ORDINANCE NO. 94-1001

AN ORDINANCE AMENDING TITLE 17: ZONING, CHAPTER 17.06: ZONING DISTRICT CLASSIFICATIONS, SECTION 17.06.020: CLASSIFICATION OF ZONING DISTRICTS, DELETING TITLE 17: ZONING, CHAPTER 17.44: US UNSTABLE SLOPES OVERLAY DISTRICT, OF THE OREGON CITY MUNICIPAL CODE, 1991, AND ENACTING A NEW TITLE 17: ZONING, CHAPTER 17.44: US UNSTABLE SOILS AND HILLSIDE CONSTRAINT OVERLAY DISTRICT, AND DECLARING AN EMERGENCY

OREGON CITY MAKES THE FOLLOWING FINDINGS:

WHEREAS, the City's Comprehensive Plan policy regarding Landslides, Weak Foundation Soils and Erosion provides, among other things, that "Landslide-prone areas should be evaluated on a site specific basis and should be protected from excavations and/or major vegetation clearing activity that would result in increased slide activity;" and

WHEREAS, the City zoning ordinance, implementing this plan policy, applies the Unstable Slopes Overlay designation on all property with a slope of 25 percent or more, and this designation requires an applicant to obtain a permit prior to development on land so designated; and

WHEREAS, the City Commission recognizes the significant hazards to life, property and natural resources and public facilities posed by development on steep slopes or unstable areas, regardless of whether such land is designated by an unstable slopes overlay; and

WHEREAS, in many instances, development on hillsides less steep than 25 percent, nonetheless pose significant threats of damage to life, property, natural resources and public facilities, especially sewer and storm drainage systems; and

WHEREAS, development on such hillsides and unstable areas must be regulated or prohibited in order to minimize or eliminate the threat which development on such lands poses to the public's health, safety and general welfare.

Therefore,

OREGON CITY ORDAINS AS FOLLOWS:

Section 1. That Title 17: ZONING, Chapter 17.06: ZONING DISTRICT CLASSIFICATIONS, Section 17.06.020: CLASSIFICATION OF ZONING DISTRICTS, of the Oregon City Municipal Code, 1991, is hereby amended to delete "US Unstable Slopes Overlay District" and to add the following:

US Unstable Soils and Hillside Constraint Overlay District

Section 2. That Title 17: ZONING, Chapter 17.44: US UNSTABLE SLOPES OVERLAY DISTRICT, of the Oregon City Municipal Code, 1991, is hereby repealed in its entirety and replaced with a new Title 17: ZONING, Chapter 17.44: US UNSTABLE SOILS AND HILLSIDE CONSTRAINT OVERLAY DISTRICT, to read as follows:

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<u>Chapter 17.44</u>

US UNSTABLE SOILS AND HILLSIDE CONSTRAINT OVERLAY DISTRICT

Sections:

17.44.010	Purpose.
17.44.020	Definitions.
17.44.030	Applicability and procedures.
17.44.040	Fee.
17.44.050	Development Standards.
17.44.060	Development permit - application - information.
17.44.070	Access to property.
17.44.080	Utilities.
17.44.090	Storm water drainage.
17.44.100	Construction standards.
17.44.110	Approval of development.
17.44.120	Liability.
17.44.130	Compliance.
17.44.140	Appeal.

17.44.010 Purpose. The purpose of this chapter is to provide safeguards in connection with development on or adjacent to steep hillside and landslide areas and other identified known or potential hazard areas, thereby preventing undue hazards to public health, welfare and safety. Such hazards include landslides, mud flows, high ground water tables, soil slump and erosion, which, in turn, may cause siltation or other degradation of quality of waters of the State and damage to public and private property and public facilities. The direct and indirect costs of these effects, in economic and noneconomic terms, can be high and warrant a conservative approach both in the review of land use applications for development of sites with steep and unstable soils and in the imposition of development conditions and restrictions.

<u>17.44.020</u> Definitions. For the purpose of this Chapter, the following definitions are applicable:

"Geotechnical remediation" means construction designed to increase the factor of safety against earth movement.

"Hillside" refers to any area with a slope of 25 percent or more.

"Landslide areas" means those areas identified as known or potential landslide or mass movement geological hazard areas:

- 1. By the State of Oregon Department of Geology and Mineral Industries (DOGAMI) in Bulletin 99, Geology and Geological Hazards of North Clackamas County, Oregon (1979), or in any subsequent DOGAMI mapping for the Oregon City area; or
- 2. By Portland State University in a study entitled "Environmental Assessment of Newell Creek Canyon, Oregon City, Oregon" (1992).

