1, NEV LINE, 900 OHMS, 008 AMPERES GRS A62-308 OR SAFETRAN @400003						
4	435-805560-4	EA	\$2.78	\$11.12	SAND, 25LB BAG FOR CABLE ENTRANCE INTO THE SHELTER						

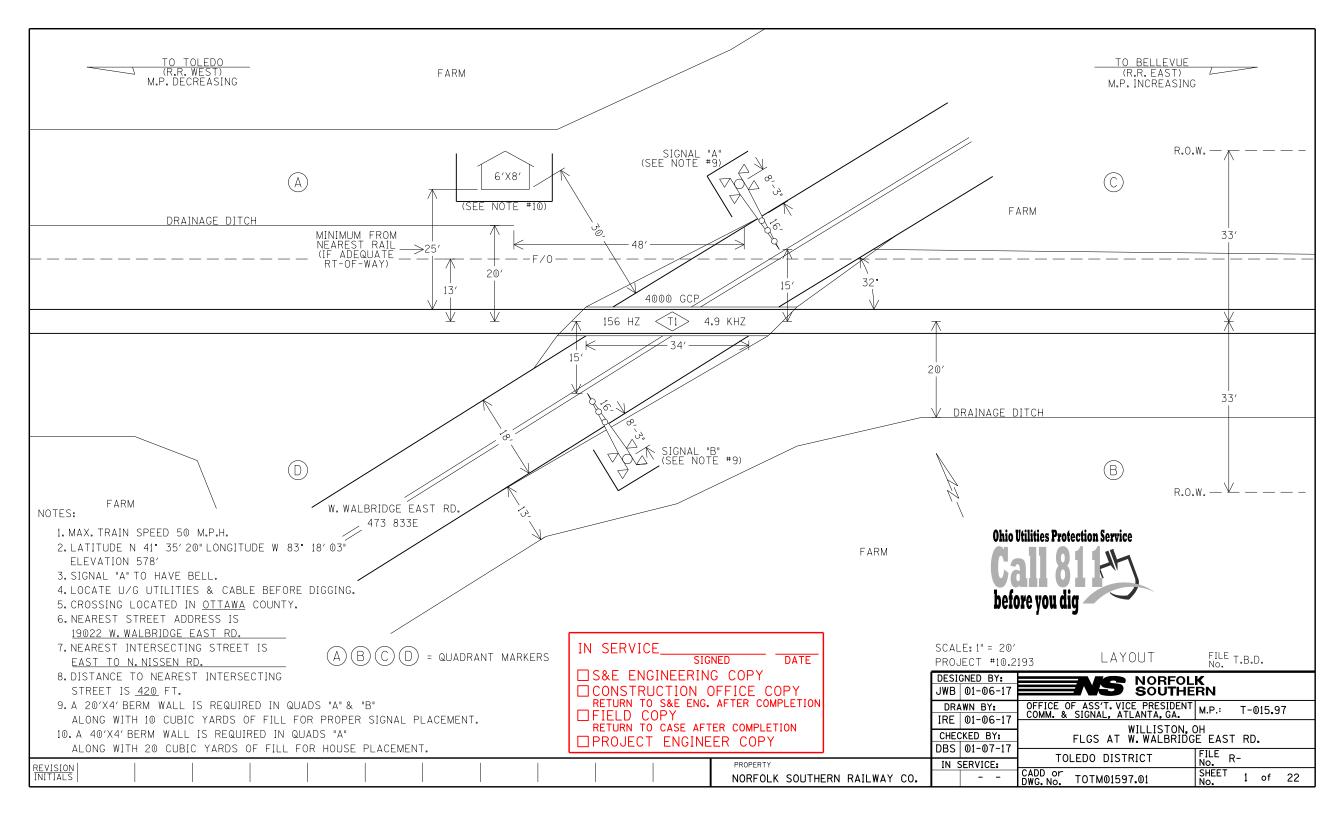
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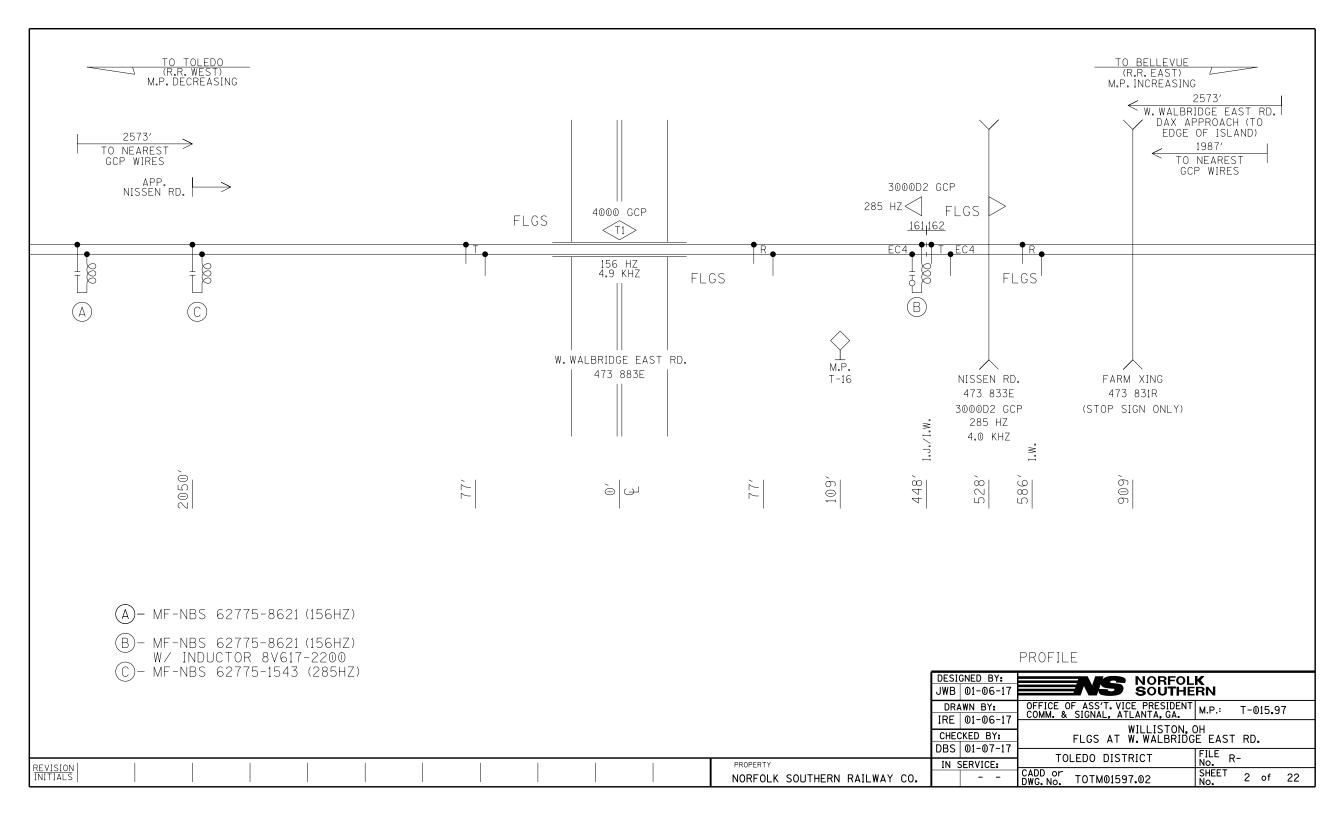
Location: WILLISTON ОН S&E Proj. No.: 10.2193 AFE No.: F-03770 Drawing No.: TOTM01597 P.O.Number: Vendor: Interrail Engineering, INC Store No.: Date Required: Date Shipped:

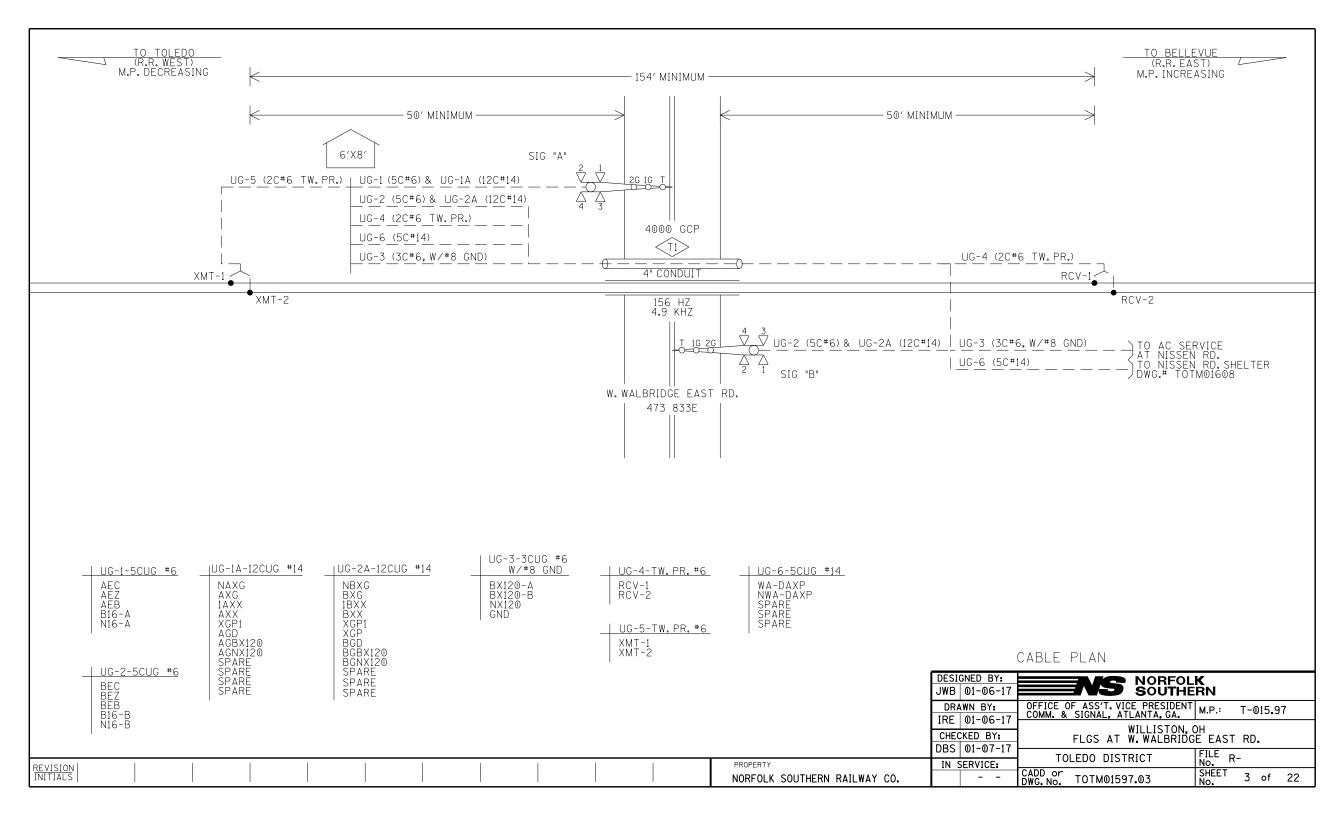
			Price			Quantity	Qua Date	ntity Insta Date	Date	Quantity Returned	Special
Qty.	Class-Item-CD	UI	per Item	Total Price	Item Description	Shipped	Quan.	Quan.	Quan.	(Credit)	Instructions
1	670-113448-4	EA	\$910.23	\$910.23	SEARIII, (VHFC w/ANTENNA) - VHF COMMUNICATOR, SAFETRAN P/N A80276, 1/ PER CROSSING						
1	670-749325-4	EA	\$237.18	\$237.18	SHELF, FOLDING, FOR LAPTOP USE IN FARADAY 6X8 SHELTER, SAFETRAN 052852-128X						
1	670-755523-4	EA	\$9,744.79		SHELTER, 6'X8' ALUMN FARADAY W/1EA EQUIPMENT RACK, W/CABLE CHUTES BEHIND TERMINAL BOARD, W/GEN RECEPTICAL, BREAKER BOX GFI OUTLET FOR LAPTOP SHELF SAFETRAN 058400-68-85						
2	670-586967-4	EA	\$42.98	T	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 SAFETRAN NARROW BAND						
2	670-393331-4	EA	\$53.74		SIGN, CROSSING ENS MALFUNCTION ASSEMBLY FOR 4" AND 5" MAST, SAFETRAN #T17215						
2	670-016346-4	EA	\$149.68		SIGN, X-BUCK, HI-INTENSIVE REFLECTIVE FRT. & BACK FOR ALL STATES, SAFETRAN# 035200-91X						
1	670-330382-4	RL	\$18.06	\$18.06	TAPE, THOR 3" DURATEC, ORANGE 1000' LENGTHS. "WARNING STOP DIGGING"						
10	670-478560-4	EA	\$20.56	\$205.60	TERMINAL BLOCK, ERICO 4 POST P/N B2700A2C1WH W/HARDWARE LESS LIGHTNING ARRESTOR						

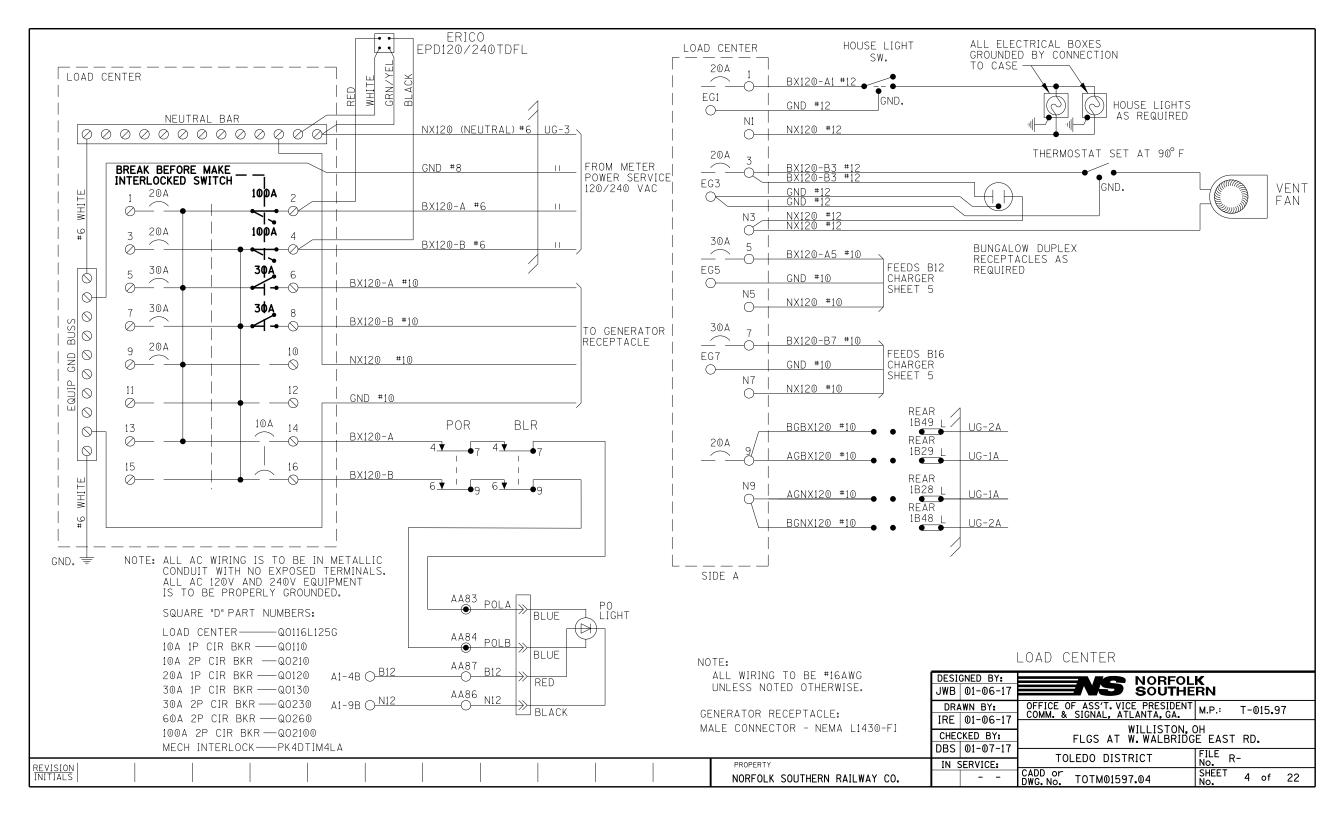
Total Material: \$107,130.43

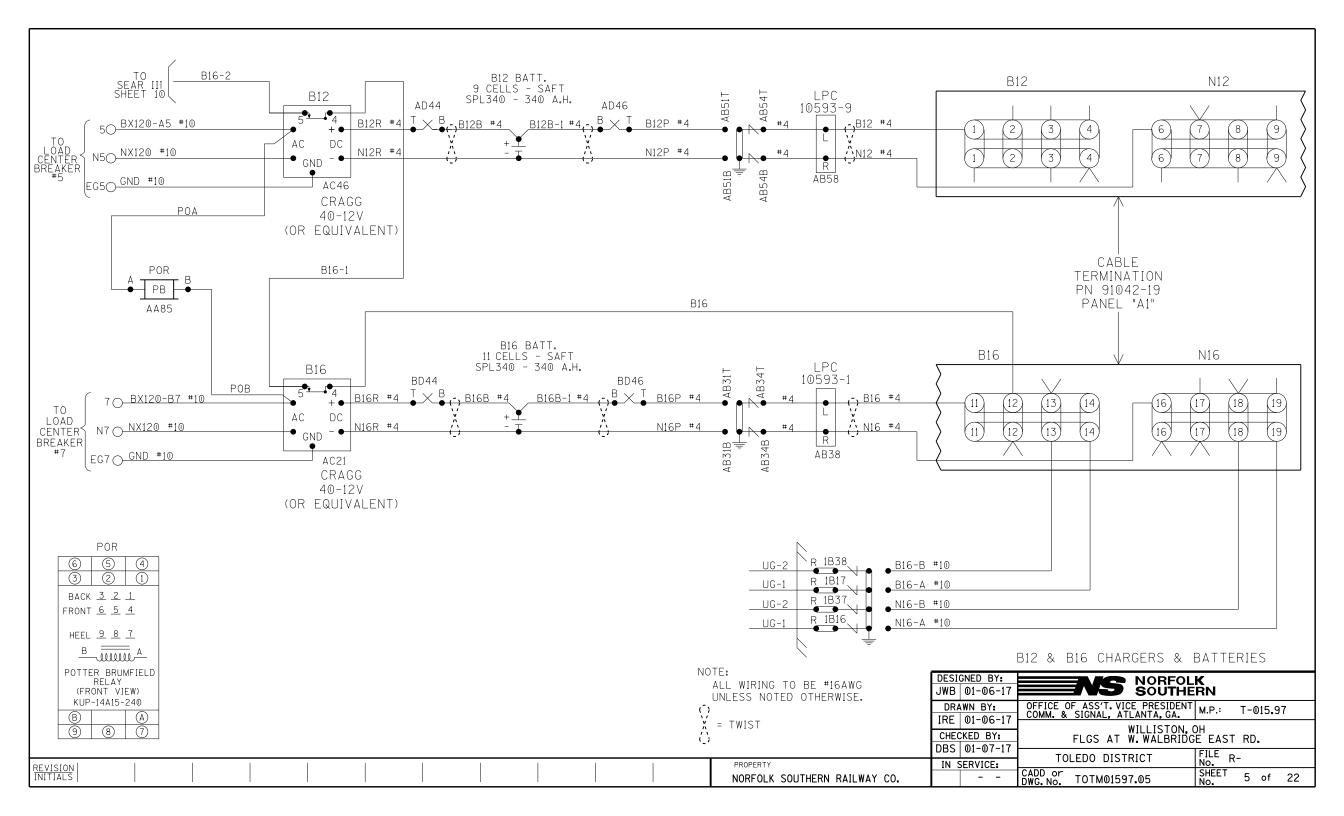
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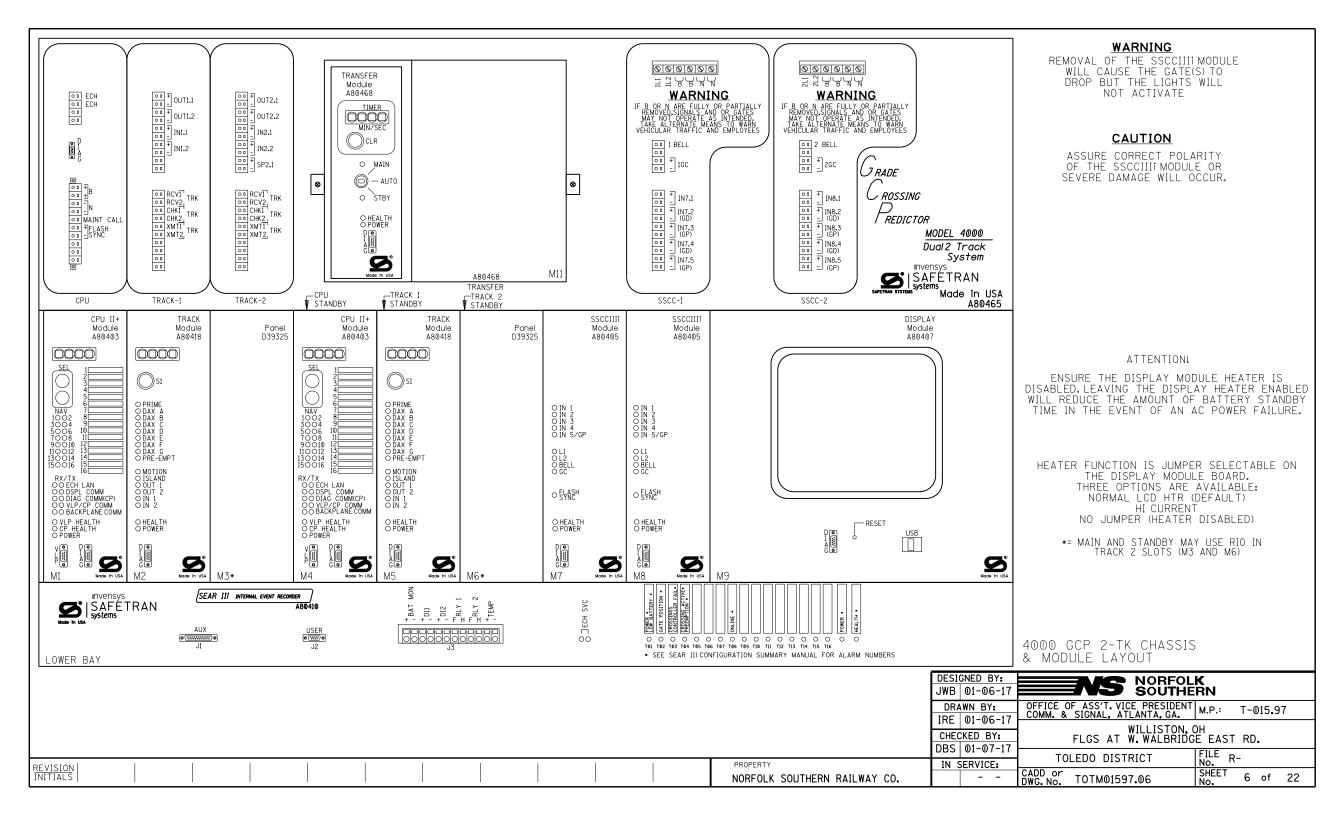












Program Report GCP: track Track 1:GCP Freq Category = Standard Track 1:GCP Frequency = 156 Hz Track 1: Approach Disfance = 2573 ft Track 1: Uni/Bi/Sim-Bidirnl = Bidirnl Track 1: GCP Transmit Level = High Location and SIN DOT Number: 473833E Milepost Number: T-015.97 1: Island Connection = Isl Track Site Name: W Walbridge East Rd Track 1: Island Distance = 154 ft Track 1: Computed Distance = 9999 ft SIN: 755023603516 Track 1: Linearization Steps = 100 GCP: track 1 enhanced det Track 1:Inbound PS Sensitivity = Off Track 1:Speed Limiting Used = Yes MCF and Template Selection MCF Name: GCP-T6X-02-1.mcf Track I: Speed Limiting Used = Yes Track I: Outbound False Act LvI= Normal Track I: Outbound PS Timer = 20 sec Track I: Trailing Switch Logic = On Track I: Post Joint Detn Time = 15 sec Track I: Adv Appr Predn = No Track I: Cancel Pickup Delay = This Isl MCF Revision: 021 MCFCRC: 6076E435 Template = 1A:6 Trk Bi Check Numbers 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 Office Check No.