

Memo

To: Docketing Division
From: Jill Henry, Rail Specialist, Rail Division
Cc: PUCO Legal Department
Date: 9/14/17

Re: PUCO Case No. 17-1987-RR-FED- In the Matter of a Request for the Installation of New Active Warning Devices at the IORY Railroad Crossing, DOT#151-303A, SR 123/Broadway Street in Clinton County, Ohio.

On June 12, 2017, the Ohio Rail Development Commission (ORDC) authorized funding for Indiana & Ohio Railway (IORY) to install new cantilevered lights and gates at the SR 123/Broadway Street (DOT#151-303A) grade crossing in Clinton County, Ohio. The crossing was surveyed on March 28, 2017 and was found to warrant the upgrade. The electric utility provider for this crossing is Blanchester Board of Public Affairs.

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amount of \$208,696.71 (ORDC to pay 50% \$104,348.35 and IORY to pay 50% \$104,358.36) has 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:

Indiana & Ohio Railway
Scott Sandoval
AVP, Engineering
Midwest Region Railroads
4349 Easton Way, Suite 110
Columbus, Ohio 43219

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

Village of Blanchester
Mayor John Carman
318 E. Main Street
Blanchester, Ohio 45107

Blanchester Board of Public Affairs (Electric)
P.O. Box 158
Blanchester, Ohio 45107

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

TO: Randall Schumacher, Supervisor, Rail Division, PUCO
FROM: Cathy Stout, Manager, Safety Section, ORDC
BY: Greg Gronbach, Project Manager, Safety Section, ORDC
SUBJECT: Clinton County, SR123/Broadway St, IORY DOT # 151303A, PID 105884
DATE: September 5, 2017

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on May 15, 2014. The Ohio Rail Development Commission (ORDC) attended the review. The Diagnostic Team recommended the improvement of warning devices to flashing lights and roadway gates. 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. 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.


Greg Gronbach
Project Manager

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 5, 2017

Scott Sandoval
AVP, Engineering, Midwest Region Railroads
Indiana & Ohio Railroad (IORY)
4349 Easton Way, Suite 110
Columbus, OH 43219

RE: Railroad Construction Authorization
Clinton County, SR123/Broadway St, IORY DOT # 151303A, PID 105884

Dear Mr. Sandoval:

The plan and estimate dated August 8, 2017, for the referenced project has been reviewed and is acceptable. **Please note that the railroad must provide ORDC with a plan stamped by a professional engineer licensed in the State of Ohio prior to acceptance and close out of the project.** Indiana & Ohio Railroad (IORY) may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan. Construction may include but is not limited to circuitry design, installation of service poles, procurement of materials and signal construction. Please note ODOT Railroad Audit Circular No.4 Subcontracted Costs for Railroads and accordingly provide ORDC with any relevant bid documents and bid tabs pertaining to this project. 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 \$208,696.71 with \$104,348.35 of direct reimbursement based on 50/50 agreement and will be adjusted based on bid tabulations if applicable. 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 Indiana & Ohio Railroad (IORY) accepting the following instructions:

1. Indiana & Ohio Railroad (IORY)'s project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Greg Gronbach, ORDC, email Greg.Gronbach@dot.ohio.gov, and to the Public Utilities Commission of Ohio at Jill.Henry@puc.state.oh.us. Indiana & Ohio Railroad (IORY)'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. Indiana & Ohio Railroad (IORY) 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



www.rail.ohio.gov

phone: 614.644.0306

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site. Utilities that are not participating members of the service must be contacted directly by Indiana & Ohio Railroad (IORY).

3. Indiana & Ohio Railroad (IORY)'s project foremen will notify Greg Gronbach at 614-395-1824 (telephone) or Greg.Gronbach@dot.ohio.gov (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. Indiana & Ohio Railroad (IORY) will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
6. Indiana & Ohio Railroad (IORY) 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.

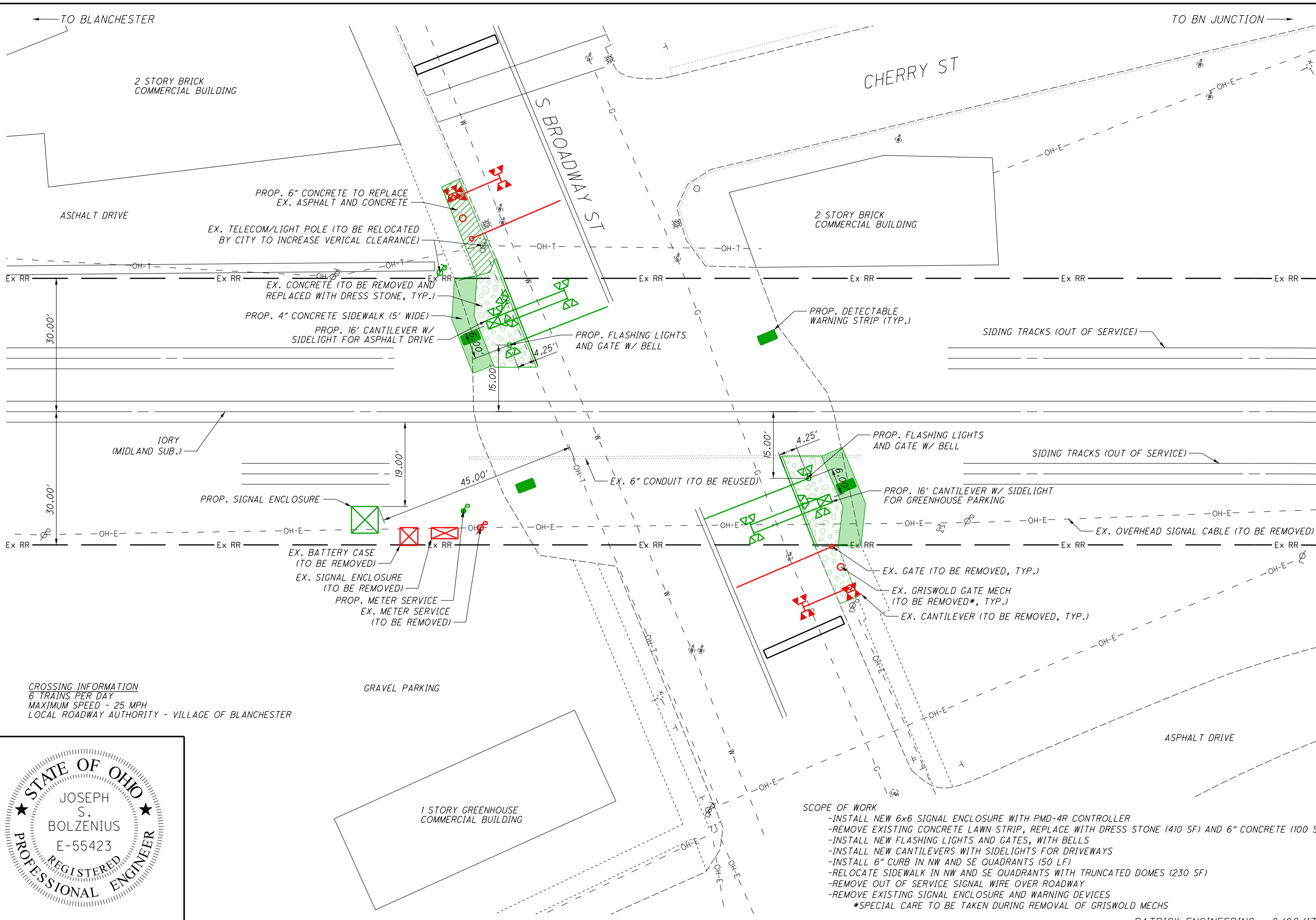
Thank you for your assistance with these matters.

Sincerely,

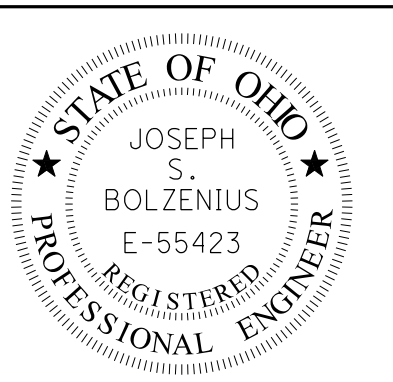

Greg Gronbach
Project Manager

C: Randall Schumacher, Rail Division Supervisor, PUCO
Jill Henry, Rail Specialist, PUCO
Cathy Stout, ORDC
Susan Arduini, ORDC
ORDC (file)

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CROSSING INFORMATION
6 TRAINS PER DAY
MAXIMUM SPEED - 25 MPH
LOCAL ROADWAY AUTHORITY - VILLAGE OF BLANCHESTER



- SCOPE OF WORK
- INSTALL NEW 6x6 SIGNAL ENCLOSURE WITH PMD-4R CONTROLLER
 - REMOVE EXISTING CONCRETE LAWN STRIP, REPLACE WITH DRESS STONE (410 SF) AND 6" CONCRETE (100 SF)
 - INSTALL NEW FLASHING LIGHTS AND GATES, WITH BELLS
 - INSTALL NEW CANTILEVERS WITH SIDELIGHTS FOR DRIVEWAYS
 - INSTALL 6" CURB IN NW AND SE QUADRANTS (50 LF)
 - RELOCATE SIDEWALK IN NW AND SE QUADRANTS WITH TRUNCATED DOMES (230 SF)
 - REMOVE OUT OF SERVICE SIGNAL WIRE OVER ROADWAY
 - REMOVE EXISTING SIGNAL ENCLOSURE AND WARNING DEVICES
 - *SPECIAL CARE TO BE TAKEN DURING REMOVAL OF GRISWOLD MECHS

PATRICK ENGINEERING - 8/08/17

S. BROADWAY ST - MP 40.64 (151303A)

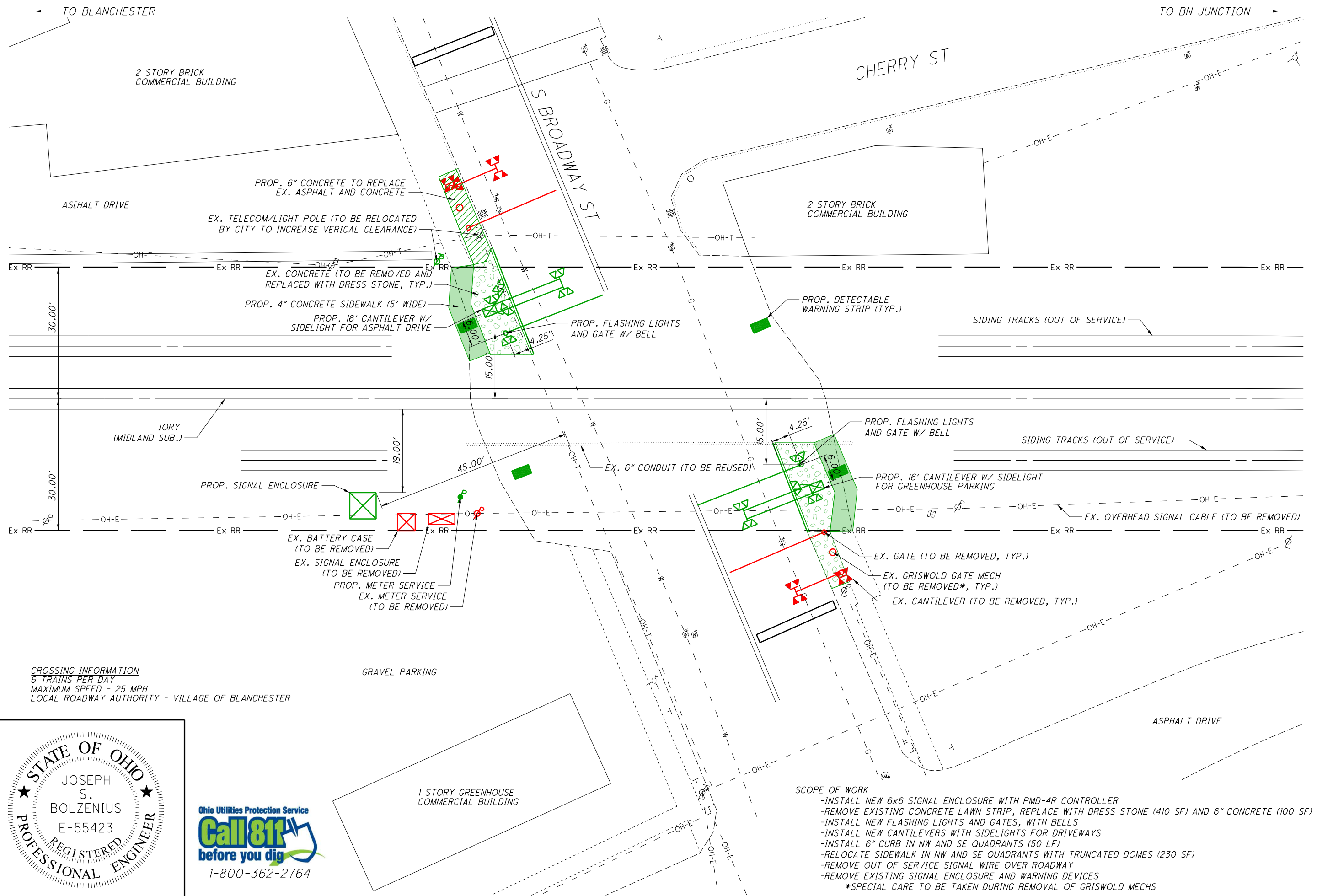
SITE LAYOUT

S. BROADWAY ST

AT IORY

1

1



PATRICK ENGINEERING - 9/05/17



Force Account Estimate - S. Broadway St / SR 123 (PID 105884)
INDIANA & OHIO RAILWAY COMPANY (IORY)

Blanchester, OH (Clinton County)

