

ORDINANCE NO. 2020-178

AN ORDINANCE OF THE TOWNSHIP OF CUMBERLAND, ADAMS COUNTY, PENNSYLVANIA, REPEALING AND REPLACING CHAPTER 8 OF THE TOWNSHIP OF CUMBERLAND CODE OF ORDINANCES, ENTITLED “FLOODPLAINS” AND AMENDING CHAPTER 4 “BUILDINGS”, CHAPTER 14 “MOBILE HOMES AND MOBILE HOME PARKS”, CHAPTER 22 “SUBDIVISION AND LAND DEVELOPMENT”, AND CHAPTER 27 “ZONING” TO PROVIDE CONSISTENCY IN FLOODPLAIN PROVISIONS.

WHEREAS, the Pennsylvania Flood Plain Management Act, 32 P.S. §§ 679.101 – 679.601, (the “Floodplain Management Act”), at Section 679.202 requires certain municipalities to adopt flood plain management regulations within six months after a flood plain map is approved or promulgated for the municipality by the United States Department of Housing and Urban Development; and

WHEREAS, the Pennsylvania Second Class Township Code, 53 P.S. §§ 65101 – 68701, (the “Second Class Township Code”), at Section 66506 empowers the Township to make regulations necessary for the proper management, care, and control of the Township; and

WHEREAS, the Board of Supervisors deems it to be in the best interest of the Township and its citizens to adopt a Floodplain Ordinance that complies with the National Flood Insurance Program and the Pennsylvania Flood Plain Management Act, 32 P.S. § 679.101, *et. seq.*

NOW THEREFORE, BE IT ENACTED AND ORDAINED, by the Board of Supervisors of Cumberland Township, Adams County, Pennsylvania, that Chapter 8 of the Township of Cumberland Code of Ordinances (the “Code”), entitled “Floodplains”, is hereby amended as follows:

SECTION 1: The contents of Chapter 8 of the Township of Cumberland Code of Ordinances, entitled “Floodplains” are hereby repealed in their entirety and replaced with the following:

Part 1. General Provisions

Section 8-101. 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.

Section 8-102. Applicability.

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

Section 8-103. Abrogation and Greater Restrictions.

The Chapter supersedes any other conflicting provisions which may be in effect in identified floodplain areas. However, any other Chapter 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 Chapter, the more restrictive shall apply.

Section 8-104. Warning and Disclaimer of Liability.

The degree of flood protection sought by the provisions of this Chapter 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 Chapter 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 Chapter shall not create liability on the part of Cumberland Township or any officer or employee thereof for any flood damages that result from reliance on this Chapter or any administrative decision lawfully made thereunder.

Part 2. Administration

Section 8-201. Designation of the Floodplain Administrator.

The Township's Zoning Officer, appointed in accordance with Chapter 27 of the Township of Cumberland Code of Ordinances, entitled "Zoning", is hereby appointed to administer and enforce this Chapter 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.

Section 8-202. Permits Required.

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

Section 8-203. 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 Zoning 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. In the case of existing structures, prior to the issuance of any Zoning Permit, the Floodplain Administrator shall review the history of repairs to the subject building, so that any cumulative substantial damage concerns can be addressed before the permit is issued.
- E. 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 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.
- F. 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 the proper credentials, at any reasonable hour to enforce the provisions of this Chapter.
- G. In the event the Floodplain Administrator discovers that the work does not comply with the 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.
- H. The Floodplain Administrator shall maintain in perpetuity, or for the lifetime of the structure, all records associated with the requirements of this Chapter including, but not limited to, finished construction elevation data, permitting, inspection, and enforcement.

- I. 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.
- J. 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.
- K. The Floodplain Administrator shall consider the requirements of the 34 PA Code and the 2015 IBC and the 2015 IRC, or the latest revision thereof as adopted by the Commonwealth of Pennsylvania.

Section 8-204 Application Procedures and Requirements.

- A. Application for such a Permit shall be made, in writing, to the Floodplain Administrator on Forms supplied by Cumberland Township. 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 costs, including a breakout of flood-related costs 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. all property and lot lines including dimensions and the size of the site expressed in acres or square feet;
 - d. the location of all existing and proposed buildings, structures, and other improvements, including the location of any existing or proposed subdivision and development;
 - e. the location of all existing streets, drives, and other access ways; and
 - f. the location of any existing bodies of water or watercourses, identified floodplain area, 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 2015 IBC, or the 2015 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 27-1102(4)) 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 27-1102(4)) 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 8-403F, Storage, and Section 8-404, Development Which May Endanger Human Life, including:
 - i. the amount, location, and purpose of any materials or substances referred to in Sections 8-403F. and 8-404 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 8-404 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.

Section 8-205. Review by County Conservation District.

A copy of all applications and plans for any proposed construction or development in any identified floodplain area to be considered for approval shall be submitted by the Floodplain Administrator

to the County Conservation District for review and comment prior to the issuance of a Permit. The recommendations of the Conservation District shall be considered by the Floodplain Administrator for possible incorporation into the proposed plan.

Section 8-206. Review of Application by Others.

A copy of all plans and applications for any proposed constructions 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.

Section 8-207. 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 the Floodplain Administrator for consideration.

Section 8-208. 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.

Section 8-209. 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 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 a permit under this Chapter does not constitute zoning approval, land development approval, or building approval. Any required zoning, land development, and building approvals must be obtained prior to construction.

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.

Section 8-210. 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 any provisions of this Chapter, or of any regulations adopted pursuant thereto, the Floodplain Administrator shall give notice of such alleged violation as hereinafter provided. Such notice shall:

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 by any other method authorized or required by the laws of this State;
5. contain an outline of remedial actions which, if taken, will effect compliance with the provisions of this Chapter.

B. Penalties

Any person who fails to comply with any or all of the requirements or provisions of this Chapter or who fails or refuses to comply with any notice, order, or direction of the Floodplain Administrator or any other authorized employee of the municipality shall be guilty of a summary offense and upon conviction shall pay a fine to Cumberland Township of not less than Twenty-five Dollars (\$25.00) nor more than Six Hundred Dollars (\$600.00) plus costs of prosecution. Each day during which any violation of this Chapter 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 Chapter. The imposition of a fine or penalty for any violation of, or noncompliance with this Chapter 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 Chapter may be declared by the Board of Supervisors or Township Code Enforcement Officer(s) to be a public nuisance and abatable as such.

Section 8-211. Appeals.

- A. Any person aggrieved by any action or decision of the Floodplain Administrator concerning the administration of the provisions of this Chapter, 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 Municipalities Planning Code and any other local ordinance.
- C. Any person aggrieved by any decision of the Zoning Hearing Board may seek relief therefrom by appeal to court, as provided by the laws of this Commonwealth including the Pennsylvania Flood Plain Management Act.

Part 3. Identification of Floodplain Areas

Section 8-301. Identification.

The identified floodplain area shall consist of those specific areas set forth and described in Section 27-1102 of this Code, entitled "Flood and Floodplain Protection".

Part 4. Technical Provisions

Section 8-401. 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 Department of Community and Economic Development, shall be notified prior to any alteration or relocation of any watercourse.
- B. When an applicant proposes 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 (1) 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 Part 65.12, as amended from time to time):

1. apply to FEMA for conditional approval of such action prior to Cumberland Township 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, Cumberland Township 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 to FEMA with a copy to Cumberland Township. FEMA will initiate a final map revision upon receipt of such certifications in accordance with 44 CFR Part 67, as amended from time to time.

- 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 Chapter and any other applicable codes, ordinances, and regulations.

Section 8-402. 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 27-1102(4) of this Code.
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 2015 International Building Code (IBC) and in the 2015 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 27-1102(4) of this Code.
3. In AO Zones, any new construction or substantial improvement shall have the 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 Corp of Engineers (June 1972, as amended March 1992) 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. A 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, under Chapter 4, Part 3 of this Code:
 - 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:
 - i. Mechanical equipment such as sump pumps and generators,
 - ii. Flood shields and closures,

- iii. Walls and wall penetrations, and
 - iv. 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:
 - i. An established chain of command and responsibility with leadership responsibilities clearly defined for all aspects of the plan.
 - ii. 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.
 - iii. 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.
 - iv. 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.
 - v. 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 2015 International Building Code (IBC) and in the 2015 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 shall be prohibited within any Identified Floodplain Area.
 - 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 Chapter, 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 Chapter 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 200 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 floatation, 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 variance is required as set forth in Part 7. If a variance is granted, a signed Declaration of Land Restriction (Nonconversion Agreement) shall be recorded on the property deed prior to issuance of the Certificate of Occupancy.

Section 8-403. 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 within any Identified Floodplain Area, 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 8-404, Development That 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 floatation, 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 floatation.

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 subsections of this Chapter, to the extent that they are more restrictive and supplement the requirements of this Chapter.

International Building Code (IBC) 2015 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) 2015 or the latest revision thereof as adopted by the Commonwealth of Pennsylvania: Secs. R104, R105, R109, R322, Appendix E, and Appendix J.

Section 8-404. Development That May Endanger Human Life.

A. In accordance with the Pennsylvania Flood Plain Management Act, and the regulations adopted by the Department of Community and Economic Development as required by the Act, within any Identified Floodplain Area, 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 Identified Floodplain Area, any new or substantially improved structure of the kind described in Subsection A above shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any watercourse.
- C. 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 8-404A 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 8-401, 8-402, and 8-403.
- D. Where permitted within any Identified Floodplain Area, any new or substantially improved non-residential structure of the kind described in Section 8-404A above, shall be built in accordance with Sections 8-401, 8-402, 8-403 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.

Section 8-405. Special Requirements for Subdivisions and Development.

All subdivision proposals and development proposals in Identified Floodplain Areas shall meet the requirements as set forth in Section 22-510 of the Chapter 22 of this Code, entitled "Subdivision and Land Development".

Section 8-406. Special Requirements for Manufactured Homes.

Any manufactured homes proposed in Identified Floodplain Areas shall be required to meet the requirements set forth in Part 15 of Chapter 14 of this Code, entitled “Mobile Homes and Mobile Home Parks”.

Part 5. Prohibited Activities

Section 8-501. General.

In accordance with the administrative regulations promulgated by the Department of Community and Economic Development to implement the Pennsylvania Flood Plain Management Act, the following activities shall be prohibited within an Identified Floodplain Area:

- 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. Public or private hospitals
 - 2. Public or private nursing homes and long-term care facilities
 - 3. Correctional facilities, including but not limited to jails, prisons, and juvenile detention centers
 - 4. Landfills
 - 5. Junkyards
 - 6. Storage of recreational vehicles.
 - 7. Outdoor storage areas, including but not limited to storage of vehicles or other materials

- 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.

Part 6. Existing Structures in Identified Floodplain Areas

Section 8-601. Existing Structures.

The provisions of this Chapter 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 8-602 shall apply.

Section 8-602. 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 an AE Area/District without floodway that would, together with all 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 percent (50%) or more of its market value shall constitute a substantial improvement and shall be undertaken only in full compliance with the provisions of this Chapter.
- D. The above activity shall also address the requirements of the 34 PA Code, as amended and the 2015 IBC and the 2015 IRC or most recent revision thereof as adopted by the Commonwealth of Pennsylvania.
- E. Within any Floodway Area/District (Section 27-1102(4)), 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 (Section 27-1102(4)), 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.
- G. Any modification, alteration, reconstruction, or improvement of any kind to an existing structure to an extent or amount of less than fifty percent (50%) of its market value shall be elevated and/or floodproofed to the greatest extent possible.
- H. Any modification, alteration, reconstruction, or improvement of any kind undertaken in response to cumulative substantial damage, as defined in this Chapter, shall be undertaken only in full compliance with the provisions of this Chapter.

Part 7. Variances

Section 8-701. General.

If compliance with any of the requirements of this Chapter would result in an exceptional hardship to a prospective builder, developer, or landowner, the Cumberland Township Zoning Hearing Board may, upon request, grant relief from the strict application of the requirements in accordance with the standards set forth in Section 27-1102 of Chapter 27 this Code, entitled "Zoning".

Section 8-702. Variance Procedures and Conditions.

Requests for variances shall be considered by the Cumberland Township Zoning Hearing Board in accordance with the procedures contained in Section 8-211 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 Development That May Endanger Human Life (Section 8-404).
- E. No variance shall be granted for Prohibited Activities (Part 5).
- F. If granted, a variance shall involve only the least modification necessary to provide relief.
- G. In granting any variance, the Cumberland Township 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 Chapter.
- H. Whenever a variance is granted, the Cumberland Township 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.
- I. In reviewing any request for a variance, the Cumberland Township 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.
- J. A complete record of all variance requests and related actions shall be maintained by the Cumberland Township 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.

Part 8. Definitions

Section 8-801. General.

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

Section 8-802. Specific Definitions.

ACCESSORY USE OR STRUCTURE

A structure or use that: (1) is clearly incidental to and customarily found in connection with a principal buildings or use; (2) is subordinate to an serves a principal building or a principal use; (3) is subordinate in area, extent, or purposes to the principal building or principal use served; and (5) is located on the same lot as the principal building or use served.

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).

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).

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.

BASEMENT

Any area of the building having its floor below ground level on all sides.

BUILDING

A structure having a roof and used or built for the enclosure of shelter of persons, animals, vehicles, goods, merchandise, equipment, materials, or property of any kind. Included shall be all manufactured homes and trailers to be used for human habitation.

CUMULATIVE SUBSTANTIAL DAMAGE

Flood related damages sustained by a structure on two or more separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damages occurred.

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.

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.

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.

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).

FLOOD

A temporary inundation of normally dry land areas.

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.

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.

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.

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.

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.

HIGHEST ADJACENT GRADE

The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

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.

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 Sections 27-1102(3)-(4) of this Code for the specifics on what areas the community has included in the Identified Floodplain Area.

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 Chapter.

MANUFACTURED HOME

A transportable single-family detached dwelling intended for occupancy (residential, commercial, storage, or any other use), contained in one unit, or in two or more units

designed to be joined into one integral unit capable of again being separated for repeated towing, that arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations, and constructed so that it may be used without a permanent foundation.

MANUFACTURED HOME PARK OR SUBDIVISION

A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

NEW CONSTRUCTION

Structures for which the start of construction commenced on or after July 22, 2020 and includes any subsequent improvements to such structures. Any construction started after September 30, 1981 and before July 22, 2020 is subject to the provisions in effect at the time the permit was issued, provided the start of construction was within 180 days of permit issuance.

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.

PERSON

An individual, partnership, public or private association or corporation, firm, trust, estate, municipality, government unit, public utility, or any other legal entity whatsoever, which is recognized by law as the subject of rights and duties.

POST-FIRM STRUCTURE

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 September 30, 1981, whichever is later, and, as such, would be required to be compliant with the regulations of the National Flood Insurance Program.

PRE-FIRM STRUCTURE

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 September 30, 1981, whichever is later, and, as such, would not be required to be compliant with the regulations of the National Flood Insurance Program.

RECREATIONAL VEHICLE

A vehicle that 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.

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.

SPECIAL FLOOD HAZARD AREA (SFHA)

An area in the floodplain subject to a one percent (1%) 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.

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 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 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.

STRUCTURE

Any man-made object having an ascertainable stationary location on or in land or water, whether or not affixed to the land.

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.

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 percent (50%) or more of the market value of the structure before the damage occurred.

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" or "cumulative 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.

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.

VARIANCE

Relief granted pursuant to the provisions of Chapter 27 or Chapter 8 of the Township of Cumberland Code of Ordinances, and Articles VI and IX of the Pennsylvania Municipalities Planning Code.

VIOLATION

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: The title of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances, shall be amended to read "Building Permits".

SECTION 3: The contents of Section 4-304, Subsection (1) thereof, of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances shall be amended to read as follows:

1. All development within the area of a floodplain shall be subject to the issuance of a building permit in accordance with the provisions herein and in accordance with the provisions of Chapter 8 of the Township of Cumberland Code of Ordinances, entitled "Floodplains".

SECTION 4: Section 4-304, Subsections (4) and (5) thereof, of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances shall be repealed in their entirety.

SECTION 5: Section 4-312 of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances, entitled "Identification of Floodplain Areas", shall be repealed in its entirety.

SECTION 6: Section 4-313 of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances, entitled "Floodplain Technical Provisions", shall be repealed in its entirety.

SECTION 7: Section 4-314 of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances, entitled "Existing Structures in Identified Floodplain Areas", shall be repealed in its entirety.

SECTION 8: Section 4-315 of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances, entitled "Variances", shall be repealed in its entirety.

SECTION 9: Section 4-316 of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances, entitled "Floodplains Definitions", shall be repealed in its entirety.

SECTION 10: Section 4-317 of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances, entitled "Development Which May Endanger Human Life", shall be repealed in its entirety.

SECTION 11: Section 4-318 of Chapter 4, Part 3 of the Township of Cumberland Code of Ordinances, entitled "Activities Requiring Special Permits", shall be repealed in its entirety.

SECTION 12: The contents of Chapter 14, Part 15, entitled "Miscellaneous Requirements", shall be amended to add a subsection 1503, entitled "Special Floodplain Requirements for Manufactured Homes", that shall read as follows:

14-1503. Special Floodplain Requirements for Manufactured Homes.

- A. Within any Floodway Area/District, manufactured homes shall be prohibited.
- B. Within any Identified Floodplain Area manufactured homes shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any watercourse.
- C. 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;
 - 3. and anchored to resist floatation, collapse, or lateral movement.

- D. 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.
- E. 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 2015 "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.
- F. Consideration shall be given to the installation requirements of the 2015 IBC, and the 2015 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.

SECTION 13: The contents of Chapter 22, Section 510 of the Township of Cumberland Code of Ordinances, entitled "Floodplains" are hereby amended to add a subsection 4 that shall read as follows:

4. 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.

SECTION 14: The following definitions contained in Chapter 27, Section 201 of the Township of Cumberland Code of Ordinances, entitled "Words and Terms Defined", shall be amended as follows:

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.

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.

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 Section 27-1102 (3)-(4) of this Code for the specifics on what areas the community has included in the Identified Floodplain Area.

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.

SECTION 15: The contents of Chapter 27, Section 1102 of the Township of Cumberland Code of Ordinances, entitled "Flood and Floodplain Protection" are hereby repealed and replaced in their entirety with the following:

1. Intent. The intent of this Section 27-1102 is to protect areas of floodplain subject to and necessary for the containment of flood waters, provide adequate protection for flood prone properties, and comply with federal and state floodplain management requirements. Specific objectives include the following:

- A. Promotion of the general health, welfare, and safety of the community.
- B. Encouragement of the utilization of appropriate construction practices in order to prevent or minimize flood damage in the future.
- C. Prevention of the construction of structures in areas unfit for human usage by reason of danger from flooding, unsanitary conditions, or other hazard.
- D. Minimization of danger to public health by protecting the quality and quantity of surface and subsurface water supplies adjacent to and underlying flood hazard areas and promoting safe and sanitary drainage.
- E. Permitting only those uses that can be appropriately located in the floodplain and that will not impede the flow or storage of flood waters, or otherwise cause danger to life and property at, above, or below site locations along the floodplain.
- F. Protection of landowners adjacent to a floodplain and those upstream and downstream from a site along the floodplain from damages resulting from development within a floodplain and the consequent obstruction or increase in flow of flood waters.
- G. Reduction in the financial burdens imposed on the community, its governmental units, and its residents, by preventing excessive development in areas subject to flooding, and the protection of the entire Township from uses of land that may result in subsequent expenditures for public works and disaster relief and that may adversely affect the economic well-being of the township.
- H. Maintenance of an ecological balance among natural systems, including wildlife, vegetation, and marine life, that are dependent upon water courses and water areas.

- I. Protection of other municipalities within the same watershed from the impact of improper development and the consequent increased potential for flooding.
- J. Provision of areas for the deposition of flood-borne sediment.
- K. Protection of uses vulnerable to floods, including public facilities, in accordance with the requirement of the National Flood Insurance Program and the Pennsylvania Flood Plain Management Act.

2. **Applicability and Scope.** This Section 27-1102 regulates the circumstances in which any use may occur in a floodplain.

3. **Identification of Floodplain Areas.** The identified floodplain area shall be any areas of Cumberland Township classified as Special Flood Hazard Areas (SFHAs) in the Flood Insurance Study (FIS) and the accompanying Flood Insurance Rate Maps (FIRMs) dated July 22, 2020 and issued by the Federal Emergency Management Agency (FEMA) or the most recent revision thereof, including all digital data developed as part of the FIS. The above referenced FIS and FIRMs, and any subsequent revisions and amendments are hereby adopted by Cumberland Township and declared to be a part of this ordinance.

4. **Description of 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.
 - 1. 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.
 - 2. 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 and 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 (1) 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 (3) 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.

5. 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, Cumberland Township

shall notify FEMA of the changes to the Special Flood Hazard Area by submitting technical or scientific data.

6. Boundary Disputes. Should a dispute concerning any identified floodplain boundary arise, an initial determination shall be made by the Floodplain Administrator and any party aggrieved by this decision or determination may appeal to the Zoning Hearing Board. The burden of proof shall be on the appellant.

7. Jurisdictional Boundary Changes. Prior to development occurring in areas where annexation or other corporate boundary changes are proposed or have occurred, the Board of Supervisors shall review flood hazard data affecting the lands subject to boundary changes. The Board of Supervisors 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, as amended from time to time.

8. Permitted Uses.

- A. Cultivation and harvesting of crops in accordance with recognized soil conservation practices.
- B. Outdoor plant nursery or orchard in accordance with accepted soil conservation practices.
- C. Game preserve, wildlife sanctuary, woodland preserve, arboretum; and passive recreation or parks, including hiking, bicycle, and bridle trails, but including no facilities subject to damage by flooding.
- D. Utility transmission lines.
- E. Sealed water supply wells, subject to the approval of the Township Engineer.
- F. Sanitary sewers, subject to the approval of the Township Engineer.
- G. Front, side, or rear yards, and required lot area, for any district provided such yards are not to be used for on-site sewage disposal systems or for non-wire fences or any other structure.

9. Prohibited Uses. The following uses and activities are specifically prohibited in floodplains:

- A. Freestanding structures, buildings, and retaining walls, with the exception of flood retention dams, culverts, and bridges as approved by the Pennsylvania Department of Environmental Protection or its successor agency.
- B. Relocation or alteration of any watercourse without approval of the Board of Supervisors and the Pennsylvania Department of Environmental Protection or its successor agency and subject to the following:
 - 1. No such approval shall be given by the Board of Supervisors without first obtaining a recommendation thereon of the Cumberland Township Planning Commission, Adams County Planning Commission, and Soil Conservation Service, U.S. Department of Agriculture or its successor agency.

2. No such relocation or alteration shall take place without prior notification of abutting municipalities and the Federal Insurance Administration of the National Flood Insurance Program.
 3. The flood-carrying capacity of a watercourse shall not be reduced by any such relocation or alteration.
- C. Sanitary landfills, dumps, junkyards, outdoor storage of vehicles and materials.
- D. On-site sewage disposal systems.
- E. Private water supply wells.
- F. The construction, placement, enlargement, or expansion of manufactured homes.
- G. The construction, enlargement, or expansion of hospitals (public or private).
- H. The construction, enlargement, or expansion of nursing homes (public or private).
- I. The construction, enlargement, or expansion of jails or prison.
- J. Any new or substantially improved structure that will be used for the production or storage of any of the following dangerous materials or substances or that will be used for any activity requiring the maintenance of a supply (more than 550) gallons or other comparable volume or any amount of radioactive substances) of any of the following dangerous materials or substances on the premises:
- 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.
- K. The storage of recreational vehicles. If a variance is obtained, then the following provisions apply:
1. Recreational vehicles in Zones A, A1-30, AH, and AE must either:
 - a. be on the site for fewer than 180 consecutive days, and
 - b. be fully licensed and ready for highway use, or
 - c. meet the permit requirements for manufactured homes, contained at Chapter 8, Section 8-406.

10. Conditional Uses. The Board of Supervisors is authorized to grant conditional uses for the following uses, subject to the advisory recommendations of the Planning Commission and Township Engineer and pursuant to the standards in Subsection 11:

- A. Commercial recreation use, whether open to the public or restricted to private membership, such as parks, camps, picnic areas, golf courses, fishing, sport, or boating clubs; not to include enclosed structures excepting toilet facilities but permitting piers, docks, floats, or shelters usually found in developed outdoor recreational areas. No toilet facilities provided shall be connected to an on-site sewage disposal system.
- B. Storm sewers or impoundment basins.
- C. Outlet installations for sewage treatment plants and sewage pumping stations, with approval of the appropriate sewer authorities.
- D. Dams, bridges, and culverts, approved by the Commonwealth of Pennsylvania, Department of Environmental Protection or its successor agency.
- E. Paved roads, driveways, and parking lots, where required by the regulations for the district applicable to the lot without consideration of this section, provided that:
 - 1. In the case of roads and driveways no such facilities shall be permitted as a conditional use if practicable alternative alignments exist.
 - 2. In the case of parking facilities, no such facility shall be permitted as a conditional use unless satisfactory evidence is submitted that such parking will not be utilized during periods of flood flow, thus posing no threat to the safety of the vehicles, their users, and/or to downstream properties. Temporary parking for periods not to exceed one hour, and/or parking for recreation uses would be examples of such exceptions.
- F. Grading or regrading of lands, including the deposit of top soils and the grading thereof, and the construction of retaining walls. An application for a conditional use for such use shall also be accompanied by a plan indicating the deposition of any fill or material proposed to be deposited by the grading or regrading of land; such fill or other materials shall be protected against erosion by rip-rap, vegetation cover, or bulkheading.
- G. Forestry, lumbering, and reforestation in accordance with recognized natural resource conservation practices, but permitting no structures.

11. Standards for Conditional Uses or Variances. The Board of Supervisors, in considering a use as a conditional use, and the Zoning Hearing Board, in considering a variance, shall bear in mind the objectives of Subsection 1 and shall consider the following:

- A. No conditional use or variance shall be granted for construction, development, use, or activity within any floodway area that would cause any increase in the one-hundred-year flood elevation.
- B. No conditional use or variance shall be granted for any construction, development, use, or activity within any AE area without floodway, that would, together with all other existing and anticipated development, increase the one-hundred-year flood elevation more than one foot at any point.
- C. If granted, any variance shall involve only the least modification necessary to provide relief.
- D. Lands abutting the waterway, both upstream and downstream, shall not be adversely affected by the proposed use.
- E. The general welfare or public interest of Cumberland Township or of other municipalities in the same watershed shall not be adversely affected.
- F. Any new structures or substantial improvements to existing structures permitted by conditional use or by variance shall be constructed and placed on the lot so as to offer the minimum obstruction to the flow of water, be designed to have a minimum effect upon the flow and height of flood water, and comply with the requirements of Subsections 15 through 18.
- G. Any new structure or substantial improvement permitted as a Conditional Use or by Variance shall be subject to the requirements of Subsection 18.
- H. Any additions to existing structures permitted as a conditional use or by variance shall have all utilities and facilities floodproofed in accordance with the provisions contained herein and in the Cumberland Township Building Code.
- I. In granting a conditional use or variance, the Township 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 chapter.

12. Additional Standards for Variances. A property owner of a lot of record, as of the date of the enactment of this section, who is able to prove that the strict enforcement of this section would create undue hardship by denying a reasonable use of an existing lot that is situated either wholly or partially in the floodplain, may seek relief by applying for a variance from the Zoning Hearing Board. The Zoning Hearing Board, after deciding upon the merits of the application, may permit the applicant to make some reasonable use of the property in question, while ensuring that such use will not violate the basic objectives of Subsection 1 and will be consistent with the standards of Subsection 11. An affirmative decision shall be issued by the Zoning Hearing Board only upon a determination that it is the minimum necessary, considering the flood hazard, to provide relief, and that:

- A. Good and sufficient cause has been shown.
- B. Failure to grant the variance would result in exceptional hardship to the applicant.
- C. Granting of the variance will neither:

1. Result in an unacceptable or prohibited increase in flood height, additional threats to public safety, or extraordinary public expense.
2. Create nuisances, cause fraud on, or victimize the public, or conflict with any other applicable state or local ordinances and regulations.

13. Application Procedures for Conditional Uses or Variances.

- A. Whenever a variance is granted, the Township 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.
- B. A complete record of all variance requests and related actions shall be maintained by the Township. In addition, a report of all variances granted during the year shall be included in the annual report to the Federal Insurance Administration.
- C. Notwithstanding any of the above, however, all structures shall be designed and constructed so as to have the capacity of resisting the one-hundred-year flood and no conditional use shall be granted by the Board of Supervisors and no variance shall be granted by the Zoning Hearing Board for any requirement pertaining to development that may endanger human life.

14. Procedures for Consideration of Conditional Uses or Variances.

- A. An application for a zoning permit shall be filed with the Zoning Officer who shall make an initial determination on the application. For a use other than those permitted in Section 27-1102, Subsection 8, an application seeking approval of a Conditional Use or Variance shall be forwarded to the Board of Supervisors or Zoning Hearing Board, as appropriate, along with required studies or information and the findings of the Zoning Officer.
- B. The application for conditional use or use by variance shall be accompanied by the following:
 1. Detailed engineering studies indicating the effects on drainage and streams on all adjacent properties as well as the property in question.
 2. An application for amending the boundaries of the floodplain if the boundaries will be affected by the proposed conditional use or use by variance.
- C. Prior to the issuance of any permit, the Zoning Officer and Township Engineer shall review the application for permit to determine if all other necessary government permits required by state and federal laws have been obtained.

15. Technical Provisions.

- 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 Department of Community and Economic Development, shall be notified prior to any alteration or relocation of any watercourse.

