

TOWNSHIP OF MIDDLESEX
CUMBERLAND COUNTY, PENNSYLVANIA

ORDINANCE NO. 3 - 2023

AN ORDINANCE OF THE TOWNSHIP OF MIDDLESEX,
CUMBERLAND COUNTY, PENNSYLVANIA, AMENDING
THE MIDDLESEX TOWNSHIP ZONING ORDINANCE WITH
RESPECT TO THE FP-FLOODPLAIN CONSERVATION
DISTRICTS.

BE IT HEREBY ENACTED AND ORDAINED and it is hereby enacted by the Board of Township Supervisors in and for the Township of Middlesex, Cumberland County, Pennsylvania, as follows:

SECTION 1: Ordinance No. 3-89 entitled "Middlesex Township Zoning Ordinance" enacted June 30, 1989 and subsequently amended, is hereby amended as follows:

A. Article III [Establishment of Zoning Districts and Map], existing Sections 3.04, 3.05 and 3.06 are hereby deleted in their entirety and the following new Section is hereby added:

Section 3.04 – ESTABLISHMENT OF FLOODPLAIN CONSERVATION DISTRICTS

The establishment of Floodplain Conservation Districts and all matters governing permits for construction, new construction and development within areas of Middlesex Township which are subject to flooding, shall be governed by the provisions of Article XIII of this Zoning Ordinance, as amended, and all laws, regulations and ordinances as specified in Article XIII as well as any applicable provisions of this Zoning Ordinance.

B. Article XIII [FP-Floodplain Conservation Districts] is amended in its entirety to provide as follows:

ARTICLE XIII

FP-FLOODPLAIN CONSERVATION DISTRICT

§13.01 STATUTORY AUTHORIZATION

The Legislature of the Commonwealth of Pennsylvania has, by the passage of the Pennsylvania Flood Plain Management Act of 1978 as amended by Act 65 of 2022, delegated the responsibility to local governmental units to adopt floodplain management regulations to promote public health, safety, and the general welfare of its citizenry. Therefore, the Board of

Supervisors of the Township of Middlesex does hereby order as follows.

§13.02 GENERAL PROVISIONS

1. Intent

The intent of this Ordinance is to:

- A. Promote the general health, welfare, and safety of the community.
- B. Encourage the utilization of appropriate construction practices in order to prevent or minimize flood damage in the future.
- C. Minimize danger to public health by protecting water supply and natural drainage.
- D. Reduce financial burdens imposed on the community, its governmental units, and its residents, by preventing excessive development in areas subject to flooding.
- E. Comply with federal and state floodplain management requirements.

2. Applicability

It shall be unlawful for any person, partnership, business or corporation to undertake, or cause to be undertaken, any construction or development anywhere within the Township of Middlesex unless a Permit has been obtained from the Floodplain Administrator.

3. Abrogation and Greater Restrictions

This ordinance supersedes any other conflicting provisions which may be in effect in identified floodplain areas. However, any other ordinance provisions shall remain in full force and effect to the extent that those provisions are more restrictive. If there is any conflict between any of the provisions of this Ordinance, the more restrictive shall apply.

4. Severability

If any section, subsection, paragraph, sentence, clause, or phrase of this Ordinance shall be declared invalid for any reason whatsoever, such a decision shall not affect the remaining portions of the Ordinance, which shall remain in full force and effect, and for this purpose the provisions of this Ordinance are hereby declared to be severable.

5. Warning and Disclaimer of Liability

The degree of flood protection sought by the provisions of this Ordinance is considered reasonable for regulatory purposes and is based on accepted engineering methods of study. Larger floods may occur or flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This Ordinance does not imply that areas outside any identified floodplain areas, or that land uses permitted within such areas will be free from flooding or flood damages.

This Ordinance shall not create liability on the part of the Township of Middlesex or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

§13.03 ADMINISTRATION

1. Designation of the Floodplain Administrator

The Zoning Officer is hereby appointed to administer and enforce this ordinance and is referred to herein as the Floodplain Administrator. The Floodplain Administrator may: (A) Fulfill the duties and responsibilities set forth in these regulations, (B) Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees, or (C) Enter into a written agreement or written contract with another agency or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity shall not relieve the community of its responsibilities pursuant to the participation requirements of the National Flood Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22.

In the absence of a designated Floodplain Administrator, the Floodplain Administrator duties are to be fulfilled by the Township Manager.

2. Permits Required

A Permit shall be required before any construction or development is undertaken within any area of the Township of Middlesex.

3. Duties and Responsibilities of the Floodplain Administrator

- A. The Floodplain Administrator shall issue a Permit only after it has been determined that the proposed work to be undertaken will be in conformance with the requirements of this and all other applicable codes and ordinances.
- B. Prior to the issuance of any permit, the Floodplain Administrator shall review the application for the permit to determine if all other necessary government permits required by state and federal laws have been obtained, such as those required by the Pennsylvania Sewage Facilities Act (Act 1966-537, as amended); the Pennsylvania Dam Safety and Encroachments Act (Act 1978-325, as amended); the Pennsylvania Clean Streams Act (Act 1937-394, as amended); and the U.S. Clean Water Act, Section 404, 33, U.S.C. 1344. No permit shall be issued until this determination has been made.
- C. In the case of existing structures, prior to the issuance of any Permit, the Floodplain Administrator shall review the proposed cost of improvements or repairs and the pre-improvement market value of the structure, so that a substantial improvement/substantial damage determination can be made, in accordance with FEMA's Substantial Improvement/Substantial Damage Desk Reference.
- D. During the construction period, the Floodplain Administrator or other authorized official shall inspect the premises to determine that the work is progressing in compliance with the

Permit and information provided on the permit application and with all applicable municipal laws and ordinances. He/she shall make as many inspections during and upon completion of the work as are necessary.

- E. In the discharge of his/her duties, the Floodplain Administrator shall have the authority to enter any building, structure, premises or development in the identified floodplain area, upon presentation of proper credentials, with the permission of the property owner or a tenant, at any reasonable hour to enforce the provisions of this ordinance. In the absence of such consent, the Floodplain Administrator must obtain an administrative warrant.
- F. In the event the Floodplain Administrator discovers that the work does not comply with the Permit or permit application or any applicable laws and ordinances, or that there has been a false statement or misrepresentation by any applicant, the Floodplain Administrator shall revoke the Permit and report such fact to the Board of Supervisors for whatever action it considers necessary.
- G. The Floodplain Administrator shall maintain in perpetuity, or for the lifetime of the structure, all records associated with the requirements of this ordinance including, but not limited to, finished construction elevation data, permitting, inspection and enforcement.
- H. The Floodplain Administrator is the official responsible for submitting a biennial report to FEMA concerning community participation in the National Flood Insurance Program as requested.
- I. The responsibility, authority and means to implement the commitments of the Floodplain Administrator can be delegated from the person identified. However, the ultimate responsibility lies with the person identified in the floodplain ordinance as the Floodplain Administrator.
- J. The Floodplain Administrator shall consider the requirements of the 34 PA Code and the 2018 IBC and the 2018 IRC, or the latest revision thereof as adopted by the Commonwealth of Pennsylvania.

4. Application Procedures and Requirements

- A. Application for such a Permit shall be made, in writing, to the Floodplain Administrator on forms supplied by the Township of Middlesex. Such application shall contain the following:
 - 1. Name and address of applicant.
 - 2. Name and address of owner of land on which proposed construction is to occur.
 - 3. Name and address of contractor.
 - 4. Site location including address.

