

**ARTICLE XXII      NATURAL RESOURCE PROTECTION STANDARDS****Section 2200      GENERAL PURPOSE**

It is the intent of this Article to promote the health, safety, and welfare of the Borough by minimizing adverse environmental impacts through establishing standards to regulate the development of areas containing environmentally sensitive lands including floodplains and floodways, steeply sloped land, wetlands and woodlands, and to evaluate potential environmental impacts on these sensitive natural resources and protect these resources through the implementation of standards contained herein.

**Section 2201      FLOODPLAIN OVERLAY DISTRICT**

A.     **Intent.** The specific intent of these provisions related to lands within the floodplain is to prevent the loss of property and life, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

1. Regulating uses, activities and development, which, acting alone or in combination with other existing or future uses, activities and development, will cause unacceptable increases in flood heights, velocities and frequencies.
2. Restricting or prohibiting certain uses, activities and development from locating within areas subject to flooding.
3. Requiring all those uses, activities and developments that do occur in floodprone areas to be protected and/or floodproofed against flooding and flood damage.
4. Protecting individuals from buying lands, buildings, and structures which are unsuited for intended purposes because of flood hazards.

B.     **Identification.**

1. Overlay Concept. The Floodplain Overlay District described above shall be an overlay to the existing underlying zoning districts, as shown on the Official Zoning Ordinance Map, and, as such, the provisions for the Floodplain Overlay District shall serve as a supplement to the underlying district provisions. Should the Floodplain Overlay District be determined as inapplicable to any tract by reason of amendment by Borough Council, interpretation by the Zoning Hearing Board, or the decision of a court of competent jurisdiction, the underlying zoning provisions shall be deemed applicable. Where there happens to be any conflict between provisions or requirements of any of the Floodplain Overlay District and those of any underlying district, the more restrictive provisions shall apply.
2. District Boundary. For the purposes of this Ordinance, the Floodplain Overlay District shall be those areas of the Borough identified as being subject to the one hundred (100) year flood in the Flood Insurance Report (FIR) prepared for the Borough by the Federal Emergency Management Agency (FEMA), dated July 16, 1980, or the most recent revision thereof. The boundaries of the Floodplain Overlay District are established as shown on the Flood Insurance Rate Map dated January 16, 1981 (or the most recent revision thereof), contained

in the Flood Insurance Report, which is declared to be a part of this Ordinance and which shall be kept at the Malvern Borough offices.

3. District Boundary Changes. The delineation of any of the Floodplain Overlay District may be revised by Malvern Borough where natural or man-made changes have occurred and/or more detailed studies conducted or undertaken by the U.S. Army Corps of Engineers, a River Basin Commission, or other qualified agency or individual comments, the need or possibility of such change. However, prior to any such change, approval must be obtained from the Federal Insurance Administration (FIA).

**C. General Provisions.**

1. Applicability. These provisions shall apply to all lands within the jurisdiction of Malvern Borough and shown as identified in Section 2201.B.
2. Compliance. No land shall be hereafter used or developed, and no structure shall be used, located, relocated, constructed, reconstructed, enlarged or structurally altered, except in full compliance with the terms and provisions of this Ordinance, and any other applicable ordinances and regulations which apply to uses and development within the jurisdiction of this Ordinance.
3. Warning and Disclaimer of Liability. The degree of flood protection sought by the provisions of this Ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge opening restricted by debris. This Ordinance does not imply that areas outside the identified Floodplain Overlay District, or that land uses permitted within such district, will be free from flooding or flood damage. This Ordinance shall not create liability on the part of Malvern Borough or any officer or employees thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

**D. Use Regulations.**

1. Permitted Uses. The following uses and activities are permitted, provided they are in compliance with the provisions of the underlying district and are not prohibited by another ordinance and provided that they do not require structures, fill or storage of materials and equipment.
  - a. Agricultural uses, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming and wild crop harvesting.
  - b. Public and private recreational uses and activities, such as parks, day camps, picnic grounds, golf courses, boat launching and swimming areas, hiking and horseback riding trails, wildlife and nature preserves, fish hatcheries, and fishing areas.
  - c. Municipal use.
  - d. Temporary uses such as carnivals or festivals provided that natural vegetative ground cover remains as it was prior to the temporary event and is not destroyed, removed or altered in a way to create sedimentation or erosion.

- e. Accessory uses, such as yard areas, open space areas, gardens, play areas and pervious parking areas, driveways, and roadways.

**E. Special Provisions.**

1. All uses, activities and development occurring within the Floodplain Overlay District shall be undertaken only in strict compliance with the provