


Public Utilities
Commission of Ohio

RECEIVED-DOCKETING DIV

2014 APR 25 PM 3:10

PUCO

Memo

To: Docketing Division
From: George Martin, Grade Crossing Planner, Rail Division 
Re: In the matter of the authorization of CSX Transportation and the Indiana & Ohio Railway to install active grade crossing warning devices in Butler and Auglaize Counties
Date: April 25, 2014

The Ohio Rail Development Commission (ORDC) has authorized funding for CSX Transportation (CSX) and the Indiana & Ohio Railway (IORY) to **install mast-mounted flashing lights and roadway gates** at the following locations:

CSX, Butler County, near Middletown, Franklin-Madison Rd/TR 4, DOT# 152434G

IORY, Auglaize County, near Uniopolis, Weimert School Rd/TR 130, DOT# 258639W

The crossings were surveyed on November 8, 2013, and May 17, 2013, respectively, due to their hazard index. Both crossings were found to warrant the upgrade to lights and gates.

The projects will be paid for with federal funds, and are actual cost. As the plans and estimates have already been submitted and approved, staff requests a Finding & Order with completion of the projects in nine months. Construction may commence at once. 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.

A suggested case coding and heading would be:

PUCO Case No. 14- **0774** -RR-FED In the matter of the authorization of CSX Transportation and the Indiana & Ohio Railway to install active grade crossing warning devices in Butler and Auglaize Counties

C: Legal Department

Please serve the following parties of record

Ms Cathy Stout

Ohio Rail Development Commission

1980 West Broad St, Mailstop #3140

Columbus, Oh 43223

Ms Amanda DeCesare

CSX Transportation

1717 Dixie Hwy, Ste 400

Ft Wright, KY 41011

Mr John Hilborn

Genesee & Wyoming

Vice-President-Engineering

Ohio Valley Region Railroads

4349 Easton Way, Ste 110

Columbus, Oh 43219

Mr Rob Rose

Franklin Township Trustees

PO Box 364

Franklin, Oh 45005

Mr Chris Saylor

Madison Township Trustees

5610 W Alexandria Rd

Middletown, Oh 45042

Mr David Emerson

Clay Township Trustees

13080 Wrestle Creek Rd

Wapakoneta, Oh 45895

Dayton Power & Light

Duke Energy

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

TO: George Martin, Rail Division, PUCO
FROM: Cathy Stout, Manager, Safety Section, ORDC
BY: Tim Perkins, Project Manager *Tim Perkins*
SUBJECT: Butler County, TR 4, Franklin-Madison Road-CSX, DOT No. 152 434 G,
PID No. 97249
DATE: April 24, 2014

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on November 8, 2013. 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.

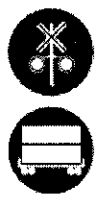
PE has already been provided by the railroad. ORDC approves the site plan and estimate as provided. Please issue a construction-only order for the project outlined above. This construction authorization is made with the stipulation and understanding that any field work needs prior approval before the 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



OHIO RAIL DEVELOPMENT COMMISSION

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

John R. Kasich, Governor • James G. Bradley, Chairman

April 24, 2014

Amanda DeCesare
CSX Transportation
Public Projects Manager
1717 Dixie Highway, Suite 400
Ft. Wright, KY 41011

RE: Butler County, T.R. 4, Franklin-Madison Road, DOT No. 152 434 G, PID No. 97249, OH0979

Dear Ms. DeCesare:

The CSX Transportation (CSX) plan and estimate dated September 19, 2014, in the amount of \$279,201.00 for the referenced project has been reviewed and is acceptable. CSX may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan. This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to \$279,201.00. Additional costs must be approved in writing by the 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 CSX accepting the following instructions:

1. CSX will furnish prior written notification of their scheduled date to start construction to George Martin, PUCO, Railroad Division.
2. CSX's project foreman will furnish FAX or written notification five (5) working days prior to the date work will start at the project site to Tim Perkins, Ohio Rail Development Commission (ORDC), 1980 West Broad Street, Columbus, Ohio 43223, email Tim.Perkins@dot.state.oh.us or FAX (614) 728-4520, (telephone number 614-644-0284), and to the Public Utilities Commission of Ohio at 180 East Broad Street, Columbus, Ohio 43215, email George.martin@puc.state.oh.us, (telephone number 614-752-9107). CSX'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.
3. CSX 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 CSX.



www.rail.ohio.gov

phone: 614.644.0306

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4. CSX's project foremen will notify Tim Perkins 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.
5. CSX will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed Encumbrance Estimate to reference when billing.
6. CSX 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 "Tim Perkins".

Tim Perkins
Project Manager

C: George Martin, PUCO, Grade Crossing Planner
ORDC (file)

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

TO: George Martin, Rail Division, PUCO
FROM: Cathy Stout, Manager, Safety Section, ORDC
BY: Tim Perkins, Project Manager *Tim Perkins*
SUBJECT: AUG-T.R. 130, Weimert School Road, I&O, DOT No. 258 639 W, PID No. 96177
DATE: April 24, 2014

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on May 17, 2013. 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.

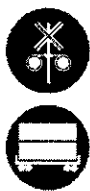
PE has already been provided by the railroad. ORDC approves the site plan and estimate as provided. Please issue a construction-only order for the project outlined above. This construction authorization is made with the stipulation and understanding that any field work needs prior approval before the 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



OHIO RAIL DEVELOPMENT COMMISSION

1980 West Broad Street, Columbus OH 43233

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

April 24, 2014

John Hilborn, P.E.
Genesee & Wyoming
Vice President – Engineering
Ohio Valley Region Railroads
4349 Easton Way, Suite 110
Columbus, Ohio 43219

RE: AUG-T.R. 130, Weimert School Road-I&O, DOT No. 258 639 W, PID No. 96177, RR
Mile Post: 146.28,

Dear Mr. Hilborn:

The Bid process for the referenced project has been reviewed and is acceptable. Indiana and Ohio (I&O) may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan. This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to \$143,945.00 and is broken down as \$109,645.00 for Railroad Signal Services, \$34,300.00 Xorail. This estimate from Xorail is broken down as PE phase 1 \$13,400.00, Phase 2 \$5,000.00, Phase 3 \$9,900.00, CE \$6,000.00, and actual cost for AC service. Additional costs must be approved in writing by the 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 I&O accepting the following instructions:

1. I&O's project foreman will furnish FAX or written notification five (5) working days prior to the date work will start at the project site to Tim Perkins, Ohio Rail Development Commission (ORDC), 1980 West Broad Street, Columbus, Ohio 43223, email Tim.Perkins@dot.state.oh.us or FAX (614) 728-4520, (telephone number 614-644-0284), and to the Public Utilities Commission of Ohio at 180 East Broad Street, Columbus, Ohio 43215, email George.martin@puc.state.oh.us, (telephone number 614-752-9107). I&O'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. I&O 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 I&O.
3. I&O's project foremen will notify Tim Perkins 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.



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phone: 614.644.0306

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4. I&O will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed Encumbrance Estimate to reference when billing.
5. I&O 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.
6. I&O will provide a credit for the pole line removal not necessary for our light and gate installation.

Thank you for your assistance with these matters.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Perkins". The signature is written in a cursive, flowing style.

Tim Perkins
Project Manager



Diagnostic Review Team Survey

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

Formula

Date:

5/17/13

Location Data

Street or Road Name:

Weimert School Road

Route/Road Number
(i.e. Twp., Co., SR or US)

TR 130

US DOT No.:

258639W

County:

AUG

Township:

Clay

City:

(In or Near)

Unipolis

Railroad
Name:

Indiana & Ohio Railway

Railroad
Division:

IOY

Branch/Line
Name:

DTI Middle

Nearest RR

Timetable Station: Lima

RR Milepost:

