

**EAST NOTTINGHAM TOWNSHIP  
ZONING ORDINANCE**

**ARTICLE IV  
NATURAL FEATURES PROTECTION STANDARDS**

**SECTION 401 STATEMENT OF INTENT**

The standards and requirements in this article are intended to afford appropriate levels of protection to those natural features within East Nottingham 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 land development or disturbance otherwise authorized under this ordinance or other regulations, and has designed the balance of this ordinance to work in harmony with the terms of this article.

**SECTION 402 FLOOD PLAIN CONSERVATION DISTRICT**

- A. Statement of Intent. The purposes of the Flood Plain Conservation District are:
1. Regulate development that will cause unacceptable increases in flood heights, velocities, and frequencies.
  2. Restrict or prohibit certain uses susceptible to flood damage.
  3. Protect aquifer recharge areas and other areas of the Township sensitive to pollution and contamination.
  4. Require all uses that do occur in flood plain areas to be protected against flooding and to be provided with all necessary access and utilities, which shall also be protected from flood damage.
  5. Minimize danger to public health and safety by protecting water supply, sanitary sewage disposal, and natural drainage.
  6. Protect the quantity and quality of surface and subsurface water supplies adjacent to and underlying flood plain areas.
  7. Contribute to: [a] the protection of stream water against sedimentation; [b] the prevention of stream bank erosion; [c] the maintenance of cool water temperatures; and [d] the preservation of fish and wildlife habitats, through the protection of trees and other riparian vegetation.
  8. Maintain the scenic and aesthetic character of the streams and stream valleys.
- B. Description of Flood Plain Areas
1. Identification

The identified flood plain area shall be any area of East Nottingham Township subject to the one hundred (100) year flood, as identified in the

Flood Insurance Study (FIS) dated \_\_\_\_\_, 19\_\_ and the accompanying maps for the Township by the Federal Emergency Management Agency (FEMA), or the most recent revision thereof.

2. Flood plain areas

The identified flood plain area shall consist of the following specific areas:

- a. FW (Floodway Area) – The areas identified as “Floodway” in the AE Zone in the Flood Insurance study prepared by the FEMA. The term shall also include floodway areas which have been identified in other available studies or sources of information for those flood plain areas where no floodway has been identified in the Flood Insurance Study.
- b. FF (Flood Fringe Area) – The remaining portions of the one hundred (100) year flood plain in those areas identified as an AE Zone in the Flood Insurance study, where a floodway has been delineated.

3. Flood plain boundaries

The basis for the outermost boundary of the Flood Plain Conservation District shall be the one hundred (100) year flood elevations as shown in the flood profiles contained in the Flood Insurance Study.

- a. FE (Special Flood Plain Area) – The areas identified as Zone AE in the Flood Insurance Study, where one hundred (100) year flood elevations have been provided, but no floodway has been delineated.
- b. FA (General Flood Plain Area) – The areas identified as Zone A in the FIS for which no one hundred (100) year flood elevations have been provided. When available, information from other Federal, State, and other acceptable sources shall be used to determine the one hundred (100) year elevation, as well as a floodway area, if possible. When no other information is available, the one hundred (100) year elevation shall be determined by using a point on the boundary of identified flood plain area which is nearest the site in question.

In lieu of the above, the Township may require the applicant to determine the elevation with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough technical review by the Township.

4. Changes in identification of area

The delineation of any identified flood plain area may be revised by the Board of Supervisors where studies or information provided by a qualified agency or person documents the need for such revision. However, prior to any such change, approval must be obtained from the Federal Insurance Administration (FIA).

5. Boundary disputes

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

C. Permitted Uses

1. Uses Permitted by Right

The following uses are permitted by right only if conducted under and in accordance with the current provisions of the following: [i] Clean Streams Law of Pennsylvania, Act 394 of 1937, as amended; [ii] the Rules and Regulations of the Pennsylvania Department of Environmental Protection; and [iii] all other applicable provisions of this ordinance.

- a. Agricultural, horticultural, and forestry uses, excluding any structures, and excluding any grading or filling.
- b. Public and private parks and/or recreation areas, excluding swimming pools, campgrounds, and any structures. Picnic tables, park benches, fireplaces, grills, and playground equipment shall be permitted, if anchored to prevent flotation.
- c. Activities related to the preservation and conservation of natural resources and amenities, excluding any structures; installation and/or enhancement of riparian buffer vegetation.
- d. Stream improvements, fish and farm ponds, dams, or stream relocations, as approved by the Pennsylvania Department of Environmental Protection and, as appropriate, in consultation with the Pennsylvania Fish and Boat Commission and/or the U.S. Fish and Wildlife Service.
- e. Erosion and sedimentation control measures, facilities, and structures, provided no increase in flood heights or frequency, unhealthful ponding, or other unsanitary conditions shall occur.
- f. Yards and open space areas.
- g. One (1) and two (2) strand fences.
- h. Culverts, bridges, and the approaches to such culverts and bridges, as also approved by the Pennsylvania Department of

Environmental Protection and/or the U.S. Army Corps of Engineers.

2. Uses Permitted by Conditional Use

The establishment and/or expansion of the following uses is permitted when approved as a conditional use by the Board of Supervisors in conformance with Section 2111, the standards of this section, and all other applicable provisions of this ordinance.

- a. Water-oriented uses and structures, such as fish hatcheries, water-monitoring devices, water wheels, and wiers.
- b. Parking lots, loading areas, driveways, and any other paved at-grade surfaces.
- c. Floodproofing and flood hazard reduction structures for nonconforming uses and structures.
- d. Improvements and/or additions to existing structures within the Flood Plain Conservation District.
- e. Hydropower plants.
- f. Fire protection facilities for the purpose of collecting and storing water for fire protection purposes.
- g. The placing or stripping of topsoil or fill material of any kind.
- h. Modification or waivers of the otherwise applicable terms of this section regulating nonconforming uses and structures, with respect to historic structures, as provided in Subsection F.

D. Activities Specifically Prohibited in the Flood Plain Conservation District. The following activities, whether proposed in conjunction with a permitted use or otherwise, shall not occur in any portion of the Flood Plain Conservation District:

1. Clear-cutting of trees, as defined in Article II of this ordinance, or the clearing of vegetation, except where such clearing is necessary:
  - a. To prepare land for a use permitted by this ordinance 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 which the basin is to serve;
  - b. As a reforestation measure; or
  - c. 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.
2. Sod farming.
3. 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.

4. 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 listed in Act 166-1978, the Pennsylvania Flood Plain Management Act, and are dangerous to human or animal life:
    - a. Acetone
    - b. Ammonia
    - c. Benzene
    - d. Calcium carbide
    - e. Carbon disulfide
    - f. Celluloid
    - g. Chlorine
    - h. Hydrochloric acid
    - i. Hydrocyanic acid
    - j. Magnesium
    - k. Nitric acid and oxides of nitrogen
    - l. Petroleum products (gasoline, fuel oil, etc.)
    - m. Phosphorus
    - n. Potassium
    - o. Sodium
    - p. Sulphur and sulphur products
    - q. Herbicides or pesticides (including insecticides, fungicides, and rodenticides)
    - r. Radioactive substances, insofar as such substances are not otherwise regulated
    - s. Any other dangerous materials or substances regulated by the appropriate federal or state agencies, or any materials or substances which may be added to the list contained in Act 166-1978 subsequent to enactment of this ordinance or which may be deemed similar thereto.
  5. Installation of subsurface sewage disposal areas.
  6. The construction, placement, enlargement, or expansion of mobile homes, mobile home parks, mobile home subdivisions, manufactured homes, manufactured home parks, manufactured home subdivisions, travel trailer parks, or travel trailers.
  7. The construction, enlargement, or expansion of hospitals (public or private).
  8. The construction, enlargement, or expansion of nursing homes (public or private).
  9. The construction, enlargement, or expansion of jails or prisons.
  10. Junk yards.
- E. Special Requirements for Mobile Homes, Manufactured Homes, and Travel Trailers

1. Within the Flood Plain Conservation District, any mobile home, manufactured home, mobile home or manufactured home park, mobile home or manufactured home subdivision, travel trailer, or travel trailer park not already existing on a lot as of the date of enactment of this ordinance shall be prohibited.
  2. Within any existing mobile home park, manufactured home park, mobile home subdivision, manufactured home subdivision, or travel trailer park within the Flood Plain Conservation District, all permitted replacement units or additions to existing units shall be:
    - a. Placed on a permanent foundation;
    - b. Anchored to resist flotation, collapse, or lateral movement;
    - c. Elevated so that the lowest floor of the home is one and one-half (1½) feet or more above the elevation of the one hundred (100) year flood.
- F. Nonconforming Structures and Uses in the Flood Plain Conservation District  
 Nonconforming structures and uses of land within the Flood Plain Conservation District shall be regulated under the provisions of Article XX of this ordinance, but the following additional regulations also shall apply:
1. Existing nonconforming structures or uses located in the Floodway (FW) shall not be expanded or enlarged.
  2. The modification, alteration, repair, reconstruction, or improvement of any kind to a nonconforming structure or use in a Floodway (FW) and the modification, expansion, enlargement, alteration, repair, reconstruction, or improvement of any kind to a nonconforming structure or use located in a Flood Fringe (FF) must be authorized as a special exception by the Zoning Hearing Board under the provisions of Article XXII of this ordinance. In considering such special exceptions, the Zoning Hearing Board shall apply the following standards and criteria:
    - a. No modification, alteration, repair, reconstruction, or improvement of any structure in the Floodway (FW) shall be permitted that will cause any increase in the one hundred (100) year flood elevation.
    - b. The proposed change is consistent with the spirit, purpose, and intent of this ordinance.
    - c. 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 considerations.
    - d. The proposed change will serve the best interests of the Township, the convenience of the community, where applicable, and the public welfare.
    - e. 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 appropriate

governmental agencies required herein or deemed advisable by the Zoning Hearing Board.

- f. If improvements to the Floodway (FW), or any filling or alterations to the elevation of the ground in the Floodway (FW) or Flood Fringe (FF), or any alterations or relocations of any perennial stream are contemplated, the Zoning Hearing Board shall determine that the applicant:
  - 1) has complied with the provisions of this section with regard to the effect of such filling or alterations on base flood elevations;
  - 2) has notified in writing, by certified mail, those adjacent communities within the stream's watershed that may be affected by such alterations;
  - 3) has provided copies of such notification to the Township for submission to the Pennsylvania Department of Community and Economic Development and the Federal Insurance Administrator; and
  - 4) has, in addition, obtained a permit from the Pennsylvania Department of Environmental Protection, Division of Dams and Waterway Management.
- g. Any permissible modification, alteration, repair, reconstruction, expansion, or improvement of any kind to a nonconforming structure or use located in the Flood Plain Conservation District to an extent or amount less than fifty (50%) percent of its market value shall be elevated and/or floodproofed to the greatest extent possible.
- h. Any modification, alteration, repair, reconstruction, expansion, or improvement of any kind to a nonconforming structure or use, regardless of location within the Flood Plain Conservation District, to an extent or amount of fifty (50%) percent or more of its market value shall be undertaken only in full compliance with the provisions of this and any other applicable ordinances.
- i. 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 flood water.
- j. The Zoning Hearing Board shall have the right to waive any of the requirements of this Subsection F 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. To be eligible to be considered for such a waiver, the site or structure must be identified as an Historic Site on the \_\_\_\_\_. In deciding upon any request for such a waiver, the Board shall be guided by the criteria in Subsection H, Hardships, and shall follow the procedures for acting on special exceptions as specified in Article XXII of this ordinance. The Board shall consider: [i] the appropriateness of the proposed activity in relation to the quality and

integrity of the historic structure; [ii] the degree to which the requested waiver will be essential in preserving the structure; [iii] the preservation benefits of the proposed activity against its potential impact on flood heights and velocities; [iv] the flood hazards attendant to the structure itself; and [v] consistency of the proposed waiver with FEMA requirements.

G. Development and Construction Requirements

1. Basements and first floors

a. Non-residential structures

- 1) Within any identified flood plain area, any new construction or substantial improvement of a non-residential structure shall have the lowest floor (including basement) elevated up to, or above, the regulatory flood elevation, or be designed and constructed so that the space enclosed by such structure shall remain either completely or essentially dry during any flood up to that height.
- 2) Any non-residential structure, or part hereof, having a lowest floor which is not elevated to at least one and one half (1 ½) feet above the one hundred (100) year flood elevation, shall be floodproofed in a completely or essentially dry manner in accordance with the W1 or W2 space classification standards contained in the publication entitled "Floodproofing 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, that the proposed design and methods of construction are in conformance with the above referenced standards.
- 3) Fully enclosed space below the lowest floor (including basement) is prohibited.

b. Residential structures

No basements shall be permitted in residential structures. First floor levels in residential structures shall be constructed at or above an elevation of one and one-half (1 ½) feet above the elevation of the one hundred (100) year flood.

2. Fill

If fill is used to raise the finished surface of the floor one and one-half (1 ½) feet above the elevation of the one hundred (100) year flood:

- a. Fill shall extend laterally fifteen (15) feet beyond the building line from all points.

- b. Fill shall consist of soil or small rock materials only. Sanitary land fills shall not be permitted.
  - c. Fill slopes shall be no steeper than one (1) vertical on two (2) horizontal, unless substantiating data, justifying steeper slopes are submitted to and approved by the Township Engineer.
  - d. Fill shall be used only to the extent to which it does not adversely affect adjacent properties.
3. Placement of buildings and structures
- a. All buildings and 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 effect upon the flow and height of flood water.
  - b. The following shall not be placed or caused to be placed in the designated Flood Plain Conservation District: fences, except two-wire fences, other structures or other matter 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 is placed where the natural flow of the stream or flood waters would carry the same downstream to the damage or detriment of either public or private property adjacent to the flood plain.
4. Anchoring
- a. All buildings and structures shall be firmly anchored to prevent flotation, 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.
  - b. All air ducts, large pipes, and storage tanks located at or below the first floor level shall be firmly anchored to prevent flotation.
5. Floors, walls, and ceilings
- a. Wood flooring used at or below the lowest floor level shall be installed to accommodate a lateral expansion of the flooring, perpendicular to the flooring grain, without incurring structural damage to the building.
  - b. All finished flooring used at or below the lowest floor level shall be made of materials which are dimensionally stable and resistant; to water damage resulting from submersion for at least a forty-eight (48) hour period.
  - c. All carpeting or carpet cushions employed as a finished flooring surface at or below the lowest floor level shall be made of materials which are resistant to water damage resulting from submersion for at least a five (5) day period.

- d. Plywood used at or below the lowest floor level shall be of any “exterior” or “marine” grade and of a water-resistant or water-proof variety.
  - e. Basement ceilings in non-residential structures shall have sufficient wet strength and be so installed as to survive inundation.
6. Electrical systems
- a. All electric water heaters, furnaces, and other critical electrical installations shall be permitted only at elevations of one and one-half (1 ½) feet or more above the level of the one hundred (100) year flood.
  - b. No electrical distribution panels shall be allowed at an elevation less than three (3) feet above the level of the one hundred (100) year flood.
  - c. Separate electrical circuits shall serve lower levels and shall be dropped from above.
7. Plumbing
- a. Water heaters, furnaces, and other critical mechanical installations shall be permitted only at elevations of one and one-half (1 ½) feet or more above the level of the one hundred (100) year flood.
  - b. No part of any on-site sewage disposal system shall be constructed within the Flood Plain Conservation District.
  - c. Water supply systems and sanitary sewage systems shall be designed to preclude infiltration of flood waters into the systems and discharges from the systems into flood waters.
  - d. All gas and oil supply systems and all other utilities shall be designed to preclude the infiltration of flood waters into the systems and discharges from the systems into flood waters. Additional provisions shall be made for the drainage of these systems in the event that flood water infiltration occurs.
8. Paints and adhesives
- a. Adhesives used at or below the lowest floor level shall have a bonding strength that is unaffected by inundation.
  - b. Doors and all wood trim at or below the lowest floor level shall be sealed with a waterproof paint or similar product.
  - c. Paints or other finishes used at or below the lowest floor level shall be capable of surviving inundation.
9. Drainage facilities
- Storm drainage facilities shall be designed to convey the flow of storm-water runoff in a safe and efficient manner. The system shall insure proper drainage along streets and provide positive drainage away from

buildings. The system shall also be designed to prevent the discharge of excess runoff onto adjacent properties.

10. Water facilities

All new or replacement water 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. Other utilities

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

12. Streets

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

13. Storage

All materials that are buoyant, flammable, explosive or, in times of flooding, could be injurious to human, animal, or plant life, and not listed in Subsection E, Activities Specifically Prohibited in the Flood Plain Conservation District, shall be stored at or above the Regulatory Flood Elevation and/or floodproofed to the maximum extent possible.

14. Fuel supply systems

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

H. Hardships.

1. When the provisions of this section are deemed by the applicant to be unreasonable or to create a substantial hardship, the applicant shall have a right to:
  - a. In the case of applications for permitted uses, make an appeal to the Zoning Hearing Board for a variance in accordance with the provisions of Article XXII of this ordinance.
  - b. In the case of an application to the Zoning Hearing Board for a special exception under the provisions of Subsection D, supply additional testimony and evidence to the Zoning Hearing Board as part of the request for relief from such hardship.
2. All decisions on such appeals shall adhere to the following criteria:
  - a. The Zoning Hearing Board shall not grant a variance or special exception for any construction, development, use, or activity within any floodway area that would cause any increase in the Base Flood Elevation.
  - b. The Zoning Hearing Board shall grant special exceptions only upon

- (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the special exception would result in substantial hardship to the applicant, and (iii) a determination that the granting of a special exception 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.
- c. 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 floodproofing, the highest feasible class of floodproofing as defined by floodproofing regulations promulgated by the Office of the Chief of Engineers, U.S. Army, shall be provided.
- d. The Zoning Hearing Board shall notify the applicant in writing over the signature of the Chairman of the Zoning Hearing Board that (i) 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 (ii) 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 (e), below.
- e. The Zoning Hearing Board shall (i) maintain a record of all decisions, including justification for their issuance, and (ii) report such decisions issued to the Township Secretary for purposes of inclusion in the annual report submitted by the Township to the Federal Insurance Administrator.
- f. No special exception or variance shall be granted for any requirement pertaining to developments which may endanger human life (as described in Subsections D-(4), (6), (8), (9), and (10) of this section), in accordance with the Pennsylvania Flood Plain Management Act, P.L. 851, No. 166 of 1978, as amended.
- g. 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:
- 1) 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.
  - 2) 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 topography based on a known USGS benchmark.
  - 3) Profile showing the slope of the bottom of the channel.