5. Listing of other permits required.
 6. Brief description of proposed work and estimated cost, including a breakout of flood-related cost and the market value of the building before the flood damage occurred where appropriate.
 7. A plan of the site showing the exact size and location of the proposed construction as well as any existing buildings or structures.
- B. If any proposed construction or development is located entirely or partially within any identified floodplain area, applicants for Permits shall provide all the necessary information in sufficient detail and clarity to enable the Floodplain Administrator to determine that:
1. All such proposals are consistent with the need to minimize flood damage and conform with the requirements of this and all other applicable codes and ordinances;
 2. All 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. Structures will be anchored to prevent floatation, collapse, or lateral movement;
 5. Building materials are flood-resistant;
 6. Appropriate practices that minimize flood damage have been used; and
 7. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities have been designed and located to prevent water entry or accumulation.
- C. Applicants shall file the following minimum information plus any other pertinent information as may be required by the Floodplain Administrator to make the above determination:
1. A completed Permit Application Form.
 2. A plan of the entire site, clearly and legibly drawn at a scale of one (1) inch being equal to one hundred (100) feet or less, showing the following:
 - a. north arrow, scale, and date;
 - b. topographic contour lines, if available;
 - c. the location of all existing and proposed buildings, structures, and other improvements, including the location of any existing or proposed

- subdivision and development;
 - d. the location of all existing streets, driveways, and other access ways; and
 - e. the location of any existing bodies of water or watercourses, identified floodplain areas, and, if available, information pertaining to the floodway, and the flow of water including direction and velocities.
3. Plans of all proposed buildings, structures and other improvements, drawn at suitable scale showing the following:
- a. the proposed lowest floor elevation of any proposed building based upon North American Vertical Datum of 1988;
 - b. the elevation of the base flood;
 - c. supplemental information as may be necessary under 34 PA Code, the 2018 IBC or the 2018 IRC, or the latest revision thereof as adopted by the Commonwealth of Pennsylvania.
4. The following data and documentation:
- a. detailed information concerning any proposed floodproofing measures and corresponding elevations.
 - b. if available, information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with a base flood.
 - c. documentation, certified by a registered professional engineer or architect, to show that the effect of any proposed development within a Floodway Area (See Section 13.04.2A) will not increase the base flood elevation at any point.
 - d. documentation, certified by a registered professional engineer or architect, to show that the cumulative effect of any proposed development within an AE Area/District without floodway (See Section 13.04.2B) when combined with all other existing and anticipated development, will not increase the base flood elevation more than one (1) foot at any point within the community.
 - e. a document, certified by a registered professional engineer or architect, which states that the proposed construction or development has been adequately designed to withstand the pressures, velocities, impact and uplift forces associated with the base flood.

Such statement shall include a description of the type and extent of flood

proofing measures which have been incorporated into the design of the structure and/or the development.

- f. detailed information needed to determine compliance with Section 13.05.3 F., Storage, and Section 13.05.4, Development Which May Endanger Human Life, including:
 - i. the amount, location and purpose of any materials or substances referred to in Sections 13.05.3 F. and 13.05.4 which are intended to be used, produced, stored or otherwise maintained on site.
 - ii. a description of the safeguards incorporated into the design of the proposed structure to prevent leaks or spills of the dangerous materials or substances listed in Section 13.05.4 during a base flood.
- g. the appropriate component of the Department of Environmental Protection's "Planning Module for Land Development."
- h. where any excavation or grading is proposed, a plan meeting the requirements of the Department of Environmental Protection, to implement and maintain erosion and sedimentation control.

D. Applications for Permits shall be accompanied by a fee, payable to the municipality based upon the estimated cost of the proposed construction as determined by the Floodplain Administrator.

5. Review of Application by Others

A copy of all plans and applications for any proposed construction or development in any identified floodplain area to be considered for approval may be submitted by the Floodplain Administrator to any other appropriate agencies and/or individuals (e.g. planning commission, municipal engineer, etc.) for review and comment.

6. Changes

After the issuance of a Permit by the Floodplain Administrator, no changes of any kind shall be made to the application, permit or any of the plans, specifications or other documents submitted with the application without the written consent or approval of the Floodplain Administrator. Requests for any such change shall be in writing, and shall be submitted by the applicant to Floodplain Administrator for consideration.

7. Placards

In addition to the Permit, the Floodplain Administrator shall issue a placard, or similar document, which shall be displayed on the premises during the time construction is in progress. This placard shall show the number of the Permit, the date of its issuance, and be signed by the Floodplain Administrator.

8. Start of Construction

Work on the proposed construction or development shall begin within 180 days after the date of issuance of the Permit. Work shall also be completed within twelve (12) months after the date of issuance of the Permit or the Permit shall expire unless a time extension is granted, in writing, by the Floodplain Administrator. The issuance of the Permit does not refer to or provide zoning approval.

The actual start of construction means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. 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 part of the main structure. For a substantial improvement, the actual start of construction means the first, alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Time extensions shall be granted only if a written request is submitted by the applicant, who sets forth sufficient and reasonable cause for the Floodplain Administrator to approve such a request and the original Permit is compliant with the ordinance and FIRM/FIS in effect at the time the extension is granted.

9. Enforcement

A. Notices

Whenever the Floodplain Administrator or other authorized municipal representative determines that there are reasonable grounds to believe that there has been a violation of the Permit, any information on the Permit application or any provisions of this Ordinance, or of any regulations adopted pursuant thereto, the Floodplain Administrator shall give notice of such alleged violation as hereinafter provided. Such notice shall comply with the requirements of Pennsylvania Municipalities Planning Code and the following:

1. Be in writing;
2. Include a statement of the reasons for its issuance;
3. Allow a reasonable time not to exceed a period of thirty (30) days for the performance of any act it requires;
4. Be served upon the property owner or his agent as the case may require; provided, however, that such notice or order shall be deemed to have been properly served upon such owner or agent when a copy thereof has been served

with such notice in the same manner as an enforcement notice under the Middlesex Township Zoning Ordinance;

5. Contain an outline of remedial actions which, if taken, will effect compliance with the provisions of this Ordinance.

B. Penalties

Any person who fails to comply with any or all of the requirements or provisions of this Ordinance or who fails or refuses to comply with any notice, order of direction of the Floodplain Administrator or any other authorized employee of the municipality shall, upon being found liable therefor in a civil enforcement proceeding after a hearing before a magisterial district judge, pay a judgment no to exceed \$500 plus all court costs and reasonable attorney's fees, as a result of such violation. Each day that a violation continues shall constitute a separate offense. In addition to the above penalties all other actions are hereby reserved including an action in equity for the proper enforcement of this Ordinance. The imposition of a fine or penalty for any violation of, or noncompliance with this Ordinance shall not excuse the violation or noncompliance or permit it to continue. All such persons shall be required to correct or remedy such violations and noncompliance within a reasonable time. Any development initiated or any structure or building constructed, reconstructed, enlarged, altered, or relocated, in noncompliance with this Ordinance may be declared by the Board of Supervisors to be a public nuisance and abatable as such.

