

ARTICLE XVIII
NATURAL RESOURCE CONSERVATION

1801 Purpose.

The natural resource conservation standards of this Article are established to protect the public health, safety, and welfare by minimizing adverse environmental impacts. These standards are intended to meet the following purposes.

- A. Define and delineate selected natural resources within the Township and establish resource conservation standards to assist the Township in reducing the impact proposed uses will have on the environment, consistent with the *Hereford Township and Washington Township Joint Comprehensive Plan (2005)*.
- B. Conserve and protect areas which are naturally unsuitable for development or which provide valuable wildlife habitat or water resource values, including streams and riparian zones, steep slopes, flood hazard areas, woodlands, wetlands, and seasonal high water table soils.

1802 Applicability of Resource Conservation Standards.

- A. In the event that the provisions of this Article and any other provisions of the Township Code are in conflict, the more restrictive provisions shall apply.
- B. In the event that two or more natural resource areas identified in this Article occur on the same lot or tract, disturbance limitations shall be measured separately. Where such resource areas overlap, the most restrictive standard (the least amount of permitted alteration, regrading, clearing, or building) shall apply to the area of overlap.
- C. It shall be a violation of this Ordinance to regrade, fill, pipe, divert, channel, build upon, or otherwise alter or disturb a natural resource protected by this Article prior to the submission, review, and approval of any applicable application for zoning or building permit(s), conditional use or special exception approval, zoning variance, or subdivision or land development plan(s).
- D. Limitations to the disturbance of resources shall apply before, during, and after construction on a site.
- E. Disturbance limitations, established as a maximum percentage of permitted disturbance, shall be applied concurrently as a percentage of each applicable resource area to the extent that it is present on the entirety of any tract or any lot AND as a percentage of the area within each discrete resource area measuring one acre or more. A discrete resource area is the entirety of any single contiguous area comprising any one resource regulated by the provisions of this Article. Any area of resource overlap shall be measured as part of the contiguous resource area with the most restrictive disturbance limitation. For example, if disturbance of 25% of a particular resource area is permitted, then it shall

apply as 25% of the total area of that resource on the applicable lot or tract. In addition, the 25% limitation shall apply individually to each discrete resource area measuring one acre or more, regardless of whether, collectively, such areas comprise 25% of all areas of such resource on the applicable lot or tract.

- F. Disturbance limitations shall be applied based on the occurrence of identified resource areas at the time of adoption of this Article. Disturbance permitted over time in multiple applications on the same lot or tract shall be measured against the same overall limitations established at the time of the first application after the adoption of this Article. For example, if applicable disturbance limitations for a particular resource permit two acres of disturbance, and one acre of disturbance is permitted upon the first application after the adoption of this Article, then only one acre shall remain to be permitted for future disturbance of the applicable resource regardless of the total number of applications over the years.
- G. Regulations and disturbance limits for each specific resource area set forth in this Article shall be complied with as applicable. The following summary table is provided as an overview of disturbance limitations. In certain cases as provided herein, exceptions or potential modifications may apply.

<i>Resource Area</i>	<i>Maximum Disturbance</i>
Flood Hazard District (as set forth in Article XIV)	0 %
Very Steep Slopes	5 %
Moderately Steep Slopes	25 %
Steep Slope Margins	25 %
Wetlands	0 %
Zone One – Inner Riparian Buffer	0 %
Zone Two – Outer Riparian Buffer	15 %
Alluvial or Seasonal High Water Table Soils	15 %
Heritage Trees	0 %
Class I Woodlands located on Very Steep Slopes	5%
Class I Woodlands outside Very Steep Slopes	10 %
Class II Woodlands	15 %
Class III Woodlands	25 %

H. Agricultural Exception to Natural Resource Conservation Standards

Disturbance or removal of woodland, hedgerow, or oldfield vegetation may be excepted from the definitions of “land disturbance” and “woodland disturbance,” and from otherwise applicable regulation, for purposes of expanding or continuing agricultural use on an existing agricultural property or on adjacent property into which an existing agricultural operation may be expanded, only in compliance with the following:

1. Agricultural operations on the subject property shall be conducted in accordance with a conservation plan filed with and acceptable to the Township and the Berks County Conservation District.
2. This exception shall not apply to disturbance or removal of vegetation within any wetland, Zone One Inner Riparian Buffer or on Very Steep Slopes.

