

Clarington

Council

Agenda

Date: February 26, 2018

Time: 7:00 PM

Place: Council Chambers, 2nd Floor
Municipal Administrative Centre
40 Temperance Street
Bowmanville, Ontario



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Copies of Reports are available at www.clarington.net

1 Call to Order

2 Moment of Reflection

3 Declaration of Interest

4 Announcements

5 Adoption of Minutes of Previous Meeting(s)

5.1 Council Minutes Minutes of a regular meeting of Council February 5, 2018 Page 5

6 Presentations

None

7 Delegations

7.1 Roland Roover, GHD, Regarding Report PSD-018-18, An Application by Bowmanville Lakebreeze East Village Ltd. to amend the R3-43 zone to permit a 341 unit townhouse development (Kaitlin) in Port Darlington Neighbourhood in Bowmanville (Unfinished Business Item 13.2)

8 Communications – Receive for Information

There are no Communications to be received for information as of the time of publication.

9 Communications – Direction

There are no Communications for direction as of the time of publication.

10 Committee Reports

10.1 Advisory Committee Reports

10.1.1 Agricultural Advisory Committee Minutes Minutes of the Agricultural Advisory Committee dated February 8, 2018 Page 30

10.2 General Government Committee	General Government Committee Report of February 12, 2018	Page 33
10.3 Planning & Development Committee	Planning and Development Committee Report of February 20, 2018	Page 39

11 Staff Reports

11.1 EGD-008-18	Ontario Municipal Commuter Cycling (OMCC) Enabling By-Law	Page 41
11.2 PSD-021-18	Participating in the Ontario Ministry of Housing's Development Charge Rebate Program	
11.3 Confidential Report LGL-002-18	Proposed Settlement of OMB Appeals - Courtice High Street Inc. (Distributed Under Separate Cover)	

12 Business Arising from Procedural Notice of Motion

13 Unfinished Business

13.1 EGD-004-18	Bennett Road & Cobble Dick Road Grade Level Crossings Train Whistle Cessation Study [Tabled from the February 12, 2018 General Government Committee Meeting]	Page 46
13.2 PSD-018-18	An Application by Bowmanville Lakebreeze East Village Ltd. to amend the R3-43 zone to permit a 341 unit townhouse development (Kaitlin) in Port Darlington Neighbourhood in Bowmanville [Tabled from the February 20, 2018 Planning and Development Committee Meeting]	Page 201

14 By-laws

- 14.1 2018-016 Being a By-law to assume a certain street within the Municipality of Clarington as public highway in the Municipality of Clarington (Item 2 of the General Government Committee Report)

- 14.2 2018-017 Being a By-law to amend By-law 84-63, the Comprehensive Zoning By-law for the Corporation of the Municipality of Clarington (Item 4 of the Planning and Development Committee Report)

- 14.3 2018-018 Being a By-law to authorize the execution of an agreement with Her Majesty the Queen in right of the Province of Ontario as represented by the Minister of Transportation for the Province of Ontario – Ontario Municipal Commuter Cycling Program 2017/2018 (Item 11.1 Report EGD-008-18)

- 14.4 2018-019 Being a By-law to authorize agreements between the Corporation of the Municipality of Clarington and Her Majesty the Queen in Right of Ontario to prepare and implement an Orono Economic Development Strategy

15 Procedural Notices of Motion

16 Other Business

17 Confirming By-Law

18 Adjournment

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Minutes of a regular meeting of Council held on February 5, 2018, at 7:00 PM, in the Council Chambers.

Present Were: Mayor A. Foster, Councillor S. Cooke, Councillor R. Hooper, Councillor J. Neal, Councillor W. Partner, Councillor C. Traill, Councillor W. Woo

Staff Present: A. Allison, T. Cannella, J. Caruana, D. Crome, F. Horvath, M. Marano, R. Maciver, N. Taylor, G. Weir, A. Greentree, M. Chambers

1 Call to Order

Mayor Foster called the meeting to order at 7:00 PM.

2 Moment of Reflection

Councillor Partner led the meeting in a moment of reflection.

3 Declaration of Interest

There were no disclosures of interest stated at this meeting.

4 Announcements

Members of Council announced upcoming community events and matters of community interest.

Later in the meeting Mayor Foster announced the Clarington Public Library received a Provincial Ontario Public Library Service Award, the Angus Mowat Award of Excellence, for the Winter WonderLearn Festival.

5 Adoption of Minutes of Previous Meeting

Resolution #C-014-18

Moved by Councillor Traill seconded by Councillor Partner

That the minutes of the regular meeting of the Council held on January 15, 2018, be approved.

Carried

6 Presentations

There are no Presentation scheduled for this meeting.

7 Delegations

7.1 Kim Taylor, Regarding Report CAO-002-18, Potential Locations for Durham Hospice – Clarington (Item 7 of the Planning and Development Committee Report)

Kim Taylor was present Report CAO-002-18, Potential Locations for Durham Hospice – Clarington. She advised the members of Council that she understands the importance of having a hospice in Clarington. Ms. Taylor advised members of Council she has lived in this area for 13 years and believes there are many issues related to the road that need to be considered prior to determining where the hospice will be located. She explained that the traffic and speeding has increased. Ms. Taylor added that the speed limit being reduced a few years ago did not decrease the speeding. She noted that Cobble Dick Road is a main route to the Conservation area and waterfront. Ms. Taylor continued by stating it is very dangerous for pedestrians as there are no sidewalks or road lighting. She questioned how far the hospice will be set back from her property line and how much lighting will be on the property. Ms. Taylor asked about safety precautions during construction and if her well and water table will be monitored. She noted that she is concerned about how much noise will be tolerated by the property owner, if fences will be surrounding the property and how the wildlife will be protected. Ms. Taylor concluded by asking Council for a road review prior to moving forward with this project. Ms. Taylor answered questions from the members of Council.

7.2 Greg Smith, Regarding Addendum to Report PSD-090-17, Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle (Unfinished Business Item 13.1)

Greg Smith was present regarding Addendum to Report PSD-090-17, Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle. He noted that the residents of Newcastle have come to Council on several occasions over the last year to request that this development not move forward. Mr. Smith added that although the *Places to Grow Act* promotes growth he feels that the small town feel of communities needs to be considered. He stated that the developer for this development is not willing to work with the residents. Mr. Smith asked for the Municipality to oppose the development at the Ontario Municipal Board (OMB) hearing. He added that the residents of this area will attend the OMB hearing to provide their support. Mr. Smith is concerned that the OMB will support the developer. He advised Council that the residents did their research prior to purchasing their home and were advised this would be zoned as residential. Mr. Smith does not feel that Newcastle has the infrastructure to support this type of intensification. He concluded by asking the members of Council to support the residents at the OMB hearing. Mr. Smith answered questions from the members of Council.

7.3 Margaret Maskell, Regarding Addendum to Report PSD-090-17, Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle (Unfinished Business Item 13.1)

Margaret Maskell was present regarding Addendum to Report PSD-090-17, Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle. Ms. Maskell noted that residents did their research prior to purchasing in Newcastle and were advised that these would be single family homes. She stated that Newcastle does not need a six-storey condo building. Ms. Maskell referred to an Ontario Municipal Board (OMB) hearing in 1985 where a high density development was denied by the OMB for being too close to Highway 2 in Newcastle. She concluded by asking the members of Council to support the residents of Newcastle. Ms. Maskell answered questions from members of Council.

7.4 Jill Richardson, Durham Hospice Clarington and Mark Murphy, Project Manager, Lakeridge Health, Regarding Report CAO-002-18, Potential Locations for Durham Hospice – Clarington (Item 7 of the Planning and Development Committee Report)

Jill Richardson, Durham Hospice Clarington and Mark Murphy, Project Manager, Lakeridge Health, were present regarding Report CAO-002-18, Potential Locations for Durham Hospice – Clarington. Ms. Richardson advised Council that they are in full support of the Staff Report. She introduced the members of the Durham Hospice Clarington that were present in the audience. Ms. Richardson asked Council to support the Staff recommendations. She thanked the members of Council for supporting the need for a hospice location within the Municipality of Clarington. Ms. Richardson noted that they will launching a fundraising initiative to increase the number of long beds in Clarington and in the surrounding region. She added that this will be a great resource to the community. Ms. Richardson concluded by thanking the members of Council. Ms. Richardson and Mr. Murphy answered questions from members of Council.

Suspend the Rules

Resolution #C-015-18

Moved by Councillor Woo, seconded by Councillor Partner

That the Rules of Procedure be suspended.

Carried

Resolution #C-016-18

Moved by Councillor Woo, seconded by Councillor Partner

That Jeff Rickard be permitted to address Council regarding Addendum to Report PSD-090-17, Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle (Unfinished Business Item 13.1)

Carried

Jeff Rickard was present regarding Addendum to Report PSD-090-17, Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle. He advised the members of Council that he is opposed to this development. Mr. Rickard stated that the zoning has not changed and he believes the developer is waiting for the zoning change to further intensify the property. He concluded by asking for this land to remain R1 zoned and developed as residential.

8 Communications – Receive for Information

There were no Communications to be received for information.

9 Communications – Direction

Resolution #C-017-18

Moved by Councillor Woo, seconded by Councillor Traill

That Communication Items 9.1 to 9.4, be approved on consent, as follows:

9.1 Victor Suppan, Chair, Clarington Heritage Committee, regarding House of Commons Standing Committee Recommendation Report on Preserving Canada's Heritage

Whereas the federal House of Commons Standing Committee on Environment and Sustainable Development has identified seventeen recommendations to the federal government and its agencies contained in 'Report 10' to improve the protection and preservation of Canada's national heritage;

Whereas Community Heritage Ontario (CHO) is seeking the support of the Clarington Heritage Committee and Municipal Council by writing to the federal Minister of Environment with copies to the Minister of Finance and the members of federal Parliament supporting the seventeen recommendations;

Whereas recommendation number eleven for a proposed tax credit for restoration and preservation work on buildings listed in the Canadian Register of Historic Places is emphasized for support as it can assist in the conservation of privately owned heritage properties within the Municipality;

Whereas the Clarington Heritage Committee has provided a letter of support for the seventeen recommendations with an emphasis on supporting recommendation number eleven and is recommending that Clarington Council also provide similar written support to the federal government;

Now therefore Be it Resolved That Clarington Council supports the seventeen recommendations of the federal House of Commons Standing Committee on Environment and Sustainable Development as contained in 'Report 10' regarding the preservation of Canada's heritage, and in particular, recommendation number eleven; and

Further that this resolution be circulated to the federal Minister of Environment and Climate Change, with copies to the Minister of Finance and the members of federal Parliament.

9.2 Confidential Memo from Robert Maciver, Municipal Solicitor, regarding OMB Appeal by Tornat Newcastle Limited

The Confidential Memo from Robert Maciver, Municipal Solicitor, regarding OMB Appeal by Tornat Newcastle Limited was considered later in the meeting during the consideration of Addendum to Report PSD-090-17.

9.3 Memo from David Crome, Director of Planning Services, regarding CAO-002-18 Report, Durham Hospice location, permission to amend the Clarington Official Plan

That Correspondence Item 9.3 from David Crome, Director of Planning Services, regarding CAO-002-18 Report, Durham Hospice location, permission to amend the Clarington Official Plan, be referred to the Consideration of Report to CAO-002-18. (Item 7 of the Planning and Development Committee Report)

9.4 Suzanne Elston regarding, PSD-011-18, Southeast Courtice Secondary Plan Study – Terms of Reference

That Correspondence from Suzanne Elston regarding, PSD-011-18, Southeast Courtice Secondary Plan Study – Terms of Reference, be referred to the consideration of Report to PSD-011-18. (Item 4 of the Planning and Development Committee Report)

Carried

Alter the Agenda

Resolution #C-018-18

Moved by Councillor Woo seconded by Councillor Partner

That the Agenda be altered to consider Report CAO-002-18, Potential Locations for Durham Hospice – Clarington Development Strategy, at this time. (Item 7 of the Planning and Development Report)

Carried

Item 7 - Potential Locations for Durham Hospice – Clarington

Resolution #C-019-18

Moved by Councillor Partner, seconded by Councillor Traill

That Report CAO-002-18 be received;

That staff be directed to declare approximately 0.8 hectares (2 acres) of the municipally-owned property south of 1895 Cobble Dick Road shown in Figure 1 of Report CAO-002-18, as surplus and transfer such property to Durham Hospice – Clarington for nominal consideration, subject to the conditions set out in section 2.11 of Report CAO-002-18 with the exception of the condition that the name “Clarington” be included in the facility’s name;

That staff be directed to take all steps to effect the transfer;

That the Mayor and Clerk be authorized to execute any documentation necessary to effect the transfer;

That Council directs staff to initiate an amendment to the Clarington Official Plan to permit a Hospice at 1785 Cobble Dick Road; and

That the owner of 1895 Cobble Dick Road be notified of Committee’s recommendation and all interested parties listed in Report CAO-002-18 and any delegations be advised of Council’s decision.

Carried later in the meeting
(See following motion)

Resolution #C-020-18

Moved by Councillor Woo, seconded by Councillor Partner

That the Rules of Procedure be suspended to allow Members of Council to speak to Resolution #C-019-18 a second time.

The foregoing Resolution #C-019-18 was then carried on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Partner	X			
Councillor Traill	X			
Councillor Woo	X			
Councillor Cooke	X			
Councillor Hooper	X			
Councillor Neal	X			
Mayor Foster	X			

Alter the Agenda

Resolution #C-021-18

Moved by Councillor Neal seconded by Councillor Cooke

That the Agenda be altered to consider Unfinished Business Item 13.1, Addendum to Report PSD-090-17, Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle, at this time.

Carried

Closed Session

Resolution #C-022-18

Moved by Councillor Partner, seconded by Councillor Woo

That, in accordance with Section 239 (2) of the Municipal Act, 2001, as amended, the meeting be closed for the purpose of discussing the following:

- A matter that deals with litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board; and
- a matter that deals with advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

Carried

Rise and Report

The meeting resumed in open session at 8:32 PM.

Mayor Foster advised that one item was discussed in “closed” session in accordance with Section 239(2) of the *Municipal Act, 2001* and no resolutions were passed.

Recess

Resolution #C-023-18

Moved by Councillor Partner, seconded by Councillor Woo

That Council recess for five minutes.

Carried

The meeting reconvened at 8:42 PM.

Unfinished Business Item 13.1, Addendum to Report PSD-090-17, Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle - Continued

Resolution #C-024-18

Moved by Councillor Partner, seconded by Councillor Woo

That Report PSD-090-17 and Addendum to Report PSD-090-17 be received for information;

That the Confidential Correspondence Item 9.2, Robert Maciver, Municipal Solicitor, regarding OMB Appeal by Tornat Newcastle Limited, be received for information;

That the Municipality oppose the applications by Tornat Newcastle Limited;

That the Municipal Solicitor be authorized to retain outside legal counsel and a professional planning expert;

That Staff Report back on cost estimates;

That the costs be funded from the Legal Reserve fund;

That all interested parties listed in Addendum to PSD-090-17 and any delegations be advised of Council's decision; and

That the Durham Regional Planning and Economic Development Department be forward a copy of Addendum to Report PSD-090-17.

Carried later in the meeting
(See following motion)

Suspend the Rules

Resolution #C-025-18

Moved by Councillor Neal, seconded by Councillor Traill

That the Rules of Procedure be suspended to allow Members of Council to speak to the matter of the foregoing Resolution #C-026-18 a second time.

Carried

The foregoing Resolution #C-024-18 was then put to a vote and carried on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Partner	X			
Councillor Traill		X		
Councillor Woo	X			
Councillor Cooke		X		
Councillor Hooper	X			
Councillor Neal		X		
Mayor Foster	X			

10 Committee Reports

- 10.1.1 Agricultural Advisory Committee Minutes Minutes of the Agricultural Advisory Committee dated January 11, 2018
- 10.1.2 Abandoned Cemetery Committee Minutes Minutes of the Abandoned Cemetery Committee dated December 7, 2017
- 10.1.3 Heritage Committee Minutes Minutes of the Heritage Committee dated January 16, 2018
- 10.1.4 Museum Minutes Minutes of the Clarington Museum and Archives Board dated January 17, 2018

Resolution #C-026-18

Moved by Councillor Cooke, seconded by Councillor Hooper

That Advisory Committee Report Items 10.1.1 and 10.1.4, be approved.

Carried

10.2 General Government Committee Report of January 22, 2018

Resolution #C-027-18

Moved by Councillor Partner, seconded by Councillor Trill

That the recommendations contained in the General Government Committee Report of January 22, 2018, be approved, on consent.

Carried

10.3 Special General Government Committee Report of January 26, 2018 and January 29, 2018

Item 1 - Operating and Capital Budget

Resolution #C-028-18

Moved by Councillor Partner, seconded by Councillor Hooper

That Report FND-001-18 be received;

That Council approve the 2018 Operating Budget as outlined in Attachment #1 to Report FND-001-18, at an estimated tax levy impact of 1.17% (exclusive of tax policy impacts), as directed in Report FND-001-18 with the following amendments:

- a. That account number 100-19-193-10190-7102 Municipal Election – Data supplies be increased by \$102,000 to a total amount of \$117,754;
- b. That the \$102,000 increase to account number 100-19-193-10190-7102 Municipal Election – Data supplies be funded from the tax levy in the amount of \$70,000 and the rate stabilization fund in the amount of \$32,000;
- c. That Account # 100-28-130-30650-6400 Emergency Services – Misc Revenue be increased by \$20,000 to \$55,000;
- d. That Account # 100-32-130-31030-6400 Engineering – Misc Revenue be increased by \$10,000 to \$10,500;
- e. That the budget amount, in accounts with object code 7165, be reduced by a total of \$3,500 at a rate of approximately 10% for each account;

That Council approve the 2018 Capital Budget as outlined in Attachment #1 to Report FND-001-18, at an estimated tax levy impact of 2.2% with the following amendments:

- a. That Capital Project 42-421-14800, SCA – Truck Replacement, in the amount of \$55,000, be deferred;

- b. That Capital Project 42-421-17601, DSC Walk Behind Scrubber, in the amount of \$10,000, be deferred;

That the following items, listed as Priority "B", as itemized in Attachment 2 of Report FND-001-18, be approved:

- a. Item #3 of Attachment 2 to Report FND-001-18, Engineering Capital, in the amount of \$267,500;
- b. The contribution to the Future Staff Reserve Fund, in the amount of \$125,000, be maintained and allocated to Emergency Services staffing in accordance with the Master Fire Plan;
- c. Item #4 of Attachment 2 to Report FND-001-18, Operations Capital, in the amount of \$200,000;
- d. Item #16 of Attachment 2 to Report FND-001-18, Various Community Improvement Program Changes in the amount of \$4,000;
- e. Item #2 of Attachment 2 of Report FND-001-18, New Staffing Proposals, two Light Equipment Operators positions (\$70,176 for each position), one part-time Building Services I position (\$29,366), one part-time Operations Clerk II position (\$34,465), the one part-time Clerk's Department Clerk II position (\$34,465), IT Business Development Supervisor position (\$103,222), and Community/Customer Services Manager position (\$132,510);
- f. Item #9 of Attachment 2 to Report FND-001-18, Operations Equipment Reserve Fund in the amount of \$25,000;
- g. Item #8 of Attachment 2 to Report FND-001-18, Increase to Facilities Maintenance Reserve Fund in the amount of \$25,000;
- h. Item #19 of Attachment 2 to Report FND-001-18, for the Tooley's Mill Park Electronic Sign at an estimated cost of \$28,000, with \$25,000 funded from an external donation and \$3,000 funded from the tax levy;
- i. Item #5 of Attachment 2 to Report FND-001-18, Community Services Transfer to R/F in the amount of \$25,000;
- j. Item #11 of Attachment 2 to Report FND-001-18, Engineering – Safe Roads/Active transportation program in the amount of \$13,500;
- k. Item #14 of Attachment 2 to Report FND-001-18, Fleet GPS Update in the amount of \$7,000;
- l. Item #17 of Attachment 2 to Report FND-001-18, Heritage Grant Incentive increase in the amount of \$1,000;

- m. Item #10 of Attachment 2 to Report FND-001-18, Engineering Admin Studies – tax levy component for the north Newcastle Drainage Study in the amount of \$11,500;
- n. \$50,000 to be allocated to Community Services for a pilot youth project in Courtice;

That the project include public consultation; and

That the public consultation include both Courtice and Newcastle with a view to a youth program being set-up in Newcastle in 2019;

That Attachment 3 to Report FND-001-18, be approved as follows at an estimated tax levy impact of 0.20%:

- a. That the Clarington Public Library 2018 grant funding be approved in the amount of \$3,077,044;
- b. That the Clarington Public Library – Capital Tax Levy 2018 Budget Request be approved in the amount of \$114,176;
- c. That the Bowmanville Older Adult Association 2018 grant funding be approved in the amount of \$295,000;
- d. That the Clarington Museums 2018 Budget Request be approved in the amount of \$282,643;
- e. That the Visual Arts Centre 2018 Budget Request be approved in the amount of \$210,848;
- f. That the John Howard Society/Firehouse Youth 2018 Budget Request be approved in the amount of \$65,200;
- g. That the Community Care Durham 2018 Budget Request be approved in the amount of \$50,000;
- h. That the Newcastle Community Hall 2018 Budget Request be approved in the amount of \$20,000;
- i. That the Orono Cemetery Board 2018 Budget Request be approved in the amount of \$10,200;

That the external agencies, referred to in Attachment #3 to Report FND-001-18, be advised of Council's decision regarding their grant request and be thanked for their delegation on January 26, 2018, as appropriate;

That attachments outlining Reserve and Reserve Fund Contributions and new Reserve/Reserve Funds be approved as shown in the 2018 Draft Budget binder;

That approximately \$800,000 be drawn from the Rate Stabilization Reserve Fund to offset the tax rate impact;

That the financing of Capital projects, as outlined in the attached documents be approved;

That any cash flow shortfall in the Development Charges Reserve Funds be interim financed from the Municipal Capital Works Reserve Fund and General Municipal Reserve Fund, to be repaid with interest as cash flow permits;

That Report FND-001-18 be adopted by resolution in accordance with provisions of Ontario Regulation 284/09 of the *Municipal Act, 2001*;

That the Streetlight LED replacement and the Parking Lot Rehabilitation Programs, identified in the 2018 Draft Capital Budget to be financed from debenture financing, that the Director of Finance/Treasurer be authorized to make application to the Region of Durham for the necessary debenture, such terms at the discretion of the Director of Finance/Treasurer; and

That the appropriate By-laws to levy the 2018 tax requirements for Municipal, Regional and Education purposes be forwarded to Council for approval, once final tax policy information is available.

Carried as amended
Later in the meeting
(See following motions)

Resolution #C-029-18

Moved by Councillor Partner, seconded by Councillor Cooke

That Item #3 of Attachment 2 to Report FND-001-18, Engineering Capital, be reduced by \$100,000 from \$267,000 to \$167,500;

That Item #4 of Attachment 2 to Report FND-001-18, Operations Capital, be reduced by \$100,000 from \$200,000 to \$100,000;

That Item #5 of Attachment 2 to Report FND-001-18, Community Services Transfer to R/F, be deleted;

That Item #8 of Attachment 2 to Report FND-001-18, Facilities Maintenance Reserve Fund, be deleted;

That Item #9 of Attachment 2 to Report FND-001-18, Operations Equipment Reserve Fund, be deleted; and

That for the Council orientation session following the 2018 municipal election, staff present options for dealing with:

- Funding for future staffing
- Funding and utilization of the Rate Stabilization Fund
- Funding for External Agencies

Carried later in the meeting
(See following motion)

Resolution #C-030-18

Moved by Councillor Neal, seconded by Councillor Traill

That foregoing Resolution #C-029-18 be divided to separate the last paragraph.
Motion Lost

The foregoing Resolution #C-029-18 was then carried on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Partner	X			
Councillor Traill	X			
Councillor Woo	X			
Councillor Cooke	X			
Councillor Hooper	X			
Councillor Neal		X		
Mayor Foster	x			

Resolution #C-031-18

Moved by Councillor Neal, seconded by Councillor Cooke

That approval new staff positions (identified as Item #2 of Attachment 2 of Report FND-002-18) be divided from the 2018 operating and capital budget.

Lost on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal	X			
Councillor Partner		X		
Councillor Traill	X			
Councillor Woo		X		
Councillor Cooke	X			
Councillor Hooper		X		
Mayor Foster		X		

Resolution #C-032-18

Moved by Councillor Neal, seconded by Councillor Cooke

That Capital Project 28-388-18001, the purchase of the new fire truck for Fire Station 5, be deferred to the 2019 Budget.

Lost on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal	X			
Councillor Partner		X		
Councillor Traill	X			
Councillor Woo		X		
Councillor Cooke	X			
Councillor Hooper		X		
Mayor Foster		x		

Resolution #C-033-18

Moved by Councillor Neal, seconded by Councillor Cooke

That the conference expense for Regional Councillor for Ward 1 & 2 Regional Councillor, Account #100-10-107-0024-7201, be reduced by \$1,500 to \$0.

Lost on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal	X			
Councillor Partner		X		
Councillor Traill	X			
Councillor Woo		X		
Councillor Cooke	X			
Councillor Hooper		X		
Mayor Foster		X		

Resolution #C-034-18

Moved by Councillor Neal, seconded by Councillor Cooke

That the Community Improvement Funding for Courtice in 2018,
Account #100-50-000-10530-7548, in the amount of \$90,000, be deleted.

Lost on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal	X			
Councillor Partner		X		
Councillor Traill	X			
Councillor Woo		X		
Councillor Cooke		X		
Councillor Hooper		X		
Mayor Foster		X		

Resolution #C-035-18

Moved by Councillor Neal, seconded by Councillor Cooke

That the Darlington Boulevard reconstruction be deferred, with the funds to be allocated to Prestonvale Road/Robert Adams Drive, and that Staff report back to a General Government Committee in May, 2018 regarding the improvements to the Prestonvale Road/Robert Adams Drive intersection.

Lost on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal	X			
Councillor Partner		X		
Councillor Traill	X			
Councillor Woo		X		
Councillor Cooke	X			
Councillor Hooper		X		
Mayor Foster		X		

Recess

Resolution #C-036-18

Moved by Councillor Hooper, seconded by Councillor Partner

That Council recess for 10 minutes.

Carried

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The meeting reconvened at 10:06 PM.

Resolution #C-037-18

Moved by Councillor Neal, seconded by Councillor Cooke

That the total parking lot replacement of Garnet B. Rickard and Fire Hall #1, Capital Project 32-000-1801 be deferred, with \$50,000 to be authorized for replacement of sections of pavement, and repair of catch basins.

Lost on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal	X			
Councillor Partner		X		
Councillor Traill	X			
Councillor Woo		X		
Councillor Cooke	X			
Councillor Hooper		X		
Mayor Foster		X		

Resolution #C-038-18

Moved by Councillor Neal, seconded by Councillor Cooke

That the replacement of two Operations trucks in the amount of \$470,000, Capital Project 36-388-10100, be deferred.

Lost on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal	X			
Councillor Partner		X		
Councillor Traill	X			
Councillor Woo		X		
Councillor Cooke	X			
Councillor Hooper		X		
Mayor Foster		X		

Resolution #C-039-18

Moved by Councillor Neal, seconded by Councillor Cooke

That Operations Department Capital Project 36-388-10150 include the purchase one new plow for 2018.

Motion Lost

Resolution #C-040-18

Moved by Councillor Neal, seconded by Councillor Cooke

That the tax levy funding for IT Capital, Capital Project 16-162-07100, be reduced by \$100,000.

Lost on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal	X			
Councillor Partner		X		
Councillor Traill	X			
Councillor Woo		X		
Councillor Cooke		X		
Councillor Hooper		X		
Mayor Foster		X		

Resolution #C-041-18

Moved by Councillor Cooke, seconded by Councillor Neal

That the Director of Finance/Treasurer be directed to find alternative funding for Item #57 of Attachment 1 to FND-001-18, Legal-tax levy share of OP Appeal costs in the amount of \$10,000.

Carried

Resolution #C-042-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Item #55 of Attachment 1 to Report FND-001-18, Mayor and Council Travel, be reduced from \$17,230 to \$2,872.

Carried

Resolution #C-043-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Item #45 of Attachment 1 to Report FND-001-18, Hydro, be reduced by 5% to \$308,935.

Carried

Resolution #C-044-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Account # 100-42-421-10130-7131, SCA – Water/Sewer be reduced by \$5,000 to \$55,935.

Motion Lost

Resolution #C-045-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Account # 100-36-370-10151-7172, MAC R/M Building, by \$5,000 to \$27,000.

Motion Lost

Resolution #C-046-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Account # 100-36-325-10115-7516, Parks MTNCE – Park Improvement, be reduced by \$5,000 to \$115,000.

Motion Lost

Resolution #C-047-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Account # 100-36-325-10115-7516, Parks MTNCE – Park Improvement, be reduced by \$5,000 to \$120,000.

Carried

Resolution #C-048-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Account # 100-16-162-00000-7160, Info Tech – Consulting, be reduced by \$5,000 to \$41,000.

Motion Withdrawn

Resolution #C-049-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Account # 100-14-130-00000-7161, Legal Admin – Prof Fees, be reduced by \$5,000 to \$70,000.

Motion Lost

Resolution #C-050-18

Moved by Councillor Traill, seconded by Councillor Woo

That the Rules of Procedure be suspended to extend the meeting to 11:30 PM.

Carried

Resolution #C-051-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Account # 100-13-130-00000-7161, Admin – Prof Fees, be reduced by \$5,000 to \$70,000.

Carried

Resolution #C-052-18

Moved by Councillor Cooke, seconded by Councillor Traill

That Account # 100-32-130-0000-7167, Eng Admin – Design, be reduced by \$5,000 to \$145,000.

Carried

Resolution #C-053-18

Moved by Councillor Traill, seconded by Councillor Cooke

That Account # 100-16-160-00000-7160, H/R Consulting, be reduced by \$25,000 to \$10,000.

Motion Lost

Resolution #C-054-18

Moved by Councillor Traill, seconded by Councillor Neal

That the following New Staff Positions included in Item # 2 Attachment 2 of Report FND-001-18, be deleted:

- Part-time Clerks Department Clerk II
- IT Business Development Supervisor
- Community/Customer Service Manager.

Motion Withdrawn
Later in the meeting
(See following motion)

Resolution #C-055-18

Moved by Councillor Cooke, seconded by Councillor Traill

That the foregoing Resolution # C-054-18, divided to vote on the Part-time Clerk's Department Clerk II position separately.

Motion Lost

Councillor Traill then withdrew Resolution #C-054-18.

Resolution #C-056-18

Moved by Councillor Traill, seconded by Councillor Cooke

That the Part-time Clerk's Department Clerk II position included in Item # 2 Attachment 2 of Report FND-001-18, be deleted.

Motion Lost

Resolution #C-057-18

Moved by Councillor Traill, seconded by Councillor Neal

That the IT Business Development Supervisor position included in Item # 2 Attachment 2 of Report FND-001-18, be deleted.

Motion Lost

Resolution #C-058-18

Moved by Councillor Traill, seconded by Councillor Cooke

That the Community/Customer Service Manager position included in Item # 2 Attachment 2 of Report FND-001-18, be deleted.

Motion Lost

Later in the meeting

(See following motion)

Resolution #C-059-18

Moved by Councillor Traill, seconded by Councillor Neal

That the Rules of Procedure be suspended to extend the meeting to 12:00 AM.

Carried

The foregoing Resolution #C-058-18 was then put to a vote and lost.

Resolution #C-060-18

Moved by Councillor Traill, seconded by Councillor Cooke

That Item #14 of Attachment 2 to Report FND-001-18, Fleet GPS Update in the amount of \$7,000 be deleted.

Motion Lost

Resolution #C-061-18

Moved by Councillor Neal, seconded by Councillor Woo

That Resolution #GG-079-18 be lifted from the table.

Carried

Council now had the following Resolution #GG-079-19 before them:

That Capital Project 42-421-18404, RRC – Lobby Digital Display Sign, in the amount of \$17,500, be deleted.

Carried

The foregoing Resolution #C-030-18 was then carried on the following recorded vote:

Council Member	Yes	No	Declaration of Interest	Absent
Councillor Neal		X		
Councillor Partner	X			
Councillor Traill		X		
Councillor Woo	X			
Councillor Cooke		X		
Councillor Hooper	X			
Mayor Foster	X			

10.4 Planning & Development Committee Report of January 29, 2018

Resolution #C-062-18

Moved by Councillor Neal, seconded by Councillor Hooper

That the recommendations contained in the Planning & Development Committee Report of January 29, 2018 be approved, on consent, with the exception of items #7 (as it was considered earlier in the meeting).

Carried

Resolution #C-063-18

Moved by Councillor Woo, seconded by Councillor Traill

That the Rules of Procedure be suspended to extend the meeting to 12:05 AM.

Carried

11 Staff Reports

None

12 Business Arising from Procedural Notice of Motion

13 Unfinished Business

13.1 Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle (Referred from the December 11, 2017 Council Meeting)

Applications by Tornat Newcastle Limited for a mixed-use development at King Avenue West and Rudell Road, Newcastle, was considered earlier in the meeting.

13.2 Resolution #GG-079-18 (Tabled from the January 29, 2018 Special General Government Committee Meeting) [To be considered with Committee Report Item 10.3]

Resolution #GG-079-18 was considered earlier in the meeting.

14 By-laws

Resolution #C-064-18

Moved by Councillor Hooper, seconded by Councillor Cooke

That leave be granted to introduce By-laws 2018-009 to 2018-014

- | | |
|---------------|--|
| 14.1 2018-009 | Being a By-law Exempt a Certain Portion of Registered Plan 40M-2590 |
| 14.2 2018-010 | Being a by-law to provide for the establishment and adoption of an Emergency Management Program for the Municipality of Clarington (Item 6 of the General Government Committee Report) |
| 14.3 2018-011 | Being a by-law to establish certain lands as public highways (Item 9 of the General Government Committee Report) |
| 14.4 2018-012 | Being a by-law to amend By-law 2015-029, a By-law to govern the proceedings of the Council of the Municipality of Clarington, its General Government Committee, its Planning and Development Committee, and Special Committees, regarding sections related to changes under the <i>Municipal Conflict of Interest Act</i> (Item 11 of the General Government Committee Report) |
| 14.5 2018-013 | Being a By-law to amend By-law 84-63, the Comprehensive Zoning By-law for the Corporation of the Municipality of Clarington (Item 8 of the Planning and Development Committee Report) |

14.6 2018-014 Being a By-law to exempt a certain portion of Registered
Plan 40M-2593 from Part Lot Control

That the said by-laws be approved.

Carried

15 Procedural Notices of Motion

There were no Procedural Notices of Motion introduced under this Section of the Agenda.

16 Other Business

None

17 Confirming By-Law

Resolution #C-065-18

Moved by Councillor Hooper, seconded by Councillor Cooke

That leave be granted to introduce By-law 2018-015, being a by-law to confirm the proceedings of the Council of the Municipality of Clarington at a regular meeting held on the 5th day of February, 2018; and

That the said by-law be approved.

Carried

18 Adjournment

Resolution #C-066-18

Moved by Councillor Traill, seconded by Councillor Neal

That the meeting adjourn at 12:01 AM.

Carried

Mayor

Municipal Clerk



Agricultural Advisory Committee of Clarington Meeting

Thursday, February 8, 2018

Members Present: John Cartwright Brenda Metcalf Don Rickard
 Eric Bowman Jennifer Knox, Wendy Partner
 Ted Watson Les Caswell Richard Rekker

Regrets: Elgin Greenham, Tom Barrie, Henry Zekveld

Guests: Randy Cluff, CCI BioEnergy, Libby Racansky

Staff: Amy Burke, Faye Langmaid, Planning Services

Brenda welcomed all to the meeting, with introductions.

Adoption of Agenda

018-04 *Moved by John Cartwright, seconded by Eric Bowman*

“That the Agenda for February 8, 2018 be adopted”

Carried

Approval of Minutes

018-05 *Moved by Eric Bowman, seconded by Don Rickard*

“That the minutes of the January 11, 2018 meeting be approved”

Carried

Presentation

Randy Cluff is the Director of Business Development for Cci BioEnergy, they have developed anaerobic digester projects, specifically one for City of Toronto to deal with greenbin waste and have been piloting smaller scale digesters. .

Randy and Kevin’s company was founded in 1992 dealing with the development of organics processing solutions using Anaerobic Digestion (AD). Municipal greenbin waste is a management challenge and an opportunity to change our thinking and realize that the organic fraction of municipal solid waste (MSW) is a resource asset with a significant amount of value.

To many, organic waste is seen as an environmental problem. CCI view it as an economic loss. With close to 40% of our farm-to-fork supply chain being lost, there is an un-tapped opportunity to reclaim these assets for economic gain.

CCI has been working with Algoma on a pilot project of a micro-scale anaerobic digestion solution to produce energy on-site from recovered organic materials (in Algoma's case apple pulp).

The question that Randy left the group with was *How could we work together to develop an innovative agriculture based project in the area?*

Business Arising

Farm field 911 numbers (Emily Project). DRFA have been following up on this initiative. In Clarington if you need an address for your property they can be obtained from Planning Services. When addresses are created in Planning they are entered into the CRYISIS (911) Service, Post Canada and all other agencies are notified. To obtain a sign Operations has indicated they will provide and install for \$80. In addition, there is the issue of cell and broadband coverage for contacting in the case of Emergency.

Correspondence and Committee Reports

C-274 the Tax Bill, correspondence from the Town of Amherstburg, referred to committee from Mayor's office. This issue has evolved since the resolution was formulated in December. Committee requested staff contact the MPs offices to obtain an update for next meeting.

Durham Agriculture Advisory Committee:

Working on DAAC Tour for September 13th. Chairperson is working with Port of Oshawa on shipping issues. Eric reminded all of the workshop on Friday, Feb 9th which is a joint effort of DAAC, DEAC and Durham Climate Change Roundtable. The Durham Workforce Survey results were discussed at meeting, there is an issue with having young people understand the relationship between agriculture, food industry and potential job opportunities in agri-food related fields.

Durham Region Federation of Agriculture:

The Emily project was discussed, DRFA would like to see funding for signage across the Region. They also are looking for consistency in emergency services notification.

Farm Connections school program is happening on April 3, 4, 5 they are looking for volunteers to assist with the stations.

Clarington Board of Trade:

Planning for the 2018 annual CBOT Agricultural Summit is underway, it will be March 23rd at Newcastle Community Hall. CBOT has registered for the Understanding the Teenage Mind: Strategies to Engage Youth in Agri-Food Careers webinar on March 14th at 2:00 p.m. Any that wish to attend please let Faye or Adam Jeronimo at CBOT know, there is limited space in CBOT's boardroom to attend the webinar.

New Business

Broadband Nancy Rutherford provided an update that the initial phase study is being completed and moving onto second phase. On target for study to be completed by July. It will contain key action items and will go to Regional Committee to determine Region's role in implementation.

Enbridge –Brenda attended a meeting with OFA reps, Enbridge, Rural Ratepayers Group, CBOT and Municipal Staff about possible expansion of gas service to rural area (Tyrone, Enniskillen, Haydon). At this point in time it is not economically viable for Enbridge to expand service. A major load generator is needed to provide impetus for expansion. There was discussion about district geothermal. Enbridge could be a possible future presentation.

407 Implementation – Request that Blackbird and MTO be invited to May meeting. There are a number of stormwater and drainage issues that have affected farmers in Phase 1. This should be better addressed in Phase 2. There is an implementation problem because MTO has downloaded on-site responsibilities to Blackbird. Land owners that have asked for commitments from MTO as part of the land deal are being hampered in having these implemented, because of the contract arrangements. Items agreed upon in the Environmental Assessment and discussed as part of 407 Committee and Community Value Plan are not being carried out. Each land owner is having to pursue issues individually rather than collectively.

Green On, John alerted members to the funding available for energy conservation works from the Province. See the website at <https://www.greenon.ca/>

Future Agendas

- Confirmed for April -- Ontario Farmland Trust
- Invite/confirmed Blackbird and MTO for May meeting
- (Not yet confirmed) Barry and Mark Bragg to speak about their operation and value-added initiatives – John Cartwright to follow up.
- (Not yet confirmed) Participation House - Jenni Knox to follow-up.