- 4) Specifications for building materials and construction, floodproofing, filling, dredging, grading, storage, and water supply and sanitary facilities.
  - 5) Computation of the increase, if any, in the height of the base flood which would be attributable to any proposed uses.
  - 6) 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 flood plain conservation district as defined by Article II of the East Nottingham Township Zoning Ordinance."
- h. 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 (i) diminish the capacity of the Flood Plain Conservation District to store and absorb flood waters, to moderate flood velocities, and to accommodate sediment; (ii) be subject to flood damage; (iii) cause erosion and impair the amenity of the Flood Plain Conservation District; or (iv) adversely affect the area contiguous to the Flood Plain Conservation District as well as areas downstream; or on any other pertinent aspect of the case.
  - i. In all proceedings before the Zoning Hearing Board, including application for special exception from the provisions of this section, the burden of proof shall be on the applicant to show that the use requested will be in general conformity with the objectives of this section, that proper safeguards will be observed, and that the use will not be injurious to the public health, safety, and general welfare.

I. Issuance of Building Permit

1. The Zoning Officer shall issue a building permit only after it has been determined that the proposed work to be undertaken will be in conformance with the requirements of this and all other applicable codes and ordinances.
2. Prior to the issuance of any building permit, the Zoning Officer shall review the application for permit to determine if all other necessary government permits such as those required by state and federal laws have been obtained, such as those required by Act 1966-537, as amended, the Pennsylvania Dam Safety and Encroachments Act; Act 1978-325, as amended; the U.S. Clean Water Act, Section 404, 33 U.S.C. 1344; and the Pennsylvania Clean Streams Act, Act 1937-394, as amended. No permit shall be issued until this determination has been made.
3. No encroachment, alteration, or improvement of any kind shall be made to any watercourse until all adjacent municipalities which may be affected by such action have been notified by the Township and until all required

permits or approvals have been first obtained from the Department of Environmental Protection, Bureau of Dams and Waterway Management.

In addition, the Federal Insurance Administrator and Pennsylvania Department of Community and Economic Development shall be notified by the Township prior to any alteration or relocation of any watercourse.

J. Application Procedures and Requirements

1. Application for a building permit shall be made, in writing, to the Zoning Officer on forms supplied by the Township. Such application shall contain the following:
  - a. Name and address of applicant.
  - b. Name and address of owner of land on which proposed construction is to occur.
  - c. Name and address of contractor.
  - d. Site location.
  - e. Listing of other permits required.
  - f. Brief description of proposed work and estimated cost.
  - g. A plan of the site showing exact size and location of proposed construction and any existing buildings or structures.
2. Where any proposed construction or development is located entirely or partially within the Flood Plain Conservation District, applicants for building permits shall provide all the necessary information in sufficient detail and clarity to enable the Zoning Officer to determine that:
  - a. 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;
  - b. All utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;
  - c. Adequate drainage is provided so as to reduce exposure to flood hazards.
3. Applicants shall file the following minimum information plus any other pertinent information as may be required by the Zoning Officer to make the above determination.
  - a. A completed Building Permit Application Form.
  - b. A plan of the entire site, drawn at a scale of one (1) inch equals one hundred (100) feet or less, showing the following:
    - 1) north arrow, scale, and date

- 2) location map showing the vicinity in which the proposed activity or development is to be located within the Township.
  - 3) topography based upon the National Geodetic Vertical Datum of 1929 showing existing and proposed contours at intervals of two (2) feet.
  - 4) all property and lot lines including dimensions, and the size of the site expressed in acres or square feet.
  - 5) the location of all existing streets, drives and other access ways with information concerning widths, pavement types, and construction elevations.
  - 6) the location of any existing bodies of water or watercourses, buildings, structures, and other public or private facilities, and any other natural or man-made features affecting, or affected by, the proposed activity or development.
  - 7) the location of the identified flood plain boundary line, floodway line, if available, information and spot elevations concerning the one hundred (100) year flood elevations, and information concerning the flow of water including the direction and velocities.
  - 8) a general plan of the entire site accurately showing the location of all proposed buildings, structures, and any other improvements, including the location of any existing or proposed subdivision and land development in order to assure that:
    - a) all such proposals are consistent with the need to minimize flood damage;
    - b) all utilities and facilities, such as sewer, gas, and electric are constructed to minimize or eliminate flood damage; and
    - c) adequate drainage is provided so as to reduce exposure to flood hazards.
- c. Plans of all proposed buildings, structures, and other improvements, drawn at suitable scale showing the following:
- 1) detailed architectural or engineering drawings including building size, flood plains, sections and exterior building elevations, as appropriate.
  - 2) the proposed lowest floor elevations of any proposed building based upon National Geodetic Vertical Datum of 1929.

- 3) the elevation of the one hundred (100) year flood.
  - 4) complete information concerning flood depths, pressures, velocities, impact and uplift forces, and other factors associated with a one hundred (100) year flood.
  - 5) detailed information concerning any proposed floodproofing measures.
  - 6) cross-section drawings for all proposed streets, drives, and other accessways and parking areas showing all rights-of-way and pavement widths.
  - 7) profile drawings for all proposed streets, drives, and vehicular accessways including existing and proposed grades.
  - 8) plans and profiles of all proposed sanitary and storm sewer systems, water supply systems, and any other utilities and facilities.
- d. The following data and documents:
- 1) documentation, certified by a registered professional engineer or architect, to show that the cumulative effect of any proposed development within the FE (Special Flood Plain Area), when combined with all other existing and anticipated development, will not increase the elevation of the one hundred (100) year flood more than one (1) foot at any point.
  - 2) a document, certified by a registered professional engineer or architect, which states that the proposed construction has been adequately designed to withstand the one hundred (100) year flood elevations, pressures, velocities, impact, and uplift forces and other hydrostatic, hydrodynamic and buoyancy factors associated with the one hundred (100) year flood. Such statement shall include a description of the type and extent of floodproofing measures which have been incorporated into the design of the structure and/or the development.
  - 3) the appropriate component of the Department of Environmental Protection "Planning Module for Land Development."
  - 4) where any excavation or grading is proposed, a plan meeting the requirements of the Chester County Conservation District, to implement and maintain erosion and sedimentation control.
4. Start of construction

The start of construction, as defined by this ordinance, and its completion shall occur within the time frames established for zoning permits in Section 2104-B of this ordinance.