B. When an applicant proposes 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 (1) 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 Part 65.12, as amended from time to time):

1. apply to FEMA for conditional approval of such action prior to Cumberland Township 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, Cumberland Township 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 to FEMA with a copy to Cumberland Township. FEMA will initiate a final map revision upon receipt of such certifications in accordance with 44 CFR Part 67, as amended from time to time.

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 Chapter and any other applicable codes, ordinances, and regulations.

16. 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.
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 2015 International Building Code (IBC) and in the 2015 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.
3. In AO Zones, any new construction or substantial improvement shall have the 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 Corp of

Engineers (June 1972, as amended March 1992) 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. A 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, under Chapter 4, Part 3 of this Code:
 - 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:
 - i. Mechanical equipment such as sump pumps and generators,
 - ii. Flood shields and closures,
 - iii. Walls and wall penetrations, and
 - iv. 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:
 - i. An established chain of command and responsibility with leadership responsibilities clearly defined for all aspects of the plan.
 - ii. 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.
 - iii. 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.

- iv. 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.
 - v. 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 2015 International Building Code (IBC) and in the 2015 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 shall be prohibited within any Identified Floodplain Area.
- 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 Chapter, 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 Chapter 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 200 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 floatation, 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 variance is required. If a variance is granted, a signed Declaration of Land Restriction (Nonconversion Agreement) shall be recorded on the property deed prior to issuance of the Certificate of Occupancy.

17. 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 within any Identified Floodplain Area, 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 8-404 of this Code, Development That 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 floatation, 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 floatation.

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 subsections of this Chapter, to the extent that they are more restrictive and supplement the requirements of this Chapter.

International Building Code (IBC) 2015 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) 2015 or the latest revision thereof as adopted by the Commonwealth of Pennsylvania: Secs. R104, R105, R109, R322, Appendix E, and Appendix J.

18. Existing Structures in Identified Floodplain Areas. The provisions of this Code 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 following provisions shall apply:

- 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 an AE Area/District without floodway that would, together with all 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 percent (50%) or more of its market value shall constitute a substantial improvement and shall be undertaken only in full compliance with the provisions of this Chapter.
- D. The above activity shall also address the requirements of the 34 PA Code, as amended and the 2015 IBC and the 2015 IRC or most recent revision thereof as adopted by the Commonwealth of Pennsylvania.
- E. Within any Floodway Area/District, 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, 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.
- G. Any modification, alteration, reconstruction, or improvement of any kind to an existing structure to an extent or amount of less than fifty percent (50%) of its market value shall be elevated and/or floodproofed to the greatest extent possible.
- H. Any modification, alteration, reconstruction, or improvement of any kind undertaken in response to cumulative substantial damage, as defined in this Code, shall be undertaken only in full compliance with the provisions of this Code.

19. Abrogation and Greater Restrictions. This section supersedes any other conflicting provisions that 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 chapter, the more restrictive shall apply.

20. Severability. If any section, subsection, paragraph, sentence, clause, or phrase of this section shall not be declared invalid for any reason whatsoever, such a decision shall not affect the

remaining portions of the section, which shall remain in full force and effect, and for this purpose the provisions of this section are hereby declared to be severable.

21. Warning and Disclaimer of Liability. The degree of flood protection sought by the provisions of this section is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This section 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 section shall not create liability on the part of the Township or any officer or employee thereof for any flood damages that result from reliance on this section or any administrative decision made thereunder.

SECTION 16: Repealer. All provisions of previous ordinances of the Township of Cumberland which are contrary to this Ordinance are expressly repealed.

SECTION 17: Savings Clause. In all other respects, the Township of Cumberland Code of Ordinances shall remain as previously enacted and ordained.

SECTION 18: Severability. The provisions of this Ordinance are declared to be severable, and if any section, subsection, sentence, clause, or part thereof is, for any reason, held to be invalid or to be unconstitutional by a court of competent jurisdiction, such decision shall not affect the validity of any remaining sections, subsections, sentences, clauses, or part of this Ordinance.

SECTION 19: Effective Date. This Ordinance shall take effect July 22, 2020.

ENACTED, ORDAINED, AND APPROVED this 23rd day of June 2020.

ATTEST:

**Cumberland Township Board of Supervisors
Adams County, Pennsylvania**

Carol A. Menyman
Secretary

David P. Wayb
Chairperson