John Cartwright moved to Adjourn.

Next Meeting: Thursday, March 8, 2018 @ 7:30 pm, Michael Pathak, CLEAResult, Harness Saving on the Farm Programs

Report to Council Meeting of February 26, 2018

Subject: General Government Committee Meeting of Monday, February 12, 2018

Recommendations:

1. Receive for Information

- (a) 8.1 Minutes of the Tyrone Community Hall Board dated November 15, 2017 and January 17, 2018
- (b) 9.1 Mary Masse, Clerk, Town of Lakeshore – Marijuana Tax Revenue
- (c) CLD-007-18 Appointment to the Newcastle Arena Board

2. Foster Creek North Subdivision Phase 1B, Newcastle, Plan 40M-2501 'Certificate of Acceptance' and 'Assumption Bylaw', Final Works Including Roads and Other Related Works

That Report EGD-002-18 be received;

That the Director of Engineering Services be authorized to issue a 'Certificate of Acceptance' for the Final Works, which includes final stage roads and other related Works, constructed with Plan 40M-2501;

That the By-law attached, as Attachment 2, to Report EGD-002-18 be approved assuming a certain street within Plan 40M-2501 as a public highway; and

That all interested parties listed in Report EGD-002-18 and any delegations be advised of Council's decision by the Department.

3. Scott Butler, Policy and Research, Ontario Good Roads Association – Municipal Class Environmental Assessment Process Reform

That the following Ontario Good Roads Association resolution, regarding Municipal Class Environmental Assessment Process Reform, be endorsed by the Municipality of Clarington:

Whereas a coalition of the Municipal Engineers Association (MEA) and the Residential and Civil Construction Alliance of Ontario have successfully

applied to have a review of the Municipal Class Environmental Assessment process conducted under Part IV (Section 61) of the *Environmental Bill of Rights Act, 1993* (EBR Act);

And whereas impact studies and public meetings required by the MCEA process often take two years or more to complete before construction can commence;

And whereas the MCEA requirements to evaluate alternatives are often not well aligned with prior or municipal land use planning decisions;

And whereas analysis by the Residential and Civil Construction Alliance of Ontario (RCCAO) has demonstrated that the time to complete an EA rose from 19 months to 26.7 months and costs went from an average of \$113,300 to \$386,500;

And whereas the Auditor General of Ontario has tabled recommendations for modernizing the MCEA process;

And whereas in spite of written commitments made by the Ministry of the Environment between 2013-2015, no action has been taken;

And whereas local projects that do not have the necessary approvals could lose out on the next intake of Build Canada funding;

Therefore be it resolved that the Municipality of Clarington requests that the Minister of the Environment and Climate Change take immediate steps to expedite the response process for Part II Orders or Bump-Up requests, as part of the s.61 review to improve MCEA process times and reduce study costs;

And further that the Minister of the Environment and Climate Change support changes to better integrate and harmonize the MCEA process with processes defined under the *Planning Act*;

And further that the Minister of the Environment and Climate Change amend the scope of MCEA reports and studies to reduce duplication with existing public processes and decisions made under municipal Official Plans and provincial legislation.

- 4.** Kathy Weiss, Director of Economic Development and Tourism, Regional Municipality of Durham, Regarding 2017-2021 Economic Development Strategy

That the presentation from Kathy Weiss, Director of Economic Development and Tourism, Regional Municipality of Durham, regarding 2017-2021 Economic Development Strategy be received with thanks; and

That that copies of reports, noted in Ms. Weiss' delegation, be directed to the Municipal Clerk.

- 5.** Automatic Aid Agreement - Oshawa Fire Services - Hwy 407

That Report ESD-002-18 be received;

That the Mayor and Clerk be authorized to execute the Automatic Aid Agreement with Oshawa Fire Services, Attachment 1 to Report ESD-002-18; and

That all interested parties listed in Report ESD-002-18 and any delegations be advised of Council's decision.

- 6.** Diversity in Clarington

That Report CSD-001-18 be received;

That Council endorse the Terms of Reference for the Diversity Advisory Committee;

That Staff be authorized to advertise to recruit members to the Diversity Advisory Committee;

That the Council Department Liaison to Community Services, Councillor Hooper, be appointed as the Council Representative to the Diversity Advisory Committee; and

That all interested parties listed in Report CSD-001-18 and any delegations be advised of Council's decision.

7. Garnet B. Rickard Recreation Complex – Pad A Arena Floor and Roof Rehabilitation

That Report COD-004-18 be received;

That Ball Construction Inc. with a revised total bid amount of \$990,730.00 (Net HST Rebate) being the lowest compliant bidder meeting all terms, conditions and specifications of Tender CL2018-2 be awarded the contract for the replacement of the arena floor of Pad A at Garnet B. Rickard Recreation Complex as required by the Community Services Department;

That the funds required for this project in the amount of \$990,730.46 (Net HST Rebate) be funded by the Municipality as follows:

RRC- Capital Improvements (2017) 110-42-421-84256-7401 \$990,730.46

With \$947,140.00 from the debenture proceeds and the additional funding required due to the shortfall of \$43,590.00 being funded from the Community Services Capital Reserve Fund (518); and

That all interested parties listed in Report COD-004-18 and any delegations be advised of Council's decision regarding the award by the Corporate Services Department.

8. Sidewalk Side Drop Repairs

That Report COD-003-18 be received;

That Gray's Landscaping and Snow Removal Inc., with an annual bid in the amount of \$76,196.91 (Net of HST), being the low, compliant bidder meeting all terms, conditions and specifications of CL2017-42 for Sidewalk Side Drop Repairs be awarded the contract for an initial two year term, as required by the Engineering Department and the Operations Department;

That, pending satisfactory performance, the Purchasing Manager be given the authority to extend the contract for this service for up to two additional one year terms;

That funds required for this project in the amount of \$83,684.81 (Net of HST) which includes construction cost of \$76,196.91 (Net of HST) and other related costs such as consulting, inspection and contingency of \$7,487.90 (Net of HST) be drawn from the following accounts:

Self-Insured Losses Reserve	100-X-X-X-2902	\$56,169.85
Operations Sidewalk Replacement	(2018) 100-36-380-10733-7112	\$13,757.48
Engineering Sidewalk Replacement	(2018) 110-32-331-83215-7401	\$13,757.48

That all interested parties listed in Report COD-003-18 and any delegations be advised by the Corporate Services Department of Council's decision regarding the award.

9. Community Event Sponsorship Program

Whereas the Municipality of Clarington's Community Event Sponsorship Program is in place to assist individuals and organization to provide opportunities for hosting special events that promote community engagement;

And whereas the Community Event Sponsorship Program may provide funding for community special events to a maximum of \$2,000 per successful application;

And whereas the application period for events occurring January 1 to June 30, 2018 closed October 1, 2017;

And whereas the submitted application were considered by Council on November 6, 2017;

And whereas the Community Event Sponsorship Program has an annual budget of \$35,000, of which the funds are divided between two application intake periods at \$17,000 each;

And whereas \$11,820 was awarded to events through the first intake period, the remaining \$5,680 would traditionally be made available to applications received through the second intake period, less the \$2,000 set aside for Carleton and Sherri Plumber's Neighbourhood party at Pearce Park to be held June 23, 2018; leaving a balance of \$3,680;

Now therefore be it resolved that \$2,000 from the remaining the 2018 first intake funds be awarded to the event of being coordinated by Sandy Cochrane in aid of Ovarian Cancer Research and Outreach for a sponsorship of the fundraiser In the Face of Angel Golf for Ovarian Cancer on May 27, 2018 at Pebblestone Golf Course, Courtice.

10. Newtonville Hall

Whereas the Newtonville Hall is in need of a new commercial dishwasher to continue their successful operations; and

Whereas the hall volunteer board is understanding of fiscal responsibility and would like to cover the cost themselves but don't have the financial capacity to do so upfront;

Now therefore be it resolved that the Newtonville Hall volunteer board be granted a three year interest free loan from the municipality in the amount of the total cost of the dishwasher plus related delivery and installation costs with annual repayments arranged through the Finance Department and;

That the dishwasher be purchased through the Purchasing Department, under the direction of the Operations Department, so as to get the best price available.

Report to Council Meeting of February 26, 2018

Subject: Planning & Development Committee Meeting of Tuesday, February 20, 2018

Recommendations:

1. An Application by Fourteen Estates Limited to rezone a 0.48 ha parcel to restrict the use of lands for open space purposes to allow for nitrate dilution to permit an additional two residential lots in Hampton

That Report PSD-016-18 be received;

That staff consider the public comments received in the further processing and preparation of a subsequent of the proposed application for Zoning By-law Amendment (ZBA2017-0035); and

That all interested parties listed in Report PSD-016-18 and any delegations be advised of Council's decision.

2. An Application by Landmark-Newcastle Limited to Amend Zoning Bylaw 84-63 to Permit the Development of 22 Townhouse Units at 415 Mill Street South and 403 Robert Street East, Newcastle.

That Report PSD-017-18 be received;

That the Zoning By-law Amendment application submitted by Landmark-Newcastle Limited continue to be processed and that a subsequent report be prepared; and

That all interested parties listed in Report PSD-017-18 and any delegations be advised of Council's decision.

3. Extension to Draft Approval for Two Draft Approved Plans of Subdivision by Smooth Run Developments (DG Group Inc.) and Brookfield Homes (Ontario) Ltd in Newcastle

That Report PSD-019-18 be received;

That the extension to Draft Approval for S-C 2005-003 be supported subject to the Conditions as contained in Attachment 2 to Report PSD-019-18;

That the extension to Draft Approval for S-C 2005-004 be supported subject to the Conditions as contained in Attachment 3 to PSD-019-18;

That the Durham Regional Planning and Economic Development Department and Municipal Property Assessment Corporation be forwarded a copy of Report PSD- 019-18 and Council's decision; and

That all interested parties listed in Report PSD-019-18 and any delegations be advised of Council's decision.

4. An Application By 3D Cana Inc. For The Removal Of Holding (H) Symbol At 685 Lake Road In Bowmanville To Permit The Development Of A New Industrial Building

That Report PSD-020-18 be received;

That the application submitted by 3D Cana Inc. to remove the Holding (H) symbol be approved and that the By-law in Attachment 1 to Report PSD-020-18 be approved;

That Council's decision and a copy of Report PSD-020-18 be forwarded to the Region of Durham and the Municipal Property Assessment Corporation; and

That all interested parties listed in Report PSD-020-18 and any delegations be advised of Council's decision.

Engineering Services Report

If this information is required in an alternate accessible format, please contact the Accessibility Coordinator at 905-623-3379 ext. 2131.

Report To: Council

Date of Meeting: February 26, 2018

Report Number: EGD-008-18 **Resolution:**

File Number: **By-law Number:**

Report Subject: **Ontario Municipal Commuter Cycling (OMCC) Enabling By-Law**

Recommendations:

1. That Report EGD-008-18 be received;
2. That the By-law attached to Report EGD-008-18 be approved;
3. That the Municipality's share of eligible costs, estimated to be \$33,760 will be funded from the tax levy portion of the Pavement Rehabilitation Program, account number 110-32-330-83212-7401;
4. That all interested parties listed in Report EGD-008-18 and any delegations be advised of Council's decision.

Report Overview

In September, 2017 the Municipality of Clarington submitted an application to the Province of Ontario for funding under the Ontario Municipal Commuter Cycling Program. Clarington has been approved for funding in the amount of \$313,899.53. This report is to create a by-law to authorize staff to execute the agreement for the Province of Ontario for funding.

1. Background

- 1.1 The Ontario Municipal Commuter Cycling Program (OMCC) is a new provincial funding program that provides funding to municipalities to support the implementation of commuter cycling infrastructure to encourage people to get out of their cars and onto bikes for their daily commute or other frequent trips. The OMCC is a four year program and the amount of funding in each year will vary.
- 1.2 In September, 2017 the Municipality of Clarington submitted an application to the Province for funding under the OMCC program. In December, 2017 the Province announced that it will be allocating a total of \$93 million among the participating municipalities based on a formula that takes into consideration the population and the number of cyclists in each municipality. The Municipality of Clarington's allocation for the first funding year is \$313,899.53.
- 1.3 As part of the application, the Municipality was required to submit a list of projects that meet specific criteria to be considered eligible for funding under the OMCC program. In order to be eligible, projects need to be completed by December, 2020 and need to be included in the Clarington Transportation Master Plan, as well as other stipulations. The list of approved projects can be updated every six months over the course of the program.
- 1.4 Each year the Municipality will be required to declare their participation in the OMCC program at which time they can add or change eligible commuter cycling projects to the list for consideration by the Province.
- 1.5 On February 8, 2018 the Ministry of Transportation Ontario advised that the Transfer Payment Agreement needs to be signed and submitted by February 23, 2018. Due to the Council schedules, the Ministry advised that the enabling by-law can be submitted by March 15, 2018.

- 1.6 As part of the OMCC application, applicants could partner with other eligible participants to submit joint projects. Clarington staff reviewed our list of potential projects and consulted with the Region of Durham on their list of projects and determined that there was one joint project that could be applied for by both as a joint project. The project was the Bloor Street off-road Multi-use Path (MUP) from Townline Road to Prestonvale Road. This project was accepted by the Province as an eligible project for both Clarington and the Region of Durham.
- 1.7 OMCC funding can be used to cover up to 80% of eligible costs for approved projects. The Municipality is required to fund the remaining 20% of eligible costs and all ineligible costs, as described in the Transfer Payment Agreement.
- 1.8 Staff have reviewed the list of approved eligible projects internally to determine which projects are feasible to complete by the December, 2020 deadline. It was determined that the following projects can be completed and will provide benefit to the Municipality of Clarington.
 - 1.8.1 Bloor Street (Regional Road 22) off road Multi-use Path (Townline Road to Prestonvale Road)
 - 1.8.2 Farewell Creek Trail Phase 2 (Townline Road to south limit of Phase 1)
 - 1.8.3 The Bloor Street multi-use path project will be completed in cooperation with the Region of Durham. It is anticipated that the construction for this project can be completed in 2018. The estimated cost of Clarington's portion of the Bloor Street multi-use path is \$118,800. OMCC funds can be used to cover 80% of eligible costs, estimated to be \$95,040. The remaining 20% of costs, estimated to be \$23,760 will be funded from the tax levy portion of the Pavement Rehabilitation Program, account number 110-32-330-83212-7401.
 - 1.8.4 Construction of the Farewell Creek Trail Phase 2 is tentatively scheduled for construction in 2020. In order to initiate Phase 2 of the Trail, funding will be needed in the amount of \$50,000 to be allocated in 2018. OMCC funds can be used for 80% or \$40,000 and the remaining 20% or \$10,000 will be funded from the approved 2018 Pavement Rehabilitation program account number 110-32-330-83212-7401. Funds from future years of the OMCC program can also be used towards the Farewell Creek Trail project. The Municipality's share of costs for the Farewell Creek project will be included in future capital budget requests.

- 1.9 The balance of the OMCC funding, \$178,859.53, will be saved for use in a subsequent year to fund the construction of Phase 2 of the Farewell Creek Trail prior to the December 2020 OMCC deadline. Any additional funding received through the OMCC annual allocation will also be used for this purpose.

2. Concurrence

This report has been reviewed by the Director of Finance who concurs with the recommendations.

3. Conclusion

It is respectfully recommended that the Mayor and Clerk be authorized to execute the Transfer Payment Agreement to enable the Municipality to accept Ontario Municipal Commuter Cycling Program funding for 2017/2018 and that approval be granted for the by-law attached to Report EGD-008-18.

4. Strategic Plan Application

The recommendations contained in this report conform to the Strategic Plan.

Submitted by:



Anthony Cannella,
Director of Engineering Services

Reviewed by:



(for) Andrew C. Allison, B. Comm, LL.B CAO

Staff Contact: Sean Bagshaw, Capital Works Engineer 905-623-3379, Ext. 2320 or
sbagshaw@clarington.net

Attachments:

Attachment 1 - By-law to EGD-008-18

List of interested parties to be notified of Council's decision is on file in the Engineering Services Department.

THE CORPORATION OF THE MUNICIPALITY OF CLARINGTON
BY-LAW NO. 2018- ____

Being a By-law to authorize the execution of an agreement with Her Majesty the Queen in right of the Province of Ontario as represented by the Minister of Transportation for the Province of Ontario – Ontario Municipal Commuter Cycling Program 2017/2018.

NOW THEREFORE the Council of the Corporation of the Municipality of Clarington hereby enacts as follows:

1. That the Mayor and Clerk are hereby authorized to execute, on behalf of the Corporation of the Municipality of Clarington, and seal with the Corporation seal, a Transfer Payment Agreement (Agreement) with Majesty the Queen in right of the Province of Ontario for 2017/2018 funding under the Ontario Municipal Commuter Cycling Program (OMCC).
2. THAT the Mayor and Clerk have the delegation of authority to execute any and all required documentation on behalf of the Corporation of the Municipality of Clarington as required by the OMCC for 2017/2018.
3. THAT the Corporation of the Municipality of Clarington commits to funding twenty (20) percent of eligible costs as required by the OMCC for 2017/2018.
4. THAT the Corporation of the Municipality of Clarington commits to implementing projects and spending OMCC 2017/2018 funding in accordance with all provisions specified in the Agreement.
5. THAT the Corporation of the Municipality of Clarington commits to spending OMCC 2017/2018 funding only on the following approved projects:
 - a. Bloor Street (Regional Road 22) Multi Use Path (Townline Road to Prestonvale Road)
 - b. Farewell Creek Trail Phase 2 (Townline Road to south limit of Phase 1)
6. THAT the Corporation of the Municipality of Clarington commits that it will obtain all required approvals for each project prior to use of OMCC funding.

BY-LAW passed in open Council this _____th day of _____ 2018.

Adrian Foster, Mayor

C. Anne Greentree, Municipal Clerk

Engineering Services Report

If this information is required in an alternate accessible format, please contact the Accessibility Coordinator at 905-623-3379 ext. 2131.

Report To: General Government Committee

Date of Meeting: February 12, 2018

Report Number: EGD-004-18 **Resolution:**

File Number: **By-law Number:**

Report Subject: **Bennett Road & Cobbledick Road Grade Level Crossings Train Whistle Cessation Study**

Recommendations:

1. That Report EGD-004-18 be received;

EITHER

2. That Council direct staff to undertake Step 2 within the Transport Canada procedure for the elimination of train whistling at grade crossings, and review the findings of the WSP Group Canada Limited (WSP) report with the rail authority, provided that there is a willingness to assume the total potential cost of remediation which may be approximately \$430,000;
3. That Council authorize staff to issue a \$10,000 purchase order, funded from the Consulting/Professional Fees reserve account number 100-00-000-00000-2926, to Canadian National Railway for their review of the sites and the WSP Whistle Cessation Report;
4. That Staff report back to Council on the results of the Step 2 discussions with the Rail Authority; and
5. That all interested parties listed in Report EGD-004-18 and any delegations be advised of Council's decision.

OR

6. That the request for whistle cessation at the Bennett Road and Cobbledick Road Level Crossings be formally denied; and

7. That all interested parties listed in Report EGD-004-18 and any delegations be advised of Council's decision.

Report Overview

The purpose of this report is to present to Council the assessment, conclusions and recommendations of the Whistle Cessation Study conducted for the Bennett Road and Cobble Dick Road grade level crossings and to seek Council direction either in moving forward to Step 2 in the Transport Canada Procedure or in denying the request for whistle cessation.

1. Background

As per the direction of Council at the General Government Committee meeting on May 29, 2017, Staff have advanced a study for the cessation of train whistles at the grade level crossings at Bennett Road and Cobble Dick Road due to concerns raised by area residents over “nuisance noise” caused by train whistling that occurs near and at these crossings.

1.1 Procedure for the Elimination of Train Whistling

Transport Canada provides a procedure for eliminating train whistling at public grade crossings. The procedure is compliant with the Grade Crossing Standards. The procedure consists of eight steps which are listed below:

1.1.1. Step 1

An interest for whistling cessation exists when a municipality receives a request from a citizen or a community group to stop train whistling at a specific area (one crossing or multiple crossings) along a railway corridor.

1.1.2. Step 2

Municipality consults with Railway Company.

The municipality consults with the railway company that operates the relevant line of railway to assess the feasibility of the whistling cessation request.

1.1.3. Step 3

Municipality issues notifications and public notice.

The municipality notifies all relevant associations or organizations (<http://www.tc.gc.ca/eng/railsafety/legislation-380.htm>) and issues a public notice of its intention to pass a resolution declaring that it agrees that whistles should not be used at a specific area (crossing or multiple crossings) along a railway corridor.

1.1.4. Step 4

Municipality and railway assess the crossing(s) against the prescribed requirements in the *Grade Crossings Regulations* and *Grade Crossing Standards*.

The municipality and the railway company assess whether or not the area (crossing or multiple crossings) meets the whistling cessation requirements specified in section 104 of the *Grade Crossings Regulations* and Appendix D of the *Grade Crossing Standards*. This may be done by engaging a professional engineer to determine if the area complies with the conditions in the regulations.

1.1.5. Step 5

Municipality and railway agree that the crossing(s) meets the prescribed requirements of the *Grade Crossings Regulations* and *Standards*.

If the municipality and the railway company do not mutually agree that the crossing(s) meets the prescribed requirements, they should try to resolve the conflict.

1.1.6. Step 5A (optional)

Municipality and railway request a final decision from Transport Canada.

If disagreement between the municipality and the railway persists, the supporting documentation should be provided to Transport Canada (railsafety@tc.gc.ca) for further assessment. Transport Canada's decision on the issue is final.

1.1.7. Step 6

Municipality passes a resolution declaring that it agrees that whistles should not be used in that area, thereby prohibiting train whistling.

Once it is deemed that the provisions of the *Grade Crossings Regulations* and Standards are satisfied, the municipality must declare, by resolution, that it agrees that train whistles should not be used at the prescribed crossing(s). A copy of the resolution should be sent to the Railway Company and all relevant associations or organizations, including the headquarters of Transport Canada's Rail Safety Directorate (railsafety@tc.gc.ca).

1.1.8. Step 7

Railway Company notifies Transport Canada and informs the municipality within 30 days that it has arranged to have whistling ceased at the crossing(s).

Upon receipt of the resolution, the railway company issues its special instructions, as per CROR 14(l)(iv), eliminating the application of CROR 14(l)(i), while providing for CROR 14(f). The railway company notifies the headquarters of Transport Canada's Rail Safety Directorate (railsafety@tc.gc.ca) of the effective date of whistling cessation at the crossing(s), and provides a copy of its special instructions.

The railway company notifies the municipality and/or the road authorities in writing of the whistling cessation not later than 30 days after the day whistling is ceased.

1.1.9. Step 8

Municipality and railway share the responsibility for monitoring and maintaining the conditions that support the cessation of train whistling at the crossing(s).

A Transport Canada Railway Safety Inspector may order the reinstatement of whistling at the crossing(s) should the responsible authorities fail to maintain the area in a manner that meets the prescribed requirements of the *Grade Crossings Regulations* and section 23.1 of the *Railway Safety Act*.

1.1.10. Council Approvals

It should be noted that prior to moving through from Step 1 to Step 2 and from Step 2 to Step 3, Municipal Council are required to make the decision to move forward with the process or not as there are financial implications in doing so.

1.2 Next Steps in the Transport Canada Procedure

In keeping with Transport Canada's procedure and in preparation for Step 2, WSP Group Canada Limited (WSP) was retained by the Municipality of Clarington in October, 2017 to complete the study. The scope of the study was to collect and provide related information to determine if train whistling could be eliminated at two active grade level crossings on the Canadian National Railway (CN) Kingston Subdivision within the Municipality in accordance with Transport Canada's Grade Crossings Regulations (GCR) and Grade Crossings Standards (GCS).

WSP completed the study in January, 2018 and provided staff with a report detailing regulatory requirements, whistle cessation procedures, assessment of existing conditions at the crossings, recommendations for improvements at the crossings to meet the requirements of the GCR and GCS, and a high level, conceptual cost estimation for implementation of the required improvements.

The next step, Step 2 in the Transport Canada guidelines, would be to review the study findings and recommendations with the rail authority and obtain their input on the feasibility of the whistle cessation request.

2. Study Findings

2.1 Study Findings

An assessment was completed for both grade level crossings in accordance with Transport Canada's GCR for compliance with the requirements to enable exemption from the regulatory train whistling requirements.

Both the Bennett Road and Cobble Dick Road crossings complied with regulatory requirements pertaining to:

- The location of the crossing within the rail corridor
- The active warning system
- No observed evidence of unauthorized access/trespass into the rail corridor
- No adjacent crossings within a prescribed 400m distance

3. Financial Implications

3.1 Conceptual Cost Estimate

- 3.1.1 WSP has prepared a conceptual cost estimate based on the scope of the suggested actions for the remediation of the deficiencies observed at each crossing to ensure

compliance with Transport Canada's GCR & GCS, should the Municipality wish to pursue whistle cessation.

A detailed list of the estimated cost of each item can be found in Tables 3 & 4 (Bennett Road) and Tables 6 & 7 (Cobbledick Road), Attachment 1.

Considering the works that WSP have recommended, staff have estimated a cost of approximately \$55,000 for the Bennett Road level crossing, approximately \$205,000, for the Cobbledick Road level crossing and possibly \$170,000 for the potential cost of fencing, for a total cost of approximately \$430,000. The details of this estimate can be found in Attachment 2.

- 3.1.2 It should be noted that several improvements at the Bennett Road crossing will be undertaken by Lakebreeze East Village Ltd. as a condition of the Lakebreeze subdivision currently being constructed west of Bennett Road. At the conclusion of works for the subdivision, the Bennett Road grade crossing will need to be re-assessed for compliance to the GCR and GCS and further remediation measures may be warranted. It is estimated that the subdivision related works of Bennett Road, will reduce the whistle cessation remediation works by roughly \$123,900, including track crossing surfacing which has been factored into the \$55,000 cost estimate.
- 3.1.3 It should be noted that in other municipalities where whistle cessation has been considered the fencing of the railway corridor has been raised as a requirement to increase safety and to mitigate trespass concerns. Although trespass has not been identified as an issue as part of this initial review it may become a concern as development of the area progresses. Currently a subdivision is under construction west of Bennett Road that would bring almost 4,000 new residents to the area. East of Bennett Road, north of the tracks a new Secondary Plan is being undertaken that would potentially see just over 1000 new residents. As these developments proceed trespass may become an issue and fencing installation may be required to maintain whistle cessation at these two crossings. The subdivision west of Bennett Road has fencing along the south side of the rail corridor as a requirement but trespass concerns may arise outside the subdivision limits. Future fencing requirements may add to the costs of maintaining whistle cessation. As potential for further development in the area around the Cobbledick Road level crossing is very low it is not anticipated that trespass issues will arise.

With the pending future development in the area of the Bennett Road level crossing and considering the subdivision at the southwest quadrant of the crossing includes fencing there may be a potential for the requirement for fencing at the other 3 quadrants of the crossing with an estimated cost of roughly \$170,000. Installation of the fencing would require approval of the landowners adjacent to the rail corridor, one of them is Clarington, as typically the rail authority does not permit the construction of fencing within the corridor.

- 3.1.4 The Canadian National Railway (CNR) has stated that it will require a purchase order in the amount of \$10,000 to undertake a review of the whistle cessation request and the supporting report that Clarington retained WSP to complete. The \$10,000 is an upset amount and CNR would bill for actual staff and consultant time spent on the review. Funding for this could be provided from the Consulting/Professional Fees reserve, account number 100-00-000-00000-2926.

3.2 Maintenance

Further to the immediate improvements required, the Municipality and the rail authority would be required to maintain the grade level crossings to ensure continued compliance with the GCR and GCS. If a crossing falls below compliance, the rail authority may choose to reintroduce whistling at their discretion.

3.3 Liability

The Municipality will be required to enter into a liability agreement with the railway and obtain additional liability insurance to protect the Municipality and the railway against third party claims for bodily injury and property damage arising out of or resulting from or connected with the issuance of an order to stop whistling at affected crossings. It is estimated that the cost of additional insurance premiums required with the implementation of whistle cessation would be approximately \$500 per level crossing.

4. Available Options

Both crossings are eligible for the implementation of whistle cessation, however, the assessment of the crossings revealed several deficiencies that would need to be remediated to ensure compliance with Transport Canada's GCR and GCS. These deficiencies include improvements to the grade level crossing surface and road approaches, signage, pavement markings and active warning system and are expected to cost approximately \$430,000 if fencing costs are also factored in. A detailed list of the noted deficiencies and suggested immediate and future actions for remediation can

be found in Tables 3 & 4 (Bennett Road) and Tables 6 & 7 (Cobbledick Road), of Attachment 1 to Report EGD-004-18. The detailed cost estimate including rail authority fees, design, administration and contingencies is provided as Attachment 2 to Report EGD-004-18.

Council can choose to proceed in moving to Step 2 by authorizing staff to issue a \$10,000 purchase order, funded from the Consulting/Professional Fees reserve account number 100-00-00000-2926, to the Canadian National Railway for their review of the sites and the Whistle Cessation Report. In doing so Council will be indicating a willingness to accept the total costs for the necessary improvement works which may be approximately \$430,000. These costs will be included in a future budget.

OR

Council denies the request for whistle cessation at the Bennett Road & Cobbledick Road Level Crossings.

5. Concurrence

This report has been reviewed by the Director of Finance/Treasurer who concurs with the recommendations.

6. Conclusion

The whistle cessation study conducted concludes, based on WSP's review, that whistle cessation is possible at both the Bennett Road, and Cobbledick Road, grade level crossings subject to the implementation of recommended actions for safety improvements to ensure compliance with Transport Canada's GCR and GCS if Council is willing to assume the costs.


Staff are of the opinion that cessation of whistling reduces the level of safety at the grade level crossings and increases potential risk and liability to the Municipality. Future intensive development of the surrounding areas will bring significant increases to traffic of all varieties at the crossings. The Municipality and rail authority will need to ensure strict maintenance of the crossings to limit risk and liability.

With the findings of the whistle cessation report it would be feasible to move to Step 2 of Transport Canada's guidelines for whistle cessation if Council is willing to accept that there may be a financial impact of approximately \$430,000 with respect to implementation that would require funding. The preliminary cost estimate would be refined through Step 2 of the process. Should the project move beyond Step 2, the future capital requirements would be referred for consideration to a future budget as appropriate based on timing.

7. Strategic Plan Application

Not applicable.

Submitted by: 
Anthony Cannella,
Director of Engineering Services

Reviewed by: 
Andrew C. Allison, B. Comm, LL.B
CAO

Staff Contact: Ron Albright, Assistant Director, Engineering Services, (905) 623-3379, Ext. 2305 or ralbright@clarington.net

ASC/ra/rb/jb

Attachments:

Attachment 1 – Train Whistle Cessation Study, CN Rail Crossing on Bennett Road and Cobble Dick Road in Clarington, ON - WSP

Attachment 2 – Detailed Cost Estimate

List of interested parties to be notified of Council's decision is on file in the Engineering Services Department.

Wilmot Creek Homeowners Association
Lakebreeze East Village Ltd. (Kaitlin)

THE CORPORATION OF THE MUNICIPALITY OF CLARINGTON – TRAIN WHISTLE CESSATION STUDY

CN RAIL CROSSING ON BENNETT ROAD AND COBBLEDICK
ROAD IN CLARINGTON, ONTARIO

FEBRUARY 05, 2018



Executive Summary

WSP Group Limited (WSP) was retained by the Corporation of the Municipality of Clarington (the Municipality) to undertake a detailed safety assessment for two at grade crossings located within the Municipality and to eliminate whistle blowing at these crossing locations. The railway tracks in the study area operate under the authority of the Canadian National Railway (CN) Kingston Subdivision and include two at grade crossing locations summarised in the following table:

Crossing	Municipality	Road Authority	Comments
Bennett Road (Mile 289.08, CN Kingston Subdivision)	Clarington, Ontario	The Corporation of the Municipality of Clarington	2 track crossing
Cobbledick Road (Mile 287.26, CN Kingston Subdivision)	Clarington, Ontario	The Corporation of the Municipality of Clarington	3 track crossing

As per Transport Canada's (TC) Grade Crossing Standards (GCS), the elimination of train whistling must be applied for and a separate application is necessary for the elimination of engine bell ringing.

The purpose of this Study is to collect and provide the necessary information and recommendations to potentially enable exemption from the regulatory train whistling requirements in the vicinity of public at-grade crossings on the Kingston Subdivision. Crossings were assessed in accordance with TC's Grade Crossing Regulations (GCR) and GCS. In order for a crossing to be allowed an exemption from whistling, the requirements specified in section 104 of the Grade Crossings Regulations and Appendix D of the GCS must be met.

Train whistling requirements are controlled through the following standards, rules, guidelines:

- Canadian Rail Operating Rules (CROR). Rule 14(L)(i)
- Procedure & Conditions For Eliminating Whistling At Public Crossings - Guideline No. 1
- Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide (TP 14372)
- Grade Crossing Standards (GCS)
- Manual on Uniform Traffic Control Devices for Canada
- TAC Geometric Design Guide for Canadian Roads

Engine whistle (cycle of long, long, short, long) is required by Canadian Rail Operating Rules (CROR) under Rule 14(I) with the signal of “2 long, 1 short, 1 long” as follows:

(i) At public crossings at-grade:

Trains exceeding 44mph must sound whistle signal ¼ miles before the crossing, to be prolonged or repeated, until the crossing is fully occupied.

Note: A whistle post will be located ¼ mile before each public crossing where required.

Movements operating at 44 mph or less must sound whistle signal to provide 20 seconds warning before entering the crossing and continuing to sound whistle signal until crossing is fully occupied.

EXCEPTION: Engine whistle signal is not required when manual protection is provided, or shoving equipment other than a snow plow over a crossing protected by automatic warning devices.

(ii) At other whistle posts indicated in special instructions.

(iii) At frequent intervals when view is restricted by weather, curvature or other conditions.

(iv) Special instructions will govern when such signal is prohibited in whole or in part.

(v) In addition an engine bell must be rung in accordance with the Canadian Rail Operating Rules (CROR) under Rule 13(a):

(vi) One-quarter of a mile from every public crossing at-grade (except within limits, as may be prescribed in special instructions) until the crossing is fully occupied by the engine of cars. When engine whistle signal 14(I) is sounded, the engine bell need not be rung.

Pursuant to the GCR the crossings were assessed for compliance with the requirements specified within section 104 to enable exemption from the regulatory train whistling requirements. An overview of the assessment as per section 104 of the GCR is provided in the table below.

<p><i>Grade Crossing Regulations Section 104:</i></p> <p><i>For the purposes of section 23.1 of the Railway Safety Act, the following requirements are prescribed:</i></p>	<p>Crossing Compliance with Prescribed Requirements to Enable Whistle Exemption</p>	
	<p>Bennett Road Mile 289.08 CN Kingston Subdivision</p>	<p>Cobbledick Road Mile 287.26 CN Kingston Subdivision</p>
<p>a) the area must be located:</p> <p>i) within a railway right-of-way, on each side of a public grade crossing, and within 0.4km from the outer edge of the crossing surface, as shown in Figure D-1 of the Grade Crossing Standards;</p>	✓	✓
<p>a) the area must be located:</p> <p>ii) within the road approach;</p>	✓	✓
<p>b) the area must have a public grade crossing that has the applicable protection referred to in sections 105 to 107;</p>	TBD*	TBD*
<p>c) the area must not have repeated incidents of unauthorized access to the line of railway; and</p>	✓	✓
<p>d) the area must not require whistling for a grade crossing located outside the area</p>	✓	✓

*Subject to review and inclusion dependent on information to be provided from CN. Additional information requested to assess both crossings as per GCR Section 104 b) include:

- Actual approach warning time,
- Gate arm delay time
- Gate length
- Gate height above crown of the road
- Distance between light units on the gate arm

The execution of a Crossing Safety Assessment is a proactive strategy to aid in determining existing conditions and safety measures in place at a railway crossing for all crossing users. Train whistling is a crucial safety measure that provides motorists, cyclists and pedestrians with advance warning of an approaching train. Whistle cessation is an option that is recommended for implementation once recommended actions for safety improvements at the crossings have been completed. Based on the study completed on both crossings located at Bennett Road and Cobbledick Road, the two crossings are eligible for whistle cessation as per Appendix D subject to implementation of recommended actions for safety improvements.

Further assessment pursuant to GCR for compliance with the requirements specified within section 104, notably section 104 b), to enable exemption from the regulatory train whistling requirements is to be determined and subject to this assessment once additional information has been provided from CN.

It should be noted that cessation of whistling reduces the road safety at the railway crossings and increases potential liability and risk to the Municipality. Future development and future traffic impacts south of the crossings at Bennett Road and Cobble Dick Road were not analyzed in the study. However, it is expected that the study area may observe an increase of vehicular, pedestrian and recreational traffic due to the increase of residential developments which will require the safety at these two crossings to be fully maintained. Further risk assessments are recommended to be completed once the future development has been constructed.

It is recommended that the Municipality consider the grade separation of Bennett Road and Cobble Dick Road as an option for whistle cessation as it will eliminate the increased potential of safety hazards brought by the expected increase of pedestrian, vehicular and railway traffic that may possibly be brought to the area by the future subdivision developments. Such hazards include but are not limited to unauthorized access to the railway right of way and collisions at the railway grade crossings.

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APPENDIX A – Bennett Road (Mile 289.08) Detailed Safety Assessment Field Guide

APPENDIX B – Cobbledick Road (Mile 287.26) Detailed Safety Assessment Field Guide

1.0 INTRODUCTION

WSP Canada Group Limited (WSP) was retained by the Corporation of the Municipality of Clarington (the Municipality) to collect and provide related information and recommendations necessary to determine if train whistling can be eliminated at two active grade crossings on the Canadian National Railway (CN) Kingston Subdivision within the Municipality of Clarington. The two crossings studied are:

- Bennett Road located at Mile 289.08, CN Kingston Subdivision; and
- Cobbledick Road located at Mile 287.26, CN Kingston Subdivision; and

Both of the crossings were assessed in accordance with Transport Canada's (TC) Grade Crossing Regulations (GCR) and Grade Crossing Standards (GCS). In order for a crossing to be considered for an exemption from whistling, the requirements in section 104 of the GCR and Appendix D of the GCS must be met.

1.1 Regulatory Requirements

Whistle cessation may only be considered if the crossings are compliant with section 104 of the GCR and Appendix D of the GCS. Relevant sections of the GCR and GCS are listed below:

1.1.1 Grade Crossing Regulations – Sections 104 - 107

§104. For the purposes of section 23.1 of the Railway Safety Act, the following requirements are prescribed:

- (a) the area must be located*
 - (i) within a railway right-of-way, on each side of a public grade crossing, and within 0.4 km from the outer edge of the crossing surface, as shown in Figure D-1 of the Grade Crossings Standards, and*
 - (ii) within the road approach;*
- (b) the area must have a public grade crossing that has the applicable protection referred to in sections 105 to 107;*
- (c) the area must not have repeated incidents of unauthorized access to the line of railway; and*
- (d) the area must not require whistling for a grade crossing located outside the area.*

§105. (1) A public grade crossing set out in column A of Table D-1 of the Grade Crossings Standards and located in an area referred to in section 104 must be equipped with the warning system set out in Table D-1 of the those Standards that corresponds to the number of tracks and the railway design speed set out in that Table, and the warning system must meet the applicable standards set out in articles 12 to 16 of those Standards.

(2) If a gate is not indicated as being required in Table D-1 of the Grade Crossings Standards, it is nonetheless required if the grade crossing corresponds to the applicable specifications set out in article 9.2 of those Standards.

§106. (1) A public grade crossing set out in column B of Table D-1 of the Grade Crossings Standards and located in an area referred to in section 104 must be equipped with the warning system that corresponds to the number of tracks and the railway design speed set out in that Table, and the warning system must meet the applicable standards set out in articles 12 to 16 of those Standards.

(2) If a gate is not indicated as being required in Table D-1 of the Grade Crossings Standards, it is nonetheless required if the grade crossing corresponds to the applicable specifications set out in article 9.6 of those Standards.

