

CITY COUNCIL

ORDINANCE NO. 311

**AN ORDINANCE REPEALING SECTION 4.162
FLOOD PLAIN REGULATIONS, AND ADOPTING
CODE REVISIONS TO SECTION 4.162 OF
CHAPTER 4 OF THE WILSONVILLE CODE**

WHEREAS, the City Council of the City of Wilsonville desires to repeal the City of Wilsonville's Flood Plain Ordinance, Section 4.162 of the Wilsonville Code and adopts the revised Flood Plain Ordinance, as a new Section 4.162 of the Wilsonville Code, to reflect regulation changes that occurred with the Federal Emergency Management Agency (FEMA), for the National Flood Rate Insurance Program (NFIP), and

WHEREAS, the Wilsonville Planning Commission on March 9, 1987, reviewed the findings and recommendations of the Planning staff, held a public hearing and recommended adoption of the Flood Plain revisions (Resolution No. 87PC6), and

WHEREAS, the City Council duly considered the matter and adopting Ordinance, at its regularly scheduled meeting on April 6, 1987, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the City of Wilsonville ordains as follows:

FLOOD PLAIN ORDINANCE

STATEMENT OF PURPOSE

It is the purpose of this Ordinance to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

4.162 Flood Plain Regulations

(1) **Purpose:**

- (a) To minimize public and private losses due to flood conditions in flood-prone areas.
- (b) To regulate uses and alteration of land which cause erosion, increased flood heights or velocities.
- (c) To require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction, alteration or remodeling.
- (d) To restrict filling, grading, dredging, and other development which would increase flood damage.
- (e) To prevent construction of flood barriers which would unnaturally divert flood waters or increase flood hazards in other areas.
- (f) To properly regulate the 100-year flood plain identified by the Federal Insurance Administration (FIA) in the "Flood Insurance Study for the City of Wilsonville" dated July 6, 1981, and displayed on FIA Floodway and Flood Insurance Rate Maps.
- (g) To implement the policies of the Comprehensive Plan and to provide standards consistent with the City of Wilsonville Storm Drainage Master Plan.
- (h) To insure the City and its residents and businesses, continued eligibility in the National Flood Insurance

Program by complying with the requirements of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

(2) **Definitions**

- (a) Appeal - means a request for a review of the Community Development Director's interpretation of any provision of this ordinance or 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 flooding 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 the flood having a one percent chance of being equalled or exceeded in any given year. Also referred to as the "100-year flood". Designation on maps always includes the letters A or V.
- (e) Development - any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the flood plain.
- (f) Fill - any act by which earth, sand, gravel, rock, structures or any similar material is deposited, erected, placed, pulled or transported, including the conditions resulting therefrom, within the limits of the 100-year flood plain.

- (g) Flood or Flooding - general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters, and/or the unusual and rapid accumulation of runoff of surface waters from any source.
- (h) Flood Insurance Rate Map (FIRM) - the official map prepared for the City of Wilsonville on which the Federal Insurance Administration has delineated both the flood plain, and the risk premium zones applicable to the community.
- (i) Flood Insurance Study - the official report prepared for City of Wilsonville by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.
- (j) 100-Year Flood Plain - land adjacent to a floodway that has a one percent chance of flooding in any given year, and as identified within the "A" zones of the FIRM.
- (k) Flood Plain - flood-prone areas as identified on the FIRM.
- (l) Floodway - 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.
- (m) Floodway Fringe - that portion of the flood plain not contained in the floodway.
- (n) Floodway Map - the official map prepared for the City of Wilsonville by the Federal Insurance Administration which identifies floodways.
- (o) Habitable floor - any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used only for storage purposes is not a "habitable floor".

- (p) Lowest Floor - means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for 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 ordinance.
- (q) 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 180 consecutive days. For insurance purposes, the term "manufactured home" does not include park trailers, travel trailers and other similar vehicles.
- (r) Start of Construction - includes 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 180 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 streets 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.

- (s) Structure - means a walled and roofed building including a gas or liquid storage tank (or mobile home) that is principally above ground.
- (t) Substantial Improvement - means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:
 - 1. Before the improvement or repair is started, or
 - 2. If the structure has been damaged and is being restored, before the damage occurred. For the purposes 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.

The term does not, however, include either:

- 1. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or
 - 2. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.
- (u) Variance - means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

(3) General Provisions

- (a) This section shall apply to all flood plain areas in the City of Wilsonville identified by the Flood Insurance Rate Map. No Building Permits or Construction Permits for development within the flood plain shall be issued

except as in compliance with the provisions of the Section.

- (b) That the City of Wilsonville Community Development Director shall review all Building Permit applications for new construction or substantial improvement to determine whether proposed building sites will be located in a flood plain. If a proposed building site is located within a flood plain, any proposed new construction or substantial improvement (including pre-fabricated and manufactured housing) must:
1. Be designed (or modified) and anchored to prevent flotation, collapse or lateral movement of the structure.
 2. Use construction materials and utility equipment that are resistant to flood damage, and
 3. Use construction methods and practices that will minimize flood damage.
- (c) That the City of Wilsonville Planning Director shall review subdivision proposals and other proposed new developments within the flood plain to assure that:
1. all such proposals are consistent with the need to minimize flood damage,
 2. all public utilities and facilities, such as sewer, gas, electrical and water systems are located, elevated and constructed to minimize or eliminate flood damage, and
 3. adequate drainage is provided so as to reduce exposure to flood hazards.
- (d) That the City of Wilsonville Community Development Director shall require new or replacement water supply systems and/or sanitary sewage systems to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters and require on-site waste disposal systems to be

located so as to avoid impairment of them or contamination from them during flooding.

