

ORDINANCE No. 3102

AN ORDINANCE AMENDING THE WEST BRADFORD TOWNSHIP ZONING ORDINANCE No.            BY REPEALING ARTICLE 700 FLOOD HAZARD DISTRICT AND REPLACING IT WITH A NEW ARTICLE 700 FLOOD HAZARD DISTRICT FOR THE PURPOSE OF UTILIZING THE FLOOD INSURANCE STUDY PREPARED BY THE FEDERAL INSURANCE ADMINISTRATION AND OF COMPLYING WITH THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM.

BE IT ENACTED AND ORDAINED and it is hereby enacted and ordained as follows:

1. Repealer

ARTICLE 700 FLOOD HAZARD DISTRICT is hereby repealed.

2. A new ARTICLE 700 FLOOD HAZARD DISTRICT is adopted as follows:

ARTICLE 700 - FLOOD HAZARD DISTRICT

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FINDINGS OF FACT

A. The flood hazard areas of West Bradford Township are subject to periodic flooding, either from a nearby watercourse or from inadequate drainage, which results in loss of property, danger to life, damage to structures, injury to people, disruption of public and private activities and services, burdensome public expenditures for flood protection and relief and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

B. These flood losses are caused by the cumulative effect of obstructions in flood hazard areas causing increases in flood heights and velocities, and the occupancy of flood hazard areas by uses vulnerable to floods.

C. Certain low sections of West Bradford Township are aquifer recharge areas which form the source of the underground water supply and are especially sensitive to pollution and contamination from inappropriate surface uses.

D. Drainage areas and streams located in West Bradford Township are part of the integrated drainage basins so that construction or other alteration of land within the Township, which increases runoff, increases the flood hazard to communities downstream.

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INTENDED PURPOSE

It is the purpose of this Article to promote the public health, safety and general welfare and to minimize those losses described hereinabove. In furthering that purpose, the specific intent of this Article is:

A. To regulate or prevent the erection of buildings and other structures in areas unfit for development by reason of periodic flooding, unsanitary drainage conditions and related hazards.

B. To protect public health by preventing pollution of surface and subsurface water supplies and providing surface area to absorb water for maintenance of the subsurface water supply.

C. To protect public safety by preserving natural floodplains and valley flats which are subject to periodic flooding in order to:

1. Prevent the increase in flood volume and rate of flow which results from covering the floodplains with impervious surfaces and from constricting natural drainage channels.

2. Provide areas for the deposition of sediment.

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- D. To prevent added downstream damage from increased flood volume and rate of flow and to permit uses of the floodplain compatible with the preservation of natural conditions and the maintenance of the stream flow throughout the year.
- E. To minimize the financial burden imposed on the community, its governmental bodies and individuals by floods.
- F. To promote responsible floodproofing measures within the Flood Hazard District.

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DEFINITION AND SCOPE OF FLOOD HAZARD DISTRICT

- A. "Flood Hazard District" is defined and established as any water or drainage course or body of water and the low lands adjoining, which may be subject to periodic flooding or overflow and which are so designated on an overlay of the West Bradford Township Zoning Map, on a map specifically designated as the West Bradford Township Flood Insurance Study dated January 16, 1981 and Flood Boundary and Floodway Map or Flood Insurance Rate Map issued by the Federal Insurance Administration. The Zoning Map overlay, Flood Hazard District Map, Flood Boundary and Floodway Map and Flood Insurance Rate Map are hereby adopted by reference and declared to be part of this Article.
- B. It is the intent of this Article that the Flood Hazard District include only those lands subject to inundation by flood which has an expected frequency of occurrence of one hundred (100) years. The party contesting the accuracy of any of the above referenced flood hazard maps must produce data derived from a comprehensive hydrologic study or studies performed by a registered professional engineer, licensed in the Commonwealth of Pennsylvania, which studies determine 100-year flood elevations and define the precise location of such lands constituting the herein intended limits of the Flood Hazard District. No modification or revision of any area identified as being flood-prone in the Flood Insurance Study prepared by the Federal Insurance Administration shall be made without prior approval from the Federal Insurance Administration.

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COMPLIANCE

No structure, land or water shall hereafter be used and no structure shall be located, extended, converted or structurally altered without full compliance with the terms of this Article and other applicable regulations.

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USES AND STRUCTURES

Within this District all uses not allowed as permitted uses or permissible by special exception shall be prohibited. Notwithstanding the permitted and special exception uses listed below, no use shall be allowed within the floodway area shown on the Flood Boundary and Floodway Map which would cause a rise in flood heights.

