

SHIPPENSBURG TOWNSHIP
FLOODPLAIN MANAGEMENT ORDINANCE OF 2009

Ordinance No. 2009-01

**SHIPPENSBURG TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA
ORDINANCE NO. 2009-01**

AN ORDINANCE REQUIRING ALL PERSONS, PARTNERSHIPS, BUSINESSES AND CORPORATIONS TO OBTAIN A BUILDING PERMIT FOR ANY CONSTRUCTION OR DEVELOPMENT; PROVIDING FOR THE ISSUANCE OF SUCH BUILDING PERMITS; SETTING FORTH CERTAIN MINIMUM REQUIREMENTS FOR NEW CONSTRUCTION AND DEVELOPMENT WITHIN AREAS OF THE TOWNSHIP WHICH ARE SUBJECT TO FLOODING; AND ESTABLISHING PENALTIES FOR ANY PERSONS WHO FAIL OR REFUSE TO COMPLY WITH THE REQUIREMENTS AND PROVISIONS OF THIS ORDINANCE.

BE IT ENACTED AND ORDAINED by the Board of Supervisors of Shippensburg Township, Cumberland County, Pennsylvania, and it is hereby enacted and ordained by the authority of the same as follows:

Body of this Ordinance exists in printed and bound form.

ARTICLE IX – APPROVAL

Section 9.1 This Ordinance shall become effective immediately upon enactment.

Section 9.2 All ordinances or parts of ordinances inconsistent with this Ordinance are hereby repealed insofar as they may be inconsistent herewith.

ENACTED AND ORDAINED by the Board of Supervisors of Shippensburg Township, Cumberland County, Pennsylvania, this 7th day of February, 2009, in session duly assembled.

**SHIPPENSBURG TOWNSHIP
BOARD OF SUPERVISORS**

By: 
Chairman

By: 
Supervisor

ATTEST


Secretary

By: 
Supervisor

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ARTICLE I - GENERAL PROVISIONS

Section 1.00 Intent

The intent of this Ordinance is to:

- A. Safeguard against the loss of life and property and 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. Preserve the capacity and ability of natural waterways to carry floodwaters.
- F. Regulate uses activities, and development which acting alone or in combination with other uses, activities, and development, will cause unacceptable increases in the elevation, velocity or frequency of flooding.
- G. Restrict or prohibit certain uses, activities, and development from locating within areas prone to flooding.
- H. Require all uses, activities and development that do occur in flood-prone areas to be protected and/or flood proofed against flooding and flood damage.
- I. Comply with federal and state floodplain management requirements.

Section 1.01 Applicability

The floodplain management provisions of this Ordinance shall be applicable to all Regulated Activities proposed on lands within the Township which are identified as floodplain. It shall be unlawful for any person, partnership, business or corporation to undertake, or cause to be undertaken, any Regulated Activity within such floodplains without prior approval by the Township. The following activities are "Regulated Activities" and shall be regulated by this Ordinance when proposed within an identified floodplain:

- 1. Land Development
- 2. Subdivision
- 3. Construction and/or installation of new buildings or additions to existing buildings
- 4. Earthwork or grading that alters the natural or pre-existing topography
- 5. Import of fill material
- 6. Construction or installation of drainage or flood conveyance structures
- 7. Temporary and permanent floodplain and watercourse encroachments
- 8. Installation or construction of water and sanitary sewer facilities and other utilities

9. Activities involving the use, production or storage of dangerous materials or substances that would pose a threat to human health, property or water supply.

Section 1.02 Abrogation and Greater Restrictions

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

Section 1.03 Severability

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

Section 1.04 Warning and Disclaimer of Liability

The degree of flood protection sought by the provisions of this Ordinance is considered reasonable for regulatory purposes and is based on 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 Ordinance does not imply that areas outside any identified floodplain areas, or that land uses permitted within such areas will be free from flooding or flood damages.

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

ARTICLE II - ADMINISTRATION

Section 2.00 Land Use Permits Required

- A. A land use permit shall be required for any regulated activity proposed within a floodplain area. Land Use Permits shall be approved and issued by the Township Board of Supervisors or its official designee.
- B. Land Use Permits shall be issued only after it has been determined that the proposed work has been planned and designed in conformance with the requirements of this and all other applicable regulations, codes and ordinances.
- C. Land Use Permits shall be issued only after the applicant demonstrates that all other applicable county, state and federal requirements have been met.
- D. If an activity requiring a Land Use Permit would result in modifications to the boundary or elevation of the floodplain in an adjoining municipality, then the approval of the affected municipality shall be required prior to issuance of a Land Use Permit by the Township.

