



## **Railway-Highway Crossing at Grade Regulations: Guidelines for British Columbia's Provincial Industrial Railways**

### **SHORT TITLE**

1. These Guidelines may be cited as the *Railway-Highway Crossing at Grade Guidelines*.

### **INTERPRETATION**

2. In these Guidelines,  
"construct" includes improvement by reconstruction;

"crossing" means any railway crossing of a highway at grade or any highway crossing of a railway at grade, but does not include highway or railway approaches to a crossing surface;

"crossing surface" means the planking, pavement or other suitable material placed between the rails and to the ends of the ties for the full width as described in section 6 and as illustrated in Schedule I;

"highway" includes any public road, street, lane, pedestrian walkway or other public way or communication;

"junior" means the railway company or road authority that is junior in title at a crossing;

"MOTI" means the provincial Ministry of Transportation and Infrastructure;

"railway company" means a railway company subject to the jurisdiction of the MOTI;

"road authority" means the public authority having legal jurisdiction to open and maintain highways in the area under its jurisdiction;

"senior" means the railway company or road authority that is senior in title at a crossing.

### **APPLICATION**

3. These Guidelines apply to all crossings for which construction authorization is granted by the MOTI.

### **PROCEDURE**

4. (1) Upon any application for leave to construct a crossing, the applicant shall send to the MOTI, with the application, four copies of a plan and profile containing the information set out in section 5.  
(2) The applicant shall send a copy of the application and three copies of the plan and profile referred to in subsection (1)
  - (a) to the appropriate road authority, if the applicant is a railway company;

- (b) to the head office of the appropriate railway company, if the applicant is a road authority.
- (3) The applicant shall indicate in the application the name and address of the road authority, agent or railway company to whom a copy of the documents referred to in subsection (2) have been sent in accordance with that subsection.

#### **PLANS**

- 5. Plans shall be numbered, dated and drawn to the following scales and shall contain the following information:
  - (a) a planview of the crossing, drawn to a scale of not less than 1:2000, showing all pertinent information including
    - (i) the location of all tracks and the right-of-way of the railway company for at least 400 m in each direction from the crossing,
    - (ii) the location of the travelled portion of the highway and of the highway right-of-way for at least 100 m in each direction from the crossing,
    - (iii) the width of the railway right-of-way,
    - (iv) the width of the highway right-of-way,
    - (v) the width of the travelled portion of the highway,
    - (vi) the width of the highway shoulders,
    - (vii) the angle of the crossing,
    - (viii) the location of all railway crossing signs and warning devices pertaining to the crossing,
    - (ix) sight lines and all obstructions to view within the distances referred to in subparagraphs (i) and (ii), and
    - (x) drainage and utilities relating to the crossing and other information relevant to the construction of the crossing;
  - (b) a profile of the railway, drawn to a scale of not less than 1:5000 horizontally and of not less than 1:250 vertically, for at least 400 m in each direction from the crossing, showing
    - (i) the elevation of the top of the lowest rail, and
    - (ii) the elevation of the original ground at the centre line of the track;
  - (c) a profile of the highway, drawn to a scale of not less than 1:2000 horizontally and of not less than 1:200 vertically, for at least 100 m in each direction from the crossing, showing
    - (i) the elevation of the highway surface and details of gradients, and
    - (ii) the elevation of the original ground at the centre line of the highway; and
  - (d) a typical cross section of the highway right-of-way in the vicinity of the crossing, drawn to a scale of not less than 1:200, showing the travelled portion of the highway, the shoulders, drainage, utilities and other information relevant to the construction of the crossing.

#### **CROSSING SURFACE**

- 6. (1) Unless otherwise ordered by the MOTI, when a crossing other than a pedestrian crossing is constructed, the crossing surface shall be in accordance with the diagrams set out in Schedule I and shall have a width of
    - (a) 8 m, or
    - (b) the width of the highway and shoulders plus 0.5 m on each side of the highway and shoulders, as measured at the approaches to the crossing, whichever is the greater.
  - (2) The distances referred to in subsection (1) shall be measured at right angles to the centre line of the highway.
- 7. A flangeway with a width of between 65 mm and 120 mm to a depth of between 50 mm and 75 mm shall be provided between the gauge side of the running rail and the highway surface.

### **CROSSING APPROACHES**

8. At all crossings the gradient of the approaches of the highway shall not be greater than 1 m of rise or fall for every 20 m of the horizontal length of the approaches.
9. Where the MOTI approves guide fences on the approaches to a crossing, they shall be constructed to the standard of the road authority concerned.

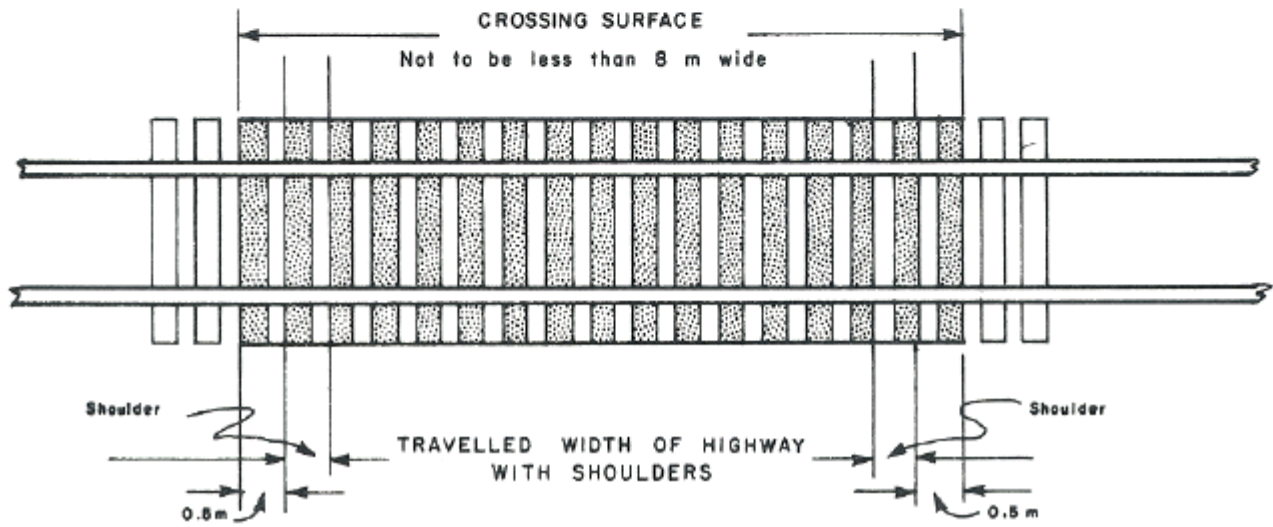
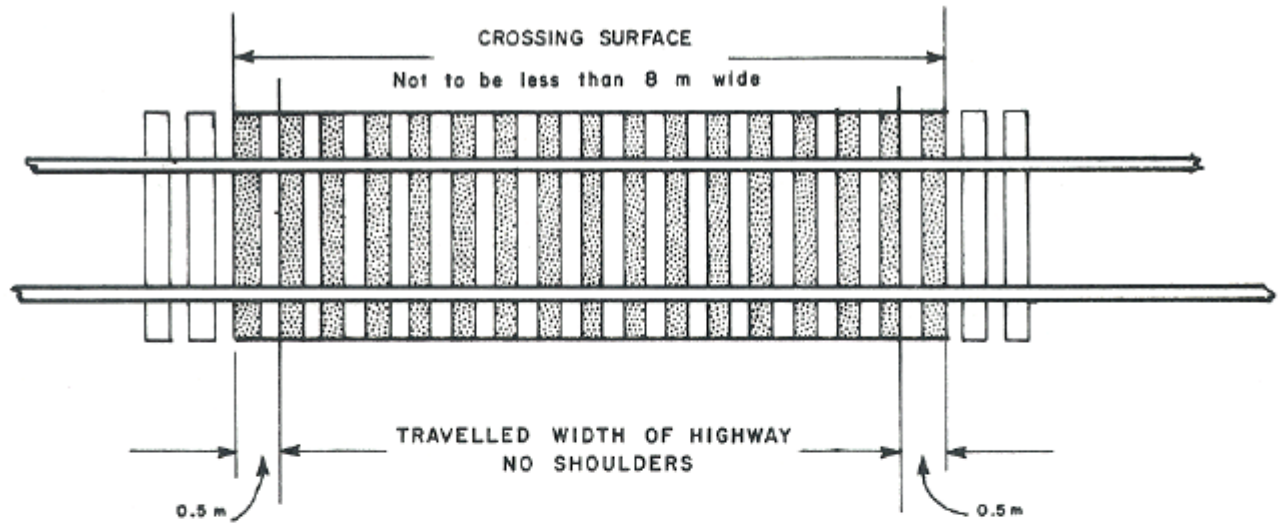
### **RAILWAY CROSSING SIGNS**

10. (1) A reflectorized railway crossing signboard shall be erected on the right side of a highway that crosses a railway track in accordance with this section and the diagrams set out in Schedule II.
- (2) The signboard referred to in subsection (1) shall be placed not more than 5 m from the track with the edge of the sign as close as possible to the travelled portion of the highway so as to be clearly visible to approaching highway traffic before the traffic crosses the tracks.
- (3) On straight and level approaches the bottom edge of the signboard shall be not less than 1.5 m nor more than 2 m above the travelled portion of the highway.
- (4) Where there are grades or curves on the approaches, the signboard shall be installed so as to be clearly visible to approaching highway traffic both at night and in the daytime.
- (5) Where the distance between the centre line of two adjacent tracks is more than 30 m measured along the highway, each crossing shall be considered a separate crossing.
- (6) Where there is more than one railway track at a crossing, an additional signboard indicating by digits the number of tracks to be crossed shall be installed on the supporting post of each sign.
- (7) This section does not apply to crossings where warning devices are installed pursuant to the *Highway Crossings Protective Devices Guidelines*.
- (8) Railway crossing signboards erected before the day on which this section comes into force may be maintained in accordance with the specifications and diagrams set out in Schedule II as it read immediately prior to the coming into force of this section until replacement of the signboard is required.

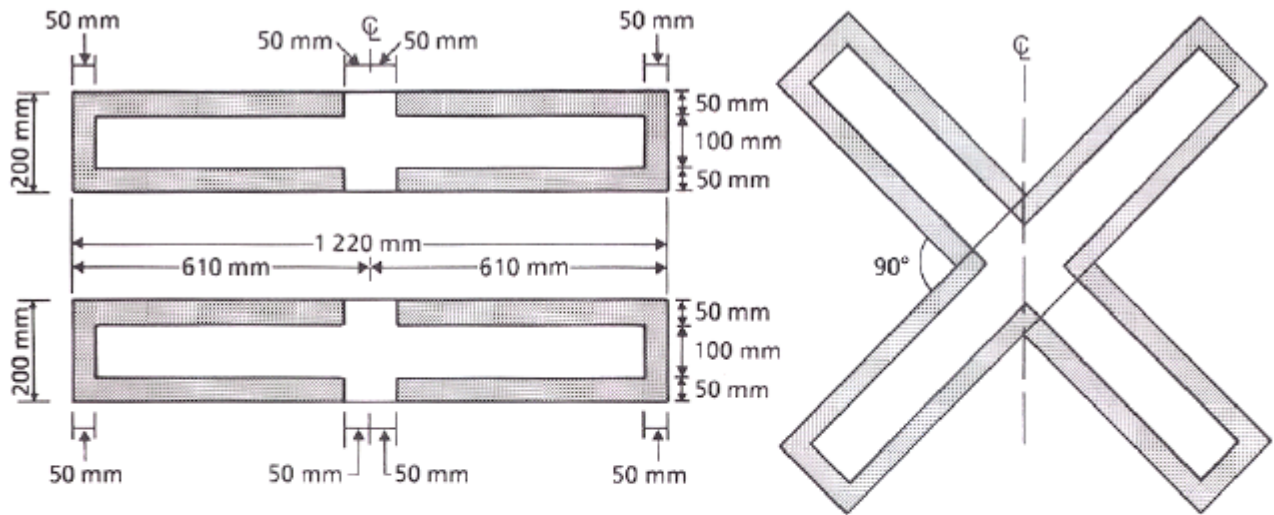
### **APPORTIONMENT OF CONSTRUCTION AND MAINTENANCE COSTS**

11. Unless otherwise ordered by the MOTI,
  - (a) when a new crossing is constructed, the following costs are payable by the junior party, namely,
    - (i) the cost of construction of the crossing, and
    - (ii) the cost of future maintenance of the crossing;
  - (b) when an existing crossing is widened, the following costs are payable by the junior party, namely,
    - (i) the cost of construction of the widening, and
    - (ii) the cost of future maintenance of the widened crossing; and
  - (c) when the railway company is the junior party, it is not responsible for construction or maintenance costs incurred beyond the width of the original highway right-of-way.


# SCHEDULE I



**SCHEDULE II**



REFLECTING MATERIAL SPECIFICATION: 62-GP-11M  
 REFLECTIVITY: Minimum Requirement - Level 2  
 SHEETING MATERIAL: 50 mm border of transparent red ink silk screen processed over retroreflective silver-white sheeting. Silver-white sheeting to cover the entire surface.

 Canadian Transport Commission	Commission canadienne des transports
<b>Reflectorized Crossing                  Signboard</b>	