

Chapter 7

Grading Requirements for Private Development

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7.1 General

- 7.1.1** All proposed developments shall be graded such that storm water runoff is conducted away from proposed building sites to swales constructed in drainage easements along lot lines, to public right-of-way, or to another approved drainage course.
- 7.1.2** When new development is proposed adjacent to existing, established properties, the new development shall accommodate the as-built grading and drainage from the existing properties. This may require drainage swales, easements, and/or storm drainage systems constructed entirely upon property within the new development, so as not to cause adverse effects on the established properties.
- 7.1.3** No filling will be allowed in any areas of land within a proposed subdivision or other type of development which lies either wholly or in part within the flood plain of a river, stream, creek, wetland, or lake unless under the terms of a permit granted by the United States Army Corps of Engineers, South Dakota Department of Agriculture and Natural Resources and/or the City of Sioux Falls where applicable.

7.2 Grading Requirements for Subdivisions

- 7.2.1** The longitudinal slope along a rear yard drainage swale shall be not less than 1.0 percent but not so great as to cause erosion.
- 7.2.2** All grade point elevations shall be shown for each lot at the property corners and at the low and high points along the property lines.
- 7.2.3** The general direction of overland drainage in the rear yard shall be indicated on each lot by an arrow.
- 7.2.4** High and low street grade points, slope direction (by arrow), and the location of all inlets and drainage ditches shall be shown on the grading plan.
- 7.2.5** A maximum slope of 3 feet horizontal to 1 foot vertical shall not be exceeded. The toe of the slope shall be located outside of drainage easements and natural drainage ways unless adequate drainage is provided.
- 7.2.6** Grading plans shall be drawn to a scale of 1 inch = 100 feet (1" = 100') or larger.
- 7.2.7** Grading plans shall include details of typical lot grading and drainage patterns intended to be used.

- 7.2.8** The grading plans shall show the contours with intervals of 1 foot for land with a slope of 1 percent or less, intervals of 2 feet for a slope between 1.1 and 9.9 percent and contours of 5 feet for land with a slope exceeding 10 percent.
- 7.2.9** All elevations shall be on the NAVD 1988 vertical control datum.
- 7.2.10** Drainage patterns other than those shown in standard details may be used and will be acceptable for review. Details of the typical lot drainage pattern shall be shown on the grading plan with all grade control points identified.
- 7.2.11** In general, for streets with ditches and no curbs, elevation of the front lot line shall be at least 6 inches above the centerline of the road.
- 7.2.12** All nonconforming lots with drainage patterns other than those in standard details shall be noted on the grading plan.
- 7.2.13** Storm drains and inlets shall be placed in rear yard swales at low (sump) points where front to rear grading is used.
- 7.2.14** Drainage swales shall be constructed entirely within the easements.
- 7.2.15** The grading plan shall show the minimum ground elevation adjacent to buildings for each lot.