

## **SECTION 9. STORM DRAINAGE IN ZONED AREAS**

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In order to preserve and protect existing storm drainage systems, natural drainages, private and public property, and in order to ensure that proposed developments provide adequate storm water management facilities, either through subdivisions or through individual residential or commercial/industrial developments, storm drainage plans shall be submitted to the County before these developments will be approved. More specific requirements for storm drainage associated with subdivisions are listed in Section 12 of this Manual.

### **9.1 Zoning Compliance Permit Requirements**

All construction and development within the jurisdiction of Missoula County on zoned land must receive a Zoning Compliance Permit from the Community and Planning Services office before starting construction. Public Works is charged with reviewing grading and drainage plans for Zoning Compliance Permits. The thresholds for grading and drainage plan review are as follows:

1. Residential projects on slopes between 5% and 10% may obtain a permit with an approved site plan submitted by the property owner or their contractor.
2. Residential projects on slopes greater than 10% require professionally engineered plans.
3. All commercial or industrial projects require professionally engineered plans regardless of grade.
4. All Condominium and Townhome Exemption Development (C-TED) projects require professionally engineered plans regardless of grade.
5. All multi-family development projects creating three or more units require professionally engineered plans regardless of grade.

### **9.2 Zoning Compliance Permit Exemptions**

Exemptions from grading and drainage review include:

1. One- and two-family units, with a total of three (3) units per parcel on slopes less than five percent (5%)
2. Interior remodels
3. Deck construction or accessories
4. Structures, both residential and commercial, less than two hundred (200) square feet
5. Additions of less than two hundred (200) square feet to any existing structure
6. The addition of a structure over an existing impervious surface
7. Billboards and signs
8. Pole barns
9. Any other project not on a permanent foundation intended for seasonal use
10. Any construction controlled by the Missoula Airport Authority

### 9.3 Zoning Compliance Plan Submittals

If construction requires a grading plan due to Zoning Compliance regulations, adequate plans shall be submitted in a digital format to the department for review and approval. The plans, at a minimum, shall show the following (if applicable):

1. 5% to 10% residential requirements
  - (a) building footprint;
  - (b) approach/driveway location;
  - (c) proposed drainage facilities or materials;
  - (d) existing site elevations;
  - (e) finished floor elevations with corner spot elevations;
  - (f) arrows drawn depicting direction of storm water flow;
  - (g) gutter spill locations; and
  - (h) retaining wall locations with elevations at top and bottom of wall.
2. Greater than 10% grade conditions for residential projects; all commercial or industrial development; all multi-family and C-TED requirements
  - (a) all requirements listed in 9.3.1; and
  - (b) topographic map showing existing and proposed contours at 2 foot minimum intervals; and
  - (c) sidewalk, curb and gutter locations and details.
3. The County will only review required landscaping plans where they may impact a public right-of-way.
4. All commercial/industrial and C-TED developments shall be required to complete a drainage report for the installation of storm water management systems. The system shall be designed to detain/retain the one hundred (100) year, twenty-four (24) hour rainstorm as obtained from the NOAA Atlas 2 using the SCS Type 2 Rainfall Distribution. Post-development discharge shall be limited to pre-development runoff rates, and complete retention may be required if downstream conditions warrant.
5. Where drainage swales are used to convey or store storm water, they shall be protected against erosion and weed invasion as approved by the County.
6. Natural drainage ways shall be preserved except for necessary crossings in which the capacity of existing drainage ways shall be preserved.
7. Graded slopes shall be planted with a vegetative ground cover, and, if applicable, consistent with the Wildland Residential Interface (WRI) requirements. Landowners shall replant areas of disturbance no later than the first growing season to prevent erosion and weed invasion in consultation with the Missoula County Extension Office in accordance with Section 11 of these standards. Where site grading is necessary, top soil shall be salvaged or imported to redistribute on areas to be re-vegetated.
8. Dry wells (sumps) may be allowed, but must be pre-approved by the County for inclusion in the drainage plan design.
9. Underground storage reservoirs or structures may be allowed, but must be pre-approved by the County for inclusion in the drainage plan design.
10. The Engineer shall submit a letter certifying that the storm water management system has been constructed to the approved design.

11. For projects disturbing one (1) acre or more, the Owner is required to submit to the County a Notice of Intent (NOI), a Storm Water Pollution Prevention Plan (SWPPP) and a notice of receipt from the Montana DEQ. These documents will be kept on file as part of the Missoula County Storm Water Management Plan (SWMP).
12. In addition to these standards, all drainage systems shall meet the minimum standards of the Montana Department of Environmental Quality, as required by Title 76, Chapter 4, Part 1 MCA and all applicable state and local regulations.
13. Projects found to be within the MS4 Boundary may require additional review by the Missoula County MS4 committee. The current MS4 boundary can be found on the Missoula Valley Water Quality District website or the Property Information System found on the Geographic Information Systems website.