I. Plan Information and Delineation of Natural Resources

1. To ensure compliance with the natural resource conservation standards of this Article, the following information shall be submitted by any Applicant applying for a zoning or building permit, conditional use or special exception approval, zoning variance, or subdivision and land development approval where land disturbance is contemplated. Submission of any required Timber Harvesting Plan shall conform to the provisions of Section 1808.C herein in lieu of this section. In those cases where only a limited amount of the site will be subject to disturbance, the Zoning Officer may determine the area of land required to be shown on the plan such that information submitted will adequately demonstrate compliance with the natural resource conservation standards of this Article. Where less than the entire site is to be shown on the plan, the application shall be accompanied by a written explanation from the Applicant as to why it is not necessary to include the entire site with the plan information.
 - a. A site plan which identifies the limits of all natural resources on the site, including areas of woodlands or other vegetation to be preserved, and the proposed use of the site including any existing or proposed structures.
 - b. The limits of all encroachments and disturbances necessary to establish the proposed use on the site, including a grading plan showing existing and proposed contours.
 - c. Calculations indicating the area of the site comprising each of any regulated natural resources and the area of each of such natural resources that would be disturbed or encroached upon. The calculations shall be shown on submitted plan sheet(s).
 - d. Deed restrictions, conservation easements, or other mechanisms proposed to ensure continued resource protection where applicable and subject to Township approval.
2. Information submitted to demonstrate compliance with this Section shall be verified as correct by the Township Engineer or other qualified professional as determined by the Township.

J. Modifications to Natural Resource Conservation Standards

1. For any use or activity subject to Subdivision or Land Development review, as part of applicable Plan Submission, modification(s) may be requested to the provisions of this Article. Requested modification(s) may be granted at the discretion of the Board of Supervisors pursuant to the provisions of the Hereford Township Subdivision and Land Development Ordinance. To the extent that modifications are granted under the Subdivision and Land Development Ordinance, no further review or regulation under this Zoning Ordinance shall be required.
2. For any use or activity not subject to Subdivision or Land Development review, but where the use or activity is subject to application for approval of a Conditional Use, Special Exception, or Zoning Variance, modification(s) to the provisions of this Article may be requested as part of such application.
3. For any use or activity not otherwise subject to permit or approval as provided in subsections a or b above, modification(s) to the provisions of this Article may be requested in the form of an application for grant of a Special Exception by the Zoning Hearing Board. Such applications shall be submitted to the Township Planning Commission for review and comment prior to formal Special Exception application to the Zoning Hearing Board.
4. In consideration of approval of any request for modification(s) under this section, it shall be determined that the specific nature of the lawful use or activity, existing site conditions, and/or safety considerations warrant such modification(s), and that the resource protection purposes of this Article shall be adhered to, to the maximum extent practicable.

1803 Steep Slope Conservation.

- A. Steep slope areas shall be preserved in their natural state whenever possible. Where construction of roads, buildings, driveways, or infrastructure cannot be avoided, land disturbance shall be kept to the minimum necessary and, in no case, shall it exceed the following permitted disturbance limits:
 1. Moderately Steep Slopes - No more than twenty-five (25) percent of moderately steep slopes shall be regraded, cleared, built upon, or otherwise altered or subject to land disturbance. Provision for on-lot sanitary facilities shall not be made within areas of moderately steep slopes unless such facilities are specifically designed to compensate for the topographic conditions of the subject site and such design has been approved by the Township Sewage Enforcement Officer and by the Board of Supervisors upon advisement by the Township Engineer.
 2. Steep Slope Margins - No more than twenty-five (25) percent of steep slope margins shall be regraded, cleared, built upon, or otherwise altered or subject to land disturbance except in accordance with an approved landscape plan.