5. Inspection and revocation
  - a. During the construction period, the Zoning Officer or other authorized official shall inspect the premises to determine that the work is progressing in compliance with the information provided on the permit application and with all applicable Township regulations and ordinances. He shall make as many inspections during and upon completion of the work as are necessary.
  - b. In the discharge of his duties, the Zoning Officer shall have the authority to enter any building, structure, premises, or development in the identified flood plain area, upon presentation of proper credentials, at any reasonable hour to enforce the provisions of this ordinance.
  - c. In the event the Zoning Officer discovers that the work does not comply with the permit application or any applicable laws, regulations, or ordinances, or that there has been a false statement or misrepresentation by any applicant, the Zoning Officer shall revoke the building permit and report such fact to the Board of Supervisors for whatever action it considers necessary.
  - d. A record of all such inspections and violations of this ordinance shall be maintained.

K. Review by the Chester County Conservation District

A copy of all plans for development of the Flood Plain Conservation District to be considered for approval shall be submitted by the Zoning Officer to the Chester County Conservation District for review and comment prior to the issuance of a permit. The recommendations of the Conservation District may be incorporated into the plan to provide for protection against predictable hazards.

L. Review Of Application by Others

A copy of all plans and applications for any proposed construction or development in any identified flood plain area to be considered for approval may be submitted by the Zoning Officer to any other appropriate agencies and/or individuals (e.g., Township Planning Commission, Township Engineer) for review and comment.

M. Warning and Disclaimer of Liability

1. The degree of flood protection sought by the provisions of this ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This ordinance does not imply that areas outside any identified flood plain area

or land uses permitted within such areas will be free from flooding or flood damage.

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

## **SECTION 403            RIPARIAN CORRIDOR CONSERVATION DISTRICT**

### **A.     Statement of Intent**

In expansion of Section 102, Purpose, and Section 103, Statement of Community Development Objectives, of this ordinance, and to address comprehensively all water resource protection benefits provided by riparian buffer areas, the purposes of this section, among others, are as follows:

1.     Reduce the amount of nutrients, sediment, organic matter, pesticides, and other harmful substances that reach watercourses, wetlands, subsurface and surface water bodies by using scientifically- proven processes including filtration, deposition, absorption, adsorption, plant uptake, and denitrification, and by improving infiltration, encouraging sheet flow, and stabilizing concentrated flows.
2.     Improve and maintain the safety, reliability, and adequacy of the water supply for domestic, agricultural, commercial, industrial, and recreational uses along with sustaining diverse populations of aquatic flora and fauna.
3.     Regulate the land use, siting, and engineering of all development to be consistent with the intent and objectives of this ordinance, accepted conservation practices, and to work within the carrying capacity of existing natural resources.
4.     Assist in the implementation of pertinent state laws concerning erosion and sediment control practices, including the Pennsylvania Clean Streams Law, Act 394, P.L. 1987, Chapter 102 of the Administrative Code (as amended October 10, 1980 Act 157 P.L.), Title 25, and any subsequent amendments thereto, as administered by the Pennsylvania Department of Environmental Protection and the Chester County Conservation District.
5.     Contribute to implementation of the recommendations of the Elk Creeks River Conservation Plan that call for creation of regulations to establish riparian forested buffer areas along streams within the watershed
6.     Conserve the natural features important to land or water resources (e.g., headwater areas, groundwater recharge zones, floodways, flood plains, springs, streams, wetlands, woodlands, prime wildlife habitats) and other features constituting high recreational value or containing amenities that exist on developed and undeveloped land.

7. Complement the provisions of this ordinance addressing the Flood Plain Conservation District, steep slopes, hydric soils, wetlands, vegetation, and topsoil in this article, and any other ordinances or regulations that protect environmentally sensitive areas, in order to minimize hazards to life, property, and riparian features.
8. Recognize that natural features contribute to the welfare and quality of life of the Township's residents.
9. Conserve natural, scenic, and recreation areas within and adjacent to riparian areas for the community's benefit.
10. Provide shade which moderates and protects fish habitat by retaining more dissolved oxygen and encouraging the growth of diatoms, beneficial algae, and aquatic insects.
11. Provide for stream bank stabilization which protects fish habitat and controls erosion and sedimentation, particularly through tree roots that consolidate the soils of the flood plain and stream banks, reducing the potential for severe stream bank erosion.
12. Provide organic nutrients through leaves that fall into the stream and are trapped on woody debris (fallen trees and limbs) and rocks where they provide food and habitat for small bottom-feeding creatures (such as insects, amphibians, crustaceans, and small fish) that are critical to the aquatic food chain.
13. Reduce the prevalence of nuisance drainage problems, which can result from, among other factors, poor road drainage design, agricultural areas without contour plowing or hedgerow filtration, and other development activities that encroach into the flood fringe of a stream.
14. Reduce or eliminate engineered water-holding facilities in headwater areas of streams.
15. Recognize and protect the fragile and unique water quality characteristics of the areas underlain by the Serpentine Barrens.

B. Overlay Concept, Establishment, and Width Determination of the District

1. Overlay Concept. The provisions of the Riparian Corridor Conservation District create an overlay district that is applicable within all other zoning districts established by this ordinance. To the extent the provisions of this section are applicable and more restrictive, they shall supersede conflicting provisions in any other part of this ordinance and all other ordinances of East Nottingham Township. However, all other provisions of this ordinance and all other ordinances of East Nottingham Township shall remain in full force.

2. Establishment and Width Determination

- a. The Riparian Corridor Conservation District (RCCD) shall apply to the following watercourses and water bodies and the land adjacent to them:
- 1). All naturally occurring watercourses that normally contain flowing water during all times of the year, including streams that may dry up during periods of extended drought. These shall include, but not be limited to:
    - a) Perennial streams identified in the most recent Soil Survey of Chester County, and/or soil surveys conducted for special projects wherein remapping of the soils has resulted and been approved by the Township..
    - b) Perennial streams identified on United States Geological Survey maps with a scale of 1:2400.

The RCCD shall be measured from the top of each stream bank.

