

APPENDIX C. CROSSING INSPECTION REQUIREMENTS

1. REGULATORY REQUIREMENTS

*Items marked in **YELLOW** and with a “*” in Table 1 represent parameters that road authority has jurisdiction for and may represent an inspection item (inspection requirements are site specific based on warning system type and overall site conditions).

Table 1: Field Inspection Requirements

Item #	Parameter	GCR Reference	GCS Reference	Jurisdiction		Field Measurement Required?
GCR Article 58 – Basic Requirements – GCS Part B Standards – Must Meet GCR Requirements Immediately						
1.	Crossing Surface Extension	58	3.1	Both	*	Yes
2.	Flangeway Dimensions	58	3.2	Railway		Yes
3.	Railway Crossing Sign and Number of Tracks Sign	58	4.1 4.1.1 4.1.2	Railway		Yes
GCR Article 59 – Additional Requirements – Must Meet GCR Requirements by November 2021						
4.	Sightlines	21	7 (all)	Both	*	Yes
5.	Crossing Surface	60	5 (all)	Both	*	Yes
6.	Approach Alignment	61	6.1	Road Authority	*	No
7.	Railway Crossing Sign and Number of Tracks Sign	62	8.1.3 8.1.4	Railway		Yes
8.	Emergency Notification Sign	63	8.5	Railway		Yes
9.	Stop Sign	64	8.4	Both	*	Yes
10.	Stop Ahead Sign	65	8.3	Road Authority	*	Yes
11.	Railway Crossing Ahead Sign and Advisory Speed Tab	66	8.2	Road Authority	*	Yes
12.	Prepare to Stop at Railway Crossing Sign	67	18.1 18.2	Road Authority	*	Yes
Warning System						
13.	Light Distribution and Intensity	68	13 (all)	Railway		No
14.	Alignment of Light Units	68	14.2-14.6	Railway		No
15.	Warning Time	69	16.1.1(a-c) 16.2.2	Railway		No
16.	Cut-out Circuits	70	16.3.1	Railway		No
17.	Directional Stick Circuit	71	16.4	Railway		No

2. FIELD INSPECTION REQUIREMENTS

For the following list, articles and sections in the Grade Crossings Regulations (GCR) and Grade Crossings Standards (GCS) are referred to in the following format: *Document Name – Article #* (e.g. Grade Crossings Regulations Article 21 is denoted as *GCR-21*, while Grade Crossings Standards Section 7 is denoted as *GCS-7*).

- 2.1. Determine the crossing surface extension in accordance with *GCR-58* and *GCS-3.1* and *GCS-5* (see items 1 and 5 in Table 1)
- 2.2. Determine sightlines (observation or using range finder) in accordance with *GCR-21* and *GCS-7* (see item 4 in Table 1)
- 2.3. Observe the approach alignment for smoothness and continuity (vertical and horizontal) in accordance with *GCR-61* and *GCS-6.1* (see item 6 in Table 1)
- 2.4. If a Stop sign is present but **is not** installed on Railway Crossing sign post, assess the crossing for compliance with *GCR-64* and *GCS-8.4* (see item 9 in Table 1)

- 2.5. If Stop sign is present, and if stop sign is not clearly visible along the approach, assess the crossing for compliance with *GCR-65* and *GCS-8.3*. (see item 10 in Table 1)
- 2.6. If Railway Crossing sign **is not** visible within the stopping sight distance or if vehicles need to be slowed down to the road crossing design speed, assess the crossing for compliance with *GCR-66* and *GCS-8.2*. (see item 11 in Table 1)
- 2.7. If weather conditions repeatedly obscure visibility of a warning system, or if at least one set of front light units on a warning system is not visible throughout the stopping sight distance, or if the approach is an expressway, assess the crossing for compliance with *GCR-67* and *GCS-18.1* and *GCS-18.2*. (see item 12 in Table 1)
- 2.8. Any obvious or serious deficiencies about the grade crossing, outside of the standard requirements, that are observed by inspectors should be documented.