3. Very Steep Slopes - No more than five (5) percent of very steep slopes shall be regraded, cleared, built upon, or otherwise altered or subject to land disturbance. In addition, land disturbance permitted on very steep slopes shall be limited to the following activities:
 - a. Timber harvesting, when conducted in compliance with the required timber harvesting plan. Clearcutting or grubbing of trees is prohibited on very steep slopes.
 - b. Grading for the minimum portion of a driveway necessary for access to the principal use and sewer, water, and other utility lines when it can be demonstrated to the satisfaction of the Township that no other routing is practicable, but excluding sewage disposal systems.
 - c. Hiking and riding trail(s) of minimum adequate width(s), where developed so as to minimize potential erosion, follow existing topographic contours to the greatest degree practicable, and where using unpaved surfaces to the maximum practicable extent.
- B. All permitted buildings or structures shall be constructed in such a manner as to provide for the least alteration necessary of the existing grade, vegetation, and natural soils condition.
- C. A grading plan shall be provided identifying the existing contours of the site, proposed finished grades, and the proposed location of all buildings and structures. Locations for all stockpiled earth, stone, and other materials shall be shown on the plan and shall not be located within the drip line of any trees intended to remain post permitted disturbance.
- D. Excessive cut and fill shall be avoided. New roads and improvements to existing roads should be designed within the existing contours of the land to the extent possible and strive for compatibility with the character of rural roads.
- E. Finished slopes of permitted cut and fill shall not exceed thirty-three (33) percent slope unless the applicant can demonstrate the method by which steeper slopes will be stabilized and maintained adequately.
- F. Any stockpile(s) of earth intended to be stored for more than twenty-one (21) days shall be seeded or otherwise stabilized to the satisfaction of the Township Engineer. Any disturbed areas of Very Steep Slope and any cut and fill resulting in slopes of greater than twenty (20) percent shall be protected with an erosion control blanket.
- G. Any land disturbance shall be in compliance with the erosion and sedimentation control standards of the Hereford Township Subdivision & Land Development Ordinance and PA DEP Title 25, Chapter 102. All applicants shall refer to the PA DEP *Erosion and Sediment Pollution Control Program Manual* dated March, 2000, or latest addition, for applicable erosion and sediment control standards. Where applicable, in the context of

any application before the Township, any applicant shall permit inspection of erosion and sedimentation controls by designated personnel of both the Township and the Berks County Conservation District.

1. An erosion and sedimentation control plan and soil stabilization plan shall be submitted consistent with the requirements of the Hereford Township Subdivision & Land Development Ordinance.
 2. The plan shall demonstrate how soil will be protected from erosion during construction and how soil will be stabilized upon the completion of construction.
- H. Where the following information has not been previously submitted as part of a subdivision or land development plan application, such information shall be submitted to the Township with building permit, conditional use, special exception, or zoning applications, when applicable:
1. The adequacy of access to the site for emergency vehicles shall be subject to review by the fire marshal or his designee. The necessary information shall be submitted by the applicant to the fire marshal or his designee for his review.
 2. Grading Plan and Erosion and Sedimentation Control Plans.
- I. Any Grading Plan or Erosion and Sedimentation Control Plan submitted pursuant to the requirements herein shall include provisions for landscaping or re-vegetation of all disturbed soils post disturbance as well as any existing unstable soils or areas of poor vegetative cover regardless of disturbance.

1804 Wetlands Conservation.

- A. Wetlands shall not be regraded, filled, piped, diverted, channeled, built upon, or otherwise altered or subject to land disturbance, including for purposes of access or utility crossings, except where all applicable permits have been obtained and copy thereof submitted to the Township.
- B. Any applicant proposing a use, activity, or improvement which would entail the regrading or placement of fill in wetlands shall provide the Township with proof that the Pennsylvania Department of Environmental Protection (Bureau of Dams and Waterway Safety and Bureau of Water Quality Management) and the U.S. Army Corps of Engineers have been contacted to determine the applicability (jurisdiction) of state and federal wetland regulations. Any applicant contacted by the Pennsylvania Department of Environmental Protection or the U.S. Army Corps of Engineers in regard to wetlands also shall concurrently provide to the Township a copy of such correspondence. Where any applicant alleges that a jurisdictional determination is not required or fails to seek such determination, the Township may nevertheless require the submission of a graphic and narrative wetlands delineation report, consistent with the submission requirements

otherwise necessary for submission to federal and state agencies for jurisdictional determination.

- C. Where permitted subject to applicable regulation and as otherwise provided herein, sewers or other liquid transport pipelines shall only be permitted to cross wetlands on the minimum traversal distance and where every precaution shall be taken to prevent leaks and to prevent any possible draining of the wetland (e.g., water flowing through or along any pipe or trench). At the expense of the applicant, the Township may require periodic inspection of applicable systems and facilities, including but not limited to x-ray of steel welds and pressure testing of pipelines.
- D. Wetlands shall be staked in the field as part of the subdivision or land development procedure and prior to any construction in the immediate area.
- E. Where a jurisdictional determination or full wetland delineation report is required to comply with state or federal regulation, or where requested by the Township, any applicant shall provide the Township with a full wetland delineation report conducted by a qualified wetland biologist, soil scientist, or environmental professional of demonstrated qualifications, subject to the following:
 - 1. Where there is any question as to the accuracy of the wetland delineation report, the Township may hire a qualified consultant to review the delineation and recommend revisions at the applicant's expense.
 - 2. Such a professional shall certify that the methods used correctly reflect the currently accepted technical concepts, including identification and analysis of wetland vegetation, hydric soils, and hydrologic indicators. Methods used in the delineation report shall be acceptable to the Township Engineer or other qualified consultant hired by the Township.
 - 3. The wetland report submitted to the Township shall include a determination of whether wetlands are present on the site and a full delineation, area measurement (in square feet), and description of any wetlands determined to be present.

1805 Conservation of Alluvial & Seasonal High Water Table Soils.

- A. With the exception of those uses or activities listed below, and where not otherwise regulated more restrictively under the provisions of this Ordinance, no more than fifteen (15) percent of any Alluvial or Seasonal High Water Table Soil shall be regraded, filled, built upon, or otherwise altered or subject to land disturbance:
 - 1. Regulated activities permitted by the Commonwealth (i.e. permitted stream or wetland crossing);
 - 2. Provision for trail and trail access where approved by the Township;

3. Selective removal of hazardous or invasive vegetation; or
 4. Vegetation management in accordance with an approved landscape plan or open space management plan.
- B. Notwithstanding the fifteen (15) percent disturbance limitation set forth above, the following regulations shall apply to Alluvial or Seasonal High Water Table Soils:
1. No structures for human use or habitation or for regular animal occupancy shall be constructed in any area of soil where the seasonal high water table is within one (1) foot of the surface;
 2. No subsurface sewage system shall be constructed within any area of Alluvial or Seasonal High Water Table Soil.
 3. No road, driveway, or emergency access shall cross any area of Alluvial or Seasonal High Water Table Soil except where providing necessary access which clearly is otherwise impracticable and only where drainage, adequate base preparation, and paving approved by the Township Engineer shall be provided.

1806 Riparian Buffer Conservation.

- A. Zone One – Inner Riparian Buffer – With the exception of those uses or activities listed below, no land disturbance shall be permitted within the Zone One Riparian Buffer:
1. Regulated activities permitted by the Commonwealth (i.e. permitted stream or wetland crossing).
 2. Provision for trail and trail access where approved by the Township with minimum disturbance to existing woodland vegetation;
 3. Installation of fencing consistent with applicable regulation;
 4. Selective removal of hazardous or invasive vegetation; or
 5. Vegetation management in accordance with an approved landscape plan or open space management plan.
- B. Zone Two – Outer Riparian Buffer - Except for the following activities, no more than fifteen (15) percent of a Zone Two Riparian Buffer shall be regraded, filled, built upon, or otherwise altered or subject to land disturbance:
1. Activities permitted in the Zone One Riparian Buffer.