- 2) All intermittent watercourses otherwise identified in the most recent Soil Survey of Chester County, or identified on plans submitted by applicants, wherein remapping of the soils has resulted and been approved by the Township. The RCCD shall be measured from the centerline of the stream.
- 3) All watercourses bordered by the following alluvial soils, and/or local alluvium soils, as mapped in the most recent Soil Survey of Chester County, provided the local alluvium soil is connected to a listed alluvial soil:

We – Wehadkee Silt Loam  
Ch – Chewacla Silt Loam  
WoA, WoB, WoC – Worsham Silt Loam

The RCCD shall be measured from the centerline of the stream.

- 4) Lands at the margins of delineated wetlands with an area of ten thousand (10,000) square feet or greater. The RCCD shall be measured from the delineated wetland edge.
  - a) A wetland delineation shall be required in accordance with the terms of Section 404 of this article.

- b) In the absence of a wetland delineation, the wetland boundary shall be assumed to be the hydric soil boundary as mapped in the most recent Soil Survey of Chester County; such soils shall include, but not be limited to, the Glenville, Guthrie, and Chrome series.
- 5) Lands at the margins of ponds with an area of five thousand (5,000) square feet or greater. The RCCD shall be measured from the edge of the mean water surface level.
- b. The minimum width of the Riparian Corridor Conservation District shall be measured horizontally on a line perpendicular to the point of measurement for each watercourse or surface water body as prescribed in Subsection (a), above. Except as noted in Subsection (c), below, required minimum widths shall be as follows:
  - 1) For watercourses defined in Subsection (a-1), above, seventy-five (75) feet from the top of each bank.
  - 2) For watercourses defined in Subsections (a-2) and (a-3), above, seventy-five (75) feet in both directions from the stream centerline.
  - 3) For surface water bodies defined in Subsections (a-4) and (a-5), above, twenty-five (25) feet.
- c. Where the 100-year flood plain extends greater than seventy-five (75) feet from a regulated waterway, the Riparian Corridor Conservation District shall extend to the outer edge of the 100-year flood plain. The 100-year flood plain shall be determined by the FEMA Flood Insurance Study for East Nottingham Township or by a hydrologic stream profile analysis, in accordance with the terms of Section 402 of this article.

C. Uses Permitted in the Riparian Corridor Conservation District

- 1. Within the first twenty-five (25) feet of any designated Riparian Corridor Conservation District, permitted uses shall be limited to open space uses that are primarily passive in character and do not generally involve disturbance to the land; such uses may include wildlife sanctuaries, nature preserves, forest preserves, passive areas of public and private parklands, reforestation, and stream bank stabilization. Existing natural vegetative conditions shall be maintained unless determined by the Township to be undesirable and/or contrary to the objectives of this section. Neither cultivation nor lawn conditions shall be permitted within this area. Following the date of enactment of this section, proposed vegetative cover shall reflect natural site conditions and shall be designed to maximize the

filtration of surface water runoff prior to its discharge into a surface water body or infiltration into the groundwater.

- a. Where slopes in excess of twenty-five percent (25%) are located within this twenty-five ( 25) foot strip, these limitations on use and disturbance shall extend the entire distance of this sloped area or seventy-five (75) feet, whichever is less.
  - b. Access to a stream by livestock or other large domestic animals shall be excluded by means of fencing.
  - c. A trail for pedestrian use only may be retained or established within this 25-foot strip, provided the surface of such trail shall be retained in a natural condition and maintained primarily through user traffic.
  - d. Permitted activity within the Riparian Corridor shall include the removal of invasive species, as defined by this ordinance. Such species shall include, but are not limited to, Purple Loosestrife, Bamboo, Norway Maple, and Multiflora Rose.
2. Within the remainder of the Riparian Corridor Conservation District, uses permitted within a Flood Fringe or Approximated Flood Plain Area, as specified in Section 402 of this article, shall be permitted.

D. Uses Specifically Prohibited in the Riparian Corridor Conservation District

1. Any use or activity not authorized by Subsection C, above, shall be prohibited within the Riparian Corridor Conservation District.
2. In addition, the following activities and facilities are specifically prohibited:
  - a. Any use or activity specifically prohibited by the terms of Section 402 of this article.
  - b. Use of fertilizers, pesticides, herbicides, and/or other chemicals in excess of prescribed industry standards or the recommendations of the Chester County Conservation District.
  - c. Planting of any invasive species, including exotic or non-native, within the Riparian Corridor or in any area from which such species may enter the Riparian Corridor by root growth or seed dispersion.
  - d. Mowing or defoliation, except to remove invasive or exotic species.
  - e. Motor or wheeled vehicle traffic in any area not designed to accommodate adequately the type and volume.

- f. Parking lots.
- g. Any type of permanent structure, except structures needed for a use permitted under the terms of this section.

E. Nonconforming Structures and Uses

Nonconforming structures and uses of land within the Riparian Corridor Conservation District shall be regulated in accordance with the requirements of Section 402 of this article.

F. Boundary Interpretation and Appeals Procedure

1. When a landowner or applicant disputes the boundary of the Riparian Corridor Conservation District or the defined edge of a watercourse or surface water body, the landowner or applicant shall submit to the Township a report with appropriate documentation showing the landowner's or applicant's proposed boundary and providing justification for the proposed boundary change. Such report shall be prepared by a registered landscape architect, registered soil scientist, or similar professional experienced in conducting such delineations.
2. The Township Engineer and/or other advisors selected by the Board of Supervisors shall evaluate all material submitted and provide a written determination within forty-five (45) days to the Board of Supervisors, Township Planning Commission, and landowner or applicant.
3. Any party aggrieved by any such determination or other decision or determination under this section may appeal to the Zoning Hearing Board under the provisions of Article XXII of this ordinance. The party contesting the location of the boundary shall have the burden of proof in case of any such appeal.

G. Inspection and Application of Riparian Corridor Conservation District

1. Lands within or adjacent to the Riparian Corridor Conservation District will be inspected by the Zoning Officer and/or Township Engineer when:
  - a. A subdivision or land development plan is submitted.
  - b. A building permit is requested.
  - c. A change or resumption of a nonconforming use is proposed.
2. The district may also be inspected by the Zoning Officer and/or other representatives designated by the Board of Supervisors at any time when the presence of an unauthorized activity or structure is brought to the attention of Township officials.

