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DRAFT RAILWAY-ROADWAY GRADE CROSSINGS POLICY

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1. (1) The definitions in this section apply to this Policy.

“Act” means the *Railway Safety Act. (Loi)*

“average annual daily traffic” means

(a) with respect to a line of railway, the number of train and engine movements over a point or segment of the line of railway in any year, divided by the number of days in that year, and

(b) with respect to a road, the total number of vehicles passing over a point or segment of the road in both directions in one year, divided by the number of days in that year. (*débit journalier moyen annuel*)

“beneficiary” means the person or organization for whom or which the railway company provides the private grade crossing. (*bénéficiaire*)

“CIF” means the date of coming-into-force of this draft Policy if finalized as a Regulation. (*date d’entrée en vigueur*)

“crossing surface” means the part of the road surface of the grade crossing that lies between the rails of each track and the part that lies outside the rails up to the ends of the railway ties, including the elevation of the railway tracks in relation to the road. (*surface de croisement*)

“cross-product”, with respect to a grade crossing, means the product of the average annual daily traffic of trains and engines on the line of railway and the average annual daily number of vehicles on the road that pass over the grade crossing. (*produit vectoriel*)

“forecast cross-product” means the cross-product predicted for a grade crossing following an evaluation of the potential road and railway traffic over a predetermined period of time in the future. (*produit vectoriel prévu*)

“Geometric Design Guide” means the *Geometric Design Guide for Canadian Roads*, (September 1999) by the Transportation Association of Canada (TAC), as amended from time to time. (*Normes de conception géométrique*)

“grade crossing” means a road crossing whose road passes across one or more lines of railway at grade. If a road crosses adjacent tracks of one or more railway companies, with a distance of 30 m or less between track centre lines, measured along the travelled surface of the road parallel to the axis of the road, it is considered to be one grade crossing. However, two adjacent but separate roads that cross a line of railway are considered as separate grade crossings. (*passage à niveau*)

“maximum railway operating speed,” in respect of a grade crossing, means the actual maximum speed of trains, taking into account speed restrictions due to gradients, passenger stations, or track configuration, operating on the line of railway while approaching to enter the grade crossing. (*vitesse maximale pratiquée sur la ligne de chemin de fer*)

“maximum road operating speed,” in respect of a grade crossing, means the actual vehicle speed at the safe stopping sight distance, and is:

(a) the legal maximum speed limit (posted or unposted); or

(b) the posted advisory speed; or

(c) the reported operating speed where constraints such as traffic control devices at intersections on the road approaches or physical restrictions such as curves restrict speed, or as determined by an acceptable traffic engineering study. (*vitesse maximale pratiquée sur la route*)

“private grade crossing” means a grade crossing whose road is a private road. (*passage à niveau privé*)

“private road” means a road that is not a public road and, in the case of a reserve within the meaning of section 2 of the *Indian Act*, a road that is one of the following:

(a) a farm road,

(b) a road that allows access to a business or facility, such as a sawmill, campground, logging operation, hospital, casino, store, band council office or educational facility, or

(c) a road that allows access to a controlled area or facility, such as a water or sewage treatment plant. (*route privée*)

“public grade crossing” means a grade crossing whose road is a public road. (*passage à niveau public*)

“public road” means a road that is opened or maintained by a road authority

(a) for public use, including a pedestrian or bicycle path and a road that allows access to a reserve, or

(b) for general use, in the case of land on a reserve within the meaning of section 2 of the *Indian Act*. (*route publique*)

“qualified person” means, in respect of a specified duty, a person who, because of their knowledge, training and experience, is qualified to perform that duty safely and properly. (*personne qualifiée*)

“railway company”, in respect of a grade crossing, means a railway company that operates a line of railway at the grade crossing, and includes all railway companies where more than one railway company operates a line of railway at the grade crossing. (*compagnie de chemin de fer*)

“responsible authority” means

(a) with respect to a public grade crossing, a railway company and a road authority, acting separately, and

(b) with respect to a private grade crossing, the railway company. (*autorité responsable*)

“road approach” means that part of a road leading up to or away from a line of railway that affects the safety at a grade crossing and within which the behaviour of a driver of a vehicle, a pedestrian, a cyclist, or a person using an assistive device may be influenced. (*abord routier*)

“road authority”, with respect to a grade crossing, means the public authority, including a band council within the meaning of section 2 of the *Indian Act*, having the legal authority to open and maintain the public road that passes across the line of railway at the grade crossing, and includes all public authorities where more than one public authority is responsible for a road approach to the grade crossing. (*autorité responsable du service de voirie*)

“CRRGCS” means the “Canadian Railway-Roadway Grade Crossings Standards”, formerly known as the “RTD 10 Road/Railway Grade Crossings Technical Standards and Inspection,

