

CHAPTER 24
F FLOOD ZONE OVERLAY DISTRICT

SECTION 24.01 PURPOSE It is the intent of this district to apply special regulation to the use of land in those areas subject to periodic inundation. Such regulation is deemed necessary to protect the public health, safety, and general welfare and to reduce public and private expenditures imposed on the community and its residents by such periodic flooding. These regulations are also intended to reserve areas for the impoundment of water, to stabilize stream flow and to maintain a proper ecological balance. In addition, these regulations are intended to comply with the provisions and requirements of the National Flood Insurance program, as constituted in accord with the National Flood Insurance Act of 1968, as amended, and regulations promulgated in furtherance of such program by the United States Department of Housing and Urban Development, Federal Insurance Administration.

SECTION 24.02 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD The areas of special flood hazard identified by the Federal Insurance administration in its report entitled "The Flood Insurance Study for the Township of Plainfield" dated July, 1980 with accompanying Flood Insurance Rate Maps and Flood Boundary-Floodway Maps is hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Township Offices. Where Federal Insurance administration data is not available, the best available flood plain information shall be utilized.

SECTION 24.03 DEFINITIONS For purposes of this chapter, the following definitions shall be used:

- A. Area of special flood hazard The land in the flood plain subject to a one percent or greater chance of flooding in any given year.
- B. Base flood The flood having a one percent chance of being equaled or exceeded in any given year.
- C. Development Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.
- D. Flood A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of waters or the unusual and rapid accumulation or runoff of surface waters from any source.
- E. Flood Insurance Rate Map (Firm) The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.
- F. Flood Insurance Study The official report provided in which the Federal Insurance Administration has provided flood profiles, as well as the Flood Boundary -Floodway Map and the water surface elevation of the base flood.
- G. Habitable floor Any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used only for storage purposes is not a "habitable floor."
- H. New construction Structures for which the "start of construction" commenced on or after the effective date of this ordinance.

- I. Regulatory Floodway The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood.

- J. Start of construction The first placement of permanent construction of a structure (other than a mobile home) on a site, such as the pouring of slabs or footings or any work beyond the state 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, footings, 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 mobile 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 mobile homes, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile 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.

- K. Substantial improvement Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 25 percent of its market value as determined by the township assessment records, of the valuation 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 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 occupancy.

SECTION 24.04 DELINEATION OF FLOOD ZONES The flood zones shall overlay zoning districts delineated on the official zoning map. In addition to other requirements of this Ordinance applicable to development in the underlying zoning district, compliance with the requirements of this chapter shall be necessary for all development occurring within the flood zones. Conflicts between the requirements of this chapter and other requirements of this Ordinance or any other ordinance shall be resolved in favor of this chapter and other requirements of this Ordinance shall be resolved in favor of this chapter except where the conflicting requirement is more stringent and would further the objectives of this chapter. In such cases the more stringent requirement shall be applied.

- A. Flood hazard zone. This zone shall coincide with the boundaries of the areas designated as A and A9 on the Flood Insurance Rate Map.

- B. Regulatory floodway zone. The boundaries of the regulatory floodway zone shall coincide with the floodway boundaries indicated on the Flood Boundary and Floodway Map.

SECTION 24.05 FLOOD HAZARD REDUCTION In all areas of special flood hazard, the following standards are required.

- A. General standards
1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
 2. All mobile 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:
 - a. over-the-top ties be provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations, with mobile homes less than 50 feet long requiring one additional ties per side;
 - b. frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with mobile homes less than 50 feet long requiring four additional ties per side.
 - c. all components of the anchoring system be capable of carrying a force of 4,800 pounds; and,
 - d. any additions to the mobile home be similarly anchored.
 3. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 4. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
 5. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
 6. On site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
 7. All subdivision proposals shall be consistent with the need to minimize flood damage.
 8. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
 9. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
 10. 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).
 11. Any proposed development shall be analyzed to determine effects on the flood carrying capacity of the area of special flood hazard.
 12. Mobile homes shall be placed on stands or lots which are elevated or compacted fill or on pilings so that the lowest floor of the mobile home

will be at or above the base flood level. In the instance of elevation on pilings, lots shall be large enough to permit steps; piling foundations shall be placed in stable soil no more than ten feet apart; and reinforcement shall be provided for piers more than six feet above ground level.

