TOWNSHIP OF MARTIC

Lancaster County, Pennsylvania	
ORDINANCE NO. <u>03-07-</u>	<u>16 A</u>

AN ORDINANCE OF THE TOWNSHIP OF MARTIC, LANCASTER COUNTY, PENNSYLVANIA, AMENDING THE ZONING ORDINANCE OF MARTIC TOWNSHIP TO REVISE FLOODPLAIN REGULATIONS.

BE AND IT IS HEREBY ORDAINED AND ENACTED by the Board of Supervisors of the Township of Martic, Lancaster County, Pennsylvania, as follows:

<u>Section 1.</u> The Zoning Ordinance of Martic Township, Article V, Supplementary District Regulations, Section 511, Floodplain Provisions, shall be replaced in its entirety to provide as follows:

Section 511. Floodplain Provisions.

- A. Purpose and authorization.
 - 1. This section serves the following major purposes:
 - a. Promote the general health, welfare, and safety of the Township.
 - 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 Township and its residents by preventing excessive development in areas subject to flooding.
 - e. Comply with federal and state floodplain management requirements.
- 2. The Legislature of the Commonwealth of Pennsylvania has, by the passage of the Pennsylvania Flood Plain Management Act of 1978, delegated the responsibility to local governmental units to adopt floodplain management regulations to promote public health, safety, and the general welfare of its citizenry.

The Board of Supervisors has enacted this Section in accordance with the Flood Plain Management Act, the Second Class Township Code, and the MPC.

a. The inclusion of construction and floodproofing standards in this section shall not be interpreted to allow any structure or construction that is not expressly authorized by this section. If the Zoning Hearing Board grants a variance to allow a structure or construction not authorized by this section, such structure or construction shall comply with all construction and floodproofing standards in this section unless the Zoning Hearing Board also grants a variance from a specific construction or floodproofing standard.

B. Floodplain Conservation District applicability and administration.

- 1. The regulations of the Floodplain Conservation District shall apply throughout the entire Township as overlay zoning regulations that supplement the zoning district regulations. Where the regulations of this section differ from the regulations of any other section of this Ordinance, the provision that is more restrictive on development shall apply.
- 2. The degree of flood protection sought by the provisions of this Ordinance is considered reasonable for regulatory purposes and is based on accepted engineering methods of study. Larger floods may occur or flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This Ordinance does not imply that areas outside any identified floodplain areas, or that land uses permitted within such areas will be free from flooding or flood damages. This Ordinance shall not create liability on the part of the Township or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.
- 3. This section 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 section and any other Township ordinance, the more restrictive shall apply.
- 4. The Zoning Officer is hereby appointed to administer and enforce this section and for all purposes shall be considered and may sometimes be referred to as the Floodplain Administrator. The Floodplain Administrator may: fulfill the duties and responsibilities set forth in these regulations, delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees, or 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 Township 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 CFR §59.22. In addition to the powers and duties generally set forth in this Ordinance, when serving as Floodplain Administrator the Zoning Officer shall have the following powers and duties:

- 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, USC §1344. No permit shall be issued until this determination has been made. In the case of existing structures, prior to the issuance of any permit the Floodplain Administrator shall also review the history of repairs to the subject building so that any repetitive loss concerns can be addressed before the permit is issued.
- c. 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 Township ordinances. He/she shall make as many inspections during and upon completion of the work as are necessary.
- d. In the discharge of his/her duties, the Floodplain Administrator shall have the authority to enter any building, structure, premises or development in the identified floodplain area, upon presentation of proper credentials, at any reasonable hour to enforce the provisions of this section.
- e. 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.
- f. The Floodplain Administrator shall maintain in perpetuity all records associated with the requirements of this section including, but not limited to, finished construction elevation data, permitting, inspection and enforcement.

- g. The Floodplain Administrator is the official responsible for submitting a biennial report to FEMA concerning Township participation in the National Flood Insurance Program.
- h. The responsibility, authority and means to implement the commitments of the Floodplain Administrator can be delegated, but the ultimate responsibility lies with the Zoning Officer.
- i. The Floodplain Administrator shall consider the requirements of the UCC.
- 5. Enforcement. This section and all other sections of this Zoning Ordinance shall be enforced in accordance with Article VII, Administration, including but not limited to Sections 705 through 709, and the MPC.

C. Floodplain compliance.

- 1. No structure shall be used or located, relocated, constructed, reconstructed, enlarged or structurally altered or land used except in full compliance with these floodplain regulations and other provisions of applicable Township ordinances. A Township zoning permit is required for any development within the one-hundred-year floodplain.
- 2. Any alteration to a waterway, drainage channel or the one-hundred-year floodplain, including development, redirecting drainage ways, changes in grade or filling in, shall only occur after a determination by the Zoning Officer that all Township ordinances have been complied with and after any needed state or federal permits are received.
- 3. Any municipality that will be affected by a change in an alteration or relocation of a waterway shall be given prior notice of such proposal, with copies of such notice provided to the DCED and FEMA.
- D. Permits for uses, structures and grading within the identified floodplain area. Applications for such a permit shall be made, in writing to the Zoning Officer.
 - 1. All permit applications shall include the following:
 - a. The name and address of the applicant.
 - b. The name and address of the owner of land on which proposed construction is to occur.
 - c. The name and address of the contractor.
 - d. The site location.

- e. A brief description of the proposed work and estimated costs.
- f. A site plan showing the exact size and location of the proposed construction, as well as any existing buildings or structures, and also showing the one-hundred-year flood line.
- g. A brief description of proposed work and estimate cost, including a breakout of flood-related cost and the market value of the building before the flood damage occurred where appropriate.
- 2. If any proposed construction or development is located entirely or partially within any identified floodplain area, permit applicants shall provide all the necessary information in sufficient detail and clarity to enable the Zoning Officer to determine that:
 - a. The proposal is consistent with the need to minimize flood damage and conform with the requirements of this and all other applicable codes and ordinances.
 - b. All utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage.
 - c. Adequate drainage is provided so as to reduce exposure to flood hazards.
 - d. Structures will be anchored to prevent flotation, collapse, or lateral movement.
 - e. Building materials are flood-resistant.
 - f. Appropriate practices that minimize flood damage have been used.
 - g. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities have been designed and/or located to prevent water entry or accumulation.
- 3. Applicants shall file the following minimum information plus any other pertinent information as may be required by the Zoning Officer to make the above determination:
 - a. A completed permit application form.

- b. A plan of the entire site, clearly and legibly drawn in at a scale of one (1) inch being equal to one hundred (100) feet or less, showing the following:
 - (1) North arrow, scale, and date.
 - (2) Topographic contour lines, if applicable.
 - (3) The location of all existing and proposed buildings, structures, and other improvements, including the location of any existing or proposed subdivision and development.
 - (4) The location of all existing streets, driveways and other access ways.
 - (5) The location of any existing bodies of water or water-courses, identified floodplain areas, and, if available, information pertaining to the floodway, and the flow of water including direction and velocities.
- c. Plans of all proposed buildings, structures and other improvements, drawn at suitable scale showing the following:
 - (1) The proposed lowest floor elevation of any proposed building based upon North American Vertical Datum of 1988.
 - (2) The BFE.
 - (3) Supplemental information as may be necessary under the UCC.
 - d. The following data and documentation:
 - (1) If available, information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with a BFE.
 - (2) Detailed information concerning any proposed floodproofing measures and corresponding elevations.
 - (3) Documentation, certified by a registered professional engineer or architect, to show that the cumulative effect of any proposed development within any identified floodplain area, when combined with all other existing and anticipated development, will not cause any increase in the BFE.

- (4) 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 BFE. 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.
- e. Detailed information needed to determine compliance within Section 511.T.6, Storage, and Section 511.U, Development Which May Endanger Human Life, including:
 - (1) The amount, location and purpose of any materials or substances referred to in Section 511.T(6) and Section 511.U which are intended to be used, produced, stored or otherwise maintained on site.
 - (2) 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 511.U during a base flood.
- f. The appropriate component of the DEP "Planning Module for Land Development."
- g. Where any excavation or grading is proposed, a plan meeting DEP requirements to implement and maintain erosion and sedimentation control.
- E. Review of permit applications by 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 Zoning Officer to the Conservation District for review and comment prior to the issuance of a permit. The recommendations of the Conservation District shall be considered by the Zoning Officer for possible incorporation into the proposed plan.
- F. Review of permit applications by others. A copy of all plans and applications for any proposed construction or development in any identified floodplain area to be considered for approval may be submitted by the Zoning Officer to any other appropriate agencies and/or individuals (e.g Planning Commission, Township Engineer, etc.) for review and comment.
- G. Changes to permits. After the issuance of a permit by the Zoning Officer, 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 Zoning Officer. Requests for any such change shall be in writing, and shall be submitted by the applicant to the Zoning Officer for consideration.

