

ERRATA for

Nebraska Department of Roads – Roadway Design Manual

June 2016

The Roadway Design Manual (*RDM*) was last updated 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 NDOR 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 June 2016 Errata RDM. Deleted text will be shown in the June 2016 Errata RDM in green with a strike through (~~errata~~) and new/corrected text will be in red (**correct**). The following chapters have already been addressed:

- Contents (updated in June 2016)
- List of Exhibits (updated in June 2016)
- 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)
- Chapter Eight: Surfacing (updated on December 15, 2015)
- Chapter Nine: Guardrail and Roadside Barriers (updated on October 16, 2012)
- Chapter Sixteen: Pedestrian and Bicycle Facilities (added on February 8, 2016)
- Chapter Seventeen: Resurfacing, Restoration and Rehabilitation (3R) Projects (added on March 26, 2014)

The Index was updated in June 2016.

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| Chapter Ten | | |
| 10-2 | Section 1.A: <u>Railroad/Highway Crossing Surfacing</u> – “For further information see Chapter Two: <u>Roadway Design Process</u> , Section 22.B and Chapter Thirteen: <u>Planning and Project Development</u> , Section 5.G.” | “For further information see Chapter Twelve: <u>Cost Estimating and Funding</u> , Section 1.A.5 and Chapter Thirteen: <u>Planning and Project Development</u> , Section 5.G.” |
| 10-11 to 10-12 | Section 3. AIRWAY HIGHWAY CLEARANCES | Remove this section; see Exhibit R of the <i>Design Process Outline</i> . |

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| Chapter Ten | | |
| 10-13 | 4. LANDSCAPING | 3. LANDSCAPING |
| 10-13 | Previous Section 4: LANDSCAPING Previous Section 4: LANDSCAPING – “1. During the development of major (normally <u>not</u> resurfacing, lighting, etc.) roadway projects, urban or rural, the Roadside Development Unit in the Planning and Project Development Division will review and recommend an appropriate landscaping treatment for each project in accordance with the AASHTO manual <u>A Guide for Landscape and Environmental Design</u> , (Reference 10.7).” | Replace all references to the Roadside Development Unit with Roadside Stabilization Unit “1. During the development of major (normally <u>not</u> resurfacing, lighting, etc.) roadway projects, urban or rural, the Roadside Stabilization Unit in the Planning and Project Development Division will review and recommend an appropriate landscaping treatment for each project in accordance with the AASHTO manual <u>A Guide for Landscape and Environmental Design</u> , (Reference 10.6).” |
| 10-14 | 4.A <u>Tree Planting and Removal</u> | 3.A <u>Tree Planting and Removal</u> |
| 10-14 | Previous Section 4.A: <u>Tree Planting and Removal</u> | Replace all references to the Roadside Development Unit with Roadside Stabilization Unit |
| 10-14 | 4.B <u>Roundabout Landscaping</u> | 3.B <u>Roundabout Landscaping</u> |
| 10-15 | 5. SNOW CONTROL | 4. SNOW CONTROL |
| 10-15 | Previous Section 5: SNOW REMOVAL – “Contact the Roadside Development Section for the possibility of using living snow fence at the right-of-way line.” | “Contact the Roadside Stabilization Unit for the possibility of using living snow fence at the right-of-way line.” |
| 10-15 | 6. FENCING | 5. FENCING |

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| 10-15 | Previous Section 6: FENCING – “For additional information, see Section 8 for fencing adjacent to retaining walls and Section 10.B.1 for fencing behind sidewalks adjacent to steep slopes.” | “For additional information, see Section 7 for fencing adjacent to retaining walls and Chapter Sixteen: <u>Pedestrian and Bicycle Facilities</u> , Section 4.A for fencing behind sidewalks adjacent to steep slopes.” |
| 10-16 | 7. CATTLE PASSES | 6. CATTLE PASSES |
| 10-16 | 8. RETAINING WALLS | 7. RETAINING WALLS |
| 10-16 | Previous Section 8: RETAINING WALLS – “ <u>EXHIBIT 10.8</u> outlines NDOR’s basic procedure to be followed in the design of retaining walls.” | “ <u>EXHIBIT 10.7</u> outlines NDOR’s basic procedure to be followed in the design of retaining walls.” |
| 10-17 & 10.18 | Exhibit 10.8 NDOR Retaining Wall Design Guidelines | Exhibit 10.7 NDOR Retaining Wall Design Guidelines |
| 10-19 | 9. OLD ROAD OBLITERATION | 8. OLD ROAD OBLITERATION |
| 10-19 to 10-29 | Section 10 PEDESTRIAN AND BICYCLIST ACCESSIBILITY | Remove this section. See Chapter Sixteen: <u>Pedestrian and Bicycle Facilities</u> . |
| 10-30 | 11. MAINTAINING TRAFFIC DURING CONSTRUCTION | 9. MAINTAINING TRAFFIC DURING CONSTRUCTION |
| 10-30 | 11.A <u>Detours</u> | 9.A <u>Detours</u> |
| 10-30 | 11.B <u>Temporary Roads</u> | 9.B <u>Temporary Roads</u> |
| 10-30 | Previous Section 11.B: <u>Temporary Roads</u> – “When there is no viable detour route (or the project includes the construction of culverts, bridges, etc.) it may be more practical to construct a temporary road around the work zone than to build the project under traffic, (See <u>EXHIBIT 10.13</u>).” | “When there is no viable detour route (or the project includes the construction of culverts, bridges, etc.) it may be more practical to construct a temporary road around the work zone than to build the project under traffic, (See <u>EXHIBIT 10.8</u>).” |

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| 10-31 | Typical Section – “Typical temporary road sections are shown in <u>EXHIBIT 10.14</u> .” | “Typical temporary road sections are shown in <u>EXHIBIT 10.9</u> .” |
| 10-31 | CURVES – “High-speed temporary roads ($V > 45$ mph (70 km/h)) should be designed according to the $e_{max} = 6\%$ superelevation table found in Chapter Three: <u>Roadway Alignment</u> , (<u>EXHIBIT 3.3</u>).” | “High-speed temporary roads ($V \geq 50$ mph (80 km/h)) should be designed according to the $e_{max} = 6\%$ superelevation table found in Chapter Three: <u>Roadway Alignment</u> , (<u>EXHIBIT 3.3</u>).” |
| 10-31 | Lateral Clearance to the Work Zone (Buffer Space) – “When a temporary road is required adjacent to bridge construction/reconstruction the highway designer shall coordinate with the Bridge Division regarding the lateral offset of the temporary road to the bridge (See <u>EXHIBIT 10.14</u>) and the required size of the drainage structure(s) needed to handle the water flow or the use of a temporary bridge structure.” | “When a temporary road is required adjacent to bridge construction/reconstruction the highway designer shall coordinate with the Bridge Division regarding the lateral offset of the temporary road to the bridge (See <u>EXHIBIT 10.9</u>) and the required size of the drainage structure(s) needed to handle the water flow or the use of a temporary bridge structure.” |
| 10-32 | Surfacing – <ul style="list-style-type: none"> • Pavement used to construct the temporary road shall be estimated for the same quantity items as for the main roadway (See Chapter Twelve: <u>Cost Estimating & Funding</u>, <u>EXHIBIT 12.9</u>) and shall be included in the pavement quantities. | <ul style="list-style-type: none"> • Pavement used to construct the temporary road shall be estimated for the same quantity items as for the main roadway (See Chapter Twelve: <u>Cost Estimating & Funding</u>, <u>EXHIBIT 12.8</u>) and shall be included in the pavement quantities. |
| 10-32 | Erosion Control – “The designer shall review the temporary road design with the Roadside Development Unit .” | “The designer shall review the temporary road design with the Roadside Stabilization Unit in the Planning and Project Development Division .” |
| 10-33 | Exhibit 10.13 Example Temporary Road | Exhibit 10.8 Example Temporary Road |

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| 10-34 | Exhibit 10.14 Typical Temporary Road Section | Exhibit 10.9 Typical Temporary Road Section |
| 10-35 | <p data-bbox="521 432 764 459">11.C <u>Crossovers</u></p> <p data-bbox="521 499 951 730">Previous Section 11.C: <u>Crossovers</u> – “The crossover pavement quantities shall be included in the cost estimate and paid for separately (See Chapter Twelve: <u>Cost Estimating & Funding</u>, EXHIBIT 12.8).”</p> | <p data-bbox="1019 432 1247 459">9.C <u>Crossovers</u></p> <p data-bbox="1019 499 1455 699">“The crossover pavement quantities shall be included in the cost estimate and paid for separately (See Chapter Twelve: <u>Cost Estimating & Funding</u>, EXHIBIT 12.7).”</p> |
| 10-35 | 11.D <u>Temporary Surfacing</u> | 9.D <u>Temporary Surfacing</u> |
| 10-35 | <p data-bbox="521 833 951 1100">Previous Section 11.D: <u>Temporary Surfacing</u> – “These materials may be used to provide temporary access to adjacent properties during construction, (See Chapter Twelve: <u>Cost Estimating & Funding</u>, EXHIBITS 12.5 & 12.8).”</p> | <p data-bbox="1019 833 1455 1037">“These materials may be used to provide temporary access to adjacent properties during construction, (See Chapter Twelve: <u>Cost Estimating & Funding</u>, EXHIBITS 12.4 & 12.7).”</p> |
| 10-35 | 12. MAILBOX TURNOUTS AND SUPPORTS | 10. MAILBOX TURNOUTS AND SUPPORTS |
| 10-35 | <p data-bbox="521 1239 951 1442">Previous Section 12: MAILBOX TURNOUTS AND SUPPORTS – “EXHIBIT 10.15 shows minimum clearance distances for mailboxes near intersections with county roads.”</p> | <p data-bbox="1019 1239 1455 1373">“EXHIBIT 10.10 shows minimum clearance distances for mailboxes near intersections with county roads.”</p> |
| 10-35 | <p data-bbox="521 1480 951 1675">Previous Section 12: MAILBOX TURNOUTS AND SUPPORTS – “A turnout width of 8 ft. (2.4 m) should be considered as desirable on 3R projects and other types of work.”</p> | <p data-bbox="1019 1480 1455 1614">“See Chapter Seventeen: <u>Resurfacing, Restoration and Rehabilitation (3R) Projects</u> for 3R project design guidance.”</p> |

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| 10-35 | Previous Section 12: MAILBOX TURNOUTS AND SUPPORTS – “For additional information see a <u>Guide for Erecting Mailboxes on Highways</u> (Reference 10.12) and the <u>Roadside Design Guide</u> (Reference 10.16).” | “For additional information see a <u>Guide for Erecting Mailboxes on Highways</u> (Reference 10.8) and the <u>Roadside Design Guide</u> (Reference 10.12).” |
| 10-36 | Exhibit 10.15 Clearance Distances for Mailboxes Near Rural Intersections | Exhibit 10.10 Clearance Distances for Mailboxes Near Rural Intersections |
| 10-37 | 13. ROADWAY LIGHTING | 11. ROADWAY LIGHTING |
| 10-37 | <u>13.A Guidelines for the Installation of Roadway Lighting</u> | <u>11.A Guidelines for the Installation of Roadway Lighting</u> |
| 10-37 | 13.A.1 Urban Lighting | 11.A.1 Urban Lighting |
| 10-37 | 13.A.1.a Warrants | 11.A.1.a Warrants |
| 10-37 | 13.A.1.b Festoon Outlets | 11.A.1.b Festoon Outlets |
| 10-38 | 13.A.1.c Costs | 11.A.1.c Costs |
| 10-38 | 13.A.2 Rural Intersection Lighting | 11.A.2 Rural Intersection Lighting |
| 10-38 | 13.A.2.a Warrants | 11.A.2.a Warrants |
| 10-39 | 13.A.2.b Costs | 11.A.2.b Costs |
| 10-39 | 13.A.3 Rural Continuous Lighting | 11.A.3 Rural Continuous Lighting |
| 10-39 | 13.A.4 Interchange Lighting | 11.A.4 Interchange Lighting |
| 10-39 | 14. PARKING | 12. PARKING |
| 10-39 | Previous Section 14: PARKING – “ <u>EXHIBITS 10.16 & 10.17</u> provide parking stall dimensions for curb/street parking and for parking lot/parking garage designs for passenger cars.” | “ <u>EXHIBITS 10.11 & 10.12</u> provide parking stall dimensions for curb/street parking and for parking lot/parking garage designs for passenger cars.” |

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| 10-39 | Previous Section 14: PARKING – “For further information see Sections 60-6, 164 and 60-6, 168 of <u>Nebraska Bridge Law</u> (Reference 10.14).” | “For further information see Sections 60-6, 164 and 60-6, 168 of <u>Nebraska Bridge Law</u> (Reference 10.10).” |
| 10-39 | 14.A <u>Accessible Parking</u> | 12.A <u>Accessible Parking</u> |
| 10-39 | Previous Section 14.A: <u>Accessible Parking</u> – “When the Department of Roads constructs or re-stripes parking spaces, it must provide accessible parking spaces as required by the <u>Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities</u> (Reference 10.11).” | “When the Department of Roads constructs or re-stripes parking spaces, it must provide accessible parking spaces as required by the <u>Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities</u> (Reference 10.7).” |
| 10-39 | Previous Section 14.A: <u>Accessible Parking</u> – “ <u>EXHIBIT 10.18</u> shows a typical access aisle layout and the required minimum number of accessible stalls for a given number of parking spaces.” | “ <u>EXHIBIT 10.13</u> shows a typical access aisle layout and the required minimum number of accessible stalls for a given number of parking spaces.” |
| 10-40 | Exhibit 10.16a Parking Stall Dimensions for Curb and Street Parking (English) | Exhibit 10.11a Parking Stall Dimensions for Curb and Street Parking (English) |
| 10-41 | Exhibit 10.16b Parking Stall Dimensions for Curb and Street Parking (Metric) | Exhibit 10.11b Parking Stall Dimensions for Curb and Street Parking (Metric) |
| 10-42 | Exhibit 10.17a Parking Stall Dimensions for Parking Lots and Garages (English) | Exhibit 10.12a Parking Stall Dimensions for Parking Lots and Garages (English) |
| 10-43 | Exhibit 10.17b Parking Stall Dimensions for Parking Lots and Garages (Metric) | Exhibit 10.12b Parking Stall Dimensions for Parking Lots and Garages (Metric) |

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| 10-44 | Exhibit 10.18 ADA Accessible Parking Guide | Exhibit 10.13 ADA Accessible Parking Guide |
| 10-44 | Previous Exhibit 10.18 ADA Accessible Parking Guide – “Source: <u>ADA Design Guide 1 – Restriping Parking Lots</u> (Reference 10.15)” | “Source: <u>ADA Design Guide 1 – Restriping Parking Lots</u> (Reference 10.11)” |
| 10-45 | 15. REFERENCES | 13. REFERENCES |
| 10-45 & 10-46 | Previous Section 15: REFERENCES | Remove References 10.2a, 10.2b, 10.6, 10.8, 10.9 and 10.10. Rename Reference 10.2c to 10.2 and update from 2001 to 2011. Update Reference 10.16 from 2002 to 2011. |
| 10-45 & 10-46 | Previous Section 15: REFERENCES | Re-number Reference 10.7 as 10.6, 10.11 as 10.7, 10.12 as 10.8, 10.13 as 10.9, 10.14 as 10.10, 10.15 as 10.11, 10.16 as 10.12, and 10.17 as 10.13 |