

3.3-500 Hillside Development Overlay District

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3.3-505 Purpose

The Hillside Development (HD) Overlay District is established to ensure that development in hillside areas: Minimizes the potential for earth movement and resultant hazards to life and property; protects water quality by minimizing soil erosion and siltation; retains and protects natural vegetation, natural water features and drainageways, scenic quality and open space by minimizing vegetation removal in sloped areas; assures the compatibility of new development with surrounding areas; encourages site and building design that is consistent with the natural topography in order to minimize the cost of providing public infrastructure; provides for adequate access for emergency services; and otherwise protects the public health and safety.

3.3-510 Applicability

The HD Overlay District is applied in residential zoning districts above 670 feet elevation or to development areas below 670 feet in elevation where any portion of the development area exceeds 15 percent slope as determined using the slope calculation described in Subsection 3.3-520A.

3.3-515 Review

Development within the HD Overlay District is reviewed under Type II procedure, submitted concurrently with the applicable application for a: Site Plan Review, Property Line Adjustment, or a Partition or Subdivision Tentative Plan.

3.3-520 Development Density and Options

- A.** All residential development within the HD Overlay District is subject to the maximum development density requirements of this section, including, but not limited to, the development of a detached single unit dwelling, duplex, middle housing, or multiple unit housing.
- B.** Where the average slope of the portion of the development area below 670 feet in elevation is less than 15 percent, the number of dwelling units allowed must be within the net density range provided below, calculated in conformance with SDC 3.2.235.

For the purposes of this section calculating the “average slope” is defined as follows

$$S = \frac{0.00229 \ I \ L}{A}$$

Where:

S = Average % of slope for the area.

I = Contour Interval (not greater than 10 feet).

L = Summation of length of the contour lines within the area.

A = Area.

- C.** Where the average slope of the development area exceeds 15% and/or is above 670 feet in elevation, an applicant may develop under Option “A,” Option “B,” or a combination of both, in conformance with this section. Option “A,” is designed to correlate minimum lot/parcel sizes to the average slope of the development area. Option “B,” is designed to allow for a density transfer bonus to stimulate development on those portions of the development area where the slope of the land is less than 15 percent.
1. **OPTION “A”—AVERAGE SLOPE—MINIMUM LOT/PARCEL SIZE.** The site development requirements of the LDR District apply, with the exception of the minimum lot/parcel size and duplex standards. Determination of minimum lot/parcel size where the slope is 15 percent or greater is a 3 step process.
 - a. Step A-I. Determine the area of the lot/parcel where the slope of the land is:
 - i. Less than 15 percent.
 - ii. From 15 percent to 35 percent.
 - iii. Greater than 35 percent.

Use the following formula to determine the % of slope:

$$\frac{\text{Vertical distance between contours}}{\text{Horizontal distance between contours}} = \frac{V \times 100}{H} = \% \text{ slope}$$

Indicate the portions of the development area that are less than 15 percent; from 15 percent to 35 percent; and greater than 35 percent then use a planimeter or other technology acceptable to the City Engineer to determine the land area of each category.

- b. Step A-2. Determine the average slope of the portion of the development area where the slope of land is from 15 percent to 35 percent by using the following formula:

$$S = \frac{0.00229 \ I \ L}{A}$$

Where:

S = Average percent of slope for the area where the slope ranges from 15 percent to 35 percent.

I = Contour interval. (Not greater than 10 feet).

L = Summation of the length of the contour lines within the area where the slope is from 15 percent to 35 percent.

A = Area in acres of the portion of the parcel where the slope is from 15 percent to 35 percent.

- c. Step A-3. Determine the minimum lot/parcel size for the portion of the development area where the slope of the land is greater than 15 percent by using the following Table:

Table 3.3-1

Average Slope	Minimum Lot/Parcel Size Per Dwelling Unit	Minimum Per Lot/Parcel Frontage(1)*
Less than 15 % and below 670 feet	See the applicable residential district density standards & minimum lot size in SDC 3.2-215.	
Less than 15% on wooded lots(2)**	10,000 sq. ft. per unit	60 ft.
15%—25%	10,000 sq. ft. per unit	90 ft.
25%—35%	20,000 sq. ft. per unit	150 ft.
Over 35%	40,000 sq. ft. per unit	200 ft.

(1)*Panhandles are permitted only when requirements of this Section pertaining to fire protection and lot/parcel size are met and the lot/parcel cannot be served with a public street. Minimum frontage standards for all other lots/parcels may be amended by the Director when it is found that the topography or location of natural features prevent achieving the standard. Cul-de-sac frontages are as specified in Section 3.2-215.

(2)** A Lot/parcel that is 10,000 square feet or larger, above 670 feet in elevation, which contains more than 5 trees 8 inches or greater dbh (See also Chapter 6).

2. OPTION “B” DENSITY TRANSFER BONUS. In order to promote the preservation of natural slopes greater than 25 percent, and encourage solar access,

development density transfer is encouraged when dividing land with slopes greater than 25 percent. The density transfer is only feasible where there are sizable portions of the development area which have slopes less than 25 percent. Determination of the density transfer bonus is a 4 step process:

- a. Step B-1. Determine the area of the parcel where the average slope of the land is:
 - i. Less than 15 percent.
 - ii. From 15 percent to 25 percent.
 - iii. From 25 percent to 35 percent.
 - iv. Greater than 35 percent.
- b. Step B-2. Determine the average slope of the area of the parcel where the average slope of the land is greater than 15 percent by using the formula identified in Option A, Step A-2.
- c. Step B-3. Determine the number of potential lots/parcels for the total development area which could have been permitted, for the portion of the parcel where the average slope is greater than 15 percent, if the average slope option had been considered by using Table 3.3-1 in Option "A," Step A-3.
- d. Step B-4. Multiply the number of potential lots/parcels by 1.2 to determine the density that may be transferred to those sections of the development area where the slopes are less than 25 percent. In no case shall the density of the developed portion of the site exceed 8 dwelling units per developable acre, (i.e., excluding streets and open space). Land of greater than 15 percent average slope used to calculate a density transfer bonus shall be maintained as permanent open space or dedicated for park use. Modification of standards as specified in SDC 3.3-535 may be applied to the entire development area.

3.3-525	Street Grade Standards
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- A. Streets shall be contoured in hillside areas to minimize environmental and scenic disruption.
- B. Street grades may exceed the 12 percent local street standard specified in SDC 4.2-105, Street Standards—Public, only where topographical conditions make it impractical to meet the 12 percent standard, subject to the following conditions:

1. No new driveways or intersections shall be permitted where street grades exceed 12 percent.

EXCEPTION: Lots/parcels created prior to the adoption of the Comprehensive Zoning Code, 1982.

2. No street with a grade of 15 percent or greater shall be permitted for a distance of more than 200 feet.
3. In no case shall a street grade exceed 18 percent for any distance.

3.3-530	Reports Required
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Where the buildable portion of the land to be developed exceeds 15 percent average slope, the following reports are required and their conclusions applied in order to prevent or mitigate possible hazards to life and property and adverse impacts on the natural environment, consistent with the purpose of this Section. The applicant shall fund peer review of the reports as deemed necessary by the City Engineer.

- A. **Geotechnical Report.** This report shall include data regarding the geology of the site, the nature, distribution, and strength of existing soils, conclusions and recommendations for grading procedures, design criteria for corrective measures, and options and recommendations to maintain soil and slope stability and minimize erosion of the site to be developed in a manner imposing the minimum variance from the natural conditions. Where geologic conditions of the site indicate that a hazard may exist, the report shall show that the proposed Subdivision or Partition shall result in lots/parcels that are suitable for development. The investigation and report shall be prepared by a civil engineer/geologist or a geotechnical engineer.
- B. **Grading Plan Report.** This plan shall include the following information:
 1. Existing and proposed details and contours (5-foot intervals) of property;
 2. Details of terrain and area drainage;
 3. Location of any existing buildings or structures on the property where the work is to be performed, the location of any existing buildings or structures on land of adjacent owners which are within 100 feet of the property or which may be affected by the proposed grading operations, and proposed or approximate locations of structures relative to adjacent topography;
 4. The direction of drainage flow and the approximate grade of all streets with the final determination to be made as specified in Subsection D., below;

5. Limiting dimensions, elevations, or finished contours to be achieved by the grading, including all cut and fill slopes, proposed drainage channels, and related construction;
 6. Detailed plans and locations of all surface and subsurface drainage devices, walls, dams, sediment basins, storage reservoirs, and other protective devices to be constructed with, or as a part of, the proposed work, together with a map showing drainage areas, the complete drainage network, including outfall lines and natural drainageways which may be affected by the proposed development, and the estimated run-off of the area served by the drains;
 7. A schedule showing when each phase of the project will be completed, including the total area of soil surface which is to be disturbed during each stage, and estimated starting and completion dates; the schedule shall be drawn up to limit to the shortest possible period the time that soil is exposed and unprotected. In no event shall the existing "natural" vegetative ground cover be destroyed, removed, or disturbed more than 15 days prior to grading or construction of required improvements. Within 15 days of grading or other pre-development activity that removes or significantly disturbs ground cover vegetation, exposed soil shall either be built upon (i.e., covered with gravel, a slab foundation or other construction), landscaped (i.e., seeded or planted with ground cover) or otherwise protected; and
 8. The Grading Plan shall be prepared by a civil engineer.
- C.** Vegetation and Re-vegetation Report. This report shall be as specified in SDC 5.19-120, if tree felling is proposed.
- D.** Verification of Slope and Grade Percentages. Prior to acceptance of the Final Plat, all streets shall be cross-sectioned and their center-lines staked in the field, to determine the accuracy of preliminary slope and grade percentages. If there are significant differences between preliminary and final grade and slope determinations, i.e., density or street gradients exceed the limits specified in this Section, the Tentative Plan shall be modified to reflect the revised information and resubmitted.
- E.** Development Plan Report. A proposed development plan shall be submitted, depicting building envelopes for each lot/parcel, including driveway approaches and all other associated impervious surface areas. The applicant shall specify whether trees will be felled under one Tree Felling Permit, as specified in SDC 5.19-100, as part of the subdivision construction process or by separate Tree Felling Permit for each individual lot/parcel prior to the issuance of a Building Permit. The plan shall be based upon the findings of the required reports in this Section and the lot/parcel coverage standards of SDC 3.2-215. Building envelopes shall be specified in Covenants, Conditions, and Restrictions recorded with the Subdivision Plat.

3.3-535 Modification of Standards

The Director may modify the standards of this Code, as they apply to the entire development area, within the following prescribed limits:

- A.** Front, side and rear yard setbacks may be reduced to zero (when permitted by the Building Safety Codes); provided, however, where attached dwellings are proposed, there shall not be more than 5 dwelling units in any group.
- B.** The reduction of public right-of-way, pavement width, and/or requirements for the installation of sidewalks as specified in Table 4.2-1, may be allowed if provisions are made to provide off-street parking in addition to that specified in SDC 4.6-125. The Director may require combinations of collective private driveways, shared parking areas and on-street parallel parking bays where topography, special traffic, building, grading, or other circumstances necessitate additional regulation to minimize land and soil disturbance and minimize impervious surface areas.

3.3-540 Fire Protection Requirements

Additional fire protection requirements may be required in hillside development areas which are considered vegetated areas subject to wildfires as determined by the Fire Marshal.

- A.** All buildings with a gross area in excess of 1,500 square feet shall be constructed within 50 feet of an approved fire lane or public street. Fire apparatus access shall be provided to within 50 feet of the building (this may mean modifying the driveway designs for width, grade and construction material in order to meet fire lane requirements). Installation of a residential fire sprinkler system will be considered as an alternative to the requirement to be within 50 feet of a fire lane or street.
- B.** The developer shall specify in the recorded Covenants, Conditions and Restrictions that a wildfire defense plan for each lot/parcel, approved by the Fire Marshal, will be required prior to the issuance of a building permit.
- C.** All buildings located in or adjacent to vegetated areas subject to wildfires shall have Class A or B roofing as specified in the Oregon State Structural Specialty Code.