2. Timber harvesting, when conducted in compliance with a timber harvesting plan approved by the Township. Clearcutting of timber shall not be permitted within the riparian buffer.

1807 Heritage Tree Conservation.

- A. Heritage Trees shall be preserved and protected to the greatest extent feasible.
- B. Where any land disturbance is proposed as part of any subdivision or land development application, removal of Heritage Trees shall not be permitted except where Applicant demonstrates to the satisfaction of the Township that such removal is essential to eliminate hazardous condition(s). In consideration of any need for tree removal, the Township may engage the services of an arborist, reasonable costs therefore to be borne by the Applicant.
- C. Where any applicant for building, zoning, subdivision or land development approval establishes conservation restrictions acceptable to the Township which shall result in the conservation of Heritage Trees, all such Heritage Trees to be retained shall be credited toward any tree replacement required under §1808.B below, at the ratio of four trees credited for each Heritage Tree retained.

1808 Woodland and Hedgerow Conservation.

- A. Disturbance Limitations for Woodlands and Hedgerows

Notwithstanding the provisions of this Section, selective harvesting of timber shall be permitted where undertaken in compliance with the provisions set forth in § 1808.C, below. Clearcutting of any woodland area shall be prohibited except to the minimum extent necessary to permit the implementation of an approved land development or building permit in conformance with this section. Except for an approved timber harvesting operation and as provided in §1802.H, all woodland disturbance shall be subject to the following disturbance limitations beyond which woodland replacement shall be required.

1. Permitted woodland disturbance in connection with any application for building or zoning permit on any single lot existing on the effective date of this Ordinance shall not exceed the following thresholds without providing for woodland replacement, measured as a percentage of the entire area of woodland within the respective designation:
 - a. Ten (10) percent of any area designated Class I Woodland on the Hereford Township Woodland Classification Map, where such woodland is coextensive with any area of Very Steep Slope.

- b. Fifteen (15) percent of any area designated Class I Woodland on the Hereford Township Woodland Classification Map, where such woodland is not coextensive with any area of Very Steep Slope.
 - c. Twenty (20) percent of any Class II Woodland as indicated on the Hereford Township Woodland Classification Map.
 - d. Twenty-five (25) percent of any Class III Woodland as indicated on the Hereford Township Woodland Classification Map.
 2. Permitted woodland disturbance in connection with any application for subdivision or land development shall not exceed the following thresholds without providing for woodland replacement, measured as a percentage of the entire area of woodland within the respective designation:
 - a. Five (5) percent of any area designated Class I Woodland on the Hereford Township Woodland Classification Map, where such woodland is coextensive with any area of Very Steep Slope.
 - b. Ten (10) percent of any area designated Class I Woodland on the Hereford Township Woodland Classification Map, where such woodland is not coextensive with any area of Very Steep Slope.
 - c. Fifteen (15) percent of any Class II Woodland as indicated on the Hereford Township Woodland Classification Map.
 - d. Twenty-five (25) percent of any Class III Woodland as indicated on the Hereford Township Woodland Classification Map.
 3. Disturbance limitations shall be measured based on the extent of the subject woodland classification at the time of first submission of applicable application(s) after the adoption of this Article and shall be indicated on applicable plan(s). The extent of any area of woodland disturbance shall be measured to include the entire area within the drip line of any tree where any part of the area within the drip line of said tree is subject to woodland disturbance. Any disturbance limitation shall run with the land, once established. Subsequent applications shall be subject to the initial determination of disturbance limitations, regardless of intervening disturbance which may have occurred. If, at any time within three years prior to an applicable application, there had existed a greater extent of woodland, such greater area shall be utilized to calculate the extent of woodland disturbance and the limitations set forth herein.
 4. In determining where necessary woodland disturbance shall occur in the context of any subdivision or land development, Applicant shall consider the following:

- a. The location(s) and benefit of conservation of healthy mature woodland stands;
 - b. The impacts, in terms of functions and values to wildlife, of separating, dividing and/or encroaching on wildlife travel corridors and/or extensive habitat areas. Such impacts must be explicitly assessed in any area designated as Riparian Buffers or Class I or Class II Woodlands.
5. In areas of permitted woodland disturbance and areas adjacent to permitted woodland disturbance, remaining trees shall be protected from damage. The following procedures shall be utilized during construction in order to protect remaining trees:
- a. Where existing trees are to remain, no change in existing grade shall be permitted within the drip line of the trees. Appropriate fencing 4 feet in height shall be placed at the drip line of trees to remain, wherever adjacent to proposed construction. Such fencing shall be maintained in place throughout the duration of construction activity. Roots shall not be cut within the drip line of any trees to remain.
 - b. Trees within 25 feet of a building, or bordering entrances or exits to building sites, shall be protected by a temporary barrier to be maintained in place throughout the duration of construction activity.
 - c. No boards or other material shall be nailed or otherwise attached to trees during construction.
 - d. Construction materials, equipment, soil and/or debris shall not be stored nor disposed of within the drip lines of trees to remain.
 - e. Tree trunks, limbs, and exposed roots damaged during construction shall be protected from further damage by being treated immediately in accordance with accepted professional landscape procedures.
- B. Woodland Replacement.
1. Where any permitted woodland disturbance exceeds any applicable threshold(s) set forth in §1808.A, above, applied independently and cumulatively, replacement plantings shall be installed as follows:

At a minimum, for each five hundred (500) square feet of woodland disturbance area, or fraction thereof, in excess of each applicable threshold set forth in §1808.A and regardless of the character and sizes of the disturbed vegetation, one tree at least 2-2½” caliper shall be planted. A sample list of acceptable replacement plantings is found in subsection 1808.B.10, below

2. Required replacement plantings shall be in addition to any required street trees or any other landscape material required under applicable provisions of this Ordinance or the Hereford Township Subdivision & Land Development Ordinance.
3. Where approved by the Township as a condition of any building, zoning, subdivision or land development approval or as a condition of grant of modification under §1802.J, required replacement trees may be substituted for greater numbers of trees of smaller caliper than otherwise required or by vegetation other than trees (e.g., for purposes of reforestation).
4. Where approved by the Township as a condition of any building, zoning, subdivision or land development approval or as a condition of grant of modification under §1802.J, some or all of the required replacement plantings may be installed at a site other than that subject to required replacement planting.
5. In lieu of actual installation of replacement plantings, the Township at its sole discretion may permit any applicant to place the equivalent cash value, as agreed upon by the Township and the applicant, for some or all of the required replacement plantings into a special fund established for that purpose. Such fund shall be utilized at the discretion of the Township for the purchase and installation of plantings elsewhere in the Township. Installation of such plantings on private lands shall be dependent upon the establishment of conservation easement(s) or other restriction(s) acceptable to the Township that will reasonably guarantee the permanent protection of such plantings. Where the provisions of this Section are otherwise applicable, any grant of approval of modifications requested pursuant to §1802.J also may be conditioned upon the placement of equivalent cash value for otherwise required replacement plantings into such a fund.
6. The locations, selected species, and sizes of all replacement plantings, along with a planting schedule tied to the timing and/or phasing of the development, shall be indicated on the Final Subdivision/Land Development Plan(s) or building permit application, as applicable.
7. Required replacement vegetation and their measurement shall conform to the standards of the publications "American or U.S.A. Standard for Nursery Stock," ANSI or U.S.A.S. Z60.1 of the American Association of Nurserymen, as amended. All plant material used on the site shall have been grown so as to have a high likelihood of survival on the site (e.g., grown specifically for planting in the applicable USDA hardiness zone) and shall be nursery grown, unless it is determined by the Township that the transplanting of trees partially fulfills the requirements of this section.
8. Species of replacement plantings selected and planting locations shall reflect careful site evaluation and in particular the following considerations:

- a. Existing and proposed site conditions and their suitability for the plant materials, based upon the site's geology, hydrology, soils, and microclimate.
 - b. Specific functional and design objectives of the plantings, which may include but not necessarily be limited to: replacement of woodland area removed, enhancement of existing woodland or oldfield area(s), reforestation of riparian buffer areas, mitigation of new woodland edge conditions as a result of land disturbance, provision for landscape buffer, visual screening, noise abatement, energy conservation, wildlife habitats, and aesthetic values.
 - c. Maintenance considerations such as hardiness, resistance to insects and disease, longevity, and availability.
 - d. Because of the many benefits of native plants (ease of maintenance, longevity, wildlife habitat, etc.), the use of nursery-grown free-fruiting native trees and shrubs is strongly encouraged. Species selection should reflect species diversity characteristic of the native deciduous woodland.
9. All replacement plantings shall be guaranteed and maintained in a healthy and/or sound condition for at least twenty-four (24) months or shall be replaced. In addition, the Applicant may be required to escrow sufficient additional funds for the maintenance and/or replacement of the proposed vegetation during the 24 month replacement period and to provide for the removal and replacement of vegetation damaged during construction, based upon the recommendation of the Township Engineer.

10. Suggested Plant List

The following list includes species acceptable for woodland replacement plantings. Examples of species appropriate for use where screening or buffering is desirable or required are indicated with an asterisk (*). Appropriate species for street tree plantings are indicated by the notation "ST." Specific species selection and planting locations shall reflect careful site evaluation as further set forth herein.

Tree, Common Name	Botanical Name
<i>Evergreen Trees</i>	
Eastern redcedar*	Juniperus virginiana
Canadian Hemlock	Tsuga canadensis
Red (Eastern or Yellow) spruce*	Picea rubens
Norway spruce*	Picea abies
Eastern White Pine*	Pinus strobes
 <i>Shade Trees</i>	
Red maple, ST	Acer rubrum
Sugar maple, ST	Acer saccharum

White ash, ST	Fraxinus americana
Green ash, ST	Fraxinus pennsylvanica
Sycamore	Platanus occidentalis
White oak, ST	Quercus alba
Northern red oak, ST	Quercus rubra
Tulip poplar	Liriodendron tulipifera
Scarlet oak, ST	Quercus coccinea
Pin oak, ST	Quercus palustris
Shagbark hickory	Carya ovata
American basswood	Tilia americana
American beech	Fagus grandifolia
Black cherry	Prunus serotina
London plane tree	Platanus acerifolia

Small Trees and Shrubs

Rhododendron	Rhododendron sp.
Black chokecherry	Aronia melanocarpa,
Shadbush/Serviceberry*	Amelanchier canadensis
Redbud	Cercis canadensis
Flowering dogwood*	Cornus florida white
Winterberry	Ilex verticillata
Washington hawthorn*	Crataegus phaemopyrum
New Jersey tea	Ceanothus americanus
Sourwood	Oxydendrum arboreum
Ironwood	Ostrya virginiana
Arrowwood	Viburnum dentatum
Black Haw	Viburnum prunifolium
Maple Leaf viburnum	Viburnum acerifolium
Mountain laurel	Kalmia latifolia
Highbush blueberry	Vaccinium corybosum
Lowbush blueberry	Vaccinium vacillans
Common juniper	Juniperus communis

C. Timber Harvesting Operations

1. Any timber harvesting operation shall be undertaken in accordance with a Timber Harvesting Plan approved by the Township. All Timber Harvesting Plans shall be submitted to the Township for review for compliance with the standards for timber harvesting operations set forth herein not less than forty-five (45) days prior to commencement of the timber harvesting operation. Within thirty (30) days of submission to the Township, a Timber Harvesting Plan shall be approved, denied, or approved subject to reasonable conditions and the Applicant so notified in writing. The Township may engage a professional with demonstrable expertise in forestry to review any submitted Timber Harvesting Plan, all reasonable cost therefore to be borne by the Applicant.
2. Any Timber Harvesting Plan submitted to the Township for review and approval shall be consistent with the Timber Harvesting Guidelines of the Pennsylvania

