

TITLE 8

BUILDING CODE

CHAPTER 870

FLOODPLAIN MANAGEMENT CODE

Statutory References and Other Authorities

Legislative History of Chapter 870 (formerly codified at Chapter 9.40)

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I. ADMINISTRATIVE PROVISIONS

870.010 Title

This chapter, LCC 870.010 to 870.999, shall be known and may be cited as the “Linn County Floodplain Management Code” or simply as the “Floodplain Management Code.”

[Adopted 85-161 eff 5/1/85; amd 03-397 §1 eff 11/5/03]

870.020 Statutory authorization

This Chapter is adopted pursuant to ORS 203.035.

[Adopted 85-161 eff 5/1/85]

870.030 Statement of purpose

The provisions of this chapter are to promote public safety and welfare and minimize flood related losses by:

(A) Managing development in floodplain areas in order to reduce the potential for loss of life and property damage.

(B) Requiring the construction of structures and utilities in a manner that will reduce damage to the installations and prevent contamination and unsanitary conditions.

(C) Preventing encroachments that decrease the flood carrying capacities of floodways, increase flood heights, or otherwise aggravate flood problems.

(D) Managing the alteration of natural floodplains, channels, and natural protective barriers that help accommodate or channel flood waters.

(E) Reducing public costs for emergency operations, relief, evacuations and restorations.

(F) Reducing flood insurance and development costs through floodplain management.

[Adopted 85-161 eff 5/1/85; amd 03-397 §1 eff 11/5/03]

870.040 Scope

This chapter and each of its regulations shall apply to all areas of special flood hazard within the jurisdiction of Linn County, except areas within incorporated cities.

[Adopted 85-161 eff 5/1/85]

870.050 Definitions

(A) “**Accessory Structure**” means a building not over 200 square feet in floor area with an average roof height of less than ten (10) feet. For the purpose of this code, accessory structures are “new construction.”

(B) “**Area of shallow flooding**” means a designated AO 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 floodplain that is subject to a one percent (1%) or greater chance of flooding in any given year.

(D) “**Base flood**” means a flood having a one percent (1%) chance of being equaled or exceeded in any given year. The term is also called the 100 year flood.

(E) “**Basement**” means any area of a building having its floor below ground level on all sides

(F) “**Building official**” means the person, or designee, charged by Linn County with responsibility for administration and enforcement of the State building code.

(G) “**Certification**” means an original document, legally authenticated, which provides written testimony as to the truth of any fact.

(H) “**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 which produce, use or store hazardous materials or hazardous waste.

(I) “**Designated floodway**” means a floodway that has been designated on a Flood Insurance Rate Map (FIRM) applicable to Linn County.

(J) “**Development**” means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, partitioning or subdividing, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment located in the area of special flood hazard.

(K) “**Elevated building**” means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns..

(L) “**Elevation certificate**” means the Federal Emergency Management Agency National Flood Insurance Program Elevation Certificate.

(M) “**Flood**” or “**Flooding**” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) the overflow of inland waters; and
- (2) the unusual and rapid accumulation

of surface waters from any source.

(N) “**Flood fringe**” means that portion of the floodplain that lies beyond the floodway and serves as a temporary storage area for flood waters during a flooding event.

(O) “**Flood Insurance Rate Map**” or “**FIRM**” means the official map on which the Federal Insurance Administration has delineated areas of special flood hazards, designated floodways, and risk premium zones as applicable to Linn County.

(P) “**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.

(Q) “**Floodplain**” means any land area susceptible to flooding from any source, the areas

of which are delineated on the Flood Insurance Rate Maps applicable to Linn County.

(R) “**Flood-proofing**” means any combination of structural and non-structural additions, changes or adjustments to structures or facilities which reduce or eliminate flood damage to improved or unimproved real estate, water and sanitary facilities, structures and their contents.

(S) “**Floodway**” means the channel of a river or other watercourse and those identifiable land areas that must be reserved in order to discharge a flood without cumulatively increasing the water surface elevation.

(T) “**Habitable floor**” means any floor used or designed for working, sleeping, eating, cooking, recreation, or any combination thereof.

(U) “**Highest adjacent natural grade**” means the highest natural grade (before any development or grading) in the area of the development touching a structure.

(V) “**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 built in accordance with this code.