10. Appeals

- A. Any person aggrieved by any action or decision of the Floodplain Administrator concerning the administration of the provisions of this Ordinance, may appeal to the Zoning Hearing Board. Such appeal must be filed, in writing, within thirty (30) days after the decision, determination or action of the Floodplain Administrator.
- B. Upon receipt of such appeal the Zoning Hearing Board shall consider the appeal in accordance with the procedures in the Middlesex Township Zoning Ordinance.
- C. Any person aggrieved by any decision of the Zoning Hearing Board may appeal to the Court of Common Pleas of Cumberland County , as provided by the laws of the Commonwealth of Pennsylvania including the Pennsylvania Flood Plain Management Act.

§13.04. IDENTIFICATION OF FLOODPLAIN AREAS

1. Identification

The identified floodplain area, also known as the FP-Floodplain Conservation District, shall be:

- A. Any areas of Township of Middlesex, classified as Special Flood Hazard Areas (SFHAs) in the Flood Insurance Study (FIS) and the accompanying Flood Insurance Rate Maps (FIRMs) dated September 7, 2023, and issued by the Federal Emergency Management Agency (FEMA) or the most recent revision thereof, including all digital data developed as part of the Flood Insurance Study.

The above referenced FIS and FIRMs, and any subsequent revisions and amendments are hereby adopted by Township of Middlesex and declared to be a part of this ordinance.

2. Description and Special Requirements of Identified Floodplain Areas

The identified floodplain area shall consist of the following specific areas:

- A. The Floodway Area shall be those areas identified in the FIS and the FIRM as floodway and which represent the channel of a watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without increasing the water surface elevation by more than one (1) foot at any point. This term shall also include floodway areas which have been identified in other available studies or sources of information for those Special Flood Hazard Areas where no floodway has been identified in the FIS and FIRM.

Permitted Uses.

1. In the Floodway Area the following uses and activities are permitted provided that they are in compliance with the provisions of the underlying zoning district and are not prohibited by any other ordinance and provided that they do not require structures, fill or storage of materials and equipment:
 - a. Agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming and wild crop harvesting.
 - b. Public and private recreational uses and activities such as parks, day camps, picnic grounds, golf courses, boat launching and swimming areas, hiking and horseback riding trails, wildlife and nature preserves, game farms, fish hatcheries, trap and skeet game ranges, and hunting and fishing areas.
 - c. Accessory residential uses, such as yard areas, gardens, play areas, and porous playing areas.
 - d. Accessory industrial and commercial uses such as yard areas, porous paving and loading areas and airport landing strips.

Uses Permitted by Special Exception.

1. The following uses and activities may be permitted by Special Exception as allowed by the Zoning Hearing Board provided that they are in compliance with the provisions of the underlying zoning district and are not prohibited by any other provisions of the Middlesex Township Zoning Ordinance:

- a. Structures, except mobile homes, accessory to the uses and activities of Section 13.04.2.A above.
 - b. Utilities and public facilities and improvements such as railroads, streets, bridges, transmission lines, pipe lines, water and sewage treatment plants and other similar or related uses.
 - c. Water-related uses and activities such as marinas, docks, wharves, piers, etc.
 - d. Extraction of sand, gravel and other materials.
 - e. Temporary uses such as circuses, carnivals, and similar activities.
 - f. Storage of materials and equipment provided that they are not buoyant, flammable or explosive, or involving development which may endanger human life as detailed in §13.05.4, and are not subject to major damage by flooding, or provided that such material and equipment is firmly anchored to prevent flotation or movement, or can be readily removed from the area within the time available after flood warning.
 - g. Other uses and activities similar to those described in (a) through (f), above, provided they cause no increase in flood heights or velocities. All uses, activities, and structural developments shall be undertaken in strict compliance with the floodproofing provisions contained in all other applicable codes and this Ordinance.
2. Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
 3. Within any floodway area, no new construction or development shall be allowed, unless the appropriate permit is obtained from the Department of Environmental Protection Regional Office.
- B. The AE Area/District shall be those areas identified as an AE Zone on the FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided.
1. The AE Area adjacent to the floodway shall be those areas identified as an AE Zone on the FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided and a floodway has been delineated.
 2. AE Area without floodway shall be those areas identified as an AE zone on the

FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided but no floodway has been determined.

- i. No encroachments, including fill, new construction, substantial improvements, or other development shall be permitted in an AE Zone without floodway, unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed development together with all other existing and anticipated development, would not result in an increase in flood levels of more than one foot within the entire community during the occurrence of the base flood discharge.
 - ii. No new construction or development shall be located within the area measured fifty (50) feet landward from the top-of-bank of any watercourse, unless the appropriate permit is obtained from the Department of Environmental Protection Regional Office.
- C. The A Area/District shall be those areas identified as an A Zone on the FIRM included in the FIS prepared by FEMA and for which no base flood elevations have been provided. For these areas, elevation and floodway information from other Federal, State, or other acceptable sources shall be used when available. Where other acceptable information is not available, the base flood elevation shall be determined by using the elevation of a point on the boundary of the identified floodplain area which is nearest the construction site.

In lieu of the above, the municipality may require the applicant to determine the elevation with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough technical review by the municipality. In the absence of any of the above data or documentation, the community may require elevation of the lowest floor to be at least three feet above the highest adjacent grade.

- D. The AO and AH Area/ District shall be those areas identified as Zones AO and AH on the FIRM and in the FIS. These areas are subject to inundation by 1-percent-annual-chance shallow flooding where average depths are between one and three feet. In Zones AO and AH, drainage paths shall be established to guide floodwaters around and away from structures on slopes.

3. Changes in Identification of Area

The Identified Floodplain Area may be revised or modified by the Board of Supervisors where studies or information provided by a qualified agency or person documents the need for such revision. However, prior to any such change to the Special Flood Hazard Area, approval must be obtained from FEMA. Additionally, as soon as practicable, but not later than six (6) months after the date such information becomes available, a community shall notify FEMA of the changes to the Special Flood Hazard Area by submitting technical or scientific data. See §13.05 (B) for

situations where FEMA notification is required.

4. Boundary Disputes

Should a dispute concerning any identified floodplain boundary arise, an initial determination shall be made by the Township of Middlesex and any party aggrieved by this decision or determination may appeal to the Board of Supervisors. The burden of proof shall be on the appellant.

5. Jurisdictional Boundary Changes

Prior to development occurring in areas where annexation or other corporate boundary changes are proposed or have occurred, the community shall review flood hazard data affecting the lands subject to boundary changes. The community shall adopt and enforce floodplain regulations in areas subject to annexation or corporate boundary changes which meet or exceed those in 44 CFR §60.3.

§13.05 TECHNICAL PROVISIONS

I. General

A. Alteration or Relocation of Watercourse

1. 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 municipality, and until all required permits or approvals have first been obtained from the Department of Environmental Protection Regional Office.
2. No encroachment, alteration, or improvement of any kind shall be made to any watercourse unless it can be shown that the activity will not reduce or impede the flood carrying capacity of the watercourse in any way.
3. In addition, FEMA and the Pennsylvania Emergency Management Agency shall be notified prior to any alteration or relocation of any watercourse.

B. When Township of Middlesex proposes to permit the following encroachments:

- any development that causes a rise in the base flood elevations within the floodway; or
- any development occurring in Zones A1-30 and Zone AE without a designated floodway, which will cause a rise of more than one foot in the base flood elevation; or
- alteration or relocation of a stream (including but not limited to installing culverts and bridges)

the applicant shall (as per 44 CFR §65.12):

1. Apply to FEMA for conditional approval of such action prior to permitting the encroachments to occur.
 2. Upon receipt of the FEMA Administrator's conditional approval of map change and prior to approving the proposed encroachments, a community shall provide evidence to FEMA of the adoption of floodplain management ordinances incorporating the increased base flood elevations and / or revised floodway reflecting the post-project condition.
 3. Upon completion of the proposed encroachments, the applicant shall provide as-built certifications. FEMA will initiate a final map revision upon receipt of such certifications in accordance with 44 CFR § 67.
- C. Any new construction, development, uses or activities allowed within any identified floodplain area shall be undertaken in strict compliance with the provisions contained in this Ordinance and any other applicable codes, ordinances and regulations.

2. Elevation and Floodproofing Requirements

A. Residential Structures

1. In AE, A1-30, and AH Zones, any new construction or substantial improvement shall have the lowest floor (including basement) elevated up to, or above, the Regulatory Flood Elevation.
2. In A Zones, where there are no Base Flood Elevations specified on the FIRM, any new construction or substantial improvement shall have the lowest floor (including basement) elevated up to, or above, the Regulatory Flood Elevation determined in accordance with Section 13.04.2.C of this ordinance.
3. In AO Zones, any new construction or substantial improvement shall have the lowest floor (including basement) at or above the highest adjacent grade at least as high as the depth number specified on the FIRM.
4. The design and construction standards and specifications contained in the 2018 International Building Code (IBC) and in the 2018 International Residential Code (IRC) or the latest edition thereof adopted by the Commonwealth of Pennsylvania, and ASCE 24 and 34 PA Code (Chapters 401-405 as amended) shall be utilized, where they are more restrictive.

B. Non-residential Structures

1. In AE, A1-30 and AH Zones, any new construction or substantial improvement of a non-residential structure shall have the lowest floor (including basement) elevated up to, or above, the Regulatory Flood Elevation, or be designed and constructed so that the space enclosed below the Regulatory Flood Elevation:

- a. is floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water and,
 - b. has structural components with the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy:
2. In A Zones, where no Base Flood Elevations are specified on the FIRM, any new construction or substantial improvement shall have the lowest floor (including basement) elevated or completely floodproofed up to, or above, the Regulatory Flood Elevation determined in accordance with Section 13.04.2.C of this ordinance.
3. In AO Zones, any new construction or substantial improvement shall have their lowest floor elevated or completely floodproofed above the highest adjacent grade to at least as high as the depth number specified on the FIRM.
4. Any non-residential structure, or part thereof, made watertight below the Regulatory Flood Elevation shall be floodproofed in accordance with the W1 or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the U.S. Army Corps of Engineers (June 1972, as amended in EP 1165-2-314, December 1995) or with some other equivalent standard. All plans and specifications for such floodproofing shall be accompanied by a statement certified by a registered professional engineer or architect which states that the proposed design and methods of construction are in conformance with the above referenced standards. There should be a statement submitted with the permit application and a statement submitted with the as-built Floodproofing Certificate prior to the issuance of the Certificate of Occupancy.
5. Any non-residential structure that will be floodproofed must submit the following to the Floodplain Administrator along with the non-residential Floodproofing Certificate and prior to the issuance of the Certificate of Occupancy:
 - a. An Inspection and Maintenance Plan detailing the annual maintenance of floodproofed components ensuring that all components will operate properly under flood conditions. Components that must be inspected include at a minimum:
 1. Mechanical equipment such as sump pumps and generators,
 2. Flood shields and closures,
 3. Walls and wall penetrations, and
 4. Levees and berms (as applicable)
 - b. Flood Emergency Operation Plan detailing the procedures to be followed during a flooding event, and must include information pertaining to how all

components will operate properly under all conditions, including power failures. The design professional must produce the plan. An adequate plan must include the following:

1. An established chain of command and responsibility with leadership responsibilities clearly defined for all aspects of the plan.
2. A procedure for notification of necessary parties when flooding threatens and flood warnings are issued. Personnel required to be at the building should have a planned and safe means of ingress and should have no other emergency response duties during a flood event. Alternates should be assigned in the event that the primary persons responsible are unable to complete their assigned duties under the plan.
3. A list of specific duties assigned to ensure that all responsibilities are addressed expeditiously. The locations of materials necessary to properly install all floodproofing components must be included in the list.
4. An evacuation plan for all personnel or occupants; those without duties for the flood emergency as well as those with duties for implementing the plan. All possible ingress and egress routes must be identified.
5. A periodic training and exercise program to keep personnel and occupants aware of their duties and responsibilities. Training drills should be held at least once a year and should be coordinated with community officials.
6. The design and construction standards and specifications contained in the 2018 International Building Code (IBC) and in the 2018 International Residential Code (IRC) or the latest revision thereof as adopted by the Commonwealth of Pennsylvania, and ASCE 24 and 34 PA Code (Chapters 401-405 as amended) shall be utilized, where they are more restrictive.

C. Space below the lowest floor

1. Basements are prohibited.
2. Fully enclosed space below the lowest floor (excluding basements) which will be used solely for the parking of a vehicle, building access, or incidental storage in an area other than a basement, shall be designed and constructed to allow for the automatic entry and exit of flood waters for the purpose of equalizing hydrostatic forces on exterior walls. The term "fully enclosed space" also includes crawl spaces.

3. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:
 - a. a minimum of two openings having a net total area of not less than one (1) square inch for every square foot of enclosed space installed on two (2) separate walls
 - b. the bottom of all openings shall be no higher than one (1) foot above grade.
 - c. openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

D. Historic Structures

Historic structures undergoing repair or rehabilitation that would constitute a substantial improvement as defined in this ordinance, must comply with all ordinance requirements that do not preclude the structure's continued designation as a historic structure. Documentation that a specific ordinance requirement will cause removal of the structure from the National Register of Historic Places or the State Inventory of Historic places must be obtained from the Secretary of the Interior or the State Historic Preservation Officer. Any exemption from ordinance requirements will be the minimum necessary to preserve the historic character and design of the structure.

E. Accessory structures

Structures accessory to a principal building need not be elevated or floodproofed to remain dry, but shall comply, at a minimum, with the following requirements:

1. The structure shall not be designed or used for human habitation, but shall be limited to the parking of vehicles, or to the storage of tools, material, and equipment related to the principal use or activity.
2. Floor area shall not exceed 600 square feet.
3. The structure will have a low damage potential.
4. The structure will be located on the site so as to cause the least obstruction to the flow of flood waters.
5. Power lines, wiring, and outlets will be elevated to the Regulatory Flood Elevation.
6. Permanently affixed utility equipment and appliances such as furnaces, heaters, washers, dryers, etc. are prohibited.
7. Sanitary facilities are prohibited.

8. The structure shall be adequately anchored to prevent flotation, collapse, and lateral movement and shall be designed to automatically provide for the entry and exit of floodwater for the purpose of equalizing hydrostatic forces on the walls. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:
 - a. a minimum of two openings having a net total area of not less than one (1) square inch for every square foot of enclosed space.
 - b. the bottom of all openings shall be no higher than one (1) foot above grade.
 - c. openings may be equipped with screens, louvers, etc. or other coverings or devices provided that they permit the automatic entry and exit of flood waters.
9. For accessory structures that are 200 square feet or larger in area (footprint) and that are below the base flood elevation, a signed Declaration of Land Restriction (Nonconversion Agreement) shall be recorded on the property deed prior to issuance of the Certificate of Occupancy.