A. Permitted Uses

The following uses and no others shall be permitted within the Flood Hazard District to the extent that they are not prohibited by any other section of this Ordinance and provided that they do not require structure, fill or storage of materials or equipment.

1. Agriculture uses, excluding structures, such as farming, cultivation and harvesting of crops according to recognized soil conservation practices, which shall in no case cause alluvial deposits to build up in watercourses or cause undue erosion to the Flood Hazard District.

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2. Pasture and grazing land, excluding structures.
3. Outdoor plant nursery or orchard, excluding structures.
4. Forestry, lumbering and reforestation, according to recognized soil conservation practices, excluding storage and mill structures.
5. Recreation uses, such as park, day camp, picnic grounds, tent camping, golf course, hiking and riding trails, hunting, fishing, and swimming areas, excluding structures with the exception of anchored picnic tables.
6. Game farm and fish hatchery, excluding structures.
7. Wildlife sanctuary, woodland or nature preserves and arboretum, excluding structures.

B. Special Exception Uses

The following special exception uses shall be permitted in the Flood Hazard District only when authorized by the Zoning Hearing Board.

1. As an area comprising no more than three fourths (3/4) of the required minimum lot area for any lot contiguous to the Flood Hazard District, provided that no building or structure and no sanitary drainage field shall be placed within the Flood Hazard District. Inclusion of Flood Hazard District land within the lots in order to meet minimum lot area or yard requirements is contingent upon complying with the objectives and standards set forth in the specific intent of this Article and with any other pertinent municipal regulation. If such compliance cannot be shown, the land area within the Flood Hazard District shall not be calculated for purposes of determining lot areas or yard requirements.
2. Roads and parking areas to serve other permitted uses in the Flood Hazard District or where required by the regulations for any contiguous district.
3. Utility transmission lines.
4. Storm and sanitary sewers and sewage pumping stations.
5. Sealed water supply wells and water pipelines.
6. Dams, culverts, bridges and impoundment basins approved by the Commonwealth of Pennsylvania, Department of Environmental Resources, and the Soil Conservation Service of the United States Department of Agriculture and any other governmental agency having regulatory or advisory jurisdiction over the watershed in question.
7. Grading, provided that the effect is not to substantially alter the effective cross-sectional profile of stream basin, including the floodplain, at the point of the proposed use, provided that a detailed engineering study shall accompany any application for a special exception on this ground and must be approved by the Commonwealth of Pennsylvania, Department of Environmental Resources, the Soil Conservation Service of the United States Department of Agriculture and any other governmental agency having regulatory or advisory jurisdiction.

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DISTRICT MAP

- A. The District established as the Flood Hazard District on the Zoning Map shall be deemed to be zoning districts to the extent that the same repeal any restriction or remove the land from any other zoning

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classification. The restrictions imposed in this Article shall be in addition to and not in substitution of the limitations and restrictions established under the applicable zoning district. The permitted uses herein enumerated shall, however, apply to all Flood Hazard District lands regardless of the applicable zoning district but in the event any lands are removed from the Flood Hazard District Map under the procedures herein set forth or otherwise, the land shall be deemed to continue under the uses, privileges and restrictions enumerated in the applicable zoning district.

B. In case of any dispute concerning the exact location of the boundaries of the Flood Hazard District or the inclusion of any lands therein, the party disputing the boundaries of content as shown as the Flood Hazard District or the Zoning Map shall have the burden of proof of demonstrating by a fair preponderance of the evidence of the inaccuracy of the said Map. The party disputing the boundary shall submit to the Zoning Hearing Board a detailed on-site survey of the land in question made by a registered professional engineer or registered surveyor or by the Township Engineer as the case may be.

C. Upon receipt of the on-site survey, one (1) copy thereof shall be sent or retained by the Township Engineer, one (1) copy sent to or retained by the applicant, one (1) copy forwarded to the Zoning Officer and one (1) copy to the Planning Commission. The Planning Commission shall review the application and within forty-five (45) days of receipt of the survey, the Zoning Officer shall, by certified mail, notify the parties disputing the boundary of the tract of his determination.

706.1 AMENDMENT OF DISTRICT MAP

Insofar as various natural conditions, including the Flood Hazard District as herein defined, may change, or for any other reason doubt arises as to the proper location of the boundaries of the district, such change or the dispute concerning the boundaries of the district may be validated or determined preliminarily by the Zoning Officer as follows:

A. In the case of an alleged change in the district due to natural or other causes, except man-made, the party alleging the change shall submit to the Zoning Officer a detailed on-site survey, made by a professional geologist or soil scientist pursuant to technical approval by the Soil Conservation Service, United States Department of Agriculture, showing in detail the changes alleged to have occurred which remove the land in question from the Flood Hazard District. There shall also be submitted a detailed on-site survey by a registered professional engineer or registered surveyor delineating the exact location of the alleged new boundaries of the tract as a result of the claimed change.