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"Slope" shall be calculated as follows:

- 1. For lots or parcels individually or cumulatively greater than 10,000 square feet in size, between grade breaks, obtain the vertical distance, divide by the horizontal distance and multiply by 100. The minimum horizontal distance to be used in determining the location of grade breaks shall be 50 feet.
- 2. For lots or parcels 10,000 square feet or smaller in size, obtain the vertical distance across the lot or parcel, divide by the horizontal distance and multiply by 100.
 - 3. The resulting number is the slope expressed as a percentage.

"Unstable slopes" or "unstable soils" includes:

- 1. Any area identified on the City's Unstable Soils and Hillside Constraint Overlay District map.
- 2. Any other area that is identified on official City, county or federal or state agency maps as being subject to soil instability, slumping or earth flow, high ground water level, landslide or erosion, or for which field investigation, performed by a suitably qualified geotechnical engineer or engineering geologist who is licensed in Oregon and derives his or her livelihood principally from that profession, confirms the existence of or potential for a severe hazard.
- 17.44.030 Applicability and procedures: The provisions of this Chapter shall apply to all applications for new development and for the expansion of existing development on landslide areas, hillsides or unstable slopes. No building or site development permit or other authorization for development shall be issued until the plans and other documents required by this Chapter have been reviewed and found by the review authority to comply with the requirements of this Chapter.
- A. Where the development is part of a land use permit application, review shall occur in the manner established in Section 17.50 for review of land use decisions.
- B. Where the development is part of a limited land use permit application, review shall occur in the manner established in Section 17.50 for review of limited land use decisions.
- C. For any other proposed development not otherwise subject to review as a land use or limited land use permit application, review shall occur in the manner established in Section 17.50 for limited land use decisions.
- 17.44.040 Fee: Where the development is part of a land use or limited land use permit application, no additional fee is required. Where the development is not part of a land use or limited land use permit application, a nonrefundable application fee, equivalent in amount to the fee for site and design review, shall accompany the application for review against the requirements of this Chapter.
- 17.44.050 Development Permit application information: Except as provided by Subsection I, of this Section, the following plans shall be required of all development proposals subject to this Chapter:

- A. A scale-drawing site plan of the property, showing all natural physical features, topography at two or five foot contour intervals, steepness of slopes, location of all test excavations or borings, watercourses both perennial and intermittent, ravines and all existing and manmade structures or features all fully dimensioned, trees six inch caliper or greater measured four feet from ground level, rock outcroppings and drainage facilities.
- B. A scale-drawing grading plan, including all of the features and detail required for the site plan above, but reflecting preliminary finished grades and indicating in cubic yards whether and to what extent there will be a net increase or loss of soil.
- C. An architectural site plan of the proposed development, showing the location, height and width of proposed structures other than detached single family dwellings and duplexes, including all important dimensions such as property lines, easement locations, setbacks and other appurtenances related to the development such as, but not limited to, parking and circulation. The architectural site plan shall identify the location of areas proposed to be stripped of top soil, paved or covered by structures (including impermeable surfaces or embankments).
- D. A cross-section diagram, drawn to scale and indicating depth, extent and approximate volume of all excavation and fills.
- E. A soil erosion control plan, based on Clackamas County's Erosion/Sedimentation Control Plans Technical Guidance Handbook (1991 or as subsequently amended) and containing:
 - 1. A description of existing topography and soil characteristics.
- 2. Specific descriptions or drawings of the proposed development and changes to the site which may affect soils and create an erosion problem.
- 3. Specific methods of soil erosion and sediment control, incorporating the following features, to be used before, during and after construction:
- a. The land area to be grubbed, stripped, used for temporary placement of soil, or to otherwise expose soil shall be confined to the immediate construction site.
- b. The duration of exposure of soils to erosion shall be kept to the minimum practicable.
- c. Wet weather measures as required in Clackamas County's Erosion/Sedimentation Control Plans Technical Guidance Handbook.
- d. Prior to grading, clearing, excavating or construction, temporary diversions, sediment basins, barriers, check dams or other methods shall be provided as necessary to hold sediment and erosion. During construction, water runoff from the site shall be controlled, and sediment resulting from soil removal or disturbance shall be retained on site per Clackamas County's Erosion/Sedimentation Control Plans Technical Guidance Handbook.