(3) If a warning system without a gate is indicated as being required in Table D-1 of the Grade Crossings Standards, guide fencing must be installed to deter persons from crossing the line of railway other than at the grade crossing.

(4) If a warning system is not indicated as being required in column 5 of Table D-1 of the Grade Crossings Standards, guide fencing must be installed, as well as a barrier that is intended to slow a person's approach to the grade crossing and to encourage a person to look both ways before crossing the grade crossing.

§107. Despite sections 105 and 106, if railway equipment must stop before proceeding across a public grade crossing that is located in an area referred to in section 104 and that is used by motor vehicles,

- (a) a warning system with flashing lights and bells must be installed at the grade crossing and must meet the applicable standards set out in articles 12 to 16 of the Grade Crossings Standards; or*
- (b) the railway company must manually protect the grade crossing.*

1.1.2 Grade Crossing Standards – Table D-1

	Column A		Column B	
Railway Design Speed	Grade Crossings for Vehicle Use		Grade Crossings for Sidewalks, Paths, or Trails with the centreline no closer than 3.6m (12 ft) to a warning signal for vehicles	
	No. of Tracks		No. of Tracks	
	1	2 or more	1	2 or more
Column 1	Column 2	Column 3	Column 4	Column 5
1 – 25 km/h (15 mph)	FLB	FLB	No warning system requirement	No warning system requirement
25 – 81 km/h (16 -50 mph)	FLB	FLB & G	FLB	FLB & G
Over 81 km/h (50 mph)	FLB & G	FLB & G	FLB & G	FLB & G
<p><i>Legend</i> FLB is a warning system consisting of flashing lights and a bell. FLB & G is a warning system consisting of flashing lights, a bell and gates.</p>				

Table 1: Table D-1 of GCS: Requirements for Warning Systems at Public Grade Crossings within an Area without Whistling

The following outlines suggested conditions for crossings where relief from whistling is being sought:

- Crossing warning systems should be as indicated on **Table D-1** of the GCS and compliant with articles 12 to 16 of the GCS.
- Railway right-of-way must not have evidence of repeated unauthorized access (trespassing) within 400m on either side of the crossing.
- Generally, whistling restrictions should be on a 24 hour basis. Under exceptional circumstances, and following consultation with Transport Canada, relief from whistling may be permitted between the hours of 2200 and 0700, local time. However the protection requirements should be the same as those required for a 24 hour whistling relief.
- Rules, respecting the sounding of locomotive bells, should still apply.
- Where a crossing has experienced two or more accidents in the past five years, even if the requirements laid out in **Table D-1** are met, the responsible authorities should undertake a thorough safety review.

2.0 WHISTLING CESSATION PROCEDURES

Transport Canada provides a procedure for eliminating train whistling at public grade crossings on their website (<https://www.tc.gc.ca/eng/railsafety/railsafety-976.html>). The procedure is compliant with the Grade Crossing Standards and supersedes the previous Procedure & Conditions for Eliminating Whistling at Public Crossings (Guideline No. 1). The procedure consists of eight steps which are listed below:

1. Interest for whistling cessation is expressed.

An interest for whistling cessation exists when a municipality receives a request from a citizen or a community group to stop train whistling at a specific area (one crossing or multiple crossings) along a railway corridor.

2. Municipality consults with Railway Company.

The municipality consults with the railway company that operates the relevant line of railway to assess the feasibility of the whistling cessation request.

3. Municipality issues notifications and public notice.

The municipality notifies all relevant associations or organizations (<http://www.tc.gc.ca/eng/railsafety/legislation-380.htm>) and issues a public notice of its intention to pass a resolution declaring that it agrees that whistles should not be used at a specific area (crossing or multiple crossings) along a railway corridor.

4. Municipality and railway assess the crossing(s) against the prescribed requirements in the Grade Crossings Regulations and Grade Crossing Standards.

The municipality and the railway company assess whether or not the area (crossing or multiple crossings) meets the whistling cessation requirements specified in section 104 of the Grade Crossings Regulations and Appendix D of the Grade Crossing Standards. This may be done by engaging a professional engineer to determine if the area complies with the conditions in the regulations.

5. Municipality and railway agree that the crossing(s) meets the prescribed requirements of the Grade Crossings Regulations and Standards.

If the municipality and the railway company do not mutually agree that the crossing(s) meets the prescribed requirements, they should try to resolve the conflict.

5A.(Optional) Municipality and railway request a final decision from Transport Canada.

If disagreement between the municipality and the railway persists, the supporting documentation should be provided to Transport Canada (railsafety@tc.gc.ca) for further assessment. Transport Canada's decision on the issue is final.

6. Municipality passes a resolution declaring that it agrees that whistles should not be used in that area, thereby prohibiting train whistling.

Once it is deemed that the provisions of the Grade Crossings Regulations and Standards are satisfied, the municipality must declare, by resolution, that it agrees that train whistles should not be used at the prescribed crossing(s). A copy of the resolution should be sent to the railway company and all relevant associations or organizations, including the head quarters of Transport Canada's Rail Safety Directorate (railsafety@tc.gc.ca).

7. Railway Company notifies Transport Canada and informs the municipality within 30 days that it has arranged to have whistling ceased at the crossing(s).

Upon receipt of the resolution, the railway company issues its special instructions, as per CROR 14(l)(iv), eliminating the application of CROR 14(l)(i), while providing for CROR 14(f). The railway company notifies the headquarters of Transport Canada's Rail Safety Directorate (railsafety@tc.gc.ca) of the effective date of whistling cessation at the crossing(s), and provides a copy of its special instructions.

The railway company notifies the municipality and/or the road authorities in writing of the whistling cessation not later than 30 days after the day whistling is ceased.

8. Municipality and railway share the responsibility for monitoring and maintaining the conditions that support the cessation of train whistling at the crossing(s).

A Transport Canada Railway Safety Inspector may order the reinstatement of whistling at the crossing(s) should the responsible authorities fail to maintain the area in a manner that meets the prescribed requirements of the Grade Crossings Regulations and section 23.1 of the Railway Safety Act.

3.0 METHODOLOGY

In order to assist with the application process required by TC to facilitate whistle cessation at the subject crossings, WSP has implemented the following work plan:

1. Coordinate and consult with the Municipality and CN to facilitate a safe site visit and acquisition of track and road alignments, crossing dimensions, type of crossing protection, road signs and pavement markings, sight-lines, and other pertinent information for subsequent evaluation;
2. Obtain available crash data at the crossings from the Transportation Safety Board (available online);
3. Obtain information about roadway and railway operations over the crossings from the Municipality and CN respectively (received September 22 2017);
4. Conduct a field investigation/audit of the crossing on November 14, 2017 and January 18 2018 which includes:
 - Visually examining the railway crossing and road approaches;
 - Assessing railway crossing sight lines and queuing;
 - Identifying and recording any indication of trespassing in the areas;
 - Identifying and recording the type, condition, length and height of any existing fencing in the areas;
 - Identifying the location railway bridges/trestles and other structures which may be relevant;
 - Identifying the location of private or other crossings within 400m (quarter mile) each side;

Data on the crossing was collected in accordance with TC's *Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide* (April 2005). The template has been updated to reflect the new Grade Crossing Standards (November 2014).

5. Prepared a report detailing the findings of the field investigation/audit, identifying the mitigation measures necessary to facilitate the safe implementation of anti-whistling, and providing associated cost estimates.

4.0 FINDINGS

4.1 Whistle Cessation Regulatory Requirements

An assessment of both crossings was completed, pursuant to GCR for compliance with the requirements specified within section 104, to enable exemption from the regulatory train whistling requirements. A description of this assessment and the requirements specified within section 104 at each crossing is provided below.

4.1.1 Bennett Road – Mile 289.08 CN Kingston Subdivision

Section 104(a)

This section outlines the area within which whistle cessation would be implemented. It includes 400m of the rail corridor on either side of the crossing, as well as through the crossing itself. The railway crossing at Bennett Road is located within a railway right-of-way as shown in Figure D-1 of the GCS, as per Figure 1 below, and is within the road approach.

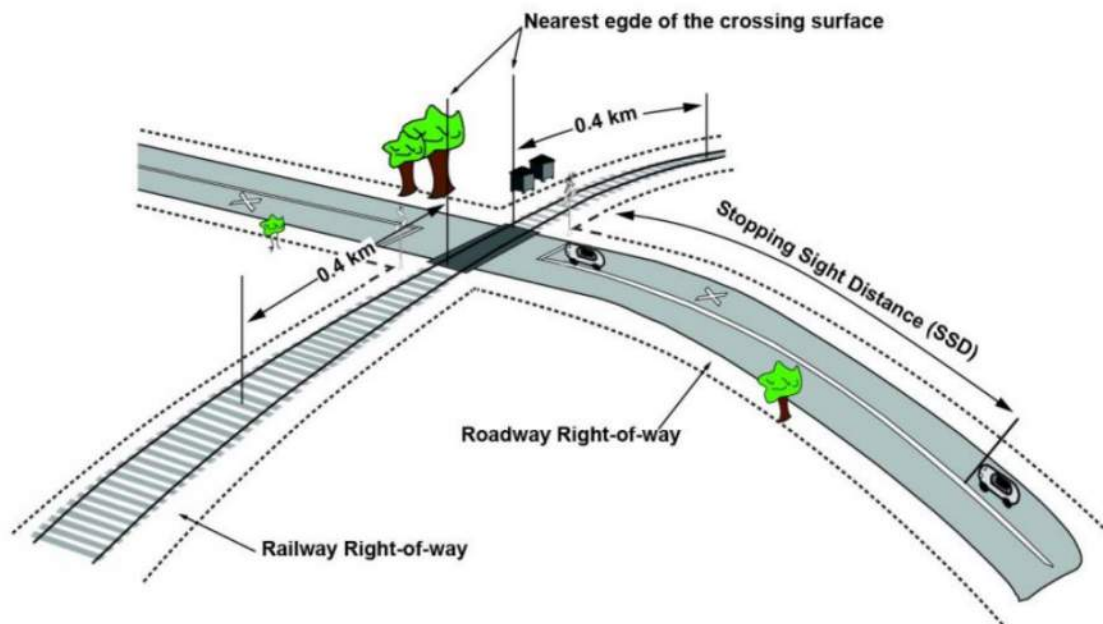


Figure 1 - Figure D-1 of GCS: Prescribed area for whistling cessation

Section 104(b)

This section outlines the required crossing protection for the implementation of whistle cessation. Since Bennett Road is a public grade crossing classified for vehicle use and does not operate with a “stop and proceed procedure”, Section 105 dictates the required protections. Section 105 indicates that crossings must meet the requirements of Table D-1 in the GCS as per Table 1 in Section 1.1.2 above.

The grade crossing at Bennett Road has two tracks and railway speed over 81km/h (50mph). As per Table D-1, the warning system at Bennett Road must consist of flashing lights, a bell and gates. The existing warning system at Bennett Road meets these requirements.

Section 105 also requires that the warning system meet the applicable standards set out in Articles 12 to 16 of the Grade Crossing Standards.

Assessment of Bennett Road for compliance to GCR Section 105 requires additional information from CN to be completed. Additional information has been requested to assess both crossings as per GCR Section 104 b) and includes:

- Actual approach warning time,
- Gate arm delay time
- Gate length
- Gate height above crown of the road
- Distance between light units on the gate arm

Section 104(c)

This section requires that the Railway Company and Road Authority ensure that there are no repeated instances of unauthorized access to the rail corridor within the area proposed for whistle cessation. This would include residents walking along the rail corridor or crossing the railway at locations other than grade crossings.

Should evidence of unauthorized access be found, mitigation measures may include fencing along the length of the rail corridor, as well as enforcement and community education programs to address trespassing issues.

With future development per the proposed subdivision works south of the crossing at Bennett Road, a significant increase to the population within the area may be expected. Further risk assessments are recommended to be carried for this crossing and the development project area during and after construction to assess potential trespassing risks through the advancement of the subdivision. Field observations and suggested actions for the installation of fencing on each quadrant of the crossing location has been discussed in Section 4.3.

During the site visit on November 14 2017 and January 18 2018, WSP did not observe any evidence of trespassing within 400m on either side of the grade crossing. Photos 1 and 2 below show a visual of both sides rail corridor at Bennett Road.

Section 104(d)

This section indicates that whistle cessation cannot be implemented within an area if that area requires whistling due to an adjacent grade crossing.

There are no grade crossings within 400m (quarter mile) on either side of the grade crossing at Bennett Road.



Photo 1 – Bennett Road crossing, rail corridor looking east.



Photo 2 – Bennett Road crossing, rail corridor looking west.

4.1.2 Cobbledick Road – Mile 287.26 CN Kingston Subdivision

Section 104(a)

This section outlines the area within which whistle cessation would be implemented. It includes 400m of the rail corridor on either side of the crossing, as well as through the crossing itself. The railway crossing at Cobbledick Road is located within a railway right-of way as shown in Figure D-1 of the GCS, as per Figure 1 in Section 4.1.1 above, and is within the road approach.

Section 104(b)

This section outlines the required crossing protection for the implementation of whistle cessation. Since Cobbledick Road is a public grade crossing classified for vehicle use and does not operate with a “stop and proceed procedure”, Section 105 dictates the required protections. Section 105 indicates that crossings must meet the requirements of Table D-1 in the GCS as per Table 1 in Section 1.1.2 above.

The grade crossing at Cobbledick Road has three tracks and railway speed over 81km/h (50mph). As per Table D-1, the warning system at Cobbledick Road must consist of flashing lights, a bell and gates. The existing warning system at Cobbledick Road meets these requirements.

Section 105 also requires that the warning system meet the applicable standards set out in Articles 12 to 16 of the Grade Crossing Standards.

Assessment of Cobbledick Road for compliance to GCR Section 105 requires additional information from CN to be completed. Additional information has been requested to assess both crossings as per GCR Section 104 b) and includes:

- Actual approach warning time,
- Gate arm delay time
- Gate length
- Gate height above crown of the road
- Distance between light units on the gate arm

Section 104(c)

This section requires that the Railway Company and Road Authority ensure that there are no repeated instances of unauthorized access to the rail corridor within the area proposed for whistle cessation. This would include residents walking along the rail corridor or crossing the railway at locations other than grade crossings.

Should evidence of unauthorized access be found, mitigation measures may include fencing along the length of the rail corridor, as well as enforcement and community education programs to address trespassing issues.

During the site visit on November 21 2017 and January 18 2018, WSP did not observe any evidence of trespassing within 400m on either side of the grade crossing. Photos 3 and 4 below show a visual of both sides rail corridor at Cobbledick Road.



Photo 3 – Cobbledick Road crossing, rail corridor looking east.



Photo 4 – Cobbledick Road crossing, rail corridor looking west.

Section 104(d)

This section indicates that whistle cessation cannot be implemented within an area if that area requires whistling due to an adjacent grade crossing.

There are no grade crossings within 400m (quarter mile) on either side of the grade crossing at Cobbledick Road.

4.2 Field Investigations

Tables 2 through 5 present the findings of the field investigation/audit; identify the mitigation measures necessary to facilitate the safe implementation of anti-whistling; and provide associated cost estimates for each of the crossings. A Detail Safety Assessment Field Guide; as well as site photos and a scene sketch is presented for each grade crossing in **Appendices A – B**.

4.3 Bennett Road (Mile 289.08, CN Kingston Subdivision)

Requirements	Existing Conditions
General Information - Rail	<ul style="list-style-type: none"> • Railway Company: Canadian National Railway • Subdivision: Kingston • Mile: 289.08 • Number of Tracks: 2 • Track Type: Mainline
General Information - Road	<ul style="list-style-type: none"> • Road Authority: The Corporation of the Municipality of Clarington • Road Name: Bennett Road • Road Classification: Rural Local Undivided • Number of Lanes: 2 • Sidewalks, Paths or Trails: No sidewalks on all quadrants. Waterfront Trail access on the southeast quadrant.
Crossing Type	<ul style="list-style-type: none"> • Active Crossing equipped with Railway Crossing Signs, Flashing Lights, Bells and Gates (FLBG)
Rail Operations	<ul style="list-style-type: none"> • Maximum Railway Operating Speed (passenger): 100 mph • Maximum Railway Operating Speed (freight): 65 mph • Daily Train Volume (total passenger and freight): 44
Road Operations	<ul style="list-style-type: none"> • Road Crossing Design Speed: 50 km/h • Average Annual Daily Traffic (AADT) : 24 • Vehicle types using the crossing: Standard traffic vehicles, Heavy Single Unit Truck used as the design vehicle.
Sightlines	<ul style="list-style-type: none"> • Crossing is an active grade crossing with gates and is exempted from D_{SSD} and D_{STOPPED} sightline requirements. • Visibility of the flashing light units and Railway Crossing Signs from the SSD are clear (Photo 22 and 28). • Sightline data was collected during the winter and sightlines must be re-assessed in the spring/summer when foliage is in place.
Incident History	<ul style="list-style-type: none"> • No reported crashes at the crossing within the past five years
Trespassing	<ul style="list-style-type: none"> • No evidence of trespassing observed within 400m (1/4 mile) each side of crossing, on November 21 2017 and January 18 2018.
Nearby Switching Operations / Yards	<ul style="list-style-type: none"> • Switch located approximately 600m east of the crossing.
Nearby Railway Bridges / Trestles and Other Structures	<ul style="list-style-type: none"> • None within 400m (1/4mile) on each side of the crossing
Other Nearby Crossings	<ul style="list-style-type: none"> • None within 400m (1/4mile) on each side of the crossing

Requirements	Existing Conditions
<p>Compliance with Regulatory Requirements</p>	<ul style="list-style-type: none"> • GCR §104 (a) <ul style="list-style-type: none"> ○ Proposed location for whistle cessation is within a rail right-of-way and road approach as defined by the GCR • GCR §104 (b) <ul style="list-style-type: none"> ○ Crossing is equipped with flashing lights, bells and gates and satisfies Table D-1 of the GCS ○ Compliance with articles 12 to 16 of the GCS to be confirmed based on receipt of data from CN. • GCR §104 (c) <ul style="list-style-type: none"> ○ No evidence of trespassing observed within 400m (1/4 mile) on each side of the grade crossing • GCR §104 (d) <ul style="list-style-type: none"> ○ Crossing is not located within 400m (1/4 mile) of another grade crossing which requires whistling

Table 2: Bennett Road (Mile 289.08) – General Information

Recommendations:

The Road Authority (the Municipality) and the Railway Company (CN) may implement whistle cessation at the crossing located at **Bennett Road, Mile 289.08, CN Kingston Subdivision, Clarington, ON** subject to the following suggested remediation listed in Tables 3 and 4. Recommended Actions for immediate and future actions have been separated as per Tables 3 and 4, respectively. Recommended Actions include an indication of the party responsible for implementation. Actions are also assigned an implementation category based on the regulatory requirements and the timelines for their implementation, as specified in the Grade Crossing Regulations. The implementation categories are as follows:

- **Category A:** Requirement under the *Grade Crossing Regulations*; basic requirement that must be implemented immediately or warning system maintenance issues covered under Article 17 of the *Grade Crossing Standards*
- **Category B:** Requirement under the *Grade Crossing Regulations*; additional requirement that must be implemented within seven years after the *Grade Crossing Regulations* comes into force (by November 2021)
- **Category C:** Requirement under the *Grade Crossing Regulations*; to be addressed when the affected component is changed (no implementation timeline specified)
- **Category D:** Other recommendations; not required under the *Grade Crossing Regulations* but recommended based on guidelines and best practices

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
1. Grade Crossing Surface			
Crossing surface is uneven due to the condition of the crossing planks. (Photo 14)	Replace crossing planks or reconstruct crossing surface to ensure a smooth surface. Responsibility: Railway Company Implementation: Category B Cost Estimate (±40%): \$50,000.00* *Cost estimate is based on an estimated unit price of \$25,000.00 per rehabilitation/reconstruction of one 40ft crossing.		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
<p>Road surface is uneven due to poorly paved transition between the road approaches and the crossing. This causes uneven vertical alignments through the crossing. Furthermore, there are signs indicating road approach deterioration with loose gravel and pot holes present. (Photo 14)</p>	<p>Both road approaches to be resurfaced with the method of resurfacing at the discretion of the Road Authority.</p> <p>The minimum recommended length of road resurfacing is 110m from the railway crossing surface on both road approaches and is based on the SSD required for this roadway's design speed of 50km/h.</p> <p>Cost estimate is based on a worst case hot mix resurfacing method with a unit rate of \$150,000.00 per lane, per kilometre and has been applied for two lanes per approach at this location.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to ensure an even and smooth road surface throughout the SSD on both road approaches.</p> <p>Responsibility: Road Authority</p> <p>Implementation: Category B</p> <p>Cost Estimate (±40%): \$33,000.00</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
2. Signs and Pavement Markings			
Sign post for the Railway Crossing Ahead Sign (WA-18) on the south road approach is not perpendicular to the road. (Photo 25)	<p>Realign sign post.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to ensure sign placements provided on both road approaches are compliant as per MUTCDC recommendations:</p> <ul style="list-style-type: none"> - Distance from rail: 50m-150m - Lateral placement from edge of travelled way: 2m-4.5m - Sign height from edge of travelled way: 1.5m (rural areas) or 2.0m (high pedestrian traffic) <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$250.00</p>		
Railway Crossing Ahead Sign on the north and south road approach do not depict the number of tracks at the crossing. (Photo 25)	<p>Replace WA-18 signs with one that depicts the track configuration.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$1,000.00</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
<p>Measurements for the Railway Crossing Ahead Sign on the north road approach do not meet the MUTCDC recommended limits:</p> <ul style="list-style-type: none"> Distance from nearest rail: 166m (50m -150m) 	<p>Sign does not meet MUTCDC recommended limits. Relocate sign to meet MUTCDC recommended limits. Monitor and ensure sign is visible and provides adequate warning to road users.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to ensure sign placements provided on both road approaches are compliant as per MUTCDC recommendations:</p> <ul style="list-style-type: none"> Distance from rail: 50m-150m Lateral placement from edge of travelled way: 2m-4.5m Sign height from edge of travelled way: 1.5m (rural areas) or 2.0m (high pedestrian traffic) <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$500.00</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
<p>Measurements for the Railway Crossing Ahead Sign on the south road approach do not meet the MUTCDC recommended limits:</p> <ul style="list-style-type: none"> Lateral placement: 1.8m (2.0m – 4.5m) 	<p>Sign does not meet MUTCDC recommended limits. Monitor and ensure sign is visible and provides adequate warning to road users.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to ensure sign placements provided on both road approaches are compliant as per MUTCDC recommendations:</p> <ul style="list-style-type: none"> Distance from rail: 50m-150m Lateral placement from edge of travelled way: 2m-4.5m Sign height from edge of travelled way: 1.5m (rural areas) or 2.0m (high pedestrian traffic) <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$500.00</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
Sign post for "REPORT IF BLOCKED 905-623-5126...Clarington Emergency Services" Sign on the south road approach is leaning. (Photo 24)	<p>Realign sign mast.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to ensure sign placements provided on both road approaches are compliant as per MUTCDC recommendations:</p> <ul style="list-style-type: none"> - Distance from rail: 50m-150m - Lateral placement from edge of travelled way: 2m-4.5m - Sign height from edge of travelled way: 1.5m (rural areas) or 2.0m (high pedestrian traffic) <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$250.00</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
No pavement markings are provided on either road approach.	<p>Provide pavement markings on the north and south road approach as per MUTCDC:</p> <ul style="list-style-type: none"> - "X" Pavement markings, 10m beyond the WA-18 sign. - Stop bars, 2m in advance of the warning system. - Directional dividing lines within 30m of the crossing on both road approaches. <p>"X" pavement markings should take into consideration the recommendation to relocate the associated WA-18 signs as per MUTCDC recommendations.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to ensure all pavement markings are provided on both road approaches as per MUTCDC recommendations.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$3,000.00</p> <ul style="list-style-type: none"> - "X" Pavement markings: \$1,000.00 - Stop bars: \$500.00 - Directional dividing lines: \$1,500.00 		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
3. Grade Crossing Warning System			
The clearance distance from the edge of the travelled way is 1.3m for the south signal mast which is less than the GCS limit of 1.875m for roadways without a curb.	Relocate warning system mast to meet GCS limits; or construct curb at least 0.625m from the warning system clearance point to protect the warning system. Responsibility: Railway Company; involvement from Road Authority is required for curb option. Implementation: Category C Cost Estimate (±40%): \$2,000.00 (Relocation of warning system) \$3,000.00 (Construction of curb)		
The distance between the top of the foundation and the surrounding ground surface is 170mm for the south signal mast. This exceeds the GCS maximum limit of 100mm.	Railway Company to ensure grade crossing warning system foundations are in compliance with the GCS. Responsibility: Railway Company; Implementation: Category C Cost Estimate (±40%): TBD* *Cost estimate cannot be provided. Warning system maintenance per GCS requirements is the responsibility of the Railway Company.		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
4. Miscellaneous			
Vehicular pathway is present along the SE ROW providing access for Railway Authority personnel. Pathway is easily accessible and unauthorized use of path may influence trespassing.	<p>Ensure Railway Authority access is monitored frequently for unauthorized access. Ensure all access points are controlled for authorized access only.</p> <p>Responsibility: Railway Company Implementation: Category D Cost Estimate (±40%): TBD*</p> <p>*Cost estimate cannot be provided. Vehicular pathway maintenance is the responsibility of the Railway Company.</p>		
		Total Cost Estimate (±40%):	<p>\$90,500.00 (with relocation of warning system)</p> <p>\$91,500.00 (with construction of a curb)</p>

Table 3: Bennett Road (Mile 289.08) – Observations and Recommended Actions – Immediate Actions

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
1. Location of the Grade Crossing			
<p>“D” distance to the nearest property access is 5m (private driveway) and 14m (private driveway which is less than the GCS limit of 30m.</p> <p>Existing warning devices are visible for vehicles turning from the above mentioned property accesses on both road approaches.</p>	<p>Property access locations are an existing condition and may remain. Any future changes to the location of the crossing or intersections must apply the GCS requirements in a manner that improves overall safety.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to apply the GCS requirements as per GCS Section 11, no part of the travelled way of an intersecting road or entranceway (other than a railway service road), is closer than 30m to the nearest rail of the grade crossing.</p> <p>Responsibility: Road Authority Implementation: Category C Cost Estimate (±40%): TBD</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
2. Road Geometry			
Gradient within 8m of the nearest rail is 3.6% on the north road approach which exceeds the GCS limit of 2.0%.	<p>Gradients are an existing condition and may remain. Any future changes to the gradient must apply the GCS requirements in a manner that improves overall safety.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to ensure gradient on either road approach are compliant with the GCS.</p> <p>If the crossing is designated for the use of persons with assistive devices, gradients are not to exceed 1.0% within 5m of the crossing.</p> <p>Responsibility: Road Authority Implementation: Category C Cost Estimate (±40%): TBD</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
Difference between the road approach gradient and the railway cross-slope, 8.2%, exceeds the GCS limit of 2.0% on the north road approach classified as Rural Local Undivided.	<p>Gradients are an existing condition and may remain. Any future changes to the gradient must apply the GCS requirements in a manner that improves overall safety.</p> <p>With future development per the proposed subdivision works south of the crossing, future roadway reconstruction to ensure the difference between the road approach gradients and the railway cross-slope on each road approach are in compliant with the GCS.</p> <p>Responsibility: Road Authority Implementation: Category C Cost Estimate (±40%): TBD</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
3. Miscellaneous			
With future development per the proposed subdivision works south of the crossing at Bennett Road, a significant increase to the population within the area may be expected resulting in potential trespassing activities.	<p>Further risk assessments are recommended to be carried for this crossing and the development project area during and after construction to assess potential trespassing risks through the advancement of the subdivision.</p> <p>Installation of fencing may be required to reduce trespassing onto the railway corridor. If warranted, fencing is recommended for 400m along the railway right of way on both sides of each rail approach.</p> <p>Cost Estimate is based on the supply and installation of chain link fencing at \$93.75/m</p> <p>Responsibility: Railway or Roadway Authority Implementation: Category D Cost Estimate (±40%): \$150,000.00</p>		
Total Cost Estimate (±40%):			\$150,000.00

Table 4: Bennett Road (Mile 289.08) – Observations and Recommended Actions – Future Actions

Note that provisions are made in Tables 3 and 4 for recording the decision of the appropriate authorities relative to the assessment findings.

4.4 Cobble Dick Road (Mile 287.26, CN Kingston Subdivision)

Requirements	Existing Conditions
General Information - Rail	<ul style="list-style-type: none"> • Railway Company: Canadian National Railway • Subdivision: Kingston • Mile: 287.26 • Number of Tracks: 3 • Track Type: Mainline
General Information - Road	<ul style="list-style-type: none"> • Road Authority: The Corporation of the Municipality of Clarington • Road Name: Cobble Dick Road • Road Classification: Rural Local Undivided • Number of Lanes: 2 • Sidewalks, Paths or Trails: None provided
Crossing Type	<ul style="list-style-type: none"> • Active Crossing equipped with Railway Crossing Signs, Flashing Lights, Bells and Gates (FLBG)
Rail Operations	<ul style="list-style-type: none"> • Maximum Railway Operating Speed (passenger): 100 mph • Maximum Railway Operating Speed (freight): 65 mph • Daily Train Volume (total passenger and freight): 44
Road Operations	<ul style="list-style-type: none"> • Road Crossing Design Speed: 50 km/h • Average Annual Daily Traffic (AADT) : 826 • Vehicle types using the crossing: Standard roadway traffic, standard single unit bus (B-12) used as design vehicle
Sightlines	<ul style="list-style-type: none"> • Crossing is an active grade crossing with gates and is exempted from D_{SSD} and D_{STOPPED} sightline requirements. • Visibility of the flashing light units and Railway Crossing Signs from the SSD is: <ul style="list-style-type: none"> ○ Clear on both road approaches; may be obstructed by vegetation on the SE quadrant during spring and summer. Vegetation to be monitored (Photo 15 and 21). ○ Back lights are obstructed along Service Road, by the warning system housing unit on the south west quadrant. (Photo 14) • Sightline data was collected during the winter and sightlines must be re-assessed in the spring/summer when foliage is in place.
Incident History	<ul style="list-style-type: none"> • No reported crashes at the crossing within the past five years
Trespassing	<ul style="list-style-type: none"> • No evidence of trespassing observed within 400m (1/4 mile) each side of crossing, on November 14 2017 and January 18 2018.
Nearby Switching Operations / Yards	<ul style="list-style-type: none"> • Switching operations 120m east of crossing.

Requirements	Existing Conditions
Nearby Railway Bridges / Trestles and Other Structures	<ul style="list-style-type: none"> • None within 400m (1/4mile) on each side of the crossing
Other Nearby Crossings	<ul style="list-style-type: none"> • None within 400m (1/4mile) on each side of the crossing
Compliance with Regulatory Requirements	<ul style="list-style-type: none"> • GCR §104 (a) <ul style="list-style-type: none"> ○ Proposed location for whistle cessation is within a rail right-of-way and road approach as defined by the GCR • GCR §104 (b) <ul style="list-style-type: none"> ○ Crossing is equipped with flashing lights, bells and gates and satisfies Table D-1 of the GCS ○ Compliance with articles 12 to 16 of the GCS to be confirmed, based on receipt of data from CN. • GCR §104 (c) <ul style="list-style-type: none"> ○ No evidence of trespassing observed within 400m (1/4 mile) on each side of the grade crossing • GCR §104 (d) <ul style="list-style-type: none"> ○ Crossing is not located within 400m (1/4mile) of another grade crossing which requires whistling.

Table 5: Cobble Dick Road (Mile 287.26) – General Information

Recommendations:

The Road Authority (the Municipality) and the Railway Company (CN) may implement whistle cessation at the crossing located at **Cobbledick Road, Mile 287.26, CN Kingston Subdivision, Clarington, ON** subject to the following suggested remediation listed in Tables 6 and 7. Recommended Actions for immediate and future actions have been separated as per Tables 6 and 7, respectively. Recommended Actions include an indication of the party responsible for implementation. Actions are also assigned an implementation category based on the regulatory requirements and the timelines for their implementation, as specified in the Grade Crossing Regulations. The implementation categories are as follows:

- **Category A:** Requirement under the *Grade Crossing Regulations*; basic requirement that must be implemented immediately or warning system maintenance issues covered under Article 17 of the *Grade Crossing Standards*
- **Category B:** Requirement under the *Grade Crossing Regulations*; additional requirement that must be implemented within seven years after the *Grade Crossing Regulations* comes into force (by November 2021)
- **Category C:** Requirement under the *Grade Crossing Regulations*; to be addressed when the affected component is changed (no implementation timeline specified)
- **Category D:** Other recommendations; not required under the *Grade Crossing Regulations* but recommended based on guidelines and best practices

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
1. Grade Crossing Surface			
Crossing surface is uneven due to the condition of the crossing planks. (Photo 6 and 8)	Replace crossing planks or reconstruct crossing surface to ensure a smooth surface. Responsibility: Railway Company Implementation: Category B Cost Estimate (±40%): \$75,000.00* *Cost estimate is based on an estimated unit price of \$25,000.00 per rehabilitation/reconstruction of one 40ft crossing.		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
2. Sightlines			
D _{STOPPED} sightlines in the SW quadrant are restricted by warning system housing unit.	<p>Crossing is exempt from D_{STOPPED} requirements; however, sightlines may be improved by relocating the bungalow in SW quadrant.</p> <p>Responsibility: Railway Company Implementation: Category D Cost Estimate (±40%): TBD*</p> <p>*Cost estimate cannot be provided. Provision of sightlines along the railway right of way the responsibility of the Railway Company.</p>		
Visibility of the east mast, flashing light units and Railway Crossing Sign on the south road approach may be obstructed by vegetation along the east side of the road at the required SSD of 110m. (Vegetation conditions could not be assessed as field audit was completed in January)	<p>Monitor vegetation and trim to improve visibility of the flashing light units and Railway Crossing Sign.</p> <p>Responsibility: Roadway Authority Implementation: Category A Cost Estimate (±40%): \$1,000.00</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
3. Signs and Pavement Markings			
<p>Measurements for the Railway Crossing Ahead Sign on the north road approach do not meet the MUTCDC recommended limits:</p> <ul style="list-style-type: none"> Distance from nearest rail: 179.8m (50m -150m) 	<p>Sign does not meet MUTCDC recommended limits. Monitor and ensure sign is visible and provides adequate warning to road users.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$500.00</p>		
<p>Measurements for the Railway Crossing Ahead Sign along Service Road do not meet the MUTCDC recommended limits:</p> <ul style="list-style-type: none"> Distance from Cobble Dick Road: 167.8m (50m -150m) Lateral placement: 1.8m (2.0m – 4.5m) 	<p>Sign does not meet MUTCDC recommended limits. Monitor and ensure sign is visible and provides adequate warning to road users.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$500.00</p>		
<p>“X” pavement markings on the south road approach appears to have completely faded.</p>	<p>Remove and repaint “X” pavement markings on the south approach as per MUTCDC recommendations, 10m beyond the WA-18 signs and should take into consideration the recommendation to relocate the associated WA-18 sign as per MUTCDC recommendations.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$1000.00</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
<p>“X” pavement markings on the north road is fading.</p>	<p>Remove and repaint “X” pavement markings on the south approach as per MUTCDC recommendations, 10m beyond the WA-18 signs and should take into consideration the recommendation to relocate the associated WA-18 sign as per MUTCDC recommendations.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$1,000.00</p>		
<p>Stop bars on both road approaches are fading.</p>	<p>Remove and repaint stop bars on both road approaches as per MUTCDC recommendations. Stop bars should be provided 2m in advance of the warning system.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$1,000.00</p>		
<p>Directional dividing line does not extend for 30m south of crossing. Directional dividing line is present on south road approach between crossing and Service Road intersection.</p>	<p>Extend directional dividing line south of service road intersection for a total length of at least 30m from crossing.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$750.00</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
<p>Railway Crossing Ahead Sign on the north and south road approach do not depict the number of tracks at the crossing.</p> <p>Railway Crossing Ahead Sign on the north road approach is damaged and is leaning eastward.</p>	<p>Replace WA-18 signs with one that depicts the track configuration as per MUTCDC recommendations.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$1,000.00</p>		
<p>Railway Crossing Ahead Sign on service road does not depict the roadway configuration or number of tracks at the crossing.</p>	<p>Replace WA-18 signs with one that depicts the track and roadway configuration as per MUTCDC recommendations.</p> <p>Responsibility: Road Authority Implementation: Category D Cost Estimate (±40%): \$500.00</p>		
4. Grade Crossing Warning System			
<p>The clearance distance from the edge of the travelled way is 0.5m for the south signal mast which is less than the GCS limit of 1.875m for roadways without a curb.</p>	<p>Relocate warning system mast to meet GCS limits; or construct curb at least 0.625m from the warning system clearance point to protect the warning system.</p> <p>Responsibility: Railway Company; involvement from Road Authority is required for curb option. Implementation: Category C Cost Estimate (±40%): \$2,000.00 \$3,000.00 (Construction of curb)</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
The distance between the top of the foundation and the surrounding ground surface is 300mm for the north signal mast and 190mm for the south signal mast. This exceeds the GCS maximum limit of 100mm.	<p>Railway Company to ensure grade crossing warning system foundations are in compliance with the GCS.</p> <p>Responsibility: Railway Company; Implementation: Category C Cost Estimate ($\pm 40\%$): TBD</p> <p>*Cost estimate cannot be provided. Warning system maintenance per GCS requirements is the responsibility of the Railway Company.</p>		
Total Cost Estimate ($\pm 40\%$):			<p>\$84,250.00 (with relocation of warning system)</p> <p>\$85,250.00 (with construction of curb)</p>

Table 6: Cobble Dick Road (Mile 287.26) – Observations and Recommended Actions – Immediate Actions

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
1. Location of the Grade Crossing			
<p>"D" distance to the nearest intersection is 19.5m (private driveway) and 20m (Service Road) which is less than the GCS limit of 30m.</p> <p>Front lights are visible for vehicles turning from the above mentioned property accesses on both road approaches. (Photo 13, 14, 19, 21)</p>	<p>Property access locations are an existing condition and may remain. Any future changes to the location of the crossing or intersections must apply the GCS requirements in a manner that improves overall safety.</p> <p>Responsibility: Road Authority Implementation: Category C Cost Estimate (±40%): TBD</p>		
2. Road Geometry			
<p>Shoulders on the north road approach vary just north of the crossing towards the Highway 401 overpass.</p>	<p>Future changes to the roadway cross-section must ensure that the width of the travelled way and shoulders at the crossing surface are not less than the width of travelled way and the shoulder on the road approaches.</p> <p>Responsibility: Road Authority Implementation: Category C Cost Estimate (±40%): TBD</p>		

Observations	Suggested Actions	Client Response	
		Agree (Y/N)	Comments
Gradient within 8m of the nearest rail is 3.4% on the north road approach and 5.5% on the south road approach which exceeds the GCS limit of 2.0%.	<p>Gradients are an existing condition and may remain. Any future changes to the gradient must apply the GCS requirements in a manner that improves overall safety.</p> <p>If the crossing is designated for the use of persons with assistive devices, gradients are not to exceed 1.0% within 5m of the crossing.</p> <p>Responsibility: Road Authority Implementation: Category C Cost Estimate (±40%): TBD</p>		
Difference between the road approach gradient and the railway cross-slope, 5.4% on the south road approach and 5.2 on the north road approach, exceeds the GCS limit of 2.0% on road approaches classified as Rural Local Undivided.	<p>Gradients are an existing condition and may remain. Any future changes to the gradient must apply the GCS requirements in a manner that improves overall safety.</p> <p>Responsibility: Road Authority Implementation: Category C Cost Estimate (±40%): TBD</p>		

Table 7: Cobble Dick Road (Mile 287.26) – Observations and Recommended Actions – Future Actions

Note that provisions are made in Tables 6 and 7 for recording the decision of the appropriate authorities relative to the assessment findings.

4.5 Cost Estimate Summary

Tables 8 and 9 provide a cost estimate summary per implementation category for the Observations and Recommended Immediate Actions and Future Actions, respectively.