(W) “**Manufactured home**” means a structure built in a factory that is transportable in one or more sections, built on a permanent chassis, designed for use as a permanent residence with or without a permanent foundation when connected to the required utilities. It does not include a recreational vehicle or travel trailer.

(X) “**New manufactured home park or subdivision**” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of adopted floodplain management regulations.

(Y) “**Non-habitable floor**” means any floor that is not a habitable floor or is used for storage purposes only.

(Z) “**Other buildings**” means detached garages, storage buildings, buildings, or other similar detached buildings accessory to one and two family dwellings.

(AA) “**Permanent construction**” does not include land preparation such as clearing, excavation for a basement, footings, piers or foundations, or the erection of forms.

(BB) “**Riverine**” means relating to, formed by, or resembling a river (including tributaries), streams, etc.

(CC) “**Start of construction**” means the first placement of permanent construction of a structure on a site such as the pouring of concrete, the installation of piles, the construction of columns, any work beyond excavation and the erection of forms, or the placement of a manufactured home on a foundation.

(1) The term 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 issuance.

(2) For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not the alteration affects the external dimensions of the building.

(DD) “**Structure**” means that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner. This term also includes a gas or liquid storage tank that is principally above ground.

(EE) “**Substantial damage**” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would be equal or exceed 50 percent (50%) of the assessed market value of the structure before the damage occurred.

(FF) “**Substantial improvement**”

(1) means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the assessed market value of the structure either:

(a) before the improvement or repair is started; or

(b) 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 with the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the structure. All improvements shall be cumulative from the date of the adoption of this code. Permits for additions, appurtenant systems and equipment to buildings issued after the adoption of this code are defined as "**new construction.**" The assessed market value of new construction shall not be used when determining substantial improvement. The building official shall determine the value of the new construction.

(2) This 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.

(GG) "**Undesignated floodway**" means a floodway not designated on a Flood Insurance Rate Map applicable to Linn County.

(HH) "**Water dependent**" means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

[Adopted 85-161 eff 5/1/85; amd 86-540 §1 eff 9/17/86; amd 87-249 §1 eff 5/27/87; amd 87-442 §1 eff 9/9/87; amd 90-444 §1 eff 6/27/90; amd 03-397 §1 eff 11/5/03; amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10]

870.060 Floodplain administrator

(A) *Appointment of floodplain administrator.* The building official is hereby appointed as

the floodplain administrator. The duties of the administrator, in general, are to administer and enforce this chapter, except as to partitioning and subdividing, which shall be under the direction of the Director of the Planning and Building Department.

(B) *Duties of the floodplain administrator.* The specific duties of the floodplain administrator shall include, but not be limited to, the following:

(1) *Permit review and inspections*

(a) to review all development applications to determine whether the permit requirements of this chapter have been satisfied;

(b) to review all development permits to determine that all necessary permits have been obtained from the federal, state, or local government agencies from which prior approval is required;

(c) to review all development permits to determine if the proposed development is located in a floodway. If located in a floodway, assure that all of the standards of this code are met;

(d) to conduct inspections and determine compliance with this chapter.

(e) where elevation data is not available either through the Flood Insurance Study, FIRM, or another authoritative source (Section 870.080), applications for building permits shall be reviewed to determine whether the proposed building sites will be reasonably safe from flooding.

(2) *Information to be obtained and maintained*

(a) where base flood elevation data is provided through the Flood Insurance Study, to obtain and to record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures and record whether or not the structure contains a basement;

(b) for all new or substantially improved structures which are flood-proofed:

(i) to verify and record the actual floor and flood level elevations (in relation

to mean sea level) to which structures are flood-proofed; and

(ii) to maintain the flood-proofing certifications required by this code.

(c) in riverine situations, notify adjacent communities and the Department of Land Conservation and Development prior to any alteration or relocation of a watercourse and to submit copies of such notification to the Federal Insurance Administrator.

(d) to maintain records of all actions taken pursuant to this chapter.

(3) *Interpretation of FIRM boundaries.* To make inspections when necessary to determine the exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions).

(4) *Interpretation of base flood elevations.* To determine the base flood elevation at a development site.

