

ORDINANCE NO. 12-04

AN ORDINANCE TO AMEND AND RE-ENACT THE  
CODE OF ORDINANCES FOR THE CITY OF DENHAM SPRINGS,  
CHAPTER 50, FLOODS, ARTICLE II, FLOOD DAMAGE PREVENTION,  
BY AMENDING SECTIONS 50-51, 50-52, 50-53 AND 50-54  
RELATIVE TO FLOOD HAZARD REDUCTION  
AND TO PROVIDE FOR RELATED MATTERS.

Be it ordained by the City Council of the City of Denham Springs, in legal session convened, that Chapter 50, Sections 50-51, 50-52, 50-53 and 50-54, of the Code of Ordinances for the City of Denham Springs, Louisiana are hereby amended and re-enacted as follows:

ARTICLE I.

**Sec. 50-51. – General Standards.**

In all areas of special flood hazards the following provisions are required:

- (1) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
- (4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharges from the system into floodwaters; and
- (7) Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

**Sec. 50-52. - Specific standards.**

In all areas of special flood hazards where base flood elevation data has been provided as set forth in section 50-31, section 50-37(8), or section 50-54(3), the following provisions are required:

- (1) *Residential construction.* New construction or substantial improvements for any residential structure shall have the lowest floor, including basement, elevated to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the building official that the standard of this subsection, as proposed in section 50-38(1)(a) is satisfied.
- (2) *Nonresidential construction.* New construction or substantial improvements for any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation or, together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall submit a certification to the building official that the standards of this subsection as proposed in section 50-38(1)(c) are satisfied. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection, and a record of such certification which includes the specific elevation, in relation to mean sea level, to which such structures are flood proofed shall be maintained by the Floodplain Administrator.
- (3) *Enclosures.* New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding 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 meet or exceed the following minimum criteria:

- a. A minimum of two openings on separate walls 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.
- b. The bottom of all openings shall be no higher than one foot above grade.
- c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(4) *Manufactured homes.*

a. Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to the ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

b. Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (1) outside of a manufactured home park or subdivision, (2) in a new manufactured home park or subdivision, (3) in an expansion to an existing manufactured home park or subdivision, or (4) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the bottom of the longitudinal structural I beam of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

c. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of subsection 4(b) of this section be elevated so that either:

1. The bottom of the longitudinal structural I beam of the manufactured home is at or above the base flood elevation, or

The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

d. Any additions to the manufactured home shall be similarly anchored.

e. For new manufactured home parks and subdivisions; for expansions to existing manufactured home parks and subdivisions; for existing manufactured home parks and subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvements has commenced; and for manufactured homes not placed in a manufactured home park or subdivision require:

1. Stands or lots are elevated on compacted fill or on piles so that the bottom of the longitudinal structural I beam of the manufactured home is at or above the Base Flood Elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the building official that the standard of this subsection complies with subsection (1) of this section.
2. Adequate surface drainage and access for a hauler are provided.
3. In the instance of elevation on piles: (i) lots are large enough to permit steps, (ii) piling foundations are placed in stable soil no more than ten feet apart, and (iii) reinforcement is provided for pilings more than six feet above the ground level.

(5) *Recreational vehicles.* Require that recreational vehicles placed on site with Zones A1-30, AH, and AE on the community's FIRM either (1) be on the site for fewer than 180 consecutive days, (2) be fully licensed and ready for highway use, or (3) meet the permit requirements of section 50-38(1), and the elevation and anchoring requirements for "manufactured homes" in paragraph (4) of this section. A recreational vehicle is ready for highway use if it is 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.

(6) *Floodways.* Located within areas of special flood hazard established in section 50-31 are areas designed as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

a. Encroachments are prohibited, including fill, new construction, substantial improvements and other developments within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

b. If 6(a) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this section and sections 50-51,

50-52, 50-53 and 50-54.

c. Under the provisions of 44 CFR Chapter 1, section 65.12, of the National Flood Insurance Program Regulations, a community may permit encroachments with the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all of the provisions required by Section 65.12.

#### **Sec. 50-53. - Standards for areas of shallow flooding; AO & AH zones.**

Located within the areas of special flood hazard established in section 50-31, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

- (1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to or above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least 1 foot if no depth number is specified).
- (2) All new construction and substantial improvements of nonresidential structures shall:
  - a. Have the lowest floor, including basement, elevated above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least 1 foot if no depth number is specified), or
  - b. Together with attendant utility and sanitary facilities be designed so that below the base specified flood depth in an AO Zone, or below the Base Flood Elevation in an AH Zone, level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.
- (3) A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this section, as proposed in section 50-38 are satisfied.
- (4) Require within zones AH and AO adequate drainage paths around structures on slopes, to guide flood waters around and away from the proposed structures.

#### **Sec. 50-54. - Standards for subdivision proposals.**

- (a) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 50-26, 50-26, and 50-28
- (b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Floodplain Development Permit requirements of section 50-32, section 50-38, and the provisions of sections 50-51, 50-52, and 50-53.
- (c) Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to section 50-31 or section 50-37(8).
- (d) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- (e) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas electrical, and water systems located and constructed to minimize or eliminate flood damage.

### **ARTICLE II.**

Be it further ordained that if any provision of this Ordinance is held invalid, such invalidity shall not effect other provisions, items, or applications of this Ordinance, which can be given effect without the invalid provisions, items or application, and to this end the provisions of this Ordinance are hereby declared severable.

### **ARTICLE III.**

Be it further ordained that all Ordinances or parts of Ordinances in conflict with this Ordinance be and the same are hereby repealed.

ARTICLE IV.

Be it further ordained that the clerk be and she is hereby instructed, authorized and directed to have said ordinance published one time in the official journal of the City of Denham Springs, and upon such publication the ordinance shall become effective.

Said Ordinance having been introduced on the 14<sup>th</sup> day of February, 2012 by Perkins, seconded by Davis, notice of Public Hearing having been published on the 19<sup>th</sup> day of February, 2012, said Public Hearing having been held on the 27<sup>th</sup> day of February, 2012, title having been read and Ordinance considered, on motion by Perkins, seconded by Davis to adopt the Ordinance, a record vote was taken and the following result was had:

YEAS:           Davis, Fugler, Lamm-Williams, Perkins, Wascom  
NAYS:           None  
ABSENT:       None

WHEREUPON, the Mayor declared the above Ordinance duly adopted on the 27<sup>th</sup> day of February, 2012.

---

JAMES E. DURBIN, MAYOR

---

JOAN LEBLANC, CITY CLERK