Crossing	Cost Estimate – Implementation Category				Total Cost Estimate
	Category A	Category B	Category C	Category D	
Bennett Road	\$0.00	\$83,000.00	\$2,000.00/ \$3,000.00	\$5,500.00	\$90,500.00/ \$91,500.00
Cobbledick Road	\$1,000.00	\$75,000.00	\$2,000.00/ \$3,000.00	\$6,250.00	\$84,250.00/ \$85,250.00

Table 8: Cost Estimate Summary – Immediate Actions

Crossing	Cost Estimate – Implementation Category				Total Cost Estimate
	Category A	Category B	Category C	Category D	
Bennett Road	\$0.00	\$0.00	\$0.00	\$150,000.00	\$150,000.00
Cobbledick Road	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Table 9: Cost Estimate Summary – Future Actions

5.0 SUMMARY AND CONCLUSIONS

The execution of a Crossing Safety Assessment is a proactive strategy to aid in determining existing conditions and safety measures in place at a railway crossing for all crossing users. Train whistling is a crucial safety measure that provides motorists, cyclists and pedestrians with advance warning of an approaching train. Whistle cessation is an option that is recommended for implementation once recommended actions for safety improvements at the crossings have been completed.

It should be noted that for a crossing to be considered for an exemption from whistling, the requirements in section 104 of the GCR and Appendix D of the GCS must be met. Observations and suggested actions outlined within this report outside of section 104 of the GCR and Appendix D of the GCS are not required for the crossing to be considered for an exemption from whistling but are recommended to improve the level of safety at each facility.

Based on the study completed on both crossings located at Bennett Road and Cobble Dick Road, the two crossings are eligible for whistle cessation as per Appendix D subject to implementation of recommended actions for safety improvements.

Further assessment pursuant to GCR for compliance with the requirements specified within section 104, notably section 104 b), to enable exemption from the regulatory train whistling requirements is to be determined and subject to this assessment once additional information has been provided from CN.

It should be noted that cessation of whistling reduces the road safety at the railway crossings and increases potential liability and risk to the Municipality. Future development and future traffic impacts south of the crossings at Bennett Road and Cobble Dick Road were not analyzed in the study. However, it is expected that the study area may observe an increase of vehicular, pedestrian and recreational traffic due to the increase of residential developments which will require the safety at these two crossings to be fully maintained. Further risk assessments are recommended to be completed once the future development has been constructed.

It is recommended that the Municipality consider the grade separation of Bennett Road and Cobble Dick Road as an option for whistle cessation as it will eliminate the increased potential of safety hazards brought by the expected increase of pedestrian, vehicular and railway traffic that may possibly be brought to the area by the future subdivision developments. Such hazards include but are not limited to unauthorized access to the railway right of way and collisions at the railway grade crossings.

Note:

The field investigation/audit of the grade crossings at 287.26 and 289.08 of the CN Kingston Subdivision in Clarington, ON covers physical features which may affect road and rail user safety and it has sought to identify potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this report were to be addressed, this would not confirm that the crossing is 'safe'; rather, adoption of the recommendations should improve the level of safety at this facility.

FIELD DATA FORMS



Active Public Crossings

Bennett Road, Mile 289.08, CN Kingston Subdivision, Corporation of Municipality of Clarington, Ontario

NOTE: The safety assessment of this grade crossing covers physical features which may affect road and rail user safety, and identifies potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this assessment were to be addressed, this would not confirm that the crossing is 'safe', rather, adoption of the recommendations should improve the level of safety at this facility.

Date of Assessment: **21/11/2017, 18/01/2018**

Assessment Team Members & Affiliations: **Ian De Vera, Evgeniy Orlov, Jared Chernoff, WSP**

Reason for Assessment:

<input type="checkbox"/> periodic assessment	<input type="checkbox"/> significant change in infrastructure	<input type="checkbox"/> significant change in road or rail volumes
<input checked="" type="checkbox"/> cessation of whistling	<input type="checkbox"/> significant change in train operations	<input type="checkbox"/> significant change in road or rail speeds
<input type="checkbox"/> change in vehicle types	<input type="checkbox"/> 2+ fatal collisions in 5yr. period	<input type="checkbox"/> other collision experience (see below)

Railway Company: **Canadian National Railway**

Crossing Location: **Bennett Road**

Municipality: **Corporation of Municipality of Clarington**

Location Number:

Railway: **CN** Mile: **289.08**

Subdivision: **Kingston** Spur:

Type of Grade Crossing: **FLBG**

Track Type: **Mainline**

Road Authority: **Corporation of Municipality of Clarington**

Road Name / Number: **Bennett Road**

Province: **Ontario**

Location Reference:

Road Classification: **Rural Local Undivided**

Collision History (5-year period):

Property Damage Collisions:	<input type="checkbox"/>	Number of Persons Injured:	<input type="checkbox"/>
+ Personal Injury Collisions:	<input type="checkbox"/>	Number of Persons Killed:	<input type="checkbox"/>
+ Fatal Injury Collisions:	<input type="checkbox"/>		
= Total Collisions in the last 5 year period:	0		

Details of Collisions:

SCENE PHOTOGRAPHS

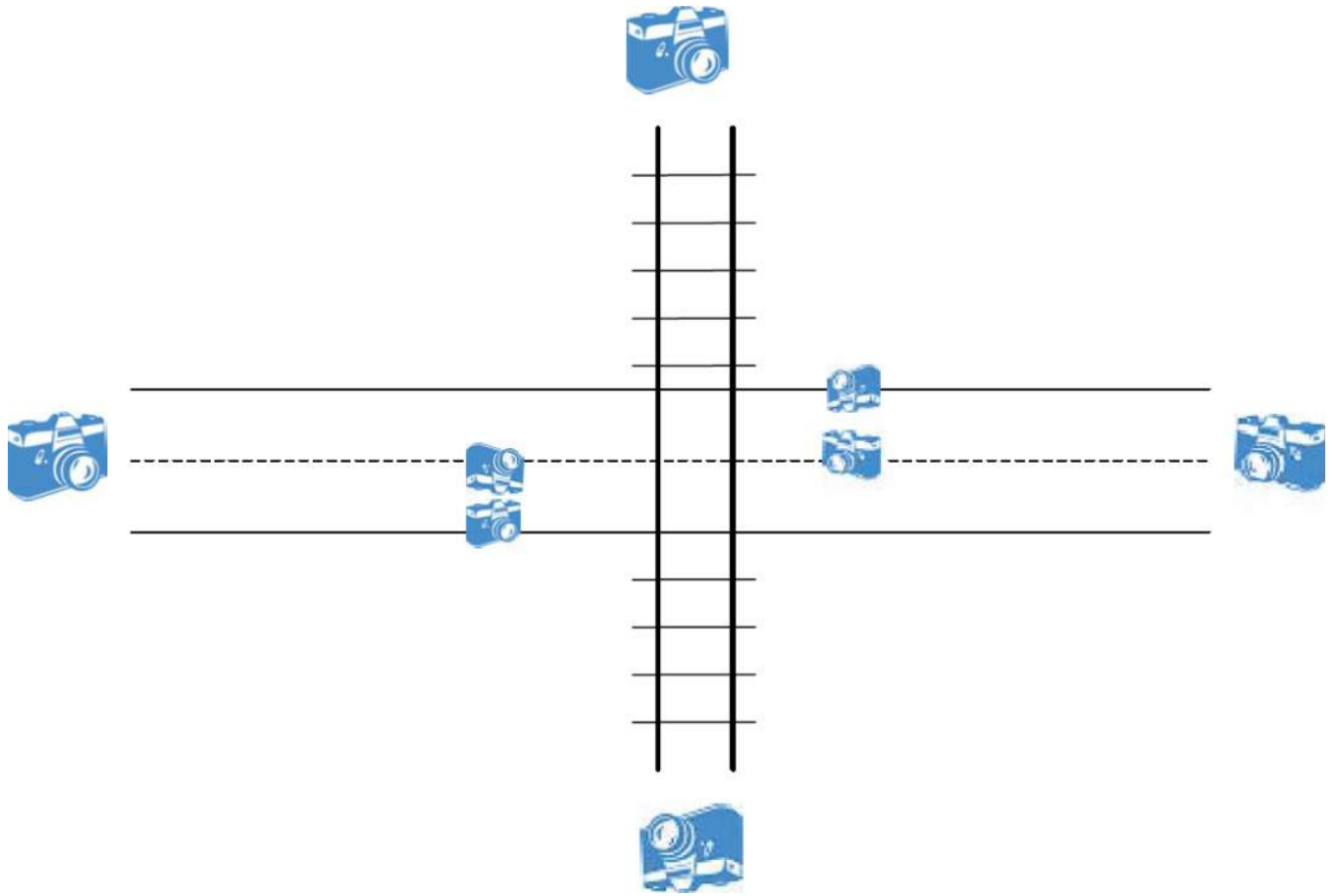




Photo 1: Road approach, looking north.



Photo 2: Northeast quadrant.



Photo 3: Rail approach, looking east.



Photo 4: Southeast quadrant.



Photo 5: Road approach, looking south.



Photo 6: Southwest quadrant.



Photo 7: Rail approach, looking west.



Photo 8: Northwest quadrant.



Photo 9: D_{STOPPED} sightlines, north road approach looking west (to the driver's right).



Photo 10: D_{STOPPED} sightlines, north road approach looking east (to the driver's left).



Photo 11: D_{STOPPED} sightlines, south road approach looking east (to the driver's right).



Photo 12: D_{STOPPED} sightlines, south road approach looking west (to the driver's left).



Photo 13: Gradient through crossing, looking south. Uneven transition between north road approach and crossing, with positive gradient through crossing towards south road approach.



Photo 14: Poor transition from north road approach to crossing surface.



Photo 15: Poor asphalt conditions on north road approach with loose gravel and pavement cracks.



Photo 16: Poor asphalt conditions on south road approach with loose gravel and potholes present.



Photo 17: Noted scrap crossing plank material placed on the south east quadrant of the crossing.



Photo 18: Property access on south road approach, east side, 5m from crossing.



Photo 19: Property access on south road approach, east side, 14m from crossing.



Photo 20: Waterfront Trail access on south road approach, east side, 25m from crossing.



Photo 21: Above property accesses on south road approach, east side.



Photo 22: South road approach, crossing at SSD of 110m for road speed of 50km/h. “X” pavement markings are not present.



Photo 23: “Stop Before Crossing” sign placed along south road approach, east side of road.



Photo 24: “Report if Blocked...” sign placed along south road approach east side of road, sign is leaning eastward.



Photo 25: WA-18 sign, WA-22 sign and “Be Prepared to Stop” sign placed on same pole on south road approach. Signs are not aligned perpendicular to the road.



Photo 26: Truck traversing crossing, required to slow down to safely navigate through crossing due to uneven transition and grade changes through crossing. Stop bars are not present on the south road approach.



Photo 27: Front light units on the south road approach aligned towards intermediate areas on the south east quadrant.



Photo 28: North road approach, crossing at SSD of 110m for road speed of 50km/h. "X" pavement markings are not present.



Photo 29: WA-18 sign, WA-22 sign placed on same pole on north road approach.



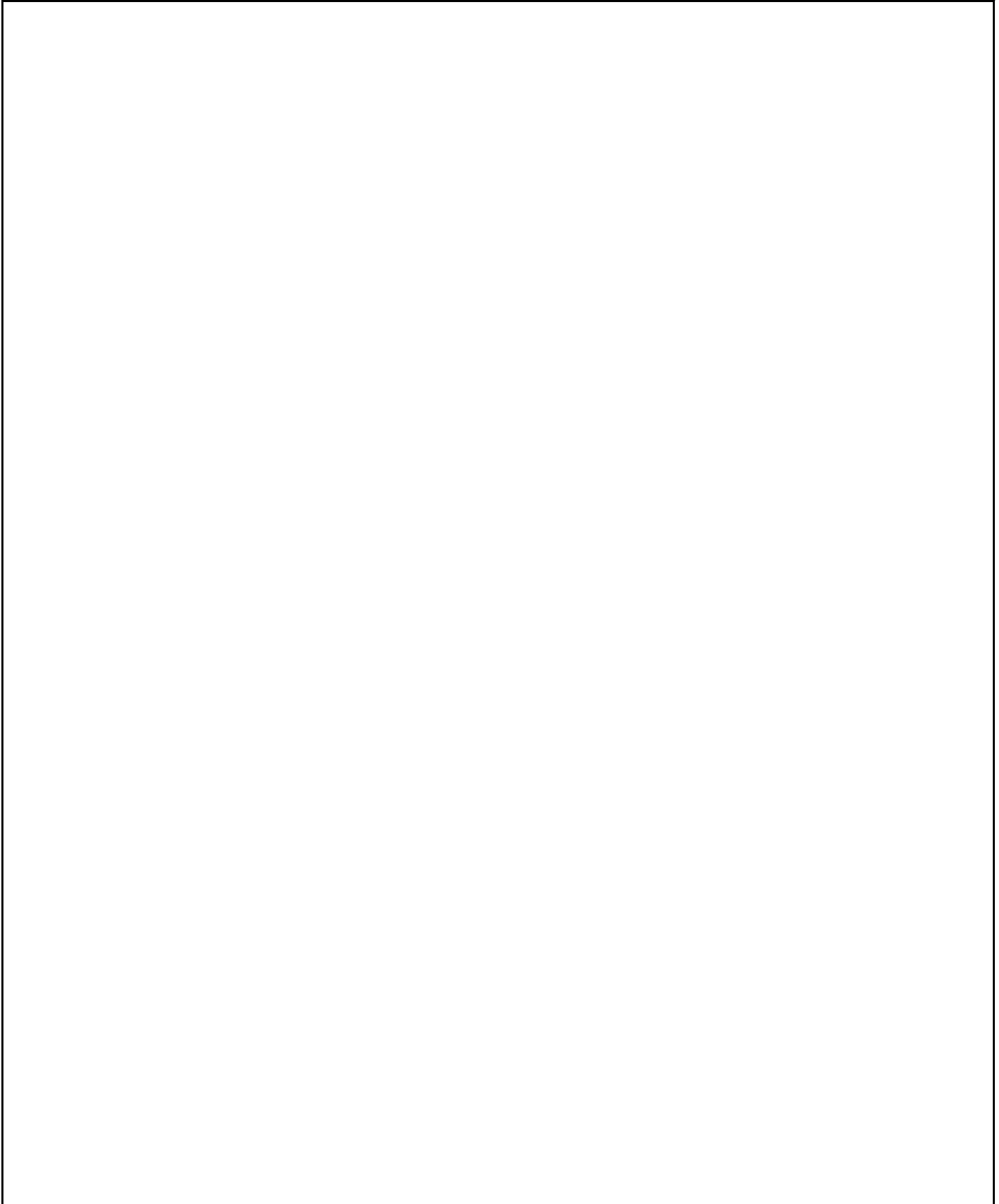
Photo 30: "Be Prepared to Stop" sign on the north road approach.

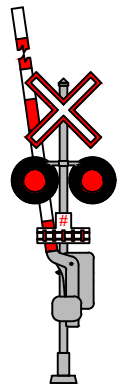


Photo 31: “Dismount Before Crossing”, “Stop Before Crossing” and “Report if Blocked...” sign on the north road approach.

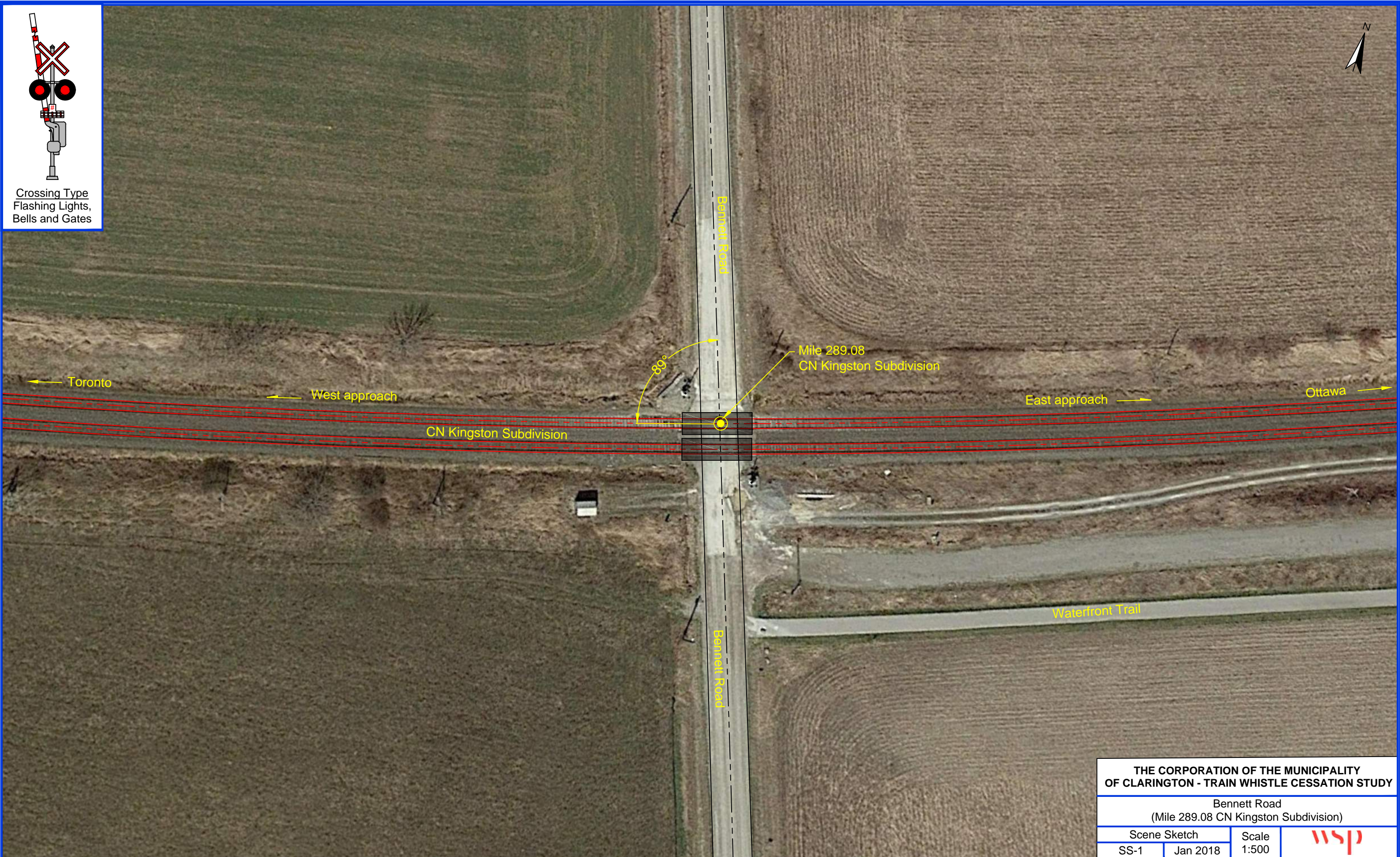
DRAFT

NOTE: All references to direction in this safety review are keyed to this diagram.





Crossing Type
Flashing Lights,
Bells and Gates



THE CORPORATION OF THE MUNICIPALITY OF CLARINGTON - TRAIN WHISTLE CESSATION STUDY		
Bennett Road (Mile 289.08 CN Kingston Subdivision)		
Scene Sketch	Scale	
SS-1	Jan 2018	

GENERAL INFORMATION

Source	Item	Reference
Rail	Maximum Railway Operating Speed, V_T = 100 mph = 161 km/h	
Rail	Daily Train Volume Freight trains/day: 12 Passenger trains/day: 32	
Rail	Switching during daytime? TBD Switching during nighttime? TBD	
Road	Average Annual Daily Traffic, AADT = 24 vpd Year of Count: TBD	
Road	High seasonal fluctuation in volumes? Not Observed	
Road	Pedestrian Volume = N.M. pedestrians/day	
Road	Cyclist Volume = N.M. cyclists/day	
Road T	Is crossing on a School Bus Route? Not Observed	
Road T	Do Dangerous Goods Trucks use this roadway? Not Observed	
Road T	Regular use of crossing by persons with Assistive Devices? Not Observed	
Road T	Other special road users? Type: N/A Daily Volume: N/A	
Road	Forecasted AADT = N/A Forecast Year: N/A	
Road T	Road Crossing Design Speed = 50 km/h	
Observe	Surrounding Land Use: Residential, Agricultural Urban/rural? Rural	
Observe	Any schools, retirement homes, etc. nearby? N/A	

Notes:

T indicates information should be confirmed by field observation

1. Road Authority should provide plans if available.
2. Forecast AADT until next assessment if significant developments are expected or if a planned bypass may reduce volumes.

GCS Section 10

Figure 10-1 – Clearance Distance (cd) for Grade Crossings

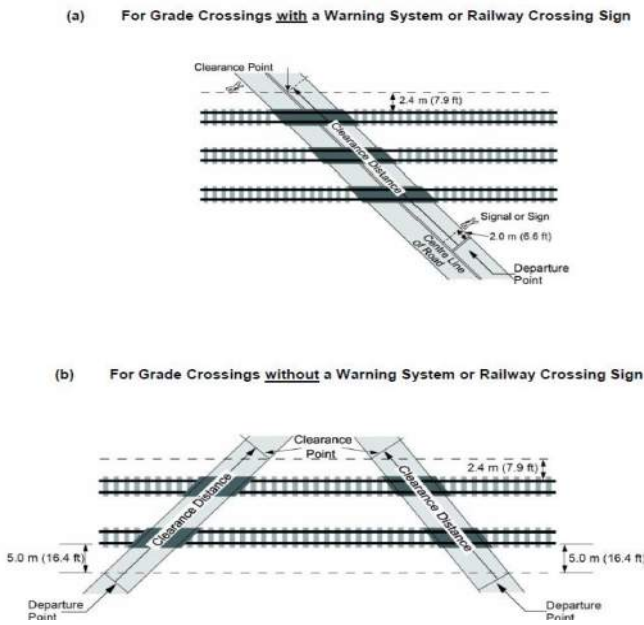
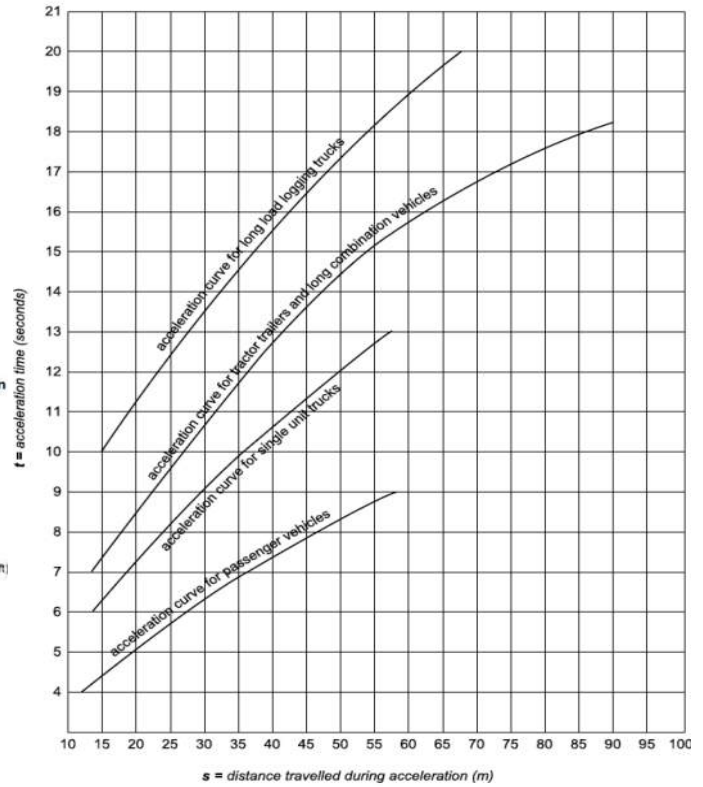


Figure 10-2 Assumed Acceleration Curves



Source: *Geometric Design Guide for Canadian Roads*, published by the Transportation Association of Canada and dated September 1999

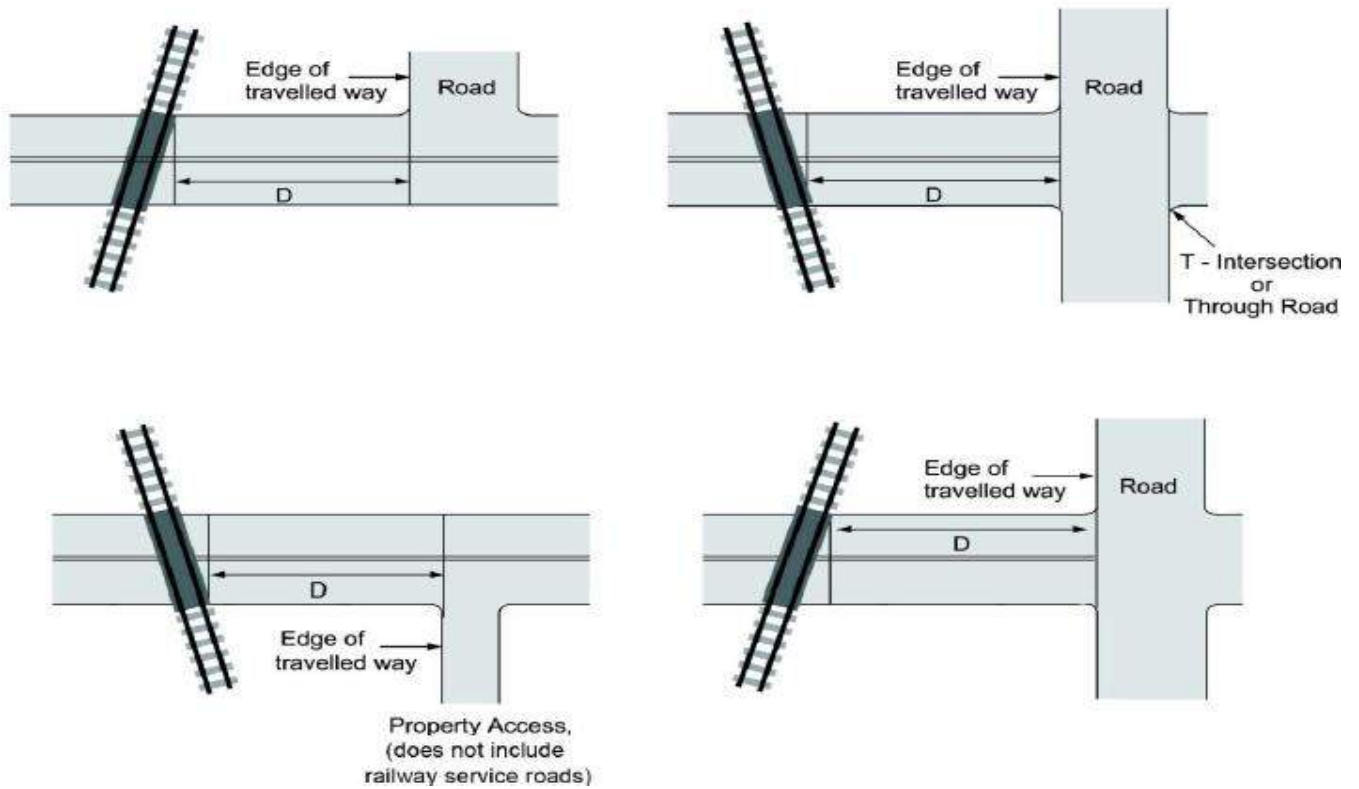
Table 10-1 Ratios of Acceleration Times on Grades

Design Vehicle	Road Grade (%)				
	-4	-2	0	+2	+4
Passenger Car	0.7	0.9	1.0	1.1	1.3
Single Unit Truck & Buses	0.8	0.9	1.0	1.1	1.3
Tractor-Semitrailer	0.8	0.9	1.0	1.2	1.7

Source: *Geometric Design Guide for Canadian Roads*, published by the Transportation Association of Canada and dated September 1999

Source	Item	Reference
	Design Vehicle	
Rail	Type: Heavy Single-Unit Trucks	Sect. 10.3.1
<i>look-up</i>	Length, L = 11.5 m	Sect. 10.3.1
<i>look-up</i>	Stopping Sight Distance, SSD = 110 m	Sect. 7.5
measure	Clearance Distance, cd = 15.5 m	Fig. 10-1
calculate	Vehicle Travel Distance, S = L + cd = 27 m	Sect. 10.2.1
calculate	Vehicle Departure Time, $T_D = J + T$ = 13.1 sec	Sect. 10.3.2
<i>look-up</i>	J = 2 sec = driver's reaction time	Sect. 10.3.2
calculate	T = (t x G) = 11.1 sec = the time for the design vehicle to travel through S	
<i>look-up</i>	t = 8.5 sec = the time for the design vehicle to accelerate through S	GDG Fig. 2.3.3.3
<i>look-up</i>	G = 1.30 = ratio of acceleration time on grade/grade adjustment factor	GDG T2.3.3.2
	Road Grade Effect:	
Road	maximum approach grade within S = 4 %	
observe	Do field acceleration times exceed T_D ? N/A	
	Pedestrian, Cyclist & Assistive Devices Departure Time, $T_P = cd/V_P$	
calculate	T_P = 12.7 sec	
<i>look-up</i>	V_P = 1.22 m/s (maximum 1.22 m/s)	

Figure 11-1 – Restrictions on the Proximity of Intersections and Entranceways to Public Grade Crossings



Source	Item	Reference
measure	"D" should not be less than 30m for either approach if train speed exceeds 15 mph. "D" = N/A m on N approach = 14 m on S approach	Fig. 11-1
observe	Are there pedestrian crossings on either road approach that could cause vehicles to queue back to the tracks? No	
observe	Is "D" insufficient such that road vehicles might queue onto the tracks? No Is "D" insufficient such that road vehicles turning from a side street might not see warning devices for the crossing? No	

Comments Following Site Visit:

North Road Approach

-no property accesses/intersections within 30m.

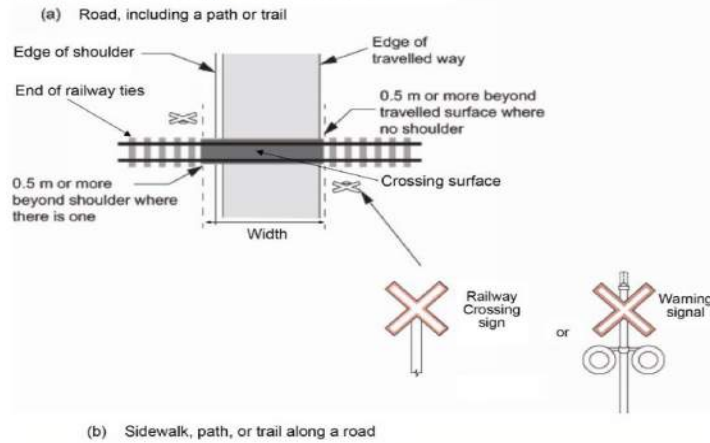
Property accesses on the South Road Approach within 30m of the crossing:

-5m (east side; railway service road)

-14m (east side, property access)

-24m (east side, Waterfront Trail)

Figure 5-1 – Grade Crossing Surface Dimensions



(b) Sidewalk, path, or trail along a road

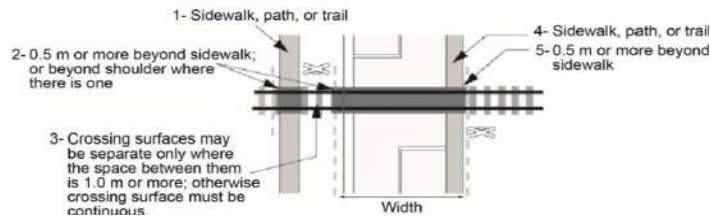


Figure 3-1 – Crossing Surface

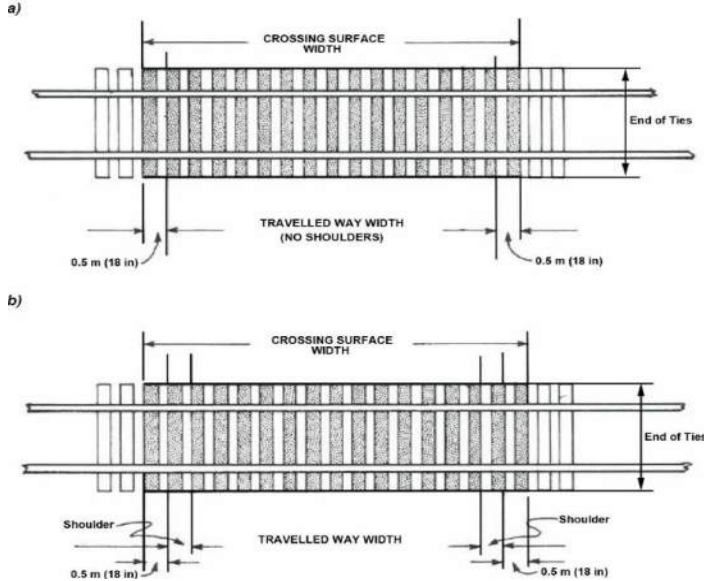


Table 5-1 – Grade Crossing Surface – Cross Section

a) Flangeway:		
Width	Minimum	65 mm
	Maximum for:	
	Public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices	75 mm
	All other grade crossings	120 mm
Depth:	Minimum	50 mm
	Maximum for:	
	Public sidewalks, paths and trails designated by the road authority for use by persons using assistive devices	75 mm
	All other grade crossings	No limit
b) Field side gap		
A space is permitted on the outer side of the rail at rural locations, except for public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices		
	Maximum width	120 mm
	Maximum depth	No limit
c) Elevation of the top of the rail with respect to the crossing surface		
The top of the crossing surface must be installed as close as possible to the top of the rail within the wear limits below:		
Wear limits:		
Public sidewalk, path or trail designated by the road authority for use by persons using assistive devices		
	Maximum distance of the top of the rail above crossing surface	13 mm
	Maximum distance of the top of the rail below crossing surface	7 mm
All other public grade crossings; the maximum distance of the top of the rail above or below the crossing surface		25 mm
Private grade crossings; the maximum distance of the top of the rail above or below the crossing surface		50 mm

Source	Item	Reference
observe	Is the crossing smooth enough to allow road vehicles, pedestrians, cyclists and other road users to cross at their normal speed without consequence? Comment below. No	Sect. 5.1
observe	Grade Crossing Surface Material: Wooden Planks	
observe	Approach Road Surface Type: Asphalt Approach Road Surface Condition: Poor Roadway Illumination? No	
measure	Road Crossing Surface Width = 12.4 m Centre Lane/Median Width = N/A m Travelled Way Width = 3.3 m on W side = 3.3 m on E side Paved Shoulder Width = 0 m on W side = 0 m on E side Surface Extension beyond Travel Lanes/Shoulder = 2.9 m on W side = 2.9 m on E side Distance between Travel Lane/Shoulder and Sidewalk/Path/Trail = N/A m on W side = N/A m on E side Sidewalk/Path/Trail Width = N/A m on W side = N/A m on E side Surface Extension beyond Sidewalk/Path/Trail = N/A m on W side = N/A m on E side	Fig. 3-1 Fig. 5-1
	Cross-Section:	
Rail	Flangeway width = Notes mm (min. = 65 mm; max. = 75 mm ¹ or 120 mm)	Table 5-1
Rail	Flangeway depth = Notes mm (min. = 50 mm; max. = 75 mm ¹ or no limit)	Table 5-1
Rail	Field Side Gap width = Notes mm (max. = 120 mm or 0 mm ¹)	Table 5-1
Rail	Field Side Gap depth = Notes mm (max. = no limit or 0 mm ¹)	Table 5-1
Rail	Elevation of Top Rail above road surface = Notes mm (max. = 13 mm ¹ or 25 mm)	Table 5-1
Rail	Elevation of Top Rail below road surface = Notes mm (min. = -7 mm ¹ or -25 mm)	Table 5-1

1. Public sidewalks, paths or trails designated by the road authority for use of persons using assistive devices

Comments Following Site Visit:

-Crossing appears to be very bumpy and appears to be within superelevated area. Rail is raised above crossing planks due to superelevation.

The condition of both road approaches is poor within 125m of the crossing. Road approaches are unpaved. There are also potholes and loose gravel on both road approaches. Poor paving within crossing is noted.

Please see the following page for notes regarding Flangeway width, flageway depth and fieldside gap width.

- Flangeway Width:
 - North Track - 98mm
 - South Track - 68mm

- Flangeway Depth:
 - North Track- 180mm
 - South Track- 55mm

- Field side gap width:
 - North Track- 75mm
 - South Track- N/A, wood planking installed in gap

- Field side gap depth:
 - North Track- 165mm
 - South Track- N/A, wood planking installed in gap

- Elevation of top rail above road surface:
 - North Track- 5-10mm
 - South Track- 5-10mm

- Elevation of top rail below road surface:
 - North Track- 0mm
 - South Track- 0mm

Source	Item	Reference
observe	Are the horizontal and vertical alignments smooth and continuous throughout SSD? N Approach No S Approach No	Sect. 6.1
observe	Are the road lanes and shoulders at least the same width on the crossing as on the road approaches? N Approach Yes S Approach Yes	Sect. 6.4
	Grades:	
measure	Road Approach Grades Within 8m -3.6 % on N approach -0.8 % on S approach (max. = 2%) Between 8m to 18m -4.0 % on N approach -2.0 % on S approach (max. = 5%)	Sect. 6.3
look-up	Road Classification Rural Local Undivided	Sect. 6.2
calculate	Allowable difference between roadway gradient and railway cross-slope = 2 %	GDG T-2.3-13.1
measure	Road approach gradient at crossing: -3.6 % on N approach -0.8 % on S approach Railway Cross Slope: notes 4 %	Sect. 6.2 GDG T-2.3-13.1
observe	Is the difference between the road approach gradient and the railway cross slope, or the railway gradient and the road approach cross slope, in accordance with the design standards of the Geometric Design Guide (Table 2.3.13.1)? N Approach Not Observed S Approach Not Observed	Sect. 6.2 GDG T-2.3-13.1
Rail	Are rail tracks super elevated? N Approach Yes S Approach Yes	
Road	Grade Crossing Angle = 89 ° (70° min and 110° max without warning system; 30° min and 150° max with warning system)	Sect. 6.5
observe	Condition of Road Approaches: anything that might affect stopping or acceleration. Comment.	
observe	Is there any evidence that "low-bed" trucks have difficulty negotiating the crossing? i.e. might they bottom-out or get stuck? Not Observed	

Comments Following Site Visit:

Vertical alignments from the north road approach through the crossing along the south road approach are not smooth and continuous. Paving/crossing surface at crossing provides for bumpy transition.

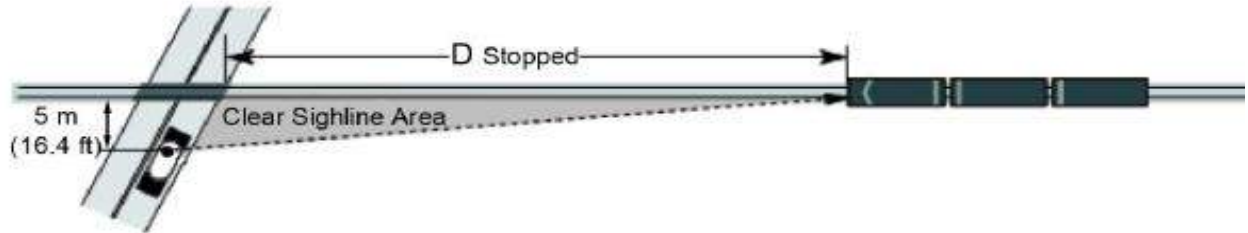
Railway Cross Slope:
North Track: 4.8%; South Track: 6.0%

Allowable difference between the road approach gradient and the railway cross-slope is not in accordance with 6.2 of the GCS:
North Road Approach: difference = 8.2% (allowable difference 2% for roadway classified as Rural Local Undivided).

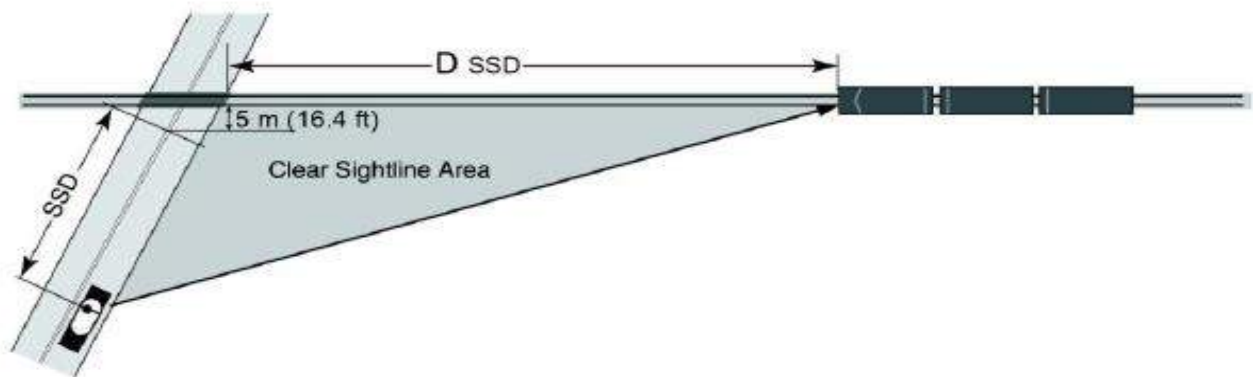
Gradient of the north road approach within 8m of the nearest rail is 3.6% which exceeds the GCS limit of 2%.

Figure 7-1 – Minimum Sightlines – Grade Crossings

(a) Sightlines for Users Stopped at a Grade Crossing (applicable to all quadrants).



(b) Sightlines for Users Approaching a Grade Crossing (applicable to all quadrants).



Driver Eye Height	= 1.05m passenger vehicles, pedestrians, cyclists & assistive devices
	= 1.80m buses & single-unit trucks
	= 2.10m large trucks & tractor-trailers
Target Height	= 1.20m above rails

Warning: some formulae are based on Imperial units while others are Metric			
Source	Item		Reference
look-up	Type of Grade Crossing: FLBG	Are gates present?	Yes
look-up	Is the crossing exempted from sightline requirements?		Yes
look-up	SSD minimum = 110 m		
measure	SSD actual: N Approach 110 m	S Approach 110 m	Sect. 7.2
	For Users Stopped at a Grade Crossing (See Fig 7-1(a))		
	$D_{STOPPED} = 1.47V_T \times T_{STOPPED}$ where V_T = railway design speed in mph (Sheet 4) and $T_{STOPPED}$ = departure times T_D or T_P (Sheet 4)		
look-up	Is crossing exempted from $D_{STOPPED}$ requirements?		Yes
look-up	Design Vehicle Departure Time (T_D)		= 13.1 sec (from sheet 4)
look-up	Pedestrian, Cyclist & Assistive Device Departure Time (T_P)		= 12.7 sec (from sheet 4)
calculate	$D_{STOPPED-D}$ minimum	= 1924 ft = 587 m	
calculate	$D_{STOPPED-P}$ minimum	= 1868 ft = 569 m	
measure	$D_{STOPPED}$ actual N Approach	103 m to driver's left	118 m to driver's right
measure	S Approach	N/A m to driver's left	N/A m to driver's right
observe	Are there any obstacles within the sight triangles that affect visibility? Comment.		No

Comments Following Site Visit:

Crossing is equipped with flashing lights, bells and gates and is exempt from DSSD and DSTOPPED sightline requirements.

Actual DSTOPPED on the north road approach to the driver's right is 117.5m, restricted due to railway curve on east rail approach.

Actual DSTOPPED on the north road approach to the driver's left is 103m, restricted due to railway curve on west rail approach.

Actual SSD is greater than 110m.

Visibility of the front light units on both road approaches is clear.

GCS Section 8

Figure 8-1 – Railway Crossing Sign and Number of Tracks Sign

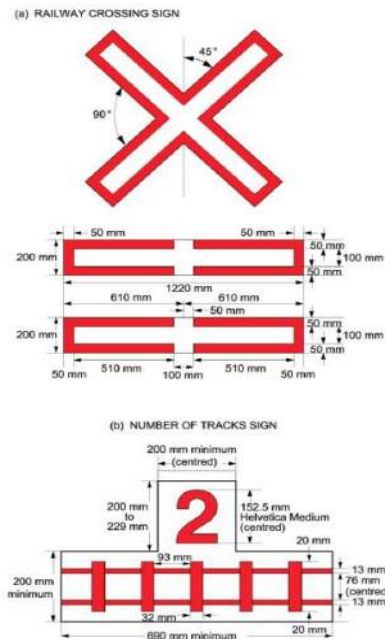


Figure 8-2 – Retroreflective Stripes on the Back of the Railway Crossing Sign and on the Sign Supporting Post (public grade crossings without a grade crossing warning system)

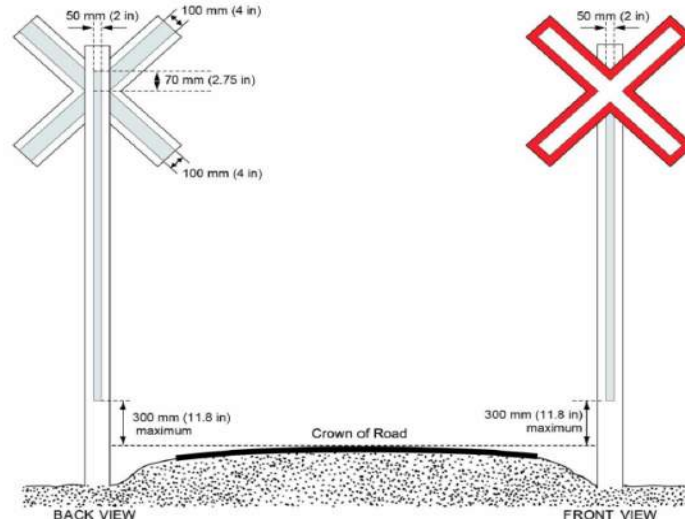


Figure 8-3 – Location of Railway Crossing Signs and Number of Tracks Signs (public grade crossings without warning systems)

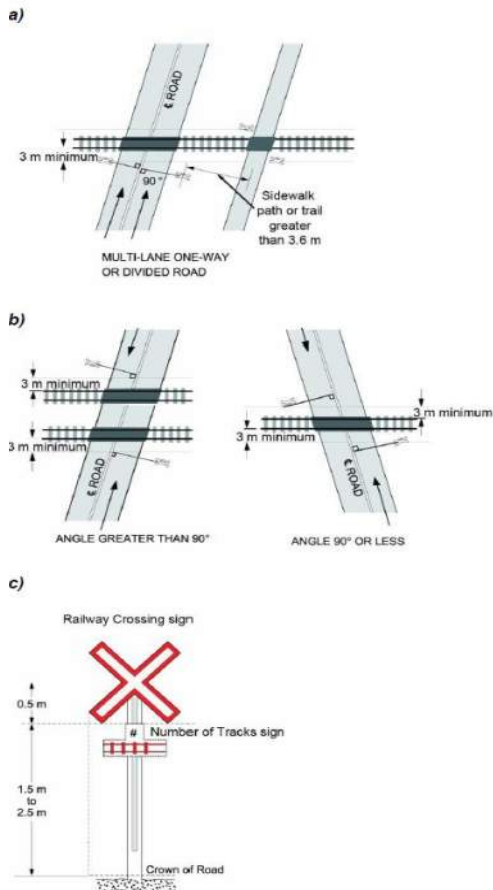
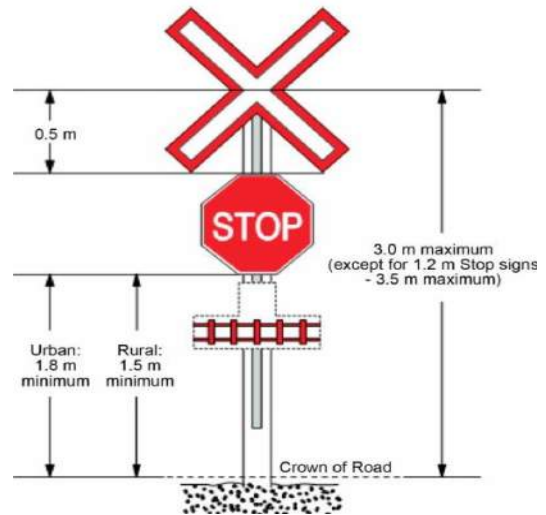


Figure 8-4 – Stop Signs



Source	Item	Reference
	Railway Crossing Sign	Sect. 8.1 MUTCDC A2.2.7
observe	Are signs present? N Approach Yes S Approach Yes	Sect. 4.1.2
observe	Are signs as shown in Figure 8-1(a)? N Approach Yes S Approach Yes	Fig. 8-1
Comments Following Site Visit:		

Source	Item	Reference
	Number of Tracks Sign	
observe	Are signs present? N Approach Yes S Approach Yes	Sect 4.1.2
look-up	Are signs required? N Approach Yes S Approach Yes	Sect 4.1.2
observe	Are signs as shown in Figure 8-1(b)? N Approach Yes S Approach Yes	Fig. 8-1
observe	Are signs installed on the supporting post of each railway crossing sign as shown in Figure 8-3(c)? N Approach Yes S Approach Yes	Fig. 8-3
Comments Following Site Visit:		

RAILWAY CROSSING OF ROAD AND BICYCLE LANE

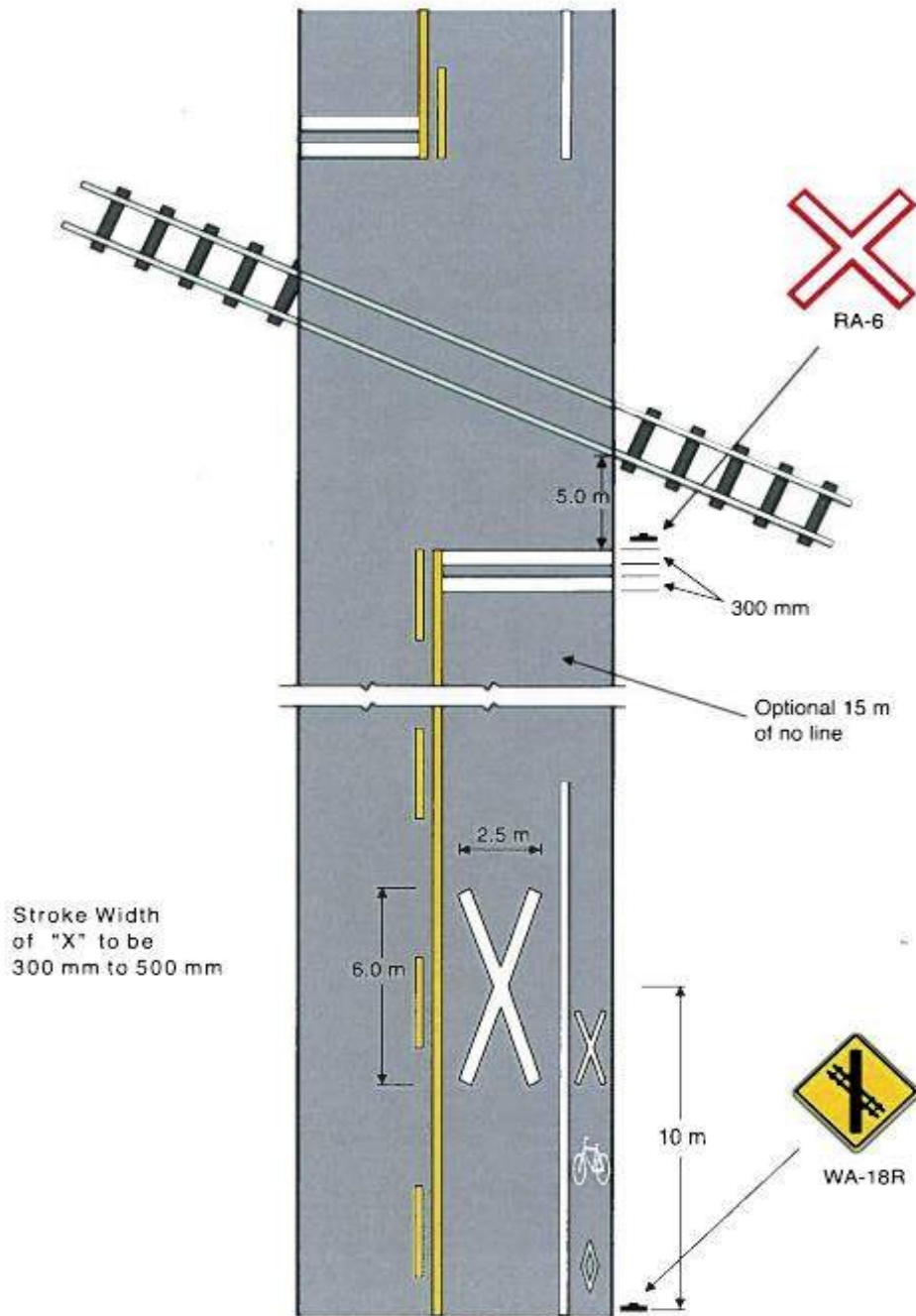


FIGURE C1-6

JANUARY 2014

Source	Item	Reference
	Railway Crossing Ahead Sign (WA-18, 19 & 20)	Sect. 8.2 MUTCDC 3.4.2
observe	Are signs present? N Approach Yes S Approach Yes	
look-up	Are signs required? N Approach No S Approach No	GCR Sect. 66
observe	Do signs have the appropriate orientation? N Approach Yes S Approach Yes	MUTCDC Fig. C1-6
measure	Distance to nearest rail: N Approach 166 m S Approach 95.3 m	MUTCDC A3.1.4
	Lateral Placement: N Approach 3 m S Approach 1.8 m	MUTCDC A1.7.2
	Height: N Approach 1.8 m S Approach 2.2 m	MUTCDC A1.7.2
<p>Comments Following Site Visit:</p> <p>Sign post for the Railway Crossing Ahead Sign (WA-18) on the south road approach is not perpendicular to the road.</p> <p>Railway Crossing Ahead Sign on the north road approach does not meet the following MUTCDC recommendations:</p> <ul style="list-style-type: none"> Distance: 166m from the nearest rail, which exceeds the MUTCDC recommended limit of 150m. <p>Railway Crossing Ahead Sign on the south road approach does not meet the following MUTCDC recommendations:</p> <ul style="list-style-type: none"> Lateral Placement: 1.8m from the edge of travelled way, which does not meet the MUTCDC recommended minimum limit of 2.0m 		

Source	Item	Reference
	Advisory Speed Tab Sign (WA-7S)	Sect. 8.2 MUTCDC 3.2.5
observe	Are signs present? N Approach No S Approach No	
look-up	Are signs required? N Approach No S Approach No	GCR Sect. 66
observe	Are signs mounted on the same post as the Railway Crossing Ahead Sign? N Approach N/A S Approach N/A	MUTCDC A3.2.5
observe	Posted speed limit? N Approach N/A S Approach N/A	
<p>Comments Following Site Visit:</p>		

Source	Item	Reference
	Emergency Notification Sign	Sect. 8.5
observe	Are signs present? N Approach Yes S Approach Yes	
look-up	Are signs required? N Approach Yes S Approach Yes	GCR Sect. 63
observe	Are signs oriented to face traffic approaching the grade crossing or parallel to the road? N Approach Yes S Approach Yes	Sect. 8.5
observe	Are signs legible to road vehicles? N Approach Yes S Approach Yes	Sect. 8.5
observe	What is the condition of the sign? N Approach Good S Approach Good	

Comments Following Site Visit:
Emergency Notification Sign is installed on the warning system housing unit in the southwest quadrant, parallel to the roadway. Due to the location of the sign, the sign may not be visible to road users. Emergency notification signs also placed on both signal masts within view of drivers stopped at crossing which meets GCS requirements.

Source	Item	Reference
	Pavement Markings	
observe	Are pavement markings consistent with those from the MUTCDC Manual? No	MUTCDC Fig. C1-6
observe	Are there directional dividing lines for at least 30 m on both road approaches? No	MUTCDC C2.1
observe	Are there lines to delineate sidewalks, paths and trails? N/A	

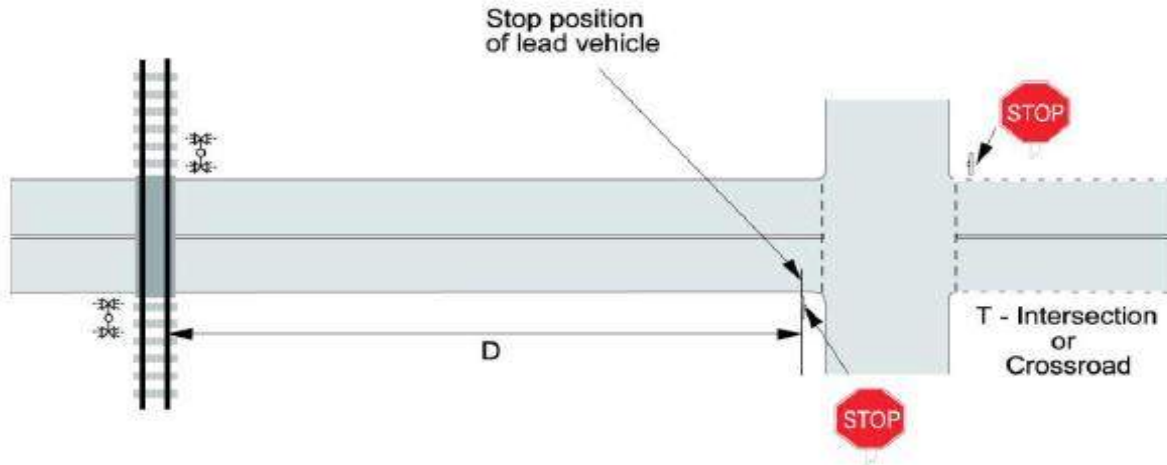
Comments Following Site Visit:
No sidewalk on either road approach.
No pavement markings noted on either road approach.

General Comments Regarding Signs & Pavement Markings:
Please see the following page for comments regarding the additional signs noted during the site visit on November 14, 2017.

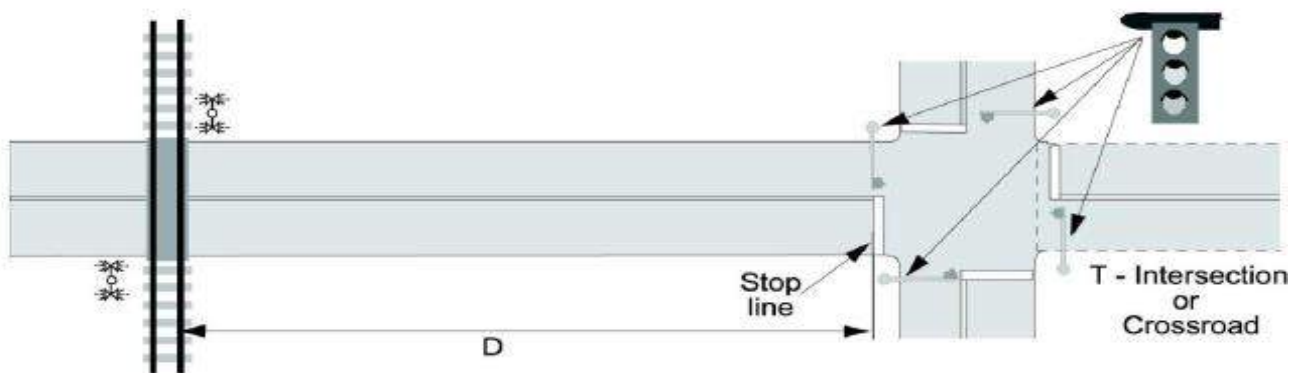
- Additional signs installed in proximity to crossing:
 - o North Road Approach
 - "Stop Before Crossing" sign: Height: 2.0m ; Offset: 3.7m; Location: 30m
 - "Dismount before crossing" sign: Height: 3.1; Offset 3.7m; Location: 30m
 - "Report if Blocked"... sign: Height: 1.45m; Offset: 3.7m; Location: 30m
 - WA-22 Sign: Height: 1.5m; Offset: 3.8m; Location: 166m
 - o South Road Approach
 - "Stop Before Crossing" sign: Height: 1.0m ; Offset: 1.9m; Location: 32m
 - "Report if Blocked"... sign: Height: 1.0m; Offset: 2.4m; Location: 59m*
Sign is leaning
 - "Be Prepared to Stop" sign: Height: 1.2m; Offset: 1.8m; Location: 95.3m
 - WA-22 Sign: Height: 0.5m; Offset: 1.8m; Location: 95.3m

Figure 9-1 – Proximity of Warning Systems to Stop Signs and Traffic Signals

(a) Intersection with Stop Sign



(b) Intersection with Traffic Signal



Source	Item	Reference
	Warrants for a Warning System Without Gates If any of A through E below are met, then a warning system without gates is required	Sect. 9.1
look-up	A. AADT = 24 vpd Daily Train Movements = 44.00 trains per day Cross-Product = 1,056 (2,000 min.) Warranted? No	Sect. 9.1.a
look-up	B. Is there a sidewalk, path or trail? No Railway Design Speed = 100 mph Warranted? Yes	Sect. 9.1.b,c
Rail	C. Are there two or more lines of railway where trains may pass each other? Yes Is the railway design speed > 15 mph? Yes Warranted? Yes	Sect. 9.1.d.i
look-up	D. Is D < 30 m to a Stop Sign at an intersection? No Is the railway design speed > 15 mph? Yes Warranted? No	Sect. 9.1.d.ii
look-up	E. Is D < 60 m to a signalized intersection? No Is the railway design speed > 15 mph? Yes Warranted? No	Sect. 9.1.d.iii
	Warrants for a Warning System With Gates If a warning system is warranted, and any of F through J are met, then gates are also required	Sect. 9.2
look-up	F. Cross-Product = 1,056 (50,000 min.) Warranted? No	Sect. 9.2.1.a
Rail	G. Are there two or more lines of railway where trains may pass each other? Yes Warranted? Yes	Sect. 9.2.1.b
look-up	H. Is the railway design speed > 50 mph? Yes Warranted? Yes	Sect. 9.2.1.c
look-up	I. Is D < 30 m to a Stop Sign at an intersection? No Warranted? No	Sect. 9.2.1.d
look-up	J. Is D < 60 m to a signalized intersection? No Warranted? No	Sect. 9.2.1.e

Comments Following Site Visit:

Source	Item	Reference
observe	Warning Systems Clearance Distance from Railway Min. 3.66 m (12 ft) for signal mast or 3.05 m (10 ft) for end of gate arm; from centreline of track N Approach 5.5 m S Approach 5.8 m	AREMA C&S Manual Part 3.1.36 C.6.
measure	Warning System Clearance Distance from Roadway Min. 625 mm from curb; or 1.875 m from travelled way and 625 mm from shoulder N Approach 2.6 m S Approach 1.3 m	Sect. 12.1.a,b
measure	Distance between top of foundation and surrounding ground level (max. 100 mm (4 in)) N Approach 170 mm S Approach 170 mm	Sect. 12.1.c
measure	Is the slope of surrounding ground from foundation towards the travelled way less than 25% (4:1)? N Approach TBD S Approach TBD	Sect. 12.1.c
observe	Light units: N Approach Yes S Approach Yes Condition: Good	Sect. 13, 14
observe	Bells: N Approach Yes S Approach Yes Condition: Good	Sect. 15.1
observe	Gates: N Approach Yes S Approach Yes Condition: Good	Sect. 15.2
observe	Cantilever Lights: N Approach No S Approach No Condition: Good	Sect. 13.3
observe	If there is only one sidewalk, is a bell located on the adjacent assembly? N/A	Sect. 15.1.2
Rail	Design Approach Warning Time: W Approach 27 sec E Approach 27 sec Should be greatest of: look-up a) 20s, unless cd > 11 m, increase the 20s by one second for each additional 3 m 22 sec look-up b) T _D 13 sec look-up c) T _P 13 sec look-up d) T _G + gate arm descent time + 5s 27 sec look-up e) Minimum warning time required for traffic signal pre-emption N/A sec look-up f) T _{SSD} 10 sec	Sect. 16.1.1
Rail	Actual Approach Warning Time: W Approach N.M sec E Approach N.M sec	Sect. 16.2

Comments Following Site Visit:

TBD = To be Determined. 'Slope of ground from foundation towards the travelled way was unable to be determined due to snow conditions on ground.

'N.M = Not measured during site visit. C.N to provide information.

Bell is present, however no sidewalk is present.

The clearance distance from the edge of the travelled way is 1.3m for the south signal mast, which is less than the GCS limit of 1.875m for roadways without a curb.

The distance between the top of the foundation and the surrounding ground surface exceeds the GCS maximum limit of 100mm for both signal masts.

GCS Section 12

Figure 12-1 – Warning Signal Assemblies

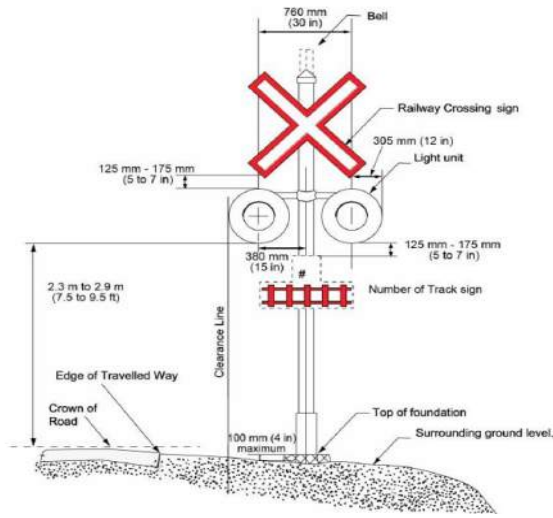


Figure 12-3 – Cantilevers

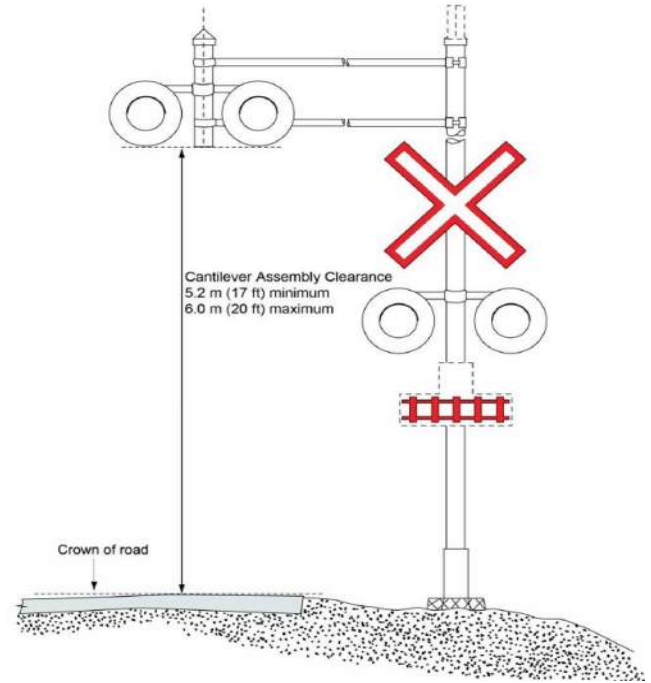
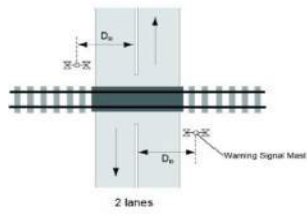


Figure 13-1 – Warning Signal Offsets Requiring Cantilevered Light Units

(a) Two-Way Road



(b) One-Way or Divided Road

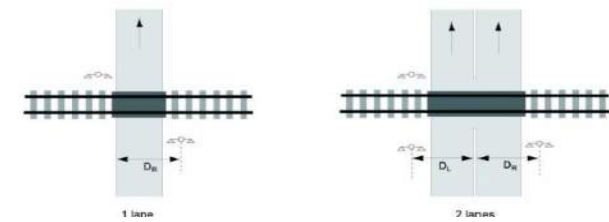
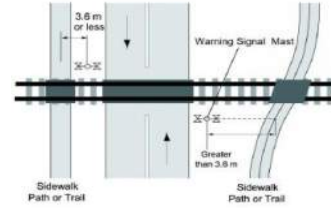
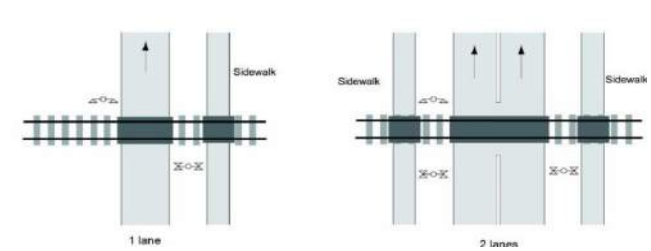


Figure 13-2 – Sidewalks, Paths and Trails

(a) Two Way



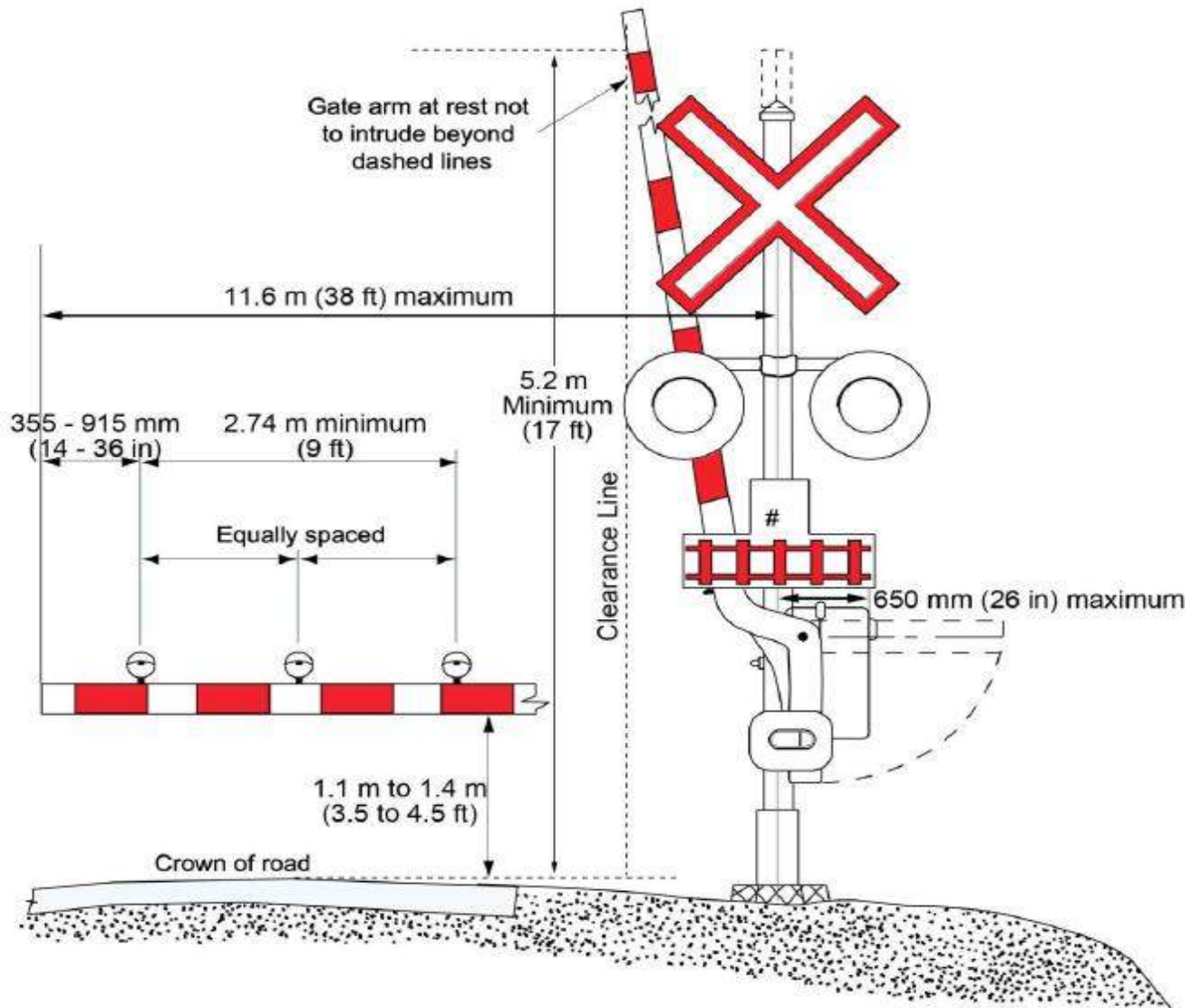
(b) One-Way



Source	Item	Reference
	Front and Back Lights for Vehicles	
observe	Are signal assemblies as shown in Figure 12-1? Yes	Sect. 12.1
measure	Alignment Height: N Approach 2.75 m S Approach 2.75 m	Fig. 12-1
observe	Are primary light units visible for at least the minimum SSD? N Approach Yes S Approach Yes	Sect. 14.3.1.a
observe	Are additional light units required to cover intermediate areas of the road approaches? N Approach No S Approach No	Sect. 14.4.1
observe	Are back light units visible by stopped vehicles at least 15 m? N Approach Yes S Approach Yes	Sect. 14.5.1
observe	Are lights installed exclusively for sidewalks, paths or trails visible for at least 30 m? N Approach N/A S Approach N/A	Sect. 14.6.1
	Additional Lights for Sidewalks, Paths, Trails, etc.	
calculate	Distance from path centreline to signal mast (max 3.6m) N Approach N/A S Approach N/A	Fig. 13-2
look-up	Are separate flashing light units required for pedestrians? N Approach No S Approach No	Sect. 13.4.1
	Cantilever Light Units	
observe	Are cantilevers as shown in Figure 12-3? N/A	Sect. 12.1
measure	Distance from nearest rail: N Approach N/A m S Approach N/A m	
measure	Distance from travelled way: N Approach N/A m S Approach N/A m	
measure	Height: N Approach N/A m S Approach N/A m	Fig 13-1
measure	D _R : N Approach N/A m S Approach N/A m	Fig. 13-1(a),(b)
measure	D _L : N Approach N/A m S Approach N/A m	Fig. 13-1(b)
look-up	Are Cantilever lights required? N Approach No S Approach No	Sect. 13.3.1

Comments Following Site Visit:
Front light units are aligned to cover access roads on the south east quadrant.

Figure 12-2 – Gates



Source	Item	Reference
observe	Are gates as shown in Figure 12-2? TBD	Sect. 12.1
calculate	Gate Arm Clearance Time for Vehicles $T_G = \text{greater of } T_{G,SSD} \text{ or } T_{G,STOP}$ $T_{G,SSD} = \text{Gate Arm Clearance Distance from SSD} / \text{Road Speed in m/s}$ $T_{G,SSD} = (SSD + 2m + L) / 0.278V$ $T_{G,SSD} = \mathbf{8.9}$ sec $T_{G,STOP} = \text{Gate Arm Clearance from Stop}$ $T_{G,STOP} = J + (t_G \times G) \quad t_G = \mathbf{6.02}$ sec $T_{G,STOP} = \mathbf{9.82}$ sec $T_G = \mathbf{9.8}$ sec	Sect. 10.4.1
measure	Gate arm delay: N Approach N.M sec S Approach N.M sec	Sect. 15.2.3
measure	Are strips on the gate arm 406 mm (16 in.) wide and aligned vertically? N Approach Yes S Approach Yes	Sect. 12.1.d.i
measure	Distance between the end of the gate arm and the edge of the travelled way N Approach N.M m S Approach N.M m	Sect. 12.1.e
measure	Gate arm descent time: 12.1 sec Gate arm ascent time: 6 sec	Sect. 15.2.2

Comments Following Site Visit:

N.M = Not Measured during site visit. C.N to provide information.

Source	Item	Reference
	Warrants for a Prepare to Stop at Railway Crossing Sign If any of A through C below are met, then a Prepare to Stop at Railway Crossing sign is required	Sect. 18 MUTCDC A3.6.6
look-up	A. Is the roadway classified as an expressway? No	GCR Sect. 67(a)
observe	B. Is at least one set of front lights on the warning system not clearly visible within the stopping sight distance of at least one of the lanes of the road approach? No	GCR Sect. 67(b)
observe	C. Do weather conditions at the grade crossing repeatedly obscure the visibility of the warning system? No	GCR Sect. 67(c)
look-up	Is a Prepare to Stop at Railway Crossing Sign required? No	GCR Sect. 67
	If any of D through E below are met, then a Prepare to Stop at Railway Crossing sign may be required	
look-up	D. Is the speed limit of the travelled way greater than 90 km/h? No	MUTCDC A3.6.6
observe	E. Is the crossing at the bottom of a hill or downgrade of considerable length? Yes	MUTCDC A3.6.6
	Calculated Distance of Light Units (See <i>Advance Warning Flashers: Guidelines for Application and Installation (TAC 2005)</i>) $D = (V_{t_{pr}} / 3.6) + (V^2 / [25.92 \times (a + Gg)])$	
look-up	V = 50 km/h (posted speed limit)	Advance Warning Flashers: Guidelines for Application and Installation (TAC 2005)
look-up	t _{pr} = 2 s (perception/reaction time)	
look-up	a = 2.6 m/s ² (deceleration rate; typically 2.6m/s ²)	
look-up	GN = -4.0 m/100m (grade on approach)	
look-up	GS = -2.0 m/100m (grade on approach)	
look-up	g = 9.81 m/s ² (gravitational acceleration; 9.81m/s ²)	
	Recommended minimum Advance Warning Flasher Distance from Railway N Approach 71.5 m S Approach 67.9 m	
measure	Actual Advance Warning Flasher Distance from Railway N Approach N/A m S Approach N/A m	
	Considering maximum prevailing speeds, geometry and traffic composition, check:	
observe	Does the sign flash: a) in advance of the activation of light units of the warning system b) during the time of operation of the light units of the warning system N Approach N/A S Approach N/A	Sect. 18.1
observe	Does the advance activation time provide sufficient time for a vehicle to: a) clear the grade crossing before the arrival of railway equipment at the crossing surface (FLB) b) clear the grade crossing before gate arms start to descend (FLBG) N Approach N/A S Approach N/A	Sect. 18.2

Comments Following Site Visit:

Source	Item	Reference
	Warrants for an Interconnected Traffic Signal	Sect. 19
<i>look-up</i>	Is the railway design speed greater than 15 mph?	Yes
measure	Is there less than 30m between the nearest rail of a grade crossing and the travelled way of an intersection with traffic signals?	No
<i>look-up</i>	Is an Interconnected Traffic Signal required?	No
Road	Are adjacent traffic signals interconnected with a grade crossing warning system?	N/A
Rail	note: provide timing plan if interconnected	
Road	Date of last pre-emption check?	N/A
	Field checks:	
observe	Does interconnection provide adequate time to clear traffic from the grade crossing before the arrival of railway equipment?	N/A
observe	Does interconnection prohibit road traffic from moving from the street intersection towards the grade crossing	N/A
observe	Are there known queuing issues at the tracks?	N/A
observe	Are pedestrians accomodated during the pre-emption?	N/A
observe	Have longer/slower vehicles been considered?	N/A
observe	Are supplemental signs needed for motorists?	N/A

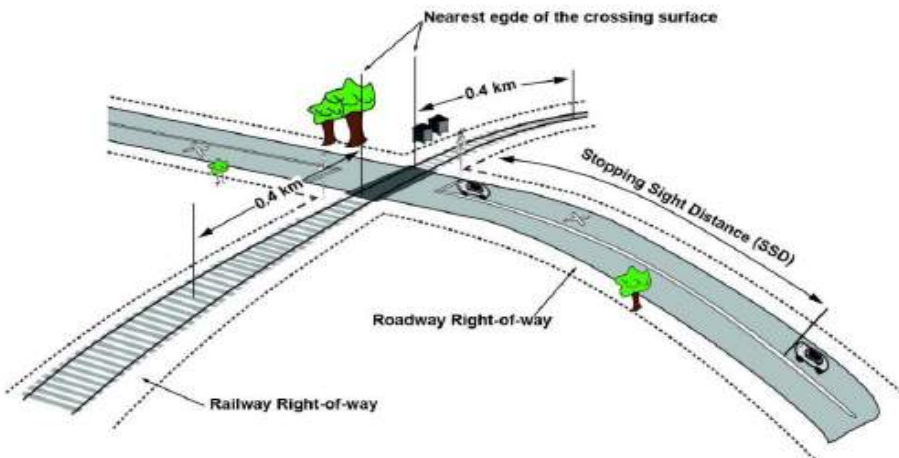
Comments Following Site Visit:

Table D-1 – Requirements for Warning Systems at Public Grade Crossings within an Area without Whistling

	Column A		Column B	
Railway Design Speed	Grade Crossings for Vehicle Use		Grade Crossings For Sidewalks, Paths, or Trails with the centreline no closer than 3.6 m (12 ft) to a warning signal for vehicles	
	No. of Tracks		No. of Tracks	
	1	2 or more	1	2 or more
Column 1	Column 2	Column 3	Column 4	Column 5
1 – 25 km/h (15 mph)	FLB	FLB	No warning system requirement	No warning system requirements
25 – 81 km/h (16 – 50 mph)	FLB	FLB & G	FLB	FLB & G
Over 81 km/h (50 mph)	FLB & G	FLB & G	FLB & G	FLB & G

Legend :
 FLB is a warning system consisting of flashing lights and a bell.
 FLB & G is a warning system consisting of flashing lights, a bell and gates

Figure D-1 – prescribed area for whistling cessation as per article 23.1 of the RSA



Source	Item		Reference
Rail	Is train whistling prohibited at this crossing? 24 hours per day?	No N/A	
observe	Is there evidence of routine unauthorized access (trespassing) on the rail line in the area of the crossing? Comment below.	No	
look-up	What is the required type of warning system as per Table D-1?	FLBG	Appendix D
observe	Are the requirements of Table D-1 met?	Yes	Appendix D

Comments Following Site Visit:
No evidence of trespassing observed during the site visit on November 21 2017

Vehicular pathway is present along the SE ROW providing access for Railway Authority personnel. Pathway is easily accessible and unauthorized use of path may occur.

Additional Prompt Lists

Human Factors

- Control device visibility / background visual clutter
- Driver workload through this area (i.e., are there numerous factors that simultaneously require the driver's attention, such as traffic lights, pedestrian activity, merging/entering traffic, commercial signing, etc.).
- Driver expectancy of the environment (i.e., are the control measures in keeping with the design levels of the road system and adjacent environment).
- Need for positive guidance.
- Conflicts between road and railway signs and signals.

Environmental Factors

- Extreme weather conditions.
- Lighting issues (night, dawn/dusk, tunnels, adjacent facilities, headlight or sunlight glare, etc.).
- Landscaping or vegetation.
- Integration with surrounding land uses (e.g., parked vehicles blocking sightlines, merging traffic lanes, etc.).

All Road Users

- Have needs of the following been met:
 - pedestrians (including strollers, baby carriages, and blind persons)
 - children
 - elderly
 - bicyclists
 - motorcyclists
 - over-sized trucks
 - buses
 - recreational vehicles
 - wheelchairs, scooters, walkers, etc.
 - rollerblades

Comments Following Site Visit:

FIELD DATA FORMS



Active Public Crossings

Cobbledick Road, Mile 287.26, CN Kingston Subdivision, Corporation of Municipality of Clarington, Ontario

NOTE: The safety assessment of this grade crossing covers physical features which may affect road and rail user safety, and identifies potential safety hazards. However, the auditors point out that no guarantee is made that every deficiency has been identified. Further, if all of the recommendations in this assessment were to be addressed, this would not confirm that the crossing is 'safe', rather, adoption of the recommendations should improve the level of safety at this facility.

Date of Assessment: **14/11/2017, 18/01/2018**

Assessment Team Members & Affiliations: **Ian De Vera, Evgeniy Orlov, Jared Chernoff; WSP**

Reason for Assessment:

<input type="checkbox"/> periodic assessment	<input type="checkbox"/> significant change in infrastructure	<input type="checkbox"/> significant change in road or rail volumes
<input checked="" type="checkbox"/> cessation of whistling	<input type="checkbox"/> significant change in train operations	<input type="checkbox"/> significant change in road or rail speeds
<input type="checkbox"/> change in vehicle types	<input type="checkbox"/> 2+ fatal collisions in 5yr. period	<input type="checkbox"/> other collision experience (see below)

Railway Company: **Canadian National Railway**

Crossing Location: **Cobbledick Road**

Municipality: **Corporation of Municipality of Clarington**

Location Number:

Railway: **CN** Mile: **287.26**

Subdivision: **Kingston** Spur:

Type of Grade Crossing: **FLBG**

Track Type: **Mainline**

Road Authority: **Corporation of Municipality of Clarington**

Road Name / Number: **Cobbledick Road**

Province: **Ontario**

Location Reference:

Road Classification: **Rural Local Undivided**

Collision History (5-year period):

Property Damage Collisions:	<input type="checkbox"/>	Number of Persons Injured:	<input type="checkbox"/>
+ Personal Injury Collisions:	<input type="checkbox"/>	Number of Persons Killed:	<input type="checkbox"/>
+ Fatal Injury Collisions:	<input type="checkbox"/>		
= Total Collisions in the last 5 year period:	0		

Details of Collisions:

SCENE PHOTOGRAPHS

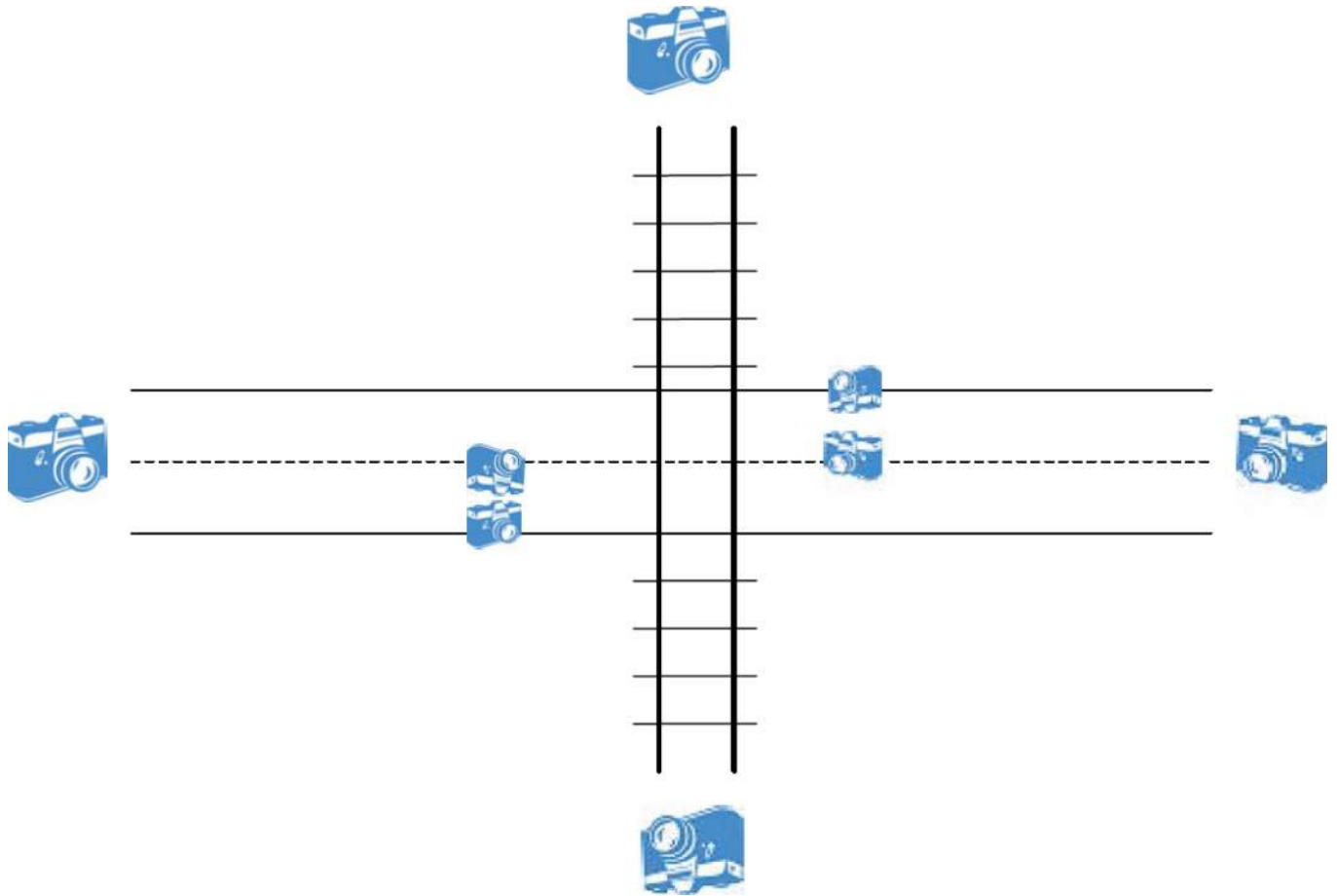




Photo 1: Road approach, looking north.



Photo 2: Northeast quadrant.



Photo 3: Rail approach, looking east.



Photo 4: Southeast quadrant.



Photo 5: Road approach, looking south.



Photo 6: Southwest quadrant.



Photo 7: Rail approach, looking west.



Photo 8: Northwest quadrant.



Photo 9: D_{STOPPED} sightlines, north road approach looking west (to the driver's right).



Photo 10: D_{STOPPED} sightlines, north road approach looking east (to the driver's left).



Photo 11: D_{STOPPED} sightlines, south road approach looking east (to the driver's right).



Photo 12: D_{STOPPED} sightlines, south road approach looking west (to the driver's left).



Photo 13: Private property access 20m from crossing along south road approach, east side.



Photo 14: Service Road and Cobble Dick Road intersection, 20m from crossing along south road approach, west side. Back lights obstructed by Warning System Housing Unit on south west quadrant. No stop bar present on Service Road at stop sign.



Photo 15: View of crossing at SSD of 110m for road speed of 50km/h on the south road approach. “X” pavement markings are not present.



Photo 16: Completely faded “X” pavement marking located beyond 110m on the south road approach.



Photo 17: WA-18, WA-22, Advisory Speed Tab sign and “3 Tracks” sign placed on the same post located beyond 110m on the south road approach. Sign is also located in a ditch and the WA-22 sign may not be visible from certain angles on the road. WA-18 sign does not show correct number of tracks.



Photo 18: Faded stop bars on the south road approach.



Photo 19: Faded stop bars on the north road approach.



Photo 20: Directional dividing line present and measured to be less than 30m due to close proximity of the Service Road intersection on the south road approach.



Photo 21: View of crossing at SSD of 110m for road speed of 50km/h on the north road approach.



Photo 22: North road approach, "X" pavement marking at 180m from crossing and is faded.



Photo 23: North road approach, WA-18 sign placed within 10m of corresponding “X” pavement marking. Sign is leaning, damaged and does not show correct number of tracks.

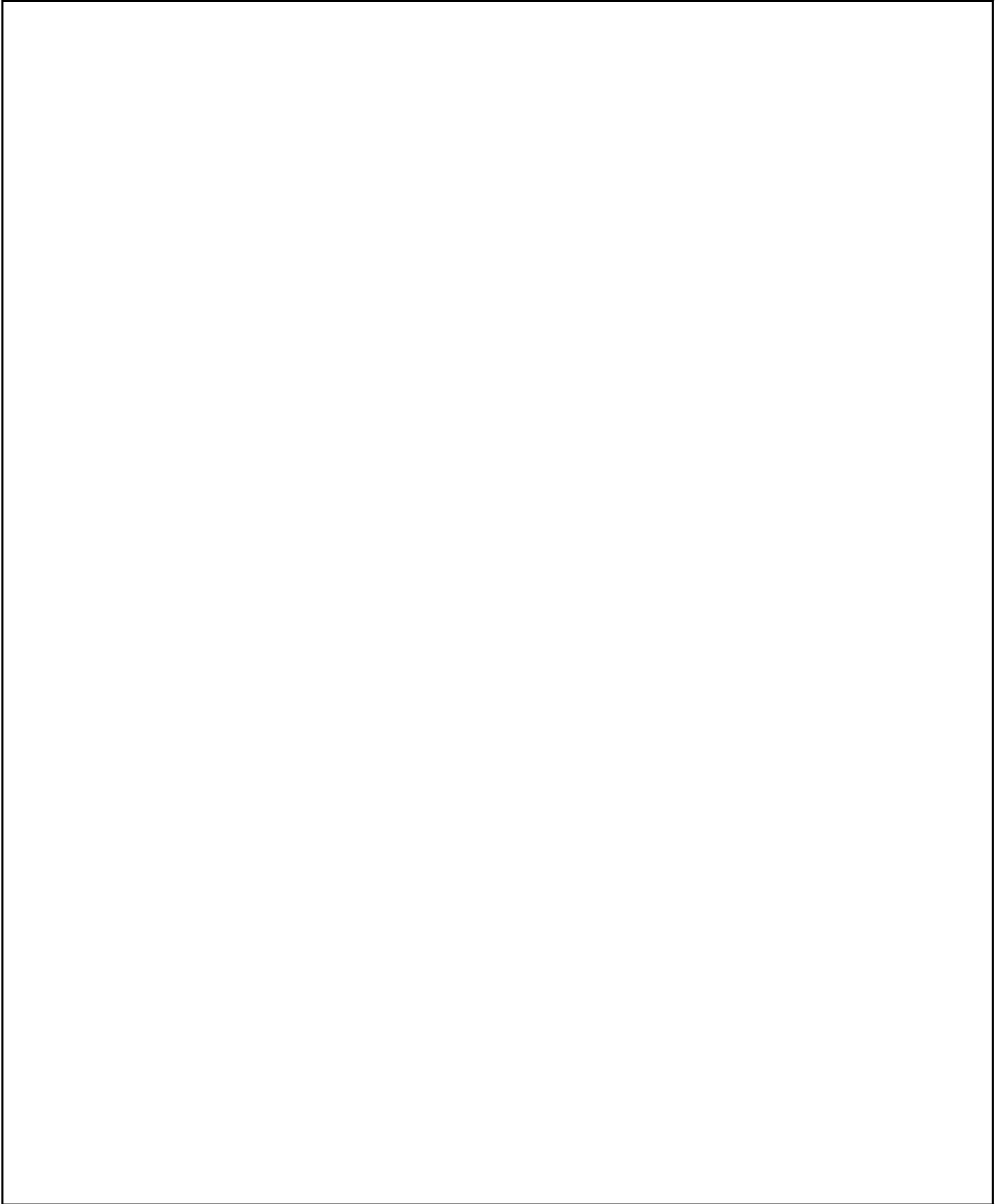


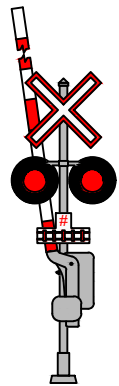
Photo 24: Modified WA-18 sign on Service Road located 168m from Cobble Dick Road intersection. Sign does not depict accurate track angle configuration and number of tracks.



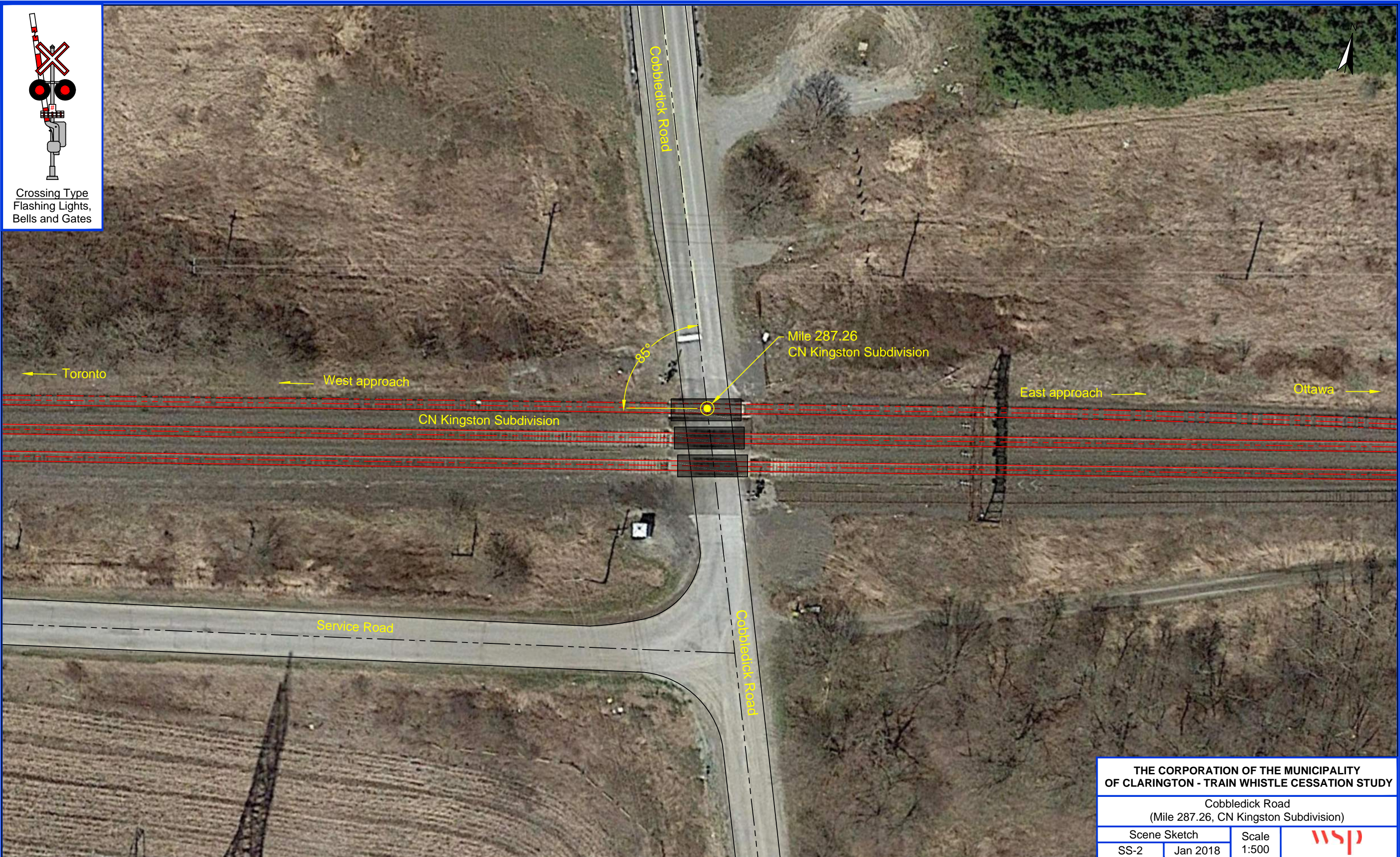
Photo 25: "X" pavement markings on Service Road are heavily faded.

NOTE: All references to direction in this safety review are keyed to this diagram.





Crossing Type
Flashing Lights,
Bells and Gates



THE CORPORATION OF THE MUNICIPALITY
OF CLARINGTON - TRAIN WHISTLE CESSATION STUDY

Cobbledick Road
(Mile 287.26, CN Kingston Subdivision)

Scene Sketch
SS-2 Jan 2018

Scale
1:500



GENERAL INFORMATION

Source	Item	Reference
Rail	Maximum Railway Operating Speed, V_T = 100 mph = 161 km/h	
Rail	Daily Train Volume Freight trains/day: 12 Passenger trains/day: 32	
Rail	Switching during daytime? TBD Switching during nighttime? TBD	
Road	Average Annual Daily Traffic, AADT = 826 vpd Year of Count: TBD	
Road	High seasonal fluctuation in volumes? Not Observed	
Road	Pedestrian Volume = N.M. pedestrians/day	
Road	Cyclist Volume = N.M. cyclists/day	
Road T	Is crossing on a School Bus Route? Yes	
Road T	Do Dangerous Goods Trucks use this roadway? Not Observed	
Road T	Regular use of crossing by persons with Assistive Devices? Not Observed	
Road T	Other special road users? Type: N/A Daily Volume: N/A	
Road	Forecasted AADT = N/A Forecast Year: N/A	
Road T	Road Crossing Design Speed = 50 km/h	
Observe	Surrounding Land Use: Hydro field south of crossing. Urban/rural? Rural	
Observe	Any schools, retirement homes, etc. nearby? N/A	

Notes:

T indicates information should be confirmed by field observation

1. Road Authority should provide plans if available.
2. Forecast AADT until next assessment if significant developments are expected or if a planned bypass may reduce volumes.

GCS Section 10

Figure 10-1 – Clearance Distance (cd) for Grade Crossings

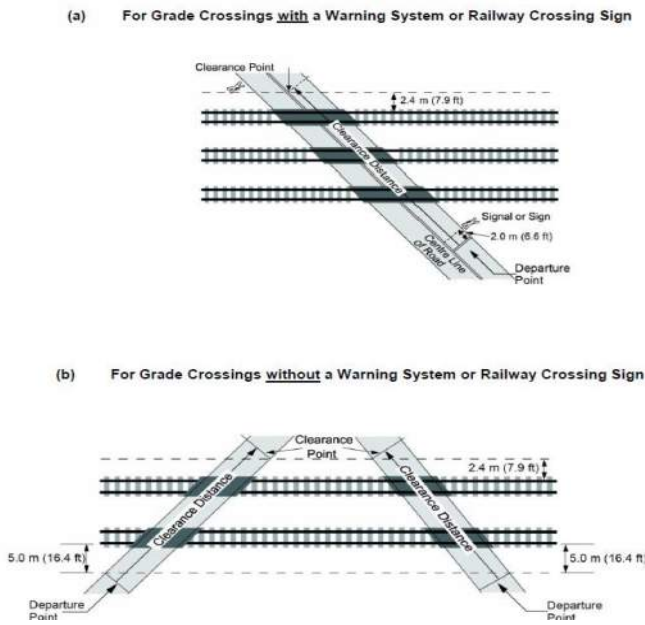
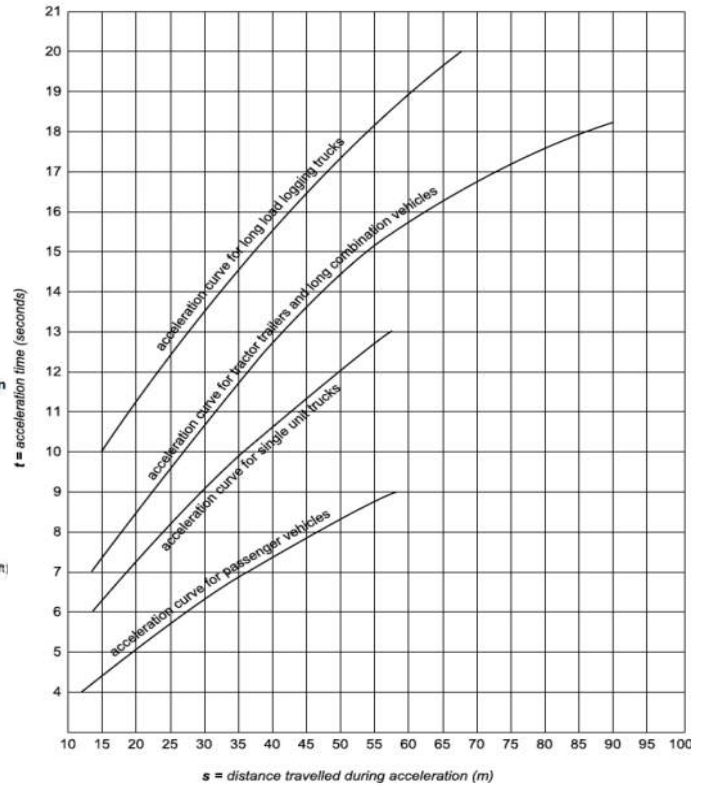


Figure 10-2 Assumed Acceleration Curves



Source: *Geometric Design Guide for Canadian Roads*, published by the Transportation Association of Canada and dated September 1999

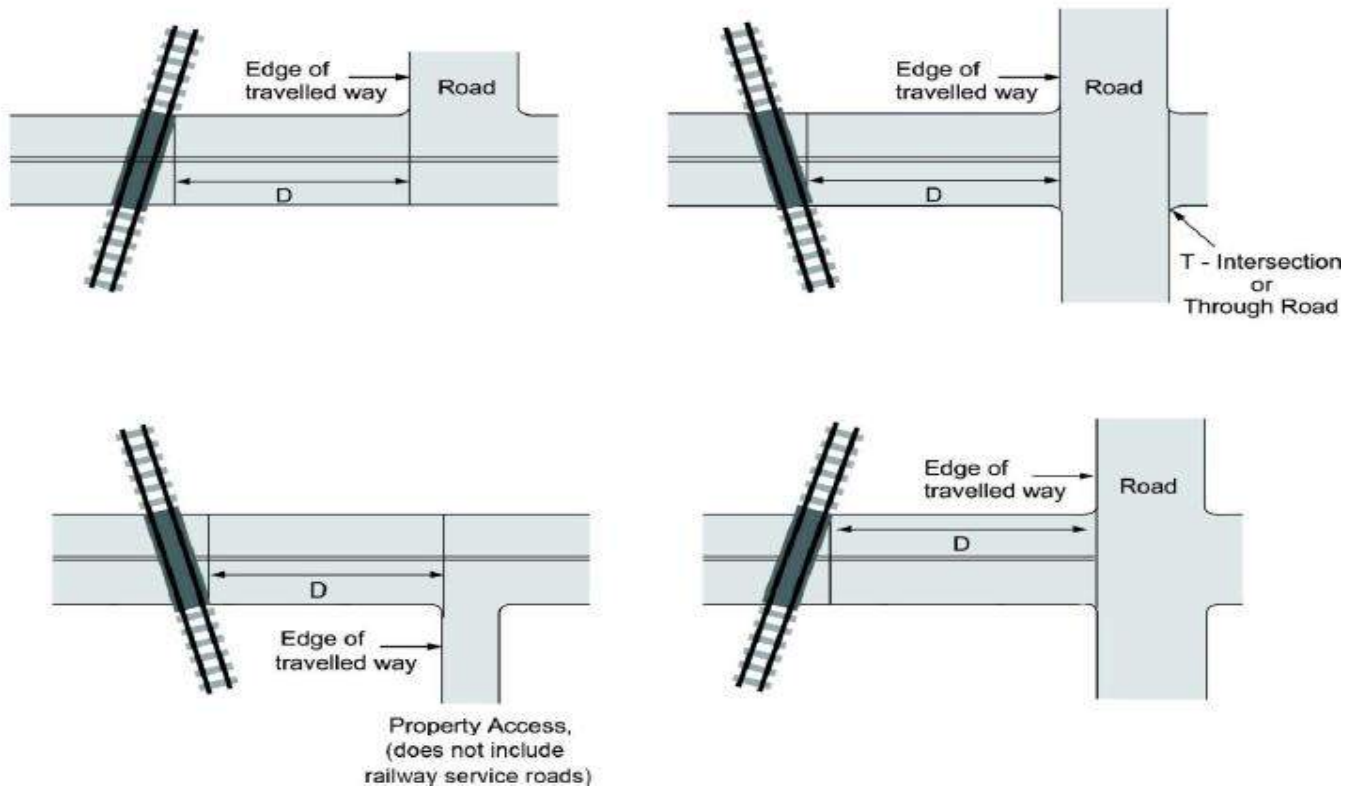
Table 10-1 Ratios of Acceleration Times on Grades

Design Vehicle	Road Grade (%)				
	-4	-2	0	+2	+4
Passenger Car	0.7	0.9	1.0	1.1	1.3
Single Unit Truck & Buses	0.8	0.9	1.0	1.1	1.3
Tractor-Semitrailer	0.8	0.9	1.0	1.2	1.7

Source: *Geometric Design Guide for Canadian Roads*, published by the Transportation Association of Canada and dated September 1999

Source	Item	Reference
	Design Vehicle	
Rail	Type: Standard Single Unit Buses (B-12)	Sect. 10.3.1
<i>look-up</i>	Length, L = 12.2 m	Sect. 10.3.1
<i>look-up</i>	Stopping Sight Distance, SSD = 110 m	Sect. 7.5
measure	Clearance Distance, cd = 19.1 m	Fig. 10-1
calculate	Vehicle Travel Distance, S = L + cd = 31.3 m	Sect. 10.2.1
calculate	Vehicle Departure Time, $T_D = J + T$ = 15.4 sec	Sect. 10.3.2
<i>look-up</i>	J = 2 sec = driver's reaction time	Sect. 10.3.2
calculate	T = (t x G) = 13.4 sec = the time for the design vehicle to travel through S	
<i>look-up</i>	t = 9.3 sec = the time for the design vehicle to accelerate through S	GDG Fig. 2.3.3.3
<i>look-up</i>	G = 1.45 = ratio of acceleration time on grade/grade adjustment factor	GDG T2.3.3.2
	Road Grade Effect:	
Road	maximum approach grade within S = 5.5 %	
observe	Do field acceleration times exceed T_D ? N/A	
	Pedestrian, Cyclist & Assistive Devices Departure Time, $T_P = cd/V_P$	
calculate	T_P = 15.7 sec	
<i>look-up</i>	V_P = 1.22 m/s (maximum 1.22 m/s)	

Figure 11-1 – Restrictions on the Proximity of Intersections and Entranceways to Public Grade Crossings



Source	Item	Reference
measure	"D" should not be less than 30m for either approach if train speed exceeds 15 mph. "D" = N/A m on N approach = 20 m on S approach	Fig. 11-1
observe	Are there pedestrian crossings on either road approach that could cause vehicles to queue back to the tracks? No	
observe	Is "D" insufficient such that road vehicles might queue onto the tracks? No Is "D" insufficient such that road vehicles turning from a side street might not see warning devices for the crossing? No	

Comments Following Site Visit:

Property accesses on the road approach within 30m of the crossing. Cobbledick Rd is the major roadway and has the right of way unless otherwise noted.

South Road Approach

-19.5m (east side)

-20m (Service Rd intersection is stop controlled with right of way to Cobbledick Rd.)

Figure 5-1 – Grade Crossing Surface Dimensions

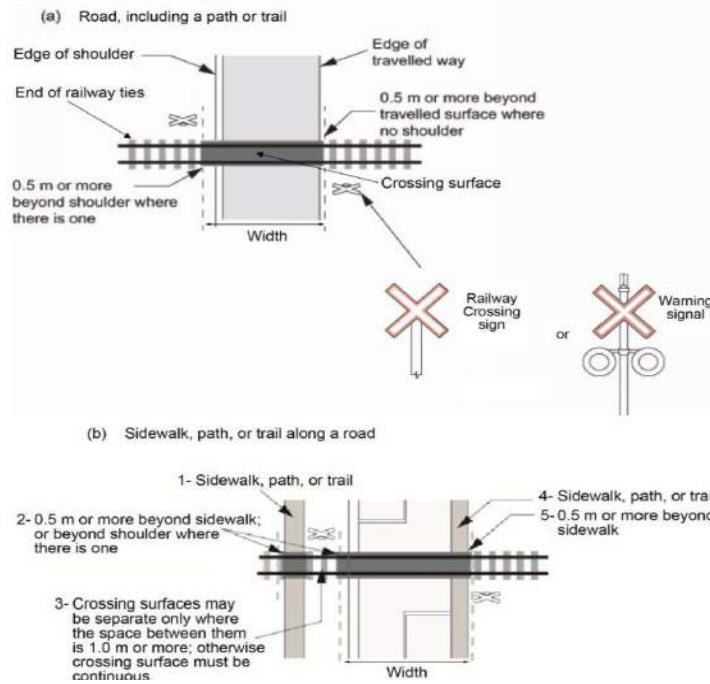


Figure 3-1 – Crossing Surface

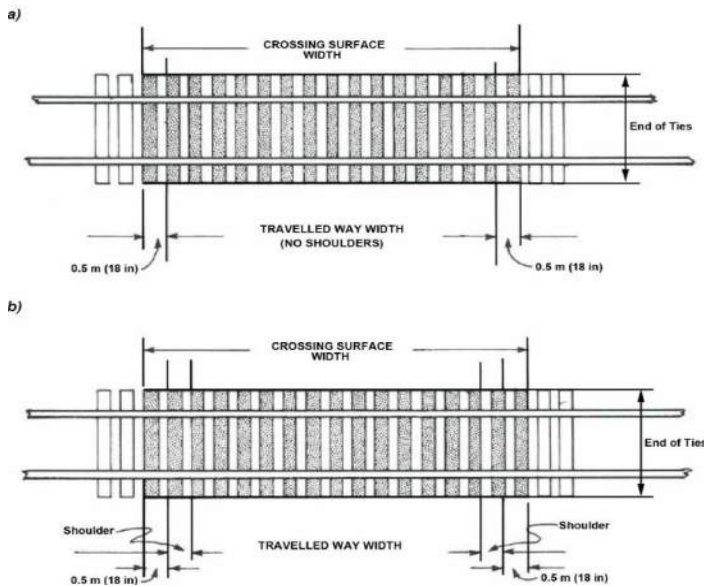


Table 5-1 – Grade Crossing Surface – Cross Section

a) Flangeway:		
Width	Minimum	65 mm
	Maximum for:	
	Public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices	75 mm
	All other grade crossings	120 mm
Depth	Minimum	50 mm
	Maximum for:	
	Public sidewalks, paths and trails designated by the road authority for use by persons using assistive devices	75 mm
	All other grade crossings	No limit
b) Field side gap		
A space is permitted on the outer side of the rail at rural locations, except for public sidewalks, paths or trails designated by the road authority for use by persons using assistive devices		
	Maximum width	120 mm
	Maximum depth	No limit
c) Elevation of the top of the rail with respect to the crossing surface		
The top of the crossing surface must be installed as close as possible to the top of the rail within the wear limits below:		
Wear limits:		
Public sidewalk, path or trail designated by the road authority for use by persons using assistive devices		
	Maximum distance of the top of the rail above crossing surface	13 mm
	Maximum distance of the top of the rail below crossing surface	7 mm
All other public grade crossings; the maximum distance of the top of the rail above or below the crossing surface		25 mm
Private grade crossings; the maximum distance of the top of the rail above or below the crossing surface		50 mm

Source	Item	Reference
observe	Is the crossing smooth enough to allow road vehicles, pedestrians, cyclists and other road users to cross at their normal speed without consequence? Comment below. Fair	Sect. 5.1
observe	Grade Crossing Surface Material: Two crossings with rubber crossing panels	
observe	Approach Road Surface Type: Asphalt Approach Road Surface Condition: Fair Roadway Illumination? No	
measure	Road Crossing Surface Width = 11.8 m Centre Lane/Median Width = N/A m Travelled Way Width = 3.3 m on W side = 3.3 m on E side Paved Shoulder Width = Notes m on W side = 0 m on E side Surface Extension beyond Travel Lanes/Shoulder = 2.6 m on W side = 2.6 m on E side Distance between Travel Lane/Shoulder and Sidewalk/Path/Trail = N/A m on W side = N/A m on E side Sidewalk/Path/Trail Width = N/A m on W side = N/A m on E side Surface Extension beyond Sidewalk/Path/Trail = N/A m on W side = N/A m on E side	Fig. 3-1 Fig. 5-1
	Cross-Section:	
Rail	Flangeway width = Notes mm (min. = 65 mm; max. = 75 mm ¹ or 120 mm)	Table 5-1
Rail	Flangeway depth = Notes mm (min. = 50 mm; max. = 75 mm ¹ or no limit)	Table 5-1
Rail	Field Side Gap width = Notes mm (max. = 120 mm or 0 mm ¹)	Table 5-1
Rail	Field Side Gap depth = Notes mm (max. = no limit or 0 mm ¹)	Table 5-1
Rail	Elevation of Top Rail above road surface = Notes mm (max. = 13 mm ¹ or 25 mm)	Table 5-1
Rail	Elevation of Top Rail below road surface = Notes mm (min. = -7 mm ¹ or -25 mm)	Table 5-1

1. Public sidewalks, paths or trails designated by the road authority for use of persons using assistive devices

Comments Following Site Visit:

Shoulder on both sides of the north road approach varies. West side shoulder widens from 1.25m to 2m at the start of Highway 401 overpass.

East side shoulder widens from 0.75m to 1.8m.

No shoulder on the south road approach.

Please see the following page for notes on the flangeway width, flangeway depth, field side gap width, field side gap depth & elevation of the top of rail with respect to the crossing surface.

- Flangeway Width:
 - North Track- 85mm, varies due to uneven wooden planks
 - Middle Track- 78mm
 - South Track- 78mm

- Flangeway Depth:
 - North Track- N/A, filled with debris (snow)
 - Middle Track- 60mm measured, inaccurate due to debris (snow, particulars)
 - South Track- 60mm measured, inaccurate due to debris (snow, particulars)

- Field side gap width:
 - North Track- 70mm, varies due to uneven wooden planks
 - Middle Track- 78mm
 - South Track- 78mm

- Field side gap depth:
 - North Track- N/A, filled with debris (snow)
 - Middle Track- N/A, rubber panel installed
 - South Track- N/A, rubber panel installed

- Elevation of top rail above road surface:
 - North Track- 5mm towards field, 15mm towards gauge side
 - Middle Track- 0mm towards field, 5-10mm towards gauge side
 - South Track- 0mm towards field, 5-10mm towards gauge side

- Elevation of top rail below road surface:
 - North Track- N/A, rail is above road surface
 - Middle Track- N/A, rail is above road surface
 - South Track- N/A, rail is above road surface

Source	Item	Reference
observe	Are the horizontal and vertical alignments smooth and continuous throughout SSD? N Approach Yes S Approach Yes	Sect. 6.1
observe	Are the road lanes and shoulders at least the same width on the crossing as on the road approaches? N Approach No S Approach Yes	Sect. 6.4
	Grades:	
measure	Road Approach Grades Within 8m -3.4 % on N approach 5.5 % on S approach (max. = 2%) Between 8m to 18m -3.2 % on N approach 2.0 % on S approach (max. = 5%)	Sect. 6.3
look-up	Road Classification Rural Local Undivided	Sect. 6.2
calculate	Allowable difference between roadway gradient and railway cross-slope = 2 %	GDG T-2.3-13.1
measure	Road approach gradient at crossing: -3.4 % on N approach 5.5 % on S approach Railway Cross Slope: notes 1 %	Sect. 6.2 GDG T-2.3-13.1
observe	Is the difference between the road approach gradient and the railway cross slope, or the railway gradient and the road approach cross slope, in accordance with the design standards of the Geometric Design Guide (Table 2.3.13.1)? N Approach Not Observed S Approach Not Observed	Sect. 6.2 GDG T-2.3-13.1
Rail	Are rail tracks super elevated? N Approach N/A S Approach N/A	
Road	Grade Crossing Angle = 85 ° (70° min and 110° max without warning system; 30° min and 150° max with warning system)	Sect. 6.5
observe	Condition of Road Approaches: anything that might affect stopping or acceleration. Comment.	
observe	Is there any evidence that "low-bed" trucks have difficulty negotiating the crossing? i.e. might they bottom-out or get stuck? Not Observed	

Comments Following Site Visit:

Shoulder on the north road approach is not consistent along roadway.

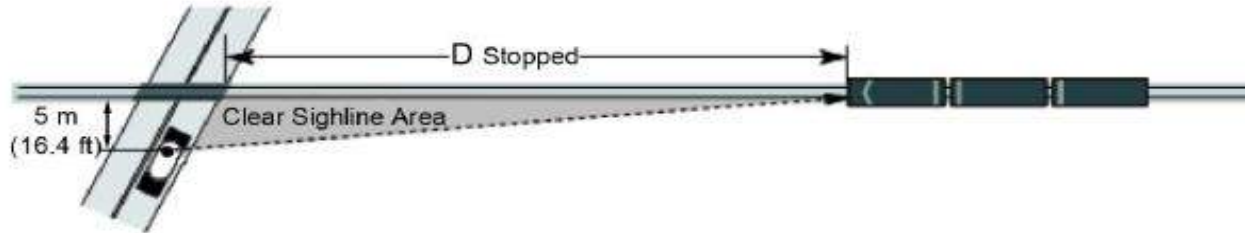
**Gradient of the south approach within 8m of the nearest rail is 5.5% which exceeds the GCS limit of 2%.
Gradient of the north approach within 8m of the nearest rail is 3.4% which exceeds the GCS limit of 2%.**

Railway Cross Slope:
North Track: 1.8%,
Middle Track: 1.0%
South Track: 0.1%

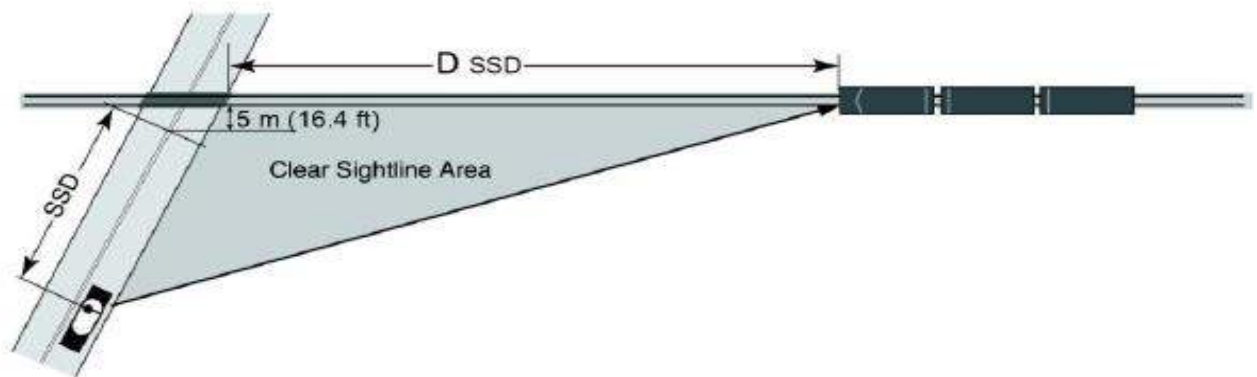
The difference between the road approach gradient and the railway cross-slope is not in accordance with 6.2 of the GCS:
South Road Approach: difference = 5.4% (allowable difference 2% for roadway classified as Rural Local Undivided).
North Road Approach: difference = 5.2% (allowable difference 2% for roadway classified as Rural Local Undivided)

Figure 7-1 – Minimum Sightlines – Grade Crossings

(a) Sightlines for Users Stopped at a Grade Crossing (applicable to all quadrants).



(b) Sightlines for Users Approaching a Grade Crossing (applicable to all quadrants).



Driver Eye Height	= 1.05m passenger vehicles, pedestrians, cyclists & assistive devices
	= 1.80m buses & single-unit trucks
	= 2.10m large trucks & tractor-trailers
Target Height	= 1.20m above rails

Warning: some formulae are based on Imperial units while others are Metric			
Source	Item		Reference
look-up	Type of Grade Crossing: FLBG	Are gates present?	Yes
look-up	Is the crossing exempted from sightline requirements?		Yes
look-up	SSD minimum = 110 m		
measure	SSD actual: N Approach	110 m	S Approach 110 m
	For Users Stopped at a Grade Crossing (See Fig 7-1(a))		
	$D_{STOPPED} = 1.47V_T \times T_{STOPPED}$ where V_T = railway design speed in mph (Sheet 4)		
	and $T_{STOPPED}$ = departure times T_D or T_P (Sheet 4)		
look-up	Is crossing exempted from $D_{STOPPED}$ requirements?		Yes
look-up	Design Vehicle Departure Time (T_D)		= 15.4 sec (from sheet 4)
look-up	Pedestrian, Cyclist & Assistive Device Departure Time (T_P)		= 15.7 sec (from sheet 4)
calculate	$D_{STOPPED-D}$ minimum	= 2269 ft	= 691 m
calculate	$D_{STOPPED-P}$ minimum	= 2301 ft	= 701 m
measure	$D_{STOPPED}$ actual	N Approach Clear m to driver's left	Clear m to driver's right
measure		S Approach Clear m to driver's left	Clear m to driver's right
observe	Are there any obstacles within the sight triangles that affect visibility? Comment.		Yes

Comments Following Site Visit:

Crossing is equipped with flashing lights, bells and gates and is exempt from DSSD and DSTOPPED sightline requirements.

Sight triangles obstructed by vegetation/brush along roadway and railway ROW.

Actual SSD is greater than 110m.

Visibility of the front light units on both road approaches is clear.

GCS Section 8

Figure 8-1 – Railway Crossing Sign and Number of Tracks Sign

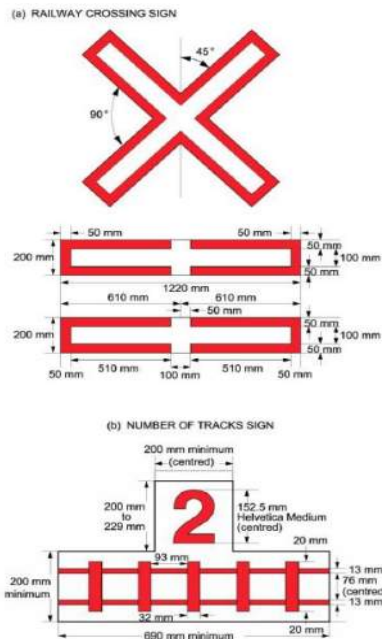


Figure 8-2 – Retroreflective Stripes on the Back of the Railway Crossing Sign and on the Sign Supporting Post (public grade crossings without a grade crossing warning system)

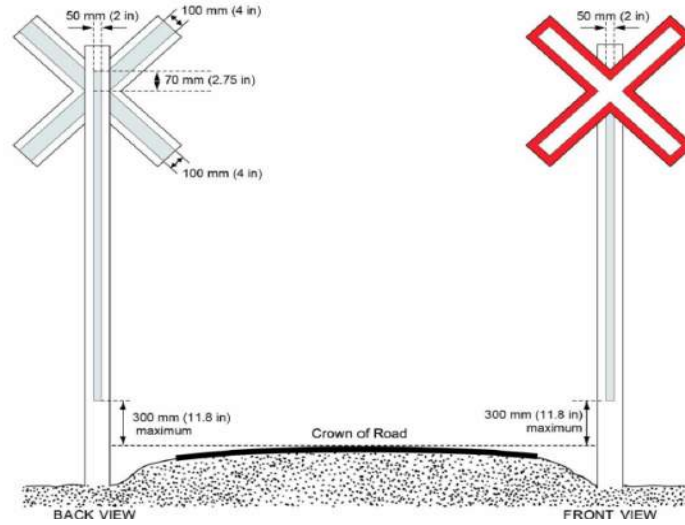


Figure 8-3 – Location of Railway Crossing Signs and Number of Tracks Signs (public grade crossings without warning systems)

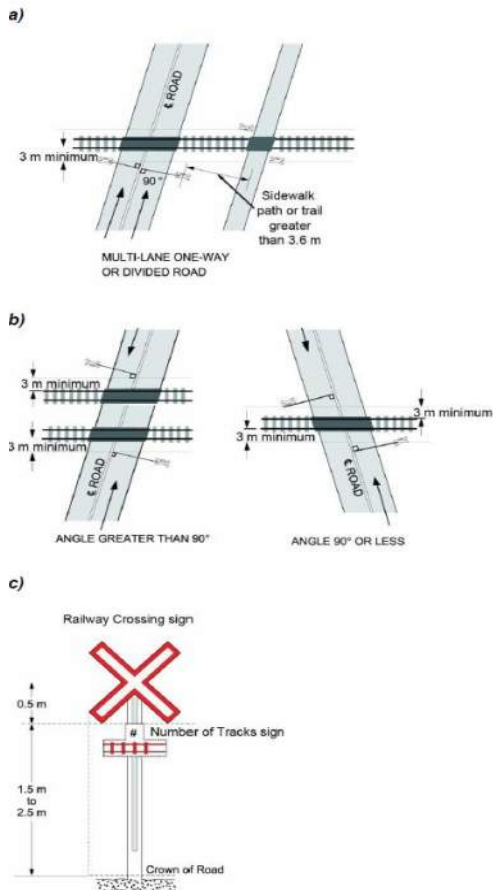
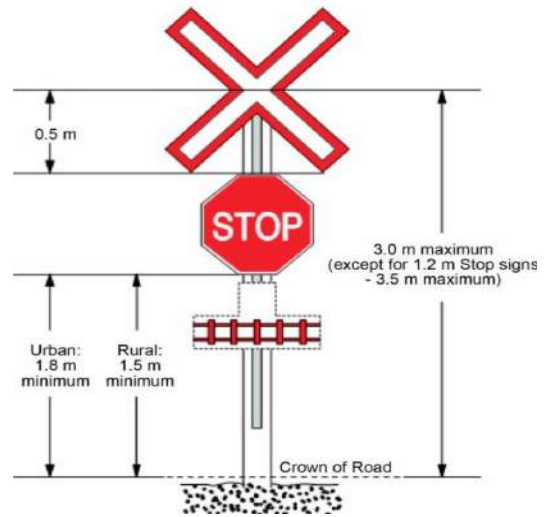


Figure 8-4 – Stop Signs



Source	Item	Reference
	Railway Crossing Sign	Sect. 8.1 MUTCDC A2.2.7
observe	Are signs present? N Approach Yes S Approach Yes	Sect. 4.1.2
observe	Are signs as shown in Figure 8-1(a)? N Approach Yes S Approach Yes	Fig. 8-1
Comments Following Site Visit:		

Source	Item	Reference
	Number of Tracks Sign	
observe	Are signs present? N Approach Yes S Approach Yes	Sect 4.1.2
<i>look-up</i>	Are signs required? N Approach Yes S Approach Yes	Sect 4.1.2
observe	Are signs as shown in Figure 8-1(b)? N Approach N/A S Approach N/A	Fig. 8-1
observe	Are signs installed on the supporting post of each railway crossing sign as shown in Figure 8-3(c)? N Approach N/A S Approach N/A	Fig. 8-3
Comments Following Site Visit:		

RAILWAY CROSSING OF ROAD AND BICYCLE LANE

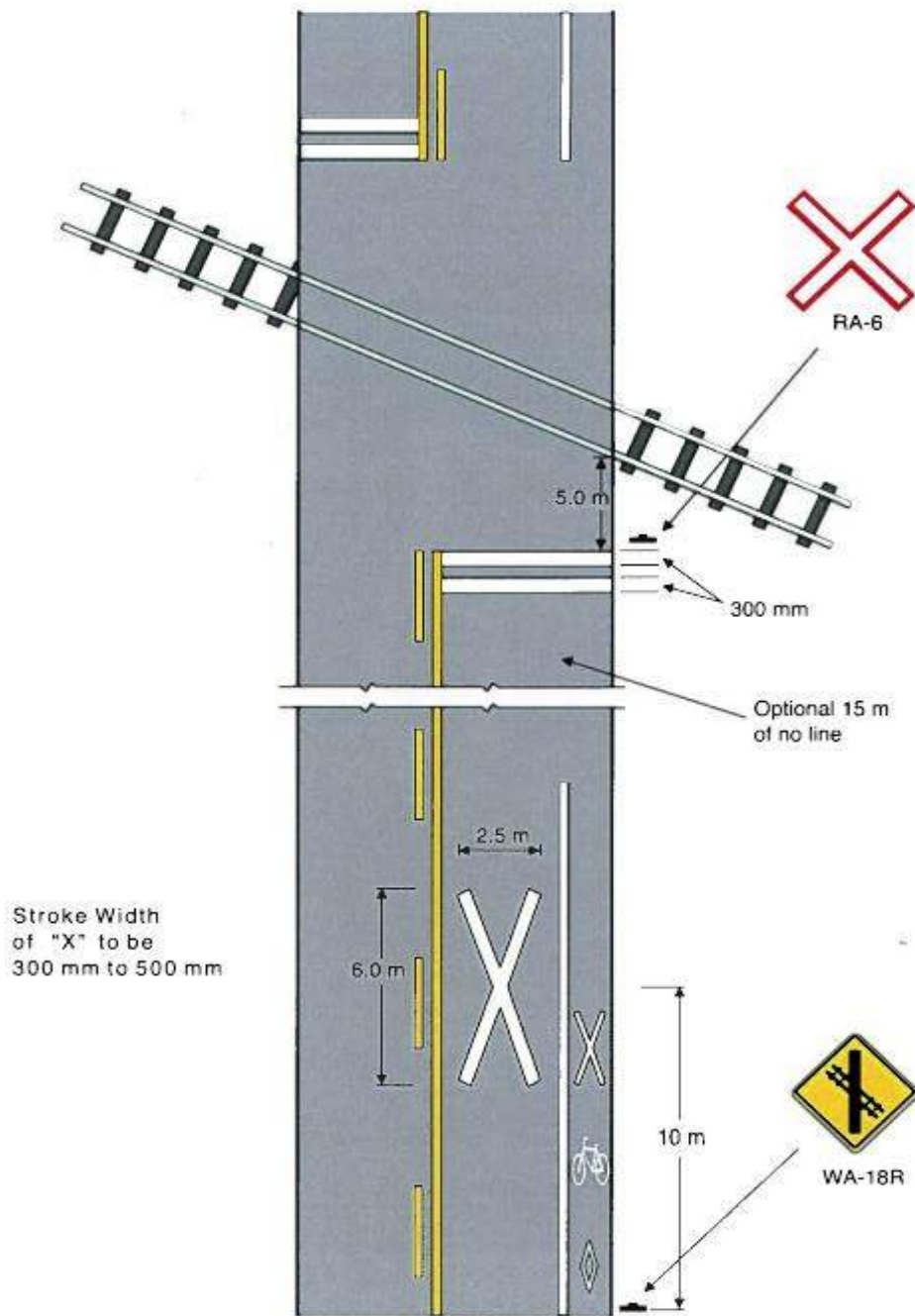


FIGURE C1-6

JANUARY 2014

Source	Item	Reference
	Railway Crossing Ahead Sign (WA-18, 19 & 20)	Sect. 8.2 MUTCDC 3.4.2
observe	Are signs present? N Approach Yes S Approach Yes	
look-up	Are signs required? N Approach No S Approach No	GCR Sect. 66
observe	Do signs have the appropriate orientation? N Approach Yes S Approach Yes	MUTCDC Fig. C1-6
measure	Distance to nearest rail: N Approach 179.8 m S Approach 150.2 m	MUTCDC A3.1.4
	Lateral Placement: N Approach 2 m S Approach 4.3 m	MUTCDC A1.7.2
	Height: N Approach 1.5 m S Approach 2.4 m	MUTCDC A1.7.2
<p>Comments Following Site Visit: Railway Crossing Ahead Sign on the north road approach does not meet the following MUTCDC recommended limits:</p> <ul style="list-style-type: none"> • Distance: 179.8m from the nearest rail, which exceeds the MUTCDC recommended limit of 150m. • Does not show correct number of tracks on sign. • Sign on the north road approach is damaged on the top and is leaning eastward 		

Source	Item	Reference
	Advisory Speed Tab Sign (WA-7S)	Sect. 8.2 MUTCDC 3.2.5
observe	Are signs present? N Approach No S Approach Yes	
look-up	Are signs required? N Approach No S Approach No	GCR Sect. 66
observe	Are signs mounted on the same post as the Railway Crossing Ahead Sign? N Approach N/A S Approach Yes	MUTCDC A3.2.5
observe	Posted speed limit? N Approach N/A S Approach 20	
<p>Comments Following Site Visit: WA-18, "3 Tracks", Advisory speed tab sign and WA-22 sign are all placed on the same post.</p>		

Source	Item	Reference
	Emergency Notification Sign	Sect. 8.5
observe	Are signs present? N Approach Yes S Approach Yes	
look-up	Are signs required? N Approach Yes S Approach Yes	GCR Sect. 63
observe	Are signs oriented to face traffic approaching the grade crossing or parallel to the road? N Approach Yes S Approach Yes	Sect. 8.5
observe	Are signs legible to road vehicles? N Approach Yes S Approach Yes	Sect. 8.5
observe	What is the condition of the sign? N Approach Good S Approach Good	

Comments Following Site Visit:

Emergency Notification Sign is installed on the warning system housing unit in the southwest quadrant, parallel to the roadway. Due to the location of the sign, the sign may not be visible to road users. Emergency notification signs also placed on both signal masts within view of drivers stopped at crossing which meets GCS requirements.

Source	Item	Reference
	Pavement Markings	
observe	Are pavement markings consistent with those from the MUTCDC Manual? No	MUTCDC Fig. C1-6
observe	Are there directional dividing lines for at least 30 m on both road approaches? Yes	MUTCDC C2.1
observe	Are there lines to delineate sidewalks, paths and trails? N/A	

Comments Following Site Visit:

**-"X" pavement marking completely faded on south road approach.
- Stop bars faded on both road approaches.**

General Comments Regarding Signs & Pavement Markings:

Additional signs installed in proximity to crossing:

South Road Approach

"3 Tracks" Sign: Height: 1.9m ; Offset: 4.3m; Location: 150.2m

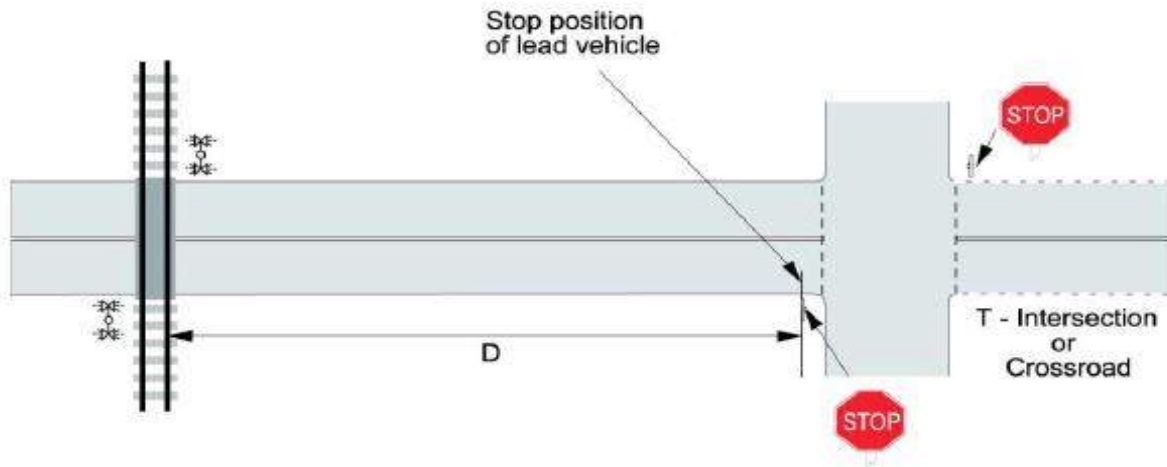
Advisory speed tab Sign: Height: 1.5m; Offset: 4.3m; Location: 150.2m

WA-22 Sign: Height: 0.7m; Offset: 4.3m; Location: 150.2m

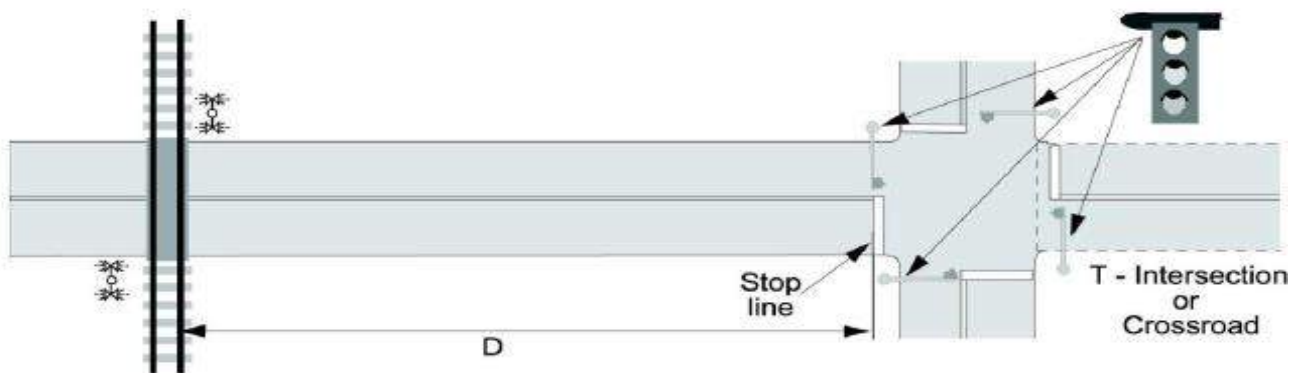
- Directional dividing line does not continue south of Service Road intersection.
- Service Road:
 - o "X" pavement marking is fading
 - o WA-18 post is leaning and not perpendicular to road.
 - o WA-18 shows incorrect orientation, showing crossing at an angle to the road, however crossing is perpendicular to the road.
 - o WA-18: Height: 2.3m; Offset: 1.5m; Location (from Cobbledick Road): 167.8
 - o "3 Tracks" sign also located on same post.

Figure 9-1 – Proximity of Warning Systems to Stop Signs and Traffic Signals

(a) Intersection with Stop Sign



(b) Intersection with Traffic Signal



Source	Item	Reference
	Warrants for a Warning System Without Gates If any of A through E below are met, then a warning system without gates is required	Sect. 9.1
<i>look-up</i>	A. AADT = 826 vpd Daily Train Movements = 44.00 trains per day Cross-Product = 36,344 (2,000 min.) Warranted? Yes	Sect. 9.1.a
<i>look-up</i>	B. Is there a sidewalk, path or trail? No Railway Design Speed = 100 mph Warranted? Yes	Sect. 9.1.b,c
Rail	C. Are there two or more lines of railway where trains may pass each other? Yes Is the railway design speed > 15 mph? Yes Warranted? Yes	Sect. 9.1.d.i
<i>look-up</i>	D. Is D < 30 m to a Stop Sign at an intersection? Yes Is the railway design speed > 15 mph? Yes Warranted? Yes	Sect. 9.1.d.ii
<i>look-up</i>	E. Is D < 60 m to a signalized intersection? No Is the railway design speed > 15 mph? Yes Warranted? No	Sect. 9.1.d.iii
	Warrants for a Warning System With Gates If a warning system is warranted, and any of F through J are met, then gates are also required	Sect. 9.2
<i>look-up</i>	F. Cross-Product = 36,344 (50,000 min.) Warranted? No	Sect. 9.2.1.a
Rail	G. Are there two or more lines of railway where trains may pass each other? Yes Warranted? Yes	Sect. 9.2.1.b
<i>look-up</i>	H. Is the railway design speed > 50 mph? Yes Warranted? Yes	Sect. 9.2.1.c
<i>look-up</i>	I. Is D < 30 m to a Stop Sign at an intersection? Yes Warranted? Yes	Sect. 9.2.1.d
<i>look-up</i>	J. Is D < 60 m to a signalized intersection? No Warranted? No	Sect. 9.2.1.e

Comments Following Site Visit:

Source	Item	Reference
observe	Warning Systems Clearance Distance from Railway Min. 3.66 m (12 ft) for signal mast or 3.05 m (10 ft) for end of gate arm; from centreline of track N Approach 4.4 m S Approach 4.4 m	AREMA C&S Manual Part 3.1.36 C.6.
measure	Warning System Clearance Distance from Roadway Min. 625 mm from curb; or 1.875 m from travelled way and 625 mm from shoulder N Approach 1.9 m S Approach 0.5 m	Sect. 12.1.a,b
measure	Distance between top of foundation and surrounding ground level (max. 100 mm (4 in)) N Approach 300 mm S Approach 190 mm	Sect. 12.1.c
measure	Is the slope of surrounding ground from foundation towards the travelled way less than 25% (4:1)? N Approach TBD S Approach TBD	Sect. 12.1.c
observe	Light units: N Approach Yes S Approach Yes Condition: Good	Sect. 13, 14
observe	Bells: N Approach Yes S Approach Yes Condition: Good	Sect. 15.1
observe	Gates: N Approach Yes S Approach Yes Condition: Good	Sect. 15.2
observe	Cantilever Lights: N Approach No S Approach No Condition: Good	Sect. 13.3
observe	If there is only one sidewalk, is a bell located on the adjacent assembly? N/A	Sect. 15.1.2
Rail	Design Approach Warning Time: W Approach 28 sec E Approach 28 sec Should be greatest of: a) 20s, unless cd > 11 m, increase the 20s by one second for each additional 3 m 23 sec b) T _D 15 sec c) T _P 16 sec d) T _G + gate arm descent time + 5s 28 sec e) Minimum warning time required for traffic signal pre-emption N/A sec f) T _{SSD} 10 sec	Sect. 16.1.1
Rail	Actual Approach Warning Time: W Approach N/A sec E Approach N/A sec	Sect. 16.2

Comments Following Site Visit:

TBD = To be determined, 'Slope of ground from foundation towards the travelled way was unable to be determined due to snow conditions on ground.

'N.M = Not measured during site visit. C.N to provide information.

Bell is present, however no sidewalk is present.

The clearance distance from the edge of the travelled way is 0.5m for the south signal mast, which is less than the GCS limit of 1.875m for roadways without a curb.

The distance between the top of the foundation and the surrounding ground surface exceeds the GCS maximum limit of 100mm for both signal masts.

GCS Section 12

Figure 12-1 – Warning Signal Assemblies

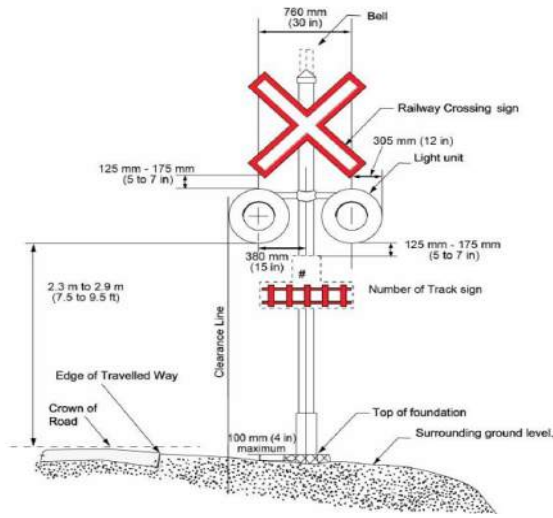


Figure 12-3 – Cantilevers

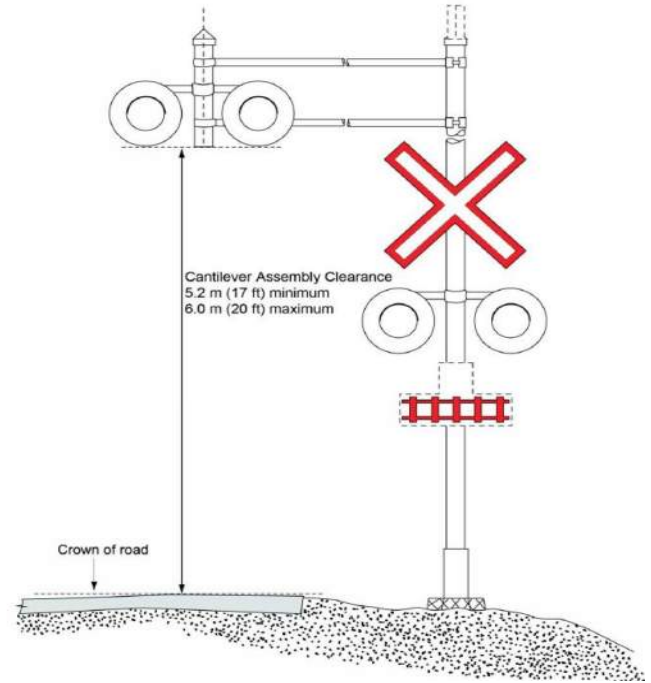
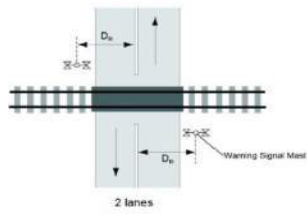


Figure 13-1 – Warning Signal Offsets Requiring Cantilevered Light Units

(a) Two-Way Road



(b) One-Way or Divided Road

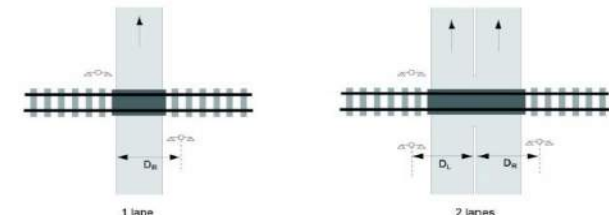
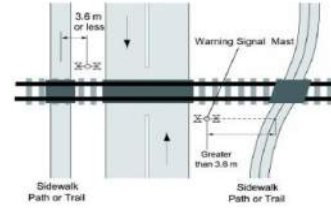
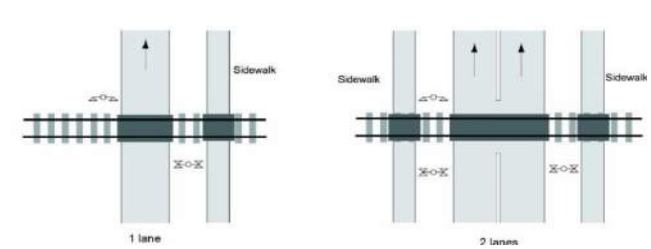


Figure 13-2 – Sidewalks, Paths and Trails

(a) Two Way



(b) One-Way

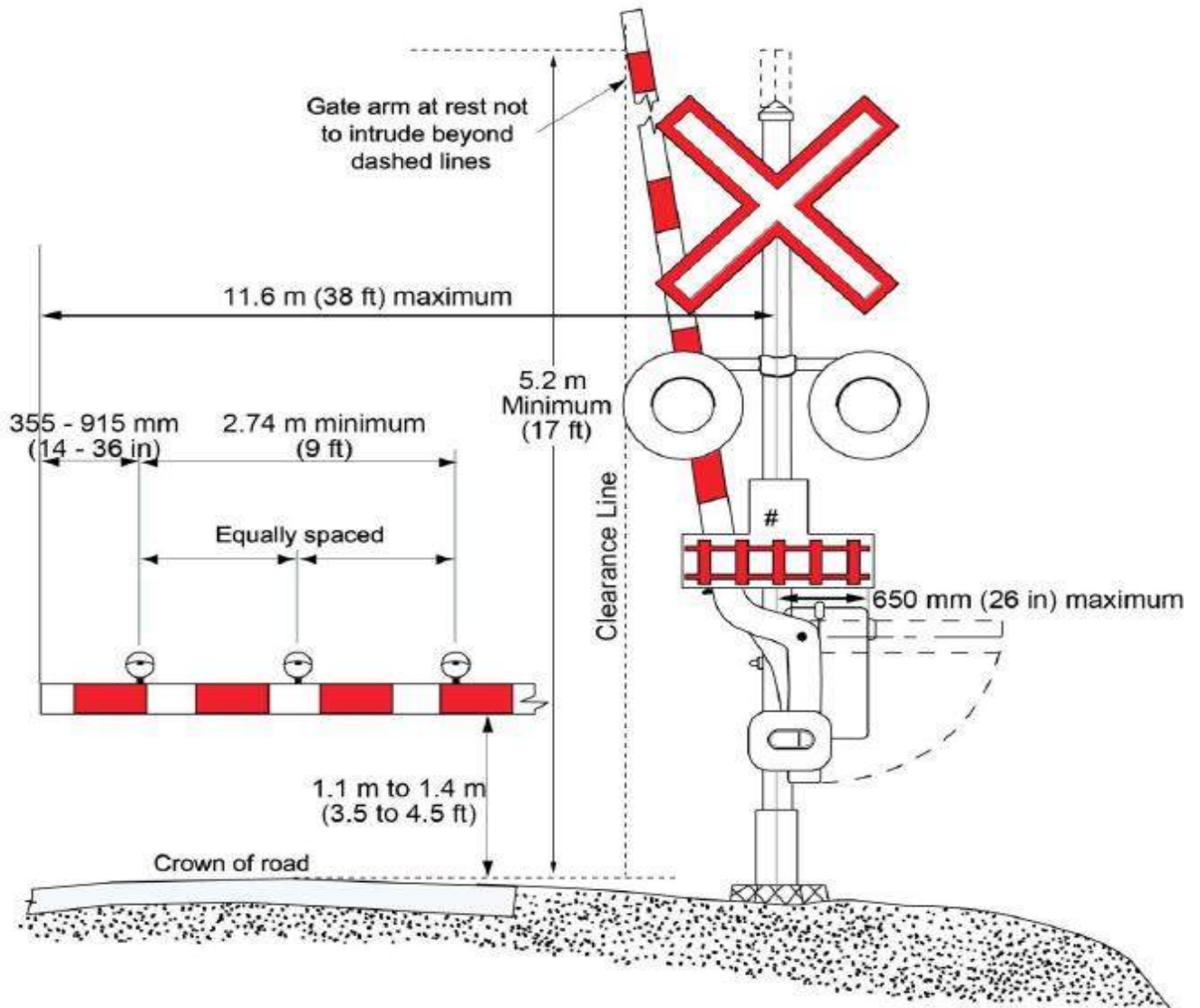


Source	Item	Reference
	Front and Back Lights for Vehicles	
observe	Are signal assemblies as shown in Figure 12-1? Yes	Sect. 12.1
measure	Alignment Height: N Approach 2.7 m S Approach 2.7 m	Fig. 12-1
observe	Are primary light units visible for at least the minimum SSD? N Approach Yes S Approach Yes	Sect. 14.3.1.a
observe	Are additional light units required to cover intermediate areas of the road approaches? N Approach No S Approach No	Sect. 14.4.1
observe	Are back light units visible by stopped vehicles at least 15 m? N Approach Yes S Approach Yes	Sect. 14.5.1
observe	Are lights installed exclusively for sidewalks, paths or trails visible for at least 30 m? N Approach N/A S Approach N/A	Sect. 14.6.1
	Additional Lights for Sidewalks, Paths, Trails, etc.	
calculate	Distance from path centreline to signal mast (max 3.6m) N Approach N/A S Approach N/A	Fig. 13-2
look-up	Are separate flashing light units required for pedestrians? N Approach No S Approach No	Sect. 13.4.1
	Cantilever Light Units	
observe	Are cantilevers as shown in Figure 12-3? N/A	Sect. 12.1
measure	Distance from nearest rail: N Approach N/A m S Approach N/A m	
measure	Distance from travelled way: N Approach N/A m S Approach N/A m	
measure	Height: N Approach N/A m S Approach N/A m	Fig 13-1
measure	D _R : N Approach N/A m S Approach N/A m	Fig. 13-1(a),(b)
measure	D _L : N Approach N/A m S Approach N/A m	Fig. 13-1(b)
look-up	Are Cantilever lights required? N Approach No S Approach No	Sect. 13.3.1

Comments Following Site Visit:

Front light units are aligned to cover Service Road.

Figure 12-2 – Gates



Source	Item	Reference
observe	Are gates as shown in Figure 12-2? TBD	Sect. 12.1
calculate	Gate Arm Clearance Time for Vehicles $T_G = \text{greater of } T_{G,SSD} \text{ or } T_{G,STOP}$ $T_{G,SSD} = \text{Gate Arm Clearance Distance from SSD} / \text{Road Speed in m/s}$ $T_{G,SSD} = (SSD + 2m + L) / 0.278V$ $T_{G,SSD} = \mathbf{8.9} \text{ sec}$ $T_{G,STOP} = \text{Gate Arm Clearance from Stop}$ $T_{G,STOP} = J + (t_G \times G) \quad t_G = \mathbf{6.15} \text{ sec}$ $T_{G,STOP} = \mathbf{10.9} \text{ sec}$ $T_G = \mathbf{10.9} \text{ sec}$	Sect. 10.4.1
measure	Gate arm delay: N Approach N.M sec S Approach N.M sec	Sect. 15.2.3
measure	Are strips on the gate arm 406 mm (16 in.) wide and aligned vertically? N Approach Yes S Approach Yes	Sect. 12.1.d.i
measure	Distance between the end of the gate arm and the edge of the travelled way N Approach N.M m S Approach N.M m	Sect. 12.1.e
measure	Gate arm descent time: 12.3 sec Gate arm ascent time: 6.2 sec	Sect. 15.2.2

Comments Following Site Visit:

N.M = Not Measured during site visit. C.N to provide information.

Source	Item	Reference																																										
	Warrants for a Prepare to Stop at Railway Crossing Sign If any of A through C below are met, then a Prepare to Stop at Railway Crossing sign is required	Sect. 18 MUTCDC A3.6.6																																										
look-up	A. Is the roadway classified as an expressway? No	GCR Sect. 67(a)																																										
observe	B. Is at least one set of front lights on the warning system not clearly visible within the stopping sight distance of at least one of the lanes of the road approach? No	GCR Sect. 67(b)																																										
observe	C. Do weather conditions at the grade crossing repeatedly obscure the visibility of the warning system? No	GCR Sect. 67(c)																																										
look-up	Is a Prepare to Stop at Railway Crossing Sign required? No	GCR Sect. 67																																										
	If any of D through E below are met, then a Prepare to Stop at Railway Crossing sign may be required																																											
look-up	D. Is the speed limit of the travelled way greater than 90 km/h? No	MUTCDC A3.6.6																																										
observe	E. Is the crossing at the bottom of a hill or downgrade of considerable length? No	MUTCDC A3.6.6																																										
	Calculated Distance of Light Units <i>(See Advance Warning Flashers: Guidelines for Application and Installation (TAC 2005))</i> $D = (V_{t_{pr}} / 3.6) + (V^2 / [25.92 \times (a + Gg)])$ <table border="0"> <tr> <td>look-up</td> <td>V</td> <td>=</td> <td>50</td> <td>km/h</td> <td>(posted speed limit)</td> </tr> <tr> <td>look-up</td> <td>t_{pr}</td> <td>=</td> <td>2</td> <td>s</td> <td>(perception/reaction time)</td> </tr> <tr> <td>look-up</td> <td>a</td> <td>=</td> <td>2.6</td> <td>m/s²</td> <td>(deceleration rate; typically 2.6m/s²)</td> </tr> <tr> <td>look-up</td> <td>GN</td> <td>=</td> <td>-3.2</td> <td>m/100m</td> <td>(grade on approach)</td> </tr> <tr> <td>look-up</td> <td>GS</td> <td>=</td> <td>2.0</td> <td>m/100m</td> <td>(grade on approach)</td> </tr> <tr> <td>look-up</td> <td>g</td> <td>=</td> <td>9.81</td> <td>m/s²</td> <td>(gravitational acceleration; 9.81m/s²)</td> </tr> </table> <p>Recommended minimum Advance Warning Flasher Distance from Railway</p> <table border="0"> <tr> <td>N Approach</td> <td>70.0</td> <td>m</td> <td>S Approach</td> <td>62.3</td> <td>m</td> </tr> </table>	look-up	V	=	50	km/h	(posted speed limit)	look-up	t _{pr}	=	2	s	(perception/reaction time)	look-up	a	=	2.6	m/s ²	(deceleration rate; typically 2.6m/s ²)	look-up	GN	=	-3.2	m/100m	(grade on approach)	look-up	GS	=	2.0	m/100m	(grade on approach)	look-up	g	=	9.81	m/s ²	(gravitational acceleration; 9.81m/s ²)	N Approach	70.0	m	S Approach	62.3	m	Advance Warning Flashers: Guidelines for Application and Installation (TAC 2005)
look-up	V	=	50	km/h	(posted speed limit)																																							
look-up	t _{pr}	=	2	s	(perception/reaction time)																																							
look-up	a	=	2.6	m/s ²	(deceleration rate; typically 2.6m/s ²)																																							
look-up	GN	=	-3.2	m/100m	(grade on approach)																																							
look-up	GS	=	2.0	m/100m	(grade on approach)																																							
look-up	g	=	9.81	m/s ²	(gravitational acceleration; 9.81m/s ²)																																							
N Approach	70.0	m	S Approach	62.3	m																																							
measure	Actual Advance Warning Flasher Distance from Railway <table border="0"> <tr> <td>N Approach</td> <td>N/A</td> <td>m</td> <td>S Approach</td> <td>N/A</td> <td>m</td> </tr> </table>	N Approach	N/A	m	S Approach	N/A	m																																					
N Approach	N/A	m	S Approach	N/A	m																																							
	Considering maximum prevailing speeds, geometry and traffic composition, check:																																											
observe	Does the sign flash: a) in advance of the activation of light units of the warning system b) during the time of operation of the light units of the warning system N Approach N/A S Approach N/A	Sect. 18.1																																										
observe	Does the advance activation time provide sufficient time for a vehicle to: a) clear the grade crossing before the arrival of railway equipment at the crossing surface (FLB) b) clear the grade crossing before gate arms start to descend (FLBG) N Approach N/A S Approach N/A	Sect. 18.2																																										

Comments Following Site Visit:

Source	Item	Reference
	Warrants for an Interconnected Traffic Signal	Sect. 19
<i>look-up</i>	Is the railway design speed greater than 15 mph?	Yes
measure	Is there less than 30m between the nearest rail of a grade crossing and the travelled way of an intersection with traffic signals?	No
<i>look-up</i>	Is an Interconnected Traffic Signal required?	No
Road	Are adjacent traffic signals interconnected with a grade crossing warning system?	N/A
Rail	note: provide timing plan if interconnected	
Road	Date of last pre-emption check?	N/A
	Field checks:	
observe	Does interconnection provide adequate time to clear traffic from the grade crossing before the arrival of railway equipment?	N/A
observe	Does interconnection prohibit road traffic from moving from the street intersection towards the grade crossing	N/A
observe	Are there known queuing issues at the tracks?	N/A
observe	Are pedestrians accomodated during the pre-emption?	N/A
observe	Have longer/slower vehicles been considered?	N/A
observe	Are supplemental signs needed for motorists?	N/A

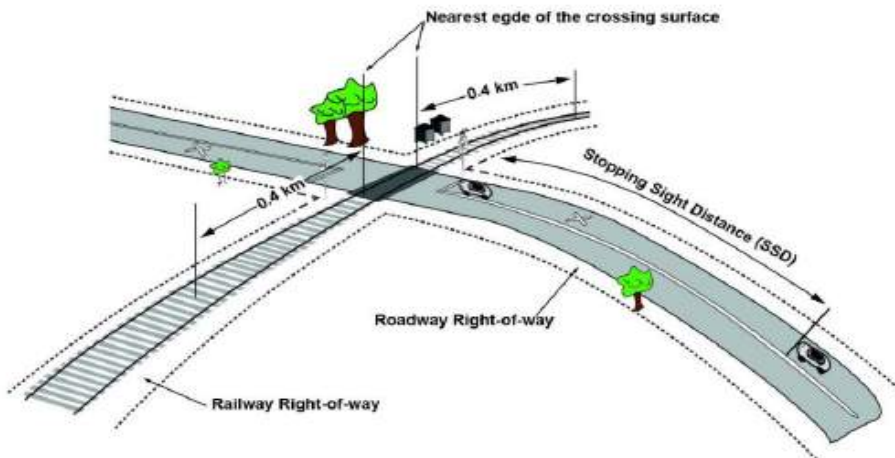
Comments Following Site Visit:

Table D-1 – Requirements for Warning Systems at Public Grade Crossings within an Area without Whistling

	Column A		Column B	
Railway Design Speed	Grade Crossings for Vehicle Use		Grade Crossings For Sidewalks, Paths, or Trails with the centreline no closer than 3.6 m (12 ft) to a warning signal for vehicles	
	No. of Tracks		No. of Tracks	
	1	2 or more	1	2 or more
Column 1	Column 2	Column 3	Column 4	Column 5
1 – 25 km/h (15 mph)	FLB	FLB	No warning system requirement	No warning system requirements
25 – 81 km/h (16 – 50 mph)	FLB	FLB & G	FLB	FLB & G
Over 81 km/h (50 mph)	FLB & G	FLB & G	FLB & G	FLB & G

Legend :
 FLB is a warning system consisting of flashing lights and a bell.
 FLB & G is a warning system consisting of flashing lights, a bell and gates

Figure D-1 – prescribed area for whistling cessation as per article 23.1 of the RSA



Source	Item		Reference
Rail	Is train whistling prohibited at this crossing? 24 hours per day?	No N/A	
observe	Is there evidence of routine unauthorized access (trespassing) on the rail line in the area of the crossing? Comment below.	No	
<i>look-up</i>	What is the required type of warning system as per Table D-1?	FLBG	Appendix D
observe	Are the requirements of Table D-1 met?	Yes	Appendix D

Comments Following Site Visit:

No evidence of trespassing observed during the site visit on November 21 2017

Additional Prompt Lists

Human Factors

- Control device visibility / background visual clutter
- Driver workload through this area (i.e., are there numerous factors that simultaneously require the driver's attention, such as traffic lights, pedestrian activity, merging/entering traffic, commercial signing, etc.).
- Driver expectancy of the environment (i.e., are the control measures in keeping with the design levels of the road system and adjacent environment).
- Need for positive guidance.
- Conflicts between road and railway signs and signals.

Environmental Factors

- Extreme weather conditions.
- Lighting issues (night, dawn/dusk, tunnels, adjacent facilities, headlight or sunlight glare, etc.).
- Landscaping or vegetation.
- Integration with surrounding land uses (e.g., parked vehicles blocking sightlines, merging traffic lanes, etc.).

All Road Users

- Have needs of the following been met:
 - pedestrians (including strollers, baby carriages, and blind persons)
 - children
 - elderly
 - bicyclists
 - motorcyclists
 - over-sized trucks
 - buses
 - recreational vehicles
 - wheelchairs, scooters, walkers, etc.
 - rollerblades

Comments Following Site Visit:

Summary of Recommendations For Initial Action by Road Authority to Move Forward with Pursuit of Whistle Cessation	
Bennett Road	
Suggested Action From Study	Estimated Cost
Replace crossing planks / reconstruct crossing surface (2 Sets of Tracks)	\$ 70,000.00
Road resurfacing	\$ 46,200.00
Signage improvements	\$ 3,500.00
Pavement Markings	\$ 4,200.00
Grade crossing warning system	\$ 4,200.00
Fencing Along Rail Corridor ***	\$ 120,000.00
Total Estimated Initial Improvement Cost	\$ 248,100.00
Engineering Costs (Detailed Design and Contract Administration @ 15%	\$ 37,200.00
Contingencies @ 10%	\$ 25,800.00
CREDIT - Works to be completed in support of the Lakebreeze Subdivision	-\$ 123,900.00
Reassessment of Level Crossing Conditions for Whistle Cessation after Improvements	\$ 6,000.00
Flagging for Reassessment of Level Crossing Conditions for Whistle Cessation	\$ 1,250.00
CNR Peer Review of Whistle Cessation Report and Recommendations	\$ 5,000.00
HST @13%	\$ 25,928.50
Net Cost For Initial Actions	\$ 225,378.50
Rounded Total	\$ 225,000.00
Cobbledick Road	
Suggested Action From Study	Estimated Cost
Replace crossing planks / reconstruct crossing surface (3 Sets of Tracks)	\$ 105,000.00
Repaving of Approaches and Areas between Tracks	\$ 15,000.00
Monitor and trim vegetation to improve visibility of warning system	\$ 1,400.00
Signage improvements	\$ 3,500.00
Pavement Markings	\$ 5,250.00
Grade crossing warning system	\$ 4,200.00
Fencing Along Rail Corridor ***	\$ -
Total Estimated Initial Improvement Cost	\$ 134,350.00
Engineering Costs (Detailed Design and Contract Administration @ 15%	\$ 20,200.00
Contingencies @ 10%	\$ 14,400.00
Reassessment of Level Crossing Conditions for Whistle Cessation after Improvements	\$ 6,000.00
Flagging for Reassessment of Level Crossing Conditions for Whistle Cessation	\$ 1,250.00
CNR Peer Review of Whistle Cessation Report and Recommendations	\$ 5,000.00
HST @13%	\$ 23,556.00
Net Cost For Initial Actions	\$ 204,756.00
Rounded Total	\$ 205,000.00
Grand Total Both Level Crossings for Initial Actions for Whistle Cessation	\$ 430,000.00

*** Note that although rail corridor trespass has not been identified as an issue during this initial review the development that is proposed in the area may change this condition at which time fencing may be required to remedy and future trespass issues.



Planning Services Public Meeting Report

If this information is required in an alternate accessible format, please contact the Accessibility Coordinator at 905-623-3379 ext. 2131.

Report To: Planning and Development Committee

Date of Meeting: February 20, 2018

Report Number: PSD-018-18

Resolution Number:

File Number: ZBA2017-0019

By-law Number:

Report Subject: **An Application by Bowmanville Lakebreeze East Village Ltd. to amend the R3-43 zone to permit a 341 unit townhouse development (Kaitlin) in Port Darlington Neighbourhood in Bowmanville**

Recommendations:

1. That Report PSD-018-18 be received;
 2. That the proposed application for Rezoning ZBA 2017-0019 continue to be processed including the preparation of a subsequent report; and
 3. That all interested parties listed in Report PSD-018-18 and any delegations be advised of Council's decision.
-

Report Overview

This is a public meeting report to provide an overview of the application by Bowmanville Lakebreeze East Village Ltd., a Kaitlin company. The proposed rezoning would amend the R3-43 Zone to permit a townhouse (condominium) development (341 units) including a mix of stacked and traditional townhouse units, and to reduce parking requirements for stacked townhouse units. The lands are within the Port Darlington Neighbourhood in Bowmanville.

1. Application Details

Applicant:	Bowmanville Lakebreeze East Village Ltd. (Kaitlin)
Proposal:	A proposed rezoning to amend the R3-43 Zone to permit a townhouse (condominium) development (341 units) including a mix of stacked, dual frontage and traditional townhouse units, and to reduce parking requirements for some stacked townhouse units.
Area:	7.68 hectares
Location:	West side of Bennett Road
Roll Number:	1817 010 010 01600 and 1817 010 010 01400
Within Built Boundary:	Yes

2. Background

- 2.1 The proposed rezoning and concurrent site plan application (SPA2017-0035) were submitted on May 16, 2017. The applications were deemed complete on January 18, 2018.
- 2.2 There are two plans of subdivision that comprise the new development areas in Port Darlington Neighbourhood
 - Port Darlington Land Corporation East (PDLC East) plan of subdivision (S-C-2002-002) was draft approved in 2012. The medium density block is contained within the draft approved plan.
 - Port Darlington Land Corporation West (PDLC West) plan of subdivision (S-C-2013-002) was draft approved in 2014.
- 2.3 A total of 1,084 units are draft approved at this time as outlined in Table 1. Onsite grading and servicing has begun, with final approval and registration expected to occur in the next month or two.

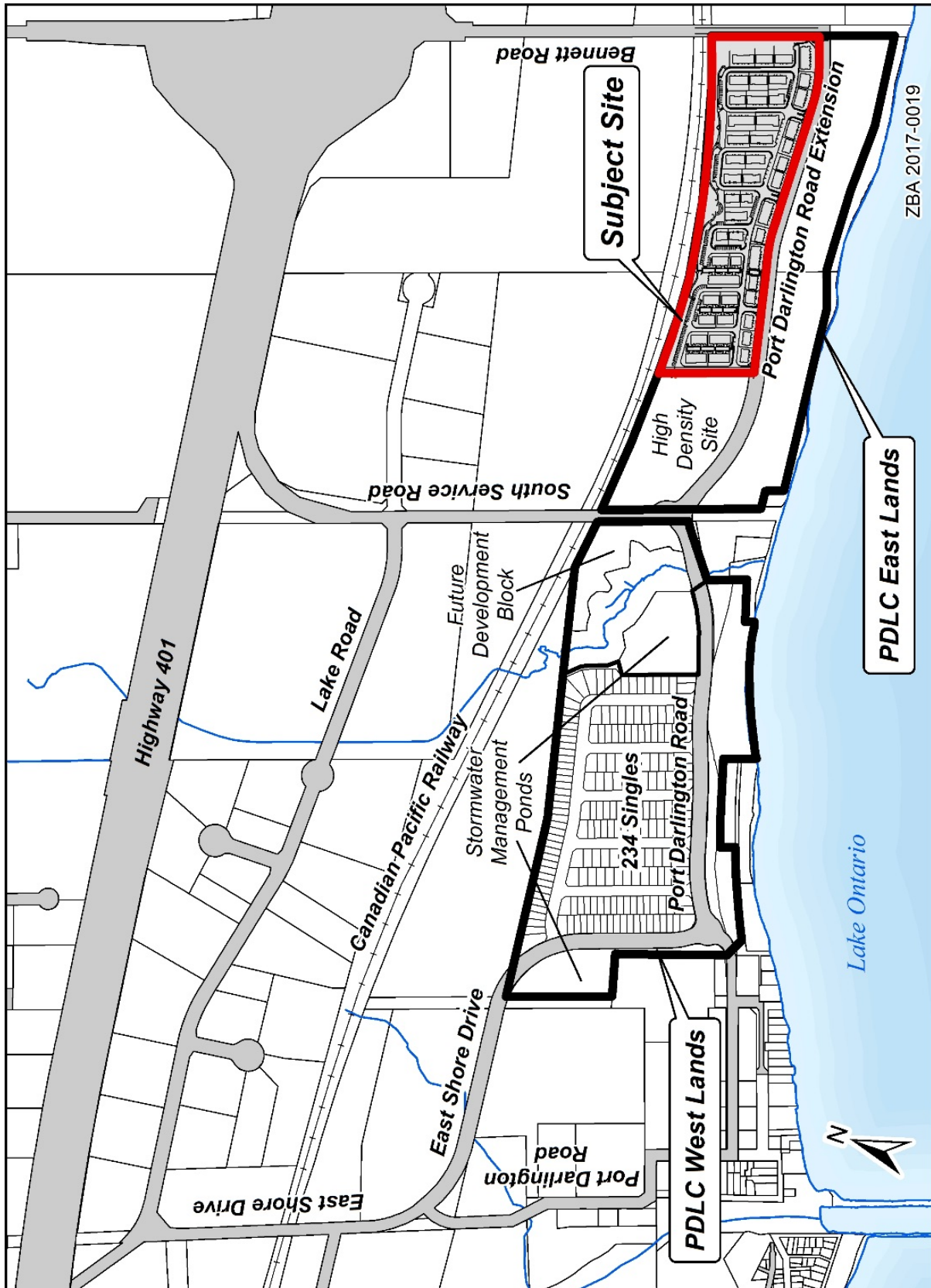


Figure 1: Port Darlington Land Corporation

Density	PDLC West Lands	PDLC East Lands	TOTAL
High Density	0	426	426
Medium Density	0	424	424
Low Density	234	0	234
Subtotal	234	850	1,084

**Table 1: Port Darlington Land Corporation Draft Approved Subdivisions
Unit Breakdown**

- 2.4 The preliminary site plan includes for the medium density block in the PDLC East (Figure 1), as shown on Figure 2, indicates 341 townhouse units, 83 units less than the Draft Approval for 424 units, as follows:
- 110 – three storey townhouse units with access on private lanes with traditional rear yards.
 - 79 – three storey dual frontage townhouse units with vehicular access and parking accessed from the private lane and front doors facing Port Darlington Road.
 - 152 – four storey stacked townhouse units.
- 2.5 The proposed zoning amendment proposes the following changes to the existing zoning:
- Introduce stacked townhouse units as a permitted form of housing;
 - Reduce the required parking for dwelling units that are 1 bedroom or less within a stacked townhouse building;
 - Reduce the setback requirements for a dwelling to a private road and allow porch or steps to be as close as 0.9 metres to a property line.
- 2.6 The following studies were submitted in support of the application and are under review:
- Noise Study
 - Energy Conservation and Sustainability Plan
 - Parking Study
 - Functional Servicing Report
 - Landscape Analysis

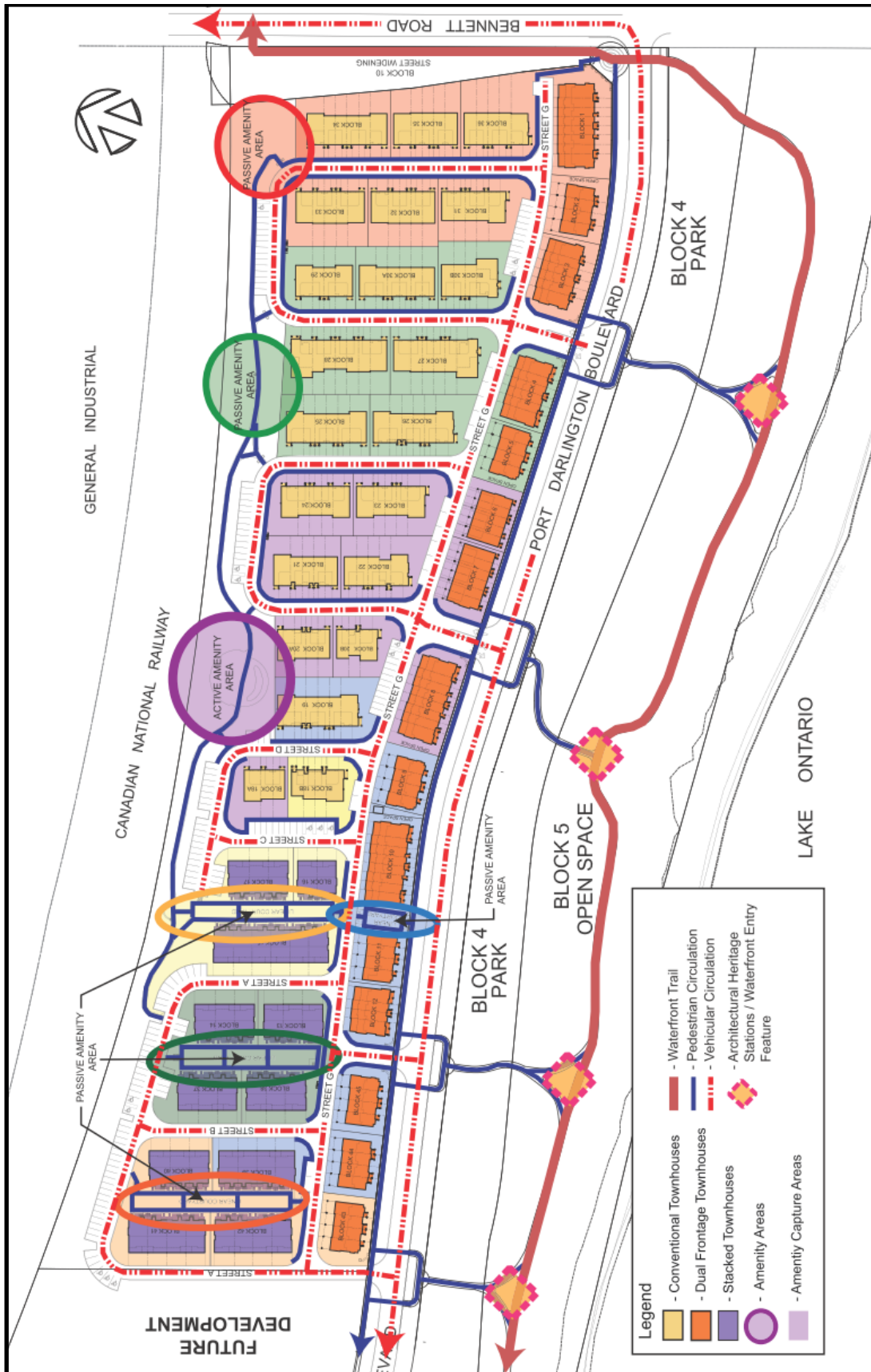


Figure 2: Master Block Plan for Subject Lands

3. Land Characteristics and Surrounding Uses

- 3.1 The subject lands have a rolling topography. The site has been stripped of topsoil and onsite preliminary grading and servicing works have begun (Figure 3).



Figure 3: Photo of Subject Lands

- 3.2 The surrounding uses are as follows:
- North - CN Railway and Industrial lands
 - South - Future waterfront park and trail; Lake Ontario
 - East - Municipal parkland on the east side of Bennett Road
 - West - Lands Zoned for Apartment Use (up to 8 storeys and up to 120 units per hectare)

4. Provincial Policy

Provincial Policy Statement

- 4.1 The Provincial Policy Statement identifies settlement areas as the focus of growth. Land use patterns shall be based on densities and a mix of land uses that efficiently use land, resources and infrastructure. Opportunities for redevelopment and intensification must be promoted. Municipalities must provide a variety of housing types and densities, and a range of housing options that are affordable to the area residents.

- 4.2 Healthy and active communities should be promoted by planning public streets to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity. Compact and diverse developments promote active modes of transportation such as walking and cycling.

Provincial Growth Plan

- 4.3 The Growth Plan for the Greater Golden Horseshoe was amended in May 2017 and all decisions of Council after July 1, 2017 must conform to the amended policies.
- 4.4 The subject lands are within the defined Built Boundary. Population and employment growth will be accommodated by directing a significant portion of new growth to the built up areas through intensification and efficient use of existing services and infrastructure.
- 4.5 The development of complete communities is encouraged by promoting a diverse mix of land uses, a mix of employment and housing types, high quality public open space and easy access to local stores and services. New transit-supportive and pedestrian-friendly developments will be concentrated along existing and future transit routes. A minimum of 40 percent of all residential development occurring annually within each upper tier municipality will be within the built up area.

5. Official Plans

Durham Regional Official Plan

- 5.1 The subject lands are designated Living Area, and are considered to be within the Waterfront Place designation. The Lake Ontario shoreline is identified as Waterfront Area. The predominant use of lands within the Living Area designation shall be for housing purposes.
- 5.2 There is specific recognition of the Port Darlington area as a Waterfront Place. Waterfront Places shall be developed as focal points along the Lake Ontario waterfront having a mix of uses, integrated with the Greenlands System. Uses may include residential, commercial, marina, recreational, tourist, and cultural and community facilities. The scale of development shall be based on and reflect the characteristics of each Waterfront Place. Where appropriate Waterfront Places shall be planned to support an overall, long-term density target of at least 60 residential units per gross hectare and a floor space index of 2.0. The built form should vary, and be developed in a manner that is sensitive to the interface with the natural environment, as detailed in area municipal official plans.
- 5.3 As the lands are within the Built Boundary, a minimum 32 percent of all residential development occurring annually in Clarington shall be through intensification within built-up areas.

Clarington Official Plan

- 5.4 The Clarington Official Plan designates the lands Urban Residential and the lands are within the limits of the Waterfront Place. Waterfront Places are considered to be a Priority Intensification Area, together with Corridors, Centres and Transportation Hubs. Lands within Waterfront Place must achieve a minimum net density of 40 units per hectare and a range of heights between 2 and 12 storeys.
- 5.5 The Official Plan contains policies for the creation of multi-unit residential developments. These policies were considered through the establishment of the Port Darlington Secondary Plan and application for Draft Approval.
- 5.6 The update to the Clarington Official Plan introduces an arterial road network through the Port Darlington Neighbourhood. Port Darlington Road extension and Lambs Road are considered arterial roads.
- 5.7 The Official Plan provides additional direction on built form, urban design and sustainability measures to be implemented through the site plan process.
- 5.8 Environmental Impact Studies and related environmental reports were approved at the time of previous approvals of the subdivision. The appropriate development limits adjacent to Lake Ontario and Bennett Creek were established through the Draft Approval in accordance with all applicable policies in place at the time including the Clarington Official Plan.

Port Darlington Neighbourhood Secondary Plan

- 5.9 The Port Darlington Neighbourhood Secondary Plan provides a more detailed land use plan for this area. The lands are within a Medium Density Residential designation. The Secondary Plan has a focus on providing a high quality urban environment, with attention to heritage resources, the waterfront and recreational opportunities. The Waterfront Greenway with the Waterfront Trail and the District Park is designated along the Lake Ontario shoreline. The plan requires proponents to submit comprehensive design documents showing how the development will satisfy the urban design objectives.

6. Zoning By-law

- 6.1 Zoning By-law 84-63 zones the subject lands Holding - Urban Residential Zone ((H)R3-43 Zone which permits up to 424 units in the form of link townhouse units and apartment units.

7. Public Notice and Submissions

- 7.1 Notice of the Public Meeting was mailed on February 2, 2018, in addition to posting on the municipal website and in the Planning Services Department E-update.
- 7.2 At the time of writing this report Staff have received only general inquiries from area residents.

8. Agency Comments

- 8.1 At the time of writing this report, comments have not been received from the Region of Durham, the Central Lake Ontario Conservation Authority, and several other circulation agencies.

9. Departmental Comments

Engineering Services

- 9.1 The Engineering Services Department has no objection to the proposed rezoning, however notes that the applicant must resolve all issues relating to the final Subdivision Approval prior to proceeding with the proposed development.
- 9.2 Engineering Staff have several comments relating to access design, servicing and grading on the site plan lands to be addressed in the context of the overall development scheme for the neighbourhood. Detailed technical comments will be provided to the applicant. Private entrances to the condominium townhouse block from Port Darlington Road extension will require approval and performance guarantees to the satisfaction of the Director of Engineering Services.
- 9.3 Engineering Staff has reviewed the Parking Study. While the report appears to provide sufficient justification for a reduction in parking related to the 1 bedroom stacked townhouse units, Engineering Staff together with other municipal departments will be discussing the potential implications of the reduction.
- 9.4 Standard requirements apply with respect to site alteration, timing windows for road excavation and construction, and noise attenuation.

Emergency and Fire Services

- 9.5 Clarington Emergency and Fire Services have no objections to the rezoning, however have provided detailed comments on the site plan with respect to fire routes and turning radii for fire trucks, requirements for no parking signage along fire routes and hydrant spacing.

10. Discussion

Accessibility

- 10.1 The subject lands are within an approved plan of subdivision and were previously zoned based on a different preliminary site plan which included low rise apartments.
- 10.2 While the request to add a stacked townhouse product, and to refine the unit or Parcel Tied Land (POTL) regulations, appears to be a minor request, Staff have expressed concern that the proposed housing forms all have stairs, interior or exterior to the unit or both and the current plan lacks any accessible units. The current plan for 341 units has

no accessible units. This issue has previously been noted to the applicant including the need for some revisions to the site plan to find opportunities for accessible units.

Parking

- 10.3 A component of determining the final unit mix will be the assessment of suitable parking. The applicant is requesting relief from the typical parking requirements for smaller 1 bedroom units within some of the stacked townhouses. The zoning by-law requires 2 parking spaces for each townhouse unit regardless of size.
- 10.4 The stacked townhouse product is relatively new to Clarington. A typical cross section is shown in Figure 4, and an elevation drawing of a typical townhouse block is provided in Figure 5. Each townhouse section provides for 4 units. A small one bedroom unit is proposed at the first level – partially below grade, with a larger unit occupying all of the main floor (at least 2 bedrooms), with the third and fourth floor also providing for 2 additional units (at least 2 bedrooms each).
- 10.5 The Zoning By-law requires 2 parking spaces for each townhouse unit, plus 0.25 spaces for each unit to be assigned to visitor parking. No distinction is made between a traditional townhouse unit and a stacked unit which may have small units more similar in size to an apartment unit.
- 10.6 The applicant has prepared a parking study to justify the requested reduction in parking, 30 spaces overall, attributed to the stacked townhouse component. The study requests consideration of a lesser rate for the stacked units, specifically reducing the rate for the 38 1-bedroom stacked units, from 2 spaces per unit, down to 1.21 spaces per unit. Visitor parking would continue to be provided at a rate of 0.25 spaces per unit for all the stacked units. The parking study is currently under review.

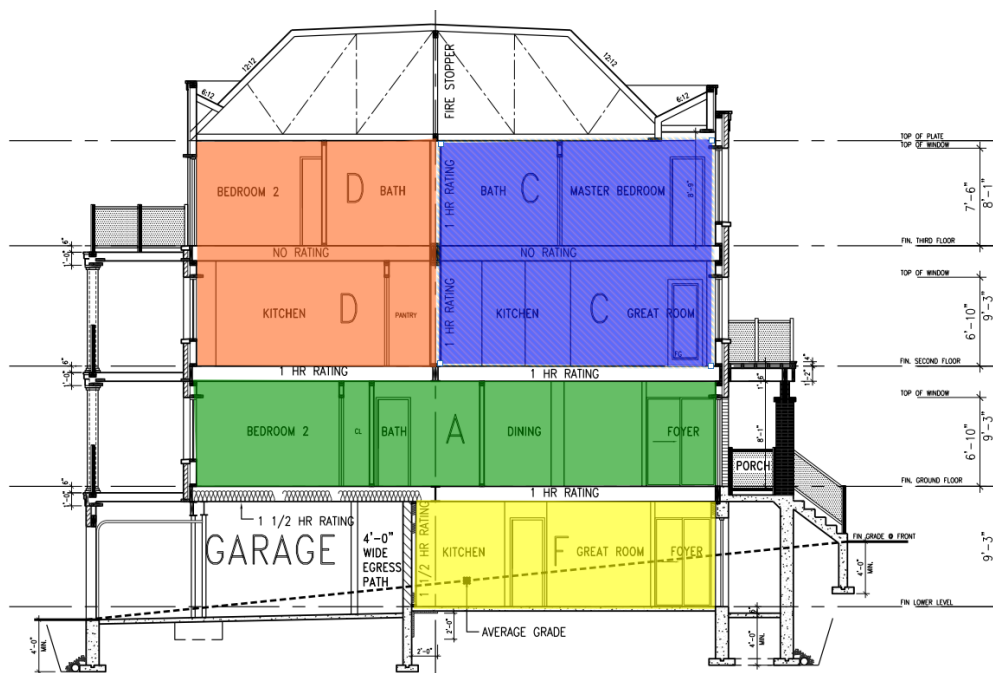


Figure 4: Stacked Unit Cross-Section



Figure 5: Stacked Townhouse Dwelling Elevation

Site Plan

- 10.7 The site plan review process will allow staff to review the Zoning compliance with the R3-43 Zone and to report back with an amendment that appropriately reflects unit mix, parking and unit regulations based on appropriate site design.
- 10.8 The purpose of the public meeting is to provide an opportunity for further public input. These public comments will be addressed in a subsequent staff report.

11. Concurrence

Not Applicable.

12. Conclusion

The purpose of this report is to provide background information for the Public Meeting on the rezoning application submitted by Bowmanville Lakebreeze East Village Ltd. Staff will continue processing the application including the preparation of a subsequent communication.

13. Strategic Plan Application

Not applicable.



Submitted by:

David J. Crome, MCIP, RPP
Director of Planning Services



Reviewed by:

Andrew C. Allison, B.Comm, LL.B
Chief Administrative Officer

Staff Contact: Anne Taylor Scott, Senior Planner, 905-623-3379 ext. 2414 or
ataylorcott@clarington.net

The following is a list of the interested parties to be notified of Council's decision:

Enzo Bertucci

ATS/CP/nl

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Planning Services Report

If this information is required in an alternate accessible format, please contact the Accessibility Coordinator at 905-623-3379 ext. 2131.

Report To:	Council	
Date of Meeting:	February 26, 2018	
Report Number:	PSD-021-18	Resolution:
File Number:	PLN 11.22	By-law Number:
Report Subject:	Participation in the Ontario Ministry of Housing's Development Charge Rebate Program	

Recommendations:

1. That Report PSD-021-18 be received;
2. That Council authorize staff to submit an Expression of Interest and enter into a Transfer Payment Agreement with the Province to facilitate participation in the Ontario Ministry of Housing's Development Charge Rebate Program;
3. That subject to a partnership arrangement between the Municipality of Clarington and the Region of Durham, that Council authorize the Regional Municipality of Durham to:
 - a) Serve as the Municipality of Clarington's program administrator for the Ontario Ministry of Housing's Development Charge Rebate Program; and
 - b) Enter into a Transfer Payment Agreement on behalf of the Municipality of Clarington with the Province to facilitate participation in the Ontario Ministry of Housing's Development Charge Rebate Program; and
4. That all interested parties listed in Report PSD-021-18 and any delegations be advised of Council's decision.

Report Overview

Because of a shortage of rental housing, the Municipality of Clarington has been identified as one of the 68 municipalities in Ontario that can participate in the \$125 million Provincial Development Charges Rebate Program designed to stimulate the construction of purpose-built rental housing. This program will provide rebates for municipal and regional development charges levies for qualified projects. There is no municipal financial contribution required but there are administrative costs associated with the program administration. Staff support the Municipality's participation in this program. It is recommended that Council authorize staff to take the appropriate steps, including seeking a partnership agreement with the Region of Durham as the housing authority, to participate in this program.

1. Background

- 1.1 On April 20, 2017, the government announced its Fair Housing Plan, a comprehensive package of 16 measures designed to improve housing affordability, address demand, protect renters and buyers, increase the supply of housing, and improve information sharing.
- 1.2 The Development Charges Rebate Program (DCRP) is an initiative designed to increase the supply of purpose-built market rental housing. The Program provides rebates for development charges and aims to reduce the construction costs of building market rental housing, particularly in those communities that are most in need of new purpose-built rental housing.
- 1.3 The DCRP was officially announced on November 29, 2017. Program Guidelines were issued on December 20, 2017 and the Ministry of Housing held information sessions in January. Clarington staff participated in a conference call briefing with Regional staff on February 15, 2018.
- 1.4 Municipalities that wish to participate in the program must open a draft Expression of Interest (EOI) application on the Province's Grants Ontario website by February 16, 2018. This step was completed. The final EOI must be completed and submitted to the Ministry by March 2, 2018. The program is designed to operate for five years, however this deadline applies for all five years of the program.

2. Discussion

- 2.1 The introduction of the DCRP provides a means for encouraging an increase in the stock of rental housing in Clarington. The need for such projects has grown in recent years. The DCRP is designed to encourage the development of rental housing by reducing its overall construction costs.

Program Overview

- 2.2 The DCRP provides up to a total of \$125 million available over five years to participating municipalities, starting with \$25 million in 2018-19. To qualify, municipalities must have multi-unit development charges and must be in need of new purpose-built market rental housing. The Province identified municipalities in need of market rental housing as those that have a low vacancy rate (3% or less), have a high rental tenant population (20% or more of all households), or have development opportunities within a 500-800 metre radius of a major transit station area i.e. GO Transit. The Municipality of Clarington has been identified by MHO as eligible to participate in the program.
- 2.3 Municipalities participating in the DCRP are able to provide up to a 100% rebate of the development charges paid by qualifying rental developments. To facilitate this, the MHO would advance funding directly to the municipality, and the municipality would then issue the rebate to the developer in compliance with the program requirements, usually at the time that building permits are issued. Since the rebate is funded in whole by the Province, no municipal contribution is required.

Project Eligibility

- 2.4 To be eligible for a rebate, purpose-built rental projects would have to remain as rental tenure for a minimum of 20 years and would have to be non-luxury units. For the purpose of this program, non-luxury units are those where starting rents do not exceed 175% of the Average Market Rent (AMR), as published by CMHC.
- 2.5 Single and semi-detached homes, duplexes/triplexes, and retirement homes are not eligible under the program. The DCRP is intended to attract new purpose-built rental projects, so rebates cannot be used to supplant existing incentive programs (e.g. Community Improvement Programs) that already offer a deferral or exemption from the payment of development charges. Where an existing incentive program results in only a partial exemption from development charges, the DCRP can be used to rebate the remaining development charges that are charged to the applicant. While Clarington has some development charge incentive programs, they are not specifically geared toward below-market rental housing. Clarification on this matter is being sought. The interrelationship of the programs will be clarified as the details are finalized.

Municipal Flexibility

- 2.6 Staff view the DCRP as a means for ensuring coordination with the Municipality's general planning objectives. The Municipality has flexibility to determine additional parameters based on local need including:
- The eligible built form of rental housing that can receive the rebate (high-rise, mid-rise, townhouses);
 - Unit size and configurations (units less than 100 square metres, 3+ bedrooms, etc.);

- Full or partial rebates;
- The timing of the rebate after the development charges are collected within the program's parameters; and
- a more stringent threshold for rents based on AMR percentage (e.g. at or below AMR).

More research into current housing needs is required prior to determining such measures.

Administration

- 2.7 Participation in the DCRP requires a considerable administrative effort. Although the EOI process is managed entirely online, the volume and detail of required content is substantial. The EOI process requires that a municipality document its need and vision for market rental housing, program expectations and capacity, existing and potential incentives, and planned program mechanisms (rent threshold, level of rebate, means of rental tenure maintenance, etc.).
- 2.8 If a municipality is selected to participate in the program, it must enter into a Transfer Payment Agreement (TPA) with the Province, administer the DCRP in compliance with the TPA and the program guidelines, undertake all activities relating to program delivery, develop and enter into required agreements with the developers of eligible rental projects, and complete all reporting requirements. Reporting responsibilities include the submission of "take-up plans" to MHO in the first quarter of each fiscal year that outline the eligible rental housing developments that have come forward for planning approvals. Municipalities are also required to submit "adjusted spending plans" on a bi-annual basis that provide detailed statistics on the rebates that have been completed.
- 2.9 Municipalities may use up to 5% of allocations through the DCRP help offset their own administrative costs.

Designation of a Program Administrator

- 2.10 Municipalities have an option to designate their housing Service Manager to serve as their program administrator. In the case of the Municipality of Clarington, this would involve designating the Region of Durham as administrator. To facilitate this arrangement, the Municipality of Clarington is required to produce a motion of Council designating the Region of Durham as program administrator. The Region must also provide written confirmation from a "person of appropriate authority" of its willingness to act as program administrator.

- 2.11 Clarington staff have had discussions with staff from the Housing, Planning and Economic Development and Finance Departments at the Region of Durham regarding the DCRB. The Region of Durham expressed a willingness to serve as the program administrator for the Municipality of Clarington. However, due to impending program deadlines, it was agreed that the Municipality would proceed with the submission of its own EOI while partnership discussions between the Municipality and Region were ongoing. If the Municipality and Region are able to arrange an agreeable partnership, the Municipality may designate the Region as its program administrator.

Application Process and Selection Criteria

- 2.12 There are a few applications that have identified to staff that they are considering purpose-built rental housing:
- One of the apartment buildings (151 units) in Courtice Uplands development;
 - A 66 unit mixed use development proposal in the Courtice Town Centre;
 - One of the apartment buildings (136 units) proposed at 51 Clarington Boulevard in Bowmanville;
 - The 20 unit townhouse development proposal on the south-east corner of Liberty and Longworth; and
 - The 16 apartment units proposed above the commercial stores in the Tornat development in Newcastle.

Once the development community is aware of the Municipality's participation in the program, we would anticipate the above projects and other potentially eligible projects will emerge over the next five years.

- 2.13 At the present time, MHO has been unable to provide any information regarding EOI evaluation criteria or prospective funding allotments. Accordingly, the range of magnitude for potential funding for the Municipality of Clarington is currently unknown. There is a total of \$125 million available from the Province over the five-year duration of the program, however, this allocation could be divided between as many as 83 municipalities. The MHO announcement of notional funding allocations is planned for Spring 2018.

3. Financial Implications

As a rebate program, there will not be any financial impacts for the Municipality. The DCRB requires the initial payment of development charges to the Municipality and then subsequently provides for a rebate to be issued to the developer using entirely provincial funds. Despite the absence of direct financial impacts, there will be administrative implications for the Municipality's Planning Services and Finance Departments, who will be responsible for administering parts of the program.

4. Concurrence

This is a joint report with the Director of Finance.

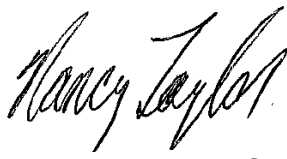
5. Conclusion

The Development Charges Rebate Program has the potential to be a valuable tool for the Municipality to implement more affordable rental housing. Designating the Regional Municipality of Durham to serve as program administrator will reduce the Municipality's administrative responsibilities in delivering the DCRP. Further, by co-ordinating local and regional incentives, the program will be more user friendly for the development community.

6. Strategic Plan

The report conforms to the Strategic Plan Action item to support a variety of affordable mixed housing types and support our residents at every stage of life and across all abilities.

Submitted by: 
David Crome, MCIP, RPP,
Director of Planning Services

Submitted by: 
Nancy Taylor, BBA, CPA, CA
Director of Finance/Treasurer


Reviewed by: (for) Andrew C. Allison, B.Comm, LL.B ,CAO

Staff Contact: Carlo Pellarin, Manager, Development Review, 905-623-3379 x2408 or cpellarin@clarington.net

The following is a list of the interested parties to be notified of Council's decision:

Alan Robin, Acting Director of Housing Services
Region of Durham

CP/DC/tg