(5) *Assure the flood carrying capacity.* To assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

[Adopted 85-161 eff 5/1/85; amd 87-249 §1 eff 5/27/87; amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10]

870.070 Basis for establishing the 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 Linn County and Incorporated Areas*, dated September 29, 2010, as revised December 8, 2016, with accompanying flood insurance maps and revisions thereto are hereby adopted by reference and declared to be part of this code. The Flood Insurance Study is on file at the Linn County Planning and Building Department, Linn County Courthouse.

[Adopted 87-249 §1 eff 5/27/87; amd 10-311 §1 eff 9/22/10; amd 16-369 §1 eff 11/22/16]

870.080 Use of other base flood data

When base flood data is not available, the Floodplain Administrator shall obtain, review and reasonably use base flood and floodway data from

other sources, i.e., Federal, State or historical sources.

[Adopted 85-161 eff 5/1/85; amd 87-249 §1 eff 5/27/87; amd 88-130 § 2 eff 7/5/88; amd 10-311 §1 eff 9/22/10]

870.090 Miscellaneous administrative provisions

(A) When terms of an Urban Growth Management agreement, adopted by both Linn County and an affected city, prescribes more stringent development standards within a floodplain, the more stringent requirement shall apply.

(B) This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions.

(C) If any section, clause, sentence or phrase of this Chapter is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this Chapter.

[Adopted 85-161 eff 5/1/85, 87-249 §1 eff 5/27/87; amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10; amd 16-369 §1 eff 11/22/16]

II. DEVELOPMENT PERMITS AND CERTIFICATES

870.110 Permits

(A) *Development permit required.* No development may begin within any area of special flood hazard unless a development permit is first applied for and obtained by the property owner or the owner's authorized agent. The permit shall be for all development.

(B) *Permit application requirements*

(1) A person requesting a permit for development within an area of special flood hazard shall submit supporting documents to the Linn County Planning and Building Department as follows:

(a) two complete sets of plans for the development.

(b) a pre-development floodplain elevation worksheet.

(c) a document from the Linn County Department of Health Services Environmental Health Program that the site is suitable for

onsite sewage disposal if the proposed development is designed to generate sewage flows.

(d) land use approval.

(C) *Document review requirements*

(1) The submitted documents shall be reviewed in accordance with this chapter and such codes, laws, and rules that apply and either approved, or denied, or held for further study pending receipt of such additional information as may be necessary to fully evaluate the proposal. It shall be the applicant's responsibility to provide such additional information.

(2) Conditions necessary to carry out the purpose of this chapter may be attached to and become a part of any approval.

(3) If denied, a written copy of the reasons for denial shall be provided to the applicant.

(D) *Post-development elevation certificate*

(1) After the development has been completed, the applicant shall file with the floodplain administrator an elevation certificate for all new construction or substantial improvements within an area of special flood hazard.

(2) The elevation certificate shall be filed with the floodplain administrator before final inspection approval will be granted.

[Adopted 85-161 eff 5/1/85; ; amd 87-249 §1 eff 5/27/87 (and renumbering from 940.320); amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10]

870.130 General development requirements

(A) *Anchoring*

(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, and lateral movement.

(2) All manufactured homes must likewise be anchored to prevent flotation, collapse, and 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 structural and non-structural building materials at or below the base flood

elevation shall be resistant to flood damage per FEMA *Technical Bulletin 2* .

(2) All new construction or substantial improvements shall be constructed using methods and practices that minimize flood damage.

(3) All new and replacement mechanical, electrical equipment, heating, ventilation, plumbing, air condition, other service facilities and components shall be elevated one foot (1') above the base flood elevation, or where the base flood elevation has not been established, two feet (2') above the highest adjacent grade .

(4) *Exception.* Paragraph (3) of this subsection does not apply to irrigation pump service equipment that is removed from the area of special flood hazard between November and May of each year.

(C) *Utilities*

(1) All electrical and mechanical components and equipment shall be elevated a minimum of one foot above the base flood elevation, flood-proofed or be listed and approved for installation in a wet location.

(2) Plumbing openings below less than one foot above base flood elevation shall be flood-proofed or equipped with approved back water valves.

(3) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood water into the system.

(4) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the system into flood waters. On site sewage disposal systems shall be located to avoid impairments to them, or contamination from them during flooding.

