DESIGN BULLETIN #63/2009 (Revised November 2016)

Revisions/Updates to the Alberta Transportation *Roadside Design Guide*, November 2007

Summary
This Bulletin is being issued as a revision and/or update to the Alberta Transportation, *Roadside Design Guide*, November 2007.

The updated pages indicated in the Revisions/Updates Summary Table, below, can be found in the appropriate section(s) of the Roadside Design Guide. The link to the home page of the Roadside Design Guide is: http://www.transportation.alberta.ca/3451.htm

Implementation
The revisions/updates to the guideline as indicated in this Design Bulletin are to be implemented as per the usual practice.

Effective Date: July 15, 2009
Revision Date 1: April 5, 2012
Revision Date 2: October 23, 2012
Revision Date 3: July 16, 2013
Revision Date 4: March 11, 2016
Revision Date 5: November 29, 2016

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Alberta Transportation

Last Updated: November 29, 2016

Revisions/Updates Summary Table for the Alberta Transportation, *Roadside Design Guide*, November 2007

The following revisions/updates apply to the Alberta Transportation, *Roadside Design Guide*, November 2007. Please update your guide to ensure that it is current.

Section	Page	Reference	Description	Comments	Date
NOVEMBER 29, 2016					
Table of Contents	H-iii		Table of Contents	Update of page numbers for Chapter H5.5 and H5.6.	Nov. 2016
Table of Contents	H-v		Table of Contents	Addition of Appendix E, E1 and E2 to the Table of Contents.	Nov. 2016
Table of Contents	H-vi		List of Figures	Update of page number for Figure H5.5.	Nov. 2016
Table of Contents	H-ix		List of Tables	Update of page numbers for Table H5.7a through Table H5.14.	Nov. 2016
Table of Contents	H-x		List of Tables	Addition of Table HE2.1 “Design Criteria and Considerations Table (Example Only)” to the List of Tables.	Nov. 2016
H5.5.2	H5-21 through H5-34		H5.5.2 High Tension Cable System	Rewrite of Section H5.5.2 to reflect the new rewrite of Design Bulletin 75/2012 (dated October 27, 2016).	Nov. 2016
Appendix B2	COVER PAGE		APPENDIX B2 High Tension Cable System	New Date.	Oct. 2016
Appendix B2	APPENDIX B2-i and B2-ii		Table of Contents	Four new drawings are indicated.	Oct. 2016
Appendix B2	H-APP-B2-1 and H-APP-B2-2		High Tension Cable Barrier System	Product Development and Acceptance Testing - Update of HTCB manufacturers and information as of September 8, 2016.	Oct. 2016

Section	Page	Reference	Description	Comments	Date
Appendix B2	H-APP-B2-3	RDG-B2.1 (Rev. 1)	Typical HTCB Median Installation - Slopes 6(H):1(V) or Flatter	Refer to Rewrite of Design Bulletin 75/2012, dated October 27, 2016. Revision to Notes and cross-sections.	Oct. 2016
Appendix B2	H-APP-B2-4	RDG-B2.2 (Rev. 1)	Typical HTCB Median Installation – 6(H):1(V) > Slopes ≥ 4(H);1(V)	Refer to Rewrite of Design Bulletin 75/2012, dated October 27, 2016. Revision to Notes and cross-sections.	Oct. 2016
Appendix B2	H-APP-B2-5	RDG-B2.3 (Rev. 1)	Typical HTCB Median Installation - Slopes Steeper than 4(H):1(V)	Refer to Rewrite of Design Bulletin 75/2012, dated October 27, 2016. Revision to Notes and cross-sections.	Oct. 2016
Appendix B2	H-APP-B2-6	RDG-B2.4 (Rev. 2)	Typical HTCB Roadside Installation	Refer to Rewrite of Design Bulletin 75/2012, dated October 27, 2016. Revision to Notes, cross-section and table.	Oct. 2016
Appendix E	Cover Page and Table of Contents		Guidelines for the Selection and Design of High Tension Cable Barrier Systems	Rewrite of Appendix E (including Appendix E1 and Appendix E2) to reflect the new rewrite of Design Bulletin 75/2012 (dated October 27, 2016).	Nov. 2016
Appendix E1	H-APP-E1-1 through H-APP-E1-4		HTCB Products List and Acceptance Testing	Rewrite of Appendix E (including Appendix E1 and Appendix E2) to reflect the new rewrite of Design Bulletin 75/2012 (dated October 27, 2016).	Nov. 2016
Appendix E2	H-APP-E2-1 through H-APP-E2-6		General Design Process	Rewrite of Appendix E (including Appendix E1 and Appendix E2) to reflect the new rewrite of Design Bulletin 75/2012 (dated October 27, 2016).	Nov. 2016
MARCH 2016					
B1	H-APP-B1	TEB 3.01, TEB 3.09, RDG-B1.1, RDG-B1.4, RDG-B1.5, RDG-B1.6, RDG-B1.7, RDG-B1.8,	TEB 3.01 redrawn to include Steel Post detail and update to reflector sheeting size TEB 3.09 revised to show galvanized nail to prevent block rotation, correction to rail splice dimensions RDG-B1.1 and RDG-B1.9 revised to include notes on steel post usage		Mar 11/16