(DT 4.6.0): 4F6B7995 Office Check Number: 4F6B7995 Config. Check Number: 29CD5D17 (Based on MCF Revision 021) Track 1: Prime Pickup Delay = 15 sec Track 1: Prime UAX = IP Program Track 1: Prime UAX Pickup = 5 sec BASIC: module configuration Track 1 Slot = Track Track 2/RIO 1 Slot = Not Used GCP: track 1 pos start Track 1: Positive Start = Off Track 3 Slot = Not Used Track 4 Slot = Not Used Track 5/RIO 2 Slot = Not Used Track 5/RIO 2 Slot = Not Used Track 6/RIO 3 Slot = Not Used Track 6/RIO 3 Slot = Not Used SSCC-1 Slot = SSCC3i SSCC-2 Slot = SSCC3i SEAR Used = Yes 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 BASIC: MS/GCP operation Track 1:MS/GCP Operation = Yes Track 1:EX Limiting Used = Yes Track 1:EZ Correction Used = Yes BASIC: island operation Track 1: Island Used = Internal ISLAND: track 1 Track 1: IslFrequency = 4.9 kHz Track 1: Pickup Delay (2s +) = 0 sec Track 1: IslEnable IP Used = No BASIC: preemption Preempt Logic = No BASIC: radio Dax links Radio DAX link A Used = No Radio DAX link B Used = No AND: track Anding AND 1 XR Used = Yes BASIC: Vital Comms links Vital Comms link 1 Used = No 2 Used = No 3 Used = No AND VitalComms link 2 Used = No AND 4 Used = No AND 5 Used = No AND 6 Used = No AND 7 Used = No PREDICTORS: track 1 Irack 1: Prime Used = Yes 1:Dax A Used = No AND 8 Used = No Track :Dax B Used = No Track AND: AND 1 XR AND 1 XR Track 1 = Prime 1:Dax C Used = No 1:Dax D Used = No Track Track Track 1: Dax E Used = No Track 1: Dax F Used = No AND 1 Enable Used = Yes And 1 Enable Pickup = 5 sec AND 1 Enable Drop = 0 sec Track 1:Dax G Used = No AND 1 Wrap Used = No

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ADVANCED: MS restart
 MS/GCP Restart Used = No
ADVANCED: out of service

00S Control = Display+00S IPs

00S Timeout = Yes
 00S Timeout = 1 hrs
 ADVANCED: out of service 2
 T1 00S Control = 00S 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: internalI/O 1
Pass Thrus = No
Int.1 Sets = Not Used
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 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 Set by = Not Used
Int.7 Set by = Not Used
Int.8 Sets = Not Used
 Int.8 Set by = Not Used
 ADVANCED: internalI/0 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: internalI/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.14 Set by = Not Used
Int.15 Sets = Not Used
Int.15 Set by = Not Used
Int.16 Sets = Not Used
Int.16 Sets = Not Used
```

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

4000 GCP PROGRAMMING SETUP

DESIG JWB	O1-06-17	NORFOL SOUTHE	K RN		
	WN BY:	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	м.Р.:	T-015.9	7
IRE 01-06-17 CHECKED BY:		WILLISTON, (FLGS AT W. WALBRIDG	OH E EAST	RD.	