- e. Topsoil removed for development shall be retained and reused on site to the degree necessary to restore disturbed areas to their original condition, or to assure a minimum of six inches of stable topsoil for revegetation. Additional topsoil shall be provided if necessary.
- f. Cleanup and removal of all sediment washed off of the site into streets or adjacent property is the responsibility of the developer.
- g. A regular maintenance schedule and procedures for maintaining all permanent on-site erosion control facilities.
- F. A preliminary hydrology report, prepared by a suitably qualified and experienced hydrology expert, addressing the effect upon the watershed in which the proposed development is located; the effect upon the immediate area's storm water drainage pattern of flow; the impact of the proposed development upon downstream areas and upon wetlands and water resources; and the effect upon the ground water supply.
- G. A preliminary engineering geology report, prepared by a suitably qualified and experienced engineering geologist who is registered in the State of Oregon and who derives his or her livelihood principally from that profession, containing a description of geologic formations, bedrock and surficial materials including artificial fill; location of any faults, folds, etc.; structural data including bedding, jointing, and shear zones; off-site geologic conditions that may pose a hazard to the site or that may be affected by on-site development; cross sections showing subsurface structure, logs of subsurface explorations and analysis if necessary to evaluate the site; and signature and certification number of the engineering geologist. The report shall also contain a statement as to whether any hazard areas should not be disturbed because of the potential for damage to the site or neighboring properties.
- H. A preliminary soil engineering report, prepared by a suitably qualified and experienced civil or geotechnical engineer who is licensed in Oregon and who derives his or her livelihood principally from that profession, discussing the engineering feasibility of the proposed development and addressing strength properties of surface and subsurface soils with regard to stability of slopes; appropriate types of foundations together with bearing values and settlement criteria for foundation design; soil erosion potential, permeability and infiltration rates; excavation, filling and grading criteria including recommended final slopes; surface and subsurface drainage; planting and maintenance of slopes; other identified soil or subsurface constraints together with geotechnical remediation and other recommendations to alleviate or minimize their effects; and signature and seal of the geotechnical engineer. The report shall also contain a statement as to whether the proposed development, constructed in accordance with the recommended methods, is reasonably likely to be safe and prevent landslide or other damage to other properties over the long term, and whether any specific areas should not be disturbed by construction.
- I. The City Engineer may waive one or more requirements of subsections E. through H. of this Section if under Oregon City Policy Guideline Manual No. 25, "Geological/Geotechnical-Level of Reports", effective May 27, 1993 or as subsequently amended, the City Engineer determines that site conditions, size or type or development of grading requirements do not warrant such detailed information. If one or more requirements is waived, the City Engineer shall, in the staff report or decision, identify the waived provision(s), explain the reasons for the waiver, and state that the waiver may be challenged on appeal and may be denied by a subsequent review authority.

- 17.44.060 Development standards: Notwithstanding any contrary dimensional or density requirements of the underlying zone, the following standards shall apply to the review of any development proposal subject to this Chapter:
- A. All developments shall be designed to avoid unnecessary disturbance of natural topography, vegetation and soils. To the maximum extent practicable as determined by the review authority, tree and ground cover removal for residential development on individual lots shall be confined to building footprints and driveways, to areas required for utility easements and for slope easements for road construction, and to areas of geotechnical remediation. Temporary protective fencing shall be established around all trees and vegetation designed for protection prior to the commencement of grading or other soil disturbance.
 - B. Designs shall minimize the number and size of cuts and fills.
- C. Toes of cuts and fills shall be set back from boundaries of separate private ownerships at least three feet, plus one-fifth of the vertical height of the cut or fill. An exception to this requirement may be granted so long as the review authority determines there is a negligible risk of landslide, slump or erosion and a slope easement is provided.
- D. Except in connection with geotechnical remediation plans approved in accordance with this Chapter, cuts shall not remove the toe of any slope that contains a known landslide or is greater than 25 percent.
- E. Any structural fill shall be designed by a suitably qualified and experienced civil or geotechnical engineer licensed in Oregon in accordance with standard engineering practice. The applicant's engineer shall certify that the fill has been constructed as designed in accordance with the provisions of this Chapter.
- F. Retaining walls shall be constructed in accordance with the Uniform Building Code adopted by the State of Oregon.
- G. Roads shall be the minimum width necessary to provide safe vehicle and emergency access, minimize cut and fill, and provide positive drainage control. The review authority may grant a variance from the City's required road standards upon findings that the variance would provide safe vehicle and emergency access and is necessary to comply with the purpose and policy of this Chapter.
- H. Unless the property is developed as a Planned Development pursuant to Title 17, Chapter 17.64, density shall be determined as follows:
- 1. For those areas with slopes less than 25 percent between grade breaks, the allowed density shall be that permitted by the underlying zoning district.
- 2. For those areas with slopes of 25-35 percent between grade breaks, the density shall not exceed two (2) dwelling units per acre except as otherwise provided in subsection I. of this Section.