Section	Page	Reference	Description	Comments	Date
		RDG-B1.9	RDG-B1.4, RDG-B1.5, RDG-B1.6, RDG-B1.7 added note to refer to manufacturer for latest drawings and specs for proprietary products RDG-B1.8 superseded by RDG-B5.10		
B5	H-APP-B5	RDG-B5.5, RDGB-5.10	RDG-B5.5 and RDG-B5.10 revised to include notes on steel post usage RDG-B5.10 notes on specific manufactured reflector sheeting removed.		Mar 11/16
B6	H-APP-B6	RDG-B6.12, RDG-B6.15	RDG-B6.12 and RDG-B6.15 revised to include notes on steel post usage		Mar 11/16
B7	H-APP-B7	RDG-B7.1	RDG-B7.1 revised to include notes on steel post usage		Mar 11/16
JULY 2013					
H1.3	H1-6	---	The Alberta Weak Post W-Beam are not allowed to be used in new installations and major replacements	Refer to Design Bulletin 64/2012	July 2013
H2.2.1	H2-1	---	The Alberta Weak Post W-Beam are not allowed to be used in new installations and major replacements	Refer to Design Bulletin 64/2012	July 2013
H2.2.4	H2-2	---	Removed text regarding Alberta Weak Post W-Beam System	Refer to Design Bulletin 64/2012	July 2013
H3.2.2.1	H3-7	---	Modified text regarding the	Refer to Design Bulletin 64/2012	July

Section	Page	Reference	Description	Comments	Date
			undertaking of a special economic analysis		2013
H3.2.3.1	H3-12 to H3-14, H3-16, and H3-17	Includes: TABLES H3.4 and H3.5	Removed Alberta Weak Post W-Beam from list and also added notes on the Turn Down End Treatments as non-crashworthy. TABLE H3.4 - Longitudinal Traffic Barrier System Selection TABLE H3.5 – Barrier Design Deflection	Refer to Design Bulletin 64/2012	July 2013
H3.2.3.2	H3-18	TABLE H3.7, H3.8, and H3.9	TABLE H3.7 – End Treatments for TL-3 Alberta Weak Post W-Beam TABLE H3.8 – End Treatments for TL-3 Weak Post Box Beam TABLE H3.9 – End Treatments for TL-3 Strong Post W-Beam Added note on Turn Down end treatments being non crash-worthy.	Refer to Design Bulletin 64/2012	July 2013
H3.3.1	H3-53	TABLE H3.15	TABLE H3.15 – Alberta-Specific RSAP Inputs	Refer to Design Bulletin 64/2012	July 2013
H3.3.3	H3-69	EXAMPLE 3	Added note on Turn Down end treatments being non crash-worthy.	Refer to Design Bulletin 64/2012	July 2013
H4.3	H4-5	TABLE H4.1	TABLE H4.1 – Appropriate Curb and Barrier System Combinations (Barrier Systems Behind Curb)	Refer to Design Bulletin 64/2012	July 2013