H. Management of the Riparian Corridor Conservation District

A Riparian Corridor Management Plan shall be developed:

1. when required by the East Nottingham Township Subdivision and Land Development Ordinance, consistent with the requirements therein;
2. as a condition of approval for [a] a proposed special exception or variance, or [b] a proposed conditional use, when deemed appropriate by the Zoning Hearing Board or Board of Supervisors, respectively. Such plan shall be prepared in accordance with the requirements of the Subdivision and Land Development Ordinance.
3. prior to undertaking any other use, development, or disturbance of land containing an area or areas of the RCCD, when determined necessary under the criteria contained in the Subdivision and Land Development Ordinance.

**SECTION 404 WETLANDS**

A. Indication of wetlands on a property

The existence of wetlands shall be indicated by any one or more of the following:

1. National Wetlands Inventory mapping, as prepared by the U.S. Fish and Wildlife Service or any other governmental agency having jurisdiction;
2. hydric soils or soils with hydric inclusions, as depicted in the *Soil Survey of Chester and Delaware Counties* and/or in USDA NRCS Hydric Soils Lists; and
3. the existence of hydrophytic vegetation or hydrologic conditions, as determined by on-site investigations performed in accordance with the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* dated January 10, 1989, or as later amended.

B. Need and basis for delineation

Where the existence of wetlands on a property is indicated on the basis of Subsection [A], above:

1. A wetlands delineation shall be performed on any site where a determination of net tract or net lot area is required.

2. A wetlands delineation shall be performed and, as determined necessary, a jurisdictional determination shall be obtained for any site where required by any other applicable permit or plan review process.

Delineation of the wetlands boundary shall be conducted in accordance with the terms of Section 508.08 of the Township Subdivision and Land Development Ordinance.

## **SECTION 405        STEEP SLOPE REGULATIONS**

- A. Use regulations. The following uses are the only uses permitted in areas where the grade of the slope exceeds twenty-five percent (25%), as determined by the terms of this section.
  1. Parks and outdoor recreational uses, consistent with the goals of watershed protection.
  2. Selective cutting of trees, as defined by this ordinance. Maximum precautions shall be taken to avoid destruction of or injury to understory brush and trees.
  3. Grading for the minimum portion of a driveway necessary to access a single-family dwelling when it can be demonstrated by a professional engineer on behalf of the applicant that no other routing which avoids slopes exceeding 25% is feasible.
  4. Accessory uses (excepting swimming pools) necessary for the operation and maintenance of the above permitted uses.
- B. Delineation
  1. The basis for determining areas where the grade of the slope exceeds 15% shall be that area shown as 15% or greater slope on a topographic survey of the subject property, prepared on behalf of the applicant by a surveyor or engineer licensed to practice in Pennsylvania.
  2. Unless otherwise approved by the Township, the topographic survey shall delineate contours at two (2) foot intervals, and the minimum area of steep slope shall be: [i] as measured over three contiguous contour intervals or not less than six (6) feet, and [ii] consisting of at least five hundred (500) square feet in area
  3. Where the subject property contains any area of steep slope in excess of 25%, such area shall be delineated and distinguished from the balance of the area with slope exceeding 15%.

4. Each application for construction or land disturbance containing an area or areas delineated as steep slope shall be submitted in accordance with Section 405-C, below. Any area of slope exceeding 15% that falls within the subject lot or lots shall be interpolated and shown by the applicant on the site plan required under Section 405-C-1-a through shading of such area or areas; any area of slope exceeding 25% shall be delineated separately. The site plan shall contain a certification by the registered surveyor or engineer having prepared the plan as to the accuracy of the slopes as depicted on the plan.
5. Where the exact boundary of an area of slope exceeding 15% in relation to a given parcel is in question, the applicant's topographic survey may be supplemented by any other documentation deemed pertinent. The Township Engineer shall evaluate all such material submitted and make a written report of the results of his determination, a copy of which shall be provided to the Board of Supervisors.
6. Any party aggrieved by any such determination of the Township Engineer or other decision or determination under this section may appeal to the Zoning Hearing Board. The burden of proof, as demonstrated by clear and convincing evidence, shall be on the appellant.”

C. Application procedure.

1. Before a permit is issued for any construction or land disturbance activity on land designated as steep slope under the terms of this section, the following material, in whole or in pertinent parts, shall be submitted for review by the Township Engineer:
  - a) An earthmoving plan of the property which indicates existing grades, with contour lines at two-foot intervals. Proposed grades within the area of any proposed activity, disturbance, or construction also shall be shown. All areas with slope exceeding 15% shall be shaded accordingly. In addition, where the property contains an area with slope exceeding 25%, such area shall be delineated and distinguished from the balance of the steep slope area.
  - b) A site plan indicating existing and proposed structures, on-site sewage facilities, on-site water supply wells, other impervious surfaces, storm drainage facilities, and retaining walls. The site plan also shall locate and identify existing vegetation and ground cover within areas of steep slope, as well as proposed landscaping material to be installed.

- c) Architectural plans, elevations, and sections.
  - d) 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 surface water runoff to neighboring properties and/or streets.
  - e) An erosion and sedimentation control and drainage plan, as it applies to all site disturbance activities including maintenance of the erosion and sedimentation control structures. The drainage plan shall show all drainage features and structures, with supporting calculations.
  - f) Plan profile and typical cross-sections of any proposed street, emergency access, or driveway.
  - g) 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.
2. 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 thereon.
  3. A fee, in an amount as specified by resolution of the Board of Supervisors, shall be paid by the applicant to cover the cost of review and recommendation by the Township Engineer.