3. Design and Construction Standards

The following minimum standards shall apply for all construction and development proposed within any identified floodplain area:

A. Fill

1. If fill is used, it shall:
 - a. extend laterally at least fifteen (15) feet beyond the building line from all points;
 - b. consist of soil or small rock materials only - Sanitary Landfills shall not be permitted;
 - c. be compacted to provide the necessary permeability and resistance to erosion, scouring, or settling;
 - d. be no steeper than one (1) vertical to two (2) horizontal feet unless substantiated data justifying steeper slopes are submitted to, and approved by the Floodplain Administrator; and
 - e. be used to the extent to which it does not adversely affect adjacent properties.

B. Drainage Facilities

Storm drainage facilities shall be designed to convey the flow of storm water runoff in a safe and efficient manner. The system shall ensure proper drainage along streets, and

provide positive drainage away from buildings. The system shall also be designed to prevent the discharge of excess runoff onto adjacent properties.

C. Water and Sanitary Sewer Facilities and Systems

1. All new or replacement water supply and sanitary sewer facilities and systems shall be located, designed and constructed to minimize or eliminate flood damages and the infiltration of flood waters.
2. Sanitary sewer facilities and systems shall be designed to prevent the discharge of untreated sewage into flood waters.
3. No part of any on-site waste disposal system shall be located within any identified floodplain area except in strict compliance with all State and local regulations for such systems. If any such system is permitted, it shall be located so as to avoid impairment to it, or contamination from it, during a flood.
4. The design and construction provisions of the UCC and FEMA #348, "Protecting Building Utilities From Flood Damages" and "The International Private Sewage Disposal Code" shall be utilized.

D. Other Utilities

All other utilities such as gas lines, electrical and telephone systems shall be located, elevated (where possible) and constructed to minimize the chance of impairment during a flood.

E. Streets

The finished elevation of all new streets shall be no more than one (1) foot below the Regulatory Flood Elevation.

F. Storage

All materials that are buoyant, flammable, explosive, or in times of flooding, could be injurious to human, animal, or plant life, and not listed in Section 13.05.4, Development Which May Endanger Human Life, shall be stored at or above the Regulatory Flood Elevation or floodproofed to the maximum extent possible.

G. Placement of Buildings and Structures

All buildings and structures shall be designed, located, and constructed so as to offer the minimum obstruction to the flow of water and shall be designed to have a minimum effect upon the flow and height of flood water.

H. Anchoring

1. All buildings and structures shall be firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse, or lateral movement.
2. All air ducts, large pipes, storage tanks, and other similar objects or components located below the Regulatory Flood Elevation shall be securely anchored or affixed to prevent flotation.

I. Floors, Walls and Ceilings

1. Wood flooring used at or below the Regulatory Flood Elevation shall be installed to accommodate a lateral expansion of the flooring, perpendicular to the flooring grain without causing structural damage to the building.
2. Plywood used at or below the Regulatory Flood Elevation shall be of a "marine" or "water-resistant" variety.
3. Walls and ceilings at or below the Regulatory Flood Elevation shall be designed and constructed of materials that are "water-resistant" and will withstand inundation.
4. Windows, doors, and other components at or below the Regulatory Flood Elevation shall be made of metal or other "water-resistant" material.

J. Paints and Adhesives

1. Paints and other finishes used at or below the Regulatory Flood Elevation shall be of "marine" or "water-resistant" quality.
2. Adhesives used at or below the Regulatory Flood Elevation shall be of a "marine" or "water-resistant" variety.
3. All wooden components (doors, trim, cabinets, etc.) used at or below the Regulatory Flood Elevation shall be finished with a "marine" or "water-resistant" paint or other finishing material.

K. Electrical Components

1. Electrical distribution panels shall be at least three (3) feet above the base flood elevation.
2. Separate electrical circuits shall serve lower levels and shall be dropped from above.

L. Equipment

1. Water heaters, furnaces, air conditioning and ventilating units, and other electrical, mechanical or utility equipment or apparatus shall not be located below the

Regulatory Flood Elevation and shall be anchored to resist floatation, collapse, and lateral movement

2. Ductwork shall be elevated to or above the Regulatory Flood Elevation or floodproofed to remain water resistant.

M. Fuel Supply Systems

All gas and oil supply systems shall be designed to prevent the infiltration of flood waters into the system and discharges from the system into flood waters. Additional provisions shall be made for the drainage of these systems in the event that flood water infiltration occurs.

N. Uniform Construction Code Coordination

The Standards and Specifications contained in 34 PA Code (Chapters 401-405), as amended and not limited to the following provisions shall apply to the above and other sections and sub-sections of this ordinance, to the extent that they are more restrictive and supplement the requirements of this ordinance.

International Building Code (IBC) 2018 or the latest revision thereof as adopted by the Commonwealth of Pennsylvania:

Secs. 801, 1202, 1403, 1603, 1605, 1612, 3402, and Appendix G.

International Residential Building Code (IRC) 2018 or the latest revision thereof as adopted by the Commonwealth of Pennsylvania:

Secs. R104, R105, R109, R322, Appendix E, and Appendix J.

4. Development That May Endanger Human Life

- A. In accordance with the Pennsylvania Flood Plain Management Act as amended, and the regulations originally adopted by the Department of Community and Economic Development, to be further adopted or amended by the Pennsylvania Emergency Management Agency in consultation with the Department of Environmental Protection required by the Act, any new or substantially improved structure which:

1. will be used for the production or storage of any of the following dangerous materials or substances; or,
2. will be used for any activity requiring the maintenance of a supply of more than 550 gallons, or other comparable volume, of any of the following dangerous materials or substances on the premises; or,
3. will involve the production, storage, or use of any amount of radioactive substances;

shall be subject to the provisions of this section, in addition to all other applicable

provisions. The following list of materials and substances are considered dangerous to human life:

- Acetone
- Ammonia
- Benzene
- Calcium carbide
- Carbon disulfide
- Celluloid
- Chlorine
- Hydrochloric acid
- Hydrocyanic acid
- Magnesium
- Nitric acid and oxides of nitrogen
- Petroleum products (gasoline, fuel oil, etc.)
- Phosphorus
- Potassium
- Sodium
- Sulphur and sulphur products
- Pesticides (including insecticides, fungicides, and rodenticides)
- Radioactive substances, insofar as such substances are not otherwise regulated.

B. Within any Floodway Area, any structure of the kind described in Subsection A., above, shall be prohibited. Where permitted within any Identified Floodplain Area, any new or substantially improved residential structure of the kind described in Section 13.05.4.A, above, shall be elevated to remain completely dry up to at least one and one half (1 ½) feet above base flood elevation and built in accordance with Sections 13.05.1, 13.05.2 and 13.05.3.

C. Where permitted within any Identified Floodplain Area, any new or substantially improved non-residential structure of the kind described in Section 13.05.4.A above, shall be built in accordance with Sections 13.05.1, 13.05.2 and 13.05.3 including:

1. elevated, or designed and constructed to remain completely dry up to at least one and one half (1 ½) feet above base flood elevation, and
2. designed to prevent pollution from the structure or activity during the course of a base flood.