Section	Page	Reference	Description	Comments	Date
H4.7	H4-9	---	The Alberta Weak Post W-Beam are not allowed to be used in new installations and major replacements	Refer to Design Bulletin 64/2012	July 2013
H5.2	H5-2, H5-3	TABLE H5.1	The Alberta Weak Post W-Beam are not allowed to be used in new installations and major replacements TABLE H5.1 – Roadside Barrier Systems Characteristics Summary	Refer to Design Bulletin 64/2012	July 2013
H5.3	H5-6	---	The Alberta Weak Post W-Beam are not allowed to be used in new installations and major replacements	Refer to Design Bulletin 64/2012	July 2013
H5.4.3	H5-11	FIGURE H5.2	FIG H5.2 – Installation of Barrier on First Stage Paving Projects	Refer to Design Bulletin 64/2012	July 2013
H5.5.1	H5-18	---	The Alberta Weak Post W-Beam and Turn Down End Treatments are not allowed to be used in new installations and major replacements	Refer to Design Bulletin 64/2012	July 2013
H5.5.3	H5-31	---	The Turn Down End Treatments are not allowed to be used in new installations and major replacements	Refer to Design Bulletin 64/2012	July 2013
H5.5.4	H5-34	---	The Turn Down End Treatments are not allowed to be used in new installations and major	Refer to Design Bulletin 64/2012	July 2013

Section	Page	Reference	Description	Comments	Date
			replacements		
H6.1	H6-2	FIGURE H6.1, H6.2, and H6.3	FIG H6.1 – Preferred Grading Requirements for Gating End Treatments FIG H6.2 – Minimum Grading Requirements for Gating End Treatments FIG H6.3 – Preferred Grading Requirements for Flared End Treatments	Updated to match standard drawings. Refer to Design Bulletin 64/2012	July 2013
H6.1	H6-4	TABLE H6.1	TABLE H6.1 – Summary of Barrier End Treatments The Turn Down End Treatments are not allowed to be used in new installations and major replacements. Sand Barrel Systems are not allowed to be used in new permanent installations.	Refer to Design Bulletin 64/2012	July 2013
H6.8	H6-14	---	Sand Barrel Systems not to be used at new permanent installations unless specifically approved by the Department.	Refer to Design Bulletin 64/2012	July 2013
H6.8.1	H6-15	---	Sand Barrel Systems not to be used at new permanent installations unless specifically approved by the Department.	Refer to Design Bulletin 64/2012	July 2013
H7.3	H7-3, H7-4	TABLE H7.3	The Alberta Weak Post W-Beam are not allowed to be used in new installations and	Refer to Design Bulletin 64/2012	July 2013

Section	Page	Reference	Description	Comments	Date
			major replacements TABLE H7.3 – Typical AT Bridge Approach Rail General Layout Drawings		
H10.2	H10-1	---	Sand Barrel Systems can only be used as temporary end treatments	Refer to Design Bulletin 64/2012	July 2013
Appendix B1	APPENDIX B1-i		Table of Contents	Highlights on updated drawings	July 2013
Appendix B1	H-APP-B1-10	TEB 3.15a Rev 2	Typical W-Beam Strong Post or Modified Thrie Beam Guardrail Placement Roadside Hazards (Two and Four Lane Highways)	Refer to Design Bulletin 64/2012. End treatment notes and sections.	July 2013
Appendix B1	H-APP-B1-11	TEB 3.15b (Obsolete)	Typical W-Beam Weak Post Guardrail Placement Roadside Hazards	Refer to Design Bulletin 64/2012. Obsolete.	July 2013
Appendix B1	H-APP-B1-12	TEB 3.16a Rev 3	Typical Strong Post W-Beam or Modified Thrie Beam Guardrail Placement at Bridge Approaches (Two-Lane Highway)	Refer to Design Bulletin 64/2012. End treatment notes, sections and clear zone.	July 2013
Appendix B1	H-APP-B1-13	TEB 3.16b (Obsolete)	Typical W-Beam Weak Post Guardrail Placement at Bridge Approaches (Two-Lane Highway)	Refer to Design Bulletin 64/2012. Obsolete.	July 2013
Appendix B1	H-APP-B1-15	TEB 3.17a Rev 2	Typical Strong Post W-Beam or Modified Thrie Beam Guardrail Placement at Bridge Approaches (Four-Lane Divided Highway)	Refer to Design Bulletin 64/2012. End treatment notes and sections.	July 2013