Section 2.01 Coordination

- A. The applicant shall notify the Pennsylvania Department of Community and Economic Development of any modifications to the floodplain boundary or floodplain elevation. Confirmation of such notification shall be provided to the Township in the form of a certified mail return receipt.
- B. The applicant shall notify the Township if a request is made for either a Letter Of Map Revision (LOMR) or Conditional Letter Of Map Revision (CLOMR) from the Federal Emergency Management Agency. The final determination and letter issued by FEMA shall be provided to the Township along with the supporting documentation, calculations, analysis, etc. submitted to FEMA for the LOMR or CLOMR request.

Section 2.02 Application Procedures and Requirements

- A. Application for Land Use Permits shall be made in writing on forms provided by the Township.
- B. The following information shall be submitted with the Land Use Permit Application.
 - 1. A plan of the entire site, clearly and legibly drawn, at a scale no smaller than 1 inch = 100 feet and containing the following:
 - a) The name, address and telephone number of the property owner and developer.
 - b) The name, address and telephone number of the individual or firm preparing the plan as well as the date that the plan was prepared and date(s) of subsequent revisions.

- c) The applicable FEMA Flood Insurance Rate Map and Panel Number.
- d) The location of floodplain with the FEMA Zone indicated (i.e., Zone A, Zone AE, etc.).
- e) The floodplain area as identified in Section 3.01 of this Ordinance in which Regulated Activities are proposed.
- f) The elevation of the 100-year flood in accordance with Article III of this Ordinance.
- g) A listing of all local, county, state and federal permits required for the proposed project.
- h) The location of the project shown on a U.S.G.S. 7.5-minute Series Topographic Map at a scale of 1 inch = 2,000 feet.
- i) A north arrow.
- j) The property boundary including the metes and bounds of all lot lines and the size of the property expressed in acres and square feet.
- k) The name and title reference of all adjoining properties.
- l) Existing and proposed topographic contours shown at a maximum 2-foot contour interval in areas where slopes are 15% or less. In areas where slopes are steeper than 15%, a 5-foot contour interval can be used. Topography shall be based upon the National Geodetic Datum of 1988.
- m) The location of all existing and proposed buildings, structures, roads, utilities and other improvements, including the location of any existing or proposed subdivision or land development, within the project area. If the project would result in any modification to the location or elevation of the floodplain, then the aforementioned features shall be shown in any and all areas that would be impacted by the floodplain modification(s).
- n) Cross Section Details of proposed streets, drives and other vehicular accessways including right-of-ways and pavement widths.
- o) Profile drawings of all proposed streets, drives and other vehicular accessways including existing and proposed grades and the elevation of the 100-year flood.
- p) Profile drawings of all proposed sanitary sewer lines, water mains and storm sewers.
- q) The lowest floor elevation (and first floor elevation, if not the lowest floor) of any proposed building based upon the National Geodetic Datum of 1988.
- r) Existing waterways, water bodies and wetlands within the project area. The absence or presence of wetlands shall be determined by a qualified wetlands delineator according to

the criteria contained in the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual.

- s) An overlay showing soil names and boundaries with hydric soils identified.
 - t) The locations of all utilities, sanitary sewers and water lines in, and within 50 feet of, the project area.
 - u) A staging and implementation schedule for construction.
 - v) A statement, signed by the landowner, acknowledging that the nature and scope of the activities depicted on the plan cannot be modified without prior written authorization by the Township.
 - w) A note identifying the owner of all improvements and or facilities, and the individual, party or entity responsible for maintenance and operation of the same.
 - x) Detailed architectural or engineering drawings of all proposed buildings and structures including floor plans, sections, exterior elevations, the elevation of all floors including the basement and the elevation of the 100-year flood.
 - y) A statement, signed by a registered professional engineer who states that the proposed structures and other improvements have been adequately designed to withstand the applicable pressures, velocities, impact and uplift forces of the 100-year flood. An architect's certification shall be accepted for structures.
2. Technical documentation and data as follows:
- a) If available, information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with a 100-year flood.
 - b) Hydrologic and hydraulic analyses and design computations, certified by a registered professional engineer, demonstrating the adequacy of all proposed drainage structures, flood conveyance structures and flood control measures.
 - c) Documentation, having sufficient detail to permit a thorough technical review, certified by a registered professional engineer, to demonstrate that the impact(s) (or lack thereof) of the regulated activity on the floodplain are in accordance with the provisions of Section 4.01.
 - d) Documentation, signed by a registered professional engineer or architect, confirming that all structures have been designed in accordance with the provisions of Section 4.02 through Section 4.05.
 - e) The amount, location and purpose of any materials or substances referred to in Sections 4.04 F. and 4.05.A which are intended to be used, produced, stored or otherwise

- maintained on site.
- f) 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 4.05.A during a 100-year flood.
 - g) The appropriate component of the Department of Environmental Protection's "Planning Module for Land Development."
3. The Township shall have the right to require additional information it considers necessary to conduct an adequate review of the application.

