

ARTICLE IV
NATURAL FEATURES PROTECTION

Section 400. GENERAL PROVISIONS

1. Statutory Authorization. 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. Therefore, the Board of Supervisors of East Pikeland Township does hereby order as follows.
2. Warning and Disclaimer of Liability. The degree of flood protection sought by the provisions of this Article 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 Article 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 Article shall not create liability on the part of East Pikeland Township or any officer or employee thereof for any flood damages that result from reliance on this Article or any administrative decision lawfully made thereunder.

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

Section 401. FLOODPLAIN CONSERVATION DISTRICT.

1. Statement of Intent. The standards and requirements in this Part are intended to afford appropriate levels of protection to those natural features within East Pikeland Township that represent significant resource opportunities to the Township and its surrounding region or which, when subject to undue disturbance, may constitute threats to public health, safety and welfare. The Township considers adherence to these standards a basic prerequisite to any subdivision or land development or disturbance otherwise authorized under this Article or other regulations, and has designed the balance of this Ordinance to work in harmony with the terms of this Article.

The intent of this Section 401 is to:

- A. Promote the general health, welfare and safety of the community.
- B. Encourage the utilization of appropriate construction practices in order to prevent or minimize flood damage in the future.
- C. Minimize danger to public health and safety by protecting water supply, sanitary sewage

disposal, and natural drainage.

- D. Protect the quality and quantity of surface and subsurface water supplies adjacent to and underlying floodplain areas.
- E. Contribute to:
 - (1) The protection of stream waters against sedimentation;
 - (2) The prevention of stream bank erosion;
 - (3) The maintenance of cool water temperatures; and
 - (4) The preservation of fish and wildlife habitats, through the protection of trees and other riparian vegetation.
- F. Maintain the scenic and aesthetic character of the streams and stream valleys, consistent with the goals of the East Pikeland Township Comprehensive Plan, and support the particular objectives of the French Creek Scenic River Guidelines and the designation of the Schuylkill River within the Scenic Rivers program.
- G. Reduce financial burdens imposed on the community, its governmental units, and its residents by preventing the unwise design and construction of development in areas subject to flooding.
- H. Fulfill the responsibility of the Township as a trustee of the people's right to clean air, pure water, and the preservation of the natural, scenic, historic and aesthetic values of the environment pursuant to Article 1, Section 27 of the Pennsylvania Constitution.

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

Provisions of all other codes, ordinances and regulations shall be applicable insofar as they are consistent with the provisions of this Chapter and East Pikeland's need to minimize the hazards and damage resulting from flooding, including, but not limited to, the requirements to obtain a Zoning Permit before any construction or development is undertaken within any area of the Township. It shall be unlawful for any person, partnership, business or corporation to undertake, or cause to be undertaken, any construction or development anywhere within an Identified Floodplain Area of East Pikeland Township unless a Permit has been obtained from the Floodplain Administrator.

3. Establishment of the Floodplain District. The identified floodplain area shall be any areas of East Pikeland Township, classified as Special Flood Hazard Areas (SFHAs) in the Flood Insurance Study (FIS) and the accompanying Flood Insurance Rate Maps (FIRMs) dated September 29, 2017 and issued by the Federal Emergency Management Agency (FEMA) or the most recent revision thereof, including all digital data developed as part of the Flood Insurance Study.

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

- A. The Floodway Area shall be those areas identified in the FIS and the FIRM as floodway and which represent the channel of a watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without increasing the water surface elevation by more than one (1) foot at any point. This term shall also include floodway areas which have been identified in other available studies or sources of information for those Special Flood Hazard Areas where no floodway has been identified in the FIS and FIRM.
1. Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
 2. Within any floodway area, no new construction or development shall be allowed, unless the appropriate permit is obtained from the Department of Environmental Protection Regional Office.
- B. The AE Area/District shall be those areas identified as an AE Zone on the FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided.
1. The AE Area adjacent to the floodway shall be those areas identified as an AE Zone on the FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided and a floodway has been delineated.
 2. AE Area without floodway shall be those areas identified as an AE zone on the FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided but no floodway has been determined.
 - i. No permit shall be granted within any AE Zone without floodway, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed development together with all other existing and anticipated development, would not result in an increase in flood levels of more than one foot within the entire community during the occurrence of the base flood discharge.
 - ii. No new construction or development shall be located within the area measured

fifty (50) feet landward from the top-of-bank of any watercourse, unless the appropriate permit is obtained from the Department of Environmental Protection Regional Office.

- C. The A Area/District shall be those areas identified as an A Zone on the FIRM included in the FIS prepared by FEMA and for which no base flood elevations have been provided. For these areas, elevation and floodway information from other Federal, State, or other acceptable sources shall be used when available. Where other acceptable information is not available, the base flood elevation shall be determined by using the elevation of a point on the boundary of the identified floodplain area which is nearest the construction site.

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

- D. Special Requirements for Subdivisions and Development

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

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

4. Boundary Dispute. An initial determination shall be made by the Zoning Officer should a dispute concerning any district boundary arise. Any party aggrieved by this decision may appeal to the Zoning Hearing Board under the provisions of Article XXII of this Article. The burden of proof shall be on the appellant.

5. Uses Permitted in Floodways.

- A. The following uses (exclusive of buildings) are permitted in the Floodway. However, within any Floodway area, no new construction, development, use, activity or encroachment shall be permitted unless the effect of such development on flood heights is fully offset by accompanying stream improvements which have been approved by all appropriate local

and/or State authorities. When a developer proposes to offset the effects of development in the Floodway by construction of stream improvements, he shall submit an engineering study, prepared by a Registered Professional Engineer, which fully evaluates the effects of such construction. The report shall use the Base Flood as herein defined as the basis of analysis. All adjacent communities and the Pennsylvania Department of Community and Economic Development shall be notified by the developer by certified mail of all such intended activities prior to any alteration or relocation of a watercourse and shall submit copies of such notification to the Federal Emergency Management Agency. In addition, the developer shall assure the Township of East Pikeland, in writing, that the flood-carrying capacity within the altered or relocated portion of the watercourse in question will be maintained.

- (1) Agricultural uses, such as: general farming, pasture, orchard, grazing, outdoor plant nurseries and truck farming. Such activities shall be conducted in accordance with a plan approved by the United States Department of Agriculture, Natural Resources Conservation Service, and recognized soil conservation practices approved by the Township.
 - (2) Selective cutting of trees, in accordance with the definition of "selective cutting" in Section 201 of this Article, and provided further that desirable mature shade trees are not totally eliminated, that particular attention is paid to retaining such trees within twenty-five (25') feet of any stream bank, and that no such trees growing within or upon a stream bank shall be removed unless dead, diseased or damaged and threatening the stability of the bank.
 - (3) Recreational uses, such as: park, camp, picnic grounds, golf course, golf driving range, archery and shooting ranges, hiking and riding trails, hunting and fishing areas, game farm, fish hatchery, wildlife sanctuary, nature preserve and swimming areas.
 - (4) An area comprising no more than three fourths (3/4) of the required minimum lot area for any lot contiguous to the Floodway and provided that no building or structure and no sanitary drainage field shall be placed within fifty (50') feet of the Floodway District boundary line.
 - (5) Construction of crossings of the Floodway by railroads, roads, bridges and utility transmission lines.
 - (6) Sealed water supply wells and water pipe lines.
 - (7) Storm and sanitary sewer outlets, which shall take the shortest route across the District to the point of discharge.
- B. The following shall not be placed or caused to be placed in the designated Floodway: fences (except two-wire fences), other matters which may impede, retard or change the direction of the flow of water or that will catch or collect debris carried by such water, or that are placed where the natural flow of the stream or floodwaters would carry the same downstream to the damage or detriment of either public or private property adjacent to the floodplain. The placement of mobile homes shall not be permitted in any designated

floodway.

6. Uses Permitted in AE Areas .

- A. The following uses are permitted in the AE Areas.
- (1) Uses permitted within the Floodway as provided in Subsection (5) above.
 - (2) Sewage treatment plants and pumping stations when constructed to prevent flood of facilities.
 - (3) An area comprising no more than three-fourths (3/4) of the required minimum lot area of any lot and provided that no building or structure and no sanitary drainage field shall be placed within fifty (50) feet of the Identified Floodplain Area.
- B. No development or use of land shall be undertaken when the effect of such development or use of land together with all other existing and anticipated development would be to increase the water surface elevation at any point more than one (1') foot above the Base Flood Elevation unless the effect of such development on flood heights is fully offset by accompanying stream improvements which have been approved by all appropriate local and/or State authorities. When a developer proposes to offset the effects of development by construction of stream improvements or to install fill or alter or relocate a watercourse, he shall submit an engineering study, prepared by a Registered Professional Engineer, which fully evaluates the effects of such construction. The report shall use the Base Flood Elevation as herein defined as the basis of analysis. The developer shall notify all adjacent communities and the Pennsylvania Department of Community and Economic Development by certified mail of all such intended activities prior to any alteration or relocation of a watercourse, and the developer shall submit copies of such notification to the Federal Emergency Management Agency. In addition, the developer shall assure the Township, in writing, that the flood-carrying capacity within the altered or relocated portion of the watercourse in question will be maintained.
- C. Prior to the issuance of any zoning 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 1996-537, as amended); the Pennsylvania Dam Safety and Encroachments Act (Act 1978-325, as amended); the Pennsylvania Clean Streams Act (Act 1937-394, as amended); and the U.S. Clean Water Act, Section 404, 33, U.S.C. 1344. No permit shall be issued until this determination has been made.

7. Activities Specifically Prohibited in the Floodplain District. Any use or activity not authorized as a permitted use under the terms of Subsections (5) and (6), above, shall be prohibited within the Floodplain District. In particular, the following activities, whether proposed in conjunction with a permitted use or otherwise, shall not occur in any portion of the Floodplain District:

- A. Clear-cutting of trees, as defined in Section 201 of this Article, or the clearing of vegetation, except where such clearing is necessary:

- (1) To prepare land for a use permitted by Subsections 5 or 6, above, or by action of the Zoning Hearing Board. Where clear-cutting is proposed in conjunction with the site of a stormwater management basin, such clear-cutting shall be authorized only when in accordance with an approved plan for development that the basin is to service;
- (2) As a reforestation measure; or
- (3) As a means to eliminate dead, diseased or hazardous tree stands.

Where a clear-cutting operation is deemed permissible for one of the above reasons, it shall be consistent with the terms of a woodland management plan approved by the Board of Supervisors. Under no circumstances shall a clear-cutting operation be conducted within twenty-five (25) feet of a stream.

- B. Sod farming.
- C. Storage of any material which, if inundated, would float, or of any flammable or toxic material or any other material which, if inundated or otherwise released to the stream, would degrade or pollute the stream, or cause damage if swept downstream.
- D. Storage of, and the construction, enlargement or expansion of any structure which would be used for the production, storage, or maintenance of, a supply of the following toxic chemicals which are dangerous to human or animal life.
- (1) Acetone
 - (2) Ammonia
 - (3) Benzine
 - (4) Calcium carbide
 - (5) Carbon disulfide
 - (6) Celluoid
 - (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) Herbicides or pesticides, fungicides and rodenticides)
 - (18) Radioactive substances, insofar as such substances are not otherwise regulated.
 - (19) Any other dangerous materials or substances regulated by the appropriate Federal or State agencies.

Further, any substantial improvement to an existing structure which will be used for the production or storage of any such materials or substances, or which will be used for any

activity requiring the maintenance of a supply (more than five hundred fifty (550) gallons or other comparable volume or any amount of radioactive substances) of any such materials or substances on the premises, shall be prohibited.

- E. Installation of subsurface sewage disposal areas.
- F. The construction, enlargement, expansion or substantial improvement of mobile homes, mobile home parks, mobile home subdivisions, manufactured homes or manufactured home parks or subdivisions.
- G. The construction, enlargement or expansion of hospitals (public or private).
- H. The construction, enlargement or expansion of nursing homes (public or private).
- I. The construction, enlargement or expansion of jails or prisons.
- J. Junkyard.
- K. Storage of recreational vehicles.

8. Nonconforming Structures and Uses in the Floodplain District.

Nonconforming structures and uses of land within the Floodplain District shall be regulated under the provisions of Article XXII of this Article, but the following additional regulations also shall apply.

- A. Existing nonconforming structures or uses located in the Floodway shall not be expanded or enlarged.
- B. 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 the Ordinance.

The modification, alteration, repair, reconstruction or improvement of any kind to a nonconforming structure or use in a Floodway (FI) and the modification, expansion, enlargement, alteration, repair, reconstruction or improvement of any kind to a nonconforming structure or use located in a AE Areas or A Areas must be authorized as a Special Exception by the Zoning Hearing Board under the provisions of Article XXII of this Article. In considering such Special Exceptions, the Zoning Hearing Board shall apply the following standards and criteria:

- (1) The modification, alteration, repair, reconstruction or improvement of any structure in the Floodway shall be permitted only where the rise in flood heights caused by the proposed development is fully offset by accompanying improvements.
- (2) The proposed change is consistent with the spirit, purpose and intent of this Article.
- (3) The proposed use is feasible and suitable in relation to the land use capabilities of

the property in question, particularly its capabilities in terms of a suitable water supply, drainage, sewage disposal, topography, soil conditions and ecological consideration.

- (4) The proposed change will serve the best interests of the Township, the convenience of the community, where applicable, and the public welfare.
- (5) The adequacy of sanitation and public safety provisions, where applicable, is assured and a certificate of adequacy or permit for sewage and water facilities has been obtained from the Chester County Health Department or other appropriate governmental agencies required herein or deemed advisable by the Zoning Hearing Board.
- (6) If improvements to the Floodway , or any filling or alterations to the elevation of the ground in the Floodway , AE Areas or A Areas, or any alterations or relocations of any perennial stream are contemplated, the Zoning Hearing Board shall determine that the developer has complied with the provisions of Subsections 5 and 6, above, with regard to the effect of such filling or alterations on Base Flood Elevations and has notified in writing, by certified mail, all adjacent communities which may be affected by such alterations and has submitted copies of such notification to the Township, the Pennsylvania Department of Community and Economic Development, and the Federal Emergency Management Agency and has, in addition, obtained a permit from the Pennsylvania Department of Environmental Protection. 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.
- (7) Any modification, alteration, repair, reconstruction, expansion, or improvement of any kind to a nonconforming structure or use located in the Floodway to an extent or amount less than fifty percent (50%) of its market value shall be elevated and/or flood-proofed to the greatest extent possible.
- (8) Any modification, alteration, repair, reconstruction, expansion, or improvement of any kind to a nonconforming structure or use, regardless of location within the Floodplain District, to an extent or amount of fifty percent (50%) or more of its market value shall be undertaken only in full compliance with the provisions of this and any other applicable ordinances.
- (9) All structures shall be constructed and placed on the lot so as to offer the minimum obstruction to the flow of water and shall be designed to have a minimum obstruction effect upon the flow and height of floodwater.
- (10) The Zoning Hearing Board shall have the right to waive any of the requirements of Subsection (8) for any structure or site listed in or determined eligible for the National Register of Historic Places or the Pennsylvania Inventory or Register of Historic Places or its equivalent. In deciding upon any request for such a waiver, the Board shall be guided by the criteria in Subsection 12 and shall follow the procedures for acting on Special Exceptions as specified in Article XXII of this Article. Any requested

waiver shall be submitted to the East Pikeland Historical Commission for review and recommendation on the appropriateness of the proposed activity in relation to the quality and integrity of the historic structure and the degree to which the requested waiver will be essential to preserving the structure. The Zoning Hearing Board also shall weigh the preservation benefits of the proposed activity against its potential impact on flood heights and velocities and the flood hazards attendant to the structure itself.

9. Modifications to the Floodplain of Stream Courses. Any modifications required to the elevation of the ground in the Floodway (FI), AE Areas or A Areas, or any alteration or relocation of any perennial stream required for the construction or conduct of permitted uses within the Floodplain District, including nonconforming uses, and any of the aforesaid modifications, alterations, or relocations required in order to gain access across land in a Floodplain District shall be designed and constructed in accordance with the following:
- A. A plan shall be prepared and presented to the Board (or Zoning Hearing Board in the case of Special Exception procedures relating to nonconforming uses) which shows or is accompanied by:
 - (1) Name and address of applicant.
 - (2) Name and address of owner of land on which proposed construction is to occur.
 - (3) Site location.
 - (4) Base Flood Elevations.
 - (5) Name of engineer, surveyor or other qualified person responsible for providing the information.
 - (6) A plan of the site, including plans of subdivisions or land developments lying partially in the Floodplain District, showing the exact size and location of the proposed construction as well as any existing buildings or structures. This plan shall show the location of the proposed work with respect to the floodplain areas, proposed lots and sites, cuts, fills, flood or erosion protection facilities, areas subject to special deed restrictions and detailed information giving the location and elevation of proposed roads, bridges, pipes, stream alterations or relocations, public utilities and building sites. All such plans shall also show contours at intervals required by the East Pikeland Township Subdivision and Land Development Regulations and identify accurately the boundaries of the Floodplain District.
 - B. The developer shall submit a copy of a notification prepared, in writing, by certified mail to the Federal Emergency Management Agency, the Pennsylvania Department of Community and Economic Development, and to adjacent communities which may be affected by modifications to the elevation of ground in a Floodplain District, or alterations or relocations of streams.
 - C. The developer shall submit a copy of a permit from the Pennsylvania Department of

Environmental Protection for the modifications to the grade or alterations or relocations to the stream, or evidence from the said Pennsylvania Department of Environmental Protection that such a permit is not required.

D. Proposed fills shall meet the following minimum standards:

- (1) Fill shall consist of soil or rock materials only. Sanitary landfills shall not be permitted.
- (2) Fill material shall be compacted to provide the necessary stability and resistance to erosion, scouring or settling.
- (3) Fill slopes shall be no steeper than one (1) vertical on three (3) horizontal, unless substantiating data justifying steeper slopes are submitted to and approved by the Zoning Officer.
- (4) Fill shall be used only to the extent to which it does not adversely affect adjacent properties.
- (5) Care shall be taken to prevent erosion and sedimentation due to proximity to the stream. The Township Engineer shall approve the proposed erosion/sedimentation control methodology.

Plans submitted under the provisions of Subsection 9 shall be subject to the review and approval of the Board according to procedures set forth in the East Pikeland Township Subdivision and Land Development Regulations.