Model Forestry Regulations of the Penn State School of Forest Resources, as applicable, and shall include a plan or plans indicating the following information:

- a. Site location and boundaries of both the entirety of the property upon which the timber harvesting operation shall occur and the specific area proposed for timber harvesting;
 - b. Significant natural features on the property including steep slopes, wetlands, Riparian Buffer zones, and Heritage Trees.
 - c. Identification of the classification of the woodland or woodland(s) where the timber harvesting operation is proposed to occur, as indicated on the Hereford Township *Woodland Classification Map*;
 - d. The general location of the proposed operation in relation to municipal and state highways and any proposed accesses to those highways;
 - e. Design, construction, maintenance, and retirement of the access system, including haul roads, skid roads, skid trails, and landings;
 - f. Design, construction, and maintenance of water control measures and structures such as culverts, broad-based dips, filter strips, and water bars;
 - g. Design, construction, and maintenance of proposed stream and wetland crossings; and,
 - h. Identification of forest canopy to remain demonstrating compliance with §1808.C.6.
 - i. Identification of higher value species to remain demonstrating compliance with §1808.C.7.
3. Any permits required by any other agency under any applicable regulation shall be the responsibility of the landowner or timber harvesting operator as applicable. Copy of all required permits and a letter of adequacy from the Berks County Conservation District shall be submitted to Hereford Township at least twenty (20) days prior to commencement of the timber harvesting operation.
 4. The following management practices shall apply to all timber harvesting operations:
 - a. Felling and skidding of trees shall be undertaken in a manner which minimizes damage to trees or other vegetation not intended to be harvested (e.g., successive limbing up the tree rather than felling in its entirety).

- b. Felling or skidding across any public thoroughfare is prohibited without the express written consent of the Township or Penn DOT, whichever is responsible for the maintenance of said thoroughfare.
 - c. Prior to initiating any timber harvesting operation, the applicant shall review with the Township Roadmaster the condition of any Township road, bridge or other public facility that will be used to transport log loads or that may otherwise be impacted by the timber harvesting operation, and shall provide the Roadmaster with a description of the gross vehicle weight, axle load, and size of vehicles to be used in removal of timber. The Township may require the posting of a bond or other approved security to cover potential damage to Township roads, bridges or other facilities.
 - d. Slash or tops resulting from a timber harvesting operation shall be cut to a height of four (4) feet or less and left on-site. The burning of slash shall be prohibited.
 - e. No tops, slash or litter shall be left within twenty-five (25) feet of any public thoroughfare or private roadway.
 - f. Litter resulting from a timber harvesting operation shall be removed from the site or otherwise dealt with as approved by the Township.
5. No timber harvesting operation shall be permitted within any Zone One Riparian Buffer. No clear-cutting of timber shall be permitted within any Zone Two Riparian Buffer.
6. In all woodlands, a minimum percentage of the forest canopy trees shall remain in good condition after the completion of any timber harvesting operation, as set forth in the table below. Remaining forest canopy trees shall be well distributed throughout the area subject to the timber harvesting operation.

	Percentage Forest Canopy Trees to Remain by location		
Woodland Class	<u>Zone One Riparian Buffer</u>	<u>Zone Two Riparian Buffer</u>	<u>All Other</u>
Class III	100	60	30
Class II	100	70	40
Class I	100	80	50

7. At least fifty (50) percent of the forest canopy trees that comprise Higher Value Species shall not be harvested and shall remain in good condition after the completion of any timber harvesting operation.

8. Township representative(s) shall be permitted access to the site of any timber harvesting operation before, during, or after active timber harvesting to review, inspect and ascertain compliance with the provisions set forth herein.
9. Upon determination that a timber harvesting operation is in violation of these regulations, each day where any violation occurs shall constitute a separate violation subject to the provisions of this Ordinance.