DOT#: 151303A
Railroad # 17IORY27R
RR MP: 40.64

SUMMARY

CROSSING WARNING SYSTEM	\$ 157,260.00
(Includes all labor, materials, equipment, shop wiring, and installation)	
SITE CIVIL ITEMS	\$ 12,936.71
(Includes all labor, materials, and equipment for MUTCD compliance)	
CROSSING SURFACE/RESURFACE	\$ -
(Includes all labor, materials, and equipment)	
TRACK GRADE AND REHABILITATION	\$ -
(Includes all labor, materials, and equipment)	
PRELIMINARY ENGINEERING	\$ 8,000.00
(Includes labor for all Engineering including site plans, Agency Coordination, and Project Management)	
CONSTRUCTION ENGINEERING	\$ 16,000.00
(Includes labor for all Engineering including circuitry plans, Agency Coordination, and Project Management)	
CONSTRUCTION ENGINEERING INSPECTION	\$ 5,500.00
(Includes all labor and mileage for site inspections during construction)	
UTILITY CROSSING	\$ -
(0 new utility crossings @ \$4000 per crossing, includes application, engineering review, and right of entry)	
FLAGGING SERVICES	\$ 5,000.00
(Estimated Flagging Services cost based on 5 days @ \$1000 per day)	
AC POWER SERVICE	\$ 4,000.00
(Includes all Coordination and Power Service Charges not included in other costs)	
OTHER (DESCRIPTION REQUIRED)	\$ -
TOTAL ESTIMATE COST	\$ 208,696.71 (USD)

Estimate Prepared By: J. Bolzenius, PE
Date: 8/8/2017

NOTE:

This Estimate has been prepared based on site conditions, anticipated work duration periods, material prices, labor rates, manpower, resource availability, and other factors known as of the date prepared. The actual cost for Railroad work may differ based upon the agency's requirements, their contractors work procedures, and/or other conditions that become apparent once construction commences or during the progress of the work. If any extended time elapses from the date of this Estimate, the Railroad will reserve the right to update the estimate to current price values, and require agency's approval before any work by Railroad will commence.

Preliminary Crossing Warning System Estimate

Railroad: IORY
Crossing Name: South Broadway St
City, (County), State : Blanchester, (Clinton), OH
Railroad #: 17IORY27R
FRA#: 151 303A
Patrick Engineering #: 21777.809

ITEM	UNIT COST	UNITS	TOTAL
6'x6' Wired House with Equipment	\$ 51,500.00	1 EA	\$ 51,500.00
Cantilever/Gate/Flasher Assembly	\$ 37,250.00	2 EA	\$ 74,500.00
		SUBTOTAL	\$ 126,000.00
Freight & Handling			\$ 2,000.00
		TOTAL MATERIALS	\$ 128,000.00
Foreman (1)	\$ 162.00	30 hrs	\$ 4,860.00
Lead Signalman (2)	\$ 121.50	50 hrs	\$ 6,075.00
Signalman (2)	\$ 94.50	50 hrs	\$ 4,725.00
		TOTAL INSTALLATION & WIRING	\$ 15,660.00
Equipment per day	\$ 1,000.00	2 Day	\$ 2,000.00
Bungalow Wiring and Test	\$ 5,800.00	2 Day	\$ 11,600.00
		TOTAL EQUIPMENT	\$ 13,600.00
TOTAL CROSSING WARNING SYSTEM			\$ 157,260.00

Estimate:

<u>Line #</u>	<u>Item Number</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
<u>Description</u>					
<u>Supplemental Description</u>					

Group 0010: Roadway

0001	609E14000	50.000	FT	\$19.67498	\$983.75
	CURB, TYPE 2-A				
0002	511E51510	3.000	CY	\$540.00000	\$1,620.00
	CLASS QC2 CONCRETE, SIDEWALK				
	4"				
0003	511E51510	2.000	CY	\$540.00000	\$1,080.00
	CLASS QC2 CONCRETE, SIDEWALK				
	6"				
0004	304E20000	20.000	CY	\$83.00763	\$1,660.15
	AGGREGATE BASE				
0005	202E23000	83.000	SY	\$24.00978	\$1,992.81
	PAVEMENT REMOVED				
0006	608E98200	4.000	EACH	\$150.00000	\$600.00
	WALKWAY, MISC.:				
	Truncated Dome Warning Strip				
0007	630E95000	1.000	LS	\$5,000.00000	\$5,000.00
	SIGNING, MISC.:				
	Existing Device Removal				

Total for Group 0010:\$12,936.71



S BROADWAY STREET



RAILROAD/HIGHWAY GRADE CROSSING SITE SURVEY

RAILROAD NAME:	Indiana & Ohio Railway Company			
LOCATION:	Blanchester, OH			
PROJECT#:	RR#	17IORY27R	Patrick#	21777.809
SURVEYED BY:	Troy Sabo		DATE:	7/13/17
ROADWAY:	S Broadway St		DOT#:	151303A
SUBDIVISION:	Midland		MILEPOST:	40.64
REGION:	Midwest		SPEED:	25 MPH
LATITUDE:	39.292169		LONGITUDE:	-83.987422
NEAREST ADDRESS:	176 S Broadway Street, Blanchester, OH 45107			
	Crossing within city limits?			Yes
REVISED:				

PROJECT SCOPE (PER AGENCY ORDER/DRTS FINDINGS):

Flashing lights and gates with bells with sidelights for driveways and Cherry Street. Cantilevers required in both quadrants. Remove RR pole line.

Special Requirements of City

Permits	N/A	Type:	Fee: \$
Bonds	N/A	Type:	Fee: \$

RAILROAD CONCERNS/SCOPE ADJUSTMENTS:

Utility pole in NW quadrant has guy wire attached to cantilever foundation, must be removed immediately. Signal conduit installed by track contractor when crossing surface was replaced.

SURVEY ATTENDEES:

Name	Title	Company	Email/Phone
Troy Sabo	Asst. Project Manager	Patrick Engineering	614-498-0344
Adam Richter	Signal Supervisor	IORY	513-335-4812



S BROADWAY STREET



SECTION 1 - EXISTING WARNING DEVICES

1.1 - EXISTING WARNING DEVICES/CONTROL EQUIPMENT (show on sketch)

Signage	Quantity	Description	Reuse/Replace
Crossbucks	2		
Stop Signs	-		
Yield Signs	-		
Track Signs	-		
SORS	-		
ENS/DOT	2		
NLT/NRT	-		
Equipment	Quantity	Description (Mast size, lens size, orientation, manufacturer, etc.)	Reuse/Replace
Flashing Lights	-		
Flashing Lights and Gates	2	Gates do not have Flashing Lights	
Cantilevers*	2	Sidelight for Cherry St in NW quad	
Cant/Gate Combo	-		
Ped Gates	-		
Bells	1	NW quad	
Bridge Signals	-		
Signal Enclosure	1	SW quad, 6x2	
Highway/Rail grade crossing warning equipment type	1	PMD-3R	
DAXing for Adjacent Xings	-		

*Include sketch of bolt hole pattern and spacing with measurements if existing cantilever is to be reused.