13. All new construction and substantial improvements within a flood hazard area shall be constructed with materials and utility equipment resistant to flood damage.

B. Specific standards

1. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above the base flood elevation.
2. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to or above the base flood elevation; or, together with attendant utility and sanitary facilities shall:
 - a. be flood proofed 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;
 - c. be certified by a registered engineer or architect that the standards of this subsection are satisfied.

SECTION 24.06 FLOODWAY PROTECTION All development within the regulatory floodway zone shall comply with the following:

- A. Encroachments, including fill, new construction, substantial improvements, and other development shall be prohibited.

Exception to this prohibition shall only be made upon certification by a registered engineer or the Department of Natural Resources, that the development proposed will not result in any increases in flood levels during a base flood discharge, and compliance with Act 245, Public Acts of 1929, as amended by Act 167, Public Act of 1968.

- B. Development, which is permitted in the regulatory floodway shall meet the requirements of Section 24.05 of the Ordinance.

SECTION 24.07 ADMINISTRATION The following procedures shall be followed during the administration of this Chapter:

- A. Building permit. Before construction or development begins within any area of special flood hazard and floodway zone, a building permit shall be obtained in accordance with the provisions of Chapter 33. In addition, 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 flood proofed.
 3. Certification by a registered engineer or architect that the flood proofing methods for any non-residential structure meet the flood proofing criteria in Section 24.05B.
 4. Description of the extent to which any watercourse will be altered or relocated as result of proposed development.
- B. Building Inspector. The duties of the Building Inspector shall include:
1. Determine that the permit requirements of this ordinance have been satisfied.
 2. Determine that all necessary permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required.
 3. Determine if the proposed development adversely affects the flood carrying capacity of the area of special flood hazard. For the purposes of this ordinance, "adversely affects" means damage to adjacent properties because of rises in flood stages attributed to physical changes of the channel and the adjacent over bank areas.
 - a. If it is determined that there is no adverse effect, then the permit shall be granted consistent with the provisions of this ordinance.
 - b. If it is determined that there is an adverse effect, then flood damage mitigation measures shall be made a condition of the permit.
 4. 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, and whether or not the structure contains a basement.
 5. For all new or substantially improved flood proofed structures:
 - a. Obtain and record the actual elevation (in relation to mean sea level) to which the structure has been flood proofed.
 - b. Maintain the required flood proofing certifications.
 6. Maintain for public inspection all records pertaining to the provisions of this ordinance.
 7. Notify adjacent communities and the Michigan Department of Natural Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration, and require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

SECTION 24.08 VARIANCES Variances from the provisions of this Chapter shall be granted by the Board of Appeals only upon a determination of compliance with the general standards for variances contained in this ordinance, and each of the following specific standards:

- A. A variance shall not be granted within the regulatory floodway zone where the result would be any increase in flood levels during a base flood discharge, except upon certification by a registered engineer or the Department of Natural Resources that the cumulative effect of the proposed development when combined with all other existing and anticipated development will not harmfully increase the water surface elevation of a base flood. In determining whether a harmful increase will occur, compliance with Public Act 245 of 1929, as amended by Public Act 167 of 1968, shall be required.
- B. A variance shall be granted only upon:
 - 1. A showing of good and sufficient cause;
 - 2. A determination that failure to grant the variance would result in flood heights in excess of those permitted by this Ordinance, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
- C. The variance granted shall be the minimum necessary, considering the flood hazard, to afford relief to the applicant.
- D. The Board of Appeals may attach conditions to the granting of a variance to insure compliance with the standards contained in this ordinance.
- E. Variances may be granted for the reconstruction, rehabilitation of structures listed on the National Register of Historic Places or the Michigan Historic Markers listing of historic sites or any other state register of historic places without regard to the requirements of this section governing variances in flood hazard areas.

SECTION 24.09 DISCLAIMER OF LIABILITY The granting of a permit or approval for any proposal in the designated flood areas shall not constitute a representation, guarantee, or warranty of any type by the Township or by any official or employee thereof of the practicality or safety of any structure or use. Nor do these regulations imply that areas outside the designated flood areas will be free from periodic flooding or flood damages, and shall create no liability upon, or a cause of action against such public body, official, or employee for any damage that may result pursuant thereto.