

CHAPTER 32

FLOOD PLAINS CONTROL

32.01 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:

- (A) To protect human life and health;
- (B) To minimize expenditure of public money for costly flood control projects;
- (C) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (D) To minimize prolonged business interruptions;
- (E) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- (F) To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (G) To insure that potential buyers are notified that property is in an area of special flood hazard; and,
- (H) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

32.02 METHODS OF REDUCING FLOOD LOSSES.

In order to accomplish its purpose, this ordinance includes methods and provisions for:

- (A) 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;
- (B) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (C) Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;

- (D) Controlling filling, grading, dredging, and other development which may increase flood damage; and,
- (E) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

32.03 DEFINITIONS.

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

APPEAL:

means a request for a review of the Building Official's interpretation of any provision of this ordinance or a request for a variance.

AREA OF SHALLOW FLOODING:

means a designated AO or VO 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.

AREA OF SPECIAL FLOOD HAZARD:

means the land in the flood plain within a community subject to a one percent (1%) or greater chance of flooding in any given year.

BASE FLOOD:

means the flood having a one percent (1%) chance of being equalled or exceeded in any given year.

DEVELOPMENT:

means 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 area of special flood hazard.

EXISTING MANUFACTURED HOME PARK OR MANUFACTURED HOME SUBDIVISION:

means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lot on which the manufactured home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of this ordinance.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR MANUFACTURED HOME SUBDIVISION:

means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).

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 or tidal waters and/or
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.
- (3) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by the waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such a lash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding, as defined in 1 and 2 of this definition.

EFFECTIVE DATE OF AMENDMENT: September 13, 2007.

FLOOD INSURANCE RATE MAP (FIRM):

means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY:

means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Map, and the water surfaces elevation of the base

flood.

FLOODPLAIN:

means any land area susceptible to being inundated by water from any source (see definition of flooding).

EFFECTIVE DATE OF AMENDMENT: September 13, 2007.

FLOODPLAIN MANAGEMENT:

means the operation of an overall program of corrective and preventative measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.

EFFECTIVE DATE OF AMENDMENT: September 13, 2007.

FLOODPLAIN MANAGEMENT REGULATIONS:

means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance), and other applications of police power that provide standards for the purpose of flood damage prevention and reduction.

EFFECTIVE DATE OF AMENDMENT: September 13, 2007.

FLOODWAY:

means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood.

HABITABLE FLOOR:

means 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".

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 attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

NEW CONSTRUCTION:

means structures for which the "start of construction" commenced on or after the effective date of this ordinance.

NEW MANUFACTURED HOME PARK OR MANUFACTURED HOME SUBDIVISION:

means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lot (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed on or after the effective date of this ordinance.

RECREATION VEHICLE:

means a vehicle which is (i) built on a single chassis; (ii) 400 square feet or less when measured at the largest horizontal projections; (iii) designed to be self-propelled or permanently towable by a light duty truck; and (iv) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

START OF CONSTRUCTION:

means the first placement of permanent construction of a structure (other than a manufactured home) on a site, such as the pouring of slabs or footings or any work beyond the stage of excavation. 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, footing, piers or foundations 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 as part of the main structure. For a structure (other than a manufactured home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For manufactured homes not within a manufactured home park or manufactured home subdivision, "start of construction" means the affixing of the manufactured home to its permanent site. For manufactured homes within manufactured home parks or manufactured home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the manufactured home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

STRUCTURE:

means a walled and roofed building, liquid or gas storage facility, or manufactured home that is principally above ground.

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.

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.

32.04 GENERAL PROVISIONS

(A) Lands to which this ordinance applies:

This ordinance shall apply to all areas of special flood hazards within the jurisdiction of the City of Lapeer.

(B) Designation of Regulated Flood Prone Hazard Areas:

The Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) Entitled Flood Insurance Study Lapeer County, Michigan and dated September 19,

2007 and the Flood Insurance Rate Maps (FIRMS) panel numbers of 26087C: 0254E, 0258E, 0261E, 0262E, 0263E, 0264E, 0266E, & 0268E and dated September 19, 2007 as pertains to the City of Lapeer, are adopted by reference for the purpose of administration of the Michigan Construction Code, and declared to be a part of Section 1612.3 of the Michigan Building Code, and to provide the content of the “Flood Hazards” section of Table R301.2(1) of the Michigan Residential Code.

EFFECTIVE DATE OF AMENDMENT: September 13, 2007.

(C) Code Appendix Enforced:

Pursuant to the provision of the state construction code, in accordance with Section 8b(6) of Act 230, of the Public Acts of 1972, as amended, Appendix G of the Michigan Building Code shall be enforced by the enforcing agency within the City of Lapeer. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance.

EFFECTIVE DATE OF AMENDMENT: September 13, 2007.

(D) Abrogation and greater restrictions:

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

(E) 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. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Lapeer, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result in reliance on this ordinance or any administrative decision lawfully made hereunder.

32.05 ADMINISTRATION

(A) Establishment of building permit:

A building permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 32.04 (B). Application for a building permit shall be made on forms furnished by the City of Lapeer and shall include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:

1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
2. Elevation in relation to mean sea level to which any structure has been floodproofed;
3. Certification by a registered professional engineer or architect that the floodproofing methods for any non-residential structure meet the floodproofing criteria in Section 30.07 B (2); and,
4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(B) Agency Designated:

Pursuant to the provisions of the state construction code, in accordance with Section 8b(6) of Act 230, of the Public Acts of 1972, as amended, the Building Official of the City of Lapeer is hereby designated as the enforcing agency to discharge the responsibility of the City of Lapeer under Act 230, of the Public Acts of 1972, as amended, State of Michigan. The City of Lapeer assumes responsibility for the administration and enforcement of said Act through out the corporate limits of the community adopting this ordinance.

EFFECTIVE DATE OF AMENDMENT: September 13, 2007.

(C) Duties and responsibilities of the Building Official:

Duties of the Building Official shall include, but not be limited to:

1. Permit Review
 - a. Review of 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 governmental agencies from which prior approval is required.
- c.** Review all building permits to determine if the proposed development adversely affects carrying capacity of the area of special flood hazard. For purposes of this ordinance, "adversely affects" means 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.

2. Information to be obtained and maintained:

- a.** Obtain and record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures.
- b.** For all new or substantially improved flood-proofed structures:
 - (i)** verify and record the actual elevation (in relation to mean sea level), and
 - (ii)** maintain the floodproofing certifications required in Section 32.05 a (3).
- c.** Maintain for public inspection all records pertaining to provisions of this ordinance.

3. Alteration of Watercourses

- a.** Notify adjacent communities including the County Drain Commission and the Department of Natural Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
- b.** Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

4. Interpretation of FIRM Boundaries

Make interpretations where needed, as to the exact location of boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 32.06.

(D) Schedule of fees.

The Schedule of fees shall be the same as those listed in Chapter 8, "Building Code" of the general ordinances of the City of Lapeer.

32.06 VARIANCE PROCEDURE

(A) Appeal Board

1. The Board of Survey as established by the City Commission, City of Lapeer, shall hear and decide appeals and requests for variances from the requirements of this ordinance.
2. The Board of Survey shall hear and decide appeals when it is alleged there is an error in any requirements, decision, or determination made by the City of Lapeer's Building Official in the enforcement or administration of this ordinance.
3. Those aggrieved by the decision of the Board of Survey, may appeal such decision to the Circuit Court, as provided by law.
4. In passing upon appeals and request for variance, the Board of Survey shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
 - (i) the danger that materials may be swept onto other lands that may injure persons and or properties;
 - (ii) the danger to life and property due to flooding or erosion damage;
 - (iii) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

- (iv) The importance of the services provided by the proposed facility to the community;
- (v) the necessity to the facility of a waterfront location, where applicable;
- (vi) the availability of alternative locations, for the proposed use that are less subject to flooding or erosion damage;
- (vii) the compatibility of the proposed use with existing and anticipated development;
- (viii) the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
- (ix) the safety of access to the property in times of flood for ordinary and emergency vehicles;
- (x) 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,
- (xi) the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, including but not limited to, such as sewer, gas, electrical, and water systems, and streets and bridges.

5. The Building Official shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.
6. The applicant will be informed in writing that if the variance is for the purposes of lowering the flood protection level of a building, the cost of flood insurance may be as high as \$25 per \$100 of insurance.

(B) Conditions for Variances:

1. Variances shall not be issued within any designated floodway if any harmful increase in flood levels during the base flood discharge would result.
2. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

3. Variances shall only be issued upon:
 - (i) a showing of good and sufficient causes.
 - (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - (iii) A determination that the granting of a variance will not result in harmful increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 32.06A(4), or conflict with existing local laws or ordinances.

32.07 PROVISIONS FOR FLOOD HAZARD REDUCTION

- (A) General standards. In all areas of special flood hazards the following standards are required:
 1. Anchoring
 - a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
 - b. All manufactured homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:
 - (i) over-the-top ties be provided at each of the four corners of a manufactured home. One additional tie shall be provided at an intermediate location for manufactured homes under fifty feet long. Two additional ties shall be provided at intermediate locations for manufactured homes over fifty feet long.
 - (ii) frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with manufactured homes less than fifty feet long requiring four additional ties per side;
 - (iii) all components of the anchoring system be capable of carrying a force of 4,800 pounds; and,

- (iv) any additions to the manufactured home be similarly anchored.

2. Construction Materials and Methods

- a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

3. Utilities

- a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the system into flood waters; and,
- c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

4. Subdivision Proposals

- a. All subdivision proposals shall be consistent with the need to minimize flood damage;
- b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and,
- d. Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least 50 lots or 5 acres (whichever is less).

(B) Specified Standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 32.04B, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOR HAZARD, the following provisions are required:

1. Residential Construction:

New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

2. 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 the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall;

- a.** Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- b.** Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,
- c.** Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set forth in Section 32.05 C.

3. A residential or nonresidential building may be elevated in accordance with the following:

- (i)** The building or improvements shall be elevated on crawl space, walls, stilts, piles, or other foundation provided:
 - (a)** the walls have permanent openings no more than one foot above grade; and
 - (b)** The walls and floor are not subject to damage by hydrostatic pressures associated with the base flood.

- (ii)** The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice, and floating debris.
- (iii)** All areas below the Flood Plain Elevation (FPE) shall be constructed of materials resistant to flood damage. The lowest floor (including basement) and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the the FPE. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the FPE.

4. Manufactured Homes

- a.** Manufactured homes shall be anchored in accordance with Section 32.07 A (1) (b)
- b.** For new manufactured home parks and manufactured home subdivisions; for expansions to existing manufactured home parks and manufactured home subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds 50 percent of value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced; and for manufactured homes not placed in a manufactured home park or manufactured home subdivision, require that:

 - (i)** Stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the manufactured home will be at or above the base level;
 - (ii)** adequate surface drainage and access for a hauler are provided; and,
 - (iii)** in the instance of elevation of pilings, that:

 - lots are large enough to permit steps,
 - piling foundations are placed in stable soil no more than ten feet apart, and

---reinforcement is provided for pilings more than six feet above the ground level.

- c. No manufactured home shall be placed in a floodway, except in an existing manufactured home park or existing manufactured home subdivision.

5. Floodways.

Located within areas of special flood hazard established in Section 32.04B 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:

- 1. To 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 harmful increase in flood levels during the occurrence of the base flood discharge.
- b. If Section 32.07 B (4) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section **32.07, PROVISIONS FOR FLOOD HAZARD REDUCTION.**
- c. To prohibit the placement of any manufactured homes, except in an existing manufactured home park or existing manufactured home subdivision.

32.08 VIOLATION AND PENALTIES

Any person, persons, firm, firms, corporation, or corporations, or anyone acting in behalf of such person, persons, firm, firms, corporation, or corporations, violating any of the provisions of this ordinance shall upon conviction thereof, be subject to a fine of not more than Five Hundred (\$500.00) Dollars and the cost of prosecution or imprisonment for a period of Ninety (90) days, or both such fine and imprisonment in the discretion of the court. Each day that a violation is permitted to exist, shall constitute a separate violation.

32.09 SEVERABILITY

If any section, paragraph, clause, phrase, or part of this ordinance is for any reason held invalid by any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions of this ordinance; and the application of those provisions to any person or circumstances shall not be affected thereby.

32.10 EFFECTIVE DATE

This ordinance shall become effective on JANUARY 3, 1992.