Testing and Maintenance Requirements”. The CRRGCS is a document to be incorporated by reference to the Regulations that provides the best engineering practices for the safety oversight of grade crossings, established by the Department of Transport and published on January 11, 2007 as amended from time to time. (*Normes de passages à niveau*)

“sightlines” means lines of sight drawn between a person at a grade crossing or its road approaches and the grade crossing, railway crossing signs, signals and trains, engines and other railway equipment approaching or occupying the grade crossing. (*lignes de visibilité*)

“traffic control device” Any sign, signal, marking, or device placed upon, over or adjacent to a roadway by a road authority or beneficiary, for the purpose of regulating, warning, guiding or informing road users. (*dispositifs de contrôle de la circulation*)

“Uniform Traffic Control Devices Manual” means the Manual of Uniform Traffic Control Devices for Canada, 4th edition, prepared by the National Committee on Uniform Traffic Control, Transportation Association of Canada (TAC), and dated September 1998, as amended from time to time. (*Manuel canadien de la signalisation routière*)

“unrestricted grade crossing” means a public or private grade crossing whose road is one of the following:

- (a) a recreational road or trail or a pedestrian or bicycle path maintained by a club, association or other organization, including a snowmobile or hiking trail,
- (b) a road or a pedestrian or bicycle path of a commercial or industrial establishment, including a business operated from a residential or farm property, that is used by clients of that establishment,
- (c) a road that serves three or more principal residences,
- (d) a road that serves three or more seasonal residences to which access is not controlled by a gate equipped with a lock,
- (e) a private road that connects two public roads,
- (f) a private road maintained by a natural resource company, such as a company involved in forestry or mining activities, or
- (g) a road that serves a building or location that provides services or facilities, and to which the public has access, including a hospital, library, park, campground or an administrative, educational, sporting or recreational facility, but excluding a passenger train platform. (*passage à niveau libre*)

“vehicle” means a vehicle that is designed to be driven or drawn by any means, other than exclusively by muscular power, and includes industrial and farm equipment, but does not include a vehicle designed to run exclusively on rails or an assistive device designed for a person with a disability. For the purposes of this Policy and the CRRGCS, bicycles are not considered a vehicle (*véhicule*)

“vicinity”, in respect of a grade crossing, means the area around the crossing within which an activity or other thing may affect the safety of the crossing. (*voisinage*)

(2) The use of the words “responsible” and “responsibilities” in this Policy are not to be interpreted as determining liability for costs.

2. Sections 3 to 12 set out the responsibilities, with respect to grade crossings, of railway companies, road authorities and beneficiaries of grade crossings for the purposes of meeting the requirements of this Policy.

3. A responsible authority or beneficiary must, with each of the other responsible authorities and beneficiaries, meet or exceed the requirements of this Policy.

4. (1) If a responsible authority concludes that a threat to safe railway operations at a grade crossing exists, the responsible authority must, in addition to fulfilling the requirements of this Policy as applicable, notify any other responsible authorities.

(2) The responsible authority that has concluded, or has been notified by another responsible authority, that a threat to safe railway operations at a grade crossing exists, must take measures to ensure safe railway and road operations until the threat is removed.

5. (1) With respect to a public grade crossing, the railway company is responsible for

(a) the standard of construction and maintenance of

(i) the crossing surface;

(ii) drainage along the railway right-of-way;

(iii) railway crossing signs and “Number of Tracks” supplementary tab signs;

(iv) grade crossing warning systems;

(v) emergency notification signs;

(vi) signs for stored or standing railway equipment

(b) sightlines along the railway right-of-way;

(c) the removal of snow from the crossing surface for the safe passage of road and rail traffic at the grade crossing; and

(d) the removal from the railway right-of-way of snow that obstructs the sightlines.

(2) In respect of a public grade crossing, the road authority is responsible for

(a) the standard of construction and maintenance of

(i) the road approaches up to the crossing surface;

(ii) drainage along the road right-of-way;

(iii) traffic control devices on road approaches and stop signs at grade crossings, including devices that interconnect with grade crossing warning systems;

(b) sightlines along the road right-of-way;

(c) the removal of snow from the road approaches for the safe passage of road traffic at the grade crossing, ensuring that snow plowed from the road does not obstruct the sightlines.

(3) The railway company and road authority are each responsible for sightlines over land adjoining a line of railway or other land in the vicinity of a grade crossing.