Section 2.03 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 Applicant to the County Conservation District for review and comment prior to the issuance of a Land Use Permit. The comments of the Conservation District shall be considered by the Township prior to approving a Land Use Permit.

Section 2.04 Review of Application by Others

A copy of all Land Use Permit Applications may be submitted by the Township to any other appropriate agencies and/or individuals (e.g. planning commission, municipal engineer, etc.) for review and comment. The comments generated by such reviews shall be considered by the Township prior to approval of applications.

Section 2.05 Changes to the Application

After the issuance of a Land Use Permit by the Township, 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 Township. Requests for any such change shall be in writing, and shall be submitted by the applicant to the Township for consideration.

Section 2.06 Land Use Permit Expiration

Land Use Permits shall be valid for a standard period of time pre-established by the Township.

Section 2.07 Inspection and Revocation

- A. The Township or its designated official(s) shall have the authority to enter the premises or development in the identified floodplain area, upon presentation of proper credentials at reasonable hours to enforce the provisions of this ordinance.
- B. In the event that the Township 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 the applicant, the Township shall revoke the Land Use Permit until

such time that appropriate remedial action is taken to bring the project into compliance with the applicable regulations and terms of the approved Land Use Permit Application.

- C. A record of all such inspections and violations of this ordinance shall be maintained by the Township.
- D. The requirements of Title 34 of the PA Code, IBC, latest edition and IRC, latest edition pertaining to elevation certificates and record retention shall be considered.

Section 2.08 Fees

An application fee schedule shall be available at the Township office at all times. In addition to the application fee, the applicant shall be responsible to reimburse the Township for any consulting fees that may be incurred as part of any technical review of the application required to determine compliance with this Ordinance.

Section 2.09 Enforcement

A. Notices

Whenever the Township or authorized representative determines that there are reasonable grounds to believe that there has been a violation of any provisions of this Ordinance, or of any regulations adopted pursuant thereto, the Township shall give notice of such alleged violation as hereinafter provided. Such notice shall (a) be in writing; (b) include a statement of the reasons for its issuance; (c) allow a reasonable time not to exceed a period of thirty (30) days for the performance of any act it requires; (d) 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; (e) contain an outline of remedial action which, if taken, will effect compliance with the provisions of this Ordinance.

B. Penalties

Any person who fails to comply with any or all of the requirements or provisions of this Ordinance or who fails or refuses to comply with any notice, order of direction of the Township or authorized representative shall be guilty of an offense and, upon conviction, shall pay a fine to the Township of not less than Twenty-five Dollars (\$25.00) nor more than Six Hundred Dollars (\$600.00) plus costs of prosecution. In default of such payment, such person shall be imprisoned in county prison for a period not to exceed ten (10) days. Each day during which any violation of this Ordinance continues shall constitute a separate offense. In addition to the above penalties all other actions are hereby reserved including an action in equity for the proper enforcement of this Ordinance. The imposition of a fine or penalty for any violation of, or noncompliance with, this Ordinance shall not excuse the violation or noncompliance or permit it to continue and all such persons shall be required to correct or remedy such violations and noncompliances within a reasonable time. Any

development initiated or any structure or building constructed, reconstructed, enlarged, altered, or relocated, in noncompliance with this Ordinance may be declared by the Board of Supervisors to be a public nuisance and abatable as such.

Section 2.10 Appeals

- A. Any person aggrieved by any action or decision of the Township concerning the administration of the provisions of this Ordinance, may appeal to the Board of Supervisors. Such appeal must be filed, in writing, within thirty (30) days after the decision, determination or action of the Building Permit Officer.
- B. Upon receipt of such appeal the Board of Supervisors shall set a time and place, within not less than ten (10) nor more than thirty (30) days, for the purpose of considering the appeal. Notice of the time and place at which the appeal will be considered shall be given to all parties.
- C. Any person aggrieved by any decision of the Board of Supervisors may seek relief therefrom by appeal to court, as provided by the laws of this Commonwealth including the Pennsylvania Floodplain Management Act.

