

# Memo

To: Docketing Division  
From: Jill Henry, Rail Specialist, Rail Division  
Cc: PUCO Legal Department  
Date: 10/25/17

Re: PUCO Case No. 17-2198-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices and Surface Installation at the Wheeling & Lake Erie Railroad Grade Crossing, DOT# 472-675D, at Seasons Road/TR 157 in Portage County, Ohio.

---

On February 6, 2017, the Ohio Rail Development Commission (ORDC) authorized funding for Wheeling & Lake Erie Railroad (WE) to install lights and gates and a new surface at Seasons Road/TR 157 in Portage County, Ohio. The crossing was surveyed on October 11, 2016 and was found to warrant the upgrade. The electric utility provider for this crossing is Ohio Edison, First Energy Corporation.

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amount of \$291,994.79 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 railroad will be responsible 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:**


Wheeling & Lake Erie Railway Company  
Tim Andrews  
Signals & Communications Supervisor  
100 E. First Street  
Brewster, Ohio 44613

Ohio Rail Development Commission  
Cathy Stout  
1980 West Broad Street  
Mail Stop #3140  
43223

Franklin Township, Portage County  
Ken Penix  
Township Administrator  
218 Gougler Avenue  
P.O. Box 291  
Kent, Ohio 44240

Ohio Edison/First Energy

**OHIO RAIL DEVELOPMENT COMMISSION  
INTER-OFFICE COMMUNICATION**

**TO:** Randall Schumacher, Rail Division, PUCO  
**FROM:** Cathy Stout, Manager, Safety Section, ORDC  
**BY:** James Tucker, Project Manager, ORDC   
**SUBJECT:** Portage County, TR157/Seasons Rd. DOT #472675D  
Wheeling & Lake Erie, PID 104305.  
**DATE:** September 27, 2017

---

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on October 11, 2016. The Ohio Rail Development Commission (ORDC) attended the review. The Diagnostic Team recommended the improvement of warning devices to flashing lights and roadway gates, with the surface to be replaced as well. Copies of the diagnostic review form and the plan and estimate are attached.

PE has already been provided by the railroad. ORDC approves the site plans and estimates as provided. Please issue a construction-only order for the project outlined above for nine month's. This construction authorization is made with the stipulation and understanding that any field work needs prior approval before the work begins. 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 railroad will be responsible 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.

Attachment: Diagnostic Review  
Plan & Estimate

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



# OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223

John R. Kasich, Governor • Mark Policinski, ORDC Chairman

September 27, 2017

Mr. Tim Andrews  
Wheeling & Lake Erie Railway (WLE)  
100 East First Street  
Brewster, Ohio 44613

RE: Portage County, Seasons Rd.  
DOT 472675D, PID# 104305

Dear Mr. Andrews:

The plan and estimate dated June 26, 2017, for the referenced project has been reviewed and is acceptable. WLE may proceed with the construction of the proposed grade crossing warning system and surface replacement 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 \$291,994.79 split as follows \$197,432.54 for light and gates and \$94,562.25 split 50/50 for surface reconstruction. 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 WLE accepting the following instructions:

1. WLE's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to James Tucker, ORDC, email [James.tucker@dot.state.oh.us](mailto:James.tucker@dot.state.oh.us) and to the Public Utilities Commission of Ohio at [jill.henry@puco.state.oh.us](mailto:jill.henry@puco.state.oh.us). WLE's 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. WLE 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 WLE.
3. WLE's project foremen will notify James Tucker at [James.tucker@dot.state.oh.us](mailto:James.tucker@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. WLE will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
6. WLE 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. This installation will include any ancillary work to make the warning devices function as designed and meet MUTCD.

Thank you for your assistance with these matters.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Tucker', followed by a horizontal line.

James Tucker  
Project Manager

C: Randall Schumacher, Rail Division Supervisor, PUCO  
Jill Henry, Grade Crossing Planner, PUCO  
Susan Arduini, ORDC  
ORDC (file)



# OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223

John R. Kasich, Governor • Mark Policinski, ORDC Chairman

August 3, 2017

Mr. Tim Andrews  
Wheeling & Lake Erie Railway  
100 E. First St.  
Brewster, Oh 44613

RE: Portage County, Seasons Rd, DOT #472675D, PID#104305

Dear Mr. Andrews:

The plan and estimate transmitted June 26, 2017, for the referenced project has been reviewed and is acceptable. Wheeling & Lake Erie may proceed with soliciting bids for 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.

A construction authorization will be sent once the bid documents have been received and approved. No field work may be started without a construction authorization from this office.

Sincerely,

James Tucker, Project Manager  
Ohio Railroad Development Commission

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



[www.rail.ohio.gov](http://www.rail.ohio.gov)

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

# WHEELING & LAKE ERIE RAILWAY COMPANY

Tim Andrews  
Signal & Communication Supervisor  
Tel. 330-767-7255

[tandrews@wlerwy.com](mailto:tandrews@wlerwy.com)

100 East First Street  
Brewster, OH 44613  
Fax: 330-767-3213

June 26, 2017

Ohio Rail Development Commission  
Mr. Eric Neff  
1980 West Broad Street, Room 2B  
Columbus, OH 43223

Re: Estimate for Railroad Crossing Warning System at Seasons Rd. DOT 472675D

Dear Mr. Neff,

I am providing this estimate for the crossing package and installation at Seasons Rd. The estimate also includes the crossing surface rehab. Award of the material package will be the result of a competitive bid; copies of the submitted quotes will be forwarded to your office when they are completed. Installation of the signals will be performed under our continuing construction agreement with CTC LLC.

<b>Engineering Services, CTC (breakout attached)</b>	<b>\$156,069.99</b>
<b>Fill Materials, transport, hauling</b>	<b>\$13,000.00</b>
<b>Preliminary Installation Services, Crosier</b>	<b>\$20,488.34</b>
<b>Electric Service, Emery</b>	<b>\$3,950.00</b>
<b>Electric Utility fees</b>	<b>\$4,200.00</b>
<b>WLE Direct Signal &amp; MOW Labor</b>	<b>\$19,379.67</b>
<b>Galvanized signal foundations</b>	<b>\$1,178.00</b>
<b>Wintrow Construction – Crossing Surface</b>	<b>\$94,562.25</b>
<b>TOTAL:</b>	<b>\$312,828.25</b>

Please contact me if additional details are required.

Respectfully,

Tim Andrews



Direct purchase from Fabricated Metals, 60' galvanized gate foundation, \$589.00 ea.

WLE

Seasons Rd.

Kent, Ohio

Attn: Dan Reinsel Email: dreinsel@wlerwy.com

**Replace existing road crossing at Season's Rd with 47.5'  
Oldcastle Star Track Crossing**

Saw cut existing roadway 10' out from proposed crossing panels  
Remove existing crossing structure and road approaches per Sheet 5  
Infill drop off areas with excavated materials and dispose of all remaining debris off site  
Excavate ballast from underneath ties to required depth  
Install drainage and conduit in open cut if requested (no materials included in this bid)  
Install LSM base to within 1" of bottom of new precast panels  
Install one inch of sand for a leveling/bedding surface for the panels and set pre-cast panels  
Weld 19'6 transition rails to the ends of the 80' sticks of 115 RE  
Install 115RE as required for installation in the crossing panels  
Re-tie in the rail to the existing line with joint bars  
Install 8 Allegheny joints provided by others (4 for island circuit and 4 for approach circuits)  
Both rail approaches will receive 10 new 9' approach timbers  
Place asphalt for road approaches

**Total Cost Estimate      \$94,562.25**

**Contingencies/Notes**

Pricing is based on manufacturer's standard detail. No responsibility for design is to be assumed by Wintrow Construction.  
No testing is included in this pricing.  
Road Closures, MOT, and detour signage to be provided  
Road approaches will be needed to stage material and project access.  
Sales Taxes Not included in Quotation  
No Bond Cost is included in above pricing  
Railroad Protective Liability Insurance is NOT included  
No Warranty or Guarantees are apart of this proposal  
Any Flagman costs, straight or premium costs are NOT included  
"Hard Excavation" will be performed on T&M  
Weather conditions prevail and may affect the construction schedule.  
Track must be free of rail cars and rail traffic.  
One Mobilization is included in the quotation.  
Engineering, plans and layout survey by others.



**Wheeling and Lake Erie Railroad  
Stow, Ohio - Seasons Rd (TR 157) DOT# 472 675D  
Project Estimate - CN17035**

<b>ENGINEERING</b>					
<i>Description</i>	<i>Qty</i>	<i>UOM</i>	<i>Unit Price</i>		<i>Amount</i>
SIGNAL DESIGNER	80	HR	32.69		\$2,615.20
SIGNAL CHECKER, LEVEL 1	10	HR	39.66		\$396.60
SIGNAL CHECKER, LEVEL 2/FIELD ENGINEER		HR	36.06		\$0.00
<b>SUBTOTAL</b>					\$3,011.80
<b>G&amp;A BURDEN FOR LABOR</b>					\$5,511.59
<b>FIXED FEE</b>					\$852.34
<b>ENGINEERING TOTAL</b>					\$9,375.73

<b>PROJECT MANAGEMENT</b>					
<i>Description</i>	<i>Qty</i>	<i>UOM</i>	<i>Unit Price</i>		<i>Amount</i>
SENIOR SIGNAL ENGINEER	12	HR	\$75.48		\$905.76
PROJECT MANAGER	24	HR	\$39.66		\$951.84
CONSTRUCTION MANAGER	80	HR	\$39.66		\$3,172.80
ACCOUNTING, LEVEL1	16	HR	\$39.81		\$636.96
ADMINISTRATIVE	4	HR	\$25.48		\$101.92
<b>SUBTOTAL</b>					\$5,769.28
<b>G&amp;A BURDEN FOR LABOR</b>					\$10,557.78
<b>FIXED FEE</b>					\$1,632.71
<b>PROJECT MANAGEMENT TOTAL</b>					\$17,959.77

<b>CONSTRUCTION LABOR</b>					
<i>Description</i>	<i>Qty</i>	<i>UOM</i>	<i>Unit Price</i>		<i>Amount</i>
SIGNAL FOREMAN	80	HR	\$29.04		\$2,323.20
SIGNALMAN	80	HR	\$23.40		\$1,872.00
SIGNAL HELPER	160	HR	\$19.00		\$3,040.00
<b>SUBTOTAL</b>					\$7,235.20
<b>G&amp;A BURDEN FOR LABOR</b>					\$13,240.42
<b>FIXED FEE</b>					\$2,047.56
<b>CONSTRUCTION LABOR TOTAL</b>					\$22,523.18

<b>CONSTRUCTION LABOR EXPENSES</b>					
<i>Description</i>	<i>Qty</i>	<i>UOM</i>	<i>Unit Price</i>		<i>Amount</i>
EMPLOYEE MEALS (PER DIEM)	32	EA	\$30.00		\$960.00
EMPLOYEE TRAVEL & LODGING	32	EA	\$70.00		\$2,240.00
<b>SUBTOTAL</b>					\$3,200.00
<b>CONSTRUCTION LABOR EXPENSES TOTAL</b>					\$3,200.00

**Wheeling and Lake Erie Railroad**  
**Stow, Ohio - Seasons Rd (TR 157) DOT# 472 675D**  
**Project Estimate - CN17035**

<b>CONSTRUCTION EQUIPMENT</b>					
<i>Description</i>	<i>Qty</i>	<i>UOM</i>	<i>Unit Price</i>		<i>Amount</i>
TRUCK, PU, 1 TON CREW CAB	80	HR	\$15.71		<b>\$1,256.80</b>
TRUCK, BOOM, ART, TELESCOPING	0	HR	\$55.95		<b>\$0.00</b>
TRAILER, UTILITY, 4 TIRE, 12,000lbs SC410	80	HR	\$7.55		<b>\$604.00</b>
RENTAL EQUIPMENT (FORK LIFT/BACKHOE/SKYTRAK)	2	WK	\$1,200.00		<b>\$2,400.00</b>
EQUIPMENT DELIVERY/PICKUP	1	LS	\$150.00		<b>\$150.00</b>
<b>SUBTOTAL</b>					<b>\$4,410.80</b>
<b>CONSTRUCTION EQUIPMENT TOTAL</b>					<b>\$4,410.80</b>

<b>MATERIAL</b>					
<i>Description</i>	<i>Qty</i>	<i>UOM</i>	<i>Unit Price</i>		<i>Amount</i>
HOUSE MATERIAL (SEE ATTACHED DETAIL)	1	LS			<b>\$38,854.05</b>
FIELD MATERIAL(SEE ATTACHED DETAIL)	1	LS			<b>\$44,876.46</b>
HOUSE AND SIGNAL WIRING	1	LS			<b>\$8,000.00</b>
FILL DIRT	10	TN	\$7.50		<b>\$75.00</b>
CONCRETE		YD	\$500.00		<b>\$0.00</b>
COVER ROCK	30	TN	\$26.50		<b>\$795.00</b>
BORING 4"		FT	\$35.00		<b>\$0.00</b>
ELECTRICAL PERMITS		EA	\$3,500.00		<b>\$0.00</b>
METER POLE ASSY AND INSTALLATION		EA	\$2,500.00		<b>\$0.00</b>
FREIGHT & CONTAINER PRICE	1	LS			<b>\$6,000.00</b>
<b>SUBTOTAL</b>					<b>\$98,600.51</b>
<b>MATERIAL TOTAL</b>					<b>\$98,600.51</b>

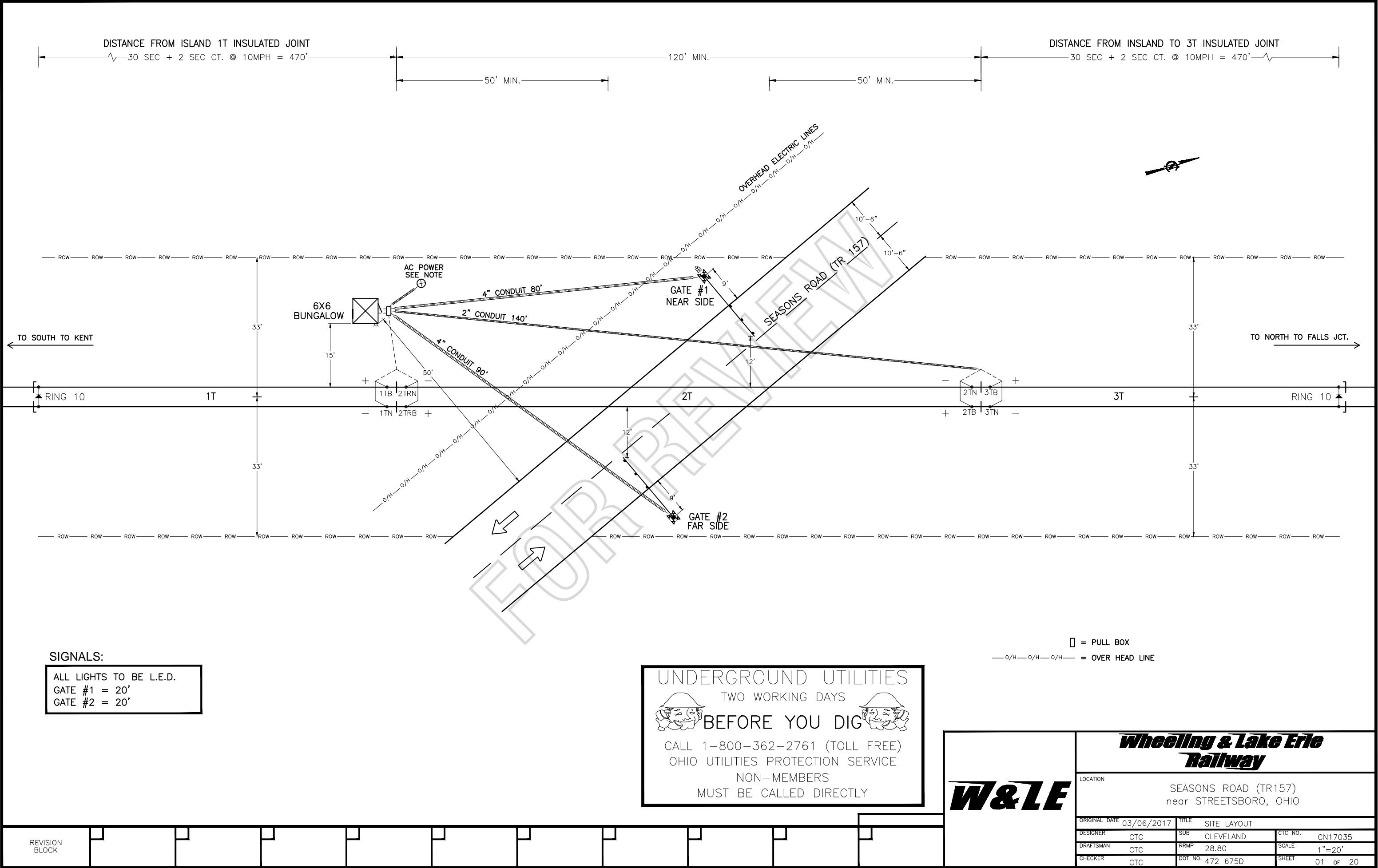
<b>TOTAL PROJECT ESTIMATE</b>	<b>\$156,069.99</b>
-------------------------------	---------------------

