NC FILE

13

Public Utilities Commission of Ohio

Memo

To: Docketing Division

From: George Martin, Grade Crossing Planner, Rail Division

Re: In the matter of the authorization of Norfolk Southern Railway to install an active grade crossing warning device in Hamilton County as part of the CJ Corridor Project

Date: June 2, 2014

The Ohio Rail Development Commission (ORDC) has authorized funding for Norfolk Southern Railway (NS) to install mast-mounted flashing lights and roadway gates at Hamilton County, City of Sharonville, E Kemper Rd, DOT# 524712A. The crossing was surveyed on May 2, 2013, and was found to warrant the upgrade as part of the CJ Corridor improvement project.

The project will be paid for with federal funds, and is actual cost. As the plan and estimate has already been submitted and approved, staff requests a Finding & Order with completion of the project in nine months. Construction may commence at once. Staff requests that the following language be incorporated in the Entry:

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- 1008 -RR-FED In the matter of the authorization of Norfolk Southern Railway to install an active grade crossing warning device in Hamilton County as part of the CJ Corridor Project

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 Cayela Wimberly

Norfolk Southern Railway

1200 Peachtree St, Box 123

Atlanta, Ga 30309

Mr D Casey Talbot

Eastman & Smith Ltd

One Seagate, 24th Floor

PO Box 10032

Toledo, Oh 43699-0032

Mr Joe Kempe, Public Works Director

10900 Reading Road

Sharonville, OH 45241

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: City of Sharonville, HAM-E. Kemper Road, NS, DOT No. 524 712 A, PID No. 96031

DATE: May 30, 2014

The Ohio Rail Development Commission (ORDC) established a diagnostic survey at the subject location on May 2, 2013. The Public Utilities Commission of Ohio (PUCO) attended the review. The Diagnostic Team recommended the modernization of the existing warning devices. 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.

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

May 30, 2014

Cayela J. Wimberly
Administrator, Highway Grade Crossings
Norfolk Southern Corporation
1200 Peachtree Street, N.E., Box 123
Atlanta, Georgia 30309

RE: City of Sharonville, Hamilton County, E. Kemper Road, DOT No. 524 712 A, PID 96031, Mile Post: CJ 245.50, S&E Project No. 10.2064

Dear Ms. Wimberly:

The Norfolk Southern (NS) plan and estimate dated May 14, 2014, in the amount of $111,109.00 for the referenced project has been reviewed and is acceptable. NS 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 $83,331.75. 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 NS accepting the following instructions:

1. NS will furnish prior written notification of their scheduled date to start construction to George Martin, PUCO, Railroad Division.

2. NS'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). NS'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. NS 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 NS.

4. NS'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. NS will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed Encumbrance Estimate to reference when billing.

6. NS 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 MUCTD.

Thank you for your assistance with these matters.

Sincerely,

Tim Perkins
Project Manager

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

OHIO RAIL DEVELOPMENT COMMISSION

Ohio Rail Development Commission
Mail Stop 3140, 1980 W. Broad Street,
Columbus, OH 43223

Diagnostic Review Team Survey

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

Date: 5/2/13

Location Data

Street or Road Name: E. Kemper Rd.			
Route/Road Number (i.e. Twp., Co., SR or US)			US DOT No.: 524712A
County: HAM	Township:	City (In or Near): Sharonville	
Railroad Name: Norfolk Southern	Railroad Division: Dearborn	Branch/Line Name: Cincinnati LI	
Nearest RR Timetable Station: Sharonville			RR Milepost: 245.5

On-Site Review Team

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

1. Joe Kemp, Sharonville – 513-678-1563 GEORGE MARTIN - PUCO 614-752-9107
2. Chad Meadows, Sharonville – 513-678-1558
3. Jim Perkins ORDC 614-644-0286
4. Don Jamison ORDC 614 466-2509
5. Derrick Drake NS 304-712-0220
6. Joe Kempe Sharonville 573-563-1177
7. CHAD MEADOWS SHARONVILLE 513-563-1177
8. Jay Korros CDS Assoc. Inc. 513-791-1700
9. Jim Cornell " " " " " "

Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs (condition?)	☑ Yes	☐ No	
'Stop' Signs	☐ Yes	☑ No	
'Stop Ahead' Signs	☐ Yes	☑ No	
Pavement Markings (condition?)	☑ Yes	☐ No	
Crossbucks	☑ Yes	☐ No	
Number of Tracks Signs	☑ Yes	☐ No	Two (2) tracks
Inventory Tags	☑ Yes	☐ No	
Interconnected Highway Traffic Signal	☑ Yes	☐ No	
Mast-Mounted Flashing Lights	☑ Yes	☐ No	
Cantilever Flashing Lights	☑ Yes	☐ No	Number: 1 Length: 20'
Side Lights	☐ Yes	☑ No	
Automatic Gates	☑ Yes	☐ No	Number: Length:
Bells	☑ Yes	☐ No	Number: 1
Sidewalk Gate Arms	☐ Yes	☑ No	
'No Turn' Signs	☐ Yes	☑ No	
Illumination	☑ Yes	☐ No	
Is crossing flagged by train crew?	☑ Yes	☐ No	
Other.	☐ Yes	☐ No	

Safety Data (Obtain crash reports, if possible, prior to review)

	Initial Information (from database)	Revised
Number & dates of crashes in previous 5 years	0	
Hazard Ranking	635 Date Run: 4/18/13	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	18	
< 1 per day		
Day thru trains	6	
Night thru trains	10	
Daytime switching movements	2	
Nighttime switching movements	0	
Total number of tracks	2	
Number of main tracks	2	
Number of other tracks	0	
Maximum train speed	40	#1 30mph #2 25mph
Typical train speed		
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 Sharonville

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	8872 (2006)	
Highway paved	X Yes ☐ No	☐ Yes ☐ No

Roadway Surface: Blacktop ☑ Gravel ☐ Concrete ☐ Other _____

Roadway width: _____ ft.

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

School Bus Operation: ☐ No ☑ Yes _____ Amount

Hazardous Materials Trucks: ☐ No ☑ Yes _____ Amount

Shoulders: ☑ No ☐ Yes

Is the shoulder surfaced? ☑ No ☐ Yes

Is there existing guardrail along roadway in crossing vicinity? ☐ No ☑ Yes

Is stopping site distance adequate? (See Table 2) ☑ Yes ☐ No If no, deficient approach(es) _____

Quadrant _____ Curb and Gutter:	Quadrant _____ Curb and Gutter:
☐ Functional (Curb height = 4" or more)	☐ Functional (Curb height = 4" or more)
☐ Non-functional (Curb height = Less than 4")	☐ Non-functional (Curb height = Less than 4")
☑ None	☑ None

Pedestrians: ☐ No ☑ Yes

Is sidewalk present? ☐ No ☑ Yes

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

If yes,

Distance _____

Is this intersection signalized? ☐ No ☑ Yes

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

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

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

If yes,

Improvement type _____ Lead Agency _____ Timeline/completion _____

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

Explain reasons:

Type of Development

☐ Open Space	☐ Institutional	Location of nearby schools:
☐ Industrial	☑ Commercial	
☐ Residential		

Utility Information

Is commercial power available? ☐ No ☑ Yes

Utility Provider (Company Name) Duke Phone Number _____

Nearest Available Power Source _____

What other utilities are present? (add locations to sketch)
☑ Gas ☐ Cable ☐ Telephone ☐ Fiber Optic Cable
☐ Petroleum ☐ Water ☐ Sanitary Sewer
☐ Other _____

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

Comments: Gas 12" transmission, no digging within 15' without call
Existing Cantilever, lights and Gates will be
upgraded ie... new gate meshs, new lights
on cantilever.

Potential Red Flags / Project Challenges

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

Crossing Consolidation or Closure:

N/A

Real Estate or ROW:

N/A

Culverts / Drainage / Ballast Conditions:

N/A

Roadway and/or Sidewalks:

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

Environmental:

Other:

Diagnostic Team Recommendations

	Quadrants Needed
☑ Install/upgrade active devices	
☐ Automatic Flashing Lights (AFLS)	
☐ AFLS /Cants	
☐ AFLS / Gates	
☐ AFLS / Gates / Cants	
☐ Bells / number	
☑ Upgrade ~~circuitry / type~~	
☐ Sidelights	
☐ Guardrail Needed	
☐ Install/Replace curb	
☐ Bungalow placement & offset from rail & highway	
☒ Other (define)	

Comments: Existing Cantilever, lights and Gates will be upgraded ie... new gate mech, new lights on Cantilevers and use existing circuitry.

☐ Install/upgrade traffic signal preemption	
☐ No improvements needed	
☐ Other (define)	

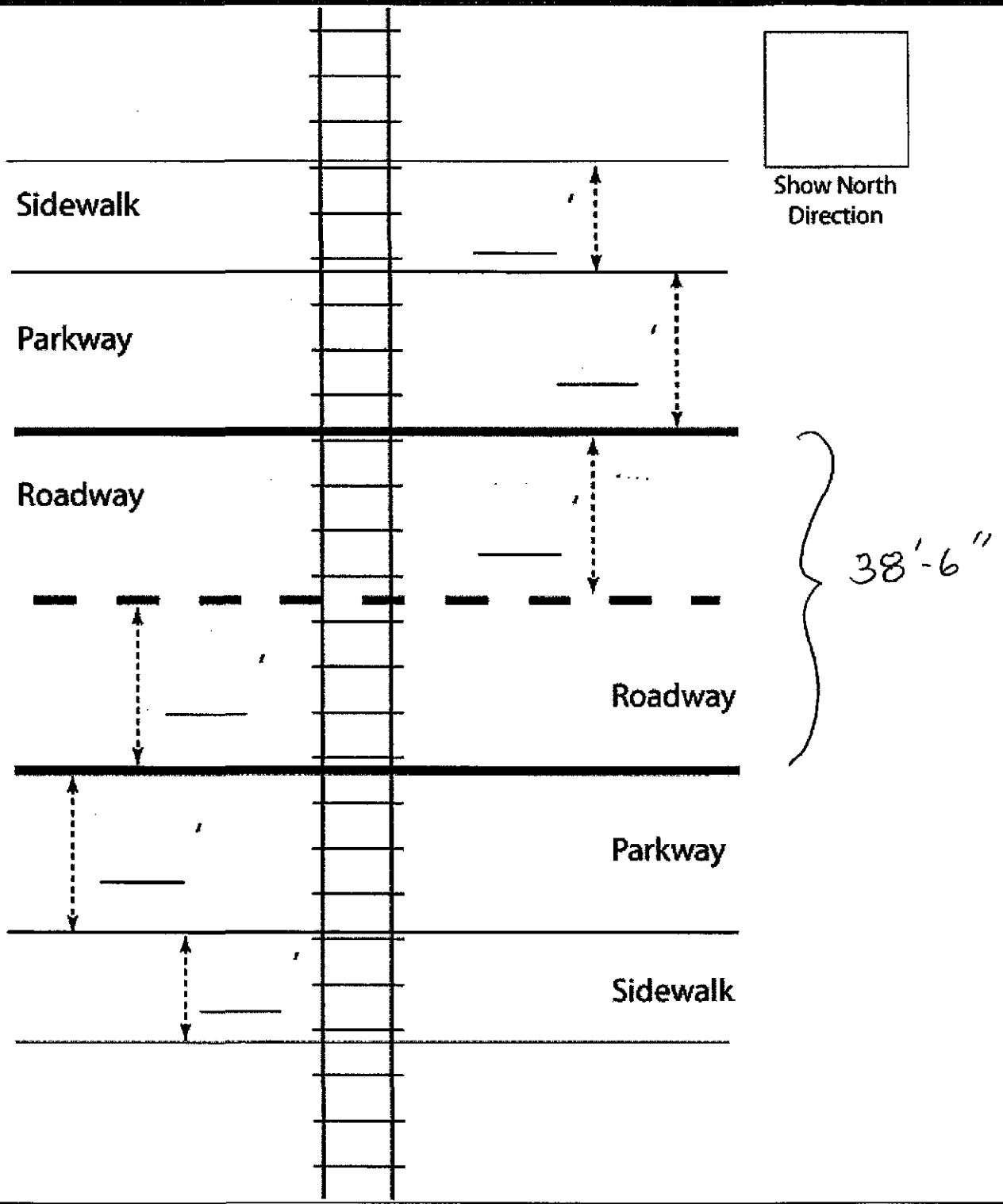
Acknowledgement of Recommendations (each entity represented at the diagnostic must have at least one signature acknowledgement):

[signature] [signature] [signature]

[signature] [signature] [signature]

[signature]

Field Dimensions



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

Measurements by: _____

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: _____

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.