ARTICLE III - IDENTIFICATION OF FLOODPLAIN AREAS

Section 3.00 Identification

The identified floodplain area shall be those areas of the Township, which are subject to the 100-year flood (1% annual chance), as identified in the Flood Insurance Study (FIS) and accompanying Flood Insurance Rate Map (FIRM) dated March 16, 2009 prepared for Shippensburg Township by the Federal Emergency Management Agency (FEMA), including all digital data developed as part of the FIS.

Section 3.01 Description of Floodplain Areas

The identified floodplain area may consist of the following specific areas.

- A. FW (Floodway Area) - the areas identified as "Floodway" in the AE Zone on the Flood Insurance Study Maps prepared by the FEMA.
- B. FF (Flood-Fringe Area) - the areas between the edge of the floodway and the outermost boundary of the floodplain on both sides of the watercourse in an AE Zone where a floodway has been delineated on the Flood Insurance Study Maps prepared by FEMA.

The basis for the outermost boundary of this area shall be the 100-year flood elevations as shown in the flood profiles contained in the Flood Insurance Study.

- C. FE (Special Floodplain Area) - the areas identified as Zone AE on the Flood Insurance Study Maps, where 100-year flood elevations have been provided, but no floodway has been delineated. Where no area is identified as floodway within the AE Zone, then the floodway shall be assumed as the area measured 50 feet landward from the top-of-bank on both sides of the watercourse.
- D. FA (General Floodplain Area) - the areas identified as Zone A on the Flood Insurance Study Maps for which 100-year flood elevations have not been provided. When available, information from other Federal, State, and other acceptable sources shall be used to determine the 100-year flood elevation, as well as a floodway area, if possible. The acceptability of other sources shall be subject to approval by the Township. When no other information is available, the 100-year flood elevation shall be determined by using a point on the boundary of the identified floodplain area which is nearest the construction site in question. Within Zone A, the floodway shall be assumed as the area measured 50 feet landward from the top-of-bank on both sides of the watercourse.

The Township may require or permit the applicant to determine the 100-year flood elevation with hydrologic and hydraulic engineering analysis. Such 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 and approval by the Township.

Section 3.02 Changes in Identification of Area

The identified floodplain area may be revised or modified by the Township where studies or information provided by a qualified agency or person documents the need for such revision. However, prior to any such change, approval must be obtained from FEMA.

Section 3.03 Boundary Disputes

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

ARTICLE IV - TECHNICAL PROVISIONS

Section 4.00 General

In an identified floodplain area, regulated activities shall be permitted only if they are undertaken in strict compliance with the provisions contained in this Ordinance and any other applicable codes, ordinances and regulations.

Section 4.01 Requirements for FW, FF, FE and FA Areas

- A. Within an identified FW (Floodway) area in an AE Zone, the following provisions apply:
 - 1. Any new regulated activity that would cause any increase in flood heights shall be prohibited.
 - 2. No new regulated activity shall be allowed, unless a permit is obtained from the Department of Environmental Protection Regional Office.
- B. Within an identified FF (Flood-Fringe) area, the following provisions shall apply:
 - 1. No new regulated activity shall be allowed unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the elevation of the 100-year flood more than one (1) foot at any point.
- C. Within an identified FE (Special Floodplain) Area, the following provisions shall apply:
 - 1. No new regulated activity shall be allowed unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the elevation of the 100-year flood more than one (1) foot at any point.
 - 2. No new construction or development shall be located within the area measured fifty (50) feet landward from the top-of-bank of any watercourse (the assumed floodway), unless a permit is obtained from the Department of Environmental Protection Regional Office.
- D. Within any FA (General Floodplain Area), the following provisions apply:
 - 1. No new regulated activity shall be allowed unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the elevation of the 100-year flood more than one (1) foot at any point.
 - 2. No new construction or development shall be located within the area measured 50-

feet landward from the top-of-bank of any watercourse (the assumed floodway), unless a permit is obtained from the Department of Environmental Protection Regional Office. If the floodplain does not extend 50 feet beyond the top of bank as depicted on FEMA Flood Insurance Study Maps, or if the same is demonstrated through hydrologic and hydraulic analyses pursuant with Section 3.01.D of this Ordinance, then approval by The Department of Environmental Protection shall not be required.

Section 4.02 Applicability of Other Standards

The following standards shall apply to activities regulated by this Ordinance, where applicable, to the extent that they are more restrictive and/or supplement the requirements of this ordinance.

1. The Uniform Construction Code (UCC), latest edition
2. The International Building Code (IBC), latest edition
3. The International Residential Code (IRC), latest edition
4. The International Fuel Gas Code (IFGC), latest edition
5. American Society of Civil Engineers 24 (ASCE24), latest edition
6. The Pennsylvania Code – Title 34 (34 PA CODE), Chapters 401-405, latest amendment
7. U. S. Department of Housing and Urban Development – Permanent Foundations for Manufactured Housing Manual, latest edition.

Section 4.03 Elevation and Flood-proofing Requirements

A. Residential Structures

Within any identified floodplain area, any new construction or substantial improvement of a residential structure shall have the lowest floor (including basement) elevated 1.5 feet above the 100-year flood elevation.

B. Non-residential Structures

1. Within any identified floodplain area, any new construction or substantial improvement of a non-residential structure shall have the lowest floor (including basement) elevated 1.5 feet above the 100-year flood elevation, or be designed, constructed, and flood-proofed so that the space enclosed by such structure shall remain either completely or essentially dry during any flood up to that height.
2. Any non-residential structure, or part thereof, having a lowest floor which is not elevated to at least 1.5 feet above the 100-year flood elevation, shall be floodproofed in a completely or essentially dry manner in accordance with the WI or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the U.S. Army Corps of Engineers (June 1972, as amended March 1992) or an approved, 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.

C. Space below the lowest floor.

1. Fully enclosed space below the lowest floor (including basement) is prohibited.
2. Partially enclosed space below the lowest floor (including basement) 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 "partially enclosed space" also includes crawl spaces.

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 floodwaters.

D. 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. The floor area shall not exceed 600 square feet.
3. The structure will be located on the site so as to cause the least obstruction to the flow of floodwaters.
4. Power lines, wiring, and outlets serving the structure will be at least 1.5 feet above the 100-year flood elevation.
5. Permanently affixed utility equipment and appliances such as furnaces, heaters, washers, dryers, etc. are prohibited.
6. Sanitary facilities are prohibited.

7. The structure shall be adequately anchored to prevent flotation or 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 minimum criteria in Section 4.03.C.

Section 4.04 Design and Construction Standards

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

A. Fill

If fill is used, it shall:

1. Extend laterally at least fifteen (15) feet beyond the building line from all points.
2. Consist of soil or small rock materials only - Sanitary Landfills shall not be permitted.
3. Be compacted to provide the necessary permeability and provide adequate resistance to settling.
4. Be reinforced and/or protected to provide adequate resistance to erosion and scouring.
5. Be no steeper than 2 feet horizontal run to 1 foot vertical rise unless substantiated data, justifying steeper slopes are submitted to, and approved by the Township.
6. The provisions contained in the IBC latest edition shall be utilized.

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 insure 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. Potential damage to persons or property shall be minimized or avoided.

C. Water and Sanitary Sewer Facilities and Systems

1. All new or replacement water 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 floodwaters. Sanitary sewage collection systems shall be water-tight.

3. No part of any on-site sewage 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.

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 elevated not less than 1 foot above the 100-year 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 4.05 of this Ordinance, Development Which May Endanger Human Life, shall be stored at or above the Regulatory Flood Elevation.

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 floodwater.

H. Anchoring

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

I. Floors, Walls and Ceilings

1. Wood flooring used at or below the Regulatory Flood Elevation shall be installed to accommodate a lateral expansion of the flooring, perpendicular to the flooring grain without causing structural damage to the building.

2. Plywood used at or below the Regulatory Flood Elevation shall be of a "marine" or "water-resistant" variety.
3. Walls and ceilings at or below the Regulatory Flood Elevation shall be designed and constructed of materials that are "water-resistant" and will withstand inundation.
4. Windows, doors, and other components at or below the Regulatory Flood Elevation shall be made of metal or other "water-resistant" material.

J. Paints and Adhesives

1. Paints and other finishes used at or below the Regulatory Flood Elevation shall be of "marine" or "water-resistant" quality.
2. Adhesives used at or below the Regulatory Flood Elevation shall be of a "marine" or "water-resistant" variety.
3. All wooden components (doors, trim, cabinets, etc.) 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 one hundred (100) year flood elevation.
2. Separate electrical circuits shall serve lower levels and shall be dropped from above.

L. Equipment

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.