- 3. For those areas with slopes over 35 percent between grade breaks, development shall be prohibited except as otherwise provided in subsection J. of this Section.
- I. For those portions of the property with slopes of 25 35 percent between grade breaks:
- 1. The maximum residential density shall be limited to two (2) dwelling units per acre; provided, however, that where the entire site is less than one-half acre in size, a single dwelling shall be allowed on a lot or parcel existing as of January 1, 1994 and meeting the minimum lot size requirements of the underlying zone.
- 2. No more than 50 percent or 4,000 square feet of the surface area of an individual lot or parcel, whichever is smaller, shall be graded or stripped of vegetation or covered with structures or impermeable surfaces.
 - J. For those portions of the property with slopes over 35 percent between grade breaks:
- 1. Notwithstanding any other City land use regulation, development other than roads, utilities, public facilities and geotechnical remediation shall be prohibited; provided, however, that the review authority may allow development upon such portions of land upon demonstration by an applicant that failure to permit development would deprive the property owner of all economically beneficial use of the property. This determination shall be made considering the entire parcel in question and contiguous parcels in common ownership on or after January 1, 1994, not just the portion where development is otherwise prohibited by this Chapter. Where this showing can be made on residentially zoned land, development shall be allowed and limited to one single family residence. Any development approved under this Chapter shall be subject to compliance with all other applicable City requirements as well as any applicable state, federal or other requirements.
- 2. To the maximum extent practicable as determined by the review authority, the applicant shall avoid locating roads, utilities, and public facilities on or across slopes exceeding 35 percent.
- K. The review authority shall determine whether the proposed methods of rendering a known or potential hazard site safe for construction, including proposed geotechnical remediation methods, are feasible and adequate to prevent landslides or damage to property and safety. The review authority shall consult with the City's geotechnical engineer in making this determination. Costs for such consultation shall be paid by the applicant. The review authority may allow development in a known or potential hazard area as provided in this Chapter if specific findings are made that the specific provisions in the design of the proposed development will prevent landslides or damage. The review authority may impose any conditions, including limits on type or intensity of land use, which it determines are necessary to assure that landslides or property damage will not occur.

17.44.070 Access to property: A. Shared private driveways may be required if the City Engineer or Principal Planner determines that their use will result in safer location of the driveway and lesser amounts of land coverage than would result if separate private driveways are

- B. Innovations in driveway design and road construction shall be permitted in order to keep grading and cuts or fills to a minimum and to achieve the purpose and policy of this Chapter.
 - C. Points of access to arterials and collectors shall be minimized.
- D. The City Engineer or Principal Planner shall verify that adequate emergency services can be provided to the site.
- 17.44.080 Utilities: All new service utilities, both on-site and off-site, shall be placed underground and under roadbeds where practicable. Every effort shall be made to minimize the impact of utility construction.
- 17.44.090 Storm water drainage: The applicant shall submit a permanent and complete storm water control plan. The program shall include, but not be limited to the following items as appropriate: curbs, gutters, inlets, catch basins, detention facilities and stabilized outfalls. Detention facilities shall be designed to City standards as set out in the City's Drainage Master Plan and design standards. The review authority may impose conditions to ensure that waters are drained from the development so as to limit degradation of water quality consistent with Clackamas County's Surface Water Quality Facilities Technical Guidance Handbook or other adopted standards subsequently adopted by the City Commission. Drainage design shall be approved by the City Engineer before construction, including grading or other soil disturbance, has begun.
- 17.44.100 Construction standards: During construction on, or within 50 feet of, land subject to this Chapter, the following standards shall be implemented by the developer:
- A. All development activity shall minimize vegetation removal and soil disturbance and shall provide positive erosion prevention measures.
- B. No grading, clearing or excavation of any land shall be initiated prior to approval of the grading plan, except that the City Engineer may authorize brush clearing and test pit digging prior to approval of such plan to the extent needed to complete prelimninary and final engineering and surveying. The plan shall be approved by the City Engineer as part of the City's review under this Chapter. The developer shall be responsible for the proper execution of the approved grading plan.
- C. Measures shall be taken to protect against landslides, mud flows, soil slump and erosion. Such measures shall include sediment fences, straw bales, erosion blankets, temporary sedimentation ponds, interceptor dikes and swales, undisturbed buffers, grooving and stair stepping, check dams, etc. The applicant shall comply with the measures described in Clackamas County's Technical Guidance Handbook.
- D. In no event shall construction activities aggravate existing conditions. All disturbed soil shall be replanted with suitable vegetation as soon as possible during or after completion of construction activities.
 - E. Existing vegetative cover shall be maintained to the maximum extent practicable.
- F. Existing perennial and intermittent watercourses shall not be disturbed unless specifically authorized by the review authority. This includes physical impacts to the stream course as well as siltation and erosion impacts.

