

Chapter 3.7 — Sensitive Lands

Sections:

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3.7.010 Purpose and Applicability

The following sections contain design standards related to areas of environmental concern within the City of Cottage Grove. These standards are applicable to any development subject to Land Use or Site Design Review on hillsides, in designated floodplains, along river corridors, or within the state-designated Willamette River Greenway.

The requirements of this section are in addition to other provisions of this code. Where the provisions of this chapter conflict with other provisions of this code, the provisions that are more restrictive of regulated development activity shall govern. Requirements of this chapter are in addition to those of the Specialty Codes adopted by Chapter 15.04 of the Cottage Grove Municipal Code.

3.7.100 Hillside Development

A. Intent and Purpose. The intent and purpose of the provisions of this section are as follows. Unless otherwise provided, the hillside area regulations are in addition to generally applicable standards provided elsewhere in this code.

1. To implement the landslide hazard prevention goals in the City of Cottage Grove Natural Hazard Mitigation Plan;
2. To implement the “Hillside Development” element of the City of Cottage Grove Comprehensive Plan;
3. To provide for the review of hillside development applications and evaluate properties for potential slope related hazards;
4. To assess the risk that a proposed use or activity may adversely affect the stability and slide susceptibility of an area; and thus promote the public health, safety, and welfare;
5. To establish standards and requirements for the development of lands in a hillside area; and
6. To mitigate risk within a hillside area, not to act as a guarantee that the hazard risk will be eliminated, nor as a guarantee that there is a higher risk of hazard at any location.

B. Definitions. As used in this chapter, except where the context otherwise clearly requires:

1. Certified Engineering Geologist means any Geologist who is certified in the specialty of Engineering Geology under provisions of ORS 672.505 to 672.705 and registered in the State of Oregon.
2. Civil Engineer means a Professional Engineer, registered with the State of Oregon, who by training, education and experience is qualified in the practice of geotechnical or soils engineering practices.
3. Contiguous Slope means a slope bounded by a summit, benches or plateaus (including basal plains) of sufficient width that a profile line constructed from the lower toe of the slope to the furthest point of the plateau or bench will have a slope of less than that specified by the particular Hillside Area Level detailed in Exhibit 1 to this ordinance.
4. Emergency Action means an action that must be undertaken immediately to prevent an imminent threat to public health or safety, or prevent imminent danger to public or private property.
5. Erosion means the wearing away of the earth's surface as a result of the movement of wind, water, or ice.
6. Excavation means any act by which earth, sand, gravel, rock or any similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated or bulldozed, including the conditions resulting there from.
7. Fill or Backfill means a deposit of earth or other natural or manmade material placed by artificial means. This includes approved waste materials and the re-deposit of previously removed material.
8. Geological Assessment means an assessment prepared and stamped by a Certified Engineering Geologist, detailing the surface and subsurface conditions of the site and delineating the areas of a property that might be subject to geological hazards, and furnish professional analysis of information to assess the suitability of the site for development. Geological assessment must be prepared in accordance with the report requirements identified in this chapter. The geological assessment may be incorporated into or included as an appendix to the geotechnical report.
9. Geotechnical Assessment means a written assessment prepared and stamped by a geotechnical engineer or professional licensed in the State of Oregon to perform such work stating whether or not a significant risk of landslide hazard exists due to seismic or water induced forces, or if significant landslide hazard risk from any cause may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the assessment. The assessment shall detail the surface and subsurface conditions of the site and delineate the areas of the property that might be

subject to geotechnical hazards.

10. Geotechnical Engineer means a Professional Engineer, registered with the State of Oregon as provided by ORS 672.002 to 672.325, who by training, education and experience is qualified in the practice of geotechnical or soils engineering practices.
11. Geotechnical Evaluation means a written letter or evaluation prepared and stamped by a geotechnical or civil engineer identifying whether a landslide hazard exists due to seismic or water induced forces or soil conditions; and whether a significant landslide hazard risk may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the evaluation.
12. Geotechnical Report means a report prepared and stamped by a Geotechnical Engineer, evaluating the site conditions and recommending design and mitigation measures necessary to reduce the risk associated with development and to facilitate a safe and stable development. A geotechnical report must be prepared in accordance with the report requirements identified in this Chapter.
13. Grading means the act of excavating or filling, which results in the changing of the elevation or drainage pattern of the surface of the land.
14. Ground Disturbance means any excavation of 50 cubic yards or more.
15. Hazardous Vegetation means as defined by Section 8.12.045 of the Municipal Code.
16. Hillside Area means any property with slopes of 15% or more.
17. Landslide means the downslope movement of soil, rocks, or other surface matter on a site. Landslides may include, but are not limited to, slumps, mudflows, earthflows, debris flows, and rockfalls.
18. Mitigation Measure means an action designed to reduce project-induced geologically hazardous area impacts.
19. Slope means an inclined earth surface, the inclination of which is expressed denoting a given rise in elevation over a given run in distance. A fifteen percent slope, for example, refers to a fifteen foot rise in elevation over a distance of one hundred feet. Slopes are measured across a horizontal rise and run calculation within any horizontal twenty-five foot distance.
20. Tree means any living, standing, woody plant, having a trunk eight inches or more in diameter or 25 inches in circumference, measured at a point of four feet above grade at the base of the trunk.
21. Tree Removal means to cut down a tree or remove all or 50% or more of the crown, trunk, or root system of a tree; or to damage a tree so as to cause the tree to decline or die.