Section	Page	Reference	Description	Comments	Date
Appendix B1	H-APP-B1-18	TEB 3.53 (Obsolete)	W-Beam Guardrail Turn Down End Hardware	Refer to Design Bulletin 64/2012. Obsolete.	July 2013
Appendix B1	H-APP-B1-19	TEB 3.56a Rev 2	Weak Post W-Beam Installation on First Stage Paving Projects	Refer to Design Bulletin 64/2012. Notes and plan view revised.	July 2013
Appendix B1	H-APP-B1-23	RDG-B1.4 Rev 1	W-Beam Strong Post TL-3 ET-PLUS Extruder Energy Absorbing Terminal	Refer to Design Bulletin 64/2012. Revised flare note.	July 2013
Appendix B7	APPENDIX B7-i		Table of Contents	Highlights on updated drawings	July 2013
Appendix B7	H-APP-B7-1	TEB 3.19 Rev 1	Sand Barrel Cushion System	Refer to Design Bulletin 64/2012. Approval note added.	July 2013
October 23, 2012					
Appendix B6	H-APP-B6-5	RDG-B6.6 Rev 1	TL-4 Single Slope Concrete Median Barrier Transition Around New Bridge Pier – Sheet 2 of 3	Bar list and note.	Oct. 2012
April 5, 2012					
Chapter H	H-i to H-x	---	Table of Contents	Various sections in the RDG have been updated based on Design Bulletin 75/2012 - High Tension Cable Barrier (HTCB) System – Median and Roadside Application.	Feb. 2012
H-1.3	H1-4	AASHTO-MASH 2009	The American Association of State Highway and Transportation Officials, *Manual for Assessing Safety Hardware 2009 (*AASHTO-MASH 2009)	Applies to all new barriers. Design Bulletin 75/2012.	Feb. 2012
H-1.4 to H1.6	H1-5 to H1-13	---	Pages renumbered.	No changes to sections.	Feb. 2012

Section	Page	Reference	Description	Comments	Date
H1.7	H1-12	References	AASHTO-MASH 2009	Design Bulletin 75/2012.	Feb. 2012
H3.2.1.1	H3-5	TABLE H3.2	TABLE H3.2 - Curve Modification Factors	Include new column (Design Speed <60km/h) and row (Radius <100m) to TABLE H3.2	Feb. 2012
H3.2.3.1	H3-12 to H3-14, H3-16, H3-17	Includes: TABLES H3.4 and H3.5	TABLE H3.4 - Longitudinal Traffic Barrier System Selection TABLE H3.5 – Barrier Design Deflection	Design Bulletin 75/2012.	Feb. 2012
H4.3	H4-5	TABLE H4.1	TABLE H4.1 – Appropriate Curb and Barrier System Combinations (footnote #5)	Added “also” to footnote to clarify the acceptability of installing curbs behind barriers at speeds greater then 85 km/h for semi-mountable and barrier curbs.	Feb. 2012
H4.3	H4-6	---	Critical dimensions for semi-mountable curbs revised	Semi-mountable curb height (125 mm typical) Semi-mountable curb slope (1:1.6 typical)	Feb. 2012
H5.2	H5-2 to H5-3	Includes: TABLE H5.1	TABLE H5.1 – Roadside Barrier Systems Characteristic Summary	Design Bulletin 75/2012.	Feb. 2012
H5.3	H5-4 to H5-5	Includes: TABLE H5.2	TABLE H5.2 – Median Barrier Systems Characteristic Summary	Design Bulletin 75/2012.	Feb. 2012
H5.4	H5-7	TABLE H5.3	TABLE H5.3 – Minimum Distance (L) for Barrier Placement	Design Bulletin 75/2012.	Feb. 2012
H5.52	H5-21 to H5-25	HTCB System	High Tension Cable Barrier System guidelines.	Design Bulletin 75/2012.	Feb. 2012
H5.52	H5-26	HTCB System	High Tension Cable Barrier System guidelines.	Design Bulletin 75/2012 (Revised April 2012)	Apr. 2012
H5.52	H5-27 to H5-28	HTCB System	High Tensions Cable Barrier System guidelines.	Design Bulletin 75/2012.	Feb. 2012