M. Fuel Supply Systems

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

Section 4.05 Development Which May Endanger Human Life

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

1. Acetone
2. Ammonia

3. Benzene
 4. Calcium carbide
 5. Carbon disulfide
 6. Celluloid
 7. Chlorine
 8. Hydrochloric acid
 9. Hydrocyanic acid
 10. Magnesium
 11. Nitric acid and oxides of nitrogen
 12. Petroleum products (gasoline, fuel oil, etc.)
 13. Phosphorus
 14. Potassium
 15. Sodium
 16. Sulphur and sulphur products
 17. Pesticides (including insecticides, fungicides, and rodenticides)
 18. Radioactive substances, insofar as such substances are not otherwise regulated.
- B. In accordance with the Pennsylvania Floodplain Management Act and the regulations adopted by the Pennsylvania Department of Community and Economic Development as required by the Act, any new or substantially improved structure shall be subject to the provisions of this Section and all other applicable codes, ordinances and regulations if the structure will be used for any activity requiring the production, or storage, or maintenance of a supply of:
1. More than 100 pounds, 12 gallons, or other comparable amount of a material listed in Section 405.A of this Ordinance, or other dangerous material.
 2. Any amount of radioactive material.
 3. More than 550 gallons of petroleum products.
- C. Within any FW (Floodway Area), any structure of the kind described in Section 4.05.B, shall be prohibited.
- D. Within any FE (Special Floodplain Area) or FA (General Floodplain Area), any new or substantially improved structure of the kind described in Section 4.05.B, shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank (the assumed floodway) of any watercourse.
- E. Where permitted within any floodplain area, any new or substantially improved structure of the kind described in Section 4.05.B, shall be:
1. Elevated or designed and constructed to remain completely dry up to at least 1.5 feet above the 100-year flood and,

2. Designed to prevent pollution from the structure or activity during the course of a 100-year 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 approved, equivalent watertight standard.

Section 4.06 Special Requirements for Manufactured Homes

- A. Within any FW (Floodway Area), manufactured homes shall be prohibited.
- B. Within any FA (General Floodplain Area) or FE (Special Floodplain Area), manufactured homes shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank (the assumed floodway) of any watercourse.
- C. Where permitted within any 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 1.5 feet or more above the 100-year flood elevation.
 3. Anchored to resist flotation, collapse, or lateral movement.
 4. Installation of manufactured homes shall be done in accordance with the manufacturer's installation instructions and other applicable Codes and Standards

ARTICLE V - ACTIVITIES REQUIRING SPECIAL PERMITS

Section 5.00 General

In accordance with the administrative regulations promulgated by the Department of Community and Economic Development to implement the Pennsylvania Floodplain Management Act, the following activities shall be prohibited within any identified floodplain area unless a Special Permit has been issued by the Township:

- A. The commencement of any of the following activities, or the construction enlargement, or expansion of any structure used, or intended to be used, for any of the following activities:
 - 1. Hospitals
 - 2. Nursing homes and other similar uses such as disability-defined group homes and multiple-unit age-restricted housing
 - 3. Jails or prisons
- B. The commencement of, or any construction of, a new manufactured home park or manufactured home subdivision, or substantial improvement to an existing manufactured home park or manufactured home subdivision.

Section 5.01 Application Requirements for Special Permits

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

- A. A written request for a Special Permit including a completed Land Use Permit Application Form.
- B. All supplemental information required by Section 2.02.B of this Ordinance.
- C. The following additional documentation:
 - 1. Proof of clear title or equitable title to the land on which the regulated activity is proposed.
 - 2. A statement, by a qualified person(s) having a thorough understanding and working knowledge of the proposed facility and its operation, which contains a complete and accurate description of the nature and extent of pollution that might possibly occur from the development during the course of a 100-year flood, including a statement concerning the effects such pollution may have on human life.
 - 3. A statement, by a qualified person(s) having a thorough understanding and working knowledge of the proposed facility and its operation, which contains a complete and accurate description of the kinds and amounts of any loose buoyant materials or debris that may possibly exist or be located on the site below the 100-year flood elevation.

4. Any other applicable permits such as, but not limited to, a permit for any activity regulated by the Department of Environmental Protection under Section 302 of Act 1978-166.
5. An evacuation plan which fully explains the manner in which the site will be safely evacuated before or during the course of a 100-year flood.

Section 5.02 Special Permit Application Review Procedures

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

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

Section 5.03 Special Technical Requirements

- A. In addition to the requirements of Article IV of this Ordinance, the following minimum

requirements shall also apply to any proposed development requiring a Special Permit. If there is any conflict between any of the following requirements and those in Article IV of this Ordinance or in any other code, ordinance, or regulation, the more restrictive provision shall apply.