“Removal” includes but is not limited to topping, damage inflicted upon a root system by application of toxic substances, operation of equipment and vehicles, storage of materials, change of natural grade due to unapproved excavation or filling, or unapproved alteration of natural physical conditions. “Removal” does not include normal trimming or pruning of trees.

22. Vegetative Removal means the disturbance or removal of more than 2,500 square feet of existing vegetative ground cover including but not limited to trees, brush, grass and low growing ground cover plants.

C. Regulated Activities; Permit and Approval Requirements; Applicability. Except as provided under section 18.41.040, no person shall engage in any of the following regulated activities in hillside areas of 15% or greater, without first obtaining a Hillside Development Permit as required by this chapter.

1. Tentative or final platting of partitions, subdivisions, manufactured home parks, planned unit developments, or mixed use master plans;
2. Proposed planned unit developments, or mixed use master plans;
3. Construction of new commercial building;
4. Construction of new residential building;
5. Construction of roads and/or utilities;
6. Excavation/fill/grading;
7. Expansion of footprint of more than 500 square feet of any existing structure, building, road or utility; or
8. Tree removal on slopes greater than 60%;
9. Vegetation removal that exceeds 2,500 square feet;
10. Any property where a geotechnical evaluation, assessment or geotechnical report has not been conducted in the last 10 years, subject to review by the City Engineer;
11. At the request of the City Engineer.

D. Application Process. The application may be processed simultaneously with other land use applications, but approval of the other land use applications shall be subject to the Hillside Development Permit being issued and the appeal period having expired.

The requirements of this chapter are in addition to other provisions of this code. Where the provisions of this chapter conflict with other provisions of this code, the provisions that are

more restrictive of regulated development activity shall govern.

E. Exemptions. The following activities, and persons engaging in same, are EXEMPT from the provisions of this chapter:

1. Construction/modifications of utilities and streets within existing footprint of street;
2. Interior remodels;
3. Exterior alterations and/or additions under 500 square feet in area;
4. Construction of accessory structures under 200 square feet in area;
5. Construction/renovation of retaining walls less than 4' in height (measured from bottom of footing to top of wall); or
6. Excavation or fill under 50 cubic yards.

F. Hillside Area Levels & Mapping. Hillside Area Levels for the purpose of this Chapter are:

1. Level 1 hillside area is any area with a slope of 15 to 20 percent;
2. Level 2 hillside area is any area with a slope of 20 to 25 percent; and
3. Level 3 hillside area is any area with a slope of greater than 25 percent.
4. Hillside area levels 1-3 are mapped on the “Slopes In Cottage Grove”, as prepared by Lane Council of Governments, dated April 19, 2006, which is on file in the Community Development Department. This map provides guidance only. Final determination of slopes should be determined by a professional licensed in the State of Oregon to perform such surveys. This map provides guidance only. Slopes should be determined on a site-specific basis by a registered surveyor.

G. Geotechnical Evaluation, Assessments & Reports.

1. Geotechnical Evaluations-Level 1.
 - a. Geotechnical Evaluations shall be based on site visits(s) and literature review and shall state the planned property use for which the evaluation was performed.
 - b. Geotechnical Evaluations shall be performed by a Geotechnical Engineer registered in the State of Oregon, or Civil Engineer registered in the State of Oregon, or a combination thereof.
 - c. The author of the evaluation shall state whether or not, in their professional opinion, a significant landslide hazard exists due to seismic or water induced forces; soil

- conditions; and if significant landslide hazard risk from any cause may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the evaluation.
- d. The evaluation shall contain recommendations to be followed during construction of the proposed work, unless the author(s) finds it probable that a significant risk may exist, at which point the author(s) shall recommend either a Geotechnical Assessment or a Geotechnical Report.
 - f. The Geotechnical Evaluation shall be stamped by the author(s).
 - f. The Geotechnical Evaluation is required at the time of Hillside Development Permit application submittal.
2. Geotechnical Assessment – Level 2.
- a. Geotechnical Assessments shall be based on site visit(s), literature review and shallow borings of sufficient depth, frequency and distribution to identify the soil or rock zones apt to mobilize under seismic or water induced forces;
 - b. Geotechnical Assessment shall be performed by a Geotechnical Engineer registered in the State of Oregon;
 - c. The author of the assessment shall state whether or not, in their professional opinion, a significant risk of landslide hazard exist due to seismic or water induced forces, or if significant landslide hazard risk from any cause may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the assessment;
 - d. The assessment shall detail the surface and subsurface conditions of the site and delineating the areas of a property that might be subject to geotechnical hazards;
 - e. The assessment shall contain recommendations to be followed during construction of the proposed work, unless the author(s) finds that a significant risk may exist, at which point they shall recommend a Geotechnical Report be performed;
 - f. The Geotechnical Assessment shall be stamped by the author; and
 - g. The Geotechnical Assessment is required at the time of Hillside Development Permit application submittal.
3. Geotechnical Report-Level 3.
- a. A Geotechnical Report shall be required:
 - 1. For slopes greater than 25%; or