Section	Page	Reference	Description	Comments	Date
H5.5.3 to H5.5.7	H5-29 to H5-38	---	Pages renumbered only.	No changes to sections.	Feb. 2012
H5.6	H5-39	References	AASHTO-MASH 2009	Design Bulletin 75/2012.	Feb. 2012
Appendix B1	APPENDIX B1-ii	---	Table of Contents	RDG-B1.12 added.	Feb. 2012
Appendix B1	H-APP-B1-33	RDG-B1.12 (New Dwg.)	Typical Material Widening for Barrier Installations	New drawing added.	Apr. 2012
Appendix B2	H-APP-B2-1		High Tension Cable Barrier System	- Product Development and Testing - Update of HTCB manufacturer's as of January 24, 2012.	Feb. 2012
Appendix B2	APPEDIX B2-I and B2-ii		Table of Contents	New pages	Feb. 2012
Appendix B2	H-APP-B2-3	RDG-B2.1 (New Dwg.)	Typical HTCB Median Installation, Slopes 6H:1V or Flatter	Design Bulletin 75/2012. New drawing added.	Feb. 2012
Appendix B2	H-APP-B2-4	RDG-B2.2 (New Dwg.)	Typical HTCB Median Installation, 6H:1V > Slopes ≥ 4H;1V	Design Bulletin 75/2012. New drawing added.	Feb. 2012
Appendix B2	H-APP-B2-5	RDG-B2.3 (New Dwg.)	Typical HTCB Median Installation, Slopes Steeper Than 4H:1V	Design Bulletin 75/2012. New drawing added.	Feb. 2012
Appendix B2	H-APP-B2-6	RDG-B2.4 (New Dwg.)	Typical HTCB Roadside Installation	Design Bulletin 75/2012. New drawing added. (Superseded April 2012)	Feb. 2012
Appendix B2	H-APP-B2-6	RDG-B-2.4 (New Dwg.)	Typical HTCB Roadside Installation	Design Bulletin 75/2012. New drawing added.	Apr. 2012
Appendix B3	H-APP-B3-12	TEB 3.35	Standard Box Beam Guardrail Splice Plate Detail	Rev. 1 – Revised bolt placement	Feb. 2012

Section	Page	Reference	Description	Comments	Date
Appendix B6	H-APP-B6-5	RDG-B6.1 Rev 1	TL-4 Standard Single Slope Concrete Barrier Details	Note # 10.	Feb. 2012
Appendix B6	H-APP-B6-18	RDG-B6.14 Rev 1	TL-4 Single Slope Concrete Barrier Transition to PL-2 Standard Bridge Concrete Barrier	General revisions	Apr. 2010
Appendix E	Appendix E and Appendix E-i		Cover Page and Table of Contents	Design Bulletin 75/2012. New appendix added.	Feb. 2012
Appendix E1	Appendix E1, Appendix E1-i		Divider Page and Table of Contents	Design Bulletin 75/2012. New appendix added.	Feb. 2012
Appendix E1	H-APP-E1-1 to H-APP-E1-2		HTCB Products List and Acceptance Testing details	Design Bulletin 75/2012. New appendix added.	Feb. 2012
Appendix E2	Appendix E2, Appendix E2-i		Divider Page and Table of Contents	Design Bulletin 75/2012. New appendix added.	Feb. 2012
Appendix E2	H-APP-E2-1 to H-APP-E2-5		General HTCB Design Process	Design Bulletin 75/2012. New appendix added.	Feb. 2012
JULY 15, 2009					
H-3.3.1	H3-53	TABLE H3.15	Alberta –Specific RSAP Inputs	- "Impact Speed" revised to read "Design Speed". - SI values for Design Speed 110 km/h. - Reference to Note 2 and 3 added.	July 2009
H4.3	H4-4	--	Curbs	- "use a mountable curb" revised to read "a mountable curb is desirable".	July 2009
H4.3	H4-5	TABLE H4.1	Appropriate Curb and Barrier System Combinations (Barrier System Behind	- "Permitted" and "Non Permitted" curb and barrier system combination revised in accordance with NCHRP Report 537. - Under Barrier Systems heading. "Concrete Barrier"	July 2009

Section	Page	Reference	Description	Comments	Date
			Curb)	revised to “Rigid Barrier System” - Dimension X. Refined from face of the curb to face of the guardrail (barrier). - “Note 2. EP = Edge of Driving Lane” deleted. Notes renumbered. - Notes 4 and 5 added.	
H5.4.1	H5-8 and H5-9	--	An exception to the 9 m minimum clear roadway would be on new bridge structures for SLC girders on specific low volume roadways.	Refer to Bridge Best Design Practices, BDG10 Minimum Bridge Width for SLC Girder Structures http://www.transportation.alberta.ca/2649.htm	July 2009
H5.4.3	H5-11	FIGURE H5.2	Installation of Barrier on First Stage Paving Projects (that are proposed to be final paved in less than 10 yrs)	Figure H5.2 updated to coincide with revisions to TEB 3.56a, Rev 1 (below).	July 2009
H5.4.6	H5-17	--	Stopping Sight Distance on Directional Interchange Ramps	- Consideration for two lane ramps and durable pavement markings included for provisions for stopping sight distance on directional ramps.	July 2009
H8.3	H8-5	FIGURE H8.4	Breakaway Wood Post	- The breakaway feature for wood posts with dimensions greater than 100 mm x 100 mm is required for posts located within the Clear Zone and desirable for posts located outside the Clear Zone within the roadway right of way. - Reference to new drawing TEB 1.81.	July 2009
Appendix B1	APPENDIX B1-ii	--	Table of Contents	New drawings added.	July 2009
Appendix B1	H-APP-B1-1	TEB 3.01 Rev 3	W Beam Guardrail Hardware Wood Spacer Block and Post Strong Post System	Reflector Details. Refer to Design Bulletin 62/2008: Updated Standards for Guardrail Reflectors and Reflective Strips on Guide Posts (Delineators)	July 2009
Appendix B1	H-APP-B1-7	TEB 3.09	Strong Post W-Beam Blocked-Out Guardrail	Refer to Design Bulletin 62/2008: Updated Standards for Guardrail Reflectors and Reflective Strips on Guide Posts	July 2009