H. Placards. In addition to the permit, the Zoning Officer shall issue a placard which shall be displayed on the premises during the time construction is in progress. This placard shall show the number of the permit, the dated of its issuance, and be signed by the Zoning Officer.

I. Start of Construction.

- 1. Work on the proposed construction and/or development shall begin within 180 days after the date of issuance and shall be completed within 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 Zoning Officer. Construction and/or development shall be considered to have started with the preparation of land, land clearing, grading, filling, excavation of basement, footings, piers, or foundations, erection of temporary forms, the installation of piling under the proposed subsurface footings, or the installation of sewer, gas, and water pipes, or electrical or other service lines from the street.
- 2. Time extensions shall be granted only if a written request is submitted by the applicant, which sets forth sufficient and reasonable cause for the Zoning Officer to approve such a request.

J. Identification of Floodplain Conservation District.

- 1. The Floodplain Conservation District is all those areas of Martic Township, Lancaster County, Pennsylvania, classified as special flood hazard areas in the Flood Insurance Study (FIS) and the accompanying FIRM dated April 5, 2016, and issued by FEMA, or the most recent version thereof, including all digital data developed as part of the FIS and FIRM.
- 2. The above referenced FIS and FIRM, and any subsequent revisions and amendments are hereby adopted by Martic Township, and declared to be a part of this section and the Floodplain Conservation District.
- K. Description and Special Requirements of Identified Floodplain Areas of the Floodplain Conservation District.

1. Floodway Area.

a. Description - the area identified as floodway in the FIS and FIRM which represents the channel of a watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively 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.

b. Special Requirements:

- (1) Any encroachment that would cause any increase in flood heights shall be prohibited.
- (2) No new construction or development shall be allowed, unless a permit is obtained from the DEP Regional Office.

2. Special Flood Hazard Area.

a. Description – The areas identified as Zones AE and A1-30 in the FIS and FIRM which are subject to inundation by the 1-percent-annual chance flood event determined by detailed methods and have BFEs shown.

b. Special Requirements:

- (1) 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 a permit is obtained from the DEP Regional Office.
- (2) In special flood hazard areas without a designated floodway, no new development shall be permitted unless it can be demonstrated that the cumulative effect of all past and projected development will not increase the BFE by more than one (1) foot.
- L. Permitted Uses. The following uses and no others are permitted in the Flood-plain Conservation District:
 - 1. Agriculture, horticulture and forestry excluding any structures and excluding any grading or filling which would cause any increase in flood heights or frequency if placed within the floodway.
 - 2. Public and private recreational areas such as parks, swimming areas (excluding swimming pools), play areas, campgrounds, picnic groves, lawns, gardens, golf courses, driving ranges, archery ranges, bicycle paths and hiking and horseback riding trails, all excluding structures and excluding any grading or filling which would cause any increase in flood heights or frequency if placed within the floodway.
 - 3. Open space and front, side or rear yards required by other sections of this Ordinance.
 - 4. Driveways and related culverts, subject to the criteria in Section 511.R and 511.T, and further subject to exclude any grading or filling which would cause any increase in flood heights or frequency if placed within the floodway.

- 5. Water-oriented uses such as docks, piers, wharves, marinas, boat liveries and boat launching ramps.
- M. Special Exception Uses. The following uses are permitted in the Floodplain Conservation District only when special exceptions are granted by the Zoning Hearing Board as provided for herein:
 - 1. Parking lots, loading areas, access drives and aircraft landing strips and taxiways.
 - 2. Public utility facilities not under the exclusive jurisdiction of the Pennsylvania Public Utility Commission, subject to the following conditions:
 - a. Facilities such as pipelines, gas lines, storm sewers, sanitary sewers, water lines, outlet installations for sewage treatment plants, sealed public and private water supply wells, pumping stations and underground communications facilities shall, together with associated structures, but excepting necessary vents, be designed and installed underground so as to be at or below the existing natural surface grade and in such manner as will prevent flotation, minimize or eliminate flood damage, and not alter the cross-sectional area of the floodplain;
 - b. All new or replacement water supply facilities and/or sanitary sewage facilities shall be designed to minimize or eliminate infiltration of flood waters into the facilities and discharges from the facilities into flood waters.
 - 3. Extraction of sand, gravel and other mineral resources, excluding top-soil.
- N. Prohibited Uses. The following uses are prohibited in the Floodplain Conservation District:
 - 1. All structures, buildings and manufactured and mobile homes with the exception of those specifically allowed by this Section.
 - 2. Sanitary landfills, dumps, junk and salvage yards and outdoor storage of vehicles and/or materials.
 - 3. Damming or relocation of any watercourse, except as provided for in this Section.
 - 4. Any parts of any on-lot sewage disposal system.
 - 5. The storage of buoyant, toxic or hazardous material.

