Jefferson County Transportation Design & Construction Manual

JEFFERSON COUNTY, COLORADO PLANNING AND ZONING DIVISION

Revision Dates

The Transportation Design & Construction Manual, formerly known as Roadway Design & Construction Manual, adopted by the Board of County Commissioners of Jefferson County, Colorado on March 21, 1995, has since been amended on the following dates:

December 5, 1995

May 12, 1998

March 23, 1999

October 1, 2002

July 1, 2003

November 25, 2003

December 5, 2006

May 20, 2008

October 13, 2009

November 24, 2015

July 17, 2018

December 17, 2019

Jefferson County Planning and Zoning Division

100 Jefferson County Parkway, Suite 3550, Golden, Colorado 80419

303-271-8700 • http://planning.jeffco.us

Table of Contents

Chapter I General Provisions

- 1.1. Short Title
- 1.2. Jurisdiction
- 1.3. Purpose and Effect
- 1.4. Enactment Authority
- 1.5. Amendment and Revisions
- 1.6. Enforcement Responsibility
- 1.7. Review and Approval
- 1.8. Interpretation
- 1.9. Relationship to Other Standards

Chapter 2 Construction Drawing Requirements

- 2.1. General Requirements
- 2.2. Cover Sheet
- 2.3. Plan
- 2.4. Profile
- 2.5. Cross Sections
- 2.6. Details
- 2.7. Standard Notes

Chapter 3 Design and Technical Criteria

- 3.1. General
- 3.2. Street/Road Types
- 3.3. Functional Classification
- 3.4. Standard Templates
- 3.5. Horizontal Alignment
- 3.6. Vertical Alignment
- 3.7. Intersection Spacing, Vision Clearance Triangle and Sight Distance Driveways and Private Streets/Roads
- 3.8. Drainage
- 3.9. Traffic Control
- 3.10 Miscellaneous

Chapter 4 Pavement Design and Technical Criteria

- 4.1. General Requirements
- 4.2. Pavement Design Report Submittal
- 4.3. Subgrade Investigation
- 4.4. Pavement Design Criteria
- 4.5. Pavement Design Procedure
- 4.6. Material Specifications

Chapter 5 Construction Specifications and Standards

- 5.1. Construction Specifications
- 5.2. Construction Standards

- 3.7.8. Driveways, Private Roads, and Non-Maintained Roads in County Right-of-Way Standards. Non-Maintained Roads in County Right-of-Way consist of a road open to the public and built to a private road standard.
- 3.7.8.1. **Driveways** serving one dwelling unit shall meet the following standards:
- 3.7.8.1.1. Minimum horizontal curve radius of 30 feet at centerline.
- 3.7.8.1.2. A total width of 14 feet, including a 10-foot all-weather travel surface and two-foot shoulders on either side or if the driveway exceeds 150 feet in length, a 12-foot all-weather travel surface and two-foot shoulders on either side is required in accordance with Template 18.
- 3.7.8.1.3. Maximum grade of ten (10) percent on straight sections and twelve (12) percent where the dip of the natural terrain bears between South 60° East and South 45° West. Maximum grade of eight (8) percent for curves with radius of less than or equal to 50 feet at centerline.
- 3.7.8.1.3.1. Areas within ten (10) feet on each side of portions of the driveways on the subject property shall be cleared of non-fire-resistive vegetation growth. An exception may be made for single specimens of trees, ornamental vegetative fuels or cultivated ground cover.
- 3.7.8.1.4 Maximum grade of fifteen (15) percent on straight sections for a maximum length of one hundred (100) feet provided the appropriate fire mitigation systems are in place based on the applicable building, fire and wildland codes.
- 3.7.8.1.4.1. Clearance of non-fire-resistive vegetation growth as specified in 3.7.8.1.3.1 applies.
- 3.7.8.1.54. If the length of the driveway in the Plains is less than or equal to 50 feet, Sections 3.7.8.1.1. through 3.7.8.1.43. do not apply.
- 3.7.8.1.65. If the length exceeds 150 feet, a turnaround shall be provided in accordance with Template 20. and Tthe location of the turnaround(s) shall be approved by the appropriate fire protection district.
- 3.7.8.1.7. If the length of the driveway in the Mountains exceeds 500 feet, a turnout shall be provided per every 500-foot length, In accordance with Template 19. The location of the turnout(s) shall be approved the appropriate fire protection district.
- 3.7.8.2. **Private roads** serving more than one dwelling unit and non-maintained roads in county Right of Way shall meet the following standards:
- 3.7.8.2.1. Minimum horizontal curve radius of 30 feet at centerline.
- 3.7.8.2.2. A total width of 20 feet, including a 16-foot all-weather travel surface and two-foot shoulders on either side in accordance with Template 18 for roads serving up to 15 dwelling units. Alternatively, for a private road a total width of 14 feet, including a 10-foot traveled surface, two-foot shoulders on either side, and pullouts at 150 foot intervals in accordance with Template 19.
- 3.7.8.2.3. A total width of 24 feet, including an 18-foot paved surface and three-foot shoulders on either side in accordance with Template 18 for roads serving 16 or more dwelling units or one or more non-residential units.
- 3.7.8.2.4. Maximum grade of ten percent on straight sections: Maximum 12 percent grade where the dip of the natural terrain bears between South 60° East and South 45° West. Maximum grade of eight percent for curves with radius of less than or equal to 50 feet at centerline.
- 3.7.8.2.5 Maximum grade of fifteen (15) percent on straight sections for a maximum length of one hundred (100) feet provided the appropriate fire mitigation systems are in place based on the applicable building code.
- 3.7.8.3. The offsite driveway or private road shall meet the requirements as described in this section or take appropriate fire protection district may approve an alternative standards design allowing deviation from the standard when the property owner does not have the ability to make Improvements to the offsite property. For driveways and private roads. Plans shall be submitted that bear the Weritten approval of all alternative standards is required of the appropriate fire protection district.

- 3.7.8.4. Driveway approaches and private road intersections with public roads must comply with Standard 8 Driveway and Private Road Approaches onto Roads.
- 3.7.8.5. Cattle guards shall conform to the current edition of the CDOT M&S Standard Plans and approved by the appropriate fire protection district.
- 3.7.8.6. All gates and entry-way structures shall be approved by the appropriate fire protection district.