

ERRATA

Nebraska Department of Transportation

Roadway Design Manual

Chapter Nine: Guardrail and Roadside Barriers

June 2016

① February 2017

② July/August 2017

③ February 2018

④ June 2018

⑤ August 2018

The last update to the Roadway Design Manual (RDM) was in 2006. In the intervening years some design guidance has become obsolete, new/updated guidance has become available, offices of responsibility have changed, design procedures have been streamlined, etc. The NDOT is in the process of updating the *RDM* but, in the interim, the obsolete/incorrect guidance is being addressed through this document and a re-issued *RDM*. Page numbers cited in this document are referenced to the August 2018 Errata RDM. Deleted text in the August 2018 Errata RDM is in green with a strike through (~~errata~~) and new/corrected text is in red (**correct**). The following chapters have already been addressed:

- ⑤ Contents (updated in August 2018)
- ⑤ List of Exhibits (updated in August 2018)
- Chapter Three: Roadway Alignment (updated on June 17, 2011)
- Chapter Four: Intersections, Driveways and Channelization (updated on April 19, 2012)
- Chapter Six: The Typical Roadway Cross-Section (updated on February 18, 2016)
- ⑤ Chapter Seven: Earthwork (updated on August 2, 2018)
- Chapter Eight: Surfacing (updated on December 15, 2015)
- Chapter Nine: Guardrail and Roadside Barriers (updated on October 16, 2012)
- ① Chapter Eleven: Highway Plans Assembly (updated on February 21, 2017)
- ② Chapter Twelve: Cost Estimating & Funding (updated on August 16, 2017)
- ① Chapter Fourteen: Traffic (updated on October 19, 2016)
- ③ Chapter Fifteen: Right-of-Way (updated on February 26, 2018)
- Chapter Sixteen: Pedestrian and Bicycle Facilities (added on February 8, 2016)
- Chapter Seventeen: Resurfacing, Restoration and Rehabilitation (3R) Projects (added on March 26, 2014)
- ⑤ Index (updated in August 2018)

The following items pertain to the entire manual:

- June 2016 and all subsequent changes – Chapter and EXHIBIT citations have been updated to the latest edition of the *RDM*
- ② July 2017 - All references to the **Nebraska Department of Roads (NDOR)** have been changed to the **Nebraska Department of Transportation (NDOT)**
- ④ June 2018 – Plan Sheet numbering updated (See Chapter Eleven, EXHIBIT 11.1)

Page	Existing Text	Corrected Text
Chapter Nine		
9-1	Above the Title	Note: Except as otherwise noted, existing roadside barriers must be reviewed for compliance with the National Cooperative Highway Research Program (NCHRP) Report 350 or the Manual for Assessing Safety Hardware (MASH). Short radius installations (See Section 7.A) shall be in compliance with NCHRP Report 230.
9-5	Exhibit 9.2: Nebraska Barrier Summary – Barrier = Cable Guardrail (Low-Tension), Location: “Can be placed within 2 feet of slope break point when slope is 1:2 or flatter.”	“Can be placed within 4 feet of slope break point when slope is 1:2 or flatter.”
① 9-7	Section 3.A: <u>Determine Runout Length & Lateral Extent of the Obstacle</u> – “When recommended by the Traffic Engineering Division (Traffic) based on the crash history and the obstacle is located on the outside of a curve with a radius of 2950 feet or less, the clear-zone distance for the tangent roadway may be multiplied by the appropriate curve correction factor to arrive at an adjusted clear-zone distance to be used in plotting the runout path.”	“When recommended by the Traffic Engineering Division (Traffic Engineering) based on the crash history and the obstacle is located on the outside of a curve with a radius of 2950 feet or less, the clear-zone distance for the tangent roadway may be multiplied by the appropriate curve correction factor to arrive at an adjusted clear-zone distance to be used in plotting the runout path.”

Page	Existing Text	Corrected Text
Chapter Nine		
9-8, 9-10, 9-15, 9-22, 9-23, 9-24, 9-26, 9-27, 9-28, 9-33, 9-34, 9-36, 9-37, 9-38, 9-39, 9-40, 9-41	Exhibits 9.4, 9.5, 9.7, 9.14, 9.15, 9.16, 9.17, 9.18, 9.19, 9.23, 9.24, 9.26, 9.27, 9.28, 9.29, 9.30 and 9.31	“Design Speed” = “Minimum Design Speed (From the <u>Nebraska Minimum Design Standards</u>)”
9-9	Section 3.B: <u>Plot the Runout Path</u> – “For a low-tension cable guardrail installation, the runout path must intersect the guardrail at a distance of 15 feet or more from the end post of the in-line terminal anchorage system when used to shield a fixed object (See <u>EXHIBIT 9.16</u>).”	“For a low-tension cable guardrail installation, the runout path must intersect the guardrail at a distance of 15 feet or more from the end post of the in-line terminal anchorage system when used to shield a fixed object (See below and <u>EXHIBIT 9.16</u>).”
9-9	Section 3.B: <u>Plot the Runout Path</u>	Added the cable guardrail intercept detail at the bottom of the page.