10. Installation of Utility Facilities in Floodplain District. Where utility lines or on-site facilities are required to be installed or replaced in a Floodplain District, the following minimum standards shall apply:

- A. Water Facilities. All new or replacement water facilities, whether public or private, shall be designed to minimize or eliminate infiltration of flood waters into the system, and be located and constructed to minimize or eliminate flood damages.
- B. Sanitary Sewer Facilities. All new or replacement sanitary sewer facilities, and private package sewage treatment plants (including all pumping stations and collector systems), whether public or private, shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into the flood waters. In addition, they should be located and constructed to minimize or eliminate flood damage and impairment. No part of any on-site waste disposal system shall be located within any identified floodplain area except in strict compliance with all State and local regulations for such systems. If any such system is permitted, it shall be located so as to avoid impairment to it, or contamination from it, during a flood.
- C. Drainage. Storm drainage facilities, whether public or private, shall be designed to convey the flow of stormwater runoff in a safe and efficient manner.
- D. All other new or replacement public or private utilities and facilities shall be designed to

minimize or eliminate infiltration of flood waters into the system, and be located and constructed to minimize or eliminate flood damages.

11. Minimum Flood-proofing Standards. Where a Special Exception has been requested under the provisions of Subsection 8, above, in which it is anticipated that a structure or use will be modified, altered, repaired, reconstructed, expanded or improved in any way, when a sewage treatment plant or pumping station is contemplated under the provisions of Subsection 6, above, or where a Special Exception or Variance is granted under the provisions of Subsection 12, below, the following minimum standards shall apply to flood-proofing:
- A. Within any Floodway , AE Areas or A Areas, the lowest floor (including basement) of any new or improved residential structure shall be above the Regulatory Flood Elevation or, in the case of non-residential structures, the structure, together with attendant utility and sanitary facilities, shall be designed so that below the Regulatory Flood Elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Any non-residential structure, or part thereof, made watertight below the Regulatory Flood Elevation shall be floodproofed in accordance with the W1 or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the U.S. Army Corps of Engineers (June 1972, as amended March 1992) or with some other equivalent standard. All plans and specifications for such floodproofing shall be accompanied by a statement certified by a registered professional engineer or architect which states that the proposed design and methods of construction are in conformance with the above referenced standards. There should be a statement submitted with the permit application and a statement submitted with the as-built Floodproofing Certificate prior to the issuance of the Certificate of Occupancy.
 - B. If fill is used to raise the finished surface of the lowest floor to the Regulatory Flood Elevation, such fill shall extend beyond a structure for a sufficient distance to provide acceptable access. For residential structures, fill shall extend laterally fifteen (15) feet beyond the building line from all points. For non-residential structures, fill shall be placed to provide access acceptable for intended use. At-grade access, with fill extending laterally fifteen (15) feet beyond the building line, shall be provided to a minimum of twenty-five percent (25%) of the perimeter of a nonresidential structure.
 - C. All buildings and structures shall be firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse and lateral movement, thus reducing the threat to life and property and decreasing the possibility of the blockage of bridge openings and other restricted sections of the watercourse.
 - D. 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 opening 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 about grade.
 - c. Opening may be equipped with screens, louvers, etc. or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
3. Consideration may be given to the requirements of 34 PA Code (Chapters 401-405 as amended) and the 2003 IRC (Sections R323.2.2 and R323.1.4) and the 2003 IBC (Sections 1612.4, 1612.5, 1202.3.2 and 1203.3.3).
- E. If any proposed construction or development is located entirely or partially within any identified floodplain area, applicants for Permits shall provide all the necessary information in sufficient detail and clarity to enable the Floodplain Administrator to determine that:
1. all such proposals are consistent with the need to minimize flood damage and conform with the requirements of this and all other applicable codes and ordinances;
 2. all utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage;
 3. adequate drainage is provided so as to reduce exposure to flood hazards;
 4. structures will be anchored to prevent floatation, collapse, or lateral movement;
 5. building materials are flood-resistant;
 6. appropriate practices that minimize flood damage have been used; and
 7. electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities have been designed and located to prevent water entry or accumulation.
- F. All air ducts, large pipes and storage tanks located at or below the Base Flood Elevation shall be firmly anchored to resist flotation.
- G. Plans filed for the purpose of determining compliance with these regulations shall include;
- (1) Name and address of applicant.
 - (2) Name and address of owner of land on which proposed construction is to occur.
 - (3) Name and address of contractor.
 - (4) Site location.
 - (5) Brief description of proposed work and estimated cost.

- (6) A plan of the site showing the exact size and location of the proposed construction as well as any existing buildings or structures.
- H. Depending on the type of structure involved, the following information shall also be included in the application and maintained on record by the Zoning Officer.
- (1) For structures to be elevated to the Regulatory Flood Elevation:
 - a. A plan showing the size of the proposed structure and its relation to the lot where it is to be constructed.
 - b. A determination of elevations of the existing ground, proposed finished ground, lowest floors (including basements), to be certified by a registered professional engineer, surveyor or architect.
 - c. Plans showing the method of elevating the proposed structure, including details of proposed fills, pile structures, retaining walls, foundations, erosion protection measures, etc. These plans shall be prepared by a registered professional engineer or architect.
 - d. Plans showing the methods used to protect utilities (including sewer, water, telephone, electric, gas, etc.) from flooding to the Base Flood Elevation at the building site.
 - (2) For structures to be flood-proofed to the Base Flood Elevation (nonresidential structures only):
 - a. Plans showing details of all flood-proofing measures, prepared by a registered professional engineer or architect, and showing the size of the proposed structure and its relation to the lot where it is to be constructed.
 - b. A determination of elevations of existing ground, proposed finished ground, lowest floors, and flood-proofing limits; certified by a registered professional engineer, surveyor or architect.
 - c. A certificate prepared by the registered professional engineer or architect who prepared the plans in Subsection (a), above, that the structure in question, together with attendant utility and sanitary facilities, is designed so that:
 - i. Below the Regulatory Flood Elevation the structure is watertight with walls substantially impermeable to the passage of water.
 - ii. The structure will withstand the hydrostatic, hydrodynamic, buoyant, impact and other forces resulting from the flood depths, velocities, pressures and other factors associated with the Base Flood Elevation.
- I. Uniform Construction Code Coordination.

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

International Building Code (IBC) 2003 or the latest edition thereof:
Sections 801, 1202, 1403, 1603, 1605, 1612, 3402, and Appendix G.

International Residential Building Code (IRC) 2003 or the latest edition thereof:
Sections R104, R105, R109, R323, Appendix AE101, Appendix E and Appendix J.

12. Hardships.

- A. When the provisions of this Section 401 are deemed by the applicant to be unreasonable or to create a substantial hardship, the applicant shall have a right to:
- (1) In the case of applications for permitted uses under Subsections 5 or 6, above, make an appeal to the Zoning Hearing Board in accordance with the provisions of Article XXII of this Article.
 - (2) In the case of an appeal to the Zoning Hearing Board for a Special Exception under the provisions of Subsection 8, above, supply additional testimony and evidence to the Zoning Hearing Board as part of his request for relief from such hardship.
- B. All decisions on such appeals shall adhere to the following criteria:
- (1) The Zoning Hearing Board shall not grant a Variance or Special Exception for any construction, development, use or activity within any Floodway District that would cause any increase in the Base Flood Elevation.
 - (2) The Zoning Hearing Board shall grant Special Exceptions only upon:
 - a. A showing of good and sufficient cause,
 - b. A determination that failure to grant the appeal would result in exceptional hardship to the applicant, and
 - c. A determination that the granting of an appeal will not result in increased flood heights, additional threats to public safety, extraordinary public expense, creation of nuisance, fraud on or victimization of the public or conflict with existing local laws or ordinances.
 - (3) The Zoning Hearing Board shall grant a Special Exception only upon determination that it is the minimum necessary to afford relief, considering the flood hazard. In the case of requirements for flood proofing, the highest feasible class of flood proofing as defined by flood proofing regulations promulgated by the Office of the Chief of

Engineers, U.S. Army shall be provided.

- (4) The Zoning Hearing Board shall notify the applicant in writing over the signature of the Chairman of the Zoning Hearing Board that (a) the issuance of a decision to allow construction of a structure below the Base Flood Elevation will result in increased premium rates for flood insurance, and (b) such construction below the Base Flood Elevation increases risks to life and property. Such notification shall be maintained with a record of all decisions as required in Subsection (5), below.
- (5) The Zoning Hearing Board shall:
 - a. Maintain a record of all decisions including justification for their issuance, and
 - b. Report such decisions issued in its annual report submitted to the Federal Emergency Management Agency.
- (6) No Special Exception or Variance shall be granted for any requirement pertaining to developments which may endanger human life (as described in this Section 401.7.D), or prohibited activities described in Section 401.7.F,G, H & I in accordance with the Pennsylvania Floodplain Management Act, P.L. 851, No. 166 of 1978, as amended.
- (7) Upon receiving an application for a Special Exception or Variance, the Zoning Hearing Board shall, prior to rendering a decision thereon, require the applicant to furnish such of the following material as is deemed necessary by the Board:
 - a. Plans in triplicate drawn to scale showing the nature, location, dimensions and elevation of the lot and existing and proposed uses; photographs showing existing uses and vegetation; soil types and other pertinent information.
 - b. A series of cross-sections at twenty-five (25) foot intervals along the lot shoreline, showing the stream channel and elevation of adjoining land areas to be occupied by the proposed uses, and high water information. Cross-sections shall be field-run.
 - c. Profile showing the slope of the bottom of the channel.
 - d. Specifications for building materials and construction, flood proofing, filling, dredging, grading, storage, water supply and sanitary facilities.
 - e. Computation of the increase, if any, in the height of the base flood which would be attributable to any proposed uses.
 - f. A deed notation or lease notation, to be placed on record to run with the land, which notation shall contain the following provision: "This lot is entirely (partially) within a floodplain district as defined by Section 201 of the East Pikeland Township Zoning Ordinance."
- (8) In considering any application for a Special Exception or Variance, the Zoning Hearing-Board may request at the hearing the testimony of any Township Board,

Commission, or technical advisor concerning the extent to which the proposed use would:

- a. Diminish the capacity of the Floodplain District to store and absorb flood waters, to moderate flood velocities and to accommodate sediment;
 - b. Be subject to flood damage;
 - c. Cause erosion and impair the amenity of the Floodplain District; or
 - d. Adversely affect the area contiguous to the Floodplain District as well as areas downstream, or on any other pertinent aspect of the case.
- (9) In all proceedings before the Zoning Hearing Board, including application for Special Exception from the provisions of this Section 401, the burden of proof shall be on the applicant to show that the use required will be in general conformity with the objectives of this Section 401, that proper safeguards will be observed, and that the use will not be injurious to the public health, safety and general welfare.

Section 402. STEEP SLOPE CONSERVATION DISTRICT.

1. Intended Purposes of this Section 402 are as follows:
 - A. To promote the public health, safety and welfare by the protection of steep slope areas and by encouraging the retention of open space located and designed so as to constitute a harmonious and appropriate part of the physical development of East Pikeland Township.
 - B. To permit only those uses of steep slope areas that are compatible with the conservation of natural conditions and which maintain stable soil conditions by
 - (1) Minimizing disturbances to vegetative ground covers; and
 - (2) Restricting the re-grading of steep slope areas.
 - C. To limit soil erosion and the resultant destruction of the land, siltation of streams and damage to the property of individuals.
 - D. To protect low lying areas from flooding by limiting the increase in stormwater runoff caused by grading of sloped areas, changes of ground cover or the erection of structures.
 - E. To maintain the ecological integrity and habitat value of steeply sloped areas, i.e., indigenous vegetation and wildlife, which could be adversely affected by otherwise permitted disturbances.
 - F. To allow the continuing replenishment of groundwater resources and the maintenance of springs.
2. General Provisions.
 - A. Compliance. No area within the Steep Slope Conservation District shall hereafter be used without full compliance with the terms of this Section 402 and other applicable regulations.
 - B. Steep Slope Conservation District Overlay Concept. The Steep Slope Conservation District shall be deemed an overlay on any zoning district(s) now or hereafter enacted to regulate the use of land in East Pikeland Township.
 - (1) The Steep Slope Conservation District shall have no effect on the permitted uses in the underlying zoning district, except where said uses are intended to be located within the boundaries of the Steep Slope Conservation District, as defined herein, and said uses are in conflict with the permitted uses set forth in this Section 402.
 - (2) In those areas of the Township where the Steep Slope Conservation District applies, the requirements of the Steep Slope Conservation District shall supersede the requirements of the underlying zoning district(s).
 - (3) Should the Steep Slope Conservation District boundaries be changed as a result of legislative or administrative actions or judicial decision, the zoning requirements applicable to the area in

question shall revert to the requirements of the underlying zoning district(s) without consideration of this Section 402.

- (4) For any parcel or any part thereof on which the Steep Slope Conservation District is an overlay, should the underlying zoning classification(s) be changed as a result of legislative or administrative actions or Judicial decision, such change(s) in classification shall have no effect on the boundaries of the Steep Slope Conservation District, unless an amendment to said boundaries was included as part of the proceedings from which the subsequent change(s) originated.

- C. Preservation of Other Restrictions. It is not intended by this Section 402 to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this Section 402 imposes greater restrictions, the provisions of this Section 402 shall prevail.
- D. Municipal Liability. Any determination that a proposed use complies with this Article, or any approval of a subdivision or land development plan, or any issuance of a building permit within or near the Steep Slope Conservation District shall not constitute a representation, guarantee or warranty of any kind by the Township, or by any official or employee thereof, of the practicability or safety of the proposed use and shall create no liability upon the Township, its officials or employees. This Article does not imply that areas outside the Steep Slope Conservation District boundaries or land uses permitted within said District will always be totally free from the adverse effects of erosion, or other effects of nearby steep slopes.

3. Designation and Interpretation of District Boundary.

- A. The Steep Slope Conservation District consists of two (2) areas, delineated and defined below. The Zoning Map Overlay constitutes only a general representation of the Steep Slope Conservation District, based on the analysis of the contours displayed on the United States Geological Survey (USGS) quadrangles from Malvern and Phoenixville, Pennsylvania. As such, refined mapping will be required to more accurately define the District, as specified in Section 402.3.B, herein.
 - (1) Prohibitive Slope - Prohibitive slopes are those characterized by a change in elevation greater than twenty-five percent (25%) over a distance or contour specified in Section 402.3.B herein.
 - (2) Precautionary Slope - Precautionary slopes are those characterized by a change in elevation from fifteen percent (15%) to twenty-five percent (25%) over a distance or contour specified in Section 402.3.B, herein.
- B. Boundary Interpretation and Appeals Procedure.
 - (1) Each application for construction or land disturbance within the Steep Slope Conservation District shall be submitted in accordance with Section 402.5.A, below. Any area of the Steep Slope Conservation District that falls within the subject lot or lots shall be shown on the site plan required under Section 402.5.A (1) through

shading of such area or areas. The Zoning Map Overlay shall be used as a general guide for determining the boundaries of the District. In any application for subdivision and/or land development, the applicant shall, using two (2) foot contours, delineate slopes from fifteen to twenty-five percent (15%-25%) and greater than or equal to twenty-five percent (25%). Further, the applicant shall use an actual field topographic survey as the source of contour information as required in the East Pikeland Township Subdivision and Land Development Ordinance.

- (2) The representative sample of a precautionary slope or prohibitive slope shall be based on a cumulative change in grade of six (6) feet or more. Therefore, all steep and very steep slope areas shall be shown, but only those occurring over three (3) consecutive two (2) foot contour intervals will invoke the use restrictions set forth below.
- (3) The mapping delineated the applicant will be reviewed by the Planning Commission and Township Engineer. The applicant will be required to follow all regulations of this Article for those areas which reflect steep slope and very steep slope conditions as determined through the Planning Commission's or Township Engineer's review.
- (4) An initial determination shall be made by the Township Engineer in such cases requiring an interpretation of the exact location of the District boundaries in relation to a given parcel. Any party seeking such a determination may submit a topographic survey of the property and any other pertinent documentation for consideration. The Township Engineer shall make a written report of the results of his initial determination, a copy of which shall be provided to the Board of Supervisors.
- (5) Any party aggrieved by such determination of the Township Engineer or other decision or determination under this Section 402 may appeal to the Zoning Hearing Board. The party contesting the location of the District boundary shall have the burden of proof in case of any such appeal.

4. Permitted Uses.

A. Standards Applicable to All Uses within the Steep Slope Conservation District.

- (1) All grading shall be minimized, and no grading shall be undertaken within any area of the Steep Slope Conservation District except where approved in conjunction with a use permitted under the terms of this Section 402.
- (2) Finished slopes of all cuts and fills shall not exceed thirty-three percent (33%), unless the applicant can demonstrate that steeper slopes can be stabilized and maintained adequately.

B. Uses Permitted In Areas of Prohibitive Slope.

- (1) Uses Permitted By Right. The following are the only uses permitted as of right in areas of prohibitive slope. Such uses also shall be in compliance with the base

zoning district, and shall not involve the erection of buildings, construction of streets, installation of sewage disposal systems, or permanent removal of topsoil.

- a. Parks and outdoor recreational uses not requiring structures, consistent with the goals of watershed protection.
- b. Logging and woodcutting, where such activity is limited to highly selective removal of trees. Maximum precaution shall be taken to avoid destruction of or injury to under-story brush and trees.
- c. Yard area of any permitted building, so long as such building is itself not within the prohibitive slope area. The yard area shall not be disturbed either by grading or clearing.

(2) Uses by Special Exception. Any of the following uses shall be permitted in areas of prohibitive slope as a Special Exception when authorized by the Zoning Hearing 2208 of this Article. In making its determination, the Board shall give particular consideration to the criteria and standards in Section 402.5.B, below.

- a. Conservation and recreation uses requiring structures.
- b. Agricultural structures and cultivation.
- c. Utilities easements and rights-of-way.
- d. Accessory uses customarily incidental to any of the foregoing; accessory structures to any uses permitted in Section 402.4.B.1 and individual driveways accessory to single-family detached dwellings, only if the Zoning Hearing Board determines no viable alternative alignment or location is feasible.

C. Uses Permitted in Areas of Precautionary Slope.

(1) Uses Permitted By Right. The following are the only uses permitted as of right in areas of precautionary slope, provided they are also in compliance with the base zoning district and all other provisions of this Article.

- a. Parks and outdoor recreational uses, consistent with the goals of watershed protection.
- b. Tree farming, forestry and other agricultural uses when conducted in conformity with the conservation practices, including minimum tillage methods, approved by the Chester County Conservation District.
- c. Access roads for the passage of emergency vehicles.
- d. Accessory uses (excepting swimming pools) necessary for the operation and maintenance of the above permitted uses.

e. Yard area of any permitted building.

- (2) Uses by Special Exception. Any of the following uses shall be permitted in areas of precautionary slope as a Special Exception when authorized by the Zoning Hearing Board subject to the requirements of this Section 402 and Section 2208 of this Article. In making its determination, the Board shall give particular consideration to the criteria and standards in Section 402.5.B, below.
- a. Any structure permitted by right, Special Exception or Conditional Use according to the terms of the underlying base zoning district.
 - b. Any road necessary to provide primary access to a use permitted by this Article, when no practical alternative exists in an area of lesser slope. Any such road shall be constructed according to the standards of the Township subdivision and land development regulations.
 - c. Sealed public water supply wells, where approved by all regulatory agencies.
 - d. Sanitary or storm sewers, where approved by all regulatory agencies.
 - e. Extractive uses, including borrow pits, when operated in accordance with required conservation practices and, as applicable, where approved by all regulatory agencies.
- (3) On any lot containing an area or areas of precautionary slope, the total amount of impervious surface that may be installed or maintained within the total area or areas of precautionary slope shall not exceed fifty percent (50%) of the maximum amount of impervious surface permitted for such use on any lot in the underlying base zoning district. Provisions shall be made and approved by the Township Engineer for control of runoff from impervious surfaces to prevent erosion.

5. Administration. The administration of this Section 402 shall be governed by Article XXIII of this Article. In addition, the following requirements shall apply:
- A. Application Procedures. Before a permit is issued for any construction or land disturbance activity on land within or affecting the Steep Slope Conservation District, the following material, in full or in pertinent parts, shall be submitted for review by the Township Engineer:
 - (1) An earth moving plan of the property which indicates existing grades with contour lines at two (2) foot intervals and proposed grades within the area of any proposed activity, disturbance or construction. All areas of prohibitive and/or precautionary slope shall be shaded accordingly.
 - (2) A site plan indicating existing and proposed structures, other impervious structures, storm drainage facilities and retaining walls. The site plan also shall locate and identify existing vegetation and ground cover within areas of prohibitive and precautionary slopes, as well as proposed landscaping material to be installed. The

modifications proposed to the existing land cover shall also be further qualified relative to the subsurface horizons of the soil. (Applicants are encouraged to consult the soil interpretation sheets available from the USDA, Soil Conservation Service).

- (3) Architectural plans, elevations and sections of the property and proposed structures at intervals prescribed by the Township Engineer.
- (4) A statement, signed and sealed by a registered architect or engineer, explaining the building methods to be used in overcoming foundation and other structural problems created by slope conditions, preserving the natural watersheds, and preventing soil erosion and excessive water runoff to neighboring properties and/or streets, and any and all additional engineering and conservation techniques designed to alleviate adverse environmental impacts which may be created by proposed development activities.
- (5) Plan, profile and typical cross-sections of any proposed street, emergency access or driveway, with the seal of a registered professional engineer thereon.
- (6) A statement, signed by the owner or future occupant at the time of subdivision, land development or building permit application, that there is a full understanding of any difficulties associated with access stemming from steep slopes.

No approval or building permit shall be authorized by the Zoning Officer and no Special Exception shall be granted by the Zoning Hearing Board, without the Township Engineer's review of this material and his recommendation thereof.

B. Additional Criteria for Review of Special Exceptions. In evaluating any application for Special Exception, the Zoning Hearing Board shall evaluate the consistency of the proposal with the following criteria:

- (1) Disturbance to particularly sensitive features of the site shall be minimized; special emphasis in planning for the site shall be given to the protection of:
 - a. The steepest areas of precautionary slope, i.e., those approaching twenty-five percent (25%).
 - b. Soils with seasonal high water table.
 - c. Underlying geology that comprises, or contributed to, a major groundwater resource including the flow of existing springs.
- (2) The area that is re-graded and/or stripped of vegetation shall not exceed thirty percent (30%) of the steep and/or very steep slope areas on the lot.
- (3) The proposed development, any impervious ground cover and the resultant disturbance to the land and existing vegetative cover will not cause runoff and/or related environmental problems off the site.
- (4) The relationship of the proposed uses to the objectives described in Section 400.

- (5) For any use(s) or structure(s) to be approved as a Special Exception, the applicant shall provide evidence that:
- a. No other alternative location is feasible or practical for development other than the area in the Steep Slope Conservation District.
 - b. Earth moving activities and vegetation removal will be conducted only to the minimum extent necessary to accommodate proposed uses and structures, and in a manner that will not cause excessive surface water runoff, soil erosion, sedimentation and unstable soil conditions. Further, it shall be demonstrated that all reasonable mitigation techniques and procedures will be utilized for the land development, such as re-vegetation measures, effective control of soils erosion and sedimentation, and effective stormwater management.
 - c. Removal of, or disturbance to, existing vegetation on the site shall be minimized. The proposed impacts on existing vegetation shall be evaluated in terms of the potentially detrimental effects on slope stability, transpiration and recharge of stormwater, aesthetic and traditional characteristics of the landscape, and existing drainage patterns. Mitigation measures may be required by the Board as it deems appropriate.
 - d. Proposed building and structures are of sound engineering design and footings are designed in response to the site's slope, soil and bedrock characteristics. Where applicable, the footings shall extend to stable solid and/or bedrock.
 - e. The important visual qualities of the site are retained by the strict conformance with the spirit and intent of this Article. In addition to vegetation, these may include hilltops or ridgelines, rock outcroppings and the natural terrain and contours of the site.
 - f. Road construction shall follow the natural topography and grading and other earth work shall be limited to a maximum eight (8) foot cut and/or fill and the portion of the internal roadway constructed at greater than six (6) feet cut or fill, shall, by length, be not more than five percent (5%) of the total length of the said roadway.
 - g. The equilibrium of the slope, as characterized by the existing interrelationships among the soil, water and vegetation, shall be disturbed as little as possible.
 - h. Retaining walls and tree wells are proposed as a means of preserving and protecting existing vegetation.
 - i. Snow fence or other like means are shown in plans to define a limit of construction or disturbance.

6. Uses and/or Structures Rendered Nonconforming by the Adoption of this District. Following the adoption of this Section 402, any use or structure which is situated within the boundaries of the Steep Slope Conservation District and which does not conform to the permitted uses specified in Subsection 402.4, above, shall become a nonconforming use or structure, regardless of its conformance to the base zoning district in which it is located without consideration of this Section 402. The expansion or continuance of said nonconforming use or structure shall be governed by the requirements of Article XXI of this Article. However, the Zoning Hearing Board shall also ensure that the standards contained in Subsection 5.B, above, are applied to the expansion or continuance of said nonconforming use or structure.

Section 403. SOILS WITH SEASONALLY HIGH WATER TABLE AND WETLANDS

1. Seasonally High Water Table Soils
 - A. Soils with seasonally high water tables, as defined in Article II, shall not be disturbed by the construction of any structure or any subsurface sewage system.
 - B. Where soils with a seasonally high water table exist, no proposed structure shall be less than fifty (50) feet from the established boundary of such soils. No land disturbance, including grading or the creation of stormwater management facilities, shall be permitted in areas containing seasonally high water table soils.
 - C. In order to delineate seasonally high water table soils, soil investigation must be observed in the field by the Township Engineer. Test pits shall be excavated at fifty (50) foot intervals along the length of the seasonally high water table soils boundary both within and outside of the seasonally high water table soils. A written soil log shall be required for each test pit. A map shall be required showing the surveyed location of each test pit as well as an identification number. A written report, prepared by a qualified professional, compiling the written logs, mapping and a summary of the delineated seasonally high water table soils area, shall also be required. The Township Engineer shall review the report to determine compliance with the Zoning Ordinance and other applicable ordinances and issue a review letter to the Township.
2. Wetlands. Wetlands shall be determined to exist where indicated by the use of the Criteria for Wetland Identification as outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands as adopted by the Pennsylvania Department of Environmental Protection. Where wetlands are found to exist, the following procedures are applicable:
 - A. Should the existence of wetlands be indicated after a review of the requirements of Section 403.2 above, a wetlands delineation shall be performed by a licensed professional engineer, hydrogeologist, soil scientist, or similarly qualified professional experienced in wetland ecology, with the selection of such party to be at the discretion of the applicant. Plans shall be submitted to the Township for review that show the delineation and indicate any disturbance of wetlands anticipated. The qualifications of the consultant performing the delineation shall be submitted with such plans. Further, unless it is clearly evident in such plans and/or by any field review of the Township Engineer that there are no designated wetlands or, if there are, that no disturbance to the designated wetlands is anticipated, the

delineation performed shall be submitted to the appropriate regulatory agencies, including, but not limited to, the U.S. Army Corps of Engineers and the Pennsylvania Department of Environmental Protection for boundary confirmation and/or requisite wetland permits. All potential impact on wetlands shall conform to applicable regulations, as amended.

- B. Should the Township conclude, after reviewing the information to be determined under Section 403.1 and 403.2, that wetlands exist, or exist to a greater extent on the site, contrary to the applicants' findings, the Township may engage a separate consultant or an independent consultant to review the data and make such examinations in the field as are required to verify or determine the extent of discrepancy from the applicant's wetland determinations. In the event the Township finds the applicant's determination to be incorrect, the applicant shall be required to pay for the cost of the Township's determinations in this regard. In the event that the applicant's wetland determinations are found to be correct, the Township will bear the cost of the verification survey indicated.
- C. Where wetlands exist and disturbance permits and/or mitigation activities are required, final plan approval or granting of applicable permits from the Township shall be contingent upon the applicant receiving all necessary wetlands permits, and/or waivers permits. Such permitting shall include, as required by the Pennsylvania Department of Environmental Protection, a habitat screening for the potential presence of bog turtles or other endangered species or their habitat as designated by any state or federal entity.

SECTION 404. CONSERVATION OF WOODLANDS AND OTHER VEGETATION

- 1. The purpose of this Section is to conserve and protect existing woodlands in the Township and to mitigate the removal of woodlands due to land development practices. The value of woodlands to the Township is both aesthetic and functional. The rural character of the Township is largely due to the presence of extensive woodlands, hedgerows and cultivated vegetation. The vegetation provides soil stability by preventing erosion from stormwater and dissipating rainfall. Habitat for wildlife is provided where significant stands of trees and shrubs are allowed to remain in a natural state.
- 2. Disturbance of Woodlands and Hedgerows
 - A. Unless conducted as an approved timber harvesting operation in accordance with the provisions of Section 1823, no more than twenty-five percent (25%) of woodlands and hedgerows shall be disturbed. Where woodlands and hedgerows overlap other protected resources, the more restrictive standard shall apply. Woodlands and hedgerows shall be considered a single resource in the calculation of the permitted degree of disturbance. Woodland disturbance includes the following:
 - 1. Any activity that alters the existing structure of woodland or hedgerow. Alterations include the cutting or removal of canopy trees, sub-canopy trees, under-story shrubs and vines, woody and herbaceous species; and
 - 2. Any activity that constitutes a land disturbance (exposes soils, alters topography) within

a woodland or hedgerow.

- B. Unless specifically exempted by this Article, no tree shall be cut or otherwise removed from any land within the Township unless a tree removal permit has been secured in accordance with the provisions of Section 404.7.B, Exemptions.
 - C. Permitted woodland disturbance shall be based on plan measurements of the extent of tree canopy removal and not on measurement of trunk diameters of trees before and after clearing.
 - D. Woodland disturbance does not include management by means of the selective cutting or removal of invasive alien trees, shrubs, vines or herbaceous species as identified by the Pennsylvania Department of Conservation and Natural Resources (PADCNR) or other authority recognized by the Township.
3. Protection of Specimen Vegetation. Specimen vegetation, as defined herein, shall not be removed from any lot or tract except where the applicant demonstrates to the satisfaction of the Township that such removal is essential to eliminate a hazardous condition(s) or there is a demonstrable financial hardship if the vegetation is not removed. Where permitted, removal of specimen vegetation shall be minimized.
4. Guidelines for Permitted Woodland Disturbance. In determining where permitted woodland disturbance will occur, the following factors shall be considered:
- A. The applicant shall consider the location(s) and benefits of the conservation of mature, healthy woodland stands and their importance as wildlife habitat.
 - B. Each building or structure shall be constructed in such a manner as to provide the least alteration necessary of the existing woodland. Where possible, the amount of clear-cutting shall be minimized and trees shall be selectively removed.
 - C. Trees which are retained shall be identified and protected in accordance with the provisions of Section 404.5.
 - D. Woodland disturbance that would threaten the growth of remaining trees shall be avoided.
 - E. Woodlands and other natural vegetation that remain undisturbed shall interconnect with woodlands or wooded areas of adjacent properties, where they exist, to preserve continuous woodland corridors and allow for the normal movement, dispersion, and migration of wildlife. The applicant shall consider the impacts, in terms of functions and values to wildlife, of separating, dividing, or encroaching on wildlife travel corridors or extensive habitat areas, especially woodlands exceeding ten (10) acres in area.
5. Tree Protection Zone. In order to prevent injury to those trees which have been designated for protection, a Tree Protection Zone shall be established, prior to any land disturbance, where trees or woodlands on the site are to be retained. In the Tree Protection Zone, the following standards shall apply:

- A. Grade changes and excavations shall not encroach upon the Tree Protection Zone.
- B. Trees being removed shall not be felled, pushed, or pulled into a Tree Protection Zone or into trees to be retained.
- C. No toxic materials, including petroleum based and derived products shall be stored within one hundred (100) feet of a Tree Protection Zone.
- D. The area within the Tree Protection Zone shall not be built upon, nor shall any materials be stored either temporarily or permanently in the Tree Protection Zone. Vehicles and equipment shall not be parked in the Tree Protection Zone.
- E. Sediment, retention and detention basins shall not be located within the Tree Protection Zone, nor shall they discharge into the Tree Protection Zone.
- F. When tree stumps are located within ten (10) feet of the tree protection zone, the stumps shall only be removed by means of a stump grinder to minimize the effect on the surrounding root systems.
- G. Tree roots which must be severed shall be cut by a backhoe or similar equipment aligned radially to the tree.
- H. Within four (4) hours of any severance of roots, all tree roots that have been exposed and/or damaged shall be trimmed cleanly and covered temporarily with moist peat moss, moist burlap or other biodegradable material to keep them from drying out until permanent cover can be installed.
- I. Where a utility line must be located through a tree protection zone, tunneling shall be used instead of trenching, except where, in the opinion of the Township, survival of the tree would not be affected by either method. The Township shall determine the most desirable location for the utility line. Trenches shall be filled as soon as possible, and tamped lightly to avoid air spaces.
- J. Marking the Tree Protection Zone on the Site

Prior to construction, the Tree Protection Zone shall be delineated by the following methods:

- (1) The Tree Protection Zone that is delineated on the site prior to construction shall conform to the approved development plans.
- (2) All trees scheduled to remain shall be marked; where groups of trees exist, only the trees on the edge need to be marked.
- (3) A suitable fence mounted on steel posts, located eight feet on center, shall be placed along the boundary of the Tree Protection Zone. The fencing along the zone shall be maintained until all construction and other work has been completed. Any damage to the protective fencing shall be replaced and repaired before further construction

commences.

- (4) In addition to the tree protection zone, trees may be left standing as protection between the trunks of the trees to be retained and the limits of grading. When additional trees are used as protection, the tree protection zone on the approved plan shall be marked in the field so that the additional buffer area is delineated. When this method of protection is used, these additional trees shall be removed at the time of completion of the project.

K. Where a tree designated for preservation is severely damaged by construction (or is clearly not going to survive) within one (1) year of the end date of construction, tree replacement shall occur as provided for in Section 404.6.

6. Tree Replacement.

A. Applicability.

- (1) Except when conducted as an approved tree harvesting operation, tree replacement shall be required whenever permitted woodland disturbance exceeds either of the following standards:
 - a. Woodland disturbance in excess of fifteen-thousand (15,000) square feet of existing woodland for each principal use permitted on a lot or tract.
 - b. Woodland disturbance in excess of fifty percent (50%) on any single lot within a subdivision.
- (2) In determining the extent of the woodland disturbance, it shall include the entire area within the drip line of any tree comprising a wooded area, where any portion of the drip line of such tree is subject to disturbance.
- (3) Tree replacement shall not be required for invasive species as identified by the Pennsylvania Department of Conservation and Natural Resources (PADCNR) or other authority recognized by the Township.

B. Tree Replacement Standards.

- (1) When required, the replacement of trees shall occur on the same lot or tract where disturbance occurs, except as may otherwise be permitted in Section 404.6.B (3) and shall occur as prescribed in the following table.

Tree Replacement Table	
DBH of Tree Removed	Number of Replacement Trees (Minimum 3 inch Caliper)
6 inches to less than 12 inches	3
12 inches to less than 18 inches	5

18 inches to less than 24 inches	7
24 inches to less than 30 inches	10
30 inches to less than 36 inches	12
Equals 36 inches	Equivalent number of 3 inch caliper trees equal to the DBH of the removed tree

- (2) Replacement trees shall be of nursery grade quality, balled and burlapped.
- (3) Where a quantity of replacement trees are required but not suitable for the particular site prescribed due to the size of the site or other limitations, the following alternatives may be undertaken, as approved by the Township:
 - a. A lesser quantity of larger replacement trees may be provided on site, provided such plantings are equivalent to the monetary value of the required quantity of three inch (3") caliper trees.
 - b. The required replacement trees may be used for planting on public lands as close to the tract as possible.
- (4) The type of replacement trees shall be the same species as removed from the site unless the tree removed was an invasive or non-native plant species or another species acceptable to the Township. The choice of replacement trees shall be approved by the Township.
- (5) Specimen trees retained shall be credited toward the tree replacement requirement at a ratio of three (3) trees credited for each one (1) specimen tree retained.
- (6) Replacement trees shall have been grown within the same USDA hardiness zone as the lot or tract and shall be nursery grown, except those deemed by the Township to be acceptable for transplanting from other disturbed portions of the lot or tract.
- (7) Species of replacement plantings shall reflect careful site evaluation, including:
 - a. Existing and proposed site conditions and their suitability for the tree species, based on geology, hydrology, soil, and microclimate.
 - b. Specific functional and design objectives, including replacement of the woodlands being removed, enhancement of existing woodlands, reforestation of riparian buffers, landscape buffering, visual screening, noise abatement, energy conservation, wildlife habitats, and maximizing aesthetic values.
 - c. Maintenance considerations such as hardiness, resistance to insects and disease, longevity, and availability.

d. Because of the many benefits of native species (ease of maintenance, longevity, wildlife habitat, etc.), the use of nursery grown, free-fruiting native trees, is strongly encouraged. Selection should reflect species diversity characteristic of the native deciduous landscape of Chester County.

(8) The planting of replacement trees shall be done by or supervised by a person with horticultural training in tree care and planting methods.

(9) Newly planted replacement trees shall be monitored for a period of one (1) year to ensure the health of the trees. If a replacement tree(s) dies or is dying within the one (1) year period, the applicant shall replace the dead tree(s) at no cost to the Township.

7. Tree Removal Permits.

A. Applicability

(1) Except for the exemptions set forth in Section 404.7.B, no trees shall be cut or otherwise removed from any lands in the Township without a tree removal permit.

(2) All applications for approval of a subdivision or land development, building permit, special exception, conditional use, or zoning variance requiring tree removal shall include an application for a tree removal permit. Any lot owner wishing to remove trees shall comply with the appropriate sections of this Section.

(3) Applications for tree removal permits shall be submitted to the Zoning Officer for review and approval.

No tree planted or preserved as part of any landscape plan or in accordance with any street tree requirement approved in conjunction with a subdivision or land development plan shall be removed, except for such trees directed to be removed pursuant to other sections of this Article.

B. Exemptions. The following shall be exempt from requirements for a tree removal permit:

(1) Trees expressly grown for or by commercial nurseries, fruit orchards, and Christmas tree farms.

(2) Trees removed in conjunction with farmland greater than five (5) acres in size that will be actively devoted primarily to agricultural uses except that where the owner desires to remove any trees for the purpose of expanding farmlands, an inventory of trees to be removed, identified by size and species, shall be prepared and filed with the Township Zoning Officer prior to any tree removal. In the event the expanded farmlands are not actively devoted primarily to farming activities for a period of seven (7) years following tree removal, the tree replacement provisions of Section 404.6.B shall apply.

(3) Trees removed from residential lots where removal is no more than three (3) non-

specimen trees of greater than or equal to six (6) inch DBH in any two (2) year period.

- (4) Trees removed from residential lots that are less than a six (6) inch DBH or less.
- (5) Any tree which is located within a cemetery.
- (6) Trees directed to be removed by municipal, county, state, or federal authority pursuant to law.
- (7) Removal of trees which are dead or dying (except within a Zone 1 Riparian Buffer), diseased trees, trees which have suffered damage, or any tree whose angle of growth makes them a hazard to structures, roads, or human life.
- (8) Removal of trees which appear to cause structural damage to buildings or foundations.
- (9) Pruning or removal of trees within the right-of-way by utility companies for maintenance of utility wires or pipelines and the pruning of trees within sight easements.

C. Tree Removal Permit Requirements. The application for a tree removal permit shall include the following information:

- (1) Name and address of the owner of the lot or tract and legal status (individual, partnership, corporation, etc.)
- (2) Description of the lot or tract where removal is to take place, including lot and block numbers and street address as assigned.
- (3) A list of all trees to be removed with a DBH equal to or greater than six (6) inches identified by size and species, including total number of each species to be removed.
- (4) Purpose for tree removal (new construction, street or roadway, driveway, utility easement, recreation areas, parking lot, etc.)
- (5) Sufficient information to allow a determination that the proposed tree removal is consistent with the woodland removal limitations and standards of this Section and any other applicable Ordinance requirements.
- (6) Such other information as may be deemed necessary by the Zoning Officer to effectively process and evaluate such permit application.
- (7) Fees shall be as established, from time to time, by resolution of the Board of Supervisors.

D. Tree Removal Permit Time Limits.

- (1) Where the tree removal permit application is submitted as part of an application for a subdivision or land development, the time for approval shall be governed by the timing requirements applicable to subdivision and land developments.
- (2) Where the application is made in connection with a lot that is not part of a subdivision or land development, the Township shall act on the application within thirty (30) days of its receipt or within such additional time as is consented to by the applicant. Failure to act on the application within thirty (30) days, or any agreed to extension thereof, shall be deemed to be an approval of the application.
- (3) Approval by default with regard to subdivision or land development plans shall not be deemed a waiver of the tree removal permit.

E. Duration of Tree Removal Permit. Permits granted for the removal of trees under the terms and conditions of this Article shall run with the land and shall remain in force and effect for the following periods of time, and not thereafter. Once the permit has expired, a new application must be submitted for review and a new permit issued. Time limits shall be as follows:

- (1) If granted for a lot or tract for which no building permit is required, one (1) year from the date of issuance.
- (2) If granted for a lot or parcel of land for which a building permit is required, but for which no subdivision or land development approval is required, until expiration of the building permit granted with such tree removal permit.
- (3) If granted for a lot or tract of land for which land development approval is required by the Township as a condition precedent to obtaining a building permit, until expiration of the land development approval, or expiration of the building permit issued after such site plan approval.
- (4) If granted for a lot or tract of land for which minor subdivision is sought, one (1) year from the date of granting of approval for such minor subdivision.
- (5) If granted for a lot or tract of land for which approval of a major subdivision is sought until expiration of such approval.

F. Inspections and Enforcement Related to Tree Removal Permits.

- (1) Prior to taking final action upon any application for a tree removal permit, an inspection of the site shall be made by the Township.
- (2) Prior to any tree removal, all trees shall be marked and areas to be cleared identified, all of which shall be inspected by the Township.
- (3) The Township shall periodically inspect the lot or tract during the construction phase to verify compliance with this Article. Such inspection shall be made of the lot or tract referred to in the permit application and of contiguous and adjoining lands, as well as of lands in the vicinity of the application, for the purpose of determining drainage and

physical conditions thereon.

- G. Violations and enforcement remedies shall be as established in Article XXV of this Article. In addition, where regulated trees are removed without a tree removal permit, the affected areas shall be replanted, increasing replacement requirements of Section 404.6.B by fifty (50) percent and planted to the satisfaction of the Township.
8. Delineation. The applicant shall delineate woodlands which are on the site, in accordance with this Section and which shall be approved by the Township Landscape Architect or the Township Engineer. In addition, where trees or woodlands on the site are to be preserved, they shall be clearly delineated on the plan as a Tree Protection Zone.
9. Subdivision and Land Development Plan Procedures.
- A. All subdivision and land development plans submitted to the Township for review shall contain a mapped inventory of existing vegetation on the entire site. Vegetation shall constitute masses of canopy, specimen and under-story trees, as well as shrub masses and hedgerows. The edge of vegetated areas shall be shown as it exists prior to any site disturbance and shall include the location of all trees over six (6) inches dbh.
- B. In its review of a subdivision or land development plan, the Township may require alteration to the proposed development in order to protect the maximum amount of existing trees. This may be done through the relocation of the proposed use, the use of multiple stories to minimize the building area, and/or the modification of drives and parking.
- C. All final approved subdivision and land development plans shall delineate vegetative areas to be retained and contain instructions for protection in accordance with this Section.

Section 405 MINIMUM LOT AREA FOR INDIVIDUAL ON-SITE SEWAGE DISPOSAL SYSTEMS

Where an elevated sand mound sewage disposal system or an alternative on-site sewage disposal system (as defined in Chapter 73, Standards for Sewage Disposal Facilities, of the Rules and Regulations of the Pennsylvania Department of Environmental Protection) is proposed, the minimum lot area, regardless of the otherwise applicable zoning district provisions, shall be two acres, and the minimum lot width shall be one hundred and fifty (150) feet.

Section 406 RETENTION OF TOPSOIL

1. Initial construction on each area planned to be disturbed on any site shall consist of stripping and piling of topsoil. Upon completion of other construction, the entire amount of topsoil stripped shall be replaced on the site. No topsoil shall be disposed of, by sale or otherwise, off the site.
2. Topsoil removed by grading operations shall be redistributed and stabilized as quickly as possible following the completion of a project or project phase. All exposed earth surfaces shall be stabilized by the following methods or approved equal:

- A. Seeding or planting on slopes of ten percent (10%) or less.
 - B. Sodding, hydro-seeding or riprap on slopes exceeding ten percent (10%).
3. Grading and earthmoving operation shall be scheduled to minimize site disturbance during the period November 15 to April 1, when re-vegetation of exposed ground surfaces is difficult.

Section 407 RIPARIAN BUFFER CONSERVATION AREAS

1. Purpose and Intent. It is the purpose of this Section 407 to establish requirements for the use of and prohibition of uses on Riparian Buffer Conservation Areas, as defined in Article II of this Article, in order to protect streams, wetlands and other water resources, to protect surface water quality, to protect riparian and aquatic ecosystems, and to provide for the environmentally sound use of land resources
 2. Applicability. The provisions of this Section 407 shall apply to the construction of any building or other structure or any land disturbance resulting from or in connection with any use or activity requiring a building permit, Special Exception or Zoning Variance approval, Conditional Use approval, or Subdivision or Land Development Plan approval.
 3. Riparian Buffer Conservation Area. Riparian buffers shall be protected in accordance with the standards of this Section 407. Riparian buffers conservation areas are areas immediately adjacent to perennial streams and other water bodies, as mapped on the U.S. Geological Survey 1:24,000 scale quadrangle maps, and shall consist of zone one riparian buffers and zone two riparian buffers as follows:
 - (1) Zone one riparian buffer - A thirty (30) foot setback zone measured from the top of the bank of a perennial stream or other water body.
 - (2) Zone two riparian buffer - A seventy (70) foot managed buffer zone extending outward from the zone one riparian buffer.
- A. Resource Protection Standards.
- (1) Zone One Riparian Buffer
 - a. Except as noted below, no woodland disturbance or other land disturbance shall be permitted within the zone one riparian buffer.
 - b. The following uses and activities shall be permitted with the zone one riparian buffer.
 - i. Regulated activities permitted by the Commonwealth of Pennsylvania (i.e. permitted stream or wetland crossing, maximum five percent (5%) disturbance).

- ii. Provision for trail access.
 - iii. Selective removal of hazardous or invasive vegetative species.
 - iv. Vegetation management in accordance with an approved landscape plan or open space management plan.
 - v. A soil or stream conservation project, including reforestation and stream bank stabilization, approved by the Chester County Conservation District.
- (2) Zone Two Riparian Buffer.
- (a) Except as noted below, no more than ten percent (10%), measured on a lot-by-lot basis, of a zone two riparian buffer shall be graded, filled, built upon, or otherwise altered or disturbed.
 - (b) The activities permitted in the zone one riparian buffer shall be permitted in the zone two riparian buffer and shall, except as noted in paragraph a, below, not be counted towards the ten percent (10%) disturbance allowance.
 - i. A maximum disturbance of five percent (5%) is permitted for regulated activities permitted by the Commonwealth of Pennsylvania (i.e. permitted stream or wetland crossing) and shall count towards the ten percent (10%) disturbance allowance.
 - ii. In no case shall the total riparian buffer width be reduced to less than seventy-five (75) feet in width, measured from the top of each stream or other water body bank.
 - iii. The total buffer may be reduced to less than the one hundred (100) foot in width, provided the following measures are undertaken:
 - (i) Conservation design techniques that minimize the amount of stormwater generated and maximize the use of pervious areas for infiltration of rainfall and stormwater.
 - (ii) Comprehensive stormwater management practices to ensure that post-development conditions are consistent with the natural characteristics of the receiving stream, including stormwater quality BMP (Best Management Practices).
 - (iii) Other BMP, such as level spreaders, meadow grass filter strips, or similar techniques to disperse overland flow prior to entering the protected buffer area where the width of the buffer is less than one hundred (100) feet.
- (3) Where a subdivision or land development is proposed where there is no established vegetated or wooded buffer (such as in areas previously cultivated for agriculture) a one hundred (100) foot riparian buffer shall be established and maintained in

accordance with the following guidelines:

- a. Forested and un-forested vegetation shall be established through natural succession. Selective planting shall be incorporated on sites devoid of vegetation to stimulate the growth of native species and discourage invasive species.
 - b. Plant selection and planting shall be consistent with the Chester County Conservation District standards or USDA riparian forested buffer guidance. The applicant is encouraged to involve local volunteer groups in the buffer planting.
- (4) An erosion and sedimentation control plan, consistent with the requirements of the Subdivision and Land Development Ordinance shall be required for any land disturbance proposed within five hundred (500) feet of any watercourse.
 - (5) Timber harvesting shall only be permitted within the ten percent (10%) disturbance allowance of the zone two riparian buffer and shall be restricted to selective cutting. Clear cutting or grubbing of trees is prohibited within all riparian buffers. Permitted timber harvesting shall be undertaken in accordance with a timber harvesting plan consistent with the requirements of Section 1823 of this Article.
 - (6) A riparian buffer adjacent to high quality waters and exceptional value waters, designated under the Pennsylvania Department of Environmental Protection Chapter 93 Rules and Regulations shall be subject to the provisions of the Pennsylvania Department of Environmental Protection *Special Protection Waters Implementation Handbook*, its amendments, or successor documents.

B. Riparian Buffer Conservation Area Delineation. The applicant shall delineate watercourses and zone one and zone two riparian buffer conservation areas located on the site in accordance with the provisions of this Section 407 which delineation shall be approved by the Township Engineer.

4. Zoning Hearing Board Appeals.

A. Applications for the appeal of a determination of the Township Engineer regarding the delineation of a Riparian Buffer Conservation Area, or an appeal of strict interpretation of this section, shall contain the basis of the appeal and a description of the relief requested. A plan shall be filed with the application, such plan to be prepared by a Landscape Architect or Civil Engineer, either of whom shall be registered in the Commonwealth of Pennsylvania. The Plan shall be reviewed by the Township Engineer for comment to the Zoning Hearing Board and shall contain the following:

- (1) A topographic map, at a scale of not less than one inch equals 100 feet (1" = 100') with contour intervals of not less than two (2) feet, delineating intermittent and perennial streams, ponds and other water resources on the property proposed for development or disturbance.
- (2) A topographic map of the same specifications in paragraph 1, above, delineating the

steep slopes as defined in Section 402.

- (3) A map, at a scale of not less than one inch equals 100 feet (1" = 100'), delineating any wetlands or areas of hydric soils.
- (4) A map, at a scale of not less than one inch equals 100 feet (1" = 100'), indicating the species, location and size of trees and other vegetation on the property.
- (5) A map, at a scale of not less than one inch equals 100 feet (1" = 100'), delineating the one hundred year floodplain as described in the Federal Emergency Management Agency, Flood Insurance Rate Maps, and verified by field inspection.
- (6) A plot plan, at a scale of not less than one inch equals 100 feet (1" = 100'), accurately delineating the location and size of any proposed building or other structure and/or any land disturbance.
- (7) A narrative justification of the basis of the appeal, indicating the reasons the Applicant contends that the determination of the Township Engineer and the literal interpretation of this Section 407 will render the property:
 - a. Unusable or unsuitable for development or land disturbance
 - b. Otherwise render the property without economic value.

The Applicant shall submit such data in support of one or the other contention or, in the alternative, present evidence that alternative design solutions will achieve the same conservation objectives of this Section 407.

B. The following standards and criteria, where applicable, shall be used by the Zoning Hearing Board in rendering affirmative decisions:

- (1) A demonstration of good and sufficient cause.
- (2) A determination, based upon the information provided that failure to grant relief would result in exceptional hardship to the Applicant.
- (3) A determination that strict application of the provisions of this Section 407, would deny the Applicant reasonable use of the property, or would have severe economic impact on the Applicant by rendering the property unusable or unsuitable for development or land disturbance.
- (4) A determination that plan modification or conditions of approval would achieve the conservation objectives of this Section 407.
- (5) A determination that the grant of appeal would not impact adjoining properties nor affect the public health, safety or general welfare.
- (6) A determination that the grant of appeal is the minimum necessary and does not conflict with any other Township, State or Federal regulations.

5. Enforcement. In addition to any other enforcement procedures provided by this Article, the Township may bring civil action to restrain a violator from proceeding with any construction, land development or land disturbance pending the completion of the proceedings provided in this Section 407, to restrain a violator of any provision of this Section 407, and to require the violator to restore at his/her expense any damage to a Riparian Buffer Conservation Area which he/she may have caused. The violator shall be liable to the Township for all costs, including attorney fees that the Township may incur in bringing such action. Alternatively, the Township may seek damages from the violator in the amount necessary to repair any damage to a Riparian Buffer Conservation Area and may also recover any costs, including attorney fees, incurred in obtaining a recovery of damages.

Section 408 WETLANDS BUFFER CONSERVATION AREAS

1. Purpose and Intent. It is the purpose of this Section 408 to establish requirements for the use of and prohibition of uses on Wetlands Buffer Conservation Areas, as defined in Article II of this Article, in order to protect wetlands and other water resources, to protect surface water quality, to protect riparian and aquatic ecosystems, and to provide for the environmentally sound use of land resources.
2. Applicability. The provisions of this Section 408 shall apply to the construction of any building or other structure or any land disturbance resulting from or in connection with any use or activity requiring a building permit, Special Exception or Zoning Variance approval, Conditional Use approval, or Subdivision or Land Development Plan approval.
3. Resource Protection Standards.
 - A. Except as permitted in Section 408.3.B, no portion of the first fifty (50) feet of the Wetlands Buffer Conservation Area directly adjacent to the wetlands boundary shall be graded, filled, built upon, or otherwise altered or disturbed. Except as permitted in Section 408.3.B, no more than ten percent (10%), measured on a lot-by-lot basis, of the Wetlands Buffer Conservation Area measured a distance of fifty (50) feet to two hundred (200) feet from the wetlands boundary shall be graded, filled, built upon, or otherwise altered or disturbed.
 - B. The following uses or activities shall be permitted in the Wetlands Buffer Conservation Area and shall, except noted in subsection (1), below, not be counted towards the ten percent (10%) disturbance allowance:
 - (1) Regulated uses or activities shall be permitted by the Commonwealth of Pennsylvania, such as stream or wetlands crossings or other encroachments. Disturbance associated with the state permitted wetlands crossing activity shall count as part of the ten percent (10%) disturbance allowance.
 - (2) Management and maintenance of vegetation in accordance with a landscape plan or open space management plan, approved by the Township. Such plans shall provide for the maintenance of stream banks, pond edges, wetland edges and water quality.

3. In order to ensure that sufficient area is provided for all structures, driveways, parking, other impervious surfaces, and other site improvements, while conforming to the resource protection standards of this Article and the minimum setbacks of this Article, the minimum buildable area(s) shall be delineated. Such delineation shall demonstrate compliance with the maximum disturbance requirements of this Article and all other applicable ordinances and regulations. For uses proposed for individual on-lot sewage disposal systems, a two thousand (2,000) square foot area shall be identified for such system and a minimum two thousand (2,000) square foot replacement area shall also be identified, both in compliance with the resource protection standards of this Article and other applicable requirements of this and other Ordinances and regulations.

4. Calculations indicating the area of the site with the natural resources as indicated in Section 409.1, above, and the area of natural proposed to be disturbed. Such calculations shall be provided in the following form:

Site Disturbance Calculations

Protected Resource	Land Area of Protected Resource* (sq. ft.)	Maximum Disturbance Allowance* (%)	Maximum Amount of Disturbance Permitted (sq. ft.)	Proposed Disturbance (sq. ft.)
Floodplain		0%		
Watercourse		0%		
Riparian Buffer				
Zone 1		0%		
Zone 2		10%		
Wetlands		0%		
Wetlands Buffer				
0 feet to 50 feet		0%		
50 feet to 200 feet		10%		
Woodlands		25%		

* Overlapping resources shall be included in the more restrictive category

** Disturbance allowances may be modified where federal/state permits have been obtained.