


NC
FILE

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2015 MAR 11 PM 3: 06

**Public Utilities
Commission of Ohio**

PUCO

Memo

To: Docketing Division
From: George Martin, Grade Crossing Planner, Rail Division 
Re: In the matter of the authorization of CSX Transportation to install an active grade crossing warning device in the City of Troy, Miami County
Date: March 11, 2015

The Ohio Rail Development Commission (ORDC) has authorized funding for CSX Transportation (CSX) to install mast-mounted flashing lights and roadway gates at Miami County, City of Troy, Dakota St., DOT# 155180E. The crossing was surveyed on May 6, 2014, due to its hazard ranking, and was found to warrant the upgrade. Staff notes that this will be a complex project, requiring extensive roadway work and interconnection of existing railroad signal devices at Union Street. The total approved cost of the project is \$383,372.00.

The project will be paid for with federal funds, and is actual cost. The plan and estimate for this project has already been approved in the amount noted above. Staff requests a Finding & Order with completion of the projects within nine months and 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. 15- 481 -RR-FED: In the matter of the authorization of CSX Transportation to install an active grade crossing warning device in the City of Troy, Miami County

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

500 Meijer Dr, Ste 305

Florence, Ky 41042

Ms Deborah Swan, PE

City Engineer

100 South Market St

Troy, Oh 45373-7303

DP&L

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

TO: George Martin, Rail Division, PUCO
FROM: Cathy Stout, Manager, Safety Section, ORDC
BY: Joe Reinhardt, Project Manager, ORDC
SUBJECT: Miami County, Dakota Street, CSX
DOT 155180E, PID 98787
DATE: March 9, 2015

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on Dakota Street. 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 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: George Martin, 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

March 9, 2015

Ms. Amanda DeCesare
Project Manager
500 Meijer Drive, Suite 305
Florence, Ky 41042

RE: Miami County, Dakota Street, DOT 155180E
PID 98787, OH1024

Dear Ms. DeCesare:

The plan and estimate dated December 10, 2014, 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 \$383,372. 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's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Joseph Reinhardt, ORDC, email Joe.Reinhardt@dot.state.oh.us and to the Public Utilities Commission of Ohio, at George.martin@puc.state.oh.us. 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.
2. 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.
3. CSX's project foremen will notify Joe Reinhardt at 614-580-7728 or Joe.Reinhardt@dot.state.oh.us 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. CSX will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.



www.rail.ohio.gov


phone: 614.644.0306

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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,


Joseph Reinhardt
Project Manager

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



Diagnostic Review Team Survey

Reason for Survey:

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

Formula Pick

Date:

5.6.14

Location Data

Street or Road Name: <u>Dakota Street</u>			
Route/Road Number (i.e. Twp., Co., SR or US)		US DOT No.: <u>155180E</u>	
County: <u>MIA</u>	Township:	City: (In or Near)	<u>City of Troy</u>
Railroad Name: <u>CSX Transportation</u>	Railroad Division: <u>Midwest</u>	<u>LOUISVILLE</u>	Branch/Line Name: <u>Toledo Sub</u>
Nearest RR Timetable Station: <u>Troy</u>		RR Milepost: <u>78.91</u>	

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

1. MIKE FORTE ORDC 614.374.9287
2. Dwight Schroeder CSX 414-~~553~~-8436
3. George Martin PUCO 614-752-9107
4. Neil Teatord City of Troy Cell/931-875-2506
5. Amanda DeCesare CSX 859 426 6924
6. _____
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	<u>1</u>
'Stop' Signs	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<u>AT HIGHWAY INTERSECTION</u>
'Stop Ahead' Signs	<input type="checkbox"/> Yes	<input 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	<u>2 W/ YIELD</u>
Number of Tracks Signs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<u>1</u>
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	<u>2</u>
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Other	<input type="checkbox"/> Yes	<input checked="" 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 (11/12/2009)	
Hazard Ranking	66 Date Run: 4/9/14	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	28	
< 1 per day		
Day thru trains	13	
Night thru trains	15	
Daytime switching movements	0	1
Nighttime switching movements	0	
Total number of tracks	3	2
Number of main tracks	1	
Number of other tracks	2	1 SIDING
Maximum train speed	25	
Typical train speed		
Amtrak		NO

If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table 1) ☒ 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: City of Troy

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	374 (2012)	
Highway paved	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Roadway Surface: Blacktop <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____		
Roadway width: 32 ft.		
Number of highway lanes		2
Urban or Rural		
Vehicle Speed: _____ MPH		25
School Bus Operation: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes _____ Amount		
Hazardous Materials Trucks: <input checked="" 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 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 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	
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 checked="" type="checkbox"/> No <input type="checkbox"/> 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? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Explain reasons: _____	
Type of Development	
<input type="checkbox"/> Open Space <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Institutional <input type="checkbox"/> Commercial Location of nearby schools: <div style="font-size: 1.2em; margin-top: 10px;">6 blocks N.</div>
Utility Information	
Is commercial power available? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Utility Provider (Company Name) <u>DP+L</u> Phone Number _____ Nearest Available Power Source <u>AT XING</u>	
What other utilities are present? (add locations to sketch) <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Petroleum <input type="checkbox"/> Other </div> <div> <input checked="" type="checkbox"/> Cable <input checked="" type="checkbox"/> Water </div> <div> <input checked="" type="checkbox"/> Telephone <input checked="" type="checkbox"/> Sanitary Sewer </div> <div> <input checked="" type="checkbox"/> Fiber Optic Cable </div> </div>	
Is(are) there potential utility conflict(s) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Comments: _____	

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:

YES RR - 60' @ ON MAIN

Culverts / Drainage / Ballast Conditions:

No

Roadway and/or Sidewalks:

YES

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

No SHOULD CONSIDER DAXING

Environmental:

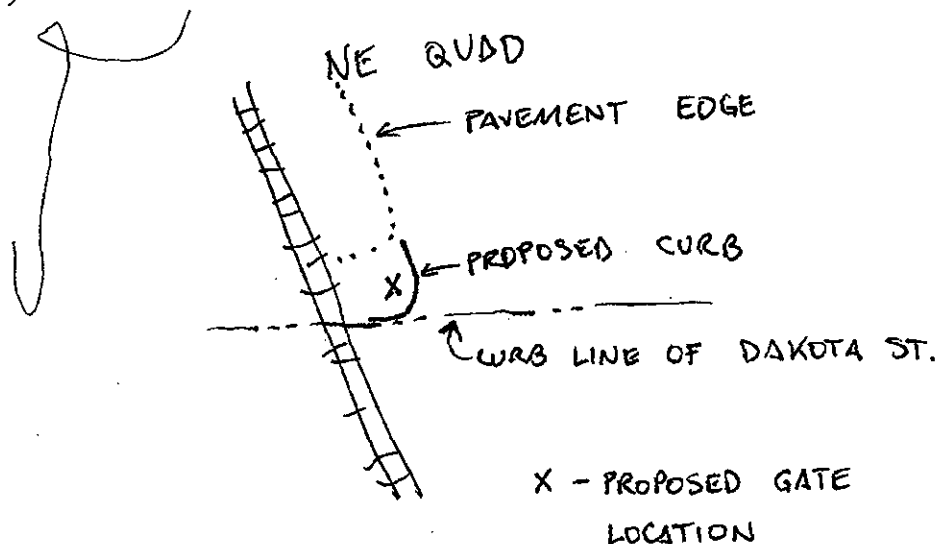
Other:

DAKOTA ST MAY NOT BE PUBLIC
IS USED BY PUBLIC

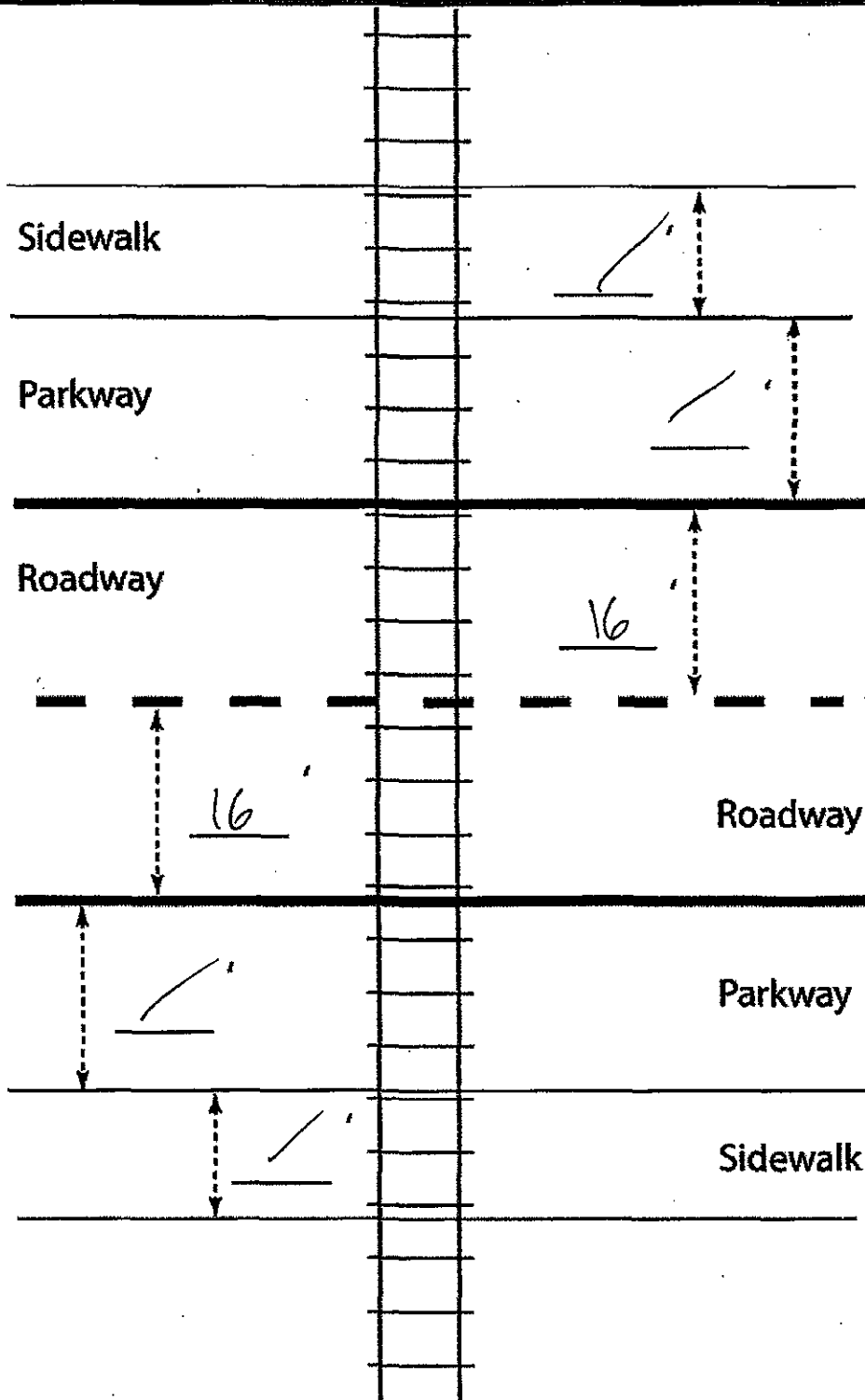
LONGER PE TIMETABLE WILL BE NEEDED
BECAUSE OF R.O.W. ISSUE.

Diagnostic Team Recommendations

	Quadrants Needed
<input checked="" type="checkbox"/> Install/upgrade active devices	
<input type="checkbox"/> Automatic Flashing Lights (AFLS)	
<input type="checkbox"/> AFLS / Cants	
<input checked="" type="checkbox"/> AFLS / Gates	NE, SW
<input type="checkbox"/> AFLS / Gates / Cants	
<input checked="" type="checkbox"/> Bells / number	2
<input type="checkbox"/> Upgrade circuitry / type	
<input checked="" type="checkbox"/> Sidelights	NE + SW - FOR S.B. TRAFFIC ON UNION
<input type="checkbox"/> Guardrail Needed	
<input checked="" type="checkbox"/> Install/Replace curb	
<input type="checkbox"/> Bungalow placement & offset from rail & highway	SW
<input checked="" type="checkbox"/> Other (define) WATER LINE RELOCATION POSSIBLE	
Comments: UPGRADE, IF R.O.W. OF DAKOTA IS CONFIRMED WARNING DEVICES	
<input type="checkbox"/> Install/upgrade traffic signal preemption	
<input type="checkbox"/> No improvements needed	
<input checked="" type="checkbox"/> Other (define) CURB INSTALL IN NE QUAD IN EX. PAVED AREA (IN LINE W/ EXIST STREET EDGE)	
Acknowledgement of Recommendations (each entity represented at the diagnostic must have at least one signature acknowledgement):	
<div style="display: flex; justify-content: space-between;"> <div> <p><u>MDX</u></p> <p>Gm / w/ RESERVATIONS DUE TO ROW ISSUES & PUBLIC / PRIVATE ROADWAY</p> </div> <div> <p><u>[Signature]</u></p> <p>Wentworth, Troy</p> </div> <div> <p><u>[Signature]</u></p> </div> </div>	



Field Dimensions



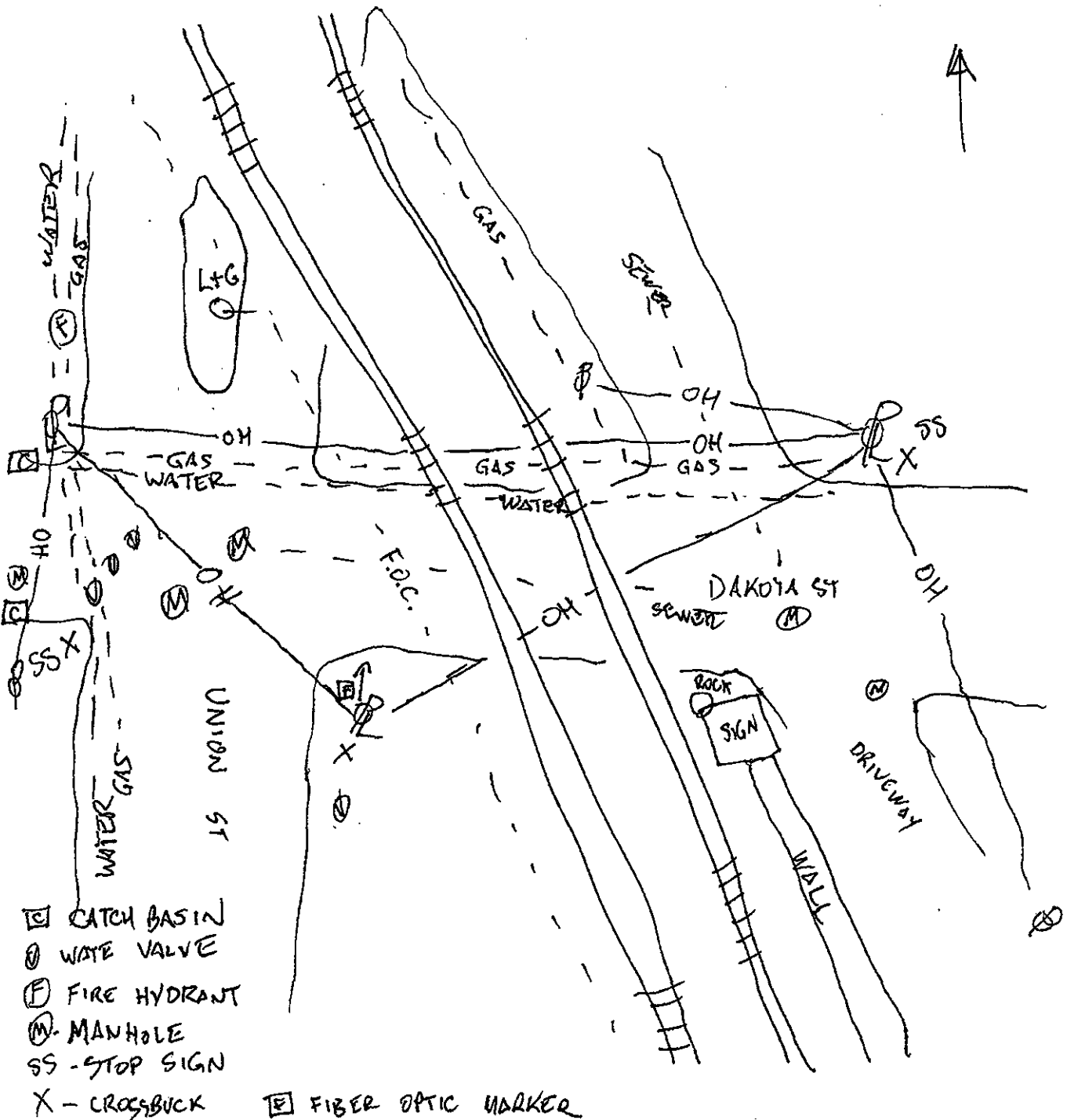
Show North
Direction

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

Measurements by: MDF

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 NW Quadrant?

Sketch by: MDF

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.



* Neil Teaford, PS
Engineering Technician

City of Troy

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