

1003 HAZARDS TO SAFETY

1003.01 PURPOSE

- A. To protect lives and property from natural or man-induced geologic or hydrologic hazards and disasters.
- B. To protect property from damage due to soil hazards.
- C. To protect lives and property from forest and brush fires.
- D. To avoid financial loss resulting from development in hazard areas.

1003.02 STANDARDS AND CRITERIA FOR MASS MOVEMENT HAZARD AREA DEVELOPMENT

- A. No development or grading shall be allowed in areas of land movement, slump or earth flow, or mud or debris flow, unless approved in a Type II application pursuant to Section 1307, *Procedures*. Unless the criteria for such development as listed in Subsection 1003.02(B) are satisfied in the review of another approved Type II application pursuant to Section 1307, a mass movement hazard area development permit is required for development in areas of land movement, slump or earth flow, or mud or debris flow.
- B. Approval Criteria:
  - 1. An engineering geologic study shall be required for development proposed on slopes of twenty (20) percent or greater.
  - 2. An engineering geologic study shall be required, regardless of the slope of the site proposed for development, unless there is stabilization of the identified hazardous condition based on established and proven engineering techniques which ensure protection of public and private property. Appropriate conditions of approval of development approved under this subsection may be attached by the County.
  - 3. The engineering geologic study required by Subsections 1003.02(B)(1) and (2) shall establish that the site is stable for the proposed use and development. The study shall include the following:
    - a. Index map;
    - b. Project description, to include: Location; topography; drainage; vegetation; discussion of previous work; and discussion of field exploration methods;

- c. Site geology, to include: Site geologic map; description of bedrock and surficial materials including artificial fill; location of any faults, folds, etc.; and structural data including bedding, jointing, and shear zones; and
  - d. Discussion and analysis of any slope stability problems.
  - e. Discussion of any offsite geologic conditions that may pose a potential hazard to the site or that may be affected by onsite development.
  - f. Suitability of site for proposed development from geologic standpoint.
  - g. Specific recommendations for cut slope stability, seepage and drainage control, or other design criteria to mitigate geologic hazards.
  - h. If deemed necessary by the engineering geologist to establish whether an area to be affected by the proposed development is stable, additional studies and supportive data shall include: cross sections showing subsurface structure; graphic logs of subsurface explorations; results of laboratory test; and references.
  - i. Signature and certification number of an engineer or engineering geologist registered in the State of Oregon.
  - j. Additional information analyses as necessary to evaluate the site.
- C. Vegetative cover shall be maintained or established for stability and erosion control purposes.
- D. Diversion of storm water into these areas shall be prohibited.
- E. The principal source of information for determining mass movement hazards is the State Department of Geology and Mineral Industries (DOGAMI) Bulletin 99 and accompanying maps. Approved site-specific engineering geologic studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the mass movement hazards data base.

1003.03 STANDARDS FOR FLOOD HAZARD AREAS

- A. Development proposed in flood hazard areas, in addition to provisions of Section 703, shall be limited to the extent that:
  - 1. Clearing, stripping of vegetation and coverage of the site by roads and structures shall be no more than necessary to maintain water quality and meet the provisions of Section 1011.

2. Site buildings to minimize alteration of terrain and other natural features.

1003.04 STANDARDS FOR SOIL HAZARD AREAS

- A. Appropriate siting and design safeguards shall insure structural stability and proper drainage of foundation and crawl space areas for development on land with any of the following soil conditions: Wet/high water table; high shrink-swell capability; compressible/organic; and shallow depth-to-bedrock.
- B. The principal source of information for determining soil hazards is the State DOGAMI Bulletin 99 and accompanying maps. Approved site specific soil studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the soil hazards data base accordingly.

1003.05 STANDARDS FOR FIRE HAZARD AREAS

- A. Development in areas with the potential for forest or brush fires shall be designed:
  1. To provide adequate water storage and pressure for purposes of maintaining minimum flows for fire protection.
  2. To provide, in cooperation with local fire districts, fire hydrants appropriate to the intensity and type of development.
  3. So that dwellings are not sited in areas subject to extreme fire hazard, such as areas of heavy fuel concentration, draws, etc.
  4. To provide for other methods of fire protection and prevention appropriate to the location and type of development, utilizing techniques recommended by the Oregon State Forestry Department.

[Amended by Ord. ZDO-280, 10/23/21]