Any such structure, or part thereof, that will be built below the Regulatory Flood Elevation shall be designed and constructed in accordance with the standards for completely dry floodproofing contained in the publication "Flood-Proofing Regulations" (U.S. Army Corps of Engineers, June 1972 as amended March 1992), or with some other equivalent watertight standard.

5. Special Requirements for Subdivisions and Development

All subdivision proposals and development proposals containing at least 50 lots or at least 5 acres, whichever is the lesser, in Identified Floodplain Areas where base flood elevation data are not available, shall be supported by hydrologic and hydraulic engineering analyses that determine base flood elevations and floodway information. The analyses shall be prepared by a licensed professional engineer in a format required by FEMA for a Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR). Submittal requirements and processing fees shall be the responsibility of the applicant.

6. Special Requirements for Manufactured Homes

- A. Within any Floodway Area/District, manufactured homes shall be prohibited.
- B. Where permitted within any Identified Floodplain Area, all manufactured homes, and any improvements thereto, shall be:
 - 1. placed on a permanent foundation;
 - 2. elevated so that the lowest floor of the manufactured home is at least one and one half (1 ½) feet above base flood elevation; and
 - 3. anchored to resist flotation, collapse, or lateral movement.
- C. Equipment requirement:
 - 1. Water heaters, furnaces, air conditioning and ventilating units, and other electrical, mechanical or utility equipment or apparatus shall not be located below the Regulatory Flood Elevation and shall be anchored to resist floatation, collapse, and lateral movement.
 - 2. Ductwork shall be elevated to or above the Regulatory Flood Elevation or floodproofed to remain water resistant.
- D. Installation of manufactured homes shall be done in accordance with the manufacturers' installation instructions as provided by the manufacturer. Where the applicant cannot provide the above information, the requirements of Appendix E of the 2018 "International Residential Building Code" or the "U.S. Department of Housing and Urban Development's Permanent Foundations for Manufactured Housing," 1984 Edition, draft or latest revision thereto and 34 PA Code Chapter 401-405 shall apply.
- E. Consideration shall be given to the installation requirements of the 2018 IBC, and the 2018 IRC or the latest revision thereto as adopted by the Commonwealth of Pennsylvania, and 34 PA Code, as amended where appropriate and/or applicable to units where the manufacturers' standards for anchoring cannot be provided or were not established for the proposed unit's installation.

7. Special Requirements for Recreational Vehicles

Within any Identified Floodplain Area the storage of recreational vehicles shall be prohibited. If a variance is obtained in accordance with the criteria in Section 13.08, then the following provisions apply:

- A. Recreational vehicles in Zones A, A1-30, AH and AE must:
 - 1. Be on the site for fewer than 180 consecutive days, and
 - 2. Be fully licensed and ready for highway use, and
 - 3. Be removed from the floodplain when an official flood warning is issued by Middlesex Township.

§13.06 ACTIVITIES REQUIRING SPECIAL PERMITS

1. General

In accordance with the administrative regulations originally adopted by the Department of Community and Economic Development to implement the Pennsylvania Flood Plain Management Act as amended, to be further adopted or amended by the Pennsylvania Emergency Management Agency in consultation with the Department of Environmental Protection as required by the Act, the following activities shall be prohibited within any Identified Floodplain Area unless a Special Permit has been issued by the Township of Middlesex:

- A. The commencement of any of the following activities; or the construction, enlargement, or expansion of any structure used, or intended to be used, for any of the following activities:
 - 1. Hospitals
 - 2. Nursing homes
 - 3. Jails or prisons
- B. The commencement of, or any construction of, a new manufactured home park or manufactured home subdivision, or substantial improvement to an existing manufactured home park or manufactured home subdivision.

2. Application Requirements for Special Permits

Applicants for Special Permits shall provide five copies of the following items:

- A. A written request including a completed Permit Application Form.
- B. A small scale map showing the vicinity in which the proposed site is located.
- C. A plan of the entire site, clearly and legibly drawn at a scale of one (1) inch being equal to

one hundred (100) feet or less, showing the following:

1. north arrow, scale and date;
2. topography based upon the North American Vertical Datum (NAVD) of 1988, showing existing and proposed contours at intervals of two (2) feet;
3. all property and lot lines including dimensions, and the size of the site expressed in acres or square feet;
4. the location of all existing streets, driveways, other access ways, and parking areas, with information concerning widths, pavement types and construction, and elevations;
5. the location of any existing bodies of water or watercourses, buildings, structures and other public or private facilities, including railroad tracks and facilities, and any other natural and man-made features affecting, or affected by, the proposed activity or development;
6. the location of the floodplain boundary line, information and spot elevations concerning the base flood elevation, and information concerning the flow of water including direction and velocities;
7. the location of all proposed buildings, structures, utilities, and any other improvements; and
8. any other information which the municipality considers necessary for adequate review of the application.

D. Plans of all proposed buildings, structures and other improvements, clearly and legibly drawn at suitable scale showing the following:

1. sufficiently detailed architectural or engineering drawings, including floor plans, sections, and exterior building elevations, as appropriate;
2. for any proposed building, the elevation of the lowest floor (including basement) and, as required, the elevation of any other floor;
3. complete information concerning flood depths, pressures, velocities, impact and uplift forces, and other factors associated with the base flood;
4. detailed information concerning any proposed floodproofing measures, including the Flood Emergency Operation Plan and the Inspection and Maintenance Plan;
5. cross section drawings for all proposed streets, driveways, other accessways, and parking areas, showing all rights-of-way and pavement widths;

6. profile drawings for all proposed streets, driveways, and vehicular accessways including existing and proposed grades; and
7. plans and profiles of all proposed sanitary and storm sewer systems, water supply systems, and any other utilities and facilities.

E. The following data and documentation:

1. certification from the applicant that the site upon which the activity or development is proposed is an existing separate and single parcel, owned by the applicant or the client he represents;
2. certification from a registered professional engineer, architect, or landscape architect that the proposed construction has been adequately designed to protect against damage from the base flood;
3. a statement, certified by a registered professional engineer, architect, landscape architect, or other qualified person which contains a complete and accurate description of the nature and extent of pollution that might possibly occur from the development during the course of a base flood, including a statement concerning the effects such pollution may have on human life;
4. a statement certified by a registered professional engineer, architect, or landscape architect, which contains a complete and accurate description of the effects the proposed development will have on base flood elevation and flows;
5. a statement, certified by a registered professional engineer, architect, or landscape architect, which contains a complete and accurate description of the kinds and amounts of any loose buoyant materials or debris that may possibly exist or be located on the site below the base flood elevation and the effects such materials and debris may have on base flood elevation and flows;
6. the appropriate component of the Department of Environmental Protection's "Planning Module for Land Development";
7. where any excavation or grading is proposed, a plan meeting the requirements of the Department of Environmental Protection to implement and maintain erosion and sedimentation control;
8. any other applicable permits such as, but not limited to, a permit for any activity regulated by the Department of Environmental Protection under Section 302 of Act 1978-166; and
9. an evacuation plan which fully explains the manner in which the site will be safely evacuated before or during the course of a base flood.