- 6. Parking, use or storage of any recreational vehicle for more than 180 days.
- 7. Any new structure or building, or any expansion or addition to an existing structure or building which constitutes a substantial improvement that will be used for the production or storage of any of the following potential dangerous materials or substances, or which will be used for the housing of any activity requiring the maintenance of a supply of more than 550 gallons or other comparable volumes any of the following dangerous materials or substances or will involve the production, storage or use of any amount of radioactive substances: 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; and any other potentially dangerous materials or substances.
 - 8. Space below the lowest floor, subject to the following:
 - a. Fully enclosed space below the lowest floor (including basement) is prohibited.
 - b. Partially enclosed space below the lowest floor (including basement) which will be used solely for 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:
 - (1) 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.
 - (2) The bottom of all openings shall be no higher than one (1) foot above grade.
 - (3) Openings may be equipped with screens, louvers, etc. or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
 - 3. Approximate Floodplain Area.
 - a. Description the areas identified as Zone A in the FIS which are subject to inundation by the 1-percent-annual-chance flood event deter-

mined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no BFEs or flood depths are shown.

b. Special Requirements:

- (1) 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 a permit is obtained from the DEP Regional Office.
- (2) When available, information from other Federal, State, and other acceptable sources shall be used to determine the BFE, as well as a floodway area, if possible. When no other information is available, the BFE shall be determined by using a point on the boundary of the identified floodplain area which is nearest the construction site in question.
- (3) In lieu of the above, the Township 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 Township.
- c. The provisions of Section 511.K.2(c), (d), and (e), are applicable to the approximate floodplain area.
- O. Changes in identified floodplain 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, approval must be obtained from the FEMA. As soon as practicable, but not later than six (6) months after the date such information becomes available, the Township shall notify FEMA of the changes by submitting technical or scientific data.
- P. Boundary Disputes. Should a dispute concerning any identified floodplain boundary arise, an initial determination shall be made by the Zoning Officer 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.

Q. Technical Provisions.

- 1. Alteration or Relocation of Watercourse.
- a. No encroachment, alteration, or improvement of any kind shall be made to any watercourse until all adjacent municipalities which may be

affected by such action have been notified by the Township, and until all required permits or approvals have been first obtained from the DEP Regional Office. It is the responsibility of the applicant to provide all required studies and pay all fees

- b. 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.
- c. FEMA and DCED shall be notified prior to any alteration or relocation of any watercourse.
- 2. Submit technical or scientific data to FEMA for a Letter of Map Revision (LOMR) within six (6) months of the completion of any new construction, development, or other activity resulting in changes in the BFE.
- 3. 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 section and any other applicable codes, ordinances and regulations.
- R. Elevation and Floodproofing Requirements. Within any identified floodplain area any new construction or substantial improvements other than those expressly authorized by Section 511.L and 511.M shall be prohibited. If a variance is obtained for new construction or substantial improvements in the identified floodplain area in accordance with Section 511.AA, then the following minimum standards shall apply for all construction and development proposed within any identified floodplain area.

1. Residential Structures.

- a. 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.
- b. In A Zones, where there are no BFEs 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 511.K.3(b)(2) and (3).
- c. The design and construction standards and specifications contained in the UCC and ASCE 24 shall be utilized, where they are more restrictive.

2. Non-Residential Structures.

- a. 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:
 - (1) is floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water and,
 - (2) has structural components with the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- b. In A Zones, where there are no BFEs 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 511.K.3(b)(2) and (3).
- c. Any non-residential structure, or part thereof, made watertight below the regulatory flood elevation shall be floodproofed 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 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.
- d. The design and construction standards and specifications contained in the UCC and ASCE 24 shall be utilized, where they are more restrictive.