[Adopted 85-161 eff 5/1/85; amd 86-540 §1 eff 9/17/86; amd 87-249 §1 eff 5/27/87 [combining old 940.440, 940.450, 940.455, 940.460, and 940.430; amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10]

870.140 Specific construction requirements; residential uses in unnumbered A zones and areas of shallow flooding (AO zones)

(A) Residential construction

(1) All new construction and substantial improvements of any residential structure constructed where base flood elevations have not been established (see Section 870.080), shall have the bottom of the lowest horizontal structural member of the lowest floor (including basement) located 18 inches above the highest natural grade within the boundary of the area of special flood hazard in the tax lot being developed.

(2) All new construction and substantial improvements of any residential structure constructed in Zone AO must be elevated so as to have the lowest horizontal structural member of the lowest floor (including basement) located a minimum of 18 inches above the depth number specified on the FIRM.

(3) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or must 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 net loss 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.

(4) The interior crawlspace grade shall be at or above the lowest adjacent exterior grade.

(5) All structural and non-structural building materials at or below the 18 inch elevation requirement or flood depth requirement shall be flood resistant per FEMA *Technical Bulletin 2*.

(6) All electrical and mechanical components and equipment shall be elevated a minimum of two feet above highest adjacent grade or be listed and approved for installation in a wet location.

(7) Plumbing openings shall be flood proofed and equipped with back water valves.

(B) Manufactured dwellings

(1) Manufactured dwellings installed where base flood elevations have not been established within a special flood hazard area, shall have the bottom of the longitudinal chassis frame beam elevated a minimum of 18 inches above the highest natural grade within the boundary of the area of special flood hazard area on the tax lot being developed. In Zone AO, the manufactured dwelling must be elevated so the bottom of the longitudinal chassis frame beam is a minimum of 18 inches above the depth number specified on the FIRM.

(2) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited.

(3) The interior crawlspace grade shall be at or above the lowest adjacent exterior grade.

(4) All structural and non-structural building materials at or below (a) the 18 inch requirement or (b) 18 inches above the depth number, shall be resistant per FEMA *Technical Bulletin 2*.

(5) All electrical and mechanical components and equipment shall be elevated at a minimum of two feet above highest adjacent grade or be listed and approved for installation in a wet location.

(6) Plumbing openings shall be flood proofed and equipped with back water valves.

(7) All manufactured dwellings shall be anchored according to one of the following:

(a) *Manufactured Home Installation in Flood Hazard Areas* guidebook; or

(b) supported on and secured to an approved foundation wall or basement wall; or

(c) attached to an approved structural skirting system; or

(d) Supported on and secured to a foundation system capable of resisting flooding that was designed by an Oregon professional engineer or architect and approved by the building official.

(8) The area below the elevated floor is non-habitable and is usable solely for parking of vehicles, building access or storage.

(C) *Other buildings*

(1) Other buildings, less than 200 square feet may have the floors below the minimum 18 inch above highest adjacent grade requirement, if all of the following conditions are met:

(a) there shall be a minimum of two openings having a total net free area of not less than one square inch for every square foot of enclosed area;

(b) the bottom of all openings shall be no higher than one foot (1') above finished grade;

(c) openings may be equipped with screens, louvers, or other coverings or devices provided that they allow the automatic entry and exit of flood waters;

(d) the floor, if installed, must be of concrete or blacktop;

(e) there shall be no interior finish within 18 inches of highest adjacent grade;

(f) All structural and non-structural building materials below the 18 inch requirement must be flood resistant per FEMA *Technical Bulletin 2*.

(D) Adequate drainage paths around structures on slopes are required to guide floodwaters around and away from proposed structures.

[Adopted 85-161 eff 5/1/85; amd 87-249 §1 eff 5/27/87 [combining old 940.465 and 940.470]; amd 87-442 § eff 9/9/87; amd 87-442 §1 eff 9/9/87; amd 90-444 §1 eff 6/27/90; amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10]

870.141 Specific construction requirements; residential uses in Zone AE zones

(A) *Residential Structures*

(1) All new construction and substantial improvements of any residential structure shall have the bottom of the lowest horizontal structural member of the lowest floor (including basement)

elevated to a minimum of 18 inches above base flood elevation on the FIRM.

(2) Fully enclosed areas below the lowest floor that are subjected 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 be either 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 new 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 the openings shall be no higher than one foot above finished 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.