B. The delineation of the Flood Hazard District boundaries may be modified by the West Bradford Township Board of Supervisors upon the recommendation of the Zoning Officer, the Township Planning Commission and the validation of the Soil Conservation Service of the United States Department of Agriculture and other agencies having regulatory or advisory jurisdiction. No modification or revision of any area identified as being flood-prone in the Flood Insurance Study prepared by the Federal Insurance Administration shall be made without prior approval from the Federal Insurance Administration.

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APPEALS TO THE ZONING HEARING BOARD

A. Appeals to the Zoning Hearing Board with respect to the provisions of this Article shall be governed by the terms of this Ordinance and in particular by the terms of this Section. Any conflict between the general provisions of the Zoning Ordinance and the provisions of this Section, the more stringent shall apply. In the case of an application for a special exception or a variance, the applicant shall also furnish the following materials and information as part of his application:

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1. Plans in triplicate drawn to scale showing the nature, location, dimensions and elevation of the lot and the existing and proposed uses.
  2. Photographs showing existing uses and vegetation.
  3. Report detailing the soil type or types existing on the lot and of which it is comprised and any other pertinent information with respect thereto.
  4. A series of cross sections at twenty-five (25) foot intervals along the lot shore line, showing the stream channel or the lake or pond bottom, the elevation of adjoining land areas to be occupied by the proposed uses, high water information, and 100-year flood elevations.
  5. Profile showing the slope of the bottom of the channel, watercourse, lake or pond.
  6. Specifications for building materials and construction, floodproofing including the level to which structures will be floodproofed, filling, dredging, storage, water supply and sanitary facilities and lowest floor, including basement, elevation for any proposed structure.
  7. Computation of the increase, if any, in the 100-year flood elevation which would be attributable to any of the proposed uses.
- B. In any instance where the Zoning Hearing Board is required to consider a request for a special exception or variance from the provisions of this Article, the Board shall, to the full extent permitted by law, consider the following factors where appropriate, to be established by the applicant who shall have the burden of proving that the criteria and conditions can be satisfied.
1. The danger to life and property due to increased flood heights or velocities caused by encroachments. No variance or special exception shall be granted for any construction, development, use or activity within any floodway area that would cause any increase in the one hundred (100) year flood elevation.
  2. The danger that materials may be swept on to other lands or downstream to the injury of others.
  3. The proposed water supply and sanitation systems and the ability of these systems to avoid causing disease, contamination and unsanitary conditions.
  4. The susceptibility of the proposed use to flood damage and the effect of such damage on the owner.
  5. The importance of the proposed use to the community.
  6. The requirements of the use for a waterfront location.
  7. The availability of alternative locations not subject to flooding for the proposed use.
  8. The compatibility of the proposed use with existing and foreseeable nearby uses.
  9. The relationship of the proposed use to the comprehensive plans and floodplain management program for the area.
  10. The safety of access to the property in times of flood for ordinary and emergency vehicles.

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11. The expected heights, velocity, duration, rate of rise and sediment transport of the flood water expected at the site.
  12. Such other factors which are relevant to the purposes of this Article.
- C.
1. Modification of waste disposal and water supply facilities. All new and replacement water supply systems in the 100-year flood plain shall be designed to minimize or eliminate the infiltration of flood waters. All new and replacement sanitary sewage systems shall be designed to minimize or eliminate the infiltration of flood waters into the systems and discharge from the system into flood waters. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
  2. Limitations of periods of use and operation.
  3. Impositions of operational controls, sureties and deed restrictions.
  4. The following floodproofing measures shall be incorporated for all new construction and substantial improvements, including the placement of mobile homes, within the 100-year flood plain:
    - (a) Anchorage to resist flotation and lateral movement.
    - (b) Installation of watertight doors, bulkheads and shutters.
    - (c) Reinforcement of walls to resist water pressures.
    - (d) Use of paints, membranes or mortars to reduce seepage of water through walls.
    - (e) Addition of mass or weight to structures to resist flotation.
    - (f) Installation of pumps to lower water levels in structures.
    - (g) Construction of water supply and waste treatment systems so as to prevent the entrance of floodwaters.
    - (h) Pumping facilities for subsurface external foundation wall and basement floor pressures.
    - (i) Construction to resist rupture or collapse caused by water pressure or floating debris.
    - (j) Cutoff valves on sewer lines or the elimination of gravity flow basement drains.
    - (k) All new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated to or above the one hundred (100) year flood elevation. All new construction and substantial improvements of nonresidential structures shall have the lowest floor (including basement) elevated to or above the 100-year flood elevation or together with attendant utility and sanitary facilities, be designed so that below the 100-year flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the

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capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the 100-year flood.

