Ontario

# Roadside Design Manual Update (policies, standards and specifications)

**Comments received by TCP:**

| Comment ID | Organization | Comment | Response |
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| 596 | | In Section 3-26 We are happy to see the Ministry has made a commitment to removing Legacy End Terminals such as the Eccentric Loader, Flared End, and Turned down end. Would the Ministry consider strengthening the language in Section 3-17 'All legacy 3 Cable Guide Rail Should be Replaced' from a Should to a Shall? 3-Cable Guide Rail is a Legacy System that has not been tested to MASH, NCHRP 350, or NCHRP 230. | Wording strengthened to strongly recommend replacement of legacy 3 cable guide rail however the use of “shall” is not recommended due to potential liability in the event that regions do not replace on capital contracts. |
| 597 | | We applaud the Ministry for updating the Evaluation Criteria for Steel Beam Guide Rail and creating the Evaluation Criteria for High Tension Cable, SBEAT's, and Crash Cushions. This is a very important step to ensure the critical assets on the | Comment noted. |

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| | | road will perform as intended and that they provide the travelling public with the highest level of safety. | |
| 598 | | There are numerous instances in the updated sections of the RDM where the term Guide Rail has been input as guiderail and guardrail. Would the Ministry be open to consistency with terminology to match contract language. | Wording standardized to “guide rail” except in instances where a specific system name may contradict this, such as “Midwest Guardrail System” |
| 599 | | In Section 3-46 can the Ministry please confirm that the Legacy SBEAT Systems that meet the requirements of NCHRP Report 350 include the ET Plus and SKT exclusively. The clarification is to ensure that Eccentric Loader Treatments per OPSD 922.430 should not be included in the Evaluation Criteria process because they do not meet the requirements of NCHRP Report 350. | While MTO does not have an authoritative inventory of existing systems on its highway network, predominant legacy systems include ET Plus and SKT. All references to ELTs removed with respect to evaluating and keeping legacy hardware. |
| 600 | | In Section 3-47, would the Ministry consider adding language to the Evaluation | Agree, wording added |

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| | | Criteria for SBEATS that includes the replacement of any damaged hardware within the SBEAT system length (including rail, block, etc). SBEAT systems are crash tested independently of SBGR and having moving parts to absorb energy. Per the manufacturers, if any of those components are damaged they shall be replaced. | |
| 601 | | In Section 3-48, there is an reference to 'existing SBGR', but in this section it should more likely read 'existing HTCB' | Corrected |
| 602 | | In Section 3-48, Evaluation Criteria for HTCGR - Would the Ministry consider separating the Evaluation Criteria for the HTCGR End Terminals from the Longitudinal HTCGR Inspection? Would like to see HTCGR and HTCGR End Terminals separated the same as Steel Beam Guide Rail is separate from SBEATs - The HTCGR and HTCGR End Terminals follow | Guidance updated to separate the evaluation criteria of HTCGR and terminals and evaluate terminal-specific components such as anchor blocks and grading. |

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| | | their crash test criteria and have different pass criteria. | |
| 603 | | In Section 4-9, would the Ministry consider adding Guide Rail with Pedestrian Railing TL-2 to its list of Semi-Rigid Roadside Barrier Systems? | Section on TL-2 steel beam guide rail with pedestrian handrail added. |
| 604 | | In Section 4-29, would the Ministry please move the caption for the Long Span Structure Connection onto the same page so it matches the image? | Updated. |
| 605 | | "In Section 4-45 through 4-89, The Ministry typically engages distributors and establishes a sunset date for product that they would like to remove from the RDM and subsequently from CPS. The sunset dates have ranged between one and three years. Will the Ministry provide a sunset date for the single sided crash cushions in a similar manner ? This will allow the industry to prepare for a change in the Single Sided Crash Cushion item." | Detailed descriptions of single-sided crash cushions have been removed from the RDM however they remain active in the construction specification and designers may still include them. Added a paragraph to this effect. We do not intend to remove them from our specifications for at least one year to allow for existing stock to be used up. Advanced notice will be provided to industry to allow for a smooth and fair sunset process. |

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| 606 | | In Chapter 4 there are references to manufacturers that need to be updated. Any references to Trinity Highway Products, Trinity Industries, and Energy Absorption Systems Inc should be updated to Valtir LLC and use the website www.Valtir.com | References updated as required |
| 607 | | "In Section 4-74: With Reference to Training<br>End Terminals, Crash Cushions, SBGR, HTCB, and Sign Supports are Critical Road Safety Assets. If not installed, maintained, inspected, and repaired appropriately could result in serious consequences. The language used for training is stated 'performed by persons with manufacturer-accredited training in these activites'. We feel that it is imperative that the 'should' in this statement needs to be a 'shall'. Would the Ministry consider strengthening the training requirements (and not simply recommending training) for critical safety asset that need | Agree with strengthening this wording in the RDM. Also added a reference to the Certification of Safety Hardware requirement in MTO contracts. Inclusion of strengthened training requirements in our specifications, including a MTO-recognized training and certification regime has been discussed in the past and would be worth pursuing. |

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| | | to perform their intended function on our Provincial Roadways?" | |
| 608 | | In Section 5-9, The Ministry is still referencing dated drawings of NCHRP Report 350 Type J Barrier in Figure 5.2 based on the dimensions noted in the show drawing. The language used to describe Figure 5.2 notes that the systems is MASH tested. Can the Ministry please update the images of the Type J Barrier to include the new MASH dimensions that are currently found in the MTOD's. | Figure updated. |
| 609 | | In Section 5-14, there is a reference to Type Z Barrier and Hill and Smith is listed as the manufacturer. That reference should be updated from Hill and Smith to ReBloc. | Reference updated |
| 610 | | In Section 5.1.3.1, there are references to Quickchange NCHRP Report 350 Barrier. As the specification has moved forward with MASH approved products, would the MTO consider only including | Reference to QMB removed. |

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| | | information related to MASH tested Lindsay Corp CRTS, Tall42, and Flux? | |

**Comments received by email:**

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| **N/A** | **N/A** | Would the ministry consider adding severity indices for 130 km/h in Appendix A? | Severity indices added for 130 km/h |