Location of shunts and type (hardwire, wide and/or narrow band):
Ex. NBS (522 Hz) at approximately 1300', replace with new.

Location of IJ's, bypass and/or tuned-joint couplers:
None

NOTES (LIST MANUFACTURER/MODEL/QUADRANT IF APPLICABLE) :

1.2 - ARE FOUNDATIONS POURED IN PLACE: Yes

1.3 - EXISTING MASTS OF CAST OR ALUMINUM: Cast

1.4 - ROOM AT CROSSING TO STORE EQUIPMENT: Yes

If no, specify where equipment can be stored:

1.5 - ARE EXISTING CIRCUITRY PLANS AVAILABLE: No

1.6 - CROSSING EQUIPMENT AND TYPE, passive, relay, solid state: Solid State

1.7 - IS THE ROADWAY BEING RELOCATED: No

1.8 - IS THERE A FRA INVENTORY REPORT: Yes

**SECTION 2 - PROPOSED WARNING DEVICES****2.1 - PROPOSED WARNING DEVICES/CONTROL EQUIPMENT (show on sketch)**

Signage	Quantity	Description
Crossbucks	2	
Stop Signs	-	
Yield Signs	-	
Track Signs	-	
SORS	-	
ENS/DOT	2	
NLT/NRT	-	
Equipment	Quantity	Description (Mast size, lens size, orientation, manufacturer, etc.)
Flashing Lights	-	
Flashing Lights and Gates	2	Sidelights - NW for drive and Cherry, SE for drive
Cantilevers	2	
Cant/Gate Combo	-	
Ped Gates	-	
Bells	2	
Bridge Signals	-	
Signal Enclosure	1	6x6 house
Highway/Rail grade crossing warning equipment type	1	PMD-4R, 522Hz

NOTES:

2.2 - TYPE OF FOUNDATIONS TO BE USED:

Steel pyramid

2.3 - ARE FOUR QUADRANT GATES TO BE INCLUDED:

No

If yes, specify exit gate delay/dwell time:

2.4 - ARE SIDELIGHTS REQUIRED*:

Yes

If yes, specify street/distance from track/quadrant:

*If parallel roadway exists, make certain there is sufficient room to install signal in that quadrant per MUTCD clearances. Said clearances are required to the front as well as the side of signals.

2.5 - CROSSING CONTROL EQUIPMENT TERMINATION:

NBS

2.6 - ADDITIONAL EQUIPMENT RECOMMENDED:

No

2.7 - IS ADDITIONAL FILL MATERIAL REQUIRED:

No

If yes, specify location and estimate quantity:

2.8 - BERM/CRIB WALL/PLATFORM REQUIRED:

No

If yes, specify location, size and type:



S BROADWAY STREET

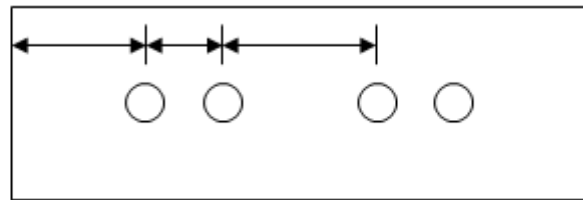
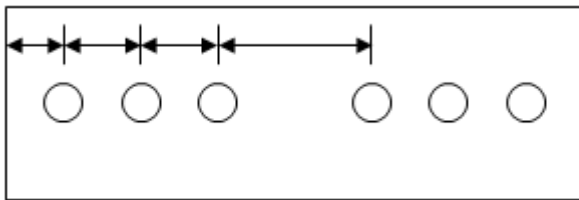


SECTION 3 – TRACK AND RAIL

3.1 – EXISTING TRACK CONDITIONS

Track	Rail Weight	CWR	JT	Bond Type	Track Speed	Track Control	Rusty Rail	Ballast Condition
Mainline	122CB		X	Head	25		No	Fair
Siding								
Siding								
Industry								
Storage								

SPECIFY INSULATED JOINT DIMENSIONS AND TYPE (show location on sketch):



3.2 - ARE COMP JOINTS PRESENT:

Yes

If yes, show location and sizes on FIELD SKETCH.

136RE to 122CB at Xing surface

3.3 - ARE GUAGE RODS PRESENT:

No

Insulated / Non-Insulated:

If yes, show location and number on FIELD SKETCH.

3.4 - DO SWITCHES REQUIRE INSULATION:

No

If yes, show switches on FIELD SKETCH.

3.5 - ANY SHUNT-TYPE SWITCHES:

No

If yes, describe type and show on FIELD SKETCH:

3.6 - SHUNT ENHANCEMENT REQUIRED:

No

If yes, specify type:

3.7 – HOW MANY TRACKS THROUGH THE ROADWAY:

1

What is the distance between tracks (center-to-center):

3.8 – INDICATE ANY SCHEDULED TRACK REARRANGEMENT OR REMOVAL

None currently scheduled, replaced 2016.



S BROADWAY STREET



3.9 –BALLAST CONDITIONS:

Has a ballast study/reading been performed to determine the ballast resistance?

No

If yes, attach a copy of the results.

Has a spectrum frequency analysis been performed?

No

If yes, attach a copy of the results.

3.10 – IS THE PROPOSED CROSSING LOCATED IN SIGNAL TERRITORY?

No

If yes, describe/attach a copy of the plans, CP, Approach signal(s), HWD, DED, and Rock Slide Detection Fences.

3.11 – ARE THERE ANY EXISTING TRACK CIRCUITS?

No

If yes, describe type/attach a copy of the plans.

3.12 – ARE THERE ANY TIE-INS OR MODIFICATIONS TO EXISTING CROSSINGS OR SIGNAL SYSTEMS?

No

If yes, describe/attach a copy of the plans.

3.13 – ARE THERE ANY OVERLAPS IN APPROACHES WITH EXISTING CROSSINGS?

Yes

If yes, describe/attach a copy of the plans.

Church St & Wright St

3.14 – ARE THERE ANY SPECIAL TRAIN MOVES OR REGULAR STOPPING OR SWITCHING IN THE PROPOSED APPROACHES?

No

If yes, describe:

3.15 – ARE THERE ANY QUIET ZONE REQUIREMENTS IN PROPOSED AREA OF CROSSING?

No

If yes, describe:

3.16 – ARE THERE ANY ELECTRONIC (e.g. NO TURN, DO NOT STOP ON TRACK) SIGNS REQUIRED?

No

If yes, describe and show on FIELD SKETCH:

3.17 – ARE THERE ANY SPECIAL DPU/STATE SPEED RESTRICTIONS FOR CROSSING?

No

If yes, describe:



S BROADWAY STREET



3.18 – ARE THERE DAXing REQUIREMENTS FOR THIS OR ADJACENT CROSSINGS?