3. Space below the lowest floor.

- a. 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.
- b. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:

- (1) 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.
- (2) The bottom of all openings shall be no higher than one (1) foot above grade.
- (3) Openings may be equipped with screens, louvers, etc., or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- S. 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 accessory 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 150 square feet.
 - 3. The accessory structure will have a low damage potential.
 - 4. The accessory 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 accessory 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 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.
- T. Design and Construction Standards. Within any identified floodplain area any new construction or substantial improvements other than those expressly authorized by Section 511.L and 511.M shall be prohibited. If a variance is obtained for new construction or substantial improvements in the identified floodplain area in accordance with Section 511.AA, then the following minimum standards shall apply for all construction and development proposed within any identified floodplain area.

1. Fill. If fill is used, it shall:

- a. Extend laterally at least fifteen (15) feet beyond the building line from all points.
- b. Consist of soil or small rock materials only ${\sf -}$ 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 Zoning Officer.
- e. Be used to the extent to which it does not adversely affect adjacent properties.
- 2. 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.
 - 3. Water and Sanitary Sewer Facilities and Systems.
 - a. 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.
 - b. Sanitary sewer facilities and systems shall be designed to prevent the discharge of untreated sewage into flood waters.
 - c. No part of any on-site sewage system shall be located within any identified floodplain area except in strict compliance with all state and Township regulations for such systems. If any such system is permitted, is

shall be located so as to avoid impairment to it, or contamination from it, during a flood.

- d. The design and construction provisions of the UCC and FEMA #348, Protecting Building Utilities From Flood Damage and The International Private Sewage Disposal Code shall be utilized.
- 4. 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.
- 5. Streets. The finished elevation of all new streets shall be no more than one (1) foot below the regulatory flood elevation.
- 6. 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 511.U, Development Which May Endanger Human Life, shall be stored at or above the regulatory flood elevation and/or flood proofed to the maximum extent possible.
- 7. Placement of Buildings and Structures. All buildings and structures shall be designed, located, and constructed so as to offer the minim obstruction to the flow of water and shall be designed to have a minimum effect upon the flow and height of flood water.

8. Anchoring.

- a. All buildings and structures shall be firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse, or lateral movement.
- . All air ducts, storage tanks, and other similar objects or components located below the regulatory flood elevation shall be securely anchored or affixed to prevent flotation.

9. Floors, Walls and Ceilings.

- a. 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.
- b. Plywood used at or below the regulatory flood elevation shall be of a "marine" or "water-resistant" variety.

- c. 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.
- d. Windows, doors, and other components at or below the regulatory flood elevations shall be made of metal or other "water-resistant" material.

10. Paints and Adhesives.

- a. Paints and other finishes used at or below the regulatory flood elevation shall be of "marine" or "water-resistant" quality.
- b. Adhesives used at or below the regulatory flood elevation shall be of a "marine" or "water-resistant" variety.
- c. All wooden components (doors, trims, cabinets, etc.) shall be finished with a "marine" or "water-resistant" paint or other finishing material.

11. Electrical Components.

- a. Electrical distribution panels shall be at least three (3) feet above the BFE.
- b. Separate electrical circuits shall serve lower levels and shall be dropped from above.
- 12. 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.
- 13. 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.
- 14. Uniform Construction Code Coordination. The standards and specifications of the UCC shall apply to the above and other subsections of this section, to the extent that they are more restrictive and/or supplement the requirements of this section.

U. Development Which May Endanger Human Life.

1. In accordance with the Pennsylvania Flood Plain Management Act, and the regulations adopted by the DCED as required by the Act, any new or substantially improved structure which:

- a. Will be used for the production or storage of any of the following dangerous materials or substances; or,
- b. 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,
- c. 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.

- 2. Within any floodway area, any structure of the kind described in Section 511.U.1 shall be prohibited.
- 3. Where permitted within any identified floodplain area, any new or substantially improved structure of the kind described in Section 511.U.1 shall be:
 - a. Elevated or designed and constructed to remain completely dry up to at least one and one half (1 $\frac{1}{2}$) feet above the BFE.
 - b. 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 con-

structed 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.

- 4. Within any identified floodplain area, any new or substantially improved structure of the kind described in Section 511.U.1 shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any watercourse.
- V. Special Requirements for Subdivisions. All subdivision proposals and development proposals containing at least 50 lots or at least 5 acres, whichever is the lesser, in flood hazard areas where BFE 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 or Letter of Map Revision. Submittal requirements and processing fees shall be the responsibility of the applicant.
- W. Special Requirements for Manufactured Homes and Recreational Vehicles. Within any identified floodplain area manufactured homes and recreational vehicles are prohibited. If a variance is obtained in accordance with Section 511.AA, then the following provisions apply:
 - 1. Within any floodway, manufactured homes and recreational vehicles shall be prohibited.
 - 2. Within approximate floodplain or special flood hazard area, manufactured homes shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any new watercourse.
 - 3. Where permitted within any floodplain area, all manufactured homes, and any improvements thereto, shall be:
 - a. Placed on a permanent foundation.
 - b. Elevated so that the lowest floor of the manufactured home is at least one and one half (1 1/2) feet above BFE.
 - c. Anchored to resist flotation, collapse, or lateral movement.
 - 4. 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 International Residential Building Code adopted as part of the UCC or the U.S. Department of Housing and Urban Development's Permanent

Foundations for Manufactured Housing, 1984 Edition, draft or latest revision thereto shall apply.

- 5. Consideration shall be given to the installation requirements of the UCC where appropriate and/or applicable to units where the manufacturers' standards for anchoring cannot be provided or were not established for the units(s) proposed installation.
- 6. Within approximate floodplain or special flood hazard area, recreational vehicles in must either
 - a. be on the site for fewer than 180 consecutive days and be fully licensed and ready for highway use, or
 - b. meet all of the requirements for manufactured homes in Section 511.W.2, 3, 4 and 5.
- X. Prohibitions. In accordance with the administrative regulations promulgated by the DCED to implement the Pennsylvania Flood Plain Management Act, the following activities shall be prohibited within any identified floodplain area.
 - 1. 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:
 - a. Hospitals.
 - b. Nursing homes.
 - c. Jails or prison.
 - 2. 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.
- Y. Existing Structures. The provisions of this section 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 511.W shall apply. Historic structures as defined in this section undergoing repair or rehabilitation that would constitute a substantial improvement as also defined in this section 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 must be obtained from the Secretary of the Interior. An exemption from ordinance requirements will be the minimum necessary to preserve historic character and design of the structure.

- Z. Improvements. The following provisions shall apply whenever any improvement is made to an existing structure located within any identified floodplain area:
 - 1. No expansion or enlargement of an existing structure shall be allowed within any floodway are that would cause any increase in the elevation of the BFE.
 - 2. No expansion or enlargement of an existing structure shall be allowed within any special flood hazard area that would, together with all other existing and anticipated development, increase the BFE more than one (1) foot at any point.
 - 3. 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 section.
 - 4. The above activity shall also address the requirements of the UCC.
 - 5. 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.
 - 6. Any modification, alteration, reconstruction, or improvement of any kind that meets the definition of "repetitive loss" shall be undertaken only in full compliance with the provisions of this section.

AA. Variances.

- 1. If compliance with any of the requirements of this section would result in an exceptional hardship to a prospective builder, developer or landowner, the Zoning Hearing Board may, upon request, grant relief from the strict application of the requirements.
- 2. Requests for variances shall be considered by the Zoning Hearing Board in accordance with the procedures contained in Article VIII of this Ordinance and the following:
 - a. No variance shall be granted for any construction, development, use or activity within any floodway that would cause any increase in the BFE.
 - b. No variance shall be granted for any construction, development, use, or activity within any special flood hazard area that would, together with all other existing and anticipated development, increase the BFE than one (1) foot at any point.

- c. Except for a possible modification of the regulatory flood elevation requirement involved, no variance shall be granted for any of the other requirements pertaining specifically to development which may endanger human life.
- d. If granted, a variance shall involve only the least modification necessary to provide relief.
- e. Whenever a variance is granted, the 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 section.
- f. Whenever a variance is granted, the 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 variance may increase the risks to life and property.
- g. In reviewing any request for a variance, the 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.
- h. 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 FE-MA.

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

AB. Definitions. Unless specifically defined below, words and phrases use in this section shall be interpreted so as to give this section its most reasonable application.

ACCESSORY STRUCTURE OR USE — A use or structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.

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").

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 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 combination of materials forming a permanent structure and which has walls and a roof. This term shall include manufactured homes and trailers used for human habitation.

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 or 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 the Township.

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 manufacturing 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.).

 ${\it FLOOD}$ — A temporary inundation of normally dry land areas.

FLOOD INSURANCE RATE MAP (FIRM) – The official map on which the FEMA or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the Township.

FLOOD INSURANCE STUDY (FIS) – The official report provided by the Federal Insurance Administration that includes flood profiles, the FIRM, 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 STRUCTURE – Any structure that is: (i) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (ii) 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; (iii) 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 (iv) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (1) by an approved state program as determined by the Secretary of the Interior or (2) directly by the Secretary of the Interior in states without approved programs.

LOWEST FLOOR — The lowest floor of the lowest fully enclosed area, including any basement. An unfinished flood-resistant partially enclosed area used solely for the 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 section.

MANUFACTURED HOME — A type of single-family detached dwelling that meets all of the following requirements:

(a) It is transportable in a single piece, or two substantial pieces designed to be joined into one integral unit capable of again being separated for towing;

(b) It is designed for permanent occupancy;

- (c) It arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations;
- (d) It may be constructed so that it may be used without a permanent founda-
- (e) It is not a recreation vehicle.

MANUFACTURED HOME PARK OR SUBDIVISON — A parcel or contiguous parcels of land which has been so designated and improved that it contains two or more mobile/manufactured home lots for the placement thereon of mobile/manufactured homes.

NEW CONSTRUCTION — Structures for which the start of construction commenced on or after the effective date of these floodplain regulations that were adopted by the Township, and includes any subsequent improvements thereto. Any construction started after January 16, 1980, and before the effective date of these floodplain regulations is subject to the regulations 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 the Township.

OBSTRUCTION — Any wall, dam, wharf, embankment, levee, dike, pile abutment, projection, excavation, channel, culvert, fence, stockpile, refuse, fill, structure or other matter in, along, across or projecting into any channel, watercourse or flood-prone area, which may impede, retard or change the direction of the flow of water, either by itself or by catching or collecting debris carried by such water, or is placed where the flow of the water may carry the matter downstream to threaten life and property.

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.

RECREATIONAL VEHICLE — A vehicle which is built on a single chassis; not more than 400 square feet, measured at the largest horizontal projections; designed to be self-propelled or permanently towable by a light-duty truck; and not designed for use as a

permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOOD ELEVATION — The BFE or estimated flood height as determined using simplified methods plus a freeboard safety factor of one and one-half (1 ½) feet.

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

SPECIAL FLOOD HAZARD AREA (SFHA) —An area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. It is shown on the FIRM as Zone A, AO, A1-A30, AE, A99, or AH.

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 from the date of the permit. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufacture home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/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.

STRUCTURE — A walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

SUBDIVISION — A subdivision as defined in the MPC.

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 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, the cost of which equals or exceeds 50% 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 "repetitive loss", regardless of the actual repair work performed. The term does not include either 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 Township 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 UCC 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 IBC.

VIOLATION – means the failure of a structure or other development to be fully compliant with the Township'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), (e)(5) is presumed to be in violation until such time as that documentation is provided.

Section 2 The Martic Township Zoning Ordinance, Article X, Definitions, Section 1002, Terms, shall be amended by adding the following definitions in alphabetical order:

CONSERVATION DISTRICT – The Lancaster County Conservation District or any agency successor thereto.

 $\ensuremath{\mathsf{DCED}}$ – the Pennsylvania Department of Community and Economic Development or any agency successor thereto.

 $\ensuremath{\mathsf{DEP}}$ – The Pennsylvania Department of Environmental Protection or any agency successor thereto.

FEMA – the Federal Emergency Management Agency or any agency successor thereto.

<u>Section 3.</u> All other sections, parts and provisions of the Martic Township Zoning Ordinance shall remain in full force and effect as previously enacted and amended.

Section 4. In the event any provision, section, sentence, clause or part of this Ordinance shall be held to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such invalidity, illegality or unconstitutionality shall not affect or impair the remaining provisions, sections, sentences, clauses or parts of this Ordinance, it being the intent of the Board of Supervisors that the remainder of the Ordinance shall be and shall remain in full force and effect.

Section 5. This Ordinance shall take effect and be in force five (5) days after its enactment by the Board of Supervisors of the Township of Martic as provided by law.

DULY ORDAINED AND ENACTED this day of May of

TOWNSHIP OF MARTIC

Lancaster County, Pennsylvania

Attested By: 11

(Assistant) Secretary

(Vice) Chairman

Board of Supervisors

[TOWNSHIP SEAL]