146.28

On-Site Review Team

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

1. DAVID EMERSON CLAY TWP 937-596-6050
2. EK Roh CLAY TWP 419-738 6948
3. GEORGE MARLIN PUCO 614-752-9107
4. Don Clark GURR 859-391-5530
5. Steve Lowe HORE 513 505 0613
6. Cathy Stout ORDC 614 866 0313
- 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	
'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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Number of Tracks Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	one
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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input 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	1 (11/21/12)	
Hazard Ranking	438 Date Run: 4/8/13	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	4 ✓	
< 1 per day		
Day thru trains	2 ✓	
Night thru trains	2 ✓	
Daytime switching movements	0	
Nighttime switching movements	0	
Total number of tracks	1	
Number of main tracks	1	
Number of other tracks		
Maximum train speed	40 25	25
Typical train speed	25	25
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:	Clay Township	
Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	38 (2008)	Seasonal & increasing
Highway paved	X Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Roadway Surface: X Blacktop <input type="checkbox"/> Gravel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____		
Roadway width: 15 ft.		
Number of highway lanes	2	
Urban or Rural	Rural	
Vehicle Speed: 55 MPH		
School Bus Operation: <input type="checkbox"/> No <input type="checkbox"/> Yes _____ Amount		
Hazardous Materials Trucks: <input type="checkbox"/> No <input type="checkbox"/> Yes _____ Amount		
Shoulders: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is the shoulder surfaced? <input type="checkbox"/> No <input 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, deficient approach(es) * _____		

* Roadway and railroad in cut. Stop loss and pavement markings should be added if pavement will support.

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: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>bicycles</i>	
Is sidewalk present? <input checked="" type="checkbox"/> No <input 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 type="checkbox"/> Yes <i>no widening</i> If yes, Improvement type <u><i>possible repaving</i></u> Lead Agency _____ Timeline/completion _____	
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: <div style="text-align: center; font-size: 1.2em;"><i>only east / west through community.</i></div>	
Type of Development	
<input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Institutional <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	Location of nearby schools: <i>None - est based school est 4-6 buses</i>
Utility Information	
Is commercial power available? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Utility Provider (Company Name) <u><i>DP&L / Pioneer</i></u> Phone Number _____ Nearest Available Power Source _____	
What other utilities are present? (add locations to sketch) <input type="checkbox"/> Gas <input type="checkbox"/> Cable <input type="checkbox"/> Telephone <input 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) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Comments: <i>AC power approx. 600' East of crossing at the intersection of T.R.130, Weimert School Road and C.R.207, Hagar. AC power should be completed before construction start.</i>	

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:

Real Estate or ROW:

Railroad right of way will be shown in all quadrants.

Culverts / Drainage / Ballast Conditions:

Ditch work needed by railroad, to keep ^{the possibility of} standing water moving.

Roadway and/or Sidewalks:

N/A

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

Jointed rail, bonding will be necessary. (south of crossing)

Environmental:

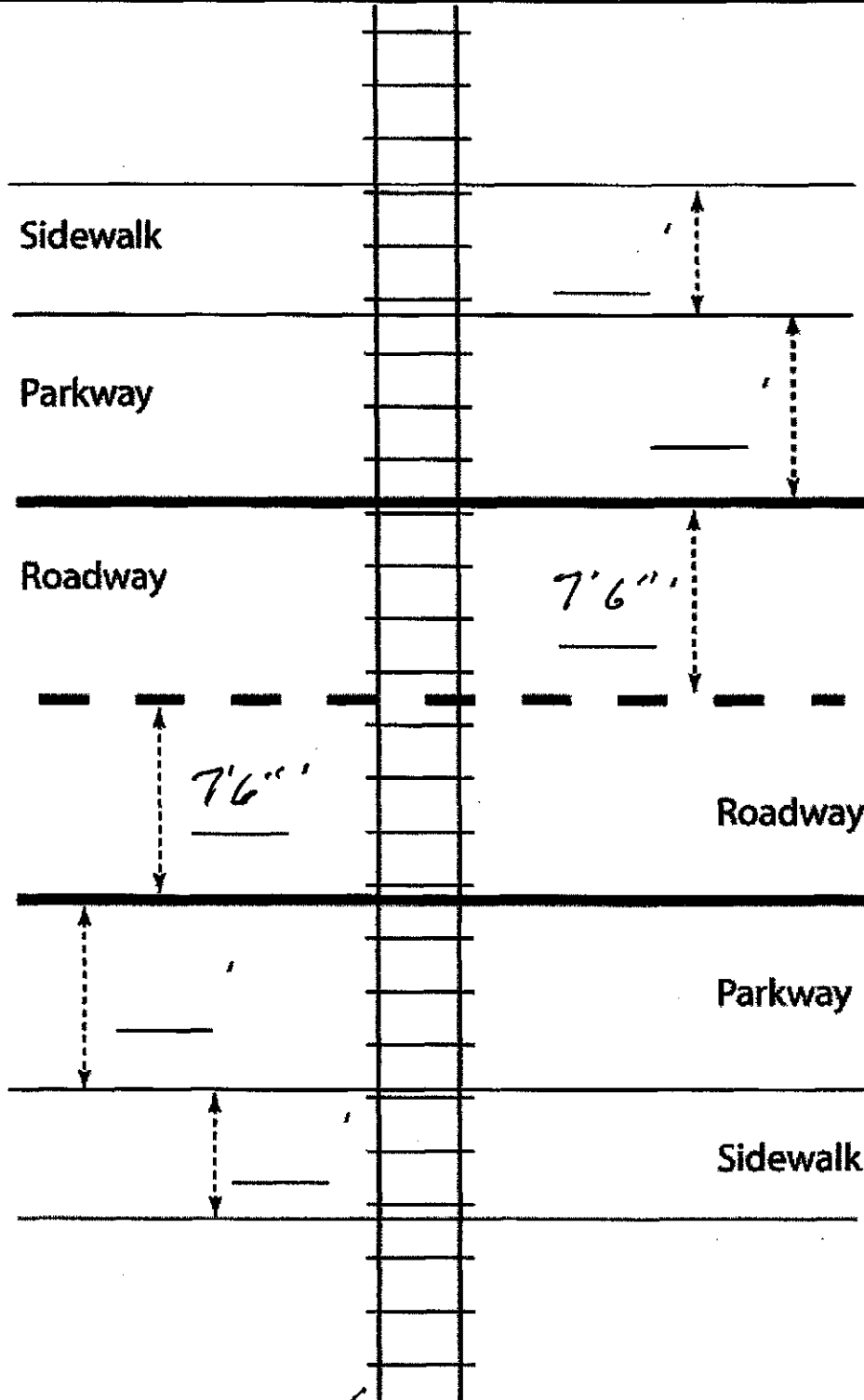
N/A

Other:

Due to AC power approx. 600' east of crossing, AC power should be completed before construction start.

Diagnostic Team Recommendations	
<input checked="" type="checkbox"/> Install/upgrade active devices	Quadrants Needed
<input type="checkbox"/> Automatic Flashing Lights (AFLS)	
<input type="checkbox"/> AFLS / Cants	
<input checked="" type="checkbox"/> AFLS / Gates	
<input type="checkbox"/> AFLS / Gates / Cants	
<input type="checkbox"/> Bells / number	
<input type="checkbox"/> Upgrade circuitry / type	
<input type="checkbox"/> Sidelights	
<input type="checkbox"/> Guardrail Needed	
<input type="checkbox"/> Install/Replace curb	
<input type="checkbox"/> Bungalow placement & offset from rail & highway	up to design team.
<input type="checkbox"/> Other (define)	
Comments: 10ft set backs to accommodate farm vehicle. Surface work for warning device circuitry to function Drainage needed.	
<input type="checkbox"/> Install/upgrade traffic signal preemption	
<input type="checkbox"/> No improvements needed	
<input type="checkbox"/> Other (define)	
Acknowledgement of Recommendations (each entity represented at the diagnostic must have at least one signature acknowledgement):	
<u>CMS</u> <u>E K Bell</u>	<u>DEC</u> <u>SIL Gm</u>
<u>DE</u>	

Field Dimensions



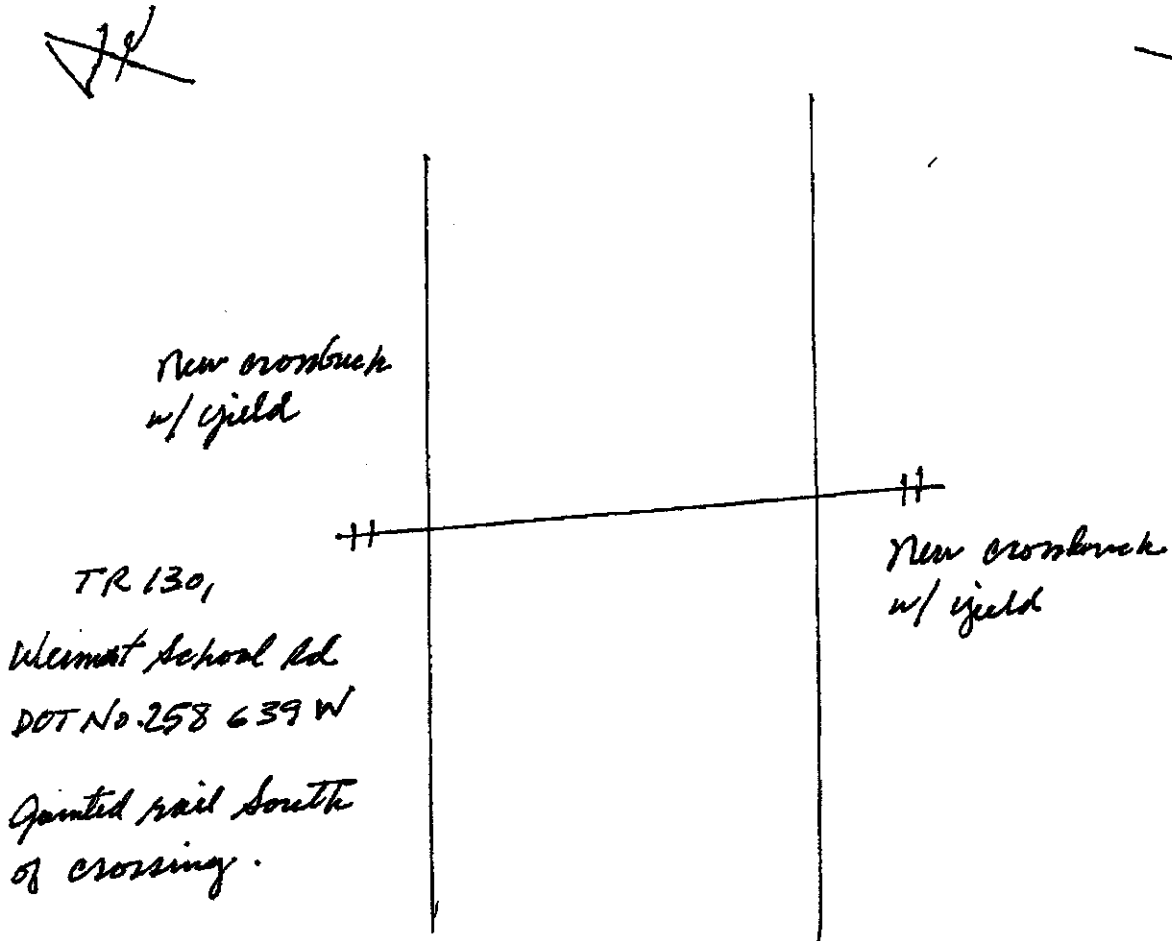
Show North Direction

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

Measurements by: 28

Field Sketch

Include utilities as marked by OUPS and LHA; include ROW boundaries as indicated by railroad and LHA.



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

Sketch by: 28

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.