2. Where a geological evaluation or assessment recommends preparation of a Geotechnical Report; or
 3. Where a landslide risk has been identified by the Oregon Department of Geology and Mineral industries; or
 4. Where unusual and site specific circumstances including, but not limited to, importance of facility, land form mobilization history or potential impacts to surrounding existing structures, exist and the City Engineer makes a written finding that such hazard may exist based on the evidence available and that a detailed examination of the site's geotechnical characteristics is warranted.
- b. The Geotechnical Report shall include at minimum the following:
- 1) A report shall evaluate the site conditions and recommend design and mitigation measures necessary to reduce the risk associated with development and to facilitate a safe and stable development;
 - 2) The author of the geotechnical report shall state that, in their opinion, a geological assessment is not required. If a Geological Assessment is required, it shall be performed by a Certified Engineering Geologist registered in the State of Oregon. Assessments shall be prepared in accordance with the Guidelines for Preparing Engineering Geologic Reports in Oregon as adopted by the Oregon State Board of Geologist Examiners. The report shall detail the conditions of the surface and subsurface conditions of the site and delineating the areas of the property that might be subject to specified geologic hazards. The report shall be stamped by the author;
 - 3) Comprehensive description of the site topography; including the characterization of each type of native and imported soil likely to be impacted by the planned activities including: Atterburg Limits, Specific Gravity, Natural Moisture Content, Cohesion, Internal Angle of Friction;
 - 4) An estimate of the safety factor against slope instability before and after development considering gravity forces, seismic forces, hydraulic impacts under varied ground water or vadose zone conditions, and vegetation removal;
 - 5) Sections through the hillside illustrating pre and post development configurations for structures, piping and roads;
 - 6) Estimate of the allowable bearing strength of the soil for foundations and identification of areas requiring further detailed work;
 - 7) Assessment of the safety of and recommendations for cut and fill operations, including specific requirements for plan modification, corrective grading and

- special techniques and systems to facilitate a safe and stable development;
- 8) Assessment of and recommendations for mitigation of potential adverse impacts on structures, roads, and piping systems;
 - 9) Recommendations for transport and collection of surface and subsurface (if present) water;
 - 10) Recommendations on vegetation removal and replacement;
 - 11) Description of the field investigation and findings;
 - 12) Other recommendations as necessary, commensurate with the project grading and development;
 - 13) Geotechnical Reports shall be in accordance with recommendations of the Geotechnical Institute of the American Society of Civil Engineers; The Geotechnical Report shall be prepared and stamped by the author; and
 - 14) The Geotechnical Report is required at the time of Hillside Development Permit application submittal.

H. Review Procedure and Approvals.

1. No regulated activity may be initiated until the City Engineer has reviewed the Geotechnical Evaluation, Assessment or Report, and/or the Geological Assessment; has made a recommendation to the Community Development Director, and the Community Development Director has made a decision and issued a Hillside Development Permit (Type I or II).
2. Level 1 Hillside Development Permits shall be processed as Type I applications. Level 2 & Level 3 Hillside Development Permits shall be processed as Type II applications. Upon review of the application, the Community Development Director and/or City Engineer may choose to process a Level 3 Permit as a Type III application.
3. A Geotechnical Evaluation, Assessment or Report and/or a Geological Assessment must be submitted concurrently with the Hillside Development Permit application.
4. Review of submittals shall include examination to ensure that the following criteria are met:
 - a. Required elements are completed;
 - b. Geotechnical or Geological Report procedures and assumptions are generally accepted; and