No

If yes, describe:

3.19 – OPERATIONS

Number of Day train moves (6a-6p):

3

Number of Night train moves (6p-6a):

3

Are cars left on tracks near crossing:

No

SECTION 4 – PRE-EMPTION

4.1 - PRE-EMPTION CIRCUITRY REQUIRED:

No

If no, skip to section 6. If yes, specify name, distance and direction to intersection:

If yes, specify type of, distance and direction to traffic signal controller cabinet:

If yes, specify type of interface, relay, electronic, communication protocol, etc.:

If yes, specify cable (6 twisted pair), routing and distance to traffic signal controller cabinet:

If yes, specify interface names applicable to traffic signal control cabinet (AP, SP, Isl Occ, GD, GU, and/or Health):

4.2 - AUTHORIZING AGENCY:

4.3 - ROADWAY TRAFFIC ENGINEER:

4.4 - DATE OF REQUIREMENT:

SECTION 5 – JOINT RAILROAD

5.1 - IS TRACK LEASED FROM ANOTHER RAILROAD:

Yes

If yes, specify railroad and division of maintenance:

CSX owns, IORY maintains

5.2 - DOES ANOTHER RAILROAD OPERATE AT CROSSING:

No

5.3 - DOES THE FOREIGN RR CROSS OR GO PARALLEL:

No

5.4 - ANY JOINT FACILITIES WITHIN ONE MILE:

No

If yes, specify railroad and division of maintenance:



SECTION 6 – POLELINE

6.1 - ARE RAILROAD POLELINES PRESENT

Yes

If no, skip to section 5. If yes, show on sketch.

6.2 - REMOVE ABANDONED POLELINE:

Yes

If yes, specify number of spans to be removed:

2+

Will Underground conduit/cable be required as a suitable replacement:

Yes

Will an interim scheme be needed until the suitable replacement is in place?

Yes

SECTION 7 – UTILITIES

7.1 - IS COMMERCIAL POWER AVAILABLE:

Yes

Specify location of nearest pole:

100' south

If no, from where and how far must it come to service this location

7.2 - POWER COMPANY NAME/CONTACT INFORMATION:

AEP

7.3 - NEW METER SERVICE REQUIRED:

Yes

Specify 110VAC or 220VAC

If no, specify existing meter number:

7.4 - EXISTING UTILITY INFORMATION

Company Name	Type of Utility	Phone Number	Conflicts



S BROADWAY STREET



7.5 - DESCRIBE ANY OVERHEAD UTILITY CONFLICTS: (height of lines and proximity to devices to be installed)
Overhead telecom line in NW quad over proposed signal location.

7.6 - DESCRIBE ANY UNDERGROUND UTILITY CONFLICTS:
Various utilities underground, may interfere with signal foundation. No boring required, conduit previously installed.

7.7 - UTILITIES AND PIPELINES PARALLEL TO TRACKS: No

7.8 - NEARBY COMMERCIAL HIGH TENSION LINES: No

7.9 - NEARBY COMMERCIAL SUBSTATIONS: No

7.10 - NEARBY SOLAR SUBSTATIONS: No

7.11 - NEARBY PROPANE/NATURAL GAS SUBSTATIONS: No

SECTION 8 – OBSTRUCTIONS

8.1 - OBSTRUCTIONS TO VISIBILITY OF DEVICES: No

If yes, show on sketch.

8.2 - OBSTRUCTIONS TO VISIBILITY ALONG TRACKS: No

If yes, show on sketch.

8.3 - OBSTRUCTION SOLUTION (PROVIDE CONTACT INFORMATION OF OWNER):

SECTION 9 – ROADWAY DATA

(Show on attached crossing sketch)

9.1 - TYPE OF ROADWAY SURFACE: Asphalt

If different, specify crossing surface type: Timber panel

9.2 - EXISTING ROADWAY WIDTH: 82' (crossing length)

If present, specify shoulder width:

9.3 - PROPOSED ROADWAY WIDTH: 82' (crossing length)

If present, specify shoulder width:



S BROADWAY STREET



9.4 - CROSSING ANGLE:	70
9.5 - VEHICLE SPEED:	35 MPH
9.6 - IS CURBING PRESENT/REQUIRED:	Required
9.7 - ARE SIDEWALKS PRESENT:	Yes
If yes, will they interfere with warning devices:	Require relocation
9.8 - ARE PEDESTRIAN GATES REQUIRED:	No
9.9 - WIDTH AND TYPE OF MEDIAN:	N/A
9.10 - LOCATION AND DISTANCE FROM XING TO DRIVEWAYS AND SIDE STREETS:	50' N to Cherry St
9.11 - DOES EXISTING DOT/AAR# MATCH INFORMATION PROVIDED:	Yes

SECTION 10 – SITE INFORMATION

10.1 - ENCROACHMENTS WITHIN RR PROPERTY:	No
If yes, describe, photograph, and include on FIELD SKETCH:	
10.2 - WILL TOPOGRAPHY AFFECT INSTALLATION:	Yes
If yes, describe, photograph, and include on FIELD SKETCH:	Proposed signals within asphalt approach.
10.3 - WILL DRAINAGE BE AFFECTED:	No
If yes, describe, photograph, and include on FIELD SKETCH:	
10.4 - CULVERTS BE EXTENDED/RELOCATED/REQUIRED:	No
10.5 - CONDUIT LENGTH REQUIRED:	N/A
10.6 - UNUSUAL/GEOGRAPHY FEATURES:	No
10.7 - MINES OR SPURS IN AREA:	No
10.8 - RIVER LOCKS:	No



S BROADWAY STREET



10.9 – ARE USCGS SURVEY MARKERS PRESENT: No

If yes, describe, photograph, and include on FIELD SKETCH (DO NOT REMOVE MARKERS):

10.10 – ANY ELECTRIFIED ROADS OR TRANSISTS IN AREA: No

10.11 – HAS RAILROAD EXPERIENCED ANY PROBLEMS AT THIS CROSSING RELATED TO TRAIN OPERATIONS: No

10.12 – SCRAP DISPOSAL: No TYPE: N/A FEE: N/A

10.13 - ADDITIONAL COMMENTS/DETAILS/CONFLICTS:

Cantilever required in both quadrants to replace existing. Assume sidelights for Cherry Street until it official is declared a one-way street. Existing signal cable and RR pole line (aerial) to be removed. Line may include telephone line to IORY train shed.

10.14 - NE QUADRANT:
Assume sidelight required, dependent on one-way approval.

10.15 - NW QUADRANT:
Overhead telecom line will interfere with cantilever installation and will be relocated by village. Existing signal foundations to be removed and sidewalk replaced as necessary.

10.16 - SE QUADRANT:
Existing signal foundations to be removed and sidewalk replaced as necessary.