HOUSE MATERIALS					
Description	QTY	UOM	MANUFACTURER PN	Unit Price	Total Price
HOUSE 6X6 AL WLE W/2-23" RKS	1	EA	PTMW	\$11,500.00	\$11,500.00
ASSY TSA-1A W/TTA3 ARRESTORS	4	EA	250787-000	\$134.00	\$536.00
EPC TD-4 TRACK DRIVER	1	EA	800-081033-100	\$712.00	\$712.00
RECTIFIER 5/5 CRAGG 5LA-N1	1	EA	5LA-N1	\$348.00	\$348.00
CHARGER 40A 12V CRAGG 40ETC12V	2	EA	017061-203	\$673.27	\$1,346.53
RECTIFIER POWER CORD 14/4 SJE BLK	70	FT		\$1.00	\$70.00
BATTERY GNB 150AH	1	EA		\$500.00	\$500.00
BATTERY NICAD 250 AH SPL-250	19	EA		\$290.00	\$5,510.00
TRAY BATTERY 12 X 27" POLYETHYLE	4	EA	7438-01	\$32.96	\$131.82
THERMOSTAT SPDT REMOTE BULB 8A	1	EA	009186-004	\$73.94	\$73.94
RLY DPDT 12VDC 5A OCT	4	EA	007192-032	\$13.22	\$52.89
SCKT RLY 8-PIN OCT SCREW PNLMT	4	EA	132246-001	\$4.48	\$17.91
POWER OFF LIGHT KIT	1	EA		\$116.40	\$116.40
NUT INSULATED HARMON	20	EA	013986-000	\$2.97	\$59.40
SSCCIII PLUS 40 AMP 19" BASE	1	EA	91190-0101	\$5,628.00	\$5,628.00
PANEL LTG SURGE SSCC 91170-01	1	EA	201756-015	\$608.75	\$608.75
MICRO DATA ANALYZER II WLE PK	1	EA	072113-100	\$3,450.00	\$3,450.00
MDA CURRENT SENSOR	2	EA		\$220.00	\$440.00
BATTERY GROUND DETECTOR	1	EA	NAS	\$1,250.00	\$1,250.00
RELAY 500 OHM 6FB NEUTRAL	2	EA	ST1 400000	\$750.00	\$1,500.00
RELAY 4 OHM 6FB NEUTRAL	3	EA	ST1 400010	\$870.00	\$2,610.00
RELAY PLUGBOARD B1 W/10-14 CRIMP TERMINALS	5	EA		\$203.00	\$1,015.00
WIRE 16AWG/19 TC EPR/PVC BLU	300	FT	012092-002	\$0.22	\$66.00
WIRE 10AWG/19 TC EPR/PVC BLU	350	FT	012092-000	\$0.62	\$215.60
WIRE 6AWG/19THHN BLK	50	FT	012253-000	\$0.79	\$39.60
WIRE 6AWG/19 THHN RED	50	FT	012253-003	\$0.84	\$41.80
WIRE 6AWG/19 THHN GRN	30	FT	012253-002	\$0.75	\$22.44
CABLE RAW 3/14AWG PWR 300V	30	FT	012690-010	\$0.77	\$23.10
RES ADJ WW 15W 10 OHM	2	EA		\$30.00	\$60.00
RES ADJ WW 15W 5.69 OHM PNLMT	5	EA	002238-101	\$26.09	\$130.46
CONN PLUG L6-15 250V 15A 2P3W	3	EA	132286-001	\$11.53	\$34.58
ASSY 2WAY TERM BLK W/AAR HARD	6	EA	202810-000	\$15.82	\$94.91
ASSEMBLY, 4 POST TERMINALBLOCK	4	EA	203032-000	\$43.48	\$173.93
ASSY TERM STRIP DBL POST 12	2	EA	250094-300	\$19.77	\$39.53
GROUND POST P5-162	4	EA	113047-000	\$25.94	\$103.75
WRENCH AAR TERMINAL	1	EA	095058-001	\$15.28	\$15.28
LABEL, DANGER 240 V, 1.75 X 2.	1	EA	SQS109	\$3.86	\$3.86
NOTIFICATION SIGN HSE	1	EA	HSE SIGN	\$312.55	\$312.55

## FIELD MATERIALS

Description	QTY	UOM	MANUFACTURER PN	Unit Price	Total Price
KIT TORQUE WRENCH S/T 070981X	1	EA	2587-01	\$256.38	\$256.38
SO CORD 10/3	60	FT		\$0.90	\$54.00
GATE ARM 16-32' UHI LED LGHTS	2	EA	076045-014	\$613.73	\$1,227.47
SLEEVE 4 ALUMINUM REC #92958	2	EA	14187-01	\$44.33	\$88.66
LED INSERT DIALIGHT FLX4000	8	EA	076048-109	\$247.76	\$1,982.11
CONDUIT PACKAGE	1	LOT		\$1,200.00	\$1,200.00
DECAL, DOT STRIP	2	EA		\$16.00	\$32.00
ASSY WLE STANDARD FLASHER/GATE W/O ARM, GATE ARM LIGHTS, GATE KEEPER	2	ASSY	CTC	\$14,300.00	\$28,600.00
TAPE MARKER BURIED RR CABLE	1	EA	029989-000	\$21.43	\$21.43
CABLE UG 3 COND #6 AWG SOLID	150	FT	1013-02	\$4.06	\$608.85
CABLE UG 7 COND #6 AWG SOLID	700	FT	1077-02	\$6.29	\$4,404.40
CABLE UG 7 COND #14 AWG SOLID	700	FT	1023-02	\$2.22	\$1,555.40
WIRE UG TRK #6 AWG DUPLEX	800	FT	1094-02	\$1.46	\$1,170.40
PVC CEMENT, 1QT W/BRUSH TOP	1	EA		\$7.15	\$7.15
GRINDING WHEEL 6IN X 1IN	4	EA		\$30.00	\$120.00
BOOTLEG KIT/1 PR TRACKWIRE WLE STANDARD	4	EA	D&W SB7100090	\$184.00	\$736.00
BOND JOINT 5/16" X 7" TAB ERICO #SB-	200	EA	2161-01	\$5.41	\$1,082.40
WIRE #6 SOFT BARE COPPER	30	FT	1436-01	\$0.40	\$11.88
CARTRIDGE SB25 POWDER W/ATTACHMETAL FOR	200	EA	1026-39	\$1.55	\$310.20
ROD 5/8 X 8 NS GRD***USE-02***	6	EA	1357-01	\$14.72	\$88.31
CONNECTION SBNT1-161G ONE-SHOTFOR 5/8 IN	6	EA	1029-01	\$6.17	\$37.03
CADWELD TYPE GR 5/8GRDX#6WIRE	6	EA	005755-002	\$7.10	\$42.57
BOND STRAND 8-STR 3/16" TINNEDSBS8TINSUL	100	FT	4133-01	\$1.21	\$121.00
TRACK RECTIFIER, RING-10	2	EA	800-004080-000	\$119.00	\$238.00
PLATE SHUNT 24"X26"X1/4" GALV.	2	EA	6193-01	\$67.06	\$134.11
SCREW LAG 3/4" X 6" BLACK GRIMLET PO	8	EA	2000-01	\$0.81	\$6.51
TAPE ELECTRICAL 3M #33+ 3/4" PLASTIC	2	RL	1190-01	\$3.62	\$7.24
DUCTSEAL 1LB BLOCK	10	EA		\$3.30	\$33.00
FOAM INSULATING SPRAY	4	EA		\$12.25	\$49.00
STAPLE GROUND WIRE 1-1/16"X3"	50	EA	113005-000	\$0.32	\$15.95
TIE CABLE .184 X 7.31" HIG TEMSELF LOCKI	100	EA	4125-01	\$0.04	\$4.40
LUG RNG 1/4" 12-10AWG INS BLK	100	EA	032114-008	\$0.01	\$1.10
TAG ST-5 SNAPOUT 11 TAGS/CARD MI# 010301	50	EA	2090-01	\$2.28	\$113.85
STAPLE COPPERWELD 3/8 X 1-3/4 144 IN. RO	50	EA	1148-01	\$0.26	\$13.20
GREASE RUST PREVENTIVE NO OXID"A SPECIAL	1	EA	1906-01	\$9.83	\$9.83
SLEEVE NICO 3/16"-#6 AWG REDUC#2363-J	20	EA	1145-01	\$0.89	\$17.82
CLIP TRACK WIRE RETAINER - ERICO #SBA	12	EA	1118-01	\$1.97	\$23.63
COMPOUND DUCT SEAL 5 LB PLUG PERMAGUM #	5	PK	1179-01	\$10.68	\$53.41
LOCK MASTER	4	EA	MLCK	\$28.41	\$113.65
EMERGENCY SIGN SIGNAL	1	EA	SIG SIGN	\$113.65	\$113.65
FIELD TAG KIT	1	EA	FLDTGKT	\$170.48	\$170.48





SIGNALS:  
ALL LIGHTS TO BE L.E.D.  
GATE #1 = 20'  
GATE #2 = 20'

UNDERGROUND UTILITIES  
TWO WORKING DAYS  
BEFORE YOU DIG  
CALL 1-800-362-2761 (TOLL FREE)  
OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS  
MUST BE CALLED DIRECTLY

<b>Wheeling &amp; Lake Erie Railway</b>			
LOCATION SEASONS ROAD (TR157) near STREETSBORO, OHIO			
ORIGINAL DATE	03/06/2017	TITLE	SITE LAYOUT
DESIGNER	CTC	SUB	CLEVELAND
DRAFTSMAN	CTC	RRMP	28.80
CHECKER	CTC	DOT NO.	472 675D
		CTC NO.	CN17035
		SCALE	1"=20'
		SHEET	01 OF 20

CONSTRUCTION NOTES

- 1.) INSTALL NEW 6' X 6' BUNGALOW IN SOUTHWEST QUADRANT.
- 2.) INSTALL (2) NEW FLASHING LIGHTS WITH GATES.
- 3.) METER POLE LOCATION SHOWN ON THE PLAN IS SUBJECT TO CHANGE WITHIN RAILROAD RIGHT-OF-WAY IF UNDERGROUND OBSTRUCTIONS PREVENT THE INSTALLATION OF THE POLE IN THE LOCATION SHOWN.
- 4.) BUNGALOW LOCATION SHOWN ON THE PLAN IS SUBJECT TO CHANGE WITHIN RAILROAD RIGHT-OF-WAY IF UNDERGROUND OBSTRUCTIONS PREVENT THE INSTALLATION OF THE BUNGALOW IN THE LOCATION SHOWN.
- 5.) INSTALL 8 INSULATED JOINTS. ALL GAUGE RODS TO BE INSTALLED OR REPLACED WITH TIES.

FOR REVIEW

											<div>W&amp;LE</div>	<div>Wheeling &amp; Lake Erie Railway</div>			
												LOCATION SEASONS ROAD (TR157) near STREETSBORO, OHIO			
												ORIGINAL DATE 03/06/2017    TITLE CONSTRUCTION NOTES			
												DESIGNER CTC	SUB CLEVELAND	CTC NO. CN17035	
												DRAFTSMAN CTC	RRMP 28.80	SCALE N.T.S.	
												CHECKER CTC	DOT NO. 472 675D	SHEET 01A OF 20	
REVISION BLOCK															





CROSSING SIGNAL ALIGNMENT

LEGEND

Ⓐ	GATE #1 FRONT MAST LIGHTS
Ⓑ	GATE #1 BACK MAST LIGHTS
Ⓒ	GATE #2 FRONT MAST LIGHTS
Ⓓ	GATE #2 BACK MAST LIGHTS

ALIGNMENT

FRONT LIGHTS  
ADJUST LIGHT UNIT VERTICALLY TO ALIGN AXIS OF BEAM 5 FT. 6 IN. ABOVE PAVEMENT AT SELECTED ALIGNMENT DISTANCE. BOTH LAMPS SHOULD BE ALIGNED TO SAME POINT.

ADJUST LIGHT UNIT HORIZONTALLY TO ALIGN AXIS OF BEAM TO CENTER OF APPROACH LANE IN APPROACH TO SIGNAL AT SELECTED ALIGNMENT DISTANCE, MAINTAINING VERTICAL ALIGNMENT. BOTH LAMPS SHOULD BE ALIGNED TO SAME POINT.

BACK LIGHTS  
ADJUST LIGHT UNIT VERTICALLY TO ALIGN AXIS OF BEAM 5 FT. 6 IN. ABOVE PAVEMENT AT A POINT 50 FT. IN APPROACH TO THE SIGNAL ON OPPOSITE SIDE OF TRACK.

ADJUST LIGHT UNIT HORIZONTALLY TO ALIGN AXIS OF BEAM TO A POINT 50 FT. IN APPROACH TO THE SIGNAL ON OPPOSITE SIDE OF TRACK AND IN CENTER OF APPROACH TRAVEL WAY.