- c. All conclusions and recommendations are supported and reasonable.
5. Conclusions and recommendations stated in an approved Geotechnical Evaluation, Assessment or Report; and/or Geological Assessment shall then be directly incorporated as permit conditions or provide the basis for conditions of approval of the regulated activity.
 6. An excavation and fill permit may be required pursuant to Section 15.20 “Erosion Prevention and Construction Site Management Practices” of the Cottage Grove Municipal Code.
- I. Independent Review.** Where the City Engineer determines that a Geotechnical Evaluation, Assessment or Report and/or the Geological Assessment fails to meet one or more of the review criteria, or the City Engineer determines that it lacks the qualifications or expertise to fully review the above noted items, the Community Development Director on the recommendation of the City Engineer, may elect to have an independent Certified Engineering Geologist and/or Geotechnical Engineer undertake the review, at City expense.
- J. Certification of Compliance.** No regulated activity requiring a Geotechnical Evaluation, Assessment, or Report shall receive initial inspection on a valid permit for properties located in a hillside area until the City receives a written statement by a civil or geotechnical engineer or other licensed professional that all performance, mitigation, or monitoring measures contained in an approved Geotechnical Report are completed, in place, and operable.
- K. Disclosure.** As a condition of City permits or approvals of regulated activities located in hillside areas, the owner:
1. Shall record a declaratory statement against the property stating the property contains slopes of fifteen percent or more and that all approved Geotechnical Evaluations, Assessment, or Reports and/or Geological Assessments for such property are on file with the City; and
 2. Shall provide evidence of such recording to the Community Development Department.
- L. Emergency Actions.** The person undertaking an emergency action as defined by this chapter shall notify the Community Development Director or City Engineer upon the immediately following the commencement of the emergency activity. If the Community Development Director after review by the City Engineer determines that the action or part of the action taken is beyond the scope of an allowed emergency action, enforcement action may be taken.

3.7.200 Floodplain Development

- A. Statutory authorization.** The legislature of the State of Oregon has in Oregon Revised Statutes (ORS 227.215) delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry.

B. Findings of fact.

1. The flood hazard areas of the city are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
2. The flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards that increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood-proofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

C. Purpose. It is the purpose of this Chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood condition in specific areas by provisions designed:

1. To protect human life and health;
2. To minimize expenditure of public money and costly flood control projects;
3. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. To minimize prolonged business interruptions;
5. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
6. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
7. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
8. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

D. Applicability. This Chapter shall apply to all areas of special flood hazards within the jurisdiction of the City of Cottage Grove. No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this Chapter and other applicable regulations.

E. Basis for Establishing Areas of Special Flood Hazard. The areas of special flood hazard

identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood Insurance Study for Lane County and Incorporated Areas, dated June 2, 1999,” and as amended, with accompanying Flood Insurance Maps, as amended, are hereby adopted by reference and declared to be a part of this Chapter. The maps are on file at the Community Development Department.

F. Floodways. Located within areas of special flood hazard established in Section 3.7.200.E Basis for Establishing Areas of Special Flood Hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that carry debris, potential projectiles and erosion potential, the following provisions apply:

1. Prohibit encroachments, including fill, new construction, substantial improvements and other development unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
2. If Subsection 1 of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 3.7.200.M General Standards for Flood Hazard Protection and 3.7.200.N Specific Standards for Flood Hazard Protection.

G. Methods of reducing flood losses. In order to accomplish its purposes, this Chapter includes methods and provisions for:

1. Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Controlling the alteration of natural flood plains, stream channels and natural protective barriers, which help accommodate or channel flood waters;
4. Controlling filling, grading, dredging and other development which may increase flood damage; and,
5. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

H. Interpretation. In the interpretation and application of this Chapter, all provisions shall be:

1. Considered as minimum requirements;
2. Liberally construed in favor of the governing body; and,

3. Deemed neither to limit nor repeal any other powers granted under state statutes.

I. Definitions.

1. For purposes of this Chapter, the following words, terms, and phrases shall be defined as follows:
 - a. Appeal means a request for review of an interpretation or decision made by City Engineer and/or Community Development Director and of any provision of this Chapter or a decision on a request for a variance.
 - b. Area of Shallow Flooding means a designated “AO” or “AH” zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flood is unpredictable and indeterminate; and velocity flow may be evident. “AO” is characterized as sheet flow and “AH” indicates ponding.
 - c. Area of Special Flood Hazard means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters “A” or “V”.
 - d. Base Flood means a flood having a one percent chance of being equaled or exceeded in any given year, and is synonymous with the one hundred year flood.
 - e. Basement means any area of the building having its floor sub-grade (below ground level) on all sides.
 - f. Breakaway Wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or supporting foundation systems.
 - g. Critical Facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use or store hazardous materials or hazardous waste.
 - h. Development means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, storage of material, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.
 - i. Existing Manufactured Home Park or Subdivision is one in which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed has been completed prior to November 11, 1985. The construction of facilities includes,

at a minimum, the installation of utilities, construction of streets, and either final site grading or the pouring of concrete pads.

- j. Expansion to an Existing Manufactured Home Park or Subdivision means the preparation of additional sites by the construction of facilities for servicing lots on which manufactured homes are to be affixed, including, but not limited to the installation of utilities, construction of streets, and final grading or pouring of concrete pads.
- k. FEMA means the Federal Emergency Management Agency.
- l. Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:
 - i. The overflow of inland or tidal waters; and/or,
 - ii. The unusual and rapid accumulation of runoff or surface waters from any source.
- m. Flood Insurance Rate Map (FIRM) means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
- n. Flood Insurance Study means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map and the water surface elevation of the base flood.
- o. Flood Proofing means any combination of structural and nonstructural additions, changes or adjustment to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.
- p. Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.
- q. Highway Ready refers to a recreation vehicle that is on wheels or a jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.
- r. Lowest Floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for the parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter found at Section 3.7.200.J Specific Standards for Flood Hazard Protection.

- s. Manufactured Home means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes, the term “manufactured home” also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than one hundred eight consecutive days and are not highway ready. For insurance purposes, the term “manufactured home” does not include park trailers, travel trailers, and other similar vehicles.
- t. Manufactured Home Park or Subdivision means a parcel, or contiguous parcels or lots of land divided into sites or lots of two or more manufactured homes that are for rent or sale.
- u. New Construction means a structure for which the “start of construction” commenced on or after November 11, 1985.
- v. Permanent Foundation refers to a natural or manufactured support system to which a structure is anchored or attached. A permanent foundation is capable of resisting flood forces and may include posts, piles, poured concrete or reinforced block walls, properly compacted fill, or other systems of comparable flood resistance and strength.
- w. Start of Construction means substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of street and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.
- x. Structure means a walled and roofed building including a gas or liquid storage tank that is principally aboveground.
- y. Substantial Damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed by 50% of the market value of the structure before the damage occurred.
- z. Substantial improvement means any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure, either:

- 1) Before the improvement or repair is started;
 - 2) If the structure has been damaged and is being restored, before the damage occurred. For the purpose of this definition “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure;
 - 3) The term does not, however, include either:
 - a) Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or,
 - b) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.
- aa. Variance means a grant of relief from the requirements of this Chapter that permits construction in a manner that would otherwise be prohibited by this Chapter.
- bb. Water Dependent means a structure for commerce or industry that cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
2. Unless specifically defined in this Section, words or phrases used in this Chapter shall be interpreted so as to give them the meaning they have in common usage and to give this Chapter its most reasonable application.

J. Administration. The Community Development Director or his/her designee is appointed to administer and implement this Chapter by granting or denying development permit applications in accordance with its provisions.

1. Duties and Responsibilities of the Community Development Director. Duties of the Community Development Director shall include, but not be limited to:
 - a. Permit Review.
 - 1) Review all development permits to determine that the permit requirements of this Chapter have been satisfied.
 - 2) Review all development permits to determine that all necessary permits have been obtained from those federal, state and local governmental agencies from which prior approval is required.
 - 3) Review all development permits to determine if the proposed development is

located in the floodway. If located in the floodway, assure that the encroachment provisions of Section “F” Floodways are met.

- 4) Maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

- b. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section “E” Basis for Establishing the Areas of Special Flood Hazard, the Director of Planning and Development shall request the assistance of the City Engineer to obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to establish a base flood elevation in order for the Community Development Director to administer Sections 3.7.200.N Specific Standards for Flood Hazard Protection, and Section 3.7.200.F, Floodways.

- c. Information to be Obtained and Maintained.
 - 1) Where base flood elevation data is provided through Flood Insurance Study or required as in Section 3.7.200.J(1)(b) Use of Other Base Flood Data, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.

 - 2) For all new or substantially improved flood-proofed structures:
 - a) Verify and record actual elevation (in relation to mean sea level) of extent of floodproofing, and;

 - b) Maintain the flood-proofing certificates required in Section L Application Requirements for Development Permit.

 - 3) Maintain for public inspection all records pertaining to the provisions of this Chapter.

2. Duties and Responsibilities of City Engineer. Duties of the City Engineer shall include, but not be limited to:
 - a. Provide technical assistance and information to the Community Development Director upon request;

 - b. Verify field surveys and technical information submitted by any applicant for new development upon request of the Community Development Director;

 - c. Act in cases of emergencies to prevent the loss of life and property, without a development permit in either the floodway or floodplain;

- d. Alteration of Watercourses.
 - 1) Notify adjacent communities and the Department of State Lands prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;
 - 2) Require that maintenance is provided within the altered or relocated portion of such watercourse so that the flood-carrying capacity is not diminished.
- e. Interpretation of FIRM Boundaries. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Sections 3.7.200.P Variances through Section 3.7.200.R Appeals.

K. Floodplain Development Permit Required. All development permits shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.7.200.E Basis for Establishing the Areas of Special Flood Areas. The Floodplain Development Permit shall be a Type I Application as set forth by Chapter 4.1. The permit shall be for all structures including manufactured homes partially or wholly within any area of special flood hazard, as set forth in Section 3.7.200.I Definitions, and for all development including fill and other activities, also set forth in the definitions. Development permits will also be required for all subdivisions (land divisions of 3 lots or more) which are wholly or in part within areas of special flood hazard.