## **SECTION 406 FORESTRY AND LOGGING STANDARDS**

### **A. Statement of Intent**

It is the purpose of this section to provide for the regulation of logging operations to ensure:

1. That long-term production of forest crops and benefits is encouraged;
2. That the right to harvest trees is exercised with due regard for the protection of the physical property of adjacent landowners;
3. That the potential for negative environmental impacts resulting from improper logging operations is minimized and sound forest stewardship is practiced; and

4. That unreasonable and unnecessary restrictions on the right to undertake logging operations are avoided.

B. Scope and Applicability

1. The provisions and requirements of this section shall apply to any logging operation, as defined by this ordinance, where the harvest area in which the logging operation will occur occupies one (1) acre or more of land within East Nottingham Township.
2. A zoning permit in accordance with the terms of this section shall be required for all logging operations, except as noted in Subsection [3], below.
3. The following operations are specifically exempt from the requirement to obtain a zoning permit or prepare a forestry/logging plan:
  - a. Removal of dead or diseased trees.
  - b. Removal of trees that are in such a condition or physical location as to constitute a danger to the occupants of a property or the structures thereon, or to a public right-of-way.
  - c. Removal of up to five (5) trees per year on any identified acre of woodland for the purpose of timber stand improvement.
  - d. Christmas tree farming
  - e. Orchard operations
  - f. Removal of nursery stock
  - g. Timber harvest for home use, normal property maintenance and upkeep

C. Responsibility

1. It shall be the responsibility of each landowner on whose land a logging operation is to be carried out to develop or have developed a written forestry/logging plan, in form and content as specified by this section, and to submit such plan to the Zoning Officer as part of the application for a zoning permit. No logging operation shall occur until the plan has been reviewed and approved by the Township. It shall be the joint responsibility of the landowner and the operator to see that the provisions of the forestry/logging plan are carried out. The plan shall be available at the harvest site at all times during the logging operation and shall be provided to the Zoning Officer upon request.
2. For any logging operation, the landowner shall notify the Zoning Officer at least ten (10) business days prior to commencement of the operation and within five (5) business days of completion of the operation. Notification shall be in writing and shall specify the land on which the operation will occur and the anticipated starting or completion dates of the operation.

D. Preparation and Content of Forestry/Logging Plan

1. Each forestry/logging plan for a logging operation within East Nottingham Township shall be prepared by a professional forester or similar professional acceptable to the Township.
2. Any logging plan shall, at minimum, include the following:

- a. Property description, including location and brief description of each stand on the property.
- b. Goals and objectives of the logging operation.
- c. A narrative stand analysis describing stocking (in terms of basal area or relative density), species composition, and average diameter of stand.
- d. Narrative description of the residual stand.
- e. The following appendices:
  - [1] Proof of current general liability and/or worker's compensation insurance.
  - [2] Copy of erosion and sedimentation control plan with a letter of adequacy from the Chester County Conservation District, and including all associated permits and reports, as applicable.
  - [3] Proof of a PennDOT highway occupancy permit or an East Nottingham Township driveway permit for temporary access, as applicable.
- f. A site map containing the following information:
  - [1] Site location and boundaries, including both the boundaries of the property on which the logging operation will take place and the boundaries of the proposed harvest area within the property.
  - [2] Location of all earth disturbance activities such as roads, landings, and water control measures and structures.
  - [3] Location of all proposed crossings of waters of the Commonwealth.
  - [4] The general location of the proposed operation in relation to Township and state roads, including proposed access to those roads.
  - [5] Topography, including areas with slope between 15% and 25% and areas with slope greater than 25%, and soils of the property and harvest site.
  - [6] Location of any wetlands or other sensitive environmental areas and the proposed measures to protect such areas.
- g. Demonstration of compliance with all applicable state laws and regulations, including but not limited to:
  - [1] Erosion and sedimentation control regulations contained in 25 Pennsylvania Code, Chapter 102, promulgated pursuant to the Clean Streams Law (35 P.S. Subsection 691.1, et seq.);
  - [2] Stream crossing and wetland protection regulations contained in 25 Pennsylvania Code, Chapter 105, promulgated pursuant to the Dam Safety and Encroachments Act (32 P.S. Subsection 693.1, et seq.); and

- [3] Stormwater management plans and regulations issued pursuant to the Stormwater Management Act (32 P.S. Subsection 680.1, et seq.).
- h. Demonstration of compliance with all applicable federal laws and regulations, including but not limited to the Best Management Practices (BMPs) as set forth at 33 CFR 323.4(a)(6)(I-xv).
- i. Identification of, and measures that will be taken to protect, specimen vegetation (as defined in the Township Subdivision and Land Development Ordinance).
- j. The forestry/logging plan shall include a plan for the reforestation of the site, including the retention of a sufficient number of younger, healthy trees. The plan shall be consistent with accepted forest management practices including, but not limited to, the use of deer fencing and herbicides. Plant material to be used for reforestation purposes shall conform to the standards of the publication "American of U.S.A. Standard for Nursery Stock," ANSI or USAS Z60.1 of the American Association of Nurserymen, as amended. All plant material used on the site shall have been grown within the same USDA hardiness zone as the site and shall be nursery grown, unless it is determined by the Township that the transplanting of trees partially fulfills the requirements of this section. The plan also shall address measures to use and/or dispose of downed trees and other slash.
- k. Where a logging operation is proposed on land with a slope between fifteen and twenty-five percent (15-25%), the forestry/logging plan shall include all applicable information required by Section 405 of this ordinance.

E. Forestry Practices in Relation to Logging Operations

The following requirements shall apply to all logging operations:

1. Felling or skidding on or across any public road is prohibited without the express written consent of the Township or the Pennsylvania Department of Transportation, whichever party is responsible for maintenance of the road.
2. Clear-cutting, as defined by this ordinance, shall not be permitted as part of any logging operation.
3. There shall be no logging permitted on any land with a slope of twenty-five percent (25%) or greater.
4. No tree shall be felled across a property line without the consent of the adjoining landowner.
5. Litter resulting from any logging operation shall be cleaned up and removed from the site before it is vacated by the operator.
6. Upon completion of the cutting and removal of trees from the site, all remaining tops and slash shall be removed from the site. The forestry/logging plan shall detail the means by which this will be accomplished. A form of financial security, consistent with the terms of

Section 601.03 of the East Nottingham Township Subdivision and Land Development Ordinance, shall be provided by the landowner or operator to assure that all tops and slash are removed from the site and that the required terms for reforestation of the site are accomplished. Such guarantee shall be for an amount not less than \$3,000 per acre of tract area being harvested.

## **SECTION 407**

## **STRIPPING OF TOPSOIL**

On any property in the Township, topsoil or sod may be removed only under the following conditions:

- A. In connection with the construction or alteration of a street, building, or parking lot; or
- B. In connection with agricultural pursuits, provided that a minimum of eight (8) inches of topsoil is left in place and that areas where topsoil is removed are reseeded with an appropriate ground cover within one (1) year.