10.17 - SW QUADRANT:



S BROADWAY STREET



SECTION 11 – PHOTO LOG

Image #	Description	QUAD	Direction
001	Southbound Warning Devices and Crossing Surface	SW	N
002	Eastern Railroad Approach	SW	E
003	Northbound Warning Devices and Crossing Surface	SW	NE
004	Southbound Warning Devices and Crossing Surface	SW	N
005	Northbound Roadway Approach	SW	S
006	Northbound Roadway Approach and Existing Warning Devices	SW	N
007	Existing Pole Line and Signal House	SW	W
008	Existing Meter Service	SW	N
009	Existing Southbound Warning Devices	NW	N
010	Existing Southbound Warning Devices, with Guy Wire Shown	NW	E
011	Telecom Guy Wire Attached to Signal Foundation	NW	E
012	Telecom Guy Wire Attached to Signal Foundation	NW	E
013	Existing Southbound Warning Devices with Light Pole	NW	S
014	Southbound Roadway Approach	NW	S
015	Existing Southbound Warning Devices with Light Pole	NW	S
016	Eastern Railroad Approach	NE	E
017	Western Railroad Approach	NE	W
018	Southbound Roadway Approach and Sidewalk	NE	W
019	Northbound Warning Devices and Crossing Surface	NE	S
020	Southbound Warning Devices with Telecom Line	NE	W
021	Northbound Warning Devices	SW	S
022	Northbound Warning Devices	SW	S
023	Existing Underdrain Pipe	SW	N
024	Overhead Signal Cable	SW	S
025	Existing Underdrain Pipe	SW	N
	(Continued)		



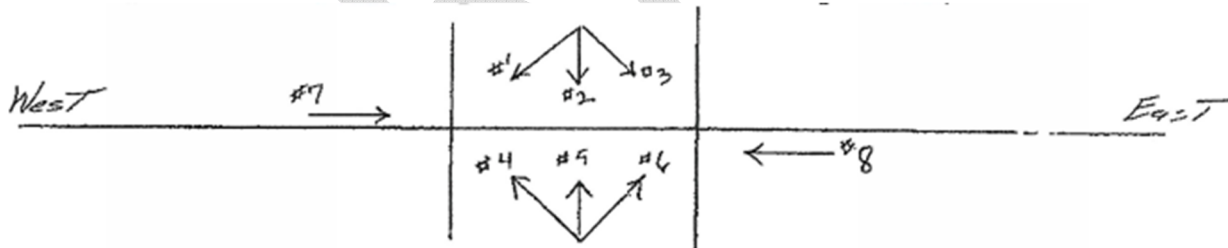
SECTION 12 –ADDITIONAL INSTRUCTIONS

12.1 A minimum of two field sketches is required. One should show a 'closeup' view of the crossing and the second should show the approaches to the crossing. **If the closeup view sketch is too congested, then include separate drawings for existing and proposed.** Pertinent structures beyond the approach limits of the crossing should be noted/shown if there is a possibility of these affecting project crossing installation/operation.

These sketches are to include, but not limited to:

- Cut sections (relayed and non-relayed)
- Switches (elec. Lock, bolt lock, H.T. derails, etc)
- Signal locations (automatic and controlled)
- Other road crossings (protected and unprotected) – take pictures.
- Slide fences, DED/TSA's, HBD,
- Non-interlocked RR crossings
- Mileposts
- Angle of crossing
- Speed of trains
- Snow blowers within approach of crossings
- Bridges (type, height, length) – take pictures
- AC meter service location
- Roadway dimensions (width, shoulders, median, sidewalk, etc.)
- Locate utilities and pipelines (underground and overhead) – take photos.

12.2 Take a minimum of eight (8) pictures, as shown below, and number each picture according to the numbered arrows on your field sketch. If additional pictures are taken, show additional numbered arrows on the field sketch to which pictures correspond.



12.3 - If AAR/DOT number plate is posted, include in picture.

12.4 - Take pictures inside any cases and/or signal houses.

12.5 – If copies plans are not available, then take pictures of circuit plans



Broadway 001 - Southbound Warning Devices and Crossing Surface - SW QUAD looking North



Broadway 002 - Eastern Railroad Approach - SW QUAD looking East



Broadway 003 - Northbound Warning Devices and Crossing Surface - SW QUAD looking Northeast



Broadway 004 - Southbound Warning Devices and Crossing Surface - SW QUAD looking North



Broadway005 - Northbound Roadway Approach - SW QUAD looking South



Broadway006 - Northbound Roadway Approach and Existing Warning Devices - SW QUAD looking North



Broadway 007 - Existing PoleLine and Signal House - SW QUAD looking West

Blanchester, OH – S Broadway Street
DOT# 151303A

RR M.P. 40.64

Project# 17IORY27R



Broadway008 - Existing Meter Service - SW QUAD looking North

Blanchester, OH – S Broadway Street
DOT# 151303A



Broadway 009 - Existing Southbound Warning Devices - NW QUAD looking North



Broadway 010 - Existing Southbound Warning Devices, with Guy Wire Shown - NW QUAD looking East



Broadway 011 - Telecom Guy Wire Attached to Signal Foundation - NW QUAD looking East



Broadway012 - Telecom Guy Wire Attached to Signal Foundation - NW QUAD looking East



Broadway 013 - Existing Southbound Warning Devices with Light Pole NW QUAD looking South



Broadway014 - Southbound Roadway Approach - NW QUAD looking South



Broadway015 - Existing Southbound Warning Devices with Light Pole NW QUAD looking South



Broadway016 - Eastern Railroad Approach - NE QUAD looking East



Broadway017 - Western Railroad Approach - NE QUAD looking West



Broadway018 - Southbound Roadway Approach and Sidewalk - NE QUAD looking West



Broadway019 - Northbound Warning Devices and Crossing Surface - NE QUAD looking South



Broadway020 - Southbound Warning Devices with Telecom Line - NE QUAD looking West



Broadway021 - Northbound Warning Devices - SW QUAD looking South

Blanchester, OH – S Broadway Street
DOT# 151303A

RR M.P. 40.64

Project# 17IORY27R



Broadway022 - Northbound Warning Devices - SW QUAD looking South



Broadway 023 - Existing Underdrain Pipe - SW QUAD looking North



Broadway 024 - Overhead Signal Cable - SW QUAD looking South

Blanchester, OH – S Broadway Street
DOT# 151303A



Broadway 025 - Existing Underdrain Pipe - SW QUAD looking North



Broadway 026 - Eastern Railroad Approach - NE QUAD looking East

Blanchester, OH – S Broadway Street
DOT# 151303A

RR M.P. 40.64

Project# 17IORY27R



Broadway 027 - Western Railroad Approach - NE QUAD looking West



Broadway 028 - Existing Warning Devices - NE QUAD looking South

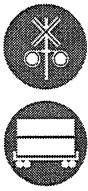


Broadway 029 - Existing Warning Devices - NE QUAD looking South



Broadway 030 - Alley and Telecom Line - NW QUAD looking East

Blanchester, OH – S Broadway Street
DOT# 151303A



OHIO RAIL DEVELOPMENT COMMISSION

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

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

June 12, 2017

John Hilborn
Vice President Engineering
GWRR/IORY
4349 Easton Way Ste. 110
Columbus, OH 43219

RE: PE Authorization
Clinton County, SR123 Broadway St, DOT # 151303A, PID 105884

Dear Mr Hilborn:

A diagnostic review was held at the above grade crossing on March 28, 2017. The crossing has been recommended for an upgrade to the warning devices with flashing lights, roadway gates and catilever.

Indiana & Ohio Railway 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 Greg Gronbach. Mr. Gronbach can be reached at (614) 395-1824, or Greg.Gronbach@dot.ohio.gov, if you have any questions.

Sincerely,

Greg Gronbach
Project Manager

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

Attachment: 1 (diagnostic review form)



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

May 8, 2017

John Hilborn,
Vice President Engineering
GWRR/IORY
4349 Easton Way Ste. 110
Columbus, OH 43219

Subject: Grade Crossing Warning Device Improvement
Clinton County, SR 123, Broadway Street
Indiana & Ohio Railway, DOT# 151303A, PID 105884

Dear Mr. Hilborn:

A diagnostic review was conducted at the SR 123, Broadway Street, DOT# 151303A, crossing on March 28, 2017. As a result of the review, the warning devices will be upgraded to flashing lights and roadway gates and cantilever.

This project shall be completed in compliance with Agreement No. 5773 dated February 16, 1989, entered into by the State of Ohio and Indiana and Ohio Railway Company (IORY) 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 fifty percent (50%) by ORDC and fifty percent (50%) by IORY. 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 IORY 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. IORY 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 IORY prior to ORDC issuing a PE authorization. PE and project estimate will be submitted by IORY to ORDC within ninety (90) days or other time specified by ORDC in the PE authorization. Construction will not be commenced by IORY prior to ORDC issuing a construction authorization. Construction will be completed by IORY 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

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

Indiana and Ohio Railway Company:

By: Amel. By

Title: President

Date: 6-1-17

Charles C. Styer
Ast. Treasurer

S-26-77

CLI SR 123 Broadway PID 105884

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Diagnostic Review Team Survey

Reason for Survey:
(e.g. formula, accident, constituent, etc.)

Constituent - Railroad

Date: 3/28/2017

Location Data

Street or Road Name: S. Broadway Street			
Route/Road Number (i.e. Twp., Co., SR or US) SR 123-3.55		US DOT No.: 151303A	
County: CLI	Township:	City: (In or Near) Village of Blanchester	
Railroad Name: Indiana & Ohio Railway	Railroad Division: Louisville	Branch/Line Name:	
Nearest RR Timetable Station: Midland CY		RR Milepost: 40.64	

On-Site Review Team

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

- GREG GRONBACH ORDC 614-395-1824 GREG.GRONBACH@DOT.OHIO.GOV
- John McMillan Village Council 937-218-4823
- Chad Hollis vegsponjo29@yahoo.com 937-302-0783 Council
- JOSHUA ELBY PUCO 740-637-0588
- Cynthia Sutton 937-725-4465
- John Harde 937-603-1806
- Wayne Welfer 937-302-0280
- Scott Sandora IORY 231-233-9084 scott.sandora@gwrr.com
- Adam Richter IORY 513-335-4812 adam.Richter@GWRR.com

Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs (condition?)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	ROAD MARKINGS = POOR
'Stop' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'Stop Ahead' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Pavement Markings (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	POOR
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Number of Tracks Signs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	BLUE INVENTORY TAG
Interconnected Highway Traffic Signal	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Mast-Mounted Flashing Lights	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Cantilever Flashing Lights	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Number: Length:
Side Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Automatic Gates	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Number: Length:
Bells	<input checked="" type="checkbox"/> Yes	<input 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	
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 (11/10/89)	
Hazard Ranking	1230 Date Run: 11/23/2016	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	6	
< 1 per day		
Day thru trains	2	
Night thru trains	2	
Daytime switching movements	1	
Nighttime switching movements	1	
Total number of tracks	5	
Number of main tracks	3	
Number of other tracks	2 (T-1360(1)T)	
Maximum train speed	30	
Typical train speed	30	
Amtrak		

If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table 1) ☐ Yes ☐ No

If multiple tracks, can two trains occupy crossing at the same time? ☐ Yes ☐ No

Can one train block the motorists' view of another train at crossing? ☐ Yes (Explain below) ☒ No

Can one or more tracks be eliminated through the crossing? ☐ Yes ☐ No

Are 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:	Village of Blanchester	
Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	5642 (2014)	
Highway paved	X Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Roadway Surface:	<input checked="" type="checkbox"/> Blacktop <input type="checkbox"/> Gravel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____	
Roadway width:	45 ft.	
Number of highway lanes	2	
Urban or Rural	Rural	
Vehicle Speed:	35 MPH 25	
School Bus Operation:	<input type="checkbox"/> No X Yes Amount 20	
Hazardous Materials Trucks:	<input type="checkbox"/> No X Yes 03% Amount	
Shoulders:	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Is the shoulder surfaced?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Is there existing guardrail along roadway in crossing vicinity?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is stopping site distance adequate? (See Table 2)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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 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 type="checkbox"/> None
Pedestrians: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Is sidewalk present? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Is there a nearby intersection that could cause queuing over the crossing? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, Distance _____ Is this intersection signalized? <input type="checkbox"/> No <input type="checkbox"/> Yes Are the signals currently interconnected with the existing crossing warning devices? <input type="checkbox"/> No <input type="checkbox"/> Yes Is there a 'Do not Stop on Track' sign? <input type="checkbox"/> No <input type="checkbox"/> 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? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, Improvement type <u>REPAVE/SIDEWALK/CURBS</u> Lead Agency <u>ODOT D-8</u> Timeline/completion - <u>START 3/1/17</u> <u>END FALL 2017</u>	
Is it the consensus of the Diagnostic Review Team that this is a potential closure project? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Explain reasons:	
Type of Development	
<input type="checkbox"/> Open Space <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Institutional <input checked="" type="checkbox"/> Commercial Location of nearby schools: <u>POTNIM ELEMENTARY (LESS THAN 1 MILE)</u>
Utility Information	
Is commercial power available? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Utility Provider (Company Name) <u>VILLAGE OF BLANCHESTER</u> Phone Number _____ Nearest Available Power Source <u>AT CROSSING</u>	
What other utilities are present? (add locations to sketch) <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Cable <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Fiber Optic Cable <input type="checkbox"/> Petroleum <input checked="" type="checkbox"/> Water <input checked="" type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Other _____	
Is(are) there potential utility conflict(s) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Comments: <div style="text-align: center; margin-top: 20px;"> <u>- OVERHEAD POWER LINES</u> </div>	

Potential Red Flags / Project Challenges

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

NO

Crossing Consolidation or Closure:

NO

Real Estate or ROW:

NO

Culverts / Drainage / Ballast Conditions:

NO

Roadway and/or Sidewalks:

YES

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

YES

Environmental:

NO

Other: - OVERHEAD RAILROAD LINES SOUTH OF CROSSING NEED TO BE REMOVED. RR STATES LINE ARE OLD AND NO LONGER NEEDED IF CROSSING IS UPGRADED

Diagnostic Team Recommendations

	Quadrants Needed
<input type="checkbox"/> Install/upgrade active devices	
<input type="checkbox"/> Automatic Flashing Lights (AFLS)	
<input type="checkbox"/> AFLS / Cants	
<input checked="" type="checkbox"/> AFLS / Gates	
<input checked="" type="checkbox"/> AFLS / Gates / Cants	CANTS TO BE REVIEWED, IF NEEDED
<input checked="" type="checkbox"/> Bells / number	
<input type="checkbox"/> Upgrade circuitry / type	
<input checked="" type="checkbox"/> Sidelights	
<input type="checkbox"/> Guardrail Needed	
<input type="checkbox"/> Install/Replace curb	
<input type="checkbox"/> Bungalow placement & offset from rail & highway	
<input type="checkbox"/> Other (define)	

Comments: - POSSIBLE CITY MAY TURN CHERRY ST INTO ONE WAY EASTBOUND, CITY TO DISCUSS AT NEXT MEETING.