(3) The interior crawlspace grade shall be at or above the lowest adjacent exterior grade.

(4) The area below the elevated floor is non-habitable and is usable solely for parking of vehicles, building access or storage.

(B) *Manufactured Dwellings*

(1) The ground area reserved for the placement of a manufactured dwelling supported by fully enclosed foundation walls shall be a minimum of one foot above BFE unless the foundation walls are designed to automatically equalize hydrostatic forces 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 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; and

(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.

(2) The bottom of the longitudinal chassis frame beam shall be a minimum of 18 inches above BFE.

(3) 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; [44 CFR 60.3(c)(6)]

(4) Electrical crossover connections shall be a minimum of 18 inches above BFE.

(5) All structural and non-structural building materials at or below the base flood elevation shall be resistant per FEMA *Technical Bulletin 2*.

(6) All electrical and mechanical components and equipment shall be elevated at a minimum of one foot above the base flood elevation or be listed and approved for installation in a wet location.

(7) Plumbing openings below the elevation of one foot above base flood elevation shall be flood proofed and equipped with back-water valves.

(8) The interior crawlspace grade shall be at or above the lowest adjacent exterior grade.

[Adopted 10-311 §1 eff 9/22/10]

870.142 Specific construction requirements; nonresidential

(A) New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest horizontal structural member of the lowest floor (including basement):

(1) elevated a minimum of 18 inches above the base flood elevation, if in Zone AE or if a BFE has been established; or

(2) elevated no lower than 18 inches above the highest natural grade within the boundary of the area special flood hazard if located in Zone A; or

(3) elevated a minimum of 18 inches above the depth number specified on the FIRM if in Zone AO; or

(4) together with attendant utility and sanitary facilities, be completely flood proofed as follows:

(a) Zone A and Zone AE – be flood proofed so that below the depth number the structure is water tight with walls substantially impermeable to the passage of water.

(5) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

(6) 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, specification, and plans and the Linn County Specialty Code. If this method is used, compliance shall be certified by a registered professional engineer or architect as in Section 870.142 (A) (2) (c).

(B) Applicants flood proofing nonresidential structures shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level.

(C) Adequate drainage paths around structures on slopes are required to guide floodwaters around and away from proposed structures.

(D) Nonresidential structures that are elevated, not flood proofed must meet the same standards for space below the lowest floor as described in 870.141 (A) (2), (3) and (4).

[Adopted 03-397 03-397 eff 11/5/03; amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10]

870.143 Specific requirements for recreational vehicles

Recreational vehicles placed on sites shall:

(A) be on the site for fewer than 180 consecutive days;

(B) 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; or

(C) meet the anchoring requirements of 870.130 and the elevation requirements for manufactured homes as follows: Section 870.140(B) and Zone A and Zone AO and Section 870.141(B) for Zone AE.

[Adopted 10-311 §1 eff 9/22/10]

870.144 Specific construction requirements; “fill and excavation”

(A) All fill placed at or below the base flood elevation shall be balanced with at least an equal amount of material removed either on site or from an approved nearby area at or below the base flood elevation in the same drainage basin or provide certification by an engineer as per number (4) below. In addition to the requirements of LCC 850 (Fill and Excavation Code), when approved by the floodplain administrator fill may be placed in an area of special flood hazard when:

(1) a development permit is obtained;
(2) the net effect of fill and excavation operations (onsite) constitutes no positive change in fill volume;

(3) the proposed fill or excavation will not change the direction or velocity of flood water flow;

(4) the proposed fill or excavation will not cause a compounding of flood hazards; or

(5) a registered engineer shall certify that the proposed project will not cause a rise in the base flood elevation during a one hundred year event or create conditions that would be detrimental to adjacent or neighboring properties. The certification shall be provided with the development permit application.

(B) *Exception:* A fill or excavation of 50 cubic yards or less, not intended to support structures and meeting the requirements of paragraphs (2) and (3) of subsection (A) of this section, section 870.149, and section 870.150. All fill is cumulative from the date of the original adoption of this chapter (November 5, 2003).

[Adopted 03-397 03-397 eff 11/5/03; amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10]

870.146 Specific construction requirements; “other development”

(A) A development permit is required for solid fences, above ground driveways, and accessory structures.

(B) Other development such as solid fences, above ground driveways, and accessory structures shall be designed and placed so as to not alter or obstruct the flow of flood water, and where applicable, anchored to prevent flotation, collapse, or lateral movement.

[Adopted 03-397 03-397 eff 11/5/03; amd 03-397 §1 eff 11/5/03]

870.149 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 Zone AE 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.

[Adopted 10-311 §1 eff 9/22/10]

870.150 Floodways

Because the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris and other potential projectiles, and has erosion potential, the following provisions shall apply:

(A) All proposed development including fill, new construction, substantial improvements, and other development must be certified by an Oregon professional engineer . demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge. The engineer will also certify the proposed development will not create conditions that would be detrimental to adjacent or neighboring properties.

(B) If Section (A) above is satisfied, all new construction and substantial improvements shall

comply with all applicable flood hazard reduction provisions of this chapter.

[Adopted 85-161 eff 5/1/85; amd 87-249 §1 eff 5/27/87; amd 03-397 §1 eff 11/5/03; amd 10-311 §1 eff 9/22/10]

870.160 Applicability of Linn County Specialty Code

All new construction and substantial improvements requiring flood proofing shall be constructed in accordance with this chapter and the applicable sections of the Linn County Specialty Code.

[Adopted 03-397 03-397 eff 11/5/03; amd 03-397 §1 eff 11/5/03]

870.170 Impact on flood insurance

When approval is given to construct a building with the floor below the base flood elevation the applicant shall be given a written notice that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

[Adopted 85-161 eff 5/1/85; amd 03-397 §1 eff 11/5/03]

870.180 Subdivision and partition proposals

(A) All subdivision and partition proposals shall be consistent with the need to minimize flood damage.

(B) All subdivision and partition proposals shall have the public utilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

(C) All subdivision and partition proposals shall have adequate drainage provided to reduce exposure to flood damage.

(D) The applicant shall provide base flood elevation data (if unknown) for all subdivisions.

[Adopted 03-397 03-397 eff 11/5/03; amd 03-397 §1 eff 11/5/03]

III. ENFORCEMENT

870.900 Prohibited activities

(A) No person shall engage in or procure, aid or abet any other person to engage in any conduct or activity for which a development permit is required without first having obtained such permit.

(B) No person shall construct or erect any flood barrier that will divert flood waters or may increase flood hazards in other areas.

(C) No person shall make alterations of a natural floodplain, channel, or any natural protective barrier that will increase flood hazards.

[Adopted 03-397 03-397 eff 11/5/03]

870.930 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 as a result of failure of manmade structures and/or natural causes. This chapter does not imply that the land outside the area of special flood hazards, or uses permitted within such area, will be free from flooding or flood damages. This chapter shall not create liability on the part of Linn County, any officer or employee thereof, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

[Adopted 03-397 03-397 eff 11/5/03]

870.950 Penalties for noncompliance

Any person violating the terms of this chapter by failure to comply with any of its requirements commits a violation of this code and is subject to enforcement under the terms of LCC 240 (Linn County Enforcement Code).

[Adopted 85-161 eff 5/1/85; renumbered from 940.335]

Statutory References and Other Authorities:

44 CFR 60.3(b)(3); ORS 203; Urban Growth Boundary Agreements; Federal Emergency Management Act (FEMA); FEMA's *Manufactured Home Installation in Flood Hazard Areas*; National Register of Historic Resources; Linn County Register of Historic Resources; Federal Emergency Management Agency (FEMA) *Flood Insurance Study for Linn County, Oregon and Incorporated Areas* dated September 29, 2010, as revised December 8, 2016; and LCC Chapters 850

(Fill & Excavation Code) and 903 (Natural Resources Element Code).

Legislative History of Chapter 870 (formerly codified at Chapter 9.40):

Adopted by 80-461 eff 3/30/81

Adopted by 85-161 eff 5/1/85; repealing 80-461

Amendments to 85-161

- #1 86-540 eff 9/17/86
 - #2 87-249 eff 5/27/87
 - #3 87-442 eff 9/9/87
 - #4 88-130 eff 7/5/88
 - #5 90-444 eff 6/27/90
 - #6 95-177 eff 5/10/95 (renumbering)
 - #7 03-397 eff 11/5/03
 - #8 10-311 eff 9/22/10
 - #9 16-369 eff 11/22/16
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