DBS	01-07-17 SERVICE:	TOLEDO DISTRICT	FILE R	-	
		CADD or DWG.No. TOTM01597.07	SHEET No.	7 of	22

REVISION PROPERT INITIALS NORFOL

NORFOLK SOUTHERN RAILWAY CO.

Int.16 Set by = Not Used

```
Gates Used = Yes
SSCC1+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
                     l Activation = AND 1 XR
1 Gate Delay = 6 sec
1 Number of GPs = 1
1 Number of GDs = 2
1 : Flash Rate = 40
                    1: Flash Sync = Moster

1: Low Battery Detection = No

1: Flash Sync = master

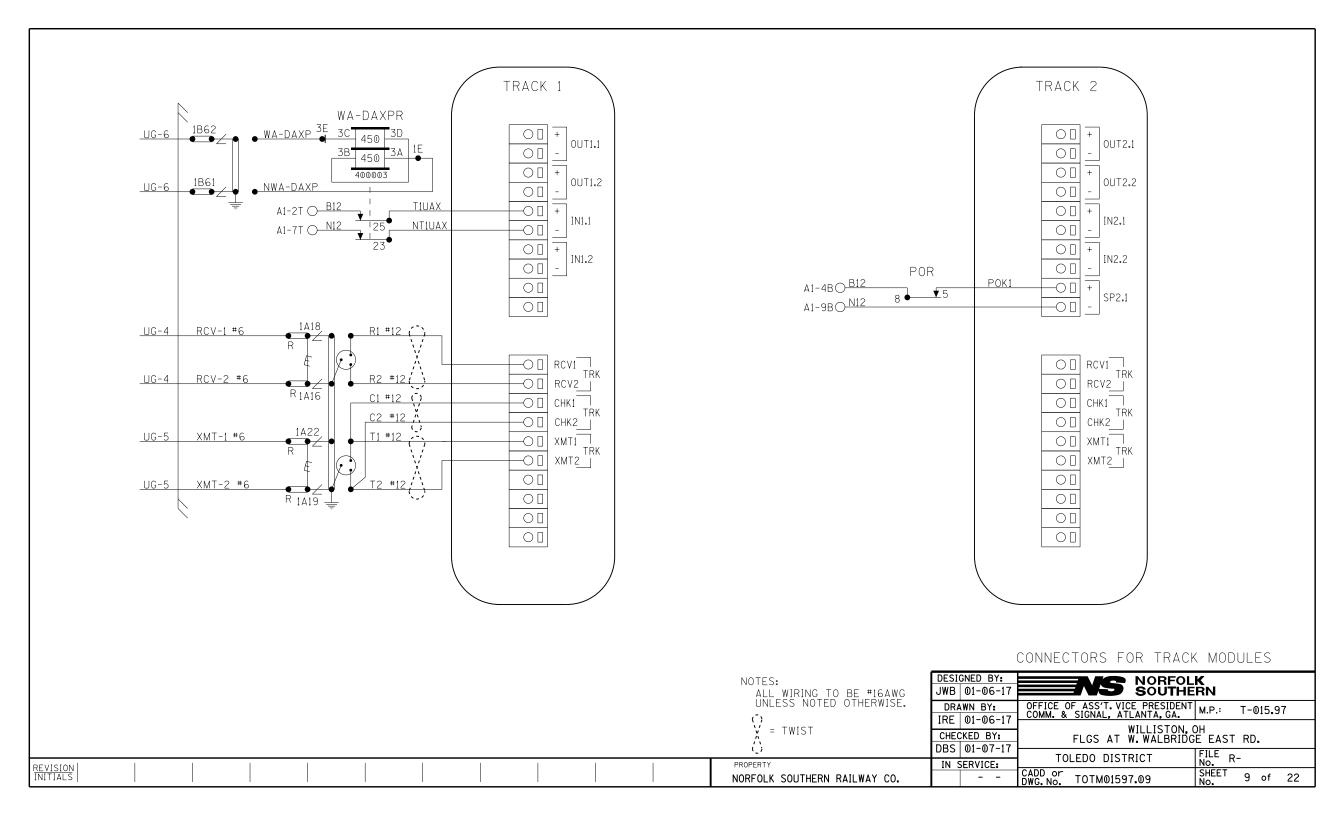
1: Invert Gate Qutput = No
  SSCC 1: Lamp Neutral Test = Off
Aux-1 Xng CtrlUsed = No
 SSCC: 2
SSCC-2 Activation = AND 1 XR
SSCC-2 Gate Delay = 6 sec
SSCC-2 Number of GPs = 0
SSCC-2 Number of GPs = 0
SSCC 2 :Flash Rate = 40
SSCC 2 :Low Battery Detection = No
SSCC 2 :Invert Gate Output = No
SSCC 2 :Lamp NeutralTest = Off
Aux-2 Xna CtrllIsed = No
  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 = T1 Prime UAX
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 = Out Of Service IP 1
IN 8.2 = Not Used
IN 8.3 = Not Used
IN 8.4 = Not Used
IN 8.5 = Not Used
IN 8.5 = Not Used
 SEAR
SEAR Subnode = 3
DI 1 = Not Used
DI 2 = Not Used
  Rly 1 = General1
Rly 2 = Not Used
 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
```

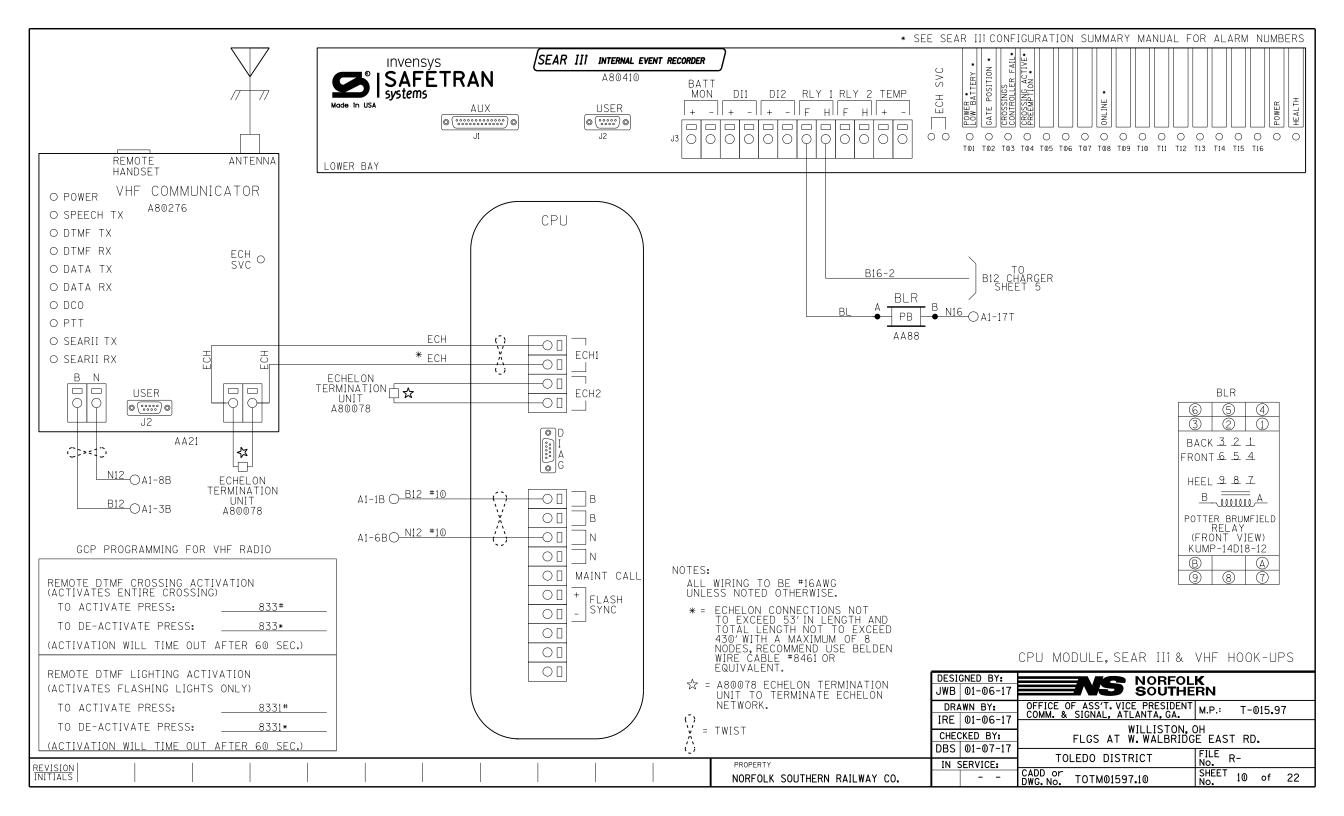
SEAR: slot 1-4 inputs SEAR: SIOT 1-4 INDL IN 1.2 = NOT Used IN 2.1 = NOT Used IN 2.2 = NOT Used IN 3.1 = NOT Used IN 3.2 = NOT Used IN 4.1 = NOT Used IN 4.2 = NOT Used SEAR: inputs slot 5 IN 5.1 = Not Used IN 5.2 = Not Used SEAR: inputs slot 6 IN 6.1 = Not Used IN 6.2 = Not Used SEAR: slot 7-8 inputs IN 7.1 = Not Used IN 8.2 = Not Used IN 8.3 = Not Used 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: TOTM01597.pac

4000 GCP PROGRAMMING SETUP

DESIGNED BY: JWB 01-06-17	NORFOLI SOUTHE	K RN
DRAWN BY: IRE 01-06-17		M.P.: T-015.97
CHECKED BY:	WILLISTON, C FLGS AT W. WALBRIDGI	DH E EAST RD.