- B. No application for a Special Permit shall be approved unless it can be determined that the structure or activity will be located, constructed and maintained in a manner which will:
 - 1. Fully protect the health and safety of the general public and any occupants of the structure. At a minimum, all new structures shall be designed, located, and constructed so that:
 - a. the structure will survive inundation by waters of the 100-year flood without any lateral movement or damage to either the structure itself, or to any of its equipment or contents below the 100-year flood elevation.
 - b. the lowest floor (including basement) elevation will be at least 1.5 feet above the 100-year flood elevation.
 - c. the occupants of the structure can remain inside for an indefinite period of time and be safely evacuated at any time during the 100-year flood.
 - 2. Prevent any significant possibility of pollution, increased flood levels or flows, or debris endangering life and property.

ARTICLE VI - EXISTING STRUCTURES IN IDENTIFIED FLOODPLAIN AREAS

Section 6.00 Existing Structures

The provisions of this Ordinance do not require any changes or improvements to be made to lawfully existing structures. However, when an improvement is made to any existing structure, the provisions of Section 6.01 of this Ordinance shall apply.

Section 6.01 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 that would cause any increase in the elevation of the 100-year flood.
- B. No expansion or enlargement of an existing structure shall be allowed within any FE area that would, together with all other existing and anticipated development, increase the 100-year flood elevation more than one (1) foot at any point.
- C. Any modification, alteration, reconstruction, or improvement, of any kind to an existing structure, to an extent or amount of fifty (50) percent or more of its market value, shall constitute a substantial improvement and shall be undertaken only in full compliance with the provisions of this Ordinance.
- D. Any modification, alteration, reconstruction, or improvement of any kind to an existing structure, to an extent or amount of less than fifty (50) percent of its market value, shall be elevated and/or floodproofed to the greatest extent possible.

ARTICLE VII – MODIFICATION OF REQUIREMENTS

Section 7.00 General

The Board of Supervisors may grant modifications to certain requirements of this ordinance at their discretion. Any request for a modification of requirements shall be provided in writing and be accompanied by adequate justification, which shall be subject to a review by the Township Engineer.

Section 7.01 Procedures and Conditions

Requests for modifications shall be considered by the Township in accordance with the procedures contained in Section 2.10 and the following:

- A. No modification of requirements shall be granted for regulated activities within any floodway area that would cause any increase in the 100-year flood elevation.
- B. No modification of requirements shall be granted for regulated activities within any FF or FE area that would, together with all other existing and anticipated development, increase the 100-year flood elevation more than one (1) foot at any point.
- C. No modification of requirements shall be granted for any of the requirements pertaining specifically to development regulated by Special Permit (Article V) or to Development Which May Endanger Human Life (Section 4.05).
- D. If granted, a modification of requirements shall involve only the least modification necessary to provide relief.
- E. In granting any modification of requirements, 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 Ordinance.
- F. Whenever a modification of requirements is granted, the Township shall notify the applicant in writing that:
 - 1. The granting of the modification of requirements may result in increased premium rates for flood insurance.
 - 2. Such modification of requirements may increase the risks to life and property.
- G. In reviewing any request for a modification of requirements, the Township shall consider, at a minimum, the following:
 - 1. That there is good and sufficient cause.
 - 2. That the granting of the modification of requirements will (i) neither result in an

unacceptable or prohibited increase in flood heights, additional threats to public safety, or extraordinary public expense, (ii) nor create nuisances, cause fraud on, or victimize the public, or conflict with any other applicable state or local ordinances and regulations.

- H. The Township shall maintain a complete record of all modification requests and related actions by the Board of Supervisors. In addition, a report of all modifications granted during the year shall be included in the annual report to the Federal Emergency Management Agency.

Notwithstanding any of the above, all structures shall be designed and constructed so as to have the capability of resisting the 100-year flood.

