

ARTICLE 6. FLOODPLAIN DEVELOPMENT

SECTION 6.010. Findings of Fact.

1. Flood Losses Resulting from Periodic Inundation. The flood hazard areas of the City of Winston are subject to periodic inundation which results in the 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. General Causes of These Flood Losses. These flood losses are caused by:
 - a. The cumulative effect of obstructions in areas of special flood hazard causing increases in flood heights and velocities, and when inadequately anchored, damage uses in other areas.
 - b. The occupancy of flood hazard areas by uses vulnerable to floods, or hazardous to others, which are inadequately floodproofed, elevated or otherwise inadequately protected from flood damage also contribute to flood loss.

SECTION 6.020. Statement of Purpose. It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize those public and private losses due to flooding in specific areas, as described in paragraph 1, of Section 6.010, by provisions designed to:

1. Protect human life and health;
2. Minimize expenditure of public money and costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Control the alteration of floodplains, stream channels, and natural barriers which help accommodate or channel flood waters;
5. Minimize prolonged business interruptions;
6. 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. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
8. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

SECTION 6.025. Methods of Reducing Flood Losses.

In order to accomplish its purposes, this ordinance 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;
5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.
6. Coordinating and supplementing the provisions of the state building code with local land use and development ordinances.

SECTION 6.030. General Provisions.

1. Lands to Which This Ordinance Applies. This ordinance shall apply to all areas of special flood hazards within the jurisdiction of City of Winston, Oregon.
2. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administration in the scientific and engineering reports entitled "Flood Insurance Study for Douglas County, Oregon and Unincorporated Areas" dated February 17, 2010, with accompanying Flood Insurance Maps, are hereby adopted by reference and declared to be part of this ordinance. The Flood Insurance Study and Flood Insurance Maps are on file at 201 NW Douglas Boulevard (City Hall), Winston, Oregon 97496. The best available information for flood hazard area identification as outlined in Section 6.040, paragraph 3, b, shall be the basis for regulation until a new FIRM is issued which incorporates the data utilized under Section 6.040, paragraph 3, b.
3. Penalties For Noncompliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations.
4. Abrogation and Greater Restrictions. It is not intended by this ordinance to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail. All other ordinances inconsistent with this ordinance are hereby repealed to the extent of the inconsistency only.

5. Severability. If any section clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.
6. Interpretation. In their interpretation and application, the provisions of this ordinance shall be held to be minimum requirements and shall be liberally constructed in favor of the governing body and shall not be deemed a limitation or repeal of any other powers granted by State statutes and rules including the state building code.
7. Warning and Disclaimer of Liability. The degree of flood protection required by this ordinance 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 man-made or natural causes. This ordinance does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Winston, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made there under.

SECTION 6.040. Administration.

1. Establishment of Development Permit. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 6.030, paragraph 2. The permit shall be for all structures including manufactured homes, as set forth in the "definitions", and for all other development including fill and other activities, also as set forth in the definitions".
2. Designation of the Administrator. The City Manager is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.
3. Duties and Responsibilities of the Administrator. Duties of the City Manager shall include, but not be limited to:
 - a. Permit Review:
 - (i) Review all development permits to determine that the permit requirements and conditions of this ordinance have been satisfied.
 - (ii) Review all development permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 - (iii) 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 6.050, paragraph 4, a, are met.

- b. Use of Other Base Flood Data (In A Zone). When base flood elevation data has not been provided (A Zone) in accordance with Section 6.030, paragraph 2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the City Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Section 6.050.
 - c. Information To Be Obtained and Maintained:
 - (i) Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 6.040, paragraph 3, b, obtain and record the actual elevation (in relation to mean sea level [NGVD 29 or NAVD 88 which ever is applicable]) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement. This information shall be provided on a FEMA Elevation Certificate form.
 - (ii) For all new or substantially improved flood-proofed structures where flood elevation date is provided through the Flood Insurance Study, FIRM, or required as in Section 6.040, verify and record the actual elevation to which the structure has been floodproofed (in relation to mean sea level [NGVD 29 or NAVD 88 which ever is applicable]). The City shall obtain and maintain FEMA floodproofing certifications.
 - (iii) Maintain for public inspection all records pertaining to the provisions of this ordinance.
 - d. Alteration of Watercourses:
 - (i) Notify adjacent communities, the Department of State Lands, the Department of Land Conservation and Development and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - (ii) Require that maintenance is provided within the altered or relocated portion of said 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 (e.g., where there appears to be a conflict between a mapped boundary and actual field conditions).
4. Appeals. The Planning Commission, as established by the City of Winston, shall hear and decide appeals and requests for variances from the requirements of this ordinance. Such appeals shall be granted consistent with the standards of Section 60.6 of the Rules and Regulations of the National Flood Insurance Program (44 CFR 59-76).