6. (1) With respect to a private grade crossing, the railway company is responsible for
- (a) the standard of construction and maintenance of all aspects of the grade crossing within the railway right-of-way limits, including that portion of a road approach outside the railway right-of-way limits from the point of safe stopping distance along the road approach to the railway right-of-way limits;
 - (b) the sightlines from the road within the railway right-of-way limits, including those sightlines that extend over land adjoining the railway right-of-way limits because of the curvature of the line of railway, but not for the part for which the beneficiary is responsible under paragraph (2)(b);
 - (c) the notification of landowners in accordance with subsections 9(1) and 10(1) with respect to any requirements for sightlines that extend over their land from the road within the railway right-of-way limits;
 - (d) informing the beneficiary with respect to any requirements for sightlines from the road outside the railway right-of-way limits;
 - (e) the removal of snow from the crossing surface for the safe passage of road and rail traffic at the grade crossing; and
 - (f) the removal from the railway right-of-way of snow that obstructs the sightlines of the road user.

(2) The beneficiary and the road authority, with respect to any public road adjacent to the railway right-of-way that intersects with a road approach to a private grade crossing, are each responsible, as the case may be, for

- (a) the standard of construction and maintenance of
 - (i) the road approaches outside the railway right-of-way limits, or, if the railway company is responsible under paragraph (1)(a) for any part of the road approaches outside the railway right-of-way limits, up to that part;
 - (ii) drainage along their road approaches outside the railway right-of-way limits;
 - (iii) traffic control devices on their road approaches outside the railway right-of-way limits;
- (b) the removal of obstructions and maintaining sightlines from the road approaches over their property up to the railway right-of-way limits; and
- (c) the removal of snow from the road approaches for the safe passage of road traffic at the grade crossing, ensuring that snow plowed from the road does not obstruct the sightlines of the road user.

7. (1) A responsible authority that is asked by another responsible authority or a beneficiary for information respecting its operations on a road or line of railway that is required in order to carry out the requirements set out in this Policy, must provide the information.

(2) A beneficiary that is asked by a responsible authority for information respecting its use of the road that is required in order to carry out the requirements set out in this Policy, must provide the information.

8. (1) A responsible authority for a grade crossing must ensure that the information described in Appendix D of the CRRGCS is shared with other responsible authorities and must be approved and dated by a qualified person.

- (a) within [2 years after [CIF], in the case of an existing grade crossing;
- (b) at the time of construction of the grade crossing, in the case of a new grade crossing; and
- (c) at the time of implementation, in the case of an alteration or operational change referred to in section 16.

(2) A responsible authority for a grade crossing must ensure that the information referred to in subsection (1) is updated and shared as soon as practicable if any of the following events occur:

- (a) a grade crossing warning system, a “prepare to stop at railway crossing” sign, a traffic signal, or other traffic control device is installed or altered at or on a road approach to the grade crossing;
- (b) the grade crossing safety documentation required under sections 14 to 19 is completed;
- (c) the use of the whistle on railway equipment approaching the grade crossing is ceased;
- (d) there is a change of more than 16 km/h (10 mph) in the maximum operating speed of rail or road traffic approaching the grade crossing;
- (e) there is a road closure or a transfer of the road authority or beneficiary at the grade crossing;
- (f) the operation of a line of railway at the grade crossing is suspended, abandoned or transferred; and
- (g) the grade crossing is closed or converted to a grade separation.

9. A responsible authority must notify landowners, if sightlines extend over their property, and of the area of the property that the sightlines cover and the requirements under section 10.

10. (1) If a person or a landowner receives notification under section 9, and, before that person or landowner conducts an activity or authorizes a proposed activity on land adjoining a line of railway or other land in the vicinity of a grade crossing or on the road approaches or on land on which a line of railway is situated that might obstruct the sightlines referred to under section 9 between the road and the line of railway or the traffic control devices, the person or landowner must consult with the responsible authority.

(2) The activities include

- (a) the construction or alteration of a building, fence or other structure;
- (b) the placing of any material, equipment, vehicle or other thing; and
- (c) the planting of any tree, bush or other vegetation.

(3) The responsible authority must be available for consultation within 30 days after receipt of a request for consultation.

(4) A person must not conduct the activity or authorize the proposed activity before the day on which they are informed by the responsible authority that adequate safety measures have been implemented to ensure that the sightlines are maintained.

11. (1) Within 30 days after a railway company ceases all operation of railway equipment over a grade crossing or becomes aware that there is no demand, and there is unlikely to be a demand, for railway operations over the grade crossing within the following 12 months,

(a) the railway company must notify, as soon as practicable, the road authority or the beneficiary that railway equipment no longer operates over the grade crossing;

(b) the railway company must remove or cover the tracks or arrange with the road authority to erect a sign to advise persons on the road approaches that railway equipment does not operate over an unrestricted grade crossing; and

(c) the railway company must remove or cover its signs and grade crossing warning system lights and gate arms at unrestricted crossings.

(2) If the railway company does not remove the tracks, it must maintain the covered tracks or the crossing surface in good condition.

(3) The road authority or beneficiary must remove or cover its signs and road markings relating to the grade crossing within 30 days after receiving the notification.

(4) Within 30 days after a road authority or beneficiary ceases road usage of a grade crossing or becomes aware that there is no demand, and there is unlikely to be a demand, for road usage over the grade crossing within the following 12 months

(a) The road authority or beneficiary must notify, as soon as practicable, the railway company that road users no longer operate over the grade crossing.

12. (1) This section applies to a responsible authority or beneficiary that, having taken the steps set out in section 11, starts to operate trains, engines or other railway equipment or allows road users to operate over a grade crossing.

(2) The responsible authority or beneficiary must ensure that the grade crossing meets the standards applicable to it as per section 36.

(3) The railway company must, before it starts to operate trains, engines or other railway equipment over the grade crossing, or upon receipt of a notification under paragraph 5(b)

(a) conduct the maintenance, testing and inspection required under sections 40 and 41;

(b) replace or uncover its railway crossing signs and signals;

(c) at least 30 days before it starts operations, if proposing the resumption of use, notify the road authority or beneficiary in writing of the proposed starting date; and

(d) at least 30 days before any operations are resumed at an unrestricted grade crossing, post a notice at the advance warning sign on each road approach or, if there is no advance warning sign, at the grade crossing and keep it in place for at least 30 days after the start of operations.

(4) Despite paragraph (3)(c), the railway company may start to operate railway equipment over the grade crossing less than 30 days after it notifies the road authority or beneficiary if the

railway company receives notification that the requirements set out in subsection (5) have been met.

(5) The road authority or beneficiary must, before it allows road users to operate over a grade crossing, or upon receipt of a notification under paragraph (3)(c)

(a) replace or uncover its traffic control devices before the proposed date set out in the notification;

(b) at least 30 days before it begins allowing road users to operate over the grade crossing, if proposing the resumption of use, notify the railway company in writing of the proposed starting date;

(c) apply the required road markings as soon as practicable after the proposed date set out in the notification; and

(d) notify the railway company if any of the alterations or operational changes referred to in section 16 were made during the period in which the grade crossing was not in use.

13. Sections 14 to 23 set out the requirements with respect to grade crossing safety documentation at grade crossings.

14. (1) The railway company must, within three years after the [CIF] document and notify the road authority or beneficiary of the conditions necessary for adequate warning of the approach of railway equipment at all grade crossings.

15. If a responsible authority proposes to undertake the construction of a new grade crossing, the railway company must document the conditions necessary to provide for adequate warning of the approach of railway equipment before construction begins, and, those conditions must be met prior to the opening of the grade crossing.

16. (1) The railway company that is a responsible authority, must, within a reasonable time, document and notify the road authority or beneficiary of the conditions necessary for adequate warning of the approach of railway equipment, and those conditions must be met prior to the implementation of any of the following alterations or operational changes:

(a) a significant change in the road or railway infrastructure, including a relocation of the grade crossing, or in the traffic patterns at or in the vicinity of a grade crossing, such as the installation of traffic signals on road approaches or a change in the location of the meeting or passing points of trains or engines on sidings or on passing tracks or in the switching of railway equipment;

(b) anything that is likely to cause a significant increase in the traffic volume on the road or line of railway at or in the vicinity of a grade crossing;

(c) a significant increase in the posted speed of traffic on the road or line of railway at or in the vicinity of a grade crossing;

(d) a significant change in the types of vehicles passing over the grade crossing;

(e) anything that is likely to cause an obstruction of sightlines;

(f) anything that is likely to cause the interruption, control or blockage of road traffic over the grade crossing; or

(g) any other action that might cause a significant change in road or railway operations that could adversely affect the safety of a grade crossing.

(2) Paragraph (1)(b) does not apply in respect of temporary protection measures, detours and emergencies.

17. (1) Before a railway company, a road authority, or a beneficiary that is not a responsible authority authorizes or conducts an alteration or operational change referred to in section 16, it must notify the responsible authority.

(2) A railway company, a road authority, or a beneficiary that is not a responsible authority may only authorize or conduct the alteration or operational change if the railway company has documented and notified the road authority or beneficiary of the conditions necessary under subsection 16 (1) and has confirmed that those conditions have been met.

18. Before a railway company ceases the use of the whistle on railway equipment at or in the vicinity of a grade crossing in response to a resolution of the government of a municipality declaring that it agrees that the whistle should not be used in that area, the railway company must determine whether the area meets the requirements set out in section 35. The railway company must document and notify the road authority of the conditions necessary for adequate warning of the approach of railway equipment and confirm that these conditions have been met.

19. (1) Before a railway company starts to operate trains, engines or other railway equipment over a grade crossing, or before a road authority or beneficiary allows road users to operate over a grade crossing that has not been in use for a period of three years or more, the railway company must document and notify the road authority or beneficiary of the conditions necessary for adequate warning of the approach of railway equipment and confirm that these conditions have been met.

20. (1) Determination of the conditions necessary for adequate warning of the approach of railway equipment must be conducted, approved and dated by a qualified person.

(2) If the determination in subsection (1) is completed by more than one railway company, each railway company must designate a qualified person to conduct the determination.

(3) The railway companies may also designate the same person to be the qualified person.

21. (1) The railway company must document and notify other responsible authorities of the conditions necessary for adequate warning of the approach of railway equipment by

(a) requesting information from the other responsible authorities or beneficiaries with respect to their operations at the grade crossing; and

(b) reviewing safety issues with respect to the grade crossing with the other responsible authorities or beneficiaries.

22. The conditions documented in subsections 14 to 21 must take into account those factors set out in section 3.1 of the CRRGCS.

23. Every responsible authority must keep the most recent grade crossing safety documentation resulting from subsections 14 to 21 in respect of each of its grade crossings.

24. Sections 25 to 27 set out the requirements with respect to safety reviews at grade crossings.

25. A responsible authority must conduct a safety review within a reasonable time, and must take into account all of the factors that could have had an impact on any of the following occurrences at or in the vicinity of a grade crossing as follows:

(a) drivers of vehicles recurrently enter the grade crossing in an unsafe manner when the lights of a grade crossing warning system are flashing;

(b) vehicles recurrently block the grade crossing, in the case of a grade crossing where trains or engines are not required to stop and measures have not been put in place to allow vehicles to clear the grade crossing before the arrival of the trains;

(c) a gate of a grade crossing warning system recurrently strikes or is struck by vehicles, or vehicles recurrently strike signs, signals or supporting structures of signals or systems.

(d) a collision occurs between railway equipment on a track and a vehicle, a pedestrian, a cyclist, or a person using an assistive device; or

(e) a report or other evidence of the front, rear or underside of a vehicle making contact with the crossing surface or the surface of a road approach within 30 m of a rail.

26. (1) A safety review must be conducted, approved and dated by a qualified person.

(2) If a safety review is conducted by more than one responsible authority, each responsible authority must designate a qualified person to conduct the review.

(3) The responsible authorities may designate the same person to be the qualified person.

27. A responsible authority that conducts a safety review must keep a record of it readily available for inspection at the request of a railway safety inspector for a minimum of ten years but must always keep the latest safety review until a subsequent one is completed.

28. Sections 29 to 38 set out the requirements for conformance with the CRRGCS.

29. (1) This section applies with respect to a grade crossing constructed before [CIF], except insofar as sections 32 to 34 may apply to alterations made to it.

(2) A responsible authority must ensure that, on [CIF], the standards in Appendix E of the CRRGCS are met at all public grade crossings.

(3) A responsible authority for a public crossing must ensure that, within five years after the [CIF], an item whose description is set out in column 1 of Table 1 conforms with the requirements of the provisions of the CRRGCS set out in column 2 for that item, in addition to the requirements of subsection (2).

(4) A responsible authority or beneficiary for a private crossing must ensure that, within seven years after the [CIF], an item whose description is set out in column 1 of Table 1 conforms with the requirements of the provisions of the CRRGCS set out in column 2 for that item.

TABLE 1

| Item | Column 1 Description | Column 2 CRRGCS Provisions |
|------|--|---|
| 1. | Crossing surface | sections 6.2 and 6.2.1 |
| 2. | Crossing surface identified for regular use by a person using an assistive device | section 6.2.2 |
| 3. | Condition of the road approaches | section 7.8 |
| 4. | Sightlines | section 8 |
| 5. | Railway crossing signs and “number of tracks” supplementary tab signs for public grade crossings | sections 9.1 to 9.1.2 (except Notes 1, 2 and 4 from Figure 9-1) |
| 6. | Railway crossing signs and “number of tracks” supplementary tab signs for private unrestricted grade crossings | sections 9.1 to 9.1.2 (except Notes 1, 2 and 4 from Figure 9-1) |
| 7. | Retroflective material on railway crossing signs and sign posts | section 9.1.3 |
| 8. | “Railway crossing ahead” and “do not stop on track” signs | sections 9.3 and 9.5 |
| 9. | Advisory speed tab signs, “stop ahead” signs and “STOP” Signs | sections 9.4, 9.4.1 and 9.8 |
| 10. | Pavement markings | sections 9.6 and 9.7 |
| 11. | Emergency Notification Sign | sections 9.11 to 9.18 |
| 12. | Number and location of light units of grade crossing warning systems | section 13 |
| 13. | Installation of a “prepare to stop at railway crossing sign” | section 14.1 |
| 14. | The warning time for “prepare to stop at railway crossing” signs | section 14.2 |
| 15. | Preemption of traffic signals by grade crossing warning systems | section 15.3 |
| 16. | Alignment of light units of grade crossing warning systems | sections 19.4 to 19.9 |
| 17. | Operating control circuits of grade crossing warning systems | paragraphs 20.1 (a), 20.1(b), 20.1(c), 20.4(b) and section 20.5 |
| 18. | Directional stick circuits and operating control circuits of grade crossing warning systems | section 20.6 |

NOTE: Items 17 and 18 in Table 1 have been replaced with the following :

| | |
|---|---|
| 17. Operating control circuits of grade crossing warning systems | paragraphs 19.10 (a), 19.10 (b), 19.10 (c), 19.12 (b) and section 19.13 |
| 18. Directional stick circuits and operating control circuits of grade crossing warning systems | section 19.14 |

30. A person must not construct a grade crossing if

- (a) train speeds on the line of railway exceed 80 mph; or
- (b) the road is a freeway as classified in the Geometric Design Guide.

31. (1) A responsible authority that undertakes the construction of a grade crossing must ensure that it is constructed in accordance with the standards set out in Parts B and C of the CRRGCS, as it reads on the day on which the construction begins.

(2) In applying the requirements of subsection (1), the responsible authority must take into account how the grade crossing is intended to be used in the first five years after construction, including the peak forecast cross-product for those years.

32. (1) A responsible authority that causes, authorizes, is notified or becomes aware of any of the alterations or operational changes set out in section 11 must alter the grade crossing to accommodate the alterations or operational changes and ensure that the grade crossing meets the standards set out in Part B of the CRRGCS as the CRRGCS read on the day on which alterations begin.

(2) The warning times of the grade crossing warning system must meet the standards set out in Part C of the CRRGCS, as the CRRGCS read on the day on which the alterations begin.

(3) The crossing angle, location and maximum gradient need to be altered to meet those standards in subsections (1) and (2) only insofar as practicable given the constraints of the grade crossing.

(4) In applying the requirements of subsections (1) to (3), the responsible authority must take into account how the grade crossing is intended to be used in the first five years after alteration, including the peak forecast cross-product for those years.

33. (1) A responsible authority that undertakes to install or alter signs, signals, systems, components or equipment at or in the vicinity of a grade crossing must ensure that the installed or altered part meets the standards set out in Parts B and C of the CRRGCS, as it reads on the day on which the installation or alteration begins.

(2) In applying the requirements of subsection (1), the responsible authority must take into account how the grade crossing is intended to be used in the first five years after the installation or alteration, including the peak forecast cross-product for those years.

34. A responsible authority that undertakes the alteration of the geometry of a grade crossing or the road approaches or line of railway in the vicinity of a grade crossing to improve safety at the

grade crossing must, in determining the scope of the work to be done to affect the improvements and the standards to be achieved, must take into account, but not be required to meet, the standards set out in Part B of the CRRGCS, as it reads on the day on which the work begins.

35. For the purposes of section 23.1 of the Act in respect of the use of the whistle on railway equipment, the following requirements for the area are prescribed:

- (a) the grade crossings in the area and their road approaches must meet the requirements of section 16 of the CRRGCS;
- (b) whistling in the area is not required for a grade crossing that is outside the area;
- (c) there is no recurrent failure by drivers, pedestrians, cyclists, and persons using an assistive device to observe the grade crossing warning systems in the area; and
- (d) there is no recurrent unauthorized access to the line of railway in the area.

36. (1) Before a responsible authority allows the operation of railway equipment or road users over a grade crossing that has not been in use for a period of three years or more, the responsible authority must ensure that the grade crossing meets the standards set out in Parts B and C of the CRRGCS,

(2) The crossing angle, location and maximum gradient need to be altered to meet those standards in subsections (1) only insofar as practicable given the constraints of the grade crossing.

(3) If a grade crossing has not been in use for a period of less than three years, the responsible authority or beneficiary must, before it starts to operate railway equipment or allow road users to operate over the grade crossing, ensure that it meets the standards that would be applicable to it if it had remained in use, including any improvements that would apply because some of the alterations or operational changes referred to in section 11 have occurred during the period when the grade crossing was not in use.

(4) The responsible authority must take into account how the grade crossing is intended to be used in the first five years after resumption of use, including the peak forecast cross-product for those years.

37. Section 38 sets out the requirements with respect to train operations at grade crossings.

38. (1) When a driver, a pedestrian, a cyclist, or a person using an assistive device requires passage over a public grade crossing, it is prohibited for a train, engine or other railway equipment, or any part of it,

- (a) to stand or switch on any part of the public grade crossing for a period longer than five minutes;
- (b) to obstruct the public grade crossing, or cause it to be obstructed, for a period longer than ten minutes;
- (c) to stand so as to cause the unnecessary operation of a grade crossing warning device;
- (d) to stand so as to unnecessarily interfere with the sightlines of a train approaching the public grade crossing on another track, notwithstanding CRRGCS section 8.6; and
- (e) to be left unattended while interfering with the sightlines of a train approaching the public grade crossing on another track.

(2) Employees of the railway company must clear any grade crossing when an emergency vehicle requires passage.

39. Sections 40 to 45 set out the requirements with respect to maintenance, testing and inspection standards at grade crossings.

40. A responsible authority and a beneficiary must ensure that their grade crossings, road approaches, grade crossing warning systems and their components, as well as traffic control devices and their components, and sightlines are maintained in accordance with the standards applicable to them, as determined under sections 29 to 38, as the case may be, and operate as intended.

41. (1) A railway company must ensure that the components of its grade crossing warning systems are tested and inspected in accordance with Part D of the CRRGCS.

(2) Every responsible authority must ensure that traffic control devices are tested and inspected in accordance with Part D of the CRRGCS.

(3) The testing and inspection required by this section must be conducted by qualified persons.

42. (1) Responsible authorities must ensure that the plans and forms required for the installation, maintenance, inspection and testing of grade crossing warning systems and traffic control devices meet Part D of the CRRGCS, and are legible, up to date, approved by a qualified person, and kept at the grade crossing or installation to which they relate.

43. (1) A responsible authority must ensure that a record of each maintenance, inspection and test of a grade crossing component is made and kept in accordance with the following:

(a) Part D of the CRRGCS;

(b) in the case of a scheduled maintenance, inspection or test, a record must be kept for at least two years from the date of the scheduled maintenance, inspection or test. If two years or more elapses between a maintenance, inspection or test, the records of the last two maintenances, inspections or tests must be kept;

(c) in the case of an unscheduled maintenance, inspection or test, a record, including the reason for the unscheduled maintenance, must be kept for at least two years from the date of the unscheduled maintenance, inspection or test; and

(d) the record in subsection (1) must include corrections or amendments to those records as deemed necessary and must be made readily available to a Railway Safety Inspector.

44. (1) A railway company must establish and implement instructions in respect of the maintenance, testing and inspection of its grade crossing components to be followed by persons responsible for the maintenance, inspection and testing of the components.

(2) The railway company must provide to the Minister a copy of the instructions and any amendments to them within 30 days after implementing them.

45. A road authority must establish and implement instructions in respect of the maintenance, inspection and testing and of its grade crossing components to be followed by persons responsible for the maintenance, inspection and testing of the components.

46. Sections 47 to 54 set out the requirements with respect to temporary protection measures at grade crossings.

47. When work is carried out within the limits of a crossing surface or an activity related to work on the line of railway is carried out within the limits of a crossing surface, the responsible authority must follow the technical guidelines and standards in respect of the control of traffic in a work zone that are

- (a) set out in Part D of the Uniform Traffic Control Devices Manual;
- (b) established by the department of transportation of the province where the grade crossing is located; or
- (c) established by the government of the municipality where the grade crossing is located.

48. The railway company must ensure that a sufficient number of persons with appropriate training and equipment are stationed at the grade crossing to advise drivers, pedestrians, cyclists, and persons using an assistive device whether it is safe to cross the tracks when work is carried out on a line of railway within the activating limits of a grade crossing warning system and the work might result in

- (a) the activation of the system; or
- (b) the failure of the system to operate when a train or engine is approaching.

49. (1) In addition to section 48, when work is carried out on a line of railway within the activating limits of a grade crossing warning system interconnected with a traffic signal and the work might result in the activation of the system, the railway company must

- (a) before carrying out that work, notify
 - (i) in the case of a public grade crossing, the road authority that is a responsible authority, or
 - (ii) in the case of a private grade crossing, the beneficiary, and, where applicable, the road authority in respect of a public road that intersects with the road approach to the private grade crossing;

(2) When work is carried out on a line of railway within the activating limits of a grade crossing warning system interconnected with a “prepare to stop at railway crossing” sign and the work might result in the failure of the sign to activate when a train or engine is approaching or occupying the grade crossing,

(a) the railway company must, before carrying out that work, notify the road authority; and

(b) the railway company must ensure the safe and orderly flow of road users and railway equipment in the vicinity of the crossing and the interconnected “prepare to stop at railway crossing” sign.

(3) The railway company must restore normal operations of the system as soon as possible.

50. When work is carried out on a line of railway that causes the obstruction of sightlines for drivers approaching or stopped at a grade crossing that does not have a grade crossing warning system, the railway company must, at any time when a train or engine might operate over that part of the line of railway, ensure that a sufficient number of persons with appropriate training and equipment are stationed at the grade crossing to advise drivers, pedestrians, cyclists and persons using an assistive device whether it is safe to cross the tracks.

51. (1) When a grade crossing warning system is activated for maintenance, inspection and testing purposes, the railway company must take the measures necessary to ensure the safe and orderly flow of vehicles, pedestrians, cyclists and persons using assistive devices, trains, engines and other railway equipment in the vicinity of the grade crossing.

(2) When maintenance, inspection or testing causes the activation of the flashing light units at the same time that trains, engines or other railway equipment might enter onto the operating control circuits of the grade crossing warning system, the railway company must ensure that

(a) a sufficient number of persons with appropriate training and equipment are stationed at the grade crossing to advise drivers, pedestrians, cyclists and persons using an assistive device whether it is safe to cross the tracks; and

52. (1) A railway company that becomes aware that a grade crossing warning system is operating without the presence of railway equipment, or that a condition exists that might cause a grade crossing warning system to malfunction during operation or to fail to activate when a train or engine is approaching or occupying a grade crossing, must ensure that

(a) the person responsible for the repair of the system is notified immediately;

(b) simultaneous movement of railway equipment and road users over the grade crossing is immediately prevented;

(c) a sufficient number of persons with appropriate training and equipment are stationed at the grade crossing to advise drivers, pedestrians, cyclists and persons using an assistive device whether it is safe to cross the tracks;

(d) the grade crossing warning system is repaired as soon as possible; and

(e) a record is made and kept for at least two years of the failure or malfunction of the system.

(2) A railway company that becomes aware that a traffic signal preemption is activated by the failure of a grade crossing warning system, or that a grade crossing warning system interconnected with a “prepare to stop at railway crossing” sign might fail to activate the sign or that a warning system might malfunction during operation must

- (a) notify the road authority immediately;
- (b) ensure that simultaneous movement of railway equipment and road users over the grade crossing is immediately prevented; and
- (c) ensure that normal operation is restored as soon as possible.

(3) A railway company is not required to conform to paragraph (2)(a) if it deactivates the traffic signal preemption immediately or corrects the condition which could lead to the failure of a “prepare to stop at railway crossing” sign to activate before the arrival of a train or engine.

53. (1) If a road authority becomes aware that a condition exists that might cause a failure to activate or malfunction during operation of a traffic signal preemption or a “prepare to stop at railway crossing” sign, they must

- (a) notify the railway company immediately; and
- (b) ensure that normal operation is restored as soon as possible.

(2) If a railway company becomes aware, or is notified under paragraph 53(1)(a), of a condition that might cause a traffic signal pre-emption to fail to activate or to or to malfunction during operation must

- (a) immediately prevent simultaneous movement of railway equipment and road users over the grade crossing; and
- (b) ensure that a sufficient number of persons with appropriate training and equipment are stationed at the grade crossing to advise drivers, pedestrians, cyclists and persons using an assistive device whether it is safe to cross the tracks.

(3) A road authority that becomes aware that a condition exists that might cause a “prepare to stop at railway crossing” sign to fail to activate or to malfunction during operation must ensure that a sufficient number of persons with appropriate training and equipment are stationed on the road approaches to the grade crossing to control the approach of drivers to the grade crossing.

(4) The persons referred to in subsection (2) and (3) must notify other responsible authorities immediately once stationed.

54. (1) The person in charge of any work, testing or other activity, including the storage of materials, must notify the railway company that operates any line of railway at the grade crossing before beginning work, testing or other activity on any of the following:

- (a) a road approach, if the work, testing or other activity might cause or result in
 - (i) the obstruction of sightlines, or
 - (ii) the interruption, control or blockage of road traffic over the grade crossing;

(b) a traffic signal or a “prepare to stop at railway crossing” sign on the road approaches, if the work, testing or other activity might cause or result in the failure of the preemption of traffic signals or of activation of a “prepare to stop at railway crossing” sign connected to the grade crossing warning system; or

(c) a road that intersects the road approaches to a grade crossing, if the work, testing or other activity might cause or result in the interruption, control or blockage of road traffic over the grade crossing.

(2) The person in charge of any work, testing or other activity, including the storage of materials, on a grade crossing situated on the road approaches to another grade crossing must notify with the railway company that operates the line of railway at the other grade crossing if the work, testing, or other activity might cause or result in the interruption, control or blockage of road traffic over the other grade crossing.

(3) If it is possible that a train or engine will operate over the grade crossing during the work, testing or other activity, the person in charge of the work, testing or other activity, must notify the railway company railway company of the work, testing or other activity, and the railway company must ensure that a sufficient number of persons with appropriate training and equipment are stationed at the grade crossing to advise drivers, pedestrians, cyclists and persons using an assistive device whether it is safe to cross the tracks.