Section	Page	Reference	Description	Comments	Date
		Rev 6		(Delineators)	
Appendix B1	H-APP-B1-8	TEB 3.10 Rev 2	W-Beam Guardrail Weak-Post End Treatment Turn Down (1.9m Spacing – With Blocks)	Refer to Design Bulletin 62/2008: Updated Standards for Guardrail Reflectors and Reflective Strips on Guide Posts (Delineators)	July 2009
Appendix B1	H-APP-B1-9	TEB 3.12 Rev 6	W-Beam Guardrail Weak-Post End Treatment Turn Down (3.8m Spacing – No Block)	Refer to Design Bulletin 62/2008: Updated Standards for Guardrail Reflectors and Reflective Strips on Guide Posts (Delineators)	July 2009
Appendix B1	H-APP-B1-19	TEB 3.56a Rev 1	Weak Post W-Beam Installation on First Stage Paving Projects	Notes 3 and 9 (added) and to Sections A-A, B-B and C-C.	July 2009
Appendix B1	H-APP-B1-27	RDG-B1.8 Rev 1	W-Beam Strong Post to Modified Thrie Beam Guardrail Transition at Roadside Structure.	Refer to Design Bulletin 62/2008: Updated Standards for Guardrail Reflectors and Reflective Strips on Guide Posts (Delineators).	July 2009
Appendix B1	H-APP-B1-28	RDG-B1.9 Rev 1	Transition of Weak Post W-Beam Guardrail to Strong Post W-Beam Guardrail Transition at Roadside Structure.	Refer to Design Bulletin 62/2008: Updated Standards for Guardrail Reflectors and Reflective Strips on Guide Posts (Delineators).	July 2009
Appendix B1	H-APP-B1-29	RDG-B1.10 (New Dwg.)	Typical Strong Post W-Beam Blocked-Out (2 Spacer Blocks) with Mountable and Semi-Mountable Curbs	- Where X=0 and where permitted (Refer to RDG Table H4.1). To avoid installation of the barrier post into the curb/gutter section an additional spacer block has been added to Strong Post W-Beam system.	July 2009
Appendix B1	H-APP-B1-30	RDG-B1.11 (New Dwg.)	Typical Strong Post W-Beam Guardrail TL-3 End Treatment with Curb and Gutter Transition.	Recommended treatment. Proposed curb and gutter combination with TL-3 end treatment has not been crash tested under NCHRP 350 testing protocols.	July 2009
Appendix B5	H-APP-B5-17	TEB 3.70 Rev 4	Modified Thrie Beam Guardrail	- Hex bolt required for connection between spacer and post. - Reflector. Refer to Design Bulletin 62/2008.	July 2009

Section	Page	Reference	Description	Comments	Date
			Rev. 4: Bolt, Reflector and Notes	- Notes: additional notes added	
Appendix B6	H-APP-B6-19	RDG-B6.15 Rev 1	Transition of W-Beam Guardrail to TL-4 Single Slope Concrete Roadside Barrier	Refer to Design Bulletin 62/2008: Updated Standards for Guardrail Reflectors and Reflective Strips on Guide Posts (Delineators).	July 2009
Appendix B7	APPENDIX B7-i	--	Table of Contents	New drawing added.	July 2009
Appendix B7	H-APP-B7-4	TEB 1.81 (New Dwg.)	Typical Breakaway Wood Post	New reference drawing added to RDG. Drawing was previously issued by TSB Traffic Operations Branch, June 2008. Refer also to revised Page HB-5 above.	13 June 2008