(4) Development Permit Required

(a) A Development Permit shall be obtained before construction or development begins within any area of special flood hazard. The Permit shall be for all structures including manufactured homes, as set forth in the "DEFINITIONS", and for all development including fill and other activities, also as set forth in the "DEFINITIONS".

(b) Outright Permitted Uses in the 100-year Flood Plain:

1. Agricultural use that is conducted without a structure other than a boundary fence.
2. Recreational uses which would require only minor structures such as picnic tables and barbecues.
3. Residential uses that do not contain buildings.
4. Underground utility facilities.
5. Repair, reconstruction or improvement of an existing structure, the cost of which is less than 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction, provided no development occurs in the floodway.

(5) Uses within the 100-year Flood Plain requiring a Flood Plain Permit:

(a) Any development except as specified in 4.162(4), that is otherwise permitted within the Zoning District provided such development is consistent with the Flood Plain Standards.

(b) All subdivisions and minor land partitions.

- (c) Installation of dikes to provide buildable or usable property, provided that said dikes do not conflict with the policies of the Comprehensive Plan and 4.162.

(6) Prohibited Uses in the 100-year Flood Plain:

- (a) Any use or building which stores or otherwise maintains hazardous materials, chemicals, explosives or any other similar materials.
- (b) Storage of any materials that are not properly anchored, enclosed or protected to prevent movement or flotation beyond the property lines.

(7) Flood Plain Permit Review Process:

- (a) Designation of the Community Development Director:

- 1. The Community Development Director is hereby appointed to administer and implement this ordinance by granting or denying Development Permit applications in accordance with its provisions.

- (b) Duties and Responsibilities of the Community Development Director:

- 1. Duties of the Community Development Director shall include, but not be limited to:

Permit Review

- a. Review all Development Permits to determine that the permit requirements of this ordinance have been satisfied.
- b. Review all Development Permits to determine that all necessary permits have been obtained from those Federal, State or local government agencies from which prior approval is required. Notify the State Department of Land Conservation and Development and FEMA of final permit decision.

- c. 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 4.162(8)(h) are met.
- (c) The Permit process for developments not regulated by 4.130 to 4.140 shall be as follows:
1. Pre-application conference with the Planning Department, in accordance with the procedures set forth in 4.008.
 2. A complete application in accordance with 4.162 shall be submitted to the Community Development Director.
 3. Within 30 days of complete application, the Community Development Director shall approve or deny the application based on the following Findings:
 - a. Reports from the City Engineer and Planning Director as to the applicant's submittal documents' compliance with 4.162, including recommendations.
 - b. The proposed development's compliance with other provisions of the Comprehensive Plan and Zoning Regulations.
- (d) The decision of the Community Development Director may be appealed to the Planning Commission, upon written notice to the City Recorder within 10 days of the date of final decision. Upon appeal, the Commission shall hear the matter in accordance with 4.017(3-8).

- (e) Any flood plain development proposed for property regulated under 4.130 to 4.140 shall be considered by the Planning Commission and the Community Development Director as part of the Planned Development Permit process.
- (f) Submittal requirements.
 - 1. A field survey in relation to mean sea level by a licensed surveyor or civil engineer of the actual location of the 100-year flood plain, fringe, floodway and the lowest habitable finished floor elevations, including basements, of all existing structures.
 - 2. A Site Plan map showing all existing and proposed contours and development and supplemented by a soils and hydrologic report sufficient to determine the net effect of the proposed development on the flood plain elevations on the subject site and adjacent properties.
 - 3. A soils stabilization plan for all cuts, fills and graded areas.
- (g) Use and Interpretation of Base Flood Data and maps.
 - 1. When specific 100-year flood plain elevation data has not been provided in accordance with 4.162(3), the Community Development Director shall obtain, review and reasonably utilize any base flood elevation data available from Federal, State or other sources, in order to determine compliance with 4.162.
 - 2. The Community Development Director shall make the final interpretation of the exact 100-year flood plain boundaries on the FIRM and the Floodway Map. Appeals shall be granted consistent with the Standards of Section 1910.6 of the rules and regulations of the National Flood Insurance Program.

(h) Monumentation and Recordation:

1. Prior to issuance of a Flood Plain Permit, the Community Development Director shall cause the placement of an elevation marker, set at two (2) feet above the 100-year flood elevation, on the subject property. The marker shall be properly identified and permanently monumented in concrete.
2. A Site Plan or map showing the location and elevation of the monument shall be submitted to and maintained on file by the Community Development Director.
3. Prior to issuance of an Occupancy Permit, for any structure within the 100-year flood plain, the Community Development Director shall insure by signature of a licensed surveyor or civil engineer that the finished floor elevation is one and one-half (1-1/2) feet above the 100-year flood elevation. The finished floor elevation shall be in relation to mean sea level, of the lowest floor (including basement) of all structures.

(8) General Standards

(a) Anchoring:

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
2. 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 or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques.

(b) Construction materials and methods:

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
3. Electrical, heating, ventilation, plumbing, and 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 conditions of flooding.

(c). Utilities:

1. All new replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
2. 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.

(d) Watercourse and Flood Plain Alterations:

1. Provide description of the extent to which a water-course will be altered or relocated as a result of proposed development.

(e) Residential Construction:

1. New construction and substantial improvement of any residential structure shall have the lowest finished floor, including basement, elevated one and one-half (1-1/2) feet above the 100-year flood elevation.

2. 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:

- a. 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.
- b. The bottom of all openings shall be no higher than one foot above grade.
- c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood-waters.

(f) Nonresidential Construction:

1. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest finished floor, including basement, elevated one and one-half (1-1/2) feet above the 100-year flood elevation; or, together with attendant utility and sanitary facilities, shall:

- a. Be floodproofed so that below the base flood level the structure is water-tight 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 the standards of this subsection are satisfied.
- d. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 4.162(8)(e)(2).
- e. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).

(g) Manufactured Homes:

- 1. All manufactured homes to be placed or substantially improved within Flood Hazard Zones A1-30, AH and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of sub-section 4.162(8)(2).

(h) Floodways:

- 1. Located with the flood plain as established in 4.162(3) 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. Encroachments, including fill in any new development, shall be prohibited unless certification by a registered professional engineer is provided, demonstrating that encroachments shall not result in any in-

crease in flood levels during the occurrence of the 100-year flood discharge.

- b. All development shall comply with all applicable flood plain standards of 4.162(8).
- c. All buildings designed for human habitation and/or occupancy shall be prohibited within the floodway.

(i) Parking Lots and Storage Areas:

- 1. All parking lots and storage areas below the flood plain elevation shall be paved.
- 2. A minimum of twenty-five (25) percent of the required parking space must be provided above the 100-year flood plain elevation for all non-residential uses.
- 3. Residential uses shall provide at least one parking space per unit above the 100-year flood plain elevation.

(j) Subdivision Proposals

- 1. All subdivision proposals shall be consistent with the need to minimize flood damage.
- 2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- 3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage, and
- 4. 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).

(k) **Review of Building Permits**

Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, 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 at least two feet above grade in these zones may result in higher insurance rates.

9. (a) **Appeal Board**

1. The Planning Commission as established by the City of Wilsonville shall hear and decide appeals and requests for variances from the requirements of this ordinance.
2. The Planning Commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the Community Development Director in the enforcement or administration of this ordinance.
3. Those aggrieved by the decision of the Planning Commission, or any taxpayer, may appeal such decision to the City Council.
4. In passing upon such applications, the Planning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and
 - (a) the danger that materials may be swept onto other lands to the injury of others;
 - (b) the danger to life and property due to flooding or erosion damage;

- (c) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (d) the importance of the services provided by the proposed facility to the community;
- (e) the necessity to the facility of a waterfront location, where applicable;
- (f) the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- (g) the compatibility of the proposed use with existing and anticipated development;
- (h) the relationship of the proposed use to the Comprehensive Plan and flood plain management program for that area;
- (i) the safety of access to the property in times of flood for ordinary and emergency vehicles;
- (j) the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
- (k) the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas electrical and water systems, and streets and bridges.

5. Upon consideration of the factors of Section 4.162(10)(4)(a - k) and the purposes of this ordinance, the Planning Commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

6. The Community Development Director shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

(b) Conditions for Variances

1. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a 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 (a-k) in Section 4.162(10)(4) have been fully considered. As the lot size increases, the technical justification required for issuing the variance increases.
2. Variances may be issued for 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 procedures set forth in this section.
3. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
5. Variances shall only be issued upon:
 - a. a showing of good and sufficient cause;
 - b. a determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - c. a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, or conflict with existing local laws or ordinances.
6. 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 elevations should be quite rare.

7. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 4.162.10(b)(2).
9. Any applicant to whom a variance is 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.

10. Conflicts:

If any provisions of 4.162 conflict with any other sections of the Zoning Ordinance, the most restrictive shall apply (Adopted 12-21-81, Ord. No. 203).

Submitted to the Council and read the first and second time at a regular meeting thereof, on the 6th day of April, 1987, at the Wilsonville City Hall.

11. Repeal:

The enactment of this Flood Plain Ordinance repeals the pre-existing provisions of 4.162 and replaces same with the provisions of this enacted Flood Plain Ordinance.

Vera A. Rojas
VERA A. ROJAS, City Recorder

ENACTED by the City Council on the 6th day of April, 1987, by the following votes: YEAS: 5 NAYS: 0

Vera A. Rojas
VERA A. ROJAS, City Recorder

DATED and signed by the Mayor this 8th day of April, 1987.

William E. Stark
WILLIAM E. STARK, Mayor