SECTION 6.050. Provisions for Flood Hazard Reduction.

1. General Standards. In all areas of special flood hazards the following standards are required:
 - a. Anchoring:
 - (i) All new construction and substantial improvements shall be anchored to prevent floatation, collapse or lateral movement of the structure.
 - (ii) All manufactured homes must likewise be anchored to prevent floatation, 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 or from tied-to-ground anchors.
 - b. Construction Materials and Methods:
 - (i) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - (ii) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 - (iii) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
 - c. Utilities:
 - (i) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
 - (ii) 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 flood waters.
 - (iii) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality.
 - d. Subdivision Proposals:
 - (i) All subdivision proposals shall be consistent with the need to minimize flood damage.

- (ii) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.
 - (iii) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
 - (iv) Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).
- e. Review of Building Permits: Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (Section 6.040 paragraph 3,b), applications for building 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 the lowest floor at least two (2) feet above grade in these zones may result in higher insurance rates.
2. Specific Standards. In all areas of special flood hazards where the base flood elevation data has been provided as set forth in section 6.030, paragraph 2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, or Section 6.040, paragraph 3, b, USE OF OTHER BASE FLOOD DATA (In A Zone), the following provisions are required:
- a. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to a minimum of one (1) foot above the base flood elevation. 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:
 - (i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - (ii) The bottom of all openings shall be no higher than one foot above grade.
 - (iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

- (iv) An attached garage where the garage slab is below the base flood elevation is considered an enclosed area and is also subject to the flood vent requirements.
- b. Non-residential Construction: New construction and substantial improvement of any commercial, industrial or other non-residential structure shall either have the lowest floor, including basement, elevated to no less than one (1) foot above the base flood elevation, or, together with attendant utility and sanitary facilities, shall:
 - (i) Be flood proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
 - (ii) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
 - (iii) Be certified by a registered professional engineer or architect that the 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 structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Section 6.040.
 - (iv) Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 6.050 paragraph 1, e or 2, a.
 - (v) Applicants flood-proofing non-residential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the flood-proofed level (e.g. a building constructed to the base flood level will be rated one (1) foot below that level).
- c. Recreational Vehicles. All recreational vehicles placed within the floodplain shall be either:
 - (i) On the site for fewer than 180 consecutive days, or
 - (ii) Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions
- d. Manufactured Homes.
 - (i) All new, replacement or substantially improved manufactured homes to be placed or substantially improved on sites shall be elevated on a permanent foundation such that the bottom of the longitudinal chassis frame beam (lowest floor) of the manufactured home, as defined in the Oregon Manufactured Dwelling Specialty Code, is elevated to a minimum 12 inches above the base flood elevation (BFE) and securely

anchored to an adequately designed foundation system to resist flotation, collapse and lateral movement.

- (ii) The manufactured dwelling stand or foundation shall be a minimum of 12 inches above the BFE unless the foundation wall is opened on one side or end so that floodwater cannot be trapped;
- (iii) The manufactured dwelling shall be anchored to prevent flotation collapse and lateral movement during the base flood. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques); and,
- (iv) Electrical cross-over connections must also be 12 inches above BFE, as provided in the Oregon Manufactured Dwelling Specialty Code).
- (v) Manufactured homes placed or substantially improved in the floodway shall also comply with the provisions of Section 6.050.4.a.

e. Below-grade crawl spaces.

Below-grade crawlspaces are allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, *Crawlspace Construction for Buildings Located in Special Flood Hazard Areas*:

- (i) The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section (2) below. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
- (ii) The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
- (iii) Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.

- (iv) Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.
- (v) The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.
- (vi) The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
- (vii) There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.
- (viii) The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

For more detailed information refer to FEMA Technical Bulletin 11-01.

3. Before Regulatory Floodway. In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
4. Floodways. Located within areas of special flood hazard established in Section 6.050, paragraph 1, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
 - a. Except as provided in paragraph c., prohibit encroachments, including fill, new construction, substantial improvements and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

- b. If Section 6.050, paragraph 4, a., is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 6.050, PROVISIONS FOR FLOOD HAZARD REDUCTION.

- c. Projects for stream habitat restoration may be permitted in the floodway provided the projects have been approved by the U.S. Army Corps of Engineers, Oregon Department of State Lands, or the Oregon Department of Fish and Wildlife, as appropriate.