DBS 01-07-17	TOLEDO DISTRICT	FILE R-
	CADD or DWG.No. TOTM01597.08	SHEET 8 of 22

NORFOLK SOUTHERN RAILWAY CO.





	SITE SET UP PROC	EDURE
	FUNCTION	LED DISPLAY
	DATE/TIME	
	AUTOMATIC DST ADJUSTMENT	YES
	TIME ZONE	EST
	SITE NAME	W.WALBRIDGE EAST RD.
	MILEPOST	T-015.97
	DOT #	473833E
	TESTER TYPE	CROSSING
	DATE FORMAT	MM-DD-YYYY
	TEMP FORMAT	FAHRENHEIT
	INDICATE HOLD (SEC)	0
	INDICATE REFRESH (SEC)	60
	SITE ATCS	7.550.236.035.03.01
	SITE TYPE	NO COMMUNICATION
**	OFFICE ATCS ADDRESS	2.550.00.0000
**	PRIMARY HOP ADDR	7.RRR.LLL.GGG.XX.XX
**	BACKUP HOP ADDR 1	7.RRR.LLL.GGG.XX.XX
**	BACKUP HOP ADDR 2	7.RRR.LLL.GGG.XX.XX
**	POLL ID	1
**	MODE	GEN/ATCS
**	WAMS XID	DISABLED
**	OFFICE COMM DEVICE	MCM (ECHELON)
**	RADIO ATCS ADDR	7.RRR.LLL.GGG.01.01
**	PHONE #	(OFFICE NUMBER)
**	INIT STRING	
**	FIELD COMM DEVICE	NONE
***	USER PORT BAUD	57600
***	USER PORT DATA BITS	8
***	USER PORT PARITY	NONE
***	USER PORT STOP BITS	1
***	USER PORT FLOW CONTROL	NONE
***	AUX PORT BAUD	9600
***	AUX PORT DATA BITS	8
***	AUX PORT PARITY	NONE
***	AUX PORT STOP BITS	1
***	AUX PORT FLOW CONTROL	NONE

	CONTROL SYSTEM CONFIGURAT	ION MENU QUESTIONS
	THE QUESTION	SELECT FROM MENU OPTION
	RESET NAMES AND MODULES?	YES
	RAILROAD NUMBER	550
	CROSSING CONFIGURATION	NORMAL
	AND 1 USED AS XR?	YES
	AND 2 USED AS XR?	NO
	AND 3 USED AS XR?	NO
	AND 4 USED AS XR?	NO
	AND 5 USED AS XR?	NO
	AND 6 USED AS XR?	NO
	AND 7 USED AS XR?	NO
	AND 8 USED AS XR?	NO
*	XR CONTROLLED BY FOREIGN RR	
	ENTRANCE GATES	2
	85% VOLTAGE RELAY OUT	YES
*	GATES CONTROLLED BY FOREIGN RR	
	BATTERY BANKS	2
	BATTERY MON USED	NO
	PREEMPTION	NO
	INTERNAL CROSSING CONTROLLERS	2
	EXTERNAL CROSSING CONTROLLERS	0
	VHF COMMUNICATOR	YES
	DTMF ACTIVATION	YES
****	ACTIVATION CODE	833
	ACTIVATION TIMEOUT (SECONDS)	60
	ILOD MODULES	0
****	ANY LED BULBS USED	
	VHF VOICE CHANNEL	2
	VHF DATA CHANNEL	2
	USE CELL MODEM NON-CRITICAL FEATURE	NO

PROGRAM MENU QUESTIONS	PROGRAM
EDIT DIGITAL INPUTS	NO
EDIT BATTERIES	NO
EDIT RELAYS	NO
EDIT INDICATOR LEDS	NO
EDIT TEST LEDS	NO
EDIT ILOD SENSORS	NO
EDIT VHF SETTINGS	NO
GCP4K ATCS SUBNODE	16

NOTES:

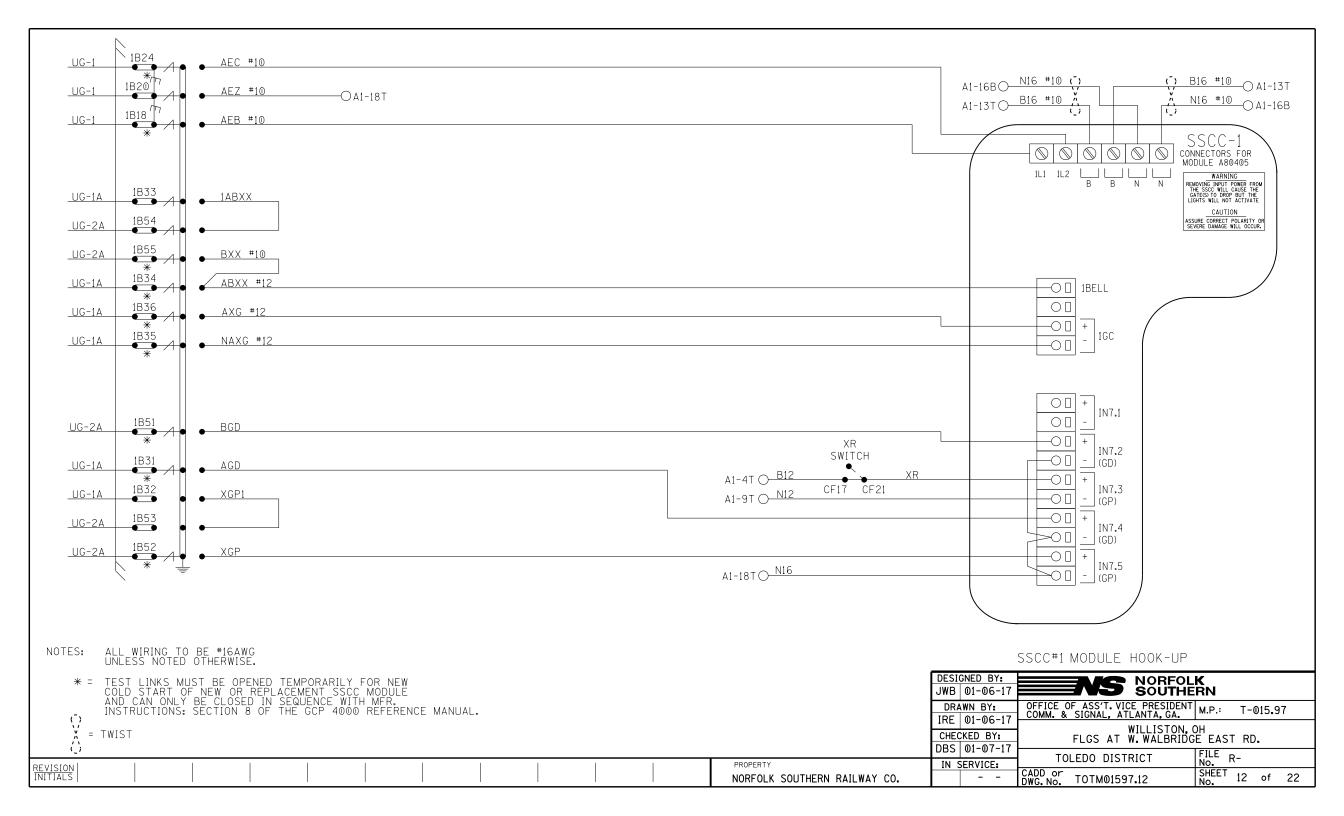
- * = DISPLAYED IF CROSSING CONFIGURATION IS SPLIT GATE.
- ** = IF SITE TYPE = NO COMMUNICATION, THEN THESE OPTIONS ARE NOT DISPLAYED.
- *** = THESE SETTINGS SHOULD BE LEFT AT THE DEFAULT SETTING.
- **** = USE LAST 3 NUMBERS FROM DOT NUMBER.
- **** = IF ILOD MODULE >0.

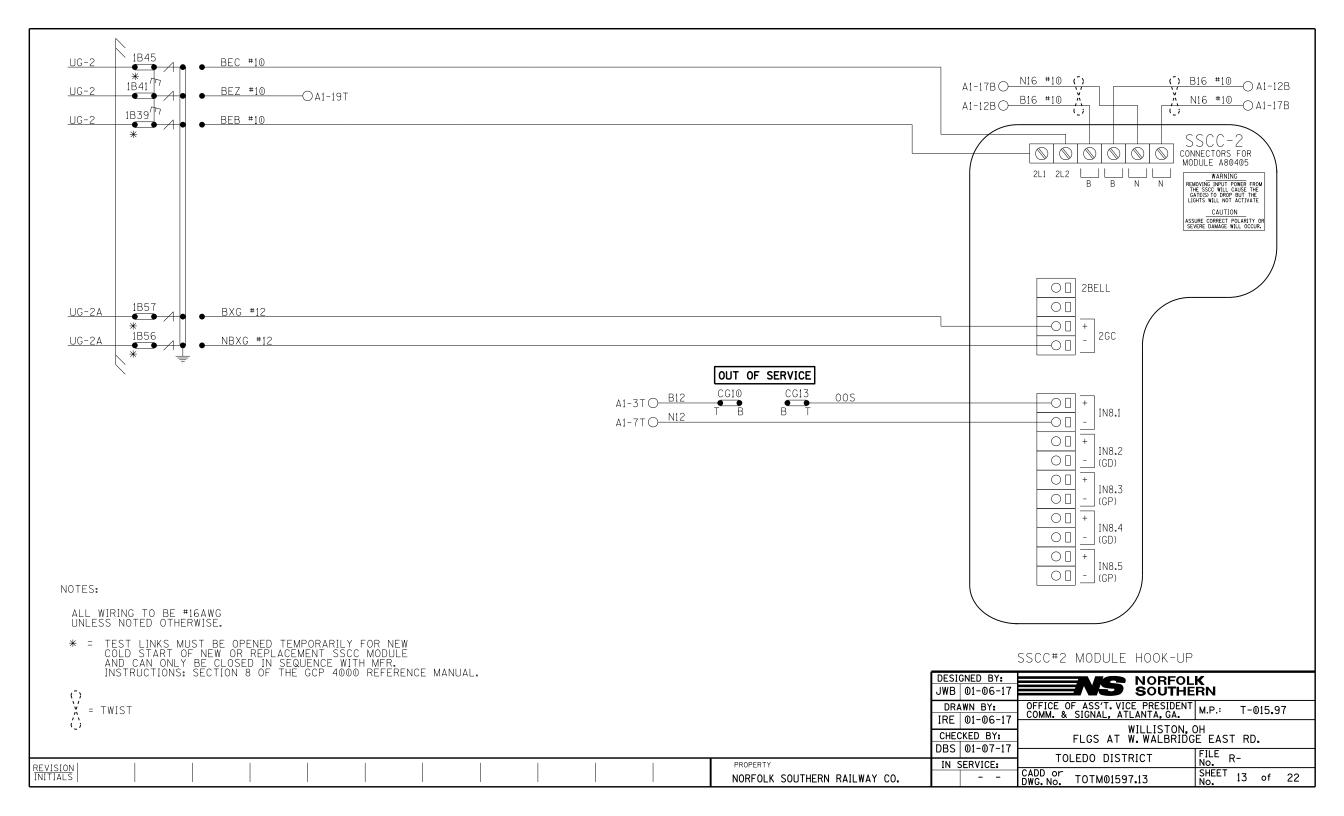
SEAR III PROGRAMMING SETUP

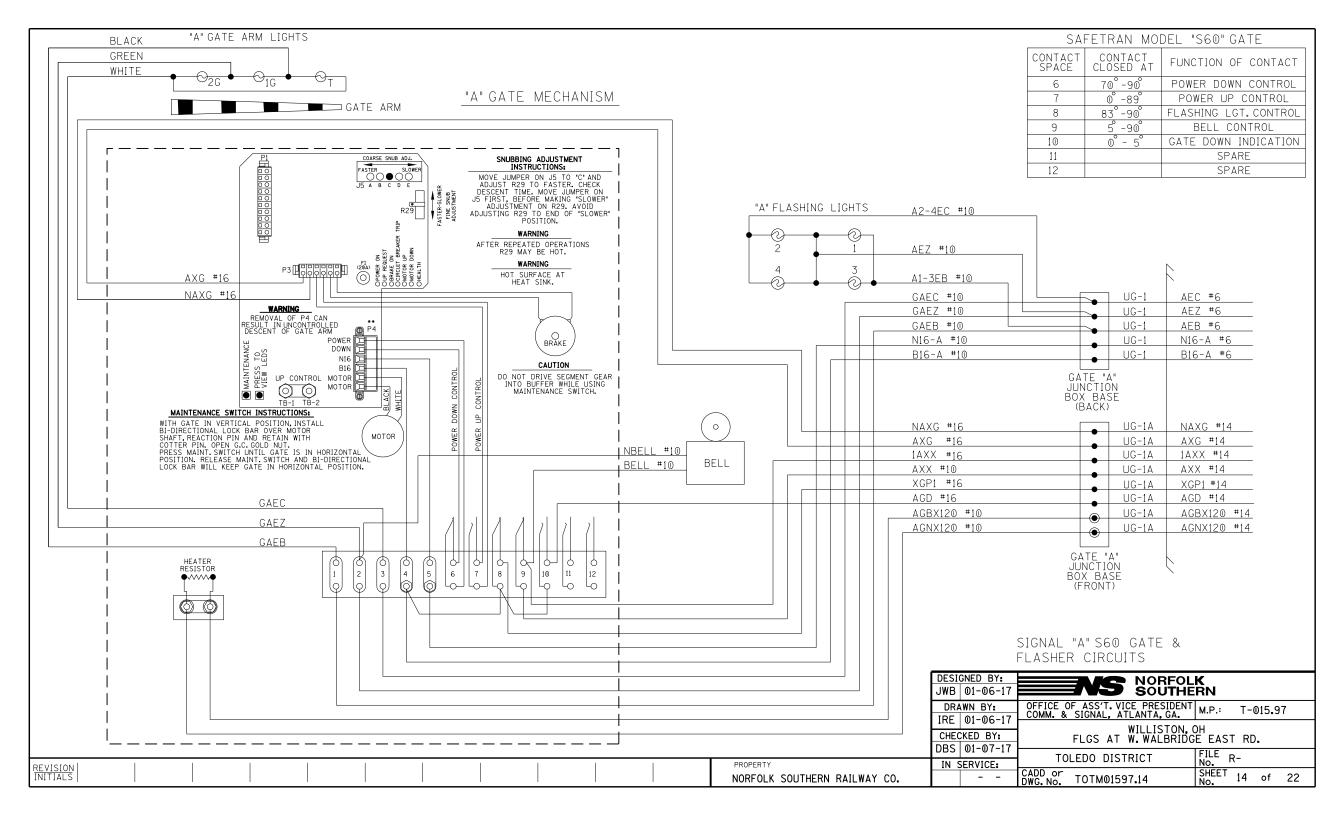
DESI	GNED BY:	NORFOLK				
JWB	01-06-17	NS NORFOLK SOUTHERN				
DRAWN BY:		OFFICE OF ASS'T. VICE PRESIDENT M.P.: T-015.97				
IRE	01-06-17	·				
CHEC	CKED BY:	WILLISTON, OH FLGS AT W. WALBRIDGE EAST RD.				
		FLGS AT W. WALBRIDGE EAST RD.				
כפט	01-07-17	TOLEDO DISTRICT FILE R-				
IN SERVICE:		NO.				
		CADD or TOTM01597.11 SHEET 11 of 22				

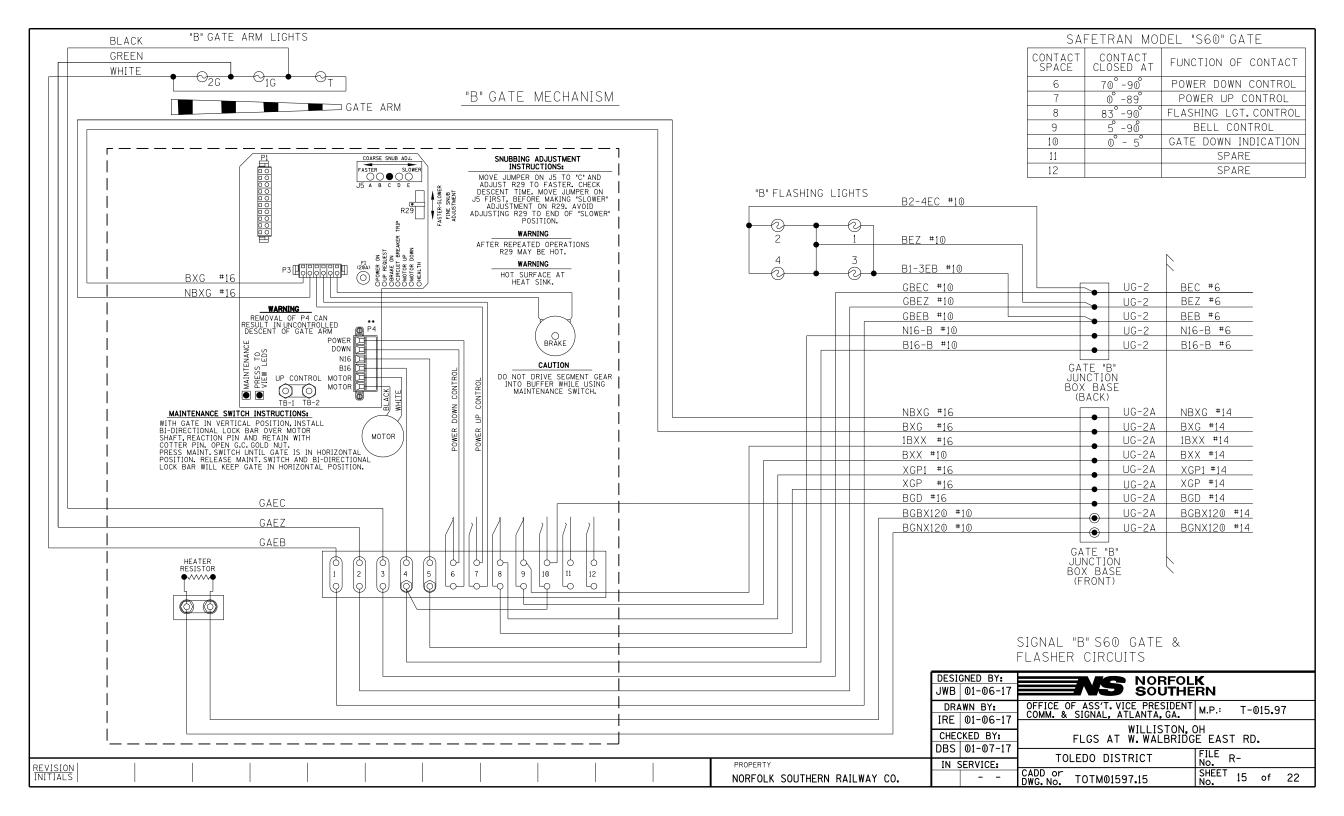
TO CONFIGURE SEARIII PRESS SITE SETUP KEY. USE ARROW KEYS TO MAKE SELECTION, PRESS ENTER AFTER SELECTION HAS BEEN MADE.

REVISION INITIALS PROPERTY NORFOLK SOUTHERN RAILWAY CO.







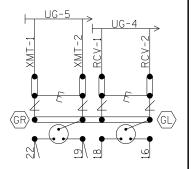


<u>"</u>

LEFT TWO ROWS TERMINAL BOARD

"1A"

UG-1 SEE_REAR_IERM. SEE_REAR_IERM. SPARE REAR TERM. SEE<u>REAR IERM</u> NWA-DAXP WA-DAXP SPARE SPARE SPARE SPARE 1AXX XGP 25 53 52 51 50 46 27 • 26 • 21 • 8 7 9



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

SEE FARADAY SHIELD DETAILS - 1A & 1B FOR HOW THIS PORTION OF THE FARADAY SHIELD IS PREDRILLED. ONLY INSTALL AND USE THE TERMINALS NEEDED.

— = Heavy Duty Equalizer (022700-1X)

Clearview

Z = 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. BACKBOARD 1A & 1B

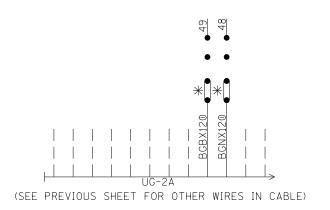
DESIGNED BY: JWB 01-06-17	NS NORFOL SOUTHE	K RN
DRAWN BY: IRE 01-06-17	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: T-015.97
CHECKED BY:	WILLISTON, C FLGS AT W. WALBRIDG	DH E EAST RD.
DBS 01-07-17	TOLEDO DISTRICT	FILE No. R-
	CADD or DWG.No. TOTM01597.16	SHEET 16 of 22

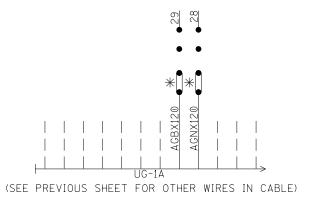
REVISION INITIALS

NORFOLK SOUTHERN RAILWAY CO.

TERMINAL BOARD 1 "1A" ROWS $_{\rm L}$ LEFT 0F REAR VIEW "1B"

REVISION INITIALS





NOTE: ALL 120VAC AND ABOVE WILL BE WIRED TO THE REAR OF FARADAY BACKBOARD. INSULATED NUTS MUST BE USED ON ALL TERMINALS.

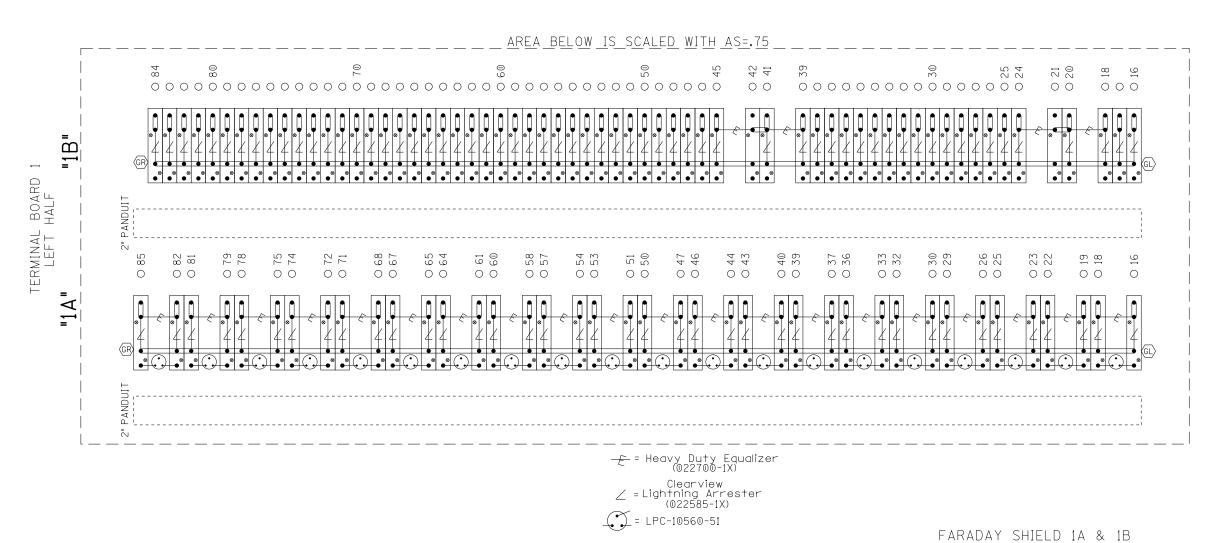
NORFOLK SOUTHERN RAILWAY CO.

* = CLOSED DURING WINTER MONTHS

REAR BACKBOARD 1A & 1B

DESIGNED BY: JWB 01-06-17	INOINI OLIX								
DRAWN BY: IRE 01-06-17	OFFICE OF ASS'T. VICE PRESIDENT M.P.: T-015.97								
CHECKED BY: DBS 01-07-17	WILLISTON, OH FLGS AT W. WALBRIDGE EAST RD.								
IN SERVICE:	TOLEDO DISTRICT FILE No. R-								
	CADD or DWG. No. TOTM01597.17 SHEET 17 of 22								

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.



= INDICATES PLACEMENT OF PANDUIT

REVISION INITIALS

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



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

DESIGNED BY: JWB | 01-06-17 DRAWN BY: IRE 01-06-17 CHECKED BY: DBS | 01-07-17

NORFOLK SOUTHERN

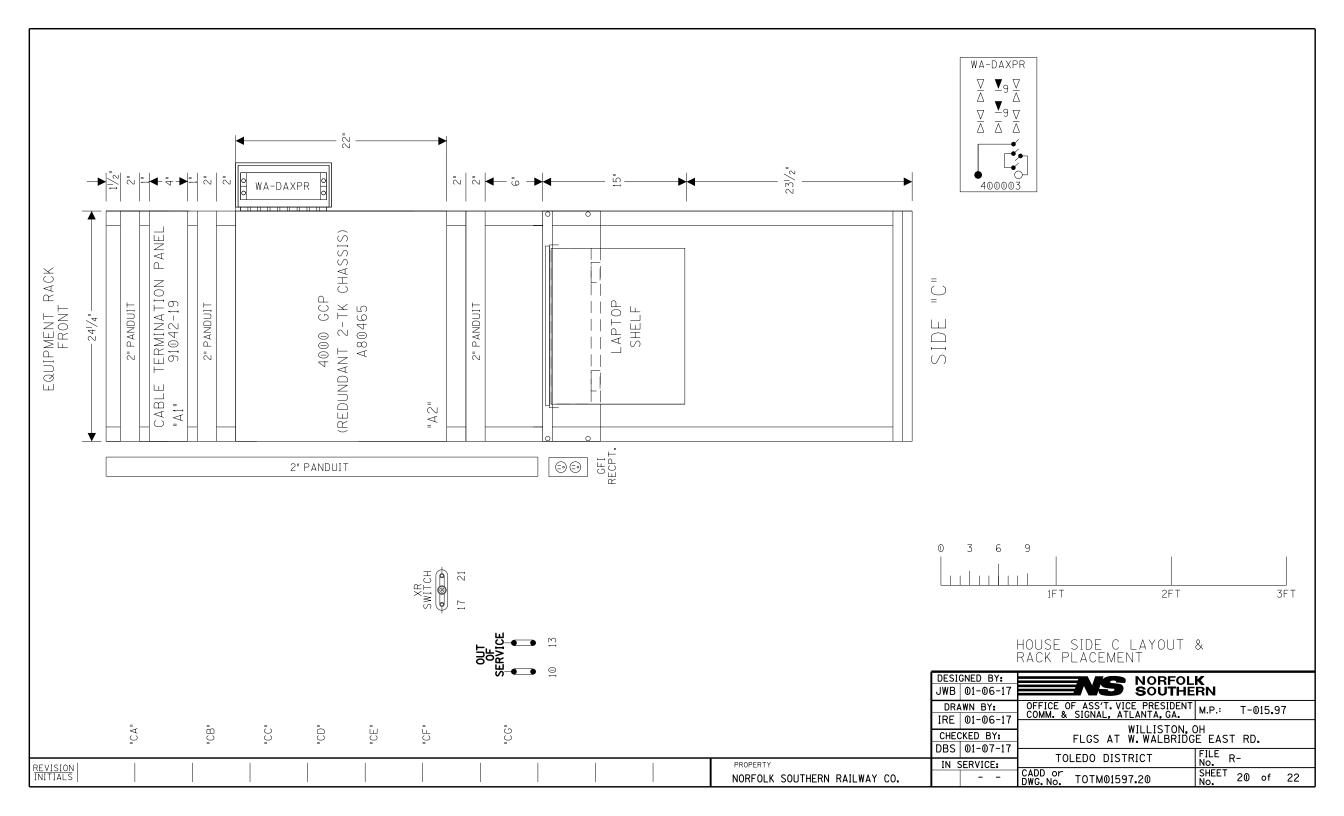
TOTM01597.18

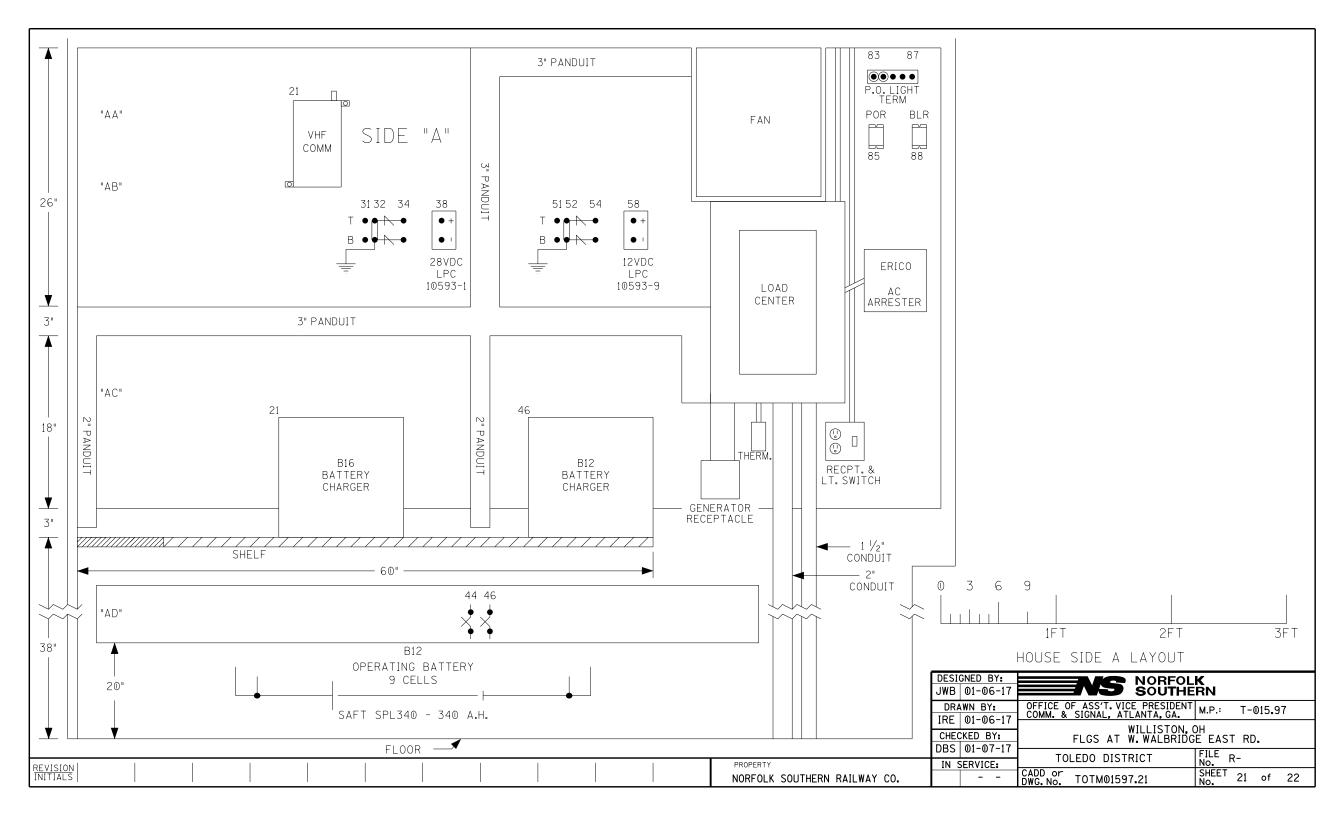
OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: T-015.97 WILLISTON, OH FLGS AT W. WALBRIDGE EAST RD.

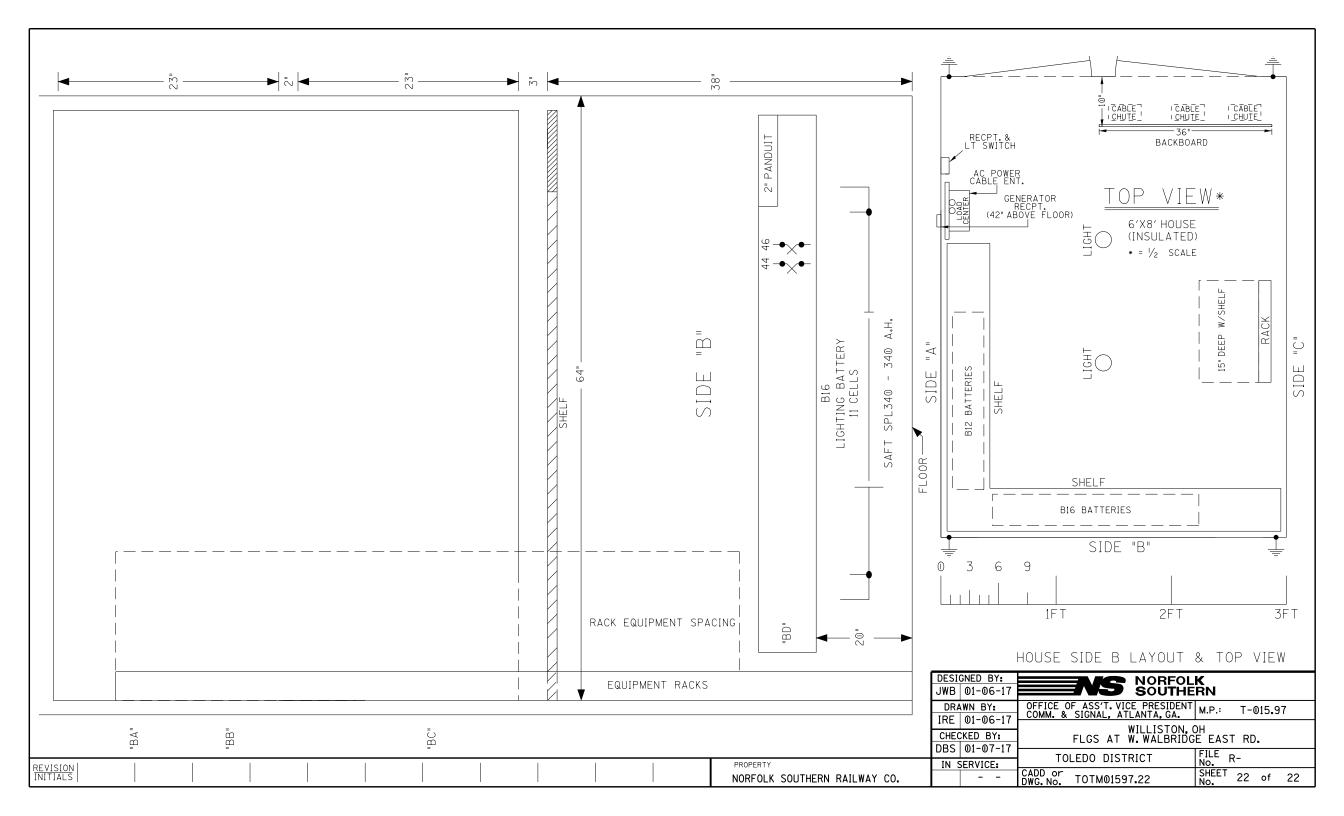
TOLEDO DISTRICT IN SERVICE: CADD or DWG. No. SHEET 18 of

NORFOLK SOUTHERN RAILWAY CO.

NOTE: IF THE FARADAY SHIELD WOULD EVER NEED TO BE DRILLED IN THE FIELD, PROPER PRECAUTIONS BE TAKEN TO INSURE METAL SHAVINGS DO NOT GET INTO EXISTING TERMINALS/WIRES. AREA BELOW IS SCALED WITH AS=.75 TERMINAL BOARD RIGHT HALF 000000000000000 000 = Heavy Duty Equalizer (022700-1X) Clearview ∠ = Lightning Arrester (022585-1X) = LPC-10560-51 FARADAY SHIELD 1C THIS SHEET IS FOR REFERENCE ONLY, DESIGNED BY: NORFOLK SOUTHERN JWB | 01-06-17 TO REFLECT HOW THE FARADAY SHIELD = TERMINALS GROUNDED TO SHIELD. = INDICATES PLACEMENT OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: 4 POST BLOCKS USE EITHER -DRAWN BY: IS PREDRILLED. ONLY INSTALL AND USE T-015.97 OF PANDUIT GR - SERMMI PART NO. 61278 IRE 01-06-17 THE TERMINALS NEEDED. WILLISTON, OH FLGS AT W. WALBRIDGE EAST RD. GL - SERMMI PART NO. 61278-1. CHECKED BY: DBS | 01-07-17 TOLEDO DISTRICT IN SERVICE: REVISION INITIALS CADD or DWG. No. SHEET No. 19 of NORFOLK SOUTHERN RAILWAY CO. TOTM01597.19







SZ.	CONTENTS
NX1	INDEX SHEET
1	LAYOUT
2	PROFILE
3	CABLE PLAN
4	LOAD CENTER
5	B12 & B16 CHARGERS & BATTERIES
6	4000 GCP 2-TK CHASSIS & MODULE LAYOUT
7	4000 GCP PROGRAMMING SETUP
8	4000 GCP PROGRAMMING SETUP
9	CONNECTORS FOR TRACK MODULES
10	CPU MODULE, SEAR III & VHF HOOK-UPS
11	SEAR III PROGRAMMING SETUP
12	SSCC#1 MODULE HOOK-UP
13	SSCC#2 MODULE HOOK-UP
14	SIGNAL "A" S60 GATE & FLASHER CIRCUITS
15	SIGNAL "B" S60 GATE & FLASHER CIRCUITS
16	BACKBOARD 1A & 1B
17	REAR BACKBOARD 1A & 1B
18	FARADAY SHIELD 1A & 1B
19	FARADAY SHIELD 1C
20	HOUSE SIDE C LAYOUT & RACK PLACEMENT
21	HOUSE SIDE A LAYOUT
22	HOUSE SIDE B LAYOUT & TOP VIEW

INDEX SHEET

DESIGNED BY: JWB 01-06-17	NS NORFOL SOUTHE	K
DRAWN BY:	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	
IRE 01-06-17	WILLISTON, (FLGS AT W.WALBRIDG	
DBS 01-07-17	TOLEDO DISTRICT	FILE No. R-
	CADD or DWG.No. TOTM01597.NX1	SHEET 1 of 22

REVISION	1	1	1	1	1	1	PROPERTY
INITIALS							NORFOLK SOUTHERN RAILWAY CO.

OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223 John R. Kasich, Governor • James G. Bradley, Chairman

November 1, 2016

Mr. Stephen Klinger Norfolk Southern Corporation Administrator Grade Crossing Program 1200 Peachtree St. NE, Box 123 Atlanta, GA 30309

RE: Grade Crossing Warning Device Improvements
Ottawa County, TR 68, Walbridge East Rd.
DOT# 473833E
PID# 101712

Dear Mr. Klinger:

A diagnostic review was held at the above grade crossing on 4/17/2015. The crossing has been recommended for the installation of automatic flashing lights and gates.

Norfolk Southern Corporation is authorized to proceed with the site plans and cost estimates (PE) for this project. This authorization is made with the stipulation and understanding that any field work needs prior approval before work begins. This authorization is also made with the stipulation and understanding that an approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit.

The ORDC is not requesting that the PUCO issue an Order at this time. When the ORDC receives the PE it will be evaluated and a construction-only Order will be requested from PUCO. Please submit the PE to ORDC within 90 days of receipt of this letter.

The diagnostic review form is attached. Please note any recommendations (page 5), if any, made by the team with regard to requirements for this location. Any minor roadway work necessary for MUTCD compliance should be incorporated into the PE and such costs will flow through the railroad reimbursement process

The ORDC Project Manager for this project is Don Damron. Don can be reached at 614-466-2509 (office), or 614-917-8466 (cell), or don.damron@dot.state.oh.us, if you have any questions.

Sincerely,

Donald J. Damron Project Manager

C: Randall Schumacher, Supervisor, Rail Division, Transportation Department, PUCO

George Martin, Grade Crossing Planner, PUCO

ORDC (file)

Attachments: Diagnostic Review Team Survey dated 4/17/2015

ORDC/NS Letter Agreement dated 9/15/2015



www.rail.ohio.gov phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY



OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223 John R. Kasich, Governor • Mark Policinski, ORDC Chairman

September 15, 2016

Norfolk Southern Railway Company Mr. Stephen Klinger Administrator Highway Grade Crossing Improvements 1200 Peachtree Street Atlanta, GA 30309-3597

Subject:

Grade Crossing Warning Device Improvements

Ottawa County, TR 68, Walbridge E. Rd., DOT # 473833E, PID 101712

Dear Mr. Klinger:

A diagnostic review was conducted at the subject grade crossing on 4/17/15. As a result of the review, the devices will be upgraded to automatic flashing lights and roadway gates.

This project shall be completed in compliance with Agreement No. 17450, dated December 19, 2012, entered into by the State of Ohio and Norfolk Southern Railway Company (NS) and incorporated as if fully rewritten herein. This construction shall also meet the general terms and conditions under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and subsequent amendments and the State of Ohio's Federally Funded Warning Device Program.

Preliminary engineering (PE) and construction costs shall be borne one hundred percent (100%) by ORDC. Reimbursable costs will be limited by the ORDC based on approved estimates and bid tabulations, if applicable. These limits will be quantified by the ORDC in its construction authorization to NS and may be amended by the ORDC based on revised estimates and bid tabulations.

This Letter Agreement and the approved plans constitute the scope of the project. NS shall notify ORDC in writing of any changes in the scope of work which are not in the approved plans and estimates and secure approval in writing of same before the work is performed.

PE will not be commenced by NS prior to ORDC issuing a PE authorization. PE will be submitted by NS to ORDC within ninety (90) days or other time specified by ORDC in the PE authorization. Construction will not be commenced by NS prior to ORDC issuing a construction authorization. Construction will be completed by NS within nine (9) months or other time specified in the time specified by ORDC in the construction authorization.

Please indicate your acceptance of the terms and conditions of this Letter Agreement by signing and returning one (1) copy to me at the address listed above and retain a copy for your files. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be a duplicate original, but all of which taken together shall be deemed to constitute a single Agreement.

Sincerely,

Matthew R. Dietrich Executive Director

www.rail.ohio.gov p

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

Norfolk/Southern Railway Company:

Bo Mugory Cample

Title: General Manager

Date: 9/23/2016

OTT TR 68 Walbridge E. Rd NS 473833E PID 101712

OHIO RAIL DEVELOPMENT COMMISSION

Diagnostic Review Team Survey

		Date: 4/17/2015
Reason for Survey: Formula (e.g. formula, accident, constituent, etc.)		
Location Data		
Street or Road Name: Walbridge East Road		US DOT No.: 472022E
Route/Road Number (i.e. Twp., Co., SR or US)		US DOT No.: 473833E
County: OTT Township: Alle	en City: (In or Near)	
Kaliroad at (II C disam Dellaged	ailroad vivision: Dearborn	Branch/Line Toledo Dist. Name:
Nearest RR Timetable Station: Williston		RR Milepost: 15.97
On-Site Review Team		
G. L. L. Name Organization - Phone Number - Ema	il)	
(Include: Name – Organization – Phone Number – Ema	15 419-557	1-4310 Joshua, Leber @ Ascorp
1. Joshua S Leber C.	Lunda H Day	don.damron@dot-state.oh.us
2. DON DAMRON: ORDO	; (614)917-8466	201. clamron (wasi-sigic.on. 03
3. SCOTT EVERHAROT, AL	ENTWP. TRISTER L	119.836.9614 SCOTT, APROENTAUMK.
0	Me Kinya March &	NE NE
4. Mile FAMMER A	The The Market	2-9107 M. harden 144 gam
5. GEALGE MARTIN T		
CRAIG BLAUSEY ALL	EN TWP Trustee	419-466-0331 colourent @ 000
0.	K.	ganoo.com
7		
8		
9		
j		
Existing Traffic Control Devices		美国企业企业的基础。在全国企业
Type of Warning Devices	Installed?	Quantity/Comments
Advance Warning Signs (condition?)	✓ Yes ☐ No	
'Stop' Signs	Yes	
'Stop Ahead' Signs	☐ Yes ☐ No	
Pavement Markings (condition?)	Yes No	
Crossbucks	Yes No	
Number of Tracks Signs	☐ Yes ☑ No	
Inventory Tags	Yes No	
Interconnected Highway Traffic Signal	Yes No	
Mast-Mounted Flashing Lights	Yes No	Number: Length:
Cantilever Flashing Lights	Yes No	Number.
Side Lights	☐ Yes ☐ No	Number: Length:
Automatic Gates		Number:
Bells	Yes No	Trumber.
Sidewalk Gate Arms	☐ Yes ☑ No	
'No Turn' Signs	Yes No	COS NOTE.
Illumination	☐ Yes No	SIGNAL TO SE SOME MAY
Is crossing flagged by train crew?	☐ Yes ☐ No	STOP AT DROSSING
	☐ Yes ☐ No	

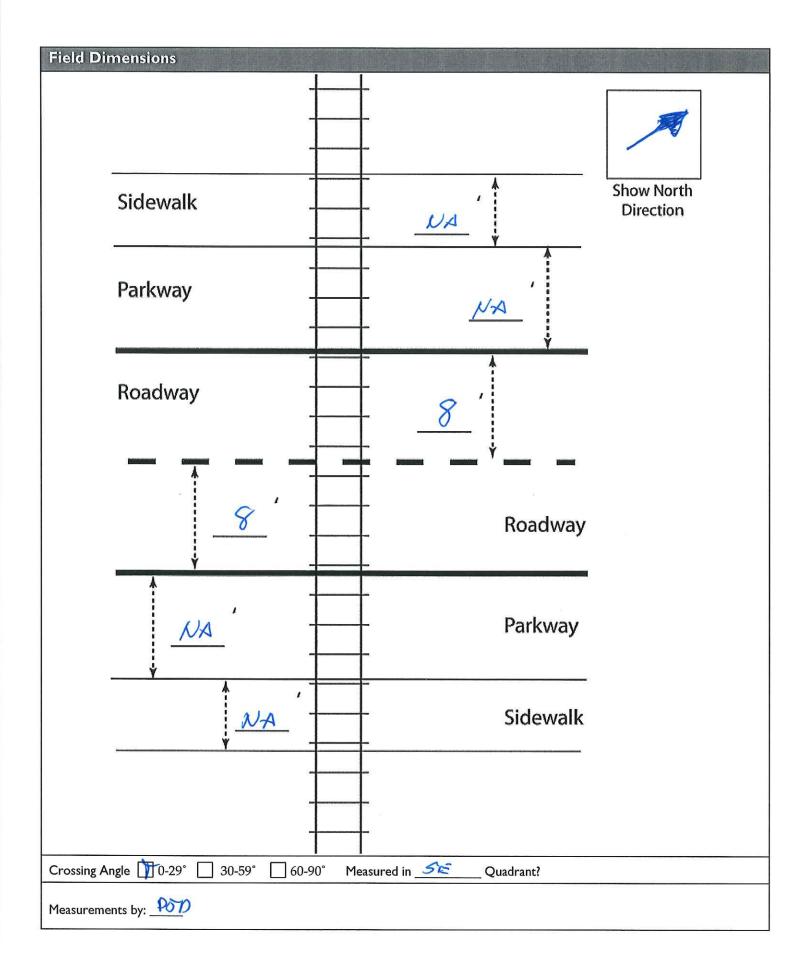
Safety Data (Obtain crash reports, if possible, prior to review)			
	Initial Information (from database) Revised		
Number & dates of crashes in previous 5 years	0		
Hazard Ranking	1389	Date Run: 4/7/2015	
Railroad Data			
Railroad Characteris	tics	Initial Information (from database)	Revised
Total trains per day		16	MORE TRAINS AS OF APRIL 1
< I per day			WAKE TRAINS = 4 Day
Day thru trains		8	AT LEAST ONE DAY
Night thru trains		8	#344 BULLT IN HOLHSTEAD YARD
Daytime switching moveme	ents		
Nighttime switching moven	nents		
Total number of tracks		1	
Number of main tracks		1	9
Number of other tracks			Si a sa s
Maximum train speed		50	OK
Typical train speed		50	MAY BE 35-40
Amtrak	Amtrak		
If non-gated crossing, is clearing	g sight distan	ce adequate in all quadrants? (See Table I)	Yes No
If multiple tracks, can two train	ns occupy cro	ossing at the same time? Yes No	
Can one train block the motor	ists' view of	another train at crossing? Yes (Explain be	elow) 🗌 No
Can one or more tracks be eli	minated thro	ugh the crossing? Yes No	
Are there other track(s) cross	ing this same	roadway within 100 ft of this crossing?	Yes 1 No
If yes, Crossing DOT #(if d If yes, distance	ifferent) (take mea	 asurement between track centerlines at close	est point along roadway)
Roadway Data			
Local Highway Authority: Allen Township			
Roadway Characteri	stics	Initial Information (from database)	Revised
Average daily traffic		89 (2007)	800/9 DAYS) 120/DAY
Highway paved		Yes No	Yes No
Roadway Surface: 🛂 Blacktop	Gravel	Concrete Other	
Roadway width: 16 ft.			
Number of highway lanes			ZLANES
Urban or Rural		Urban	
Vehicle Speed: 55 MPH			
School Bus Operation: No VYes 4 Amount 2 AM / 2 PM			
Hazardous Materials Trucks: No Yes Amount FERTICIZER PLXINT TO THE WEST			
Shoulders: No Yes			
Is the shoulder surfaced? No Yes			
Is there existing guardrail along roadway in crossing vicinity? No Yes			
Is stopping site distance adequate? (See Table 2)			

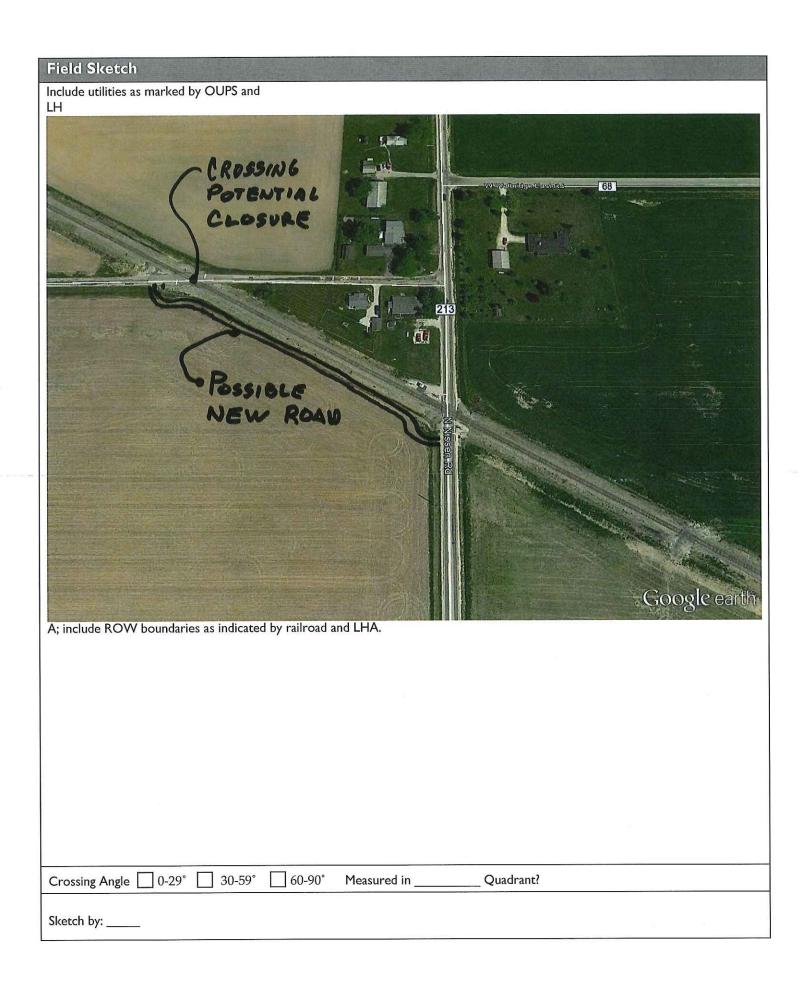
Quadrant Curb and Gutter:	Quadrant Curb and Gutter:	
Functional (Curb height = 4" or more)	Functional (Curb height = 4" or more)	
☐ Non-functional (Curb height = Less than 4")	☐ Non-functional (Curb height = Less than 4")	
None	None	
Pedestrians: WNo Yes May BE	A FOW PEDESTRIANS	
Is sidewalk present? No Yes		
Is there a nearby intersection that could cause queuing over the ci	rossing? Vo Yes	
If yes, Distance		
Is this intersection signalized? No Yes		
Are the signals currently interconnected with the existing crossi	ing warning devices? No Yes	
Is there a 'Do not Stop on Track' sign? No		
	by new or upgraded traffic signal, sidewalk) planned at or near this	
location in the foreseeable future? No Yes		
Improvement type Lead Agency _	Timeline/completion	
Is it the consensus of the Diagnostic Review Team that this is a potential closure project: No		
NOT PRIMARY ROOTE (IM	SIDE POCT SCHOOL BUS LOUTE AS WELL)	
Type of Development		
Open Space Institutional Location of nearby		
☐ Industrial ☐ Commercial 5W of CR	0351006	
Residential		
Utility Information		
Is commercial power available? No Yes		
Utility Provider (Company Name) Tok. EDISON Phone Number		
Nearest Available Power Source AT NISSEN		
What other utilities are present? Gas Cable Telephone Fiber Optic Cable (add locations to sketch) Petroleum Water Sanitary Sewer		
Other		
Is(are) there potential utility conflict(s)		
Comments: FIBER CROSSES ROAD FROM N TO S SIDE OF TAKES:		
-NE QUAD = NORTH OF TRACKS		
-5 W QUAD = SOUTH OF TRACKS		

Potential Red Flags / Project Challenges
Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):
NA
Crossing Consolidation or Closure:
POSSIBLE CONSOLIDATION PROJECT
Real Estate or ROW: RR = 50 EITHER SIDE 100
ROAD = GO' TOT ROW
Culverts / Drainage / Ballast Conditions:
DITCH IN SW QUAD MAY IMPACT GATE MECH FOUNDATION
CLEAN DITCH WORK RECENTLY COMPLETED.
Roadway and/or Sidewalks:
NA
Circuitry (e.g. reaches out to other crossings, specific needs, etc.):
INTERMEDIATE SIGNAL AT NISSENC
Environmental: CONSOLIDATION WILL INVOLUE ENVIRONMENTAL REVIEW
Other:

Diagnostic Team Recommendations		
	Quadrants Needed	
Install/upgrade active devices		
Automatic Flashing Lights (AFLS)		
AFLS /Cants		
AFLS / Gates		
AFLS / Gates / Cants		
Bells / number		
Upgrade circuitry / type		
Sidelights		
☐ Guardrail Needed		
☐ Install/Replace curb		
☐ Bungalow placement & offset from rail & highway		
Other (define)	#1	
Comments: CONSENSUS:	TOWNSHIPS PUBLIC).	
107ENTIAL CLUSURE (DISCUSSIO		
POTENTIAL OLDSURE (DISCUSSION * IF NOT POSSIBLE TO CLOSE THE	EN UPBRADE WITH L+G. *	
☐ Install/upgrade traffic signal preemption		
☐ No improvements needed		
Other (define)		
Acknowledgement of Recommendations (each entity represented	at the diagnostic must have at least one signature	
acknowledgement):		
(v) (w) Sur Enla	Oil	
En G'Blancey		
of god		

*PUCO/OROC/NS WILL NOT PETITION TO CLUSE CROSSING.





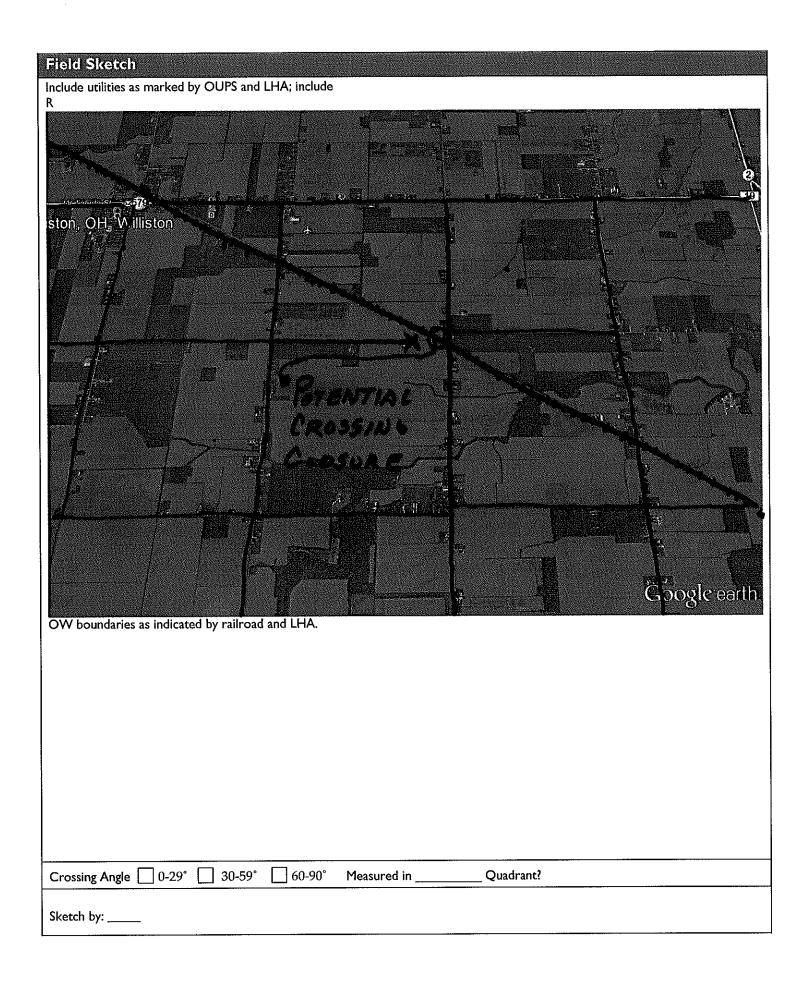


TABLE I

Clearing Sight Distances

Maximum Authorized Train Speed	Distance (dT) Along Railroad from Crossing (ft)
1 - 10	240
15	360
20	480
25	600
30	720
35	840
40	960
45	1080
50	1200
55	1320
60	1440
65	1560
70	1680
75	1800
80	1920
85	2040
90	2160

Source: R-H Grade Crossing Handbook Table 36 (pp. 132-133)

Notes:

All calculated distances are rounded up to the next higher 5-foot increment.

Distances indicated are for 65-ft double bottom semi-tractor trailers and level single track 90 degree crossings; and may need to be adjusted for multiple tracks, skewed crossings or approaches on grades.

Clearing Sight Distance is to be measured in each vehicle travel direction at <u>non-gated crossings</u> as viewed from a point 25 feet from centerline of nearest track in the center of whichever travel lane is nearest the direction along track being measured.

Table 2

Stopping Sight Distances

Highway Vehicle Speed	Distance (dH) Along Roadway from Crossing (ft)
0	n/a
5	50
10	70
15	105
20	135
25	180
30	225
35	280
40	340
45	410
50	490
55	570
60	660
65	760
70	865

Source: R-H Grade Crossing Handbook Table 36 (pp. 132-133)

Notes:

All calculated distances are rounded up to the next higher 5-foot increment.

Distances indicated are for 65-ft double bottom semi-tractor trailers on dry level pavements.

Stopping Sight Distance is to be measured on each roadway approach to crossing from stop bar.

This foregoing document was electronically filed with the Public Utilities

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6/12/2017 8:08:19 AM

in

Case No(s). 17-1424-RR-FED

Summary: Application In the Matter of a Request for the Installation of Active Warning Devices at the Norfolk Southern Railway Crossing, Walbridge East Road/TR 68 DOT#473-833E, in Ottawa County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division