- G. All soil erosion and sediment control measures shall be maintained during construction and for one year after development is completed, or until soils are stabilized by revegetation or other measures to the satisfaction of the City Engineer. Such maintenance shall be the responsibility of the developer. If erosion or sediment control measures are not being properly maintained or are not functioning properly due to faulty installation or neglect, the City may order work to be stopped.
- 17.44.110 Approval of development: The City Engineer shall review the application and verify, based on the applicant's materials and the land use record, whether the proposed development constitutes a hazard to life, property, natural resources or public facilities. If, in the City Engineer's opinion, a particular development poses such a hazard, the City Engineer shall recommend to the review authority permit conditions designed to reduce or eliminate the hazard. These conditions may include, but are not limited to, prohibitions on construction activities between November 1, and March 31.
- 17.44.120 Liability: Approval of an application for development on land subject to this Chapter shall not imply any liability on the part of the City for any subsequent damage due to earth slides. Prior to the issuance of a building permit, a waiver of damages and an indemnity and hold harmless agreement shall be required which releases the City from all liability for any damages resulting from the development approved by the City's decision.
- 17.44.130 Compliance: Nothing contained in this Chapter shall relieve the developer of the duty to comply with any other provision of law. In the case of a conflict, the more restrictive regulation shall apply.
- 17.44.140 Appeal: The review authority's decision may be appealed in the manner set forth in Chapter 17.50.
- Section 3. Because this ordinance is necessary for the immediate preservation of the public health, safety and welfare of Oregon City, and because any delay in the effective date of this ordinance after its announcement may result in land use applications being submitted for areas which would otherwise be subject to this new regulation, and because any such applications would then not be subject to this ordinance, an emergency is hereby declared to exist, and this ordinance shall be in full force and effect immediately upon its passage by the Commission and approval by the Mayor.

Read for the first time at a regular meeting of the City Commission held on the 2nd day of March, 1994, and the foregoing ordinance was finally enacted by the City Commission this 2nd day of March, 1994.

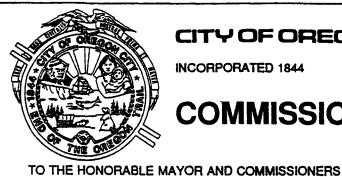
JEAN/K. ELLIOTT, City Recorder

ATTESTED this 2nd day of March, 1994.

DANIEL W. FOWLER, Mayor

ORDINANCE NO. 94-1001

Effective Date: March 2, 1994



CITY OF OREGON CITY

INCORPORATED 1844

COMMISSION REPORT

FOR AGENDA DATED

March 2, 1994

1 of 1

Report No. 94-44

Page

Subject:

Proposed Ordinance No. 94-1001

An Ordinance Amending Section 17.06.020:

Classification of Zoning Districts,

Deleting Title 17: Zoning, Chapter 17.44: US Unstable Slopes Overlay District, of the Oregon City Municipal Code, 1991, and Enacting A New Title 17: Zoning, Chapter 17.44: US Unstable Soils and Hillside Constraint Overlay

District, and Declaring An Emergency -

Continued Public Hearing

On the March 2, 1994 City Commission agenda is a continued public hearing on the revisions to the Unstable Slopes Overlay District, Chapter 17.44 of the Zoning Code.

The Commission held a public hearing on January 26, 1994 and a work session on February 16, 1994 to review and receive input on the revisions. One of the changes was to change the name to Unstable Soils and Hillside Constraint Overlay District.

Attached for Commission review is the revised Ordinance No. 94-1001, enacting the changes from the previous public hearings, submitted written testimony, and comments from the work session.

Notice of proposed Ordinance No. 94-1001 has been posted at City Hall, 320 Warner-Milne Road, Courthouse, 807 Main Street, and, Senior Center, 615 Fifth Street, by direction of the City Recorder. It is recommended that first and second readings be unanimously approved, for final enactment to become effective March 2, 1994.

> CHARLES LEESON City Manager

attach.

CC

- Max Talbot, Director, Community Development
- Denyse C. McGriff, Principal Planner

ISSUED BY THE CITY MANAGER