	<b>Wheeling &amp; Lake Erie Railway</b>		
	LOCATION SEASONS ROAD (TR157) near STREETSBORO, OHIO		
	ORIGINAL DATE 03/06/2017	TITLE CROSSING SIGNAL ALIGNMENT	
	DESIGNER CTC	SUB CLEVELAND	CTC NO. CN17035
	DRAFTSMAN CTC	RRMP 28.80	SCALE N.T.S.
CHECKER CTC	DOT NO. 472 675D	SHEET 02 OF 20	

REVISION  
BLOCK

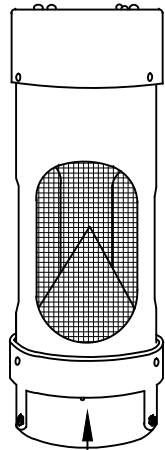


SITE LAYOUT NOTES

1.) CROSSING IS LOCATED: LATITUDE 41.2012275  
LONGITUDE -81.3777716

FOR REVIEW

ELECTRONIC CROSSING BELL  
GSI MODEL EB-3-360-5

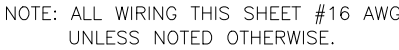


THIS SIDE FACING  
ROADWAY

	<b>Wheeling &amp; Lake Erie Railway</b>		
	LOCATION SEASONS ROAD (TR157) near STREETSBORO, OHIO		
	ORIGINAL DATE 03/06/2017	TITLE SITE LAYOUT NOTES	
	DESIGNER CTC	SUB CLEVELAND	CTC NO. CN17035
	DRAFTSMAN CTC	RRMP 28.80	SCALE N.T.S.
CHECKER CTC		DOT NO. 472 675D	SHEET 03 OF 20

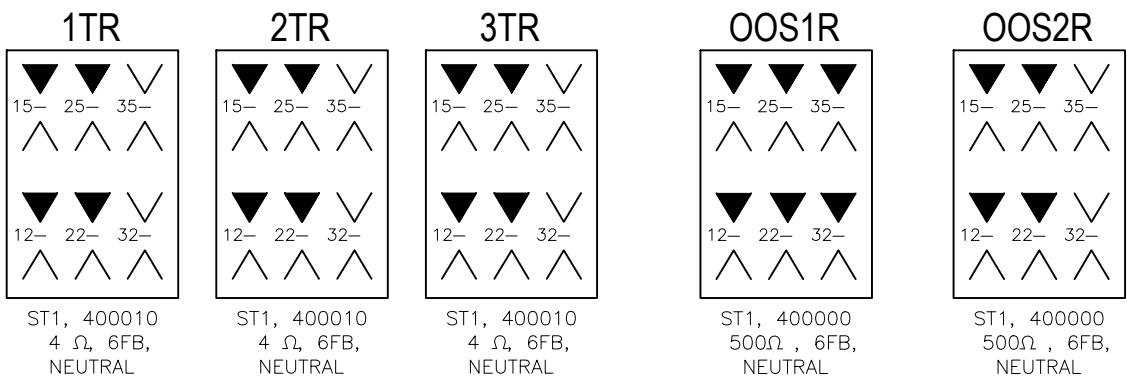
REVISION  
BLOCK

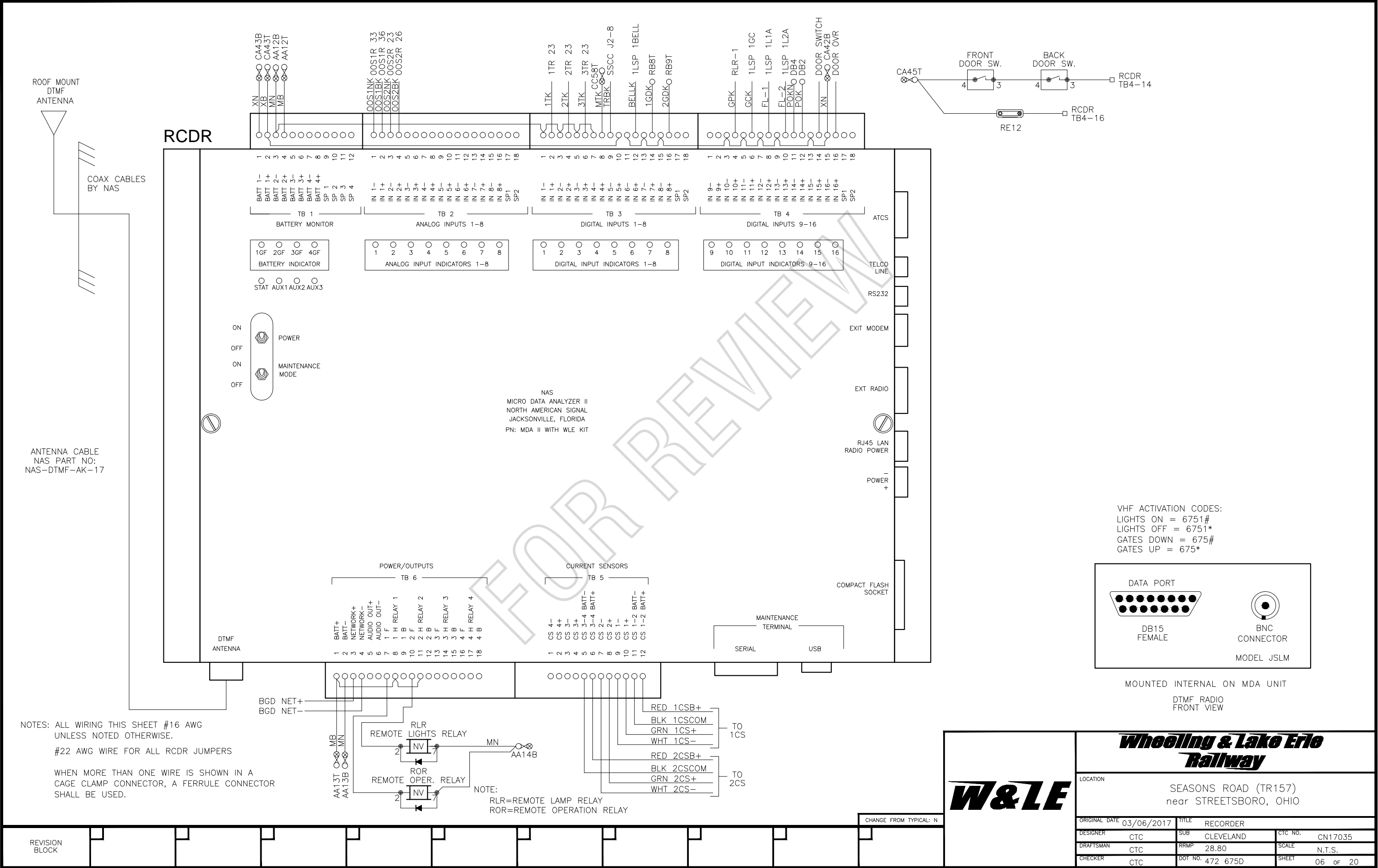
CHANGE FROM TYPICAL: N

CHANGE FROM TYPICAL: N

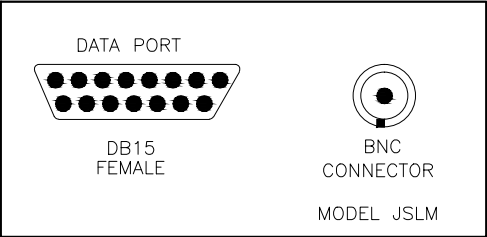
CHECKER	CTC	DOT NO.	472 675D	SHEET	04 OF 2
---------	-----	---------	----------	-------	---------

ST RELAY LAYOUT





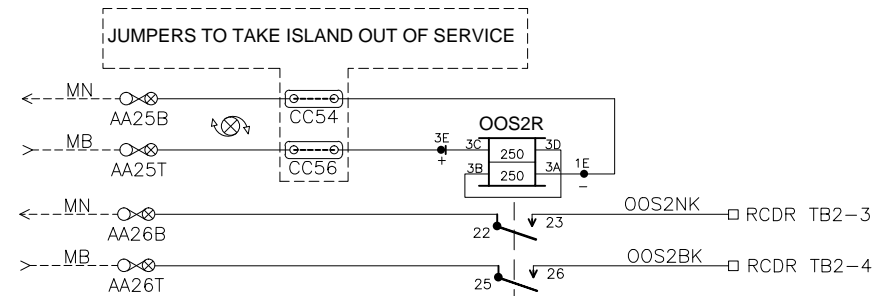
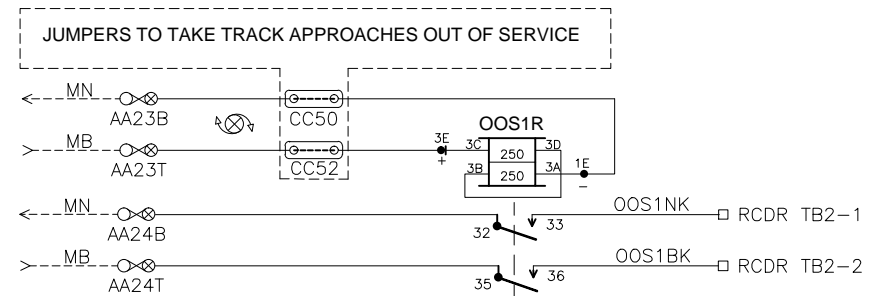
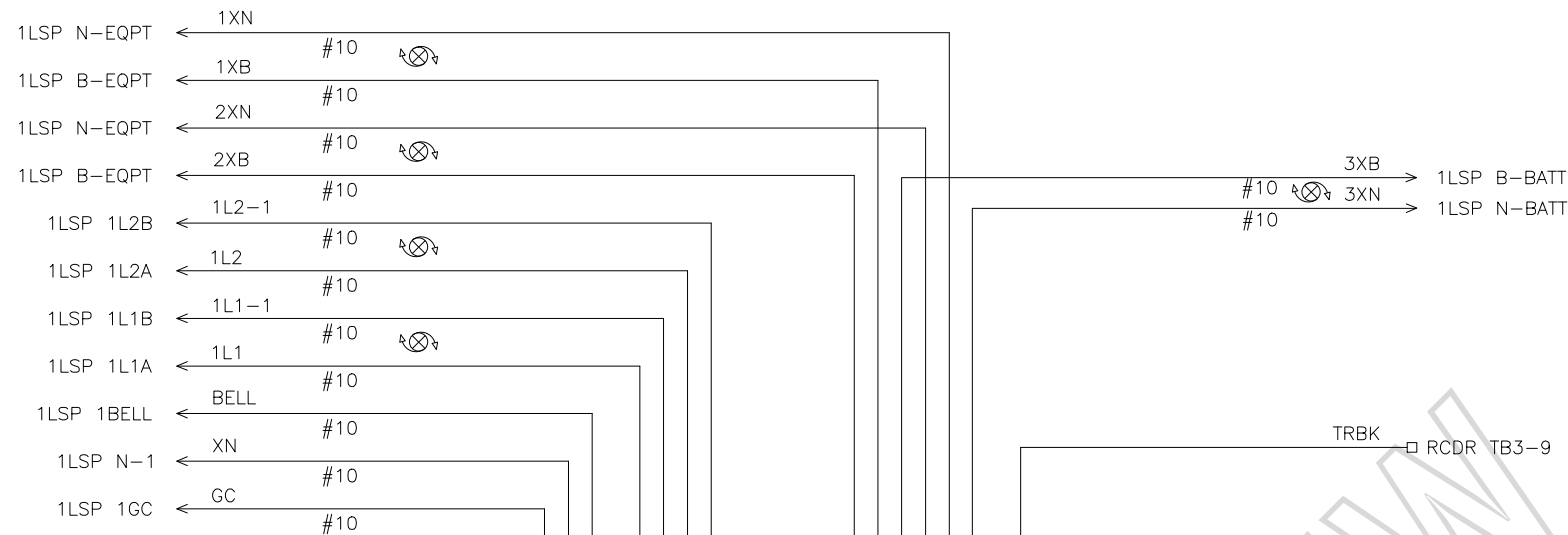
VHF ACTIVATION CODES:  
LIGHTS ON = 6751#  
LIGHTS OFF = 6751\*  
GATES DOWN = 675#  
GATES UP = 675\*



MOUNTED INTERNAL ON MDA UNIT  
DTMF RADIO FRONT VIEW

<b>Wheeling &amp; Lake Erie Railway</b>			
LOCATION: SEASONS ROAD (TR157) near STREETSBORO, OHIO			
ORIGINAL DATE	03/06/2017	TITLE	RECORDER
DESIGNER	CTC	SUB	CLEVELAND
DRAFTSMAN	CTC	RRMP	28.80
CHECKER	CTC	DOT NO.	472 675D
		CTC NO.	CN17035
		SCALE	N.T.S.
		SHEET	06 OF 20

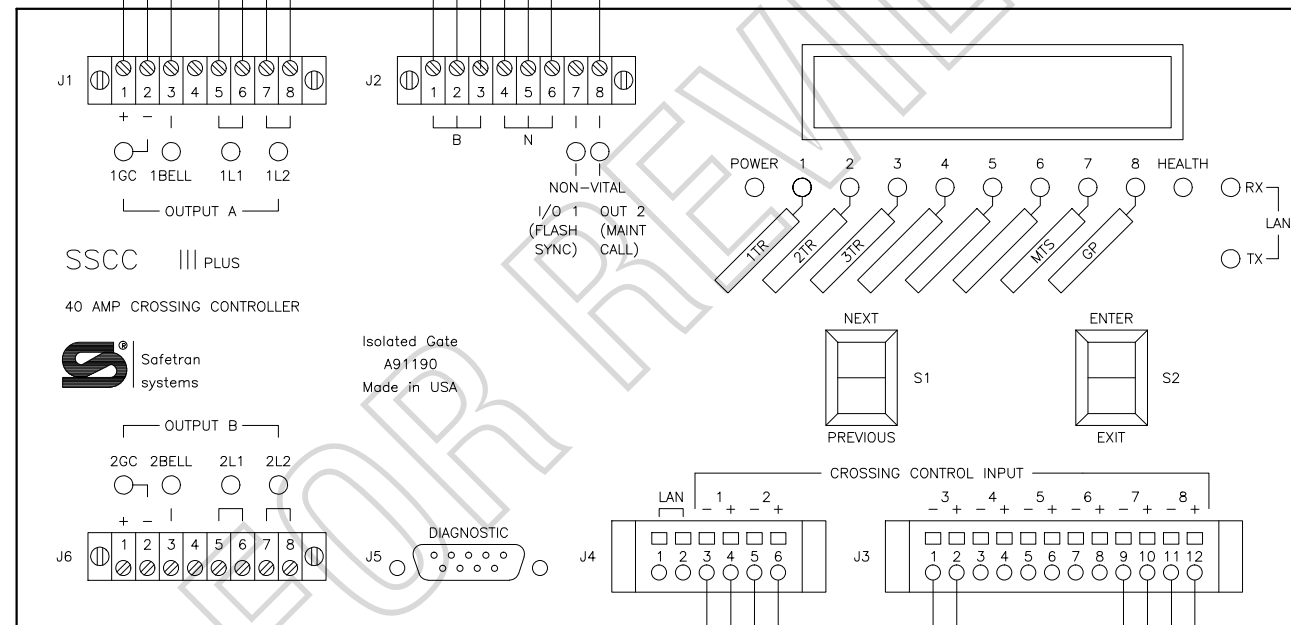




MCF=2TRKDSTK.MCF CRC=A9776265

PROGRAM	
FLASHER RATE:	50 FPM
GATE DELAY 1 TIMER:	4 SEC.
GATE DELAY 2 TIMER:	4 SEC.
BELL-ON GATE RISING	ON
PRG 2GC/17 MODE	NORMAL
MIN ACTIVATION TIMER:	0 SEC.
ENABLE INPUTS 4,5&6	DISABLED
PRG TEST SWITCH	ACTIVATE
PRG STICK RELEASE	15 MIN.
PRG ENABLED OUTPUTS: A&B	A
TIME	
DATE	
DAYLIGHT SAVINGS	DISABLED
PASSWORD	DISABLED
SET TO DEFAULT	N/A

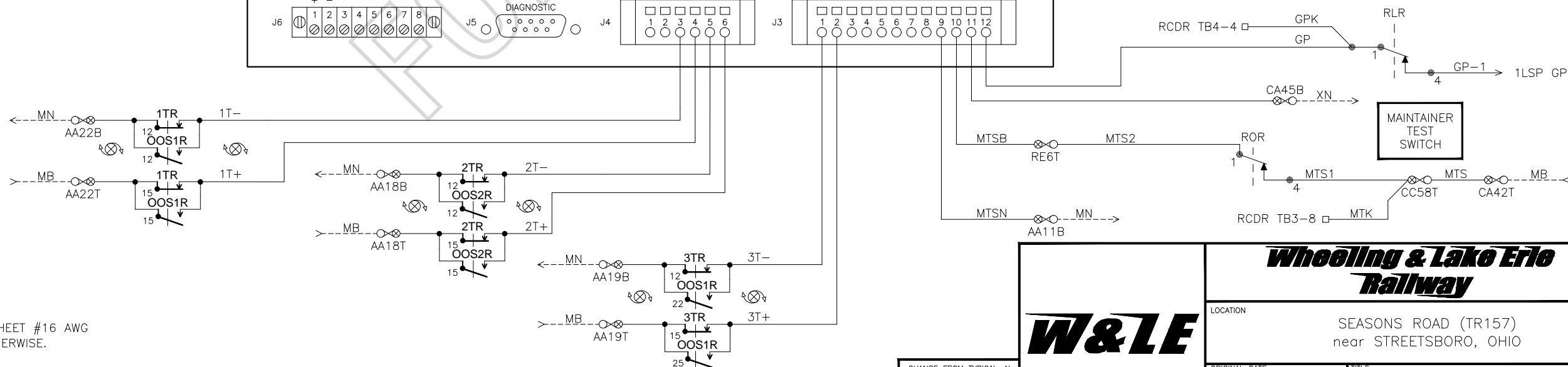
WARNING  
DO NOT JUMPER  
1GC- OR 2GC-  
DIRECTLY TO N  
ON CONNECTOR J2




INCORRECT POLARITY WILL RESULT IN SEVERE  
DAMAGE TO THE CONTROLLER UNIT.