L. Application Requirements for Floodplain Development Permit. Application for a development permit shall be made on forms furnished by the Community Development Department and may include but not be limited to: plans in triplicate drawn to scale showing the nature, location, dimensions and elevations of the area in question; existing or proposed structures, fill, removal, grading, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
2. Elevation in relation to mean sea level to which any structure has been or will be flood-proofed;
3. Certification by a registered professional engineer or architect that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria in Section 3.7.200.N(2) Specific Standards for Flood Hazard Protection, Nonresidential Construction;
4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development;

5. Filing fees shall be paid by the applicant, as established by the City Council. Neither the Council nor the Planning Commission is to be considered an applicant and shall pay no fee.

M. General Standards for Flood Hazard Protection. In all areas of special flood hazards, the following standards are required to be met:

1. Anchoring.
 - a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
 - b. All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top frame ties to ground anchors (reference FEMA’s “Manufactured Home Installation in Flood Hazard Areas” guidebook for additional techniques).
2. Construction Materials and Methods.
 - a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 - c. Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during flood conditions.
3. Utilities.
 - a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters in to the system;
 - b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into floodwaters; and,
 - c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
4. Subdivision Proposals.

- a. All subdivision proposals shall be consistent with the need to minimize flood damage;
 - b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
 - c. All subdivision proposals shall be adequate drainage provided to reduce exposure to flood damage; and,
 - d. Where base flood elevation data is not available from another authorizing source, it shall be generated for subdivision proposals and other proposed developments that are wholly or in part within an area of special flood hazard.
5. Review of Development Permits. Where elevation data is not available, either through the Flood Insurance Study or from another authoritative source (Section 3.7.200.J Use of Other Base Flood Data), applications for development permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

N. Specific Standards for Flood Hazard Protection. In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section E Basis for Establishing the Areas of Special Flood Hazard or Section 3.7.200.J Use of Other Base Flood Data, the following provisions are required to be met:

1. Residential Construction.

- a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to at least one foot above the one-hundred-year flood (base flood) elevation.
- b. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - 1) A minimum of 2 openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.
 - 2) The bottom of all openings shall be no higher than 1 foot above grade.
 - 3) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

2. Nonresidential Construction. New construction and substantial improvement of any

commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the one-hundred-year flood (base flood) elevation; or, together with attendant utility and sanitary facilities, shall:

- a. Be flood-proofed so that below 1 foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
 - c. Be certified by a registered professional engineer or architect that design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this Subsection based on their development and/or review of the structure design, specifications and plans. Such certifications shall be provided as set forth in Section 3.7.200.J Information to be Obtained and Maintained;
 - d. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 3.7.200.N(1)(b) Residential Construction, above;
 - e. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are 1 foot below the flood-proofed level (e.g. a building constructed to 1 foot above the base flood level will be rated as at the base flood level).
3. Manufactured Homes. All manufactured homes to be placed or substantially improved within Zone A1-30, AH and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at least 1 foot above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of Section 3.7.200.M(1)(b).
 4. Recreational vehicles, travel trailers, park trailers and similar vehicles and dwellings that occupy sites within Zones A1-30, AH or AE on the applicable FIRM shall either:
 - a. Be on site for less than 180 days in one year, and;
 - b. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by “quick-disconnect”-type utilities and security devices, and have no permanently attached additions, or;
 - c. Meet the requirements for manufactured homes listed above under Section 3.7.200.N(3), including, but not limited to anchoring and elevation.

O. Conditions. The City may impose conditions as it deems necessary or desirable on permit approvals in order that:

1. The applicable standards, regulations, criteria and purposes of this Chapter and Title are fulfilled;
2. The health, safety or welfare of the community is furthered, or;
3. Special considerations due to the nature and location of the proposed activity may be addressed.

Upon consideration of the criteria listed in Section 3.7.200.Q and the purposes of this Chapter, the Community Development Director may attach such conditions to the granting of variances as deemed necessary to further the purposes of this Chapter.

P. Variances. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevation if granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. Variances may be issued for:

1. Nonresidential buildings in very limited circumstances to allow a lesser degree of flood-proofing than watertight or dry-flood-proofing, where it can be determined that such action will have low damage potential, complies with all variance criteria, and otherwise complies with Sections 3.7.200.M(1) and (2) of the general standards.
2. The reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the requirements and criteria for a variance.
3. New construction and substantial improvements with a lowest floor elevation below the base flood elevation to be erected on a tract, parcel or lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1) through (11) in Section 3.7.200.R Appeals have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

Q. Criteria for Evaluation of a Variance Request. Variances shall only be issued through a Type II Variance Application, upon a determination by the Community Development Director that:

1. The variance is the minimum necessary, considering the flood hazard, to afford relief;
2. A showing of good and sufficient cause has been presented by the applicant;
3. Failure to grant the variance would result in exceptional hardship to the applicant beyond

financial hardship;

4. The granting of the variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
5. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result. The applicant shall have the burden of providing this evidence from a professional registered engineer.