3. Application Review Procedures

Upon receipt of an application for a Special Permit by the Township of Middlesex the following procedures shall apply in addition to those of §13.03:

- A. Within three (3) working days following receipt of the application, a complete copy of the application and all accompanying documentation shall be forwarded to the County Planning Commission by registered or certified mail for its review and recommendations. Copies of the application shall also be forwarded to the Township of Middlesex Planning Commission and Township of Middlesex engineer for review and comment.
- B. If an application is received that is incomplete, the Township of Middlesex shall notify the applicant in writing, stating in what respect the application is deficient.
- C. If the Township of Middlesex decides to disapprove an application, it shall notify the applicant, in writing, of the reasons for the disapproval.
- D. If the Township of Middlesex approves an application, it shall file written notification, together with the application and all pertinent information, with the Pennsylvania Emergency Management Agency, by registered or certified mail, within five (5) working days after the date of approval.
- E. Before issuing the Special Permit, the Township of Middlesex shall allow the Pennsylvania Emergency Management Agency thirty (30) days, after receipt of the notification by the Agency, to review the application and decision made by the Township of Middlesex.
- F. If the Township of Middlesex does not receive any communication from the Pennsylvania Emergency Management Agency during the thirty (30) day review period, it may issue a Special Permit to the applicant.
- G. If the Pennsylvania Emergency Management Agency should decide to disapprove an application, it shall notify the Township of Middlesex and the applicant, in writing, of the reasons for the disapproval, and the Township of Middlesex shall not issue the Special Permit.

4. Special Technical Requirements

- A. In addition to the requirements of §13.05. of this Ordinance, the following minimum requirements shall also apply to any proposed development requiring a Special Permit. If there is any conflict between any of the following requirements and those in §13.05 of this Ordinance or in any other code, ordinance, or regulation, the more restrictive provision shall apply.
- B. No application for a Special Permit shall be approved unless it can be determined that the structure or activity will be located, constructed and maintained in a manner which will:
 - 1. Fully protect the health and safety of the general public and any occupants of the

structure. At a minimum, all new structures shall be designed, located, and constructed so that:

- a. the structure will survive inundation by waters of the base flood without any lateral movement or damage to either the structure itself, or to any of its equipment or contents below the BFE.
 - b. the lowest floor (including basement) will be elevated to at least one and one half (1 ½) feet above base flood elevation.
 - c. the occupants of the structure can remain inside for an indefinite period of time and be safely evacuated at any time during the base flood.
2. Prevent any significant possibility of pollution, increased flood levels or flows, or debris endangering life and property.

All hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc. shall be submitted in sufficient detail to allow a thorough technical review by the Township of Middlesex and the Pennsylvania Emergency Management Agency.

§13.07 EXISTING STRUCTURES IN IDENTIFIED FLOODPLAIN AREAS

1. Existing Structures

The provisions of this Ordinance do not require any changes or improvements to be made to lawfully existing structures. However, when an improvement is made to any existing structure, the provisions of Section 13.07.2 shall apply.

2. Improvements

The following provisions shall apply whenever any improvement is made to an existing structure located within any Identified Floodplain Area:

- A. No expansion or enlargement of an existing structure shall be allowed within any Floodway Area/District that would cause any increase in BFE.
- B. No expansion or enlargement of an existing structure shall be allowed within AE Area/District without floodway that would, together with all other existing and anticipated development, increase the BFE more than one (1) foot at any point.
- C. Any modification, alteration, reconstruction, or improvement of any kind to an existing structure to an extent or amount of fifty (50) percent or more of its market value, shall constitute a substantial improvement and shall be undertaken only in full compliance with the provisions of this Ordinance.
- D. The above activity shall also address the requirements of the 34 PA Code, as amended and

the 2018 IBC and the 2018 IRC or most recent revision thereof as adopted by the Commonwealth of Pennsylvania.

- E. Within any Floodway Area/District (See Section 13.04.2.A) no new construction or development shall be allowed, unless the appropriate permit is obtained from the Department of Environmental Protection Regional Office.
- F. Within any AE Area/District without Floodway (See Section 13.04.2.B), no new construction or development shall be located within the area measured fifty (50) feet landward from the top-of-bank of any watercourse, unless the appropriate permit is obtained from the

§13.08 VARIANCES

1. General

If compliance with any of the requirements of this Ordinance would result in an exceptional hardship to a prospective builder, developer or landowner, the Township of Middlesex Zoning Hearing Board may, upon request, grant relief from the strict application of the requirements.

2. Variance Procedures and Conditions

Requests for variances shall be considered by the Township of Middlesex Zoning Hearing Board in accordance with the procedures contained in Section 13.03.10 and the following:

- A. No variance shall be granted for any construction, development, use, or activity within any Floodway Area/District that would cause any increase in the BFE.
- B. No variance shall be granted for any construction, development, use, or activity within any AE Area/District without floodway that would, together with all other existing and anticipated development, increase the BFE more than one (1) foot at any point.
- C. No variances shall be granted for a proposed accessory structure that exceeds 600 square feet in size. A signed Non-Conversion Agreement is required as a condition of receiving the variance.
- D. Except for a possible modification of the Regulatory Flood Elevation requirement involved, no variance shall be granted for any of the other requirements pertaining specifically to development regulated by Special Permit (Section 13.06) or to Development Which May Endanger Human Life (Section 13.05.4).
- E. If granted, a variance shall involve only the least modification necessary to provide relief.
- F. In granting any variance, the Township of Middlesex Zoning Hearing Board shall attach whatever reasonable conditions and safeguards it considers necessary in order to protect the public health, safety, and welfare, and to achieve the objectives of this Ordinance.

G. Whenever a variance is granted, the Township of Middlesex Zoning Hearing Board shall notify the applicant in writing that:

1. The granting of the variance may result in increased premium rates for flood insurance.
2. Such variances may increase the risks to life and property.

H. In reviewing any request for a variance, the Township of Middlesex Zoning Hearing Board shall consider, at a minimum, the following:

1. That there is good and sufficient cause.
2. That failure to grant the variance would result in exceptional hardship to the applicant.
3. That the granting of the variance will
 - a. neither result in an unacceptable or prohibited increase in flood heights, additional threats to public safety, or extraordinary public expense,
 - b. nor create nuisances, cause fraud on, or victimize the public, or conflict with any other applicable state or local ordinances and regulations.

I. A complete record of all variance requests and related actions shall be maintained by the Township of Middlesex Zoning Hearing Board. In addition, a report of all variances granted during the year shall be included in the annual report to the FEMA.

Notwithstanding any of the above, however, all structures shall be designed and constructed so as to have the capability of resisting the one-percent (1%) annual chance flood.

§13.09 DEFINITIONS

1. General

The words and phrases utilized in this Article XIII shall have those meanings set forth below. In the event a contrary definition for such word or phrase appears in any other Township ordinances, the definitions below shall control and be applicable to the provisions contained in Article XIII. To the extent not defined below, words and phrases utilized in Article XIII shall have those meanings ascribed to them as noted in Article II and elsewhere in this Zoning Ordinance.

Unless specifically defined below, words and phrases used in this Ordinance shall be interpreted so as to give this Ordinance its most reasonable application.