WARNING  
IF B OR N ARE FULLY OR PARTIALLY REMOVED,  
SIGNALS AND/OR GATES MAY NOT OPERATE AS  
INTENDED. TAKE ALTERNATE MEANS TO WARN  
VEHICULAR TRAFFIC AND EMPLOYEES.

CONFIGURE	
INPUT 1 LOS	8
INPUT 2 LOS	8
INPUT 3 LOS	8
INPUT 4 LOS	0
INPUT 5 LOS	0
INPUT 6 LOS	0
INPUT 7 LOS	0
ATCS ADDRESS	700000000000
LOW BATTERY	DISABLED
AUX I/O	NV OUTPUT
DETECT LAMP NEUTRAL WIRE:	NO



NOTE: ALL WIRING THIS SHEET #16 AWG  
UNLESS NOTED OTHERWISE.



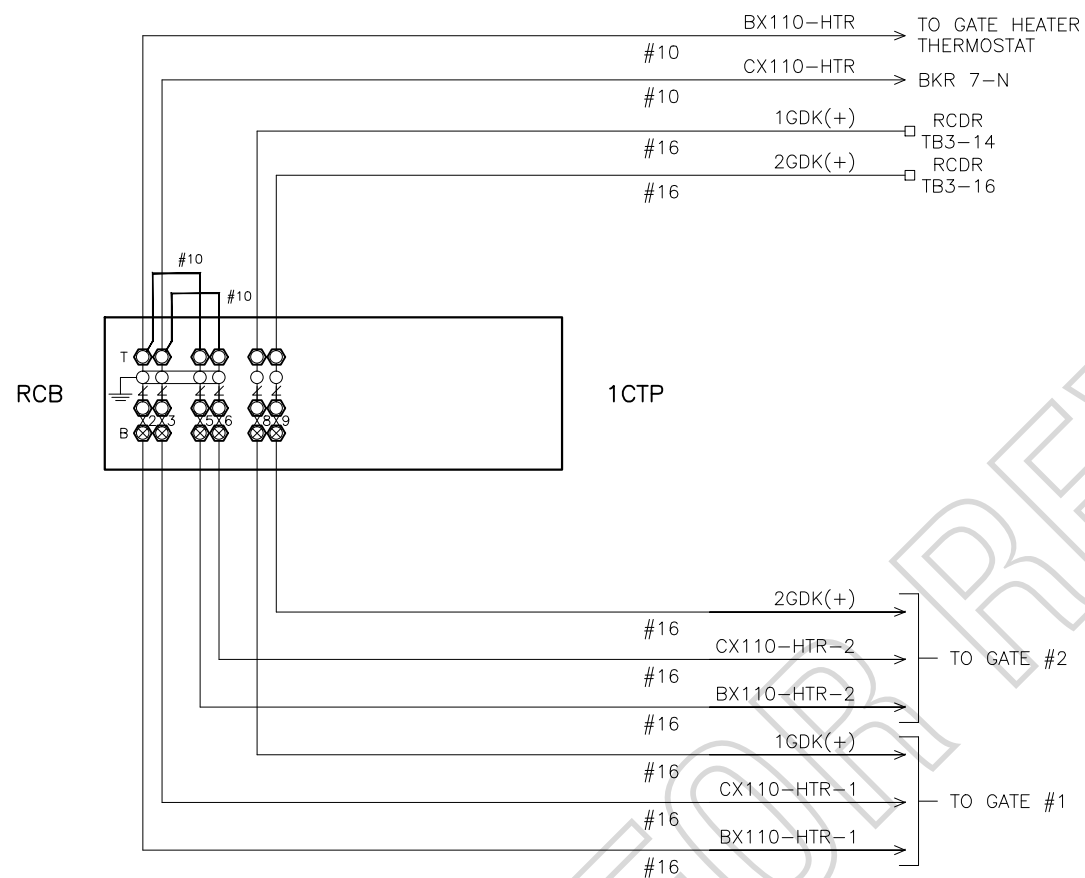
CHANGE FROM TYPICAL: N

**Wheeling & Lake Erie  
Railway**

LOCATION  
SEASONS ROAD (TR157)  
near STREETSBORO, OHIO

ORIGINAL DATE 03/06/2017	TITLE SSCC PLUS	
DESIGNER CTC	SUB CLEVELAND	CTC NO. CN17035
DRAFTSMAN CTC	RRMP 28.80	SCALE N.T.S.
CHECKER CTC	DOT NO. 472 675D	SHEET 08 OF 20





LEGEND:

⊗ = INSULATED NUT

CHANGE FROM TYPICAL: N

	<b>Wheeling &amp; Lake Erie Railway</b>		
	LOCATION SEASONS ROAD (TR157) near STREETSBORO, OHIO		
	ORIGINAL DATE 03/06/2017	TITLE CTP	
	DESIGNER CTC	SUB CLEVELAND	CTC NO. CN17035
	DRAFTSMAN CTC	RRMP 28.80	SCALE N.T.S.
CHECKER CTC		DOI NO. 472 675D	SHEET 10 OF 20

REVISION  
BLOCK




CONTACT	CLOSED	FUNCTION	TENSION
1B	75-90 DEG.	POWER DOWN	18-28 OZ.
1F	0-70 DEG.	SNUB DOWN	18-28 OZ.
2	0-86 DEG.	POWER UP	18-28 OZ.
3	0-10 DEG.	GATE DOWN	16-24 OZ.
4	82-90 DEG.	GATE CLEAR	16-24 OZ.
5	10-90 DEG.	BELL	16-24 OZ.
6	SPARE	SPARE	16-24 OZ.
7	0-2 DEG.	SNUB	16-24 OZ.

LEGEND:

 = INSULATED NUT

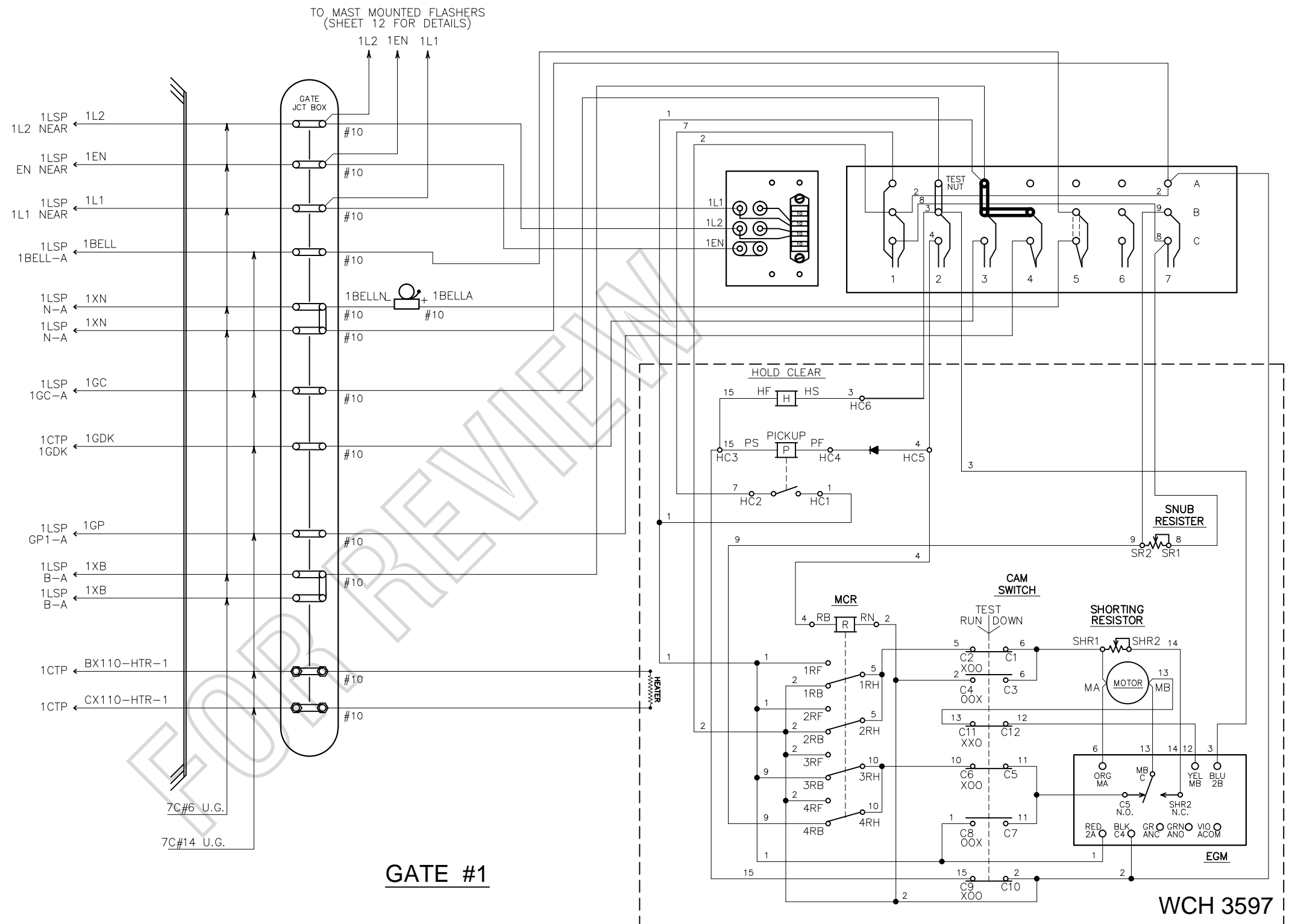
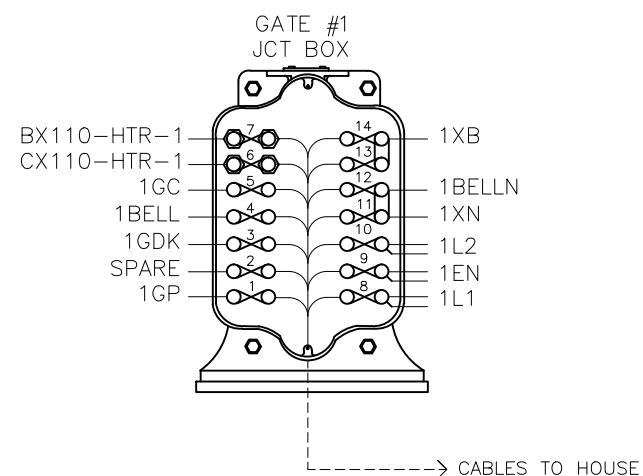
NOTES:

\* BELL TO BE ELECTRONIC.

 = INTERNAL GATE WIRES THAT SHARE ELECTRICAL CONNECTIONS WITH OTHER WIRES THAT ARE ASSIGNED THE SAME NUMBER.

REFER TO SHEET 12 FOR GATE  
ARM LIGHT WIRING

ADD STRAP FROM:  
3A TO 3B AND 3B TO 4B



CHANGE FROM TYPICAL: N

REVISION  
BLOCK**W&LE**

## ***Wheeling & Lake Erie Railway***

LOCATION

SEASONS ROAD (TR157)  
near STREETSBORO, OHIO

ORIGINAL DATE 03/06/2017

7	TITLE	GATE #1 MECHANISM (NEAR SIDE)
---	-------	-------------------------------

DESIGNER	CTC
----------	-----

	DATE // 1 MARCH
SUB	CLEVELAND

CTC NO.	CN17035
---------	---------

	CTC
DRAFTSMAN	CTC

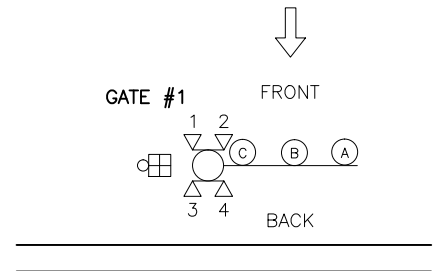
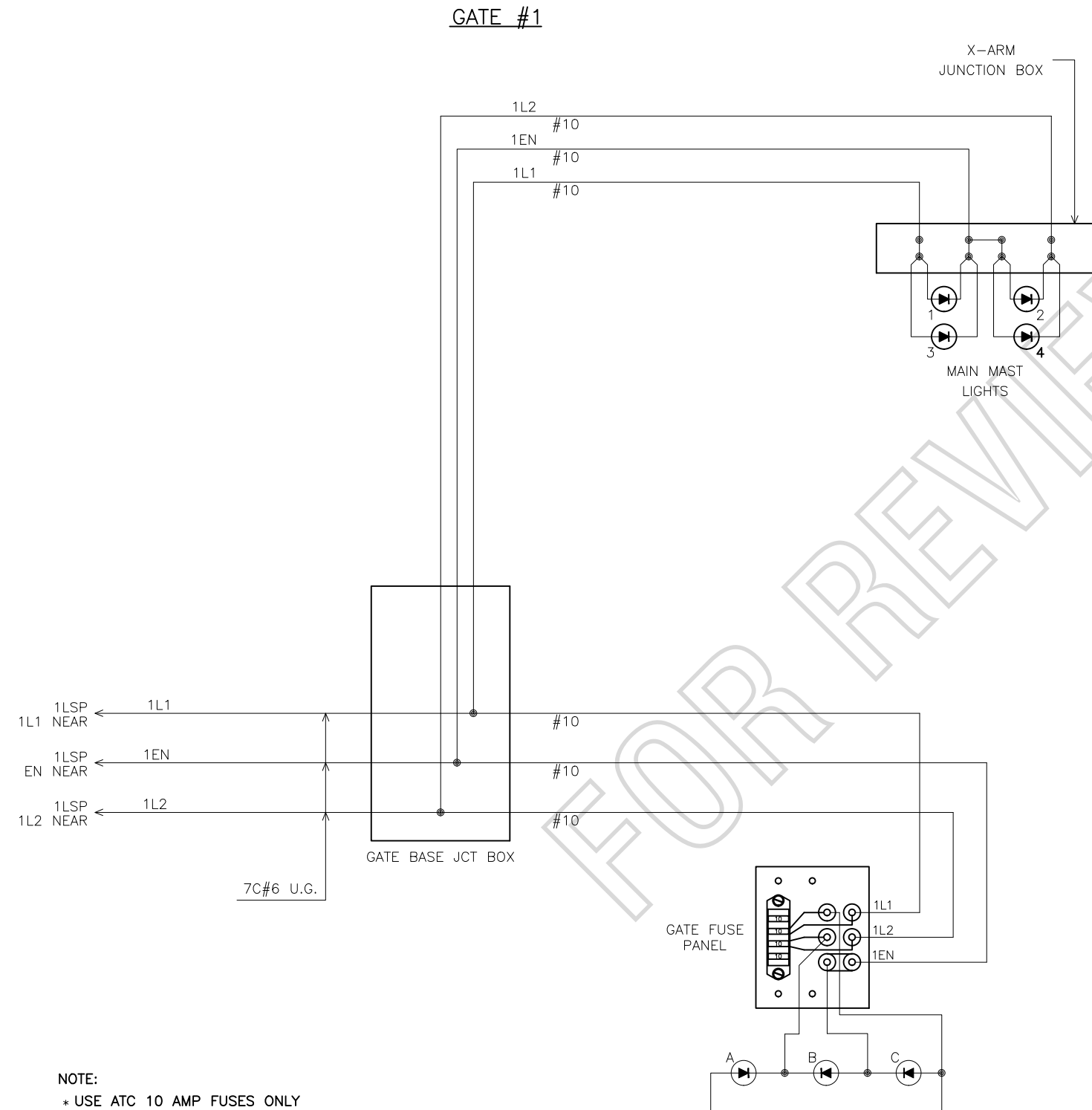
RRMP	28.80
------	-------

SCALE	N.T.S.
-------	--------

CHECKER	CTC
---------	-----

DOT NO. 472 675D

	N.T.S.
SHEET	11 OF 20



NOTE:  
\* USE ATC 10 AMP FUSES ONLY

⬅ IS LED SYMBOL ONLY. INSTALL ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

	<b>Wheeling &amp; Lake Erie Railway</b>		
	LOCATION SEASONS ROAD (TR157) near STREETSBORO, OHIO		
	ORIGINAL DATE 03/06/2017	TITLE GATE #1 LIGHTS (NEAR SIDE)	
	DESIGNER CTC	SUB CLEVELAND	CTC NO. CN17035
	DRAFTSMAN CTC	RRMP 28.80	SCALE N.T.S.
	CHECKER CTC	DOT NO. 472 675D	SHEET 12 OF 20

REVISION  
BLOCK

CHANGE FROM TYPICAL: Y


CONTACT	CLOSED	FUNCTION	TENSION
1B	75-90 DEG.	POWER DOWN	18-28 OZ.
1F	0-70 DEG.	SNUB DOWN	18-28 OZ.
2	0-86 DEG.	POWER UP	18-28 OZ.
3	0-10 DEG.	GATE DOWN	16-24 OZ.
4	82-90 DEG.	GATE CLEAR	16-24 OZ.
5	10-90 DEG.	BELL	16-24 OZ.
6	SPARE	SPARE	16-24 OZ.
7	0-2 DEG.	SNUB	16-24 OZ.

LEGEND:

 = INSULATED NUT

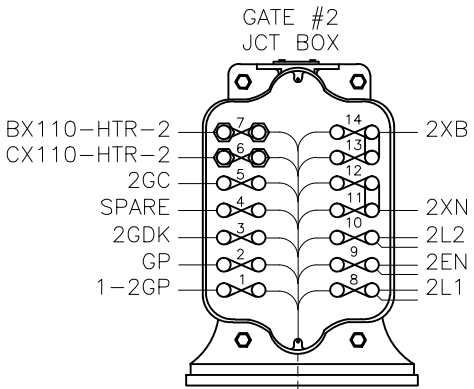
NOTES:

\* BELL TO BE ELECTRONIC.

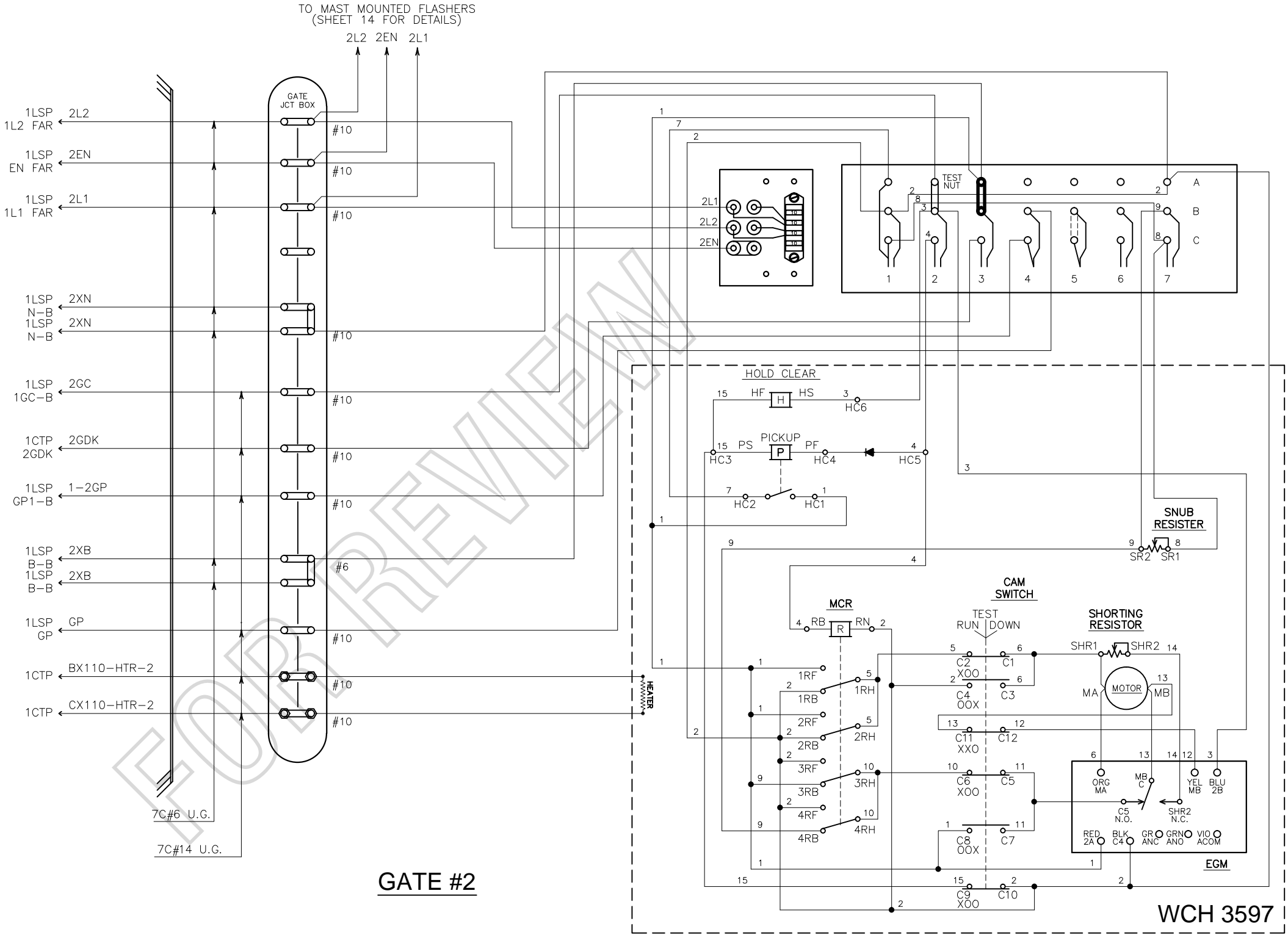
 = INTERNAL GATE WIRES THAT SHARE ELECTRICAL CONNECTIONS WITH OTHER WIRES THAT ARE ASSIGNED THE SAME NUMBER.

REFER TO SHEET 14 FOR GATE ARM LIGHT WIRING

ADD STRAP FROM:  
3A TO 3B




-----> CABLES TO HOUSE



GATE #2

WCH 3597



**Wheeling & Lake Erie**  
**Railway**

LOCATION  
SEASONS ROAD (TR157)  
near STREETSBORO, OHIO

ORIGINAL DATE 03/06/2017  
DESIGNER CTC  
DRAFTSMAN CTC  
CHECKER CTC

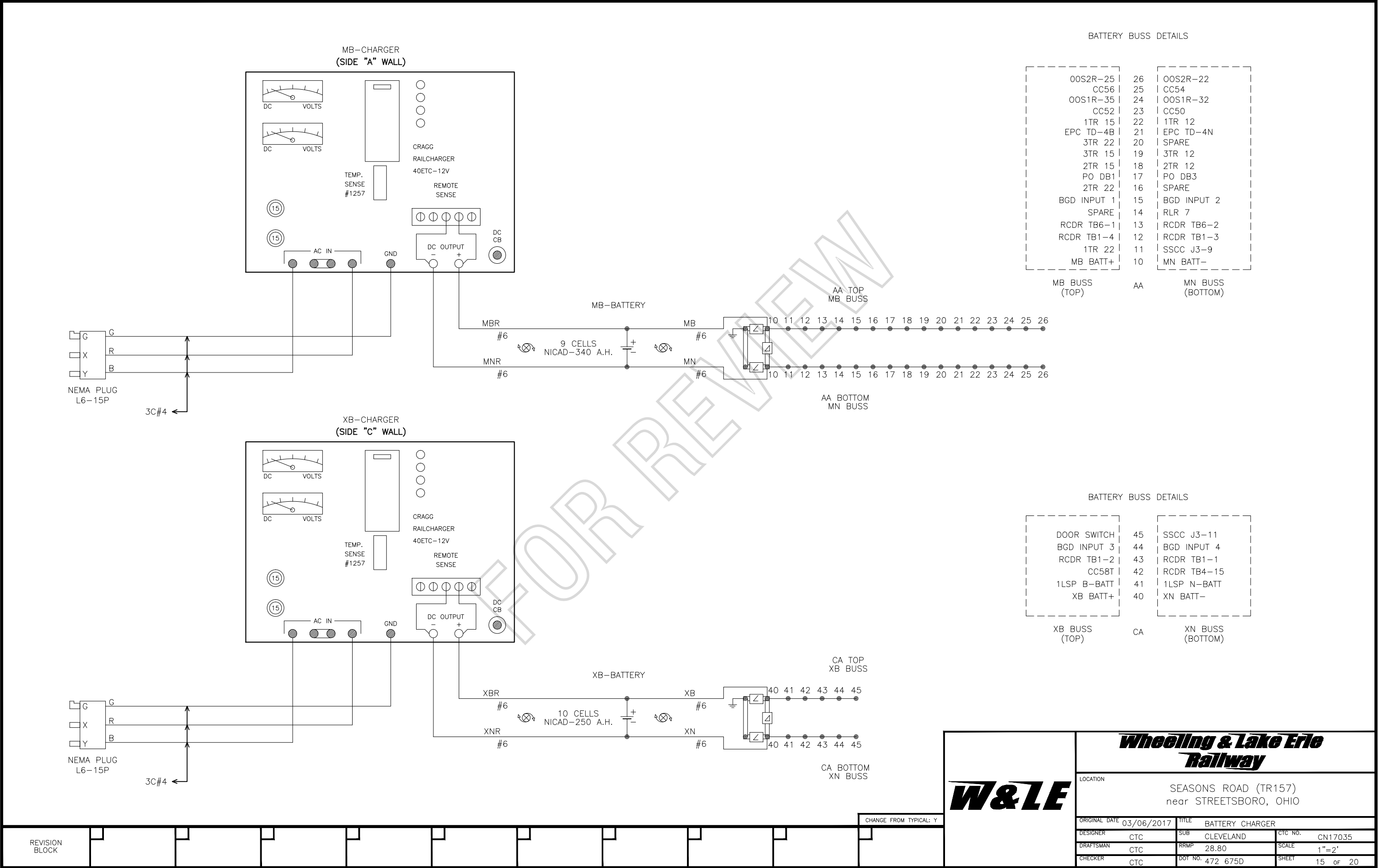
TITLE  
GATE #2 MECHANISM (FAR SIDE)  
SUB CLEVELAND  
RRMP 28.80  
DOT NO. 472 675D

CTC NO.  
CN17035  
SCALE  
N.T.S.  
SHEET  
13 OF 20

CHANGE FROM TYPICAL: Y

REVISION  
BLOCK



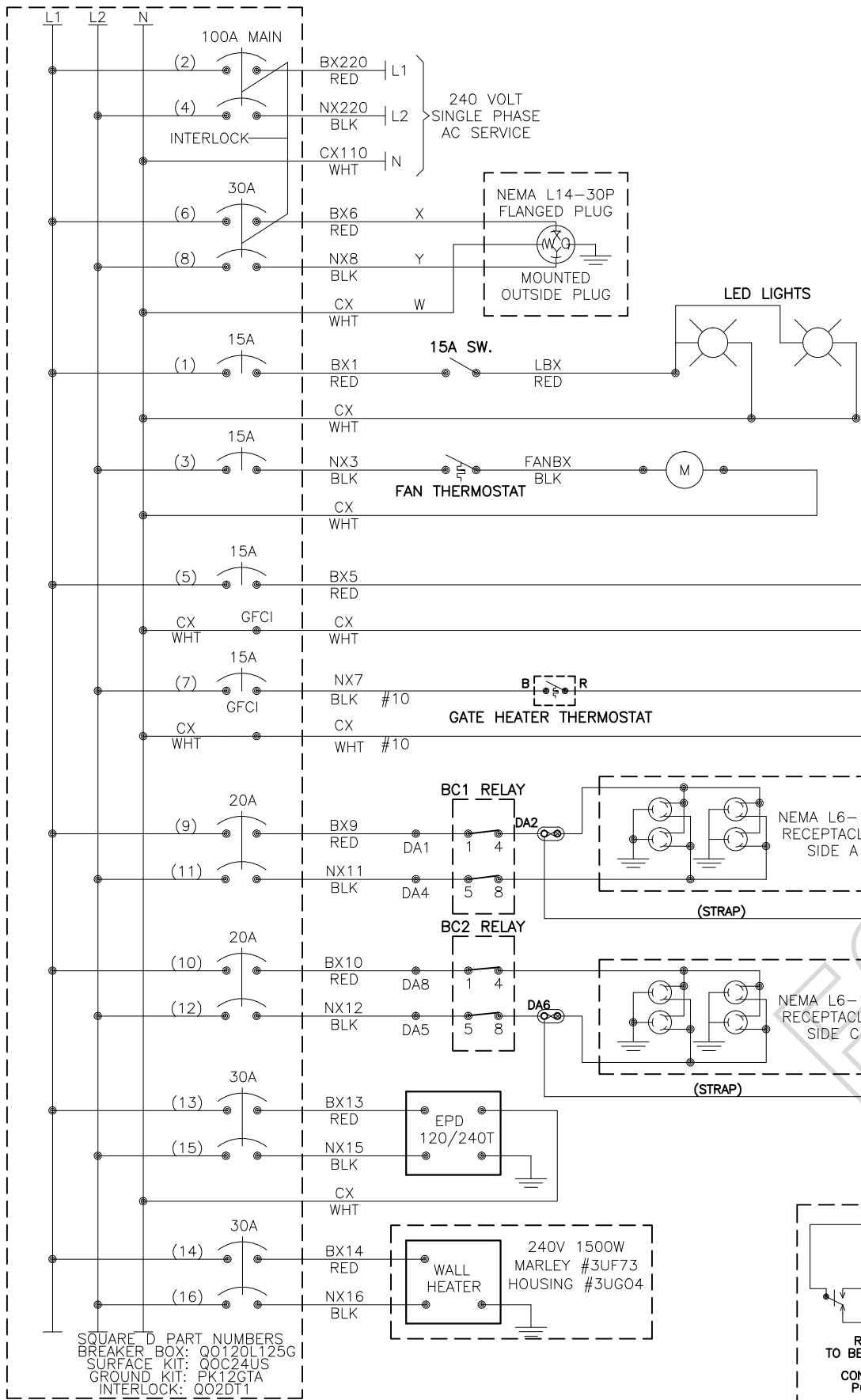




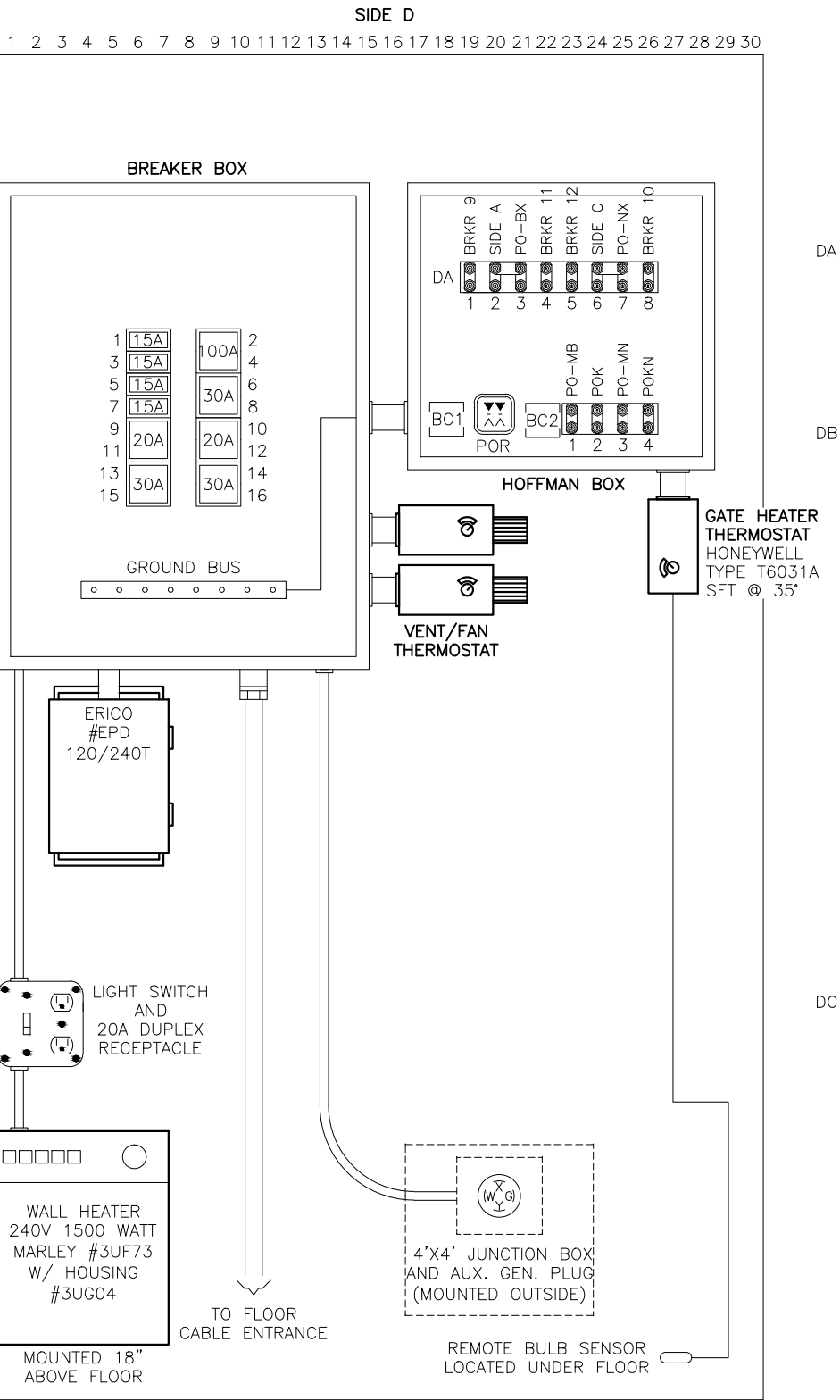
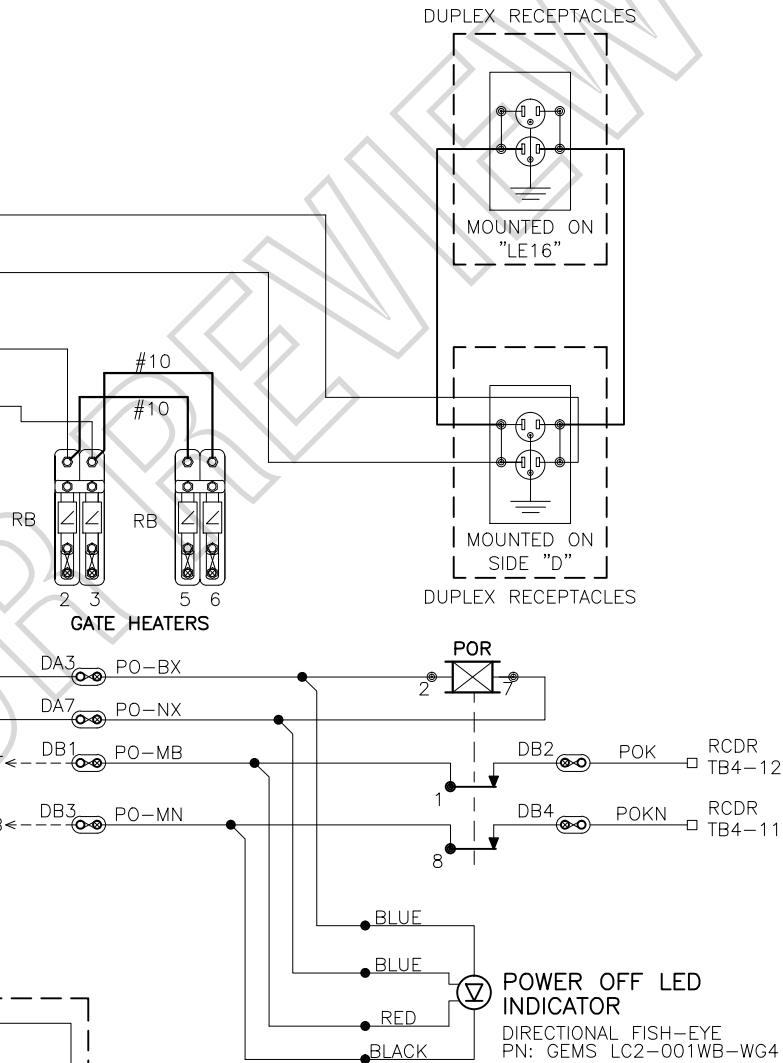
**Wheeling & Lake Erie  
Railway**

LOCATION: SEASONS ROAD (TR157)  
near STREETSBORO, OHIO

ORIGINAL DATE	03/06/2017	TITLE	BATTERY CHARGER	
DESIGNER	CTC	SUB	CLEVELAND	CTC NO. CN17035
DRAFTSMAN	CTC	RRMP	28.80	SCALE 1"=2'
CHECKER	CTC	DOI NO.	472 675D	SHEET 15 OF 20




- NOTES:
- USE THE FOLLOWING COLOR CODE:  
GRN - GREEN - SAFETY EQUIPMENT GROUND  
WHT - WHITE - CX110 (NEUTRAL)  
BLK - BLACK - NX220 (L2)  
RED - RED - BX220 (L1)  
EXCEPTIONS TO THE ABOVE COLOR CODE ARE THE PRE-WIRED, SEALED ARRESTOR UNITS MOUNTED ON THE BREAKER BOX WHICH HAVE TWO BLACK AND ONE WHITE WIRE EACH.
  - MINIMUM WIRE SIZE:  
10 AMP - NO.14 AWG THHN OR THWN SOLID  
20 AMP - NO.12 AWG THHN OR THWN SOLID  
30 AMP - NO.10 AWG THHN OR THWN SOLID
  - GROUND FAULT INTERRUPT (GFI) MUST BE USE ON ALL CIRCUITS SERVING CONVENIENCE OUTLETS AND ANY EQUIPMENT OUTSIDE THE BUNGALOW. RECEPTACLE MOUNTED GFCI MAY BE USE INSTEAD OF BREAKER TYPE.
  - ALL GROUND WIRES RUN TO BREAKER BOX GROUND BUS



REVISION  
BLOCK

CHANGE FROM TYPICAL: N

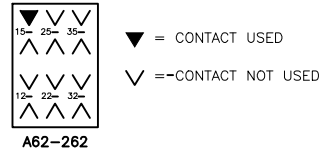
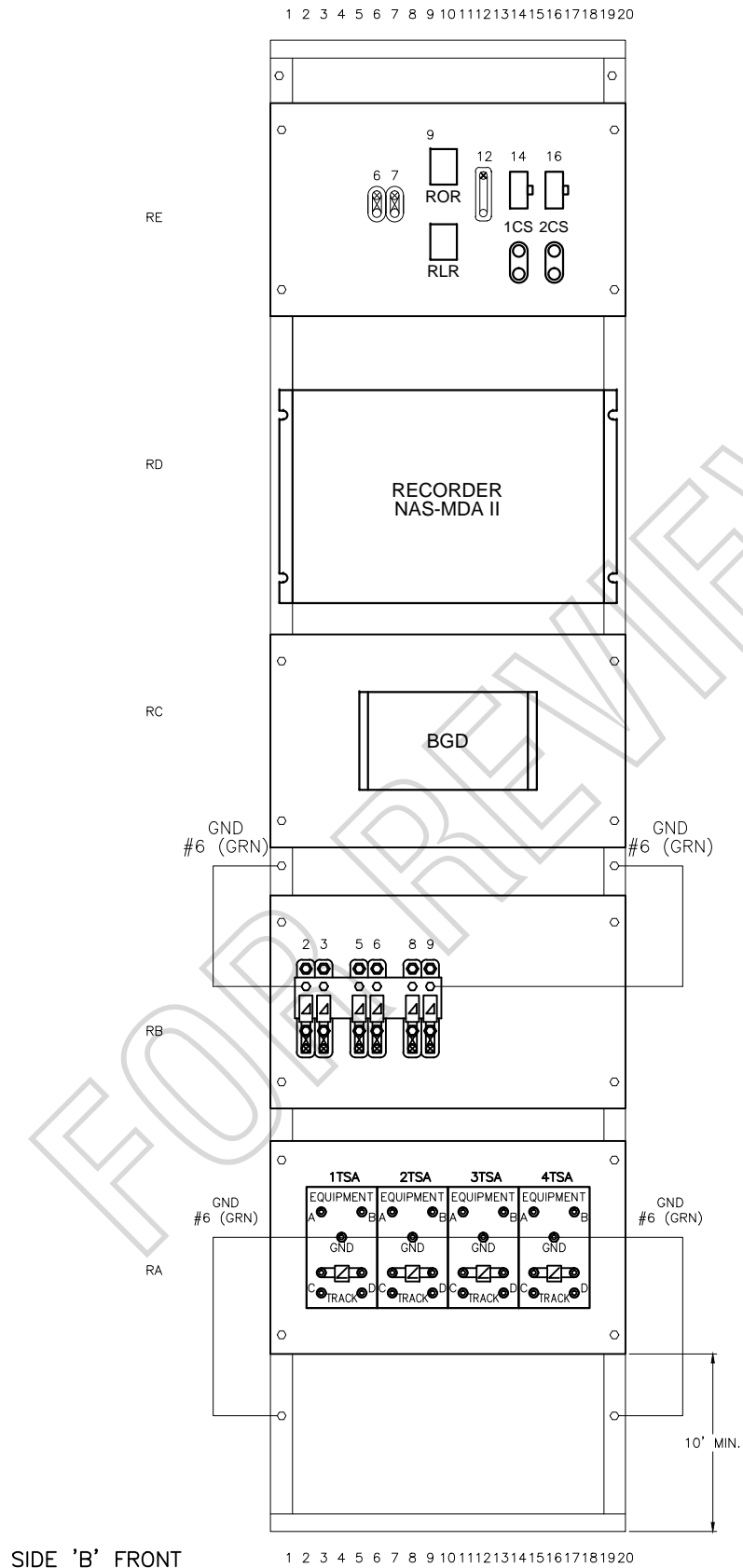
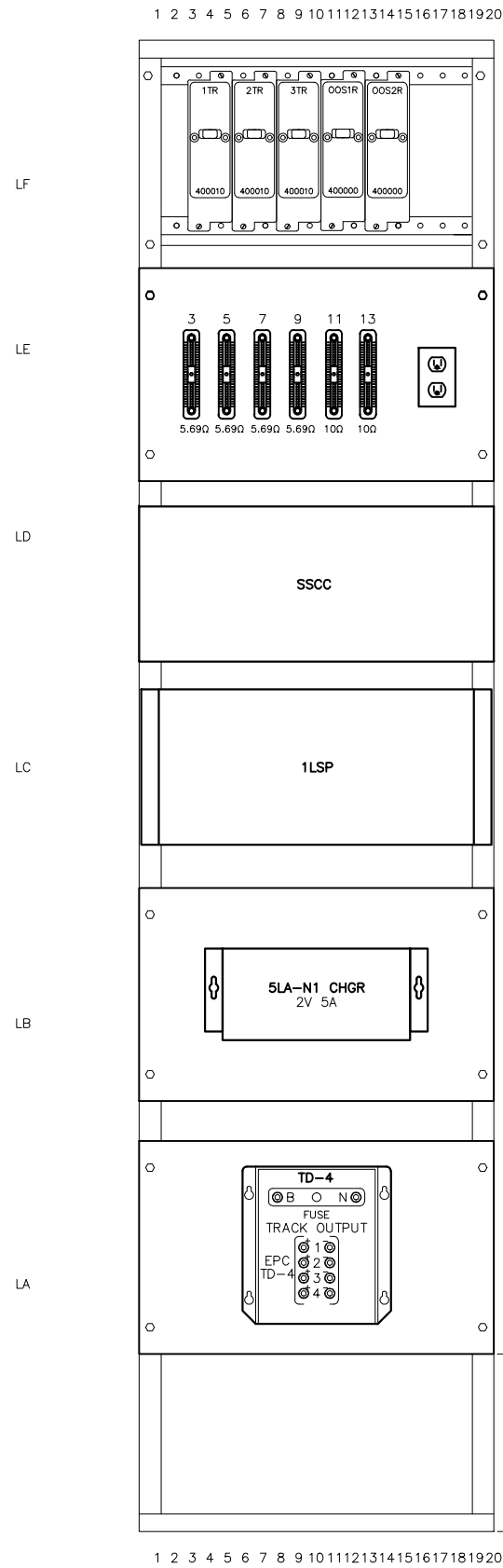


**Wheeling & Lake Erie  
Railway**

LOCATION

SEASONS ROAD (TR157)  
near STREETSBORO, OHIO

ORIGINAL DATE	03/06/2017	TITLE	AC POWER DISTRIBUTION
DESIGNER	CTC	SUB	CLEVELAND
DRAFTSMAN	CTC	RRMP	28.80
CHECKER	CTC	DOT NO.	472 675D
		CTC NO.	CN17035
		SCALE	1"=2'
		SHEET	16 OF 20



RELAY CROSS REFERENCE	
GRS	SAFETRAN
A62-262	400000

SIDE 'B' FRONT



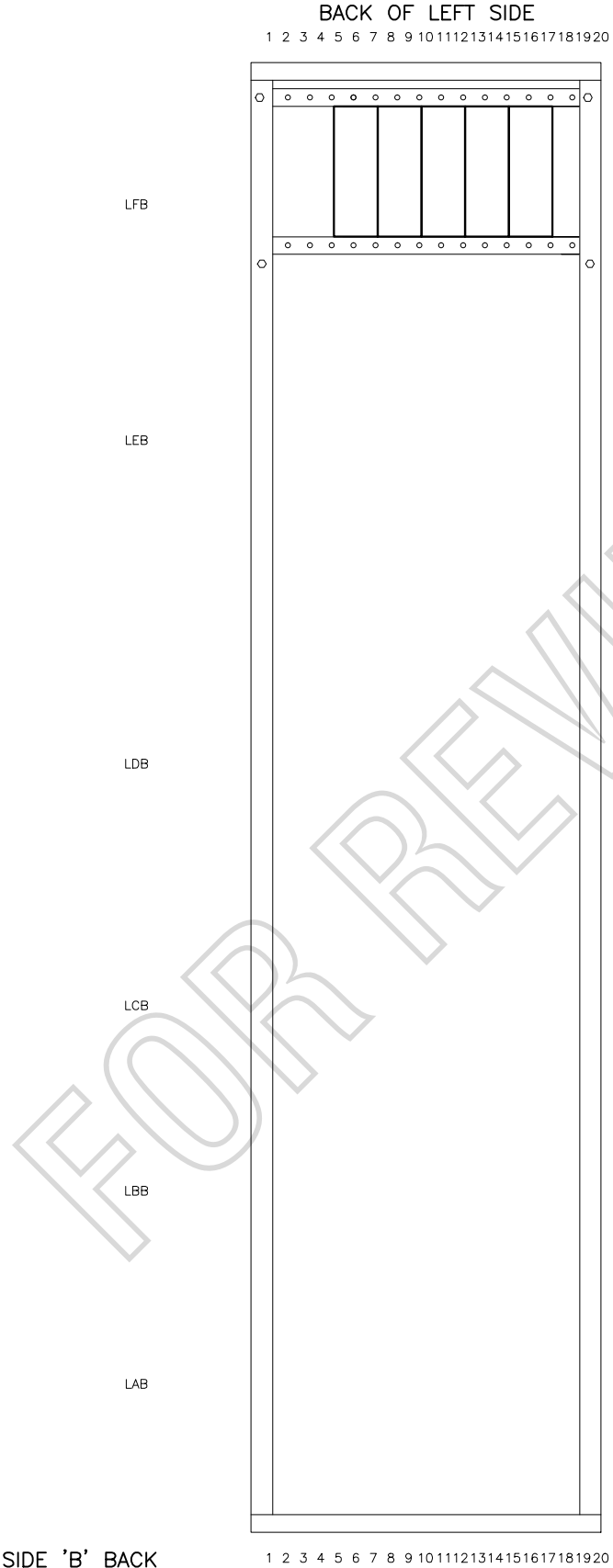
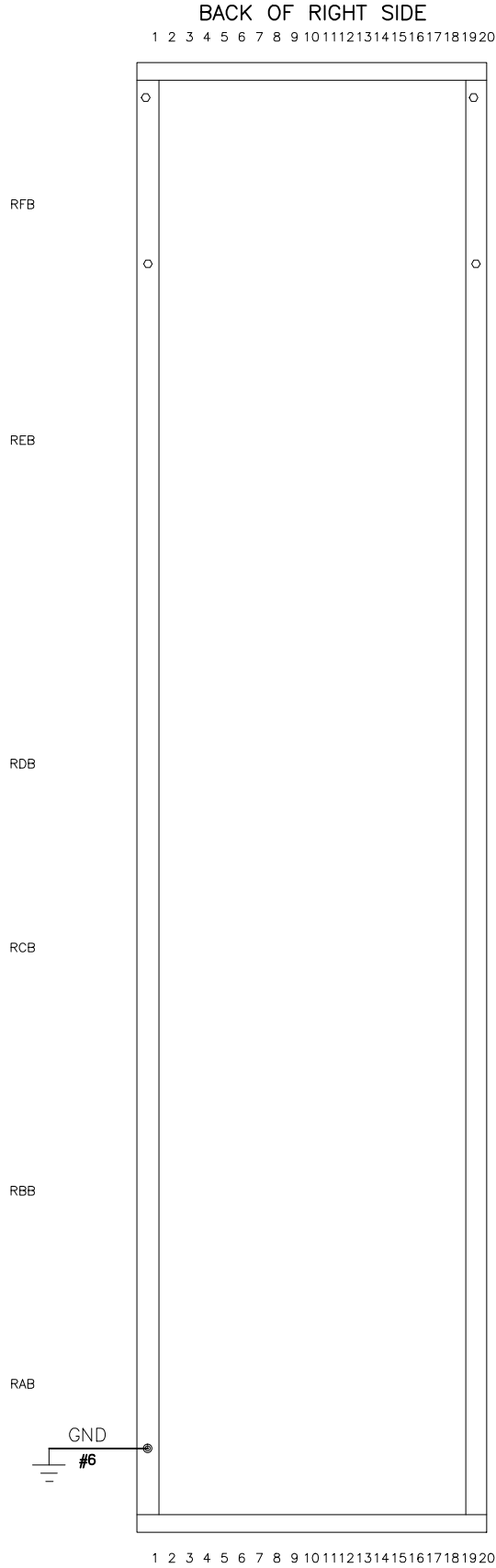
**Wheeling & Lake Erie  
Railway**

LOCATION SEASONS ROAD (TR157)  
near STREETSBORO, OHIO

ORIGINAL DATE 03/06/2017	TITLE RACK FRONT VIEW	
DESIGNER CTC	SUB CLEVELAND	CTC NO. CN17035
DRAFTSMAN CTC	RRMP 28.80	SCALE 1"=2'
CHECKER CTC	DOT NO. 472 675D	SHEET 17 OF 20

REVISION  
BLOCK

CHANGE FROM TYPICAL: Y



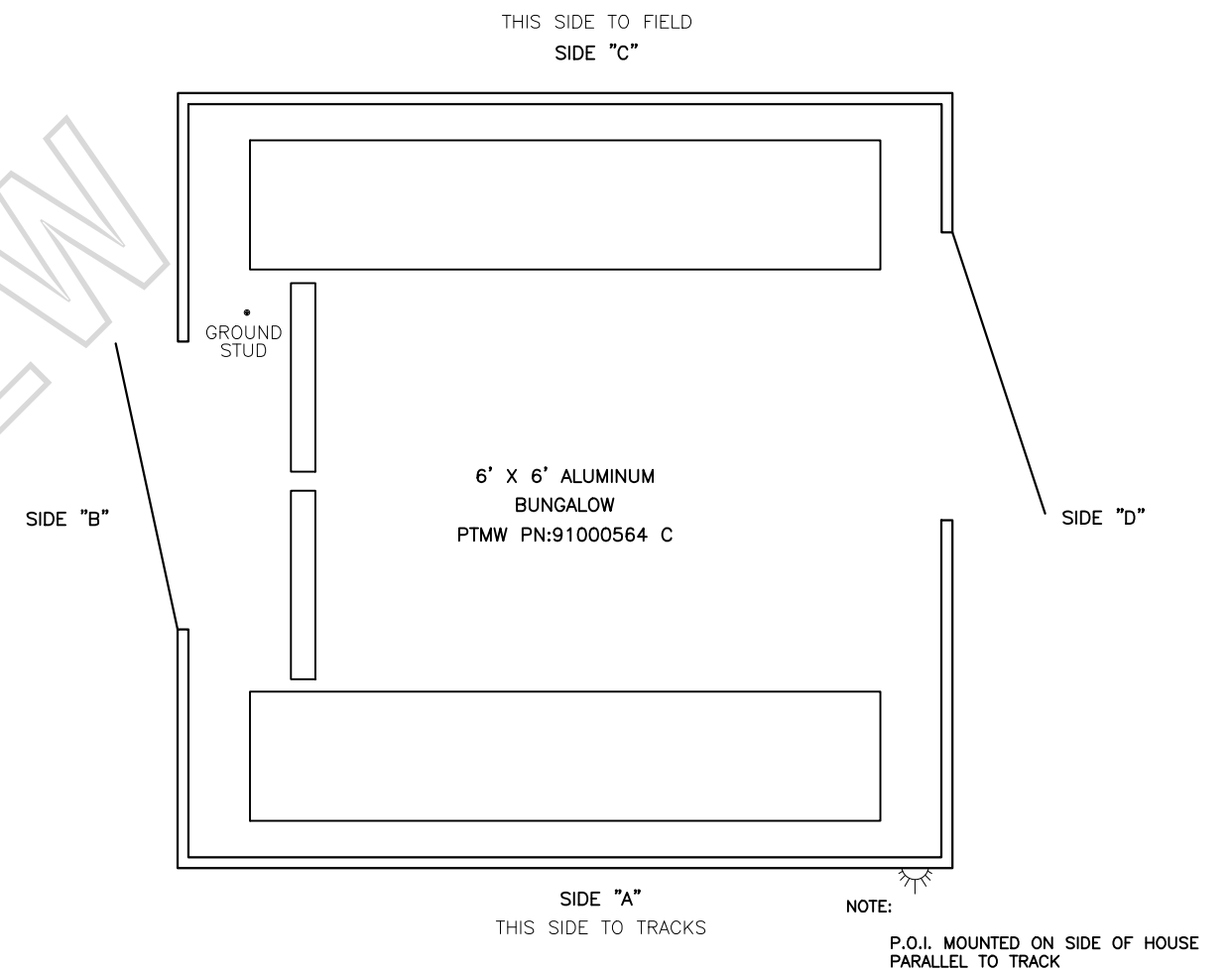
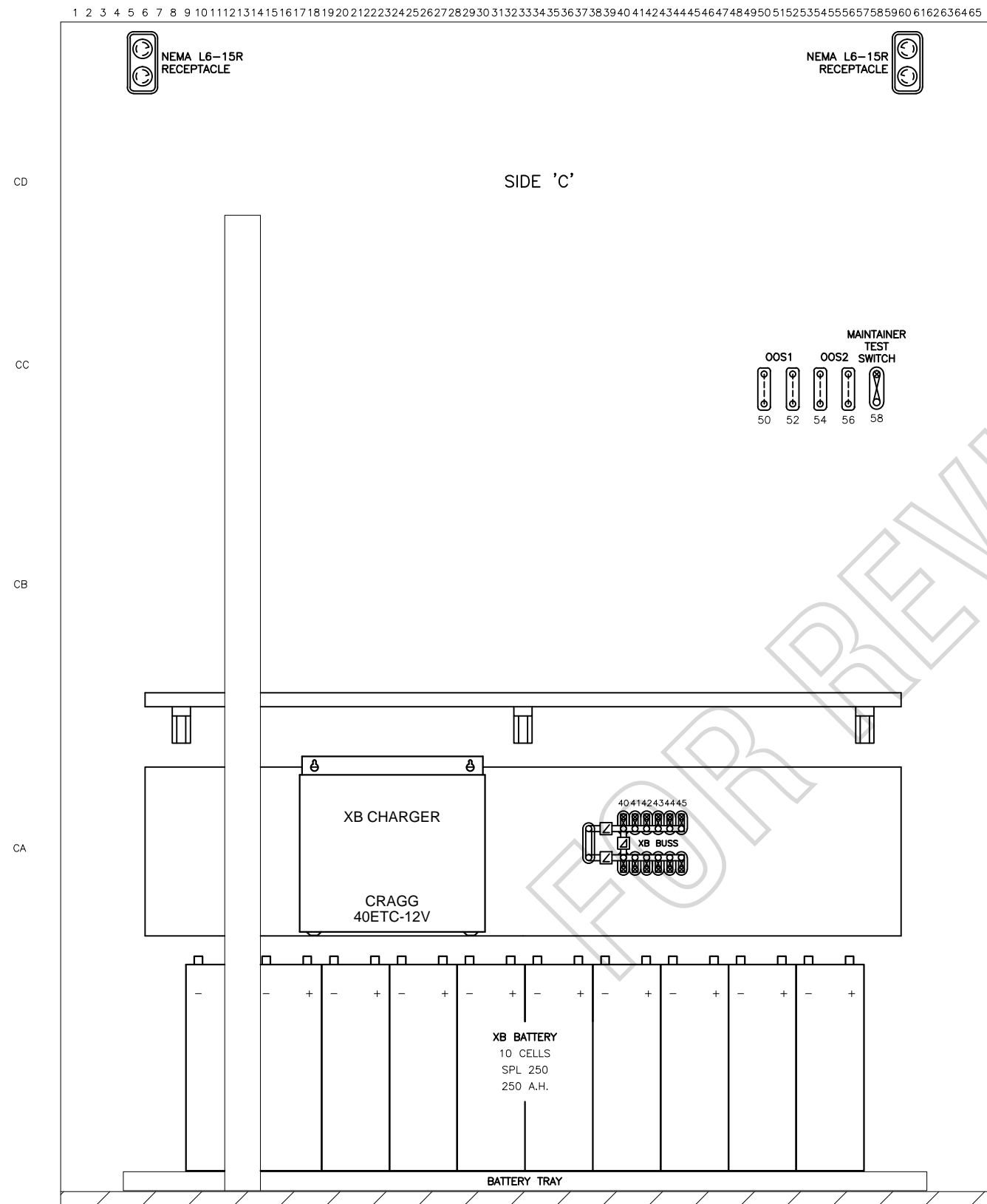
SIDE 'B' BACK


	<b>Wheeling &amp; Lake Erie Railway</b>	
	LOCATION SEASONS ROAD (TR157) near STREETSBORO, OHIO	
ORIGINAL DATE	03/06/2017	TITLE RACK BACK VIEW
DESIGNER	CTC	SUB CLEVELAND
DRAFTSMAN	CTC	RRMP 28.80
CHECKER	CTC	DOT NO. 472 675D
		CTC NO. CN17035
		SCALE 1"=2'
		SHEET 18 OF 20

REVISION  
BLOCK







	<h1 style="margin: 0;"><i><b>Wheeling &amp; Lake Erie Railway</b></i></h1>
LOCATION  SEASONS ROAD (TR157) near STREETSBORO, OHIO	
ORIGINAL DATE    03/06/2017	TITLE    SIDE "C"
DESIGNER    CTC	SUB    CLEVELAND    CTC NO.    CN17035
DRAFTSMAN    CTC	RRMP    28.80    SCALE    1"=2'
CHECKER    CTC	DDT NO.    472 675D    SHEET    20 OF 20



# OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223

John R. Kasich, Governor • Mark Policinski, ORDC Chairman

February 6, 2017

Mr. Tim Andrews  
Wheeling & Lake Erie  
100 East First St.  
Brewster Oh, 44613

RE: Portage County, TR157/Seasons Rd, DOT# 472675D, PID# 104305

Dear Mr. Andrews:

A diagnostic review was held at the above grade crossing on October 11 2016. The crossing has been recommended for the installation of lights and gates. It was also determined that the surface will be replaced with that cost being split 50/50 between the ORDC and the Wheeling & Lake Erie.

Wheeling & Lake Erie (WE) is authorized to proceed with the site plans and cost estimates (PE) or bid package 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 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 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 Project Manager for this project is James Tucker. James can be reached at (614) 398-6897, or [james.tucker@dot.ohio.gov](mailto:james.tucker@dot.ohio.gov), if you have any questions.