R. Appeals. Type II Administrative decisions shall be appealed through the procedures established in Section 4.1.300 and as provided in Section 4.1.400.C-E. In passing upon such application, the hearings body shall consider all technical evaluations, all relevant factors, standards specified in other Sections of this Chapter, and:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the Flood Plain Management Program for the affected site;
9. The safety or access to the property in times of flood for ordinary and emergency vehicles;
10. The expected height, velocity, duration, rate or rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and,
11. The costs of providing governmental services during or after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and municipal water, and streets and bridges.

S. Violation and Penalty.

1. Violation of the provisions of this chapter by failure to comply with any of its requirements (including violation of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this Chapter or fails to comply with any of its requirement shall upon conviction thereof be fined not more than 500 dollars, imprisoned for a period not to exceed 100 days, or punished by both such fine and imprisonment.
2. Each person, firm or corporation found guilty of a violation shall be deemed guilty of a separate offense for every day during any portion of which any violations of any provisions of this Chapter are committed, continued or permitted by such person, firm or corporation, and shall be punishable therefore, as provided for in this Chapter.
3. In addition, each person, firm or corporation found guilty of a violation shall pay all costs and expenses involved in the case of all parties.
4. Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation.

T. Abrogation and Greater Restrictions. This Chapter is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this Chapter and another ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restriction shall prevail.

U. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Chapter shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this Chapter or any administration decision lawfully made thereunder.

3.7.300 Riparian Development

A. Applicability. The following standards are applicable to lands adjacent to the Coast Fork of the Willamette River, Row River, Silk Creek and Bennett Creek. This section applies the standards and specific rules for riparian safe harbors as established in OAR 660-023. The requirements of this section are in addition to other provisions of this code, and will be enforced as part of Land Use, Site Review, or other development review. If riparian modifications occur that are not associated with a development project, these standards shall be enforced through a Type II application.

B. Purpose. The purpose of this section is to:

1. To improve and maintain water quality in the Coast Fork Willamette River sub-basin;

2. To mitigate potential flood damage caused by modification of natural riparian habitats;
3. To protect native riparian habitats for sensitive fish and animals that depend upon the rivers and their banks;
4. To implement the “Willamette River Greenway” and “Riparian Resources” elements of the Cottage Grove Comprehensive Plan;
5. To protect aesthetic value of the City’s waterways; and
6. To implement Goal 5 Riparian Safe Harbor standards established in OAR 660-023.

C. Definitions. For the purpose of this section, the following definitions from OAR 660-023-0090 Riparian Corridors apply:

1. **Riparian Area** is the area adjacent to a river, lake, or stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem. Significant riparian areas are identified in the adopted Goal 5 Riparian Resource Inventory.
2. **Riparian Corridor** is a Goal 5 resource that includes the water areas, fish habitat, adjacent riparian areas, and wetlands within the riparian area boundary.
3. **Riparian corridor boundary** is an imaginary line that is a certain distance upland from the top bank as specified in subsection D of this section.
4. **Stream** is a channel such as a river or creek that carries flowing surface water, including perennial streams and intermittent streams with defined channels, and excluding man-made irrigation and drainage channels.
5. **Structure** is a building or other improvement that is built, constructed, or installed, not including minor improvements, such as fences, utility poles, flagpoles, or irrigation system components.
6. **Top of bank** shall have the same meaning as “bankfull stage” defined in OAR 141-085-0010(12).

D. Riparian Corridor Boundary. Along all riparian areas identified in the adopted Goal 5 Riparian Resource Inventory, the riparian corridor boundary shall be 50 feet from top of bank.

When the riparian corridor includes all or portions of a significant wetland as defined by the acknowledged Local Wetland Inventory map, the standard distance to the riparian corridor boundary shall be measured from, and include, the upland edge of the wetland.

E. Prohibited Development & Vegetation Removal within Riparian Corridor Boundary.

Permanent alteration of the riparian area by grading or by the placement of structures or impervious surfaces shall be prohibited within the riparian corridor boundary, except as identified in subsection E below. Vegetation removal shall be prohibited, except as identified in subsection G below.

F. Exempt Development.

The following uses are allowed through a Type II application, provided they are designed and constructed to minimize intrusion into the riparian area:

1. Streets, roads and paths;
2. Drainage facilities, utilities, and irrigation pumps;
3. Water-related and water-dependent uses;
4. Replacement of existing structures with structures in the same location that do not disturb additional riparian surface area; and
5. Removal of non-native vegetation and replacement with native plant species; and
6. Removal of vegetation necessary for the development of water-related or water-dependent uses.