1. Specific Definitions

1. Accessory use or structure - a use or structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.

2. Base flood - a flood which has a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood" or one-percent (1%) annual chance flood).
3. Base flood discharge - the volume of water resulting from a Base Flood as it passes a given location within a given time, usually expressed in cubic feet per second (cfs).
4. Base flood elevation (BFE) - the elevation shown on the Flood Insurance Rate Map (FIRM) for Zones AE, AH, A1-30 that indicates the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.
5. Basement - any area of the building having its floor below ground level on all sides.
6. Building - a combination of materials to form a permanent structure having walls and a roof. Included shall be all manufactured homes and trailers to be used for human habitation.
7. Declaration of Land Restriction (Non-Conversion Agreement) - A form signed by the property owner to agree not to convert or modify in any manner that is inconsistent with the terms of the permit and these regulations, certain enclosures below the lowest floor of elevated buildings and certain accessory structures. The form requires the owner to record it on the property deed to inform future owners of the restrictions.
8. Development - any man-made change to improved or unimproved real estate, including but not limited to the construction, reconstruction, renovation, repair, expansion, or alteration of buildings or other structures; the placement of manufactured homes; streets, and other paving; utilities; filling, grading and excavation; mining; dredging; drilling operations; storage of equipment or materials; and the subdivision of land.
9. Existing manufactured home park or subdivision -- 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.
10. Expansion to an existing manufactured home park or subdivision -- 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, the construction of streets, and either final site grading or the pouring of concrete pads).
11. Flood - a temporary inundation of normally dry land areas.
12. Flood Insurance Rate Map (FIRM) - the official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

13. Flood Insurance Study (FIS) - the official report provided by the Federal Emergency Management Agency that includes flood profiles, the Flood Insurance Rate Map, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.
14. Floodplain area - a relatively flat or low land area which is subject to partial or complete inundation from an adjoining or nearby stream, river or watercourse; and/or any area subject to the unusual and rapid accumulation of surface waters from any source.
15. Floodproofing - any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
16. 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 without cumulatively increasing the water surface elevation more than one foot.
17. Highest Adjacent Grade - The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
18. Historic structures – any structure that is:
 - a. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
 - b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
 - c. Individually listed on a state inventory of historic places in states which have been approved by the Secretary of the Interior; or
 - d. Individually listed on a local inventory of historic places in communities with historic preservation that have been certified either:
 - i. By an approved state program as determined by the Secretary of the Interior or
 - ii. Directly by the Secretary of the Interior in states without approved programs.
19. Identified Floodplain Area- this term is an umbrella term that includes all of the areas within which the community has selected to enforce floodplain regulations. It will always include the area identified as the Special Flood Hazard Area on the Flood Insurance Rate Maps and Flood Insurance Study, but may include additional areas identified by the community. See §13.04.1 and §13.04.2. for the specifics on what areas the community has included in the Identified Floodplain Area.

20. Lowest floor - the lowest floor of the lowest fully enclosed area (including basement). An unfinished, flood resistant partially enclosed area, used solely for parking of vehicles, building access, and incidental storage, in an area other than a basement area is not considered the lowest floor of a building, provided that such space is not designed and built so that the structure is in violation of the applicable non-elevation design requirements of this ordinance.
21. Manufactured home - 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 includes park trailers, travel trailers, recreational and other similar vehicles which are placed on a site for more than 180 consecutive days.
22. Manufactured home park or subdivision – a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
23. New construction - structures for which the start of construction commenced on or after the effective start date of this floodplain management ordinance and includes any subsequent improvements to such structures. Any construction started after June 15, 1981 and before the effective start date of this floodplain management ordinance is subject to the ordinance in effect at the time the permit was issued, provided the start of construction was within 180 days of permit issuance.
24. New manufactured home park or subdivision – 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 on or after the effective date of floodplain management regulations adopted by a community.
25. Person - an individual, partnership, public or private association or corporation, firm, trust, estate, municipality, governmental unit, public utility or any other legal entity whatsoever, which is recognized by law as the subject of rights and duties.
26. Post-FIRM Structure - is a structure for which construction or substantial improvement occurred after December 31, 1974 or on or after the community's initial Flood Insurance Rate Map (FIRM) dated June 15, 1981, whichever is later, and, as such, would be required to be compliant with the regulations of the National Flood Insurance Program.
27. Pre-FIRM Structure - is a structure for which construction or substantial improvement occurred on or before December 31, 1974 or before the community's initial Flood Insurance Rate Map (FIRM) dated June 15, 1981, whichever is later, and, as such, would not be required to be compliant with the regulations of the National Flood Insurance Program.
28. Recreational vehicle - a vehicle which is:

- a. built on a single chassis;
 - b. not more than 400 square feet, measured at the largest horizontal projections;
 - c. designed to be self-propelled or permanently towable by a light-duty truck,
 - d. not designed for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
29. Regulatory Flood Elevation - the base flood elevation (BFE) or estimated flood height as determined using simplified methods plus a freeboard safety factor of one and one-half (1 ½) feet. The freeboard safety factor also applies to utilities and ductwork.
30. Special permit - a special approval which is required for hospitals, nursing homes, jails, and new manufactured home parks/ subdivisions and substantial improvements to such existing parks, when such development is located in all, or a designated portion of a floodplain.
31. Special flood hazard area (SFHA) - means an area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. It is shown on the FIRM as Zone A, AO, A1-A30, AE, A99, or, AH.
32. Start of construction - includes substantial improvement and other proposed new development and means the date the Permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days after the date of the permit and shall be completed within twelve (12) months after the date of issuance of the permit unless a time extension is granted, in writing, by the Floodplain Administrator. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufacture home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and 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 part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.
33. Structure – a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.
34. Subdivision - the division or re-division of a lot, tract, or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for

distribution to heirs, or devisees, transfer of ownership or building or lot development: Provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten acres, not involving any new street or easement of access or any residential dwelling, shall be exempted.

35. Substantial damage - damage from any cause sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty (50) percent or more of the market value of the structure before the damage occurred.
36. Substantial improvement - any reconstruction, rehabilitation, addition, or other improvement of a structure, of which the cost equals or exceeds fifty (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, however, include any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.
37. Uniform Construction Code (UCC) – The statewide building code adopted by The Pennsylvania General Assembly in 1999 applicable to new construction in all municipalities whether administered by the municipality, a third party or the Department of Labor and Industry. Applicable to residential and commercial buildings, The Code adopted The International Residential Code (IRC) and the International Building Code (IBC), by reference, as the construction standard applicable with the State floodplain construction. For coordination purposes, references to the above are made specifically to various sections of the IRC and the IBC.
38. Variance- A grant of relief by a community from the terms of a floodplain management regulation.
39. Violation - means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR §60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

SECTION 2: Except only as amended, modified and changed herein, the Middlesex Township Zoning Ordinance as originally enacted and previously amended shall remain in all other respects in full force and effect.

SECTION 3: If any section, sub-section, provision, regulation, limitation, restriction, sentence, clause, phrase or word in this Ordinance is declared by any reason to be illegal, unconstitutional, or invalid by any court of competent jurisdiction, such decision shall not effect or impair the validity of this Ordinance or the Middlesex Township Zoning Ordinance as a whole, or any other section, sub-section, provision, regulation, limitation, restriction, sentence,

clause, phrase, word or remaining portion of this Ordinance or the Middlesex Township Zoning Ordinance.

SECTION 4: This Ordinance shall become effective on September 7, 2023.

ENACTED AND ADOPTED by the Board of Supervisors this 25th day of August, 2023.

ATTEST:

BOARD OF SUPERVISORS OF THE
TOWNSHIP OF MIDDLESEX



Township of Middlesex Secretary

By: 

(Vice) Chairman, Board of Supervisors

(Township Seal)