

## CHAPTER 158 - FLOOD DAMAGE PREVENTION

### 158.01 Definitions.

For the purpose of this Ordinance, the following definitions are adopted.

- a. Building - see "structure."
- b. Development - any man-made change to improved or unimproved real estate including but not limited to:
  - (1) construction, reconstruction, or placement of a building or any addition to a building valued at more than \$1,000.
  - (2) installing a manufactured home on a site, preparing a site for a manufactured home or installing a travel trailer on a site for more than 180 days.
  - (3) installing utilities, erection of walls and fences, construction of roads, or similar projects;
  - (4) construction of flood control structures such as levees, dikes, channel improvements, etc.;
  - (5) mining, dredging, filling, grading, excavation, or drilling operations;
  - (6) construction and/or reconstruction of bridges or culverts;
  - (7) storage of material; or
  - (8) any other activity that might change the direction, height, or velocity of flood or surface waters.

"Development" does not include activities such as the maintenance of existing buildings and facilities such as painting, re-roofing; resurfacing roads; or gardening, plowing, and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent buildings.

- c. Existing 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 before the effective date of the floodplain management regulations adopted by a community.
- d. Expansion to an existing manufactured home park or subdivision - means the preparation of additional sites by the construction of facilities for serving the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).
- e. FEMA - means Federal Emergency Management Agency
- f. FHBM - means Flood Hazard Boundary Map.

- g. FIRM - means Flood Insurance Rate Map.
- h. Flood - a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow, the unusual and rapid accumulation, or the runoff of surface waters from any source.
- i. Floodplain - the channel proper and the areas adjoining any wetland, lake or watercourse which have been or hereafter may be covered by the regulatory flood. The flood plain includes both the floodway and the floodway fringe districts.
- j. Flood Protection Grade or the "FPG" - means the elevation of the regulatory flood plus two feet at any given location in the SFHA.
- k. Floodway - means the channel of a river or stream and those portions of the flood plains adjoining the channel which are reasonably required to efficiently carry and discharge the peak flood flow of the regulatory flood of any river or stream.
- l. Floodway fringe - means those portions of the flood hazard areas lying outside the floodway.
- m. Letter of Map Amendment (LOMA) - an amendment to the currently effective FEMA map that establishes that a property is not located in a Special Flood Hazard Area (SFHA). a LOMA is only issued by FEMA.
- n. Letter of Map Revision (LOMR) - An official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.
- o. Lowest Floor - means the lowest of the following:
  - (1) the basement floor;
  - (2) the garage floor, if the garage is the lowest level of the building;
  - (3) the first floor of buildings elevated on pilings or constructed on a crawl space with permanent openings; or
  - (4) the floor level of any enclosure below an elevated building where the walls of the enclosure provide any resistance to the flow of flood waters unless:
    - (a) the walls are designed to automatically equalize the hydrostatic flood forces on the walls by allowing for the entry and exit of flood waters, through providing a minimum of two openings (in addition to doorways and windows) having a total area of one (1) square foot for every two (2) square feet of enclosed floor area subject to flooding. The bottom of all such openings shall be no higher than one (12) foot above the enclosed area's floor.
    - (b) such enclosed space shall be usable for nonresidential purposes and building access.
- p. 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."

- q. 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 home 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 floodplain management regulations adopted by a community.
- r. Recreation vehicle - means a vehicle which is (1) built on a single chassis; (2) 400 square feet or less when measured at the largest horizontal projections; (3) designed to be self-propelled or permanently towable by a light duty truck; and (4) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational camping, travel, or seasonal use.
- s. Regulatory Flood - means the flood having one percent probability of being equal exceeded in any given year, as calculated by a method and procedure which is acceptable to and approved by the Indiana Natural Resources Commission. The regulatory flood elevation of any location is as defined in Section 5 of this ordinance. The "Regulatory Flood" is also known by the term "Base Flood."
- t. SFHA or Special Flood Hazard Area - means those lands within the jurisdiction of the Town that are subject to inundation by the regulatory flood. The SFHAs of the Town are generally identified as such on the Flood Insurance Rate Map of the Town prepared by the Federal Emergency Management Agency and dated October 15, 1981. The SFHAs of those parts of unincorporated Marshall County that are within the extraterritorial jurisdiction of the Town or that may be annexed into the Town are generally identified as such on the Flood Insurance Rate Map prepared for Marshall County by the Federal Emergency Management Agency and dated January 5, 1989.
- u. Structure - means a structure that is principally above ground and is enclosed by walls and a roof. The term includes a gas or liquid storage tank, a manufactured home, or a prefabricated building. The term also includes recreational vehicles and travel trailers to be installed on a site for more than 180 days.
- v. Substantial Improvements means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not include improvements of structures to correct existing violations of state or local health, sanitary or safety code requirements or any alteration of a "historical structure", provided that the alteration will not preclude the structures continued designation as a "historic structure."

#### 158.02 Duties of the Administrator.

The Building commissioner (a/k/a Building Official) shall implement this ordinance and hereafter be referred to as the Zoning Administrator. The zoning Administrator for the Town of Bremen is appointed to review all development and subdivision proposals to insure compliance with this ordinance, including but not limited to the following duties:

- a. Ensure that all development activities within the SFHAs of the jurisdiction of the Town meet the requirements of this Ordinance.
- b. Provide information and assistance to citizens upon request about permit procedures and floodplain construction techniques.
- c. Ensure that construction authorization has been granted by the Indiana Natural Resources Commission for all development projects subject to Section 7 of this ordinance, and maintain a record of such authorization (either copy of actual permit or letter or recommendation).
- d. Maintain a record of the "as-built" elevation of the lowest floor (including abasement) of all new and/or substantially improved building constructed in the SFHA.
- e. Maintain a record of the engineer's certificate and the "as build" floodproofed elevation of all buildings subject to Section 8 of this Ordinance.
- f. Cooperate with state and federal floodplain management agencies to improve base flood and floodway date and to improve the administration of this ordinance. Submit reports as required for the National Flood Insurance Program.
- g. Maintain for public inspection and furnish upon request regulatory flood data, SFHA maps, copies of DNR permits and letters of recommendation, federal permit documents, and "as built" elevation and floodproofing data for all buildings constructed subject to this ordinance.

158.03 Regulatory Flood Elevation.

This ordinance's protection standard is the regulatory flood. The best available regulatory flood data is listed below. Whenever a party disagrees with the best available data, the party submitting the detailed engineering study needs to replace existing data with better data and submit it to the Department of Natural Resources for review approval.

- a. The regulatory flood elevation for the SFHAs of Yellow River shall be a delineated on the 100 year flood profiles in the Flood Insurance Study of the Town prepared by the Federal Emergency Management Agency and dated October 15, 1981, and the corresponding FBFM dated October 15, 1981 prepared by the Federal Emergency Management Agency.
- b. The Regulatory flood elevation for each SFHA delineated as an "AH Zone" or "AO Zone" shall be that elevation (or depth) delineated on the Flood Insurance Rate Map of the Town.
- c. The regulatory Flood Elevation for each of the remaining SFHAs delineated as an "A Zone" on the Flood Insurance Rate Map of the Town shall be according to the best data available as provided by the Department of Natural Resources.
- d. The regulatory flood elevation for the SFHAs of those parts of unincorporated Marshall County that are within the extraterritorial jurisdiction of the Town or that may be annexed into the Town shall be as delineated on the 100 year flood profiles in the Flood Insurance Study of Marshall County dated January 5, 1989, and the corresponding FIRM dated January 5, 1989 prepared by the Federal

Emergency Management Agency.

- e. If the SFHA is delineated as "AH Zone or AO Zone", the elevation (or depth) will be delineated as "Zone A" on the County Flood Insurance Rate Map. If the SFHA is delineated as "Zone A: on the County Flood Insurance Rate Map, the regulatory flood elevation shall be according to the best data available as provided by the Department of Natural Resources.

158.04 Improvement Location Permit

No person, firm, corporation, or governmental body not exempted by state law shall commence any "development" in the SFHA without first obtaining an Improvement Location Permit from the Building Commissioner. The Building Commissioner shall not issue an Improvement Location Permit if the proposed "development" does not meet the requirements of this ordinance.

- a. The application for Improvement Location Permit shall be accompanied by the following.
  - (1) A description of the proposed development.
  - (2) Location of the proposed development - sufficient to accurately locate property and structure in relation to existing roads and streams.
  - (3) A legal description of the property site.
  - (4) A site development plan showing existing and proposed structure locations and existing and proposed land grades.
  - (5) Elevation of lowest floor (including basement) of all proposed structures. Elevation should be in National Geodetic Vertical Datum of 1929 (NCVD).
- b. Upon receipt of an application for an Improvement Location Permit, the Building Official shall determine if the site is located within an identified floodway or within the flood plain where the limits of the floodway have not yet been determined.
  - (1) If the site is in an identified floodway the Building Official shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Department of Natural Resources and apply for a permit for construction in a floodway.

Under the provisions of IC 13-2-22 a permit from the Natural Resources Commissions is required prior to the issuance of a local building permit for any excavation, deposit, construction or obstruction activity located in the floodway. This includes land preparation activities such as filling, grading, clearing and paving, etc., undertaken before the actual start of construction of the building.

No action shall be taken by the Building Official until a permit has been issued by the Natural Resources Commission granting approval for construction in the floodway. Once a permit has been

issued by the Natural Resources Commission, the Building Official may issued the local Improvement Location Permit, provided the provisions contained in Sections 7 and 8 of this ordinance have been met. The Improvement Location Permit cannot be less restrictive than the permit issued by the Natural Resources Commission.

- (2) If the site is located in an identified floodway fringe, then the Building Official may issue the local Improvement Location Permit provided the provisions contained in Section 7 and 8 of this ordinance have been met. The key provision is that the lowest floor of any new or substantially improved structure shall be at or above the Flood Protection Grade.
- (3) If the site is in an identified floodplain where the limits of the floodway and floodway fringe have not yet been determined (shown on Zone A on the Flood Insurance Rate Map), and the drainage area upstream of the site is greater than one square mile, the Building Official shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Department of Natural Resources for review and comment.

No action shall be taken by the Building Official until either a permit for construction in the floodway or a letter of recommendation citing the 100 year flood elevation and the recommended Flood Protection Grade has been received from the Department of Natural Resources.

Once the Building Official has received the proper permit or letter of recommendation approving the proposed development, an Improvement Location Permit may be issued provided the conditions of the ILP are not less restrictive than the conditions received from Natural Resources and the provisions contained in Section 7 and 8 of the Ordinance have been met.

#### 158.05 Preventing Increased Damages

No development in the SFHA shall create a damaging or potentially damaging increase in flood heights or velocity or threat to public health and safety.

- a. Within the floodway identified on the Flood Boundary and Floodway Map the Flood Insurance Rate Map, the following standards shall apply:
  - (1) No development shall be allowed which acting along or in combination with existing or future similar works, will cause any increase in the elevation of the regulatory flood; and
  - (2) For all projects involving channel modifications or fill (including levees) the Town shall submit a request to the Federal Emergency Management Agency to revise the regulatory flood date.
- b. With all SFHAs identified as A Zones (no 100 year flood elevation and/or floodway/floodway fringe delineation has been provided) the following standard shall apply:

The total cumulative effect of the proposed development, when combined with

all other existing and anticipated development, will not increase the regulatory flood elevation more than one-tenth (0.1) of one foot and will not increase flood damages or potential flood damages.

c. Public Health Standards in all SFHAs

- (1) No development in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous or toxic materials below the Flood Protection Grade, unless such materials are stored in a storage tank or floodproofed building constructed according to the requirements of Section 8 of the ordinance.
- (2) New and replacement sanitary sew lines and on-site waste disposal systems may be permitted providing all manholes or other above ground openings located below the FPG are watertight.

158.06 Protection Buildings

In addition to the damage prevention requirements of Section 7, all buildings to be located in the SFHA shall be protected from flood damage below the FPG.

a. This building protection requirement applies to the following situations:

- (1) construction or placement of any new building valued at more than \$1,000;
- (2) structural alterations made to an existing building that increase the market value of the building by more than 50% (excluding the value of the land). Structural alterations to an existing building that do not increase the market value of the building by more than 50% may be made on a one time only basis without protecting the alteration below the FPG;
- (3) any subsequent alterations;
- (4) reconstruction or repairs made to a damaged building that are valued at or more than 50% of the market value of the building (excluding the value of the land) before damage occurred;
- (5) installing a manufactured home on a new site or a new manufactured home on an existing site. This ordinance does not apply to returning the existing manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage; and
- (6) installing a travel trailer on a site for more than 180 days.

b. This building protection requirement may be met by one of the following methods. The Building Official shall maintain a record of compliance with these building protection standards as required in Section 4 of this ordinance.

- (1) A residential or non residential building may be constructed on a permanent land fill in accordance with the following:
  - (a) The fill shall be placed in layers no greater than one (1) foot deep

before compacting to 95% of the maximum density obtainable with the Standard Proctor Test method.

- (b) The fill should extend at least ten (10) feet beyond the foundation to the building before sloping below the FPG.
- (c) The fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, bulkheading. If vegetative cover is used, the slopes shall be no steeper than three (3) horizontal to one (1) vertical.
- (d) The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.
- (e) The lowest floor (see definition of lowest floor in Section 3. Definitions) shall be at or above the FPG.

(2) A residential or nonresidential building may be elevated in accordance with the following:

- (a) The building or improvements shall be elevated on posts, piers, columns, extended walls, or other types of similar foundation provided:

[1] Walls of any enclosure below the elevated floor shall be designed to automatically equalize hydrostatic flood forces on the walls by allowing for the entry and exit of flood waters through providing a minimum of two openings (in addition to doorways and windows) having a total area of one(1) square for every two(2) square feet of enclosed floor area subject to flooding. The bottom of all such opening shall be no higher than one (1) foot above the enclosed area's floor.

[2] Any enclosure below the elevated floor is used for non-residential purposes and building access.

- (b) 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.
- (c) All areas below the FPG 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 FPG. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the FPG.

(3) Manufactured homes and travel trailers (also called recreational vehicles) to be installed or substantially improved on a site for more than 180 days must meet one of the following anchoring requirements:

- (a) The manufactured home shall be elevated on a permanent foundation such that the lowest floor shall be at or above



FPG and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. This requirement applies to all manufactured home to be placed on a site:

- [1] outside 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.

This requirement applies to all manufactured homes to be placed on a site in an existing manufactured home park or subdivision that has not been substantially damaged by flood.

- (b) he manufactured home shall be elevated so that the lowest floor of the manufactured home chassis is supported by reinforced piers or other foundation elements 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.
- (4) Recreation vehicles placed on a site shall either;
- (a) be on site for less than 180 consecutive days;
  - (b) be fully licensed and ready for highway use (defined as being 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 requirements for "manufactured homes" in paragraph (3) of this section.
- (5) A non-residential building may be floodproofed to the FPG (in lieu of elevating) if done in accordance with the following:
- (a) a Registered Professional Engineer shall certify that the building has been designed so that below the FPG, the structure and attendant utility facilities are watertight and capable of resisting the effects of the regulatory flood. The Building design shall take into account flood velocities, duration, rate of rise, hydrostatic pressures, and impacts from debris or ice.
  - (b) Floodproofing measures shall be operable without human intervention and without an outside source of electricity.

158.07 Other Development Requirements.

- a. The Plan Commission shall review all proposed subdivisions to determine whether the subdivision lies in a flood hazard area as defined elsewhere by

ordinance. If the Plan Commission finds the subdivision to be so located, the Plan Commission shall forward plans and materials to the Indiana Department of Natural Resources for review and comment. The Plan Commission shall require appropriate changes and modifications in order to assure that:

- (1) it is consistent with the need to minimize flood damages;
  - (2) all public utilities; and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;
  - (3) adequate drainage is provided so as to reduce exposure to flood hazards;
  - (4) onsite waste disposal systems, if provided, will be so located and designed to avoid impairment of them or contamination from them during the occurrence of the regulator flood.
- b. Developers shall record the 100 year flood elevation on all subdivision plats containing lands identified elsewhere by ordinance as within a flood hazard area prior to submitting the plats for approval by the Plan Commission.
- c. All owners of manufactured home parks or subdivision located within the SFHA identified as Zone A on the community's FHMB or FIRM develop an evacuation plan for those lots located in Zone A and file it with the local Plan Commission and have it filed and approved by the appropriate community emergency management authorities.

158.08 Variances

- a. The Board of Zoning Appeals may consider issuing a variance to the terms and provisions of this ordinance provided the applicant demonstrates that:
- (1) there exists a good and sufficient cause for the requested variance;
  - (2) The strict application of the terms of this ordinance will constitute an exceptional hardship to the applicant, and
  - (3) The granting of the requested variance will not increase flood heights, create additional threats to public safety, cause additional public expense, create nuisances, cause fraud or victimization of the public, or conflict with existing laws or ordinances.
- b. The Board of Zoning Appeals may issue a variance to the terms and provisions of this ordinance subject to the following standards and conditions:
- (1) No variance or exception for a residential use within a floodway subject to Section 7 (a) or (b) may be granted.
  - (2) Any variance or exception granted in a floodway subject to Section 7 (a) or (b) will require a permit from Natural Resources.
  - (3) Variances or exceptions to the Building Protection Standards of Section 8 may be granted only when a new structure is to be located on a lot or one-half acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the

flood protection grade.

- (4) Variance or exception may be granted for the reconstruction or restoration of any structure individually listed on the Register of Historic Places or the Indiana State Survey or Historic Architectural, Archaeological and Cultural Sites, Structures, Districts and Objects.;
- (5) All variances shall give the minimum relief necessary and be such that the maximum practical flood protection will be given to the proposed construction; and
- (6) The Board of Zoning Appeals shall issue a written notice to the recipient of a variance or exception that the proposed construction will be subject to increased risks to life and property and could require payment of excessive flood insurance premiums.

158.09 Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable or regulatory purposes and is based on available information derived from engineering and scientific methods of study. Larger floods can and will occur on rare occasions. Therefore, this ordinance does not create any liability on the part of the community, Natural Resources, or the State of Indiana, for any flood damage that results from reliance of this ordinance or any administrative decision made lawfully thereunder.

158.10 Violations

Failure to obtain an Improvement Location Permit in the SFHA or failure to comply with the requirements of a permit or conditions of a variance shall be deemed to be a violation of this ordinance. All violations shall be considered a common nuisance and be treated as such in accordance with the provisions of the Zoning Code for the Town of Bremen. All violations shall be punishable by a Class "B" Infraction.

- a. A separate offense shall be deemed to occur for each day the violation continues to exist.
- b. The Bremen Plan Commission shall inform the owner that such violation is considered a willful act to increase flood damages and therefore may cause coverage by a standard Flood Insurance Policy to be suspended.
- c. Nothing herein shall prevent the Town from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.