G. Variance from Riparian Corridor Requirements. Request for relief from the above standards shall be processed pursuant to the Type III Variance application requirements set forth in Chapter 4.1. Variances may be granted for the permanent alteration of the riparian area by placement of structures or impervious surfaces within the riparian corridor boundary if:

1. The restrictions in this section render a lot existing at the date of the adoption of this ordinance not buildable, at which time a lesser setback of 25 feet from the riparian boundary corridor shall be applied; or
2. It can be demonstrated that equal or better protection for identified resources will be ensured through restoration of riparian areas, enhanced buffer treatment, or similar measures. In no case shall such alterations occupy more than 50 percent of the width of the riparian area measured from the upland edge of the corridor.

3.7.400 Willamette River Greenway

A. Intent and Purpose. The Willamette River Greenway is a State-designated scenic corridor along both sides of the Coast Fork of the Willamette River within the City of Cottage Grove. The boundaries of the approved Willamette River Greenway shall be maintained on a map at the City of Cottage Grove Community Development Department Office.

The purpose of the Willamette River Greenway designation is to protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River.

The qualities of the Willamette River Greenway shall be protected, conserved, enhanced and maintained consistent with the lawful uses present on December 6, 1975. Intensification of uses, changes in use or developments may be permitted after this date only when they are consistent with the City of Cottage Grove Comprehensive Plan, the Willamette River Greenway Statute, Statewide Planning Goal 15, ORS Chapter 290.010 to 390.220 and ORS Chapter 390.310 to 390.368, the interim goals in ORS 215.515(1) and the statewide planning goals, as appropriate, and when such changes have been approved by the approval body through a Type III application process.

B. Applicability. The land use element of the comprehensive plan and underlying zoning district shall determine the uses permitted in the Greenway. All intensification, changes of use or development activities in the Greenway are subject to this section unless otherwise exempted in Section C Definitions.

C. Definitions.

1. Change of Use: means making a different use of the land or water than that which existed on December 6, 1975. It includes a change which requires construction, alterations of the land, water or other areas outside of existing buildings or structures and which substantially alters or affects the land or water. It does not include a change of use of a building or other structure which does not substantially alter or affect the land or water upon which it is situated. The sale of property is not in itself considered to be a change of use. An existing open storage area shall be considered to be the same as a building. Landscaping, construction of driveways, modifications of existing structures, or the construction or placement of such subsidiary structures or facilities as are usual and necessary to the use and enjoyment of existing improvements shall not be considered a change of use for purposes of this section.
2. Intensification: means any additions which increase or expand the area or amount of an existing use, or the level of activity. Remodeling of the exterior of a structure not excluded below is an intensification when it will substantially alter the appearance of the structure. Maintenance and repair usual and necessary for the continuance of an existing use is not an intensification of use. Reasonable emergency procedures for the safety or the protection of property are not an intensification of use. Residential use of lands within the Greenway includes the practices and activities customarily related to the use and enjoyment of one's home. Landscaping, construction of driveways, modification of existing structures or construction or placement of such subsidiary structures or facilities adjacent to the residence as are usual and necessary to such use and enjoyment shall not be considered an intensification for the purposes of this section.

D. Criteria and conditions. The approval body shall consider the following objectives, make

affirmative findings on each of them through a Type III Conditional Use Permit per Chapter 4.4, and shall impose conditions on the permit to carry out the purpose and intent of the Willamette River Greenway Statutes:

1. Significant fish and wildlife habitats shall be protected;
2. Identified scenic area, viewpoints and vistas shall be preserved;
3. Any structure must be located outside the existing vegetative fringe or behind a setback line which is at least 50 feet (whichever is the greatest distance) from the top of the river bank to insure that areas of natural, historical or recreational significance will be protected, conserved, maintained or enhanced to the maximum extent possible (setback line shall not apply to water-related or water-dependent uses);
4. The natural vegetative fringe along the river shall be enhanced and protected to the maximum extent practicable in order to assure scenic quality, protection of wildlife, protection from erosion and screening of uses from the river;
5. The proposed development change or intensification of use is compatible with the site and surrounding area;
6. Any development will be located away from the river to the maximum extent possible;
7. The proposed development, change or intensification of use will provide the maximum landscaped area, open space or vegetation between the activity and the river;
8. Necessary public access will be provided to and along the river by appropriate legal means;
9. The proposed development meets the Vegetation Maintenance Standards in Section 3.7.300; and
10. The proposed development, change or intensification of use meets the requirements of the City of Cottage Grove Comprehensive Plan, the Willamette River Greenway Statute, Statewide Planning Goal 15, ORS Chapter 290.010 to 390.220 and ORS Chapter 390.310 to 390.368, the interim goals in ORS 215.515(1) and the statewide planning goals.

E. Notice to Department of Transportation. The city will not permit an intensification, change of use or development on lands within the boundaries of the Willamette River Greenway without first giving immediate notice by “certified mail – return receipt requested” to the Department of Transportation of an application for a Greenway conditional use permit. Notice of action taken by the city on an application shall be furnished to the Department of Transportation.