All of the remaining (1) Special Requirements for Mobile Homes is to be added.

Special Requirements for Mobile Homes

1. All mobile homes and any additions thereto shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors in accordance with the American National Standards Institute and National Fire Protection Association Standards as specified in the Standard for the Installation of Mobile Homes Including Mobile Home Park Requirements [NFPA No. 501A-1974 (ANSI A119.3-1975)] as amended for Mobile Homes in Hurricane Zones or other Appropriate Standards such as the following:
  - a. over-the-top ties shall be provided at each of the four (4) corners of the mobile home, with two (2) additional ties per side at intermediate locations for units fifty (50) feet or more in length, and one (1) additional tie per side for units less than fifty (50) feet in length.
  - b. frame ties shall be provided at each corner of the mobile home, with five (5) additional ties per side at intermediate locations for units fifty (50) feet or more in length, and four (4) additional ties per side for units less than fifty (50) feet in length.
  - c. all components of the anchoring system shall be capable of carrying a force of four thousand eight hundred (4800) pounds.
2. All mobile homes and any additions thereto shall also be elevated in accordance with the following requirements:
  - a. the stands or lots shall be elevated on compacted fill, or on pilings so that the lowest floor of the mobile home will be at or above the elevation of the Regulatory Flood.
  - b. adequate surface drainage is provided.
  - c. adequate access for a hauler is provided.
  - d. where pilings are used for elevation, the lots shall be large enough to permit steps; piling foundations shall be placed in stable soil no more than ten (10) feet apart; reinforcement shall be provided for pilings that will extend for six (6) feet or more above the ground level.
3. An evacuation plan indicating alternate vehicular access and escape routes shall be filed with the appropriate Township for mobile home parks and mobile home subdivisions where appropriate.
4. No mobile homes shall be placed in any designated Floodway area.

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5. Variances shall only be issued by the Zoning Hearing Board upon a) a showing of good and sufficient cause, b) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and c) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

6. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

7. The Zoning Hearing Board shall notify the applicant in writing that a) the issuance of a variance to construct a structure below the 100-year flood level will result in increased premium rates for flood insurance, b) such construction below the 100-year flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions.

8. The Zoning Hearing Board shall a) maintain a record of all variance actions, including justification for their issuance and b) report such variances issued in its annual report submitted to the Federal Insurance Administration.

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Alteration or Relocation of Watercourses

No encroachment, alteration, or improvement of any kind shall be made to any watercourse until all adjacent municipalities which may be affected by such action have been notified by the Township and until all required permits to approvals have been first obtained from the Department of Environmental Resources, Dams and Waterways Management Bureau. In addition, the Federal Insurance Administrator and Pennsylvania Department of Community Affairs, Bureau of Community Planning, shall be notified by the Township prior to any alteration or relocation of a watercourse.

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Permits Required

1. A permit shall be required before any construction or development is undertaken within the Township.
2. Prior to the issuance of any building permit the Building Permit Officer shall review the application for a permit to determine if all other necessary governmental permits such as those required by State and Federal laws have been obtained, including those required by Act 537, the Pennsylvania Sewage Facilities Act, the Water Obstruction Act of 1913, and the Federal Water Pollution Control Act Amendments of 1972, Section 404, 33, U.S.C. 1334. No permit shall be issued until this determination has been made.

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Definitions

1. 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.
2. Flood - a temporary inundation of normally dry land areas.
3. Mobile home - means a structure transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. It does not include recreational vehicles or travel trailers.

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4. New construction - structures for which the start of construction commenced on or after the effective date of this Ordinance.
5. One hundred year flood - means the flood having a one percent chance of being equalled or exceeded in any given year.
6. Start of construction - means 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 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, 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 not within a mobile home park or subdivision "start of construction" means the affixing of the mobile home to its permanent site. For mobile homes within mobile home parks or mobile home subdivisions, "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.
7. 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 (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 when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not the 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.

Enactment

ENACTED AND ORDAINED THIS 27 DAY OF May, 1981.  
This Ordinance shall become effective upon passage.

WEST BRADFORD TOWNSHIP,  
BOARD OF SUPERVISORS

Samuel W. [Signature]  
James Wood  
George B. [Signature]

[Signature]  
Attest