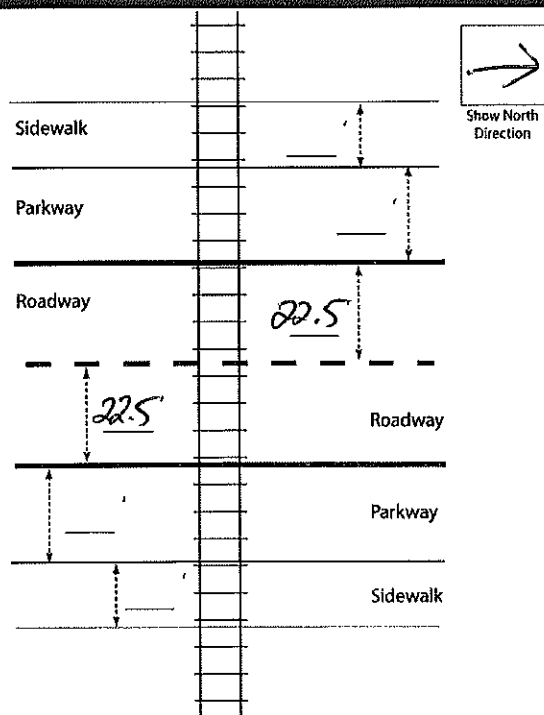
<input type="checkbox"/> Install/upgrade traffic signal preemption	
<input type="checkbox"/> No improvements needed	
<input checked="" type="checkbox"/> Other (define) - ODOT D8 TO INSTALL ADVANCE WARNING SIGNS NORTH + SOUTH OF CROSSING. CURRENTLY NO SIGNAGE.	

Acknowledgement of Recommendations (each entity represented at the diagnostic must have at least one signature acknowledgement):

GW6

FM CH. JH WC CS. ACR. SS, JF

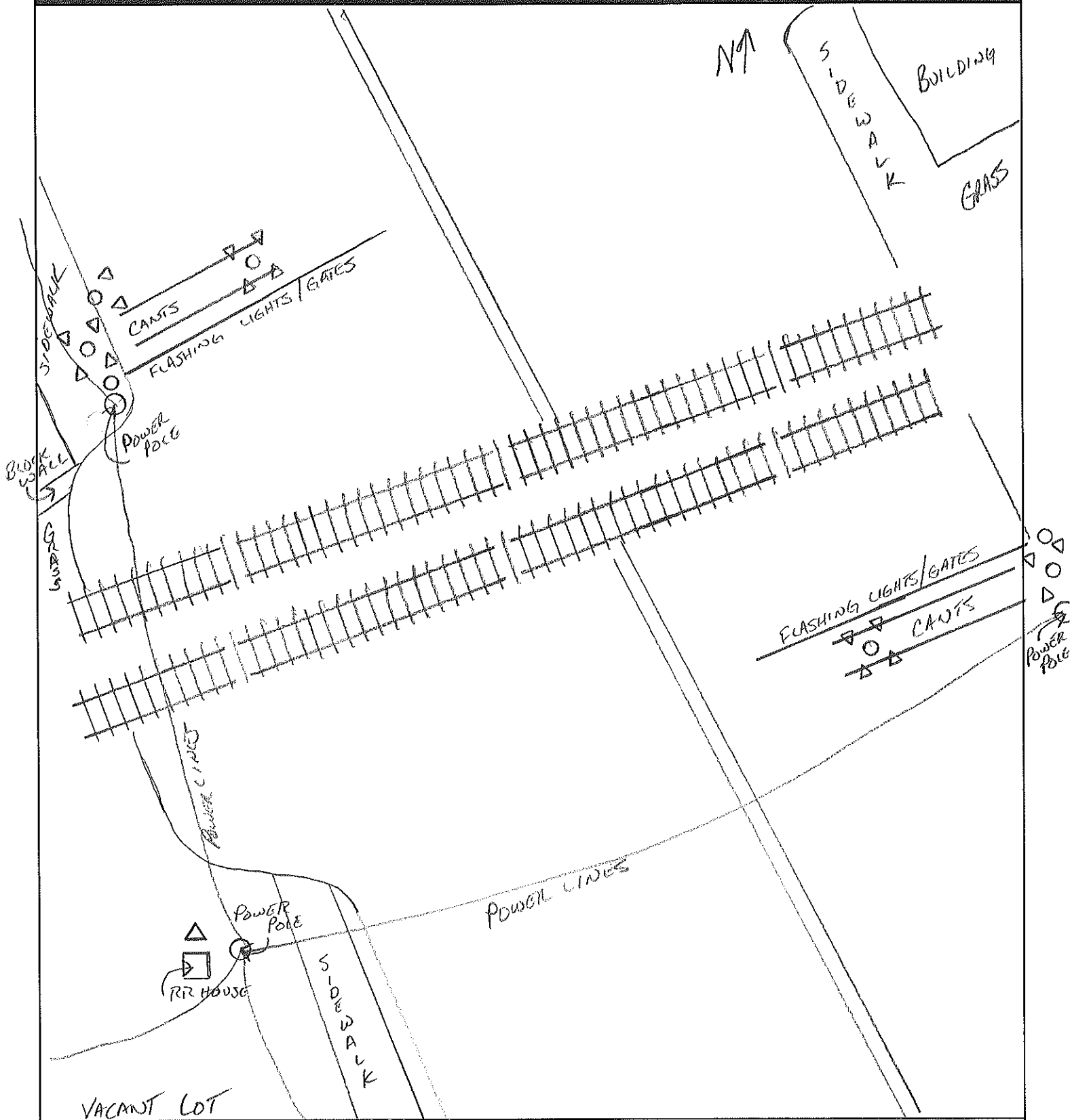
Field Dimensions



PROJECT = YES

- IF POSSIBLE, CITY WOULD LIKE TO SEE WARNING DEVICE UPGRADE COINCIDE WITH THE ROADWAY REPAIRING/ SIDEWALKS/CURB WORK THAT IS TO BE COMPLETED FALL 2017.

Field Sketch



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

Sketch by: GW61

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 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

9/14/2017 3:12:58 PM

in

Case No(s). 17-1987-RR-FED

Summary: Application In the Matter of a Request for the Installation of New Active Warning Devices at the IORY Railroad Crossing, DOT#151-303A, SR 123/Broadway Street in Clinton County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division