Sincerely,

Project Manager

C: Randall Schumacher, Supervisor, Rail Division, PUCO  
Jill Henry, Grade Crossing Planner, PUCO  
Susan Arduini, ORDC  
ORDC (file)

Attachment: 1 (diagnostic review form)



[www.rail.ohio.gov](http://www.rail.ohio.gov)

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY



**Public Utilities  
Commission**

Asim Z. Haque, Chairman

**Commissioners**

Lynn Slaby  
M. Beth Trombold  
Thomas W. Johnson  
Vacant

January 24, 2017

Wheeling & Lake Erie Railroad  
Mr. Tim Andrews  
Signals & Communications Supervisor  
100 E. First Street  
Brewster, Ohio 44613

Re: 1) Portage County, Seasons Road,  
DOT#472-675D, hereinafter  
referred to as the "Project"

Dear Mr. Andrews:

The Public Utilities Commission of Ohio (PUCO) has identified and the Ohio Rail Development Commission (ORDC) surveyed, on October 14, 2016, the above mentioned grade crossing for warning device upgrades. The location has been approved for flashing lights and roadway gates. In addition to the flashing lights and roadway gates, the location has been approved for a surface reconstruction.

The Project shall comply with Agreement No. 0001-A, dated September 17, 1990 and Reconstruction Agreement No. 6781, dated February 10, 1992, entered into by the State of Ohio and Wheeling & Lake Erie Railroad (WE). Furthermore, the RAILROAD shall comply with all applicable state and federal laws governing grade crossing safety programs.

Preliminary engineering (PE) and construction costs for the flashing lights and roadway gates shall be borne one hundred percent (100%) by ORDC. Preliminary engineering (PE) and construction costs for the surface reconstruction shall be borne fifty percent (50%) by ORDC and fifty percent (50%) by RAILROAD.

Reimbursable costs will be limited by ORDC based upon approved estimates and bid tabulations, if applicable. These limits will be quantified by the ORDC in its construction authorization to the RAILROAD and may be amended by the ORDC based upon revised estimates and bid tabulations. Additional costs must be approved in writing by the ORDC prior to being incurred. Emergency verbal authorizations by ORDC may be permitted but must be confirmed in writing within ten (10) business days of the verbal approval.

The RAILROAD shall complete plans and estimates for the Project within ninety (90) days after the RAILROAD is notified of authorization to proceed unless otherwise agreed by ORDC/PUCO and the RAILROAD.

The RAILROAD shall not commence construction prior to PUCO's Order or ORDC's construction authorization. The RAILROAD shall provide written notification of the

180 East Broad Street  
Columbus, Ohio 43215-3793

(614) 466-3016  
[www.PUCO.ohio.gov](http://www.PUCO.ohio.gov)

*An equal opportunity employer and service provider*

construction start date to PUCO and ORDC no later than five (5) business days prior to such date.

Please indicate your acceptance of the terms and conditions of this Letter of Agreement by signing and returning one (1) copy to Ms. Jill Henry, Rail Specialist, Rail Division, Public Utilities Commission of Ohio, 180 E. Broad Street, Columbus, Ohio 43215-3793.

Sincerely,



Milan Orbovich  
Director of Transportation  
Public Utilities Commission of Ohio

Date 1/24/17

Wheeling & Lake Erie Railroad

By



Title S+C Supervisor

Date 1-25-17



Matthew Dietrich  
Executive Director  
Ohio Rail Development Commission

Date 1-27-17



## Diagnostic Review Team Survey

## Reason for Survey:

(e.g. formula, accident, constituent, etc.)

Formula

Date: 10/11/2016

## Location Data

Street or Road Name: Seasons Road			
Route/Road Number (i.e. Twp., Co., SR or US) TR 157		US DOT No.: 472675D	
County: POR	Township: Franklin	City: (In or Near) Near Streetsboro	
Railroad Name: Wheeling & Lake Erie		Railroad Division:	Branch/Line Name: Main
Nearest RR Timetable Station: Streetsboro		RR Milepost: 28.75	

## On-Site Review Team

(Include: Name -- Organization -- Phone Number -- Email)

1. James Tucker ORDC 614-398-6897 James.Tucker@dot.ohio.gov
2. Randy Johr POCO 330-495-3810 N/A
3. Tim Andrews WLE 330-417-5541 TAndrews@wle.org
4. DOUG DIMAURO P-C-E 330-296-6411
5. Mark Beckwith Franklin Twp. 330-931-1264 mbeckwith@neo.rr.com
6. Jake Biltz Franklin Twp 330-687-8085 frktwpfoundsuper@gmail.com
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_

## Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments	
Advance Warning Signs (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	3	
'Stop' Signs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2	
'Stop Ahead' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Pavement Markings (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2	good
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2	
Number of Tracks Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Interconnected Highway Traffic Signal	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Mast-Mounted Flashing Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Cantilever Flashing Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number:	Length:
Side Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Automatic Gates	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number:	Length:
Bells	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number:	
Sidewalk Gate Arms	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
'No Turn' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Illumination	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	1	
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Other	<input type="checkbox"/> Yes	<input type="checkbox"/> 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	1502	Date Run: 9/30/16 1517 10/22/16

**Railroad Data**

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	2	
< 1 per day		
Day thru trains	1	
Night thru trains	1	
Daytime switching movements		
Nighttime switching movements		
Total number of tracks	1	
Number of main tracks	1	
Number of other tracks		
Maximum train speed	25	25
Typical train speed	25	25
Amtrak		

If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table I) ☒ Yes ☐ NoIf multiple tracks, can two trains occupy crossing at the same time? ☐ Yes ☒ NoCan one train block the motorists' view of another train at crossing? ☐ Yes (Explain below) ☒ NoCan one or more tracks be eliminated through the crossing? ☐ Yes ☒ NoAre there other track(s) crossing this same roadway within 100 ft of this crossing? ☐ Yes ☒ No

If yes, Crossing DOT # (if different) \_\_\_\_\_

If yes, distance \_\_\_\_\_ (take measurement between track centerlines at closest point along roadway)

**Roadway Data**

Local Highway Authority: Franklin Township

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	1840 (2012)	1778 (2016)
Highway paved	X Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

Roadway Surface: ☒ Blacktop ☐ Gravel ☐ Concrete ☐ Other \_\_\_\_\_

Roadway width: 20 ft.

Number of highway lanes	2	
Urban or Rural	Rural	
Vehicle Speed: _____ MPH	35	

School Bus Operation: ☐ No ☒ Yes 2 AmountHazardous Materials Trucks: ☐ No X Yes .05 AmountShoulders: ☐ No ☒ YesIs the shoulder surfaced? ☒ No ☐ YesIs there existing guardrail along roadway in crossing vicinity? ☒ No ☐ YesIs stopping site distance adequate? (See Table 2) ☒ Yes ☐ No If no, deficient approach(es) \_\_\_\_\_

Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None	Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None
---	---

Pedestrians: ☒ No ☐ Yes

Is sidewalk present? ☒ No ☐ Yes

Is there a nearby intersection that could cause queuing over the crossing? ☒ No ☐ Yes

If yes,  
 Distance \_\_\_\_\_

Is this intersection signalized? ☒ No ☐ Yes

Are the signals currently interconnected with the existing crossing warning devices? ☒ No ☐ Yes

Is there a 'Do not Stop on Track' sign? ☒ No ☐ Yes

Is a roadway improvement project (e.g. widening, turn lanes, nearby new or upgraded traffic signal, sidewalk) planned at or near this location in the foreseeable future? ☒ No ☐ Yes

If yes,  
 Improvement type \_\_\_\_\_ Lead Agency \_\_\_\_\_ Timeline/completion - \_\_\_\_\_

Is it the consensus of the Diagnostic Review Team that this is a potential closure project? ☒ No ☐ Yes

Explain reasons: \_\_\_\_\_

Type of Development	
<input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Institutional <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential	Location of nearby schools: <u>Kent City Schools = 2 miles</u>

Utility Information
---------------------

Is commercial power available? ☐ No ☒ Yes

Utility Provider (Company Name) OHIO Edison Phone Number \_\_\_\_\_

Nearest Available Power Source \_\_\_\_\_

What other utilities are present? (add locations to sketch)

<input type="checkbox"/> Gas	<input type="checkbox"/> Cable	<input checked="" type="checkbox"/> Telephone	<input checked="" type="checkbox"/> Fiber Optic Cable
<input type="checkbox"/> Petroleum	<input type="checkbox"/> Water	<input type="checkbox"/> Sanitary Sewer	
<input type="checkbox"/> Other _____			

Is(are) there potential utility conflict(s) ☐ Yes ☐ No ☒ Unknown

Comments: \_\_\_\_\_



## Potential Red Flags / Project Challenges

Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):

N/A

Crossing Consolidation or Closure:

N/A

Real Estate or ROW:

N/A

Culverts / Drainage / Ballast Conditions:

N/A

Roadway and/or Sidewalks:

Surface is in poor condition

Circuitry (e.g. reaches out to other crossings, specific needs, etc.):

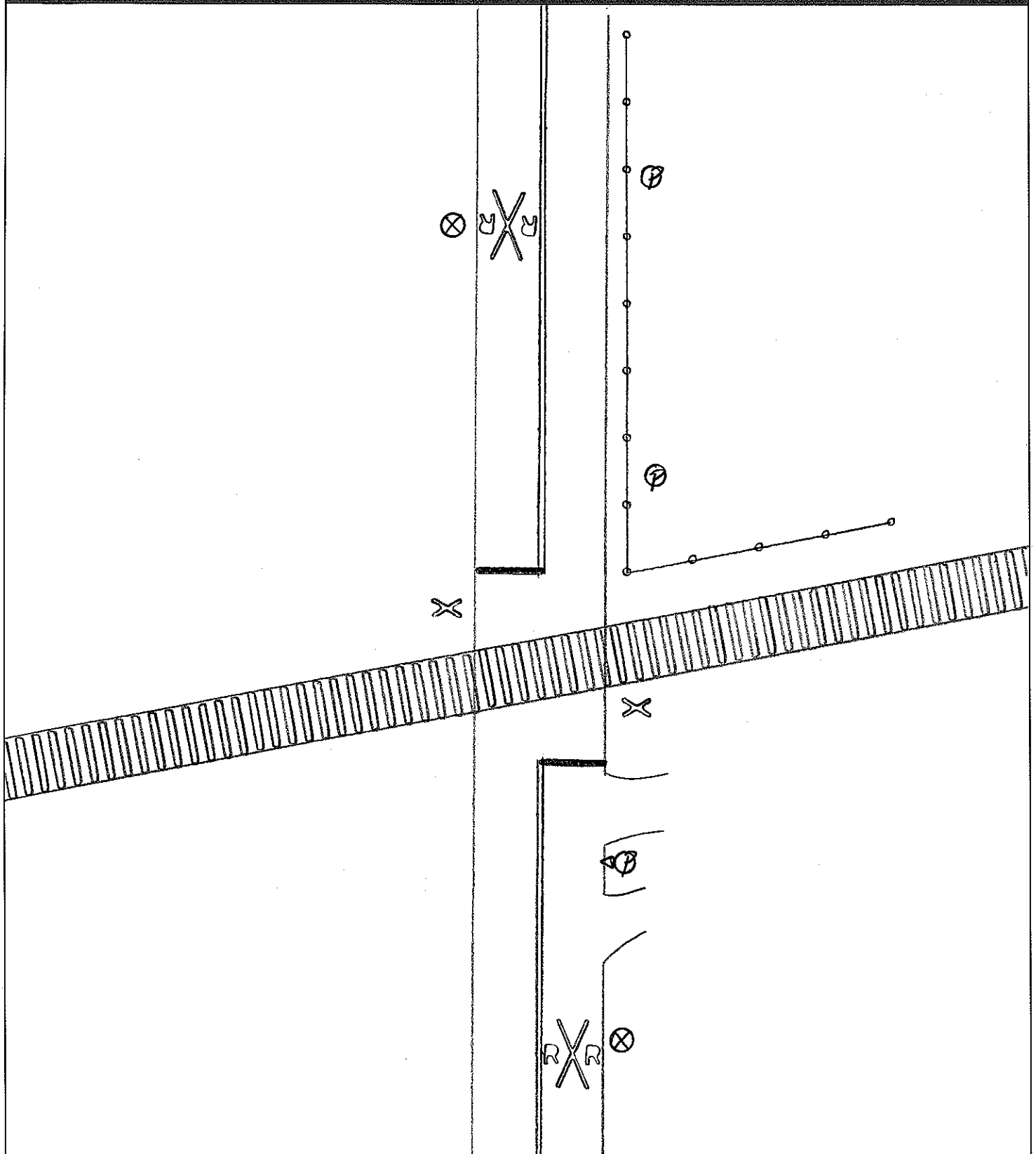
N/A

Environmental:

N/A

Other:

# Field Sketch



Crossing Angle ☒ 0-29° ☐ 30-59° ☐ 60-90° Measured in \_\_\_\_\_ Quadrant?

Sketch by: JT

## Diagnostic Team Recommendations

☒ 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)

Quadrants Needed

1

NW Quad.

Comments: This crossing needs a new Surface.

☐ 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):

*J. T. [Signature]*

*T. A. [Signature]*

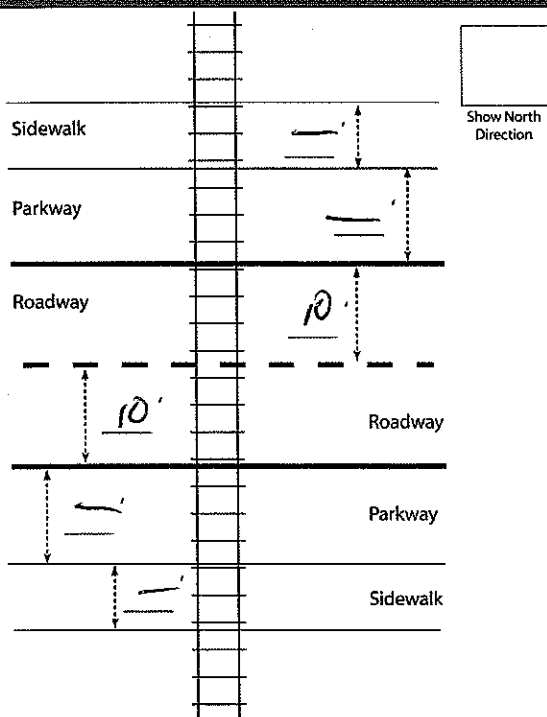
*Dany Dimmang*

*Landy a. John*

*[Signature]*

*Wm a. Bell*

## Field Dimensions



County: Por Route: Seasons Rd. DOT#: 472675D

<b>Surface type</b> <input type="checkbox"/> Rubber seal and asphalt <input checked="" type="checkbox"/> Timber and asphalt <input type="checkbox"/> Asphalt <input type="checkbox"/> Composite <input type="checkbox"/> Concrete panel <input type="checkbox"/> Full-depth timber <input type="checkbox"/> Full-depth rubber <input type="checkbox"/> Other _____	<b>Condition</b> <input type="checkbox"/> Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Poor Comments: <u>Rough w/ Potholes</u> _____ _____
Is the surface good and sufficient? Yes / <input checked="" type="radio"/> No	
Vehicle type (cars, trucks, etc.): <u>CARS</u>	
<b>Surface conditions:</b> Can vehicles cross at posted speed? <u>There is a Stop Sign @</u> Local observations/driver behaviors: <u>this location. Most drivers</u> <u>do not stop</u> Relevant crash history: <u>N/A</u> _____ _____	
Do existing surface conditions have negative effects on the current or proposed warning devices? Explain: <u>NO</u> _____ _____	
Comments:          	

Form completed by: J. T. [Signature]

Date: 10-17-16

TABLE 1

**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 non-gated crossings 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**

**Commission of Ohio Docketing Information System on**

**10/25/2017 8:33:27 AM**

**in**

**Case No(s). 17-2198-RR-FED**

Summary: Application In the Matter of a Request for the Installation of Active Warning Devices and Surface Installation at the Wheeling & Lake Erie Railroad Grade Crossing, DOT# 472-675D, at Seasons Road/TR 157 in Portage County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division