ARTICLE VIII DEFINITIONS

Section 8.00 Definitions

1. **Accessory use or structure** - a use or structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.
2. **Applicant** – any person, partnership, business or corporation applying for a Land Use Permit involving regulated activities in an identified floodplain.
3. **Basement** - any area of the building having its floor below ground level on all sides.
4. **Board of Supervisors** – The Shippensburg Township Board of Supervisors
5. **Building** - a combination of materials to form a permanent structure having walls and a roof. Included shall be all manufactured homes and trailers to be used for human habitation.
6. **Completely dry space** - a space which will remain totally dry during flooding; the structure is designed and constructed to prevent the passage of water and water vapor.
7. **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.
8. **Encroachment** – a structure or activity which changes, expands or diminishes the course, current or cross section of a watercourse or floodplain.
9. **Essentially dry space** - a space which will remain dry during flooding, except for the passage of some water vapor or minor seepage; the structure is substantially impermeable to the passage of water.
10. **Flood** - a temporary inundation of normally dry land areas.
11. **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.
12. **Floodproofing** - means 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.
13. **Floodway** - the designated area of a floodplain required to carry and discharge flood waters of a given magnitude. For the purposes of this Ordinance, the floodway shall be capable of

accommodating a flood of the 100-year magnitude.

14. **Historic structure** - any structure that is:

- (1) 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;
- (2) 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;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs 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.

16. **Identified floodplain area** - the floodplain area specifically identified in this Ordinance as being inundated by the 100-year flood.

17. **Land development** - Any of the following activities:

- (1) The improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving:
 - (i) a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or
 - (ii) the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.
- (2) A subdivision of land.

18. **Lowest floor** - the lowest floor of the lowest fully enclosed area (including basement). An unfinished, flood resistant partially enclosed area, used solely for parking of vehicles, building access, and incidental storage, in an area other than a basement area is not considered the lowest floor of a building, provided that such space is not designed and built so that the structure is in violation of the applicable non-elevation design requirements of this ordinance.
19. **Manufactured home** - a structure, transportable in one or more sections, which is built on a permanent chassis, and is designed for use with or without a permanent foundation when attached to the required utilities. The term manufactured home includes park trailers, travel trailers, recreational and other similar vehicles, which are placed at one or more locations on a single property, or upon multiple contiguous properties under the same ownership, within an identified floodplain for more than 180 consecutive days.
20. **Manufactured home park** - a parcel of land under single ownership, which has been planned and improved for the placement of two or more manufactured homes for non-transient use.
21. **Minor repair** - the replacement of existing work with equivalent materials for the purpose of its routine maintenance and upkeep, but not including the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the exitway requirements; nor shall minor repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, oil, waste, vent, or similar piping, electric wiring or mechanical or other work affecting public health or general safety.
22. **New construction** - structures for which the start of construction commenced on or after the date of enactment of this Ordinance, and includes any subsequent improvements thereto.
23. **One hundred year flood** - a flood that has a 1 percent chance of occurring annually (i.e. frequency of 1 time every 100 years), but may occur in any year.
24. **Person** - an individual, partnership, public or private association or corporation, firm, trust, estate, municipality, governmental unit, public utility or any other legal entity whatsoever, which is recognized by law as the subject of rights and duties.
25. **Recreational vehicle** - a vehicle which is (i) built on a single chassis; (ii) not more than 400 square feet, measured at the largest horizontal projections; (iii) designed to be self-propelled or permanently towable by a light-duty truck; (iv) not designed for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
26. **Regulatory flood elevation** - the 100-year flood elevation plus 1.5 feet.
27. **Special permit** - a special approval which is required for hospitals, nursing homes, jails, and new manufactured home parks and subdivisions and substantial improvements to such

existing parks, when such development is located in all, or a designated portion of a floodplain.

28. **Structure** - anything constructed or erected on the ground or attached to the ground including, but not limited to buildings, sheds, manufactured homes, and other similar items. This term includes any man-made object having an ascertainable stationary location on or in land or water whether or not affixed to land.
29. **Subdivision** - the division or redivision 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.
30. **Substantial additions to manufactured home parks** – Any repair, reconstruction, or improvement of an existing manufactured home park or manufactured home subdivision, where such repair, reconstruction, or improvement of the streets, utilities, and pads will equal or exceed 50% of the value of the streets, utilities, and pads before the repair, reconstruction, or improvement is started.
31. **Substantial damage** - damage from any cause sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty (50) percent or more of the market value of the structure before the damage occurred.
32. **Substantial improvement** - Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures, which have incurred "substantial damage regardless of the actual repair work performed. The term does not, however include either:
 - (1) 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, or;
 - (2) Any alteration of a "historic structure," provided that the alteration would not preclude the structure's continued designation as a "historic structure."
33. **Township** – The Township of Shippensburg, Cumberland County, Pennsylvania
34. **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 Commonwealth floodplain construction.

35. **Watercourse** – a channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.
36. **Wetland** – area that is saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions as determined in accordance with the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual.