

Record of Revisions

This version of the Roadside Design Manual dated (TBD, 2023) includes Edition #3 and supersedes the previous edition. Changes from the previous edition are summarized below.

All Chapters

- All references to Design and Contract Standards Office replaced by Highway Design Office

Chapter 1

- Section 1.1 added definition for Dynamic Deflection
- Section 1.2 updated ORSAR collision data to 2019 and NHTSA collision type data to 2020.

Chapter 2

- Erratum: Table 2-4 corrected less than or equal to notation
- Erratum: Table 2-6 corrected less than or equal to notation
- Table 2-11 added gore encroachment length for 130 km/h design speed
- Section 2.3.6 changed 22.5m depressed median to “minimum” from “standard”. Added requirement for median barrier protection for new medians less than 22.5m width. Added requirement that left shoulder be no wider than one 0.25 m increment than adjacent left lane.
- Section 2.3.9 changed curb nomenclature from “barrier”, “semi-mountable” and “mountable” to “Type I”, “Type II” and “Type III” respectively.
- Section 2.3.9 added wording stating that curb does not have redirection capacity at speeds greater than 10 km/h
- Section 2.3.12 new section covering luminaire supports and high mast poles
- Section 2.4.1 added requirement to policy statement that roadside systems on high-speed roads shall be TL-3 or greater.
- Table 2-15 added runout lengths for 130 km/h design speed.

Chapter 3

- Table 3-1 added encroachment lengths for 130 km/h design speed
- Section 3.3.4 added requirement that existing SBGR runs on high speed roads and all existing 3-cable guide rail are to be replaced with MASH roadside barrier. Removed guidance on evaluation of existing 3-cable guide rail.
- Section 3.3.4 added Type M SBGR evaluation criteria for existing systems

Chapter 4

- Section 4 introduction added note that designers should keep current with standards and specifications between RDM updates
- Section 4 introduction added clarification that systems are not to be modified from standards without the guidance of Highway Design Office
- Section 4.1.2 added paragraph highlighting potential non-intuitive behaviour of roadside systems and reinforced the importance of not making modifications.
- Table 4-1 removed entry for Type M SBGR with ¼ post spacing. Updated working width for Type M SBGR with ½ post spacing.
- Section 4.2.2.1 added information on 1 m pedestrian opening in SBGR
- Section 4.2.2.1 added MASH SBGR structure connection information
- Section 4.2.4 new section added for TL-4 roadside barrier systems including guidance on use on high truck volume roads.
- Section 4.2.4.1 new section for ACP TL-4 roadside barrier
- Section 4.2.4.2 new section for EzyGuard High Containment barrier
- Section 4.4.1.7 new section for MATT Median SBEAT. Existing sections 4.4.1.7 and 4.4.1.8 renumbered to 4.4.1.8 and 4.4.1.9
- Section 4.4.2.7 new section for SMA Hercules crash cushion
- Section 4.4.2.8 new section for Delta crash cushion
- Section 4.4.4 added requirement to replace systems pre-dating NCHRP Report 350 on capital contracts.
- Section 4.5 added note allowing shielding of overhead and cantilever sign supports with a redirective, non-gating crash cushion.

Chapter 5

- Section 5 introduction added note that designers should keep current with standards and specifications between RDM updates
- Section 5 introduction added clarification that temporary barrier systems are not to be modified from standards without the guidance of Highway Design Office
- Section 5.1 changed “front face” to “traffic face”
- Section 5.1.1 added clarification that ministry-approved temporary barriers are required for DBB, DB, P3 and all alternative delivery model contracts.
- Section 5.1.1 changed “Quickchange Movable Barrier” to “Movable temporary concrete barrier”
- Section 5.1.1.1 added section with guidance on the use of temporary barriers to separate opposing traffic flows
- Section 5.1.2 added direction prohibiting the use of precast I-lock Tall Wall barrier in temporary applications.
- Section 5.1.2.2 changed Type M TCB guidance to allow only MASH tested freestanding version on low-speed roads.

- Section 5.1.2.4 added restrained options for Type X TCB
- Section 5.1.2.5 added restrained option for Type Z TCB
- Section 5.1.3 broke section into subsections for different movable temporary concrete barriers.
- Section 5.1.3.2 new section on Reactive Tension System barrier
- Section 5.1.3.3 new section on Flux System
- Section 5.1.4.6 new section on Highway Guard steel barrier
- Section 5.2 changed “front face” to “upstream face” in reference to temporary crash cushions
- Section 5.2.1 listed individual reduced exposure systems in 5.2.1.X subheadings consistent with other similar sections
- Section 5.4 new section for Temporary Work Zone Signs
- Section 5.4.1 new section for skid-mounted temporary sign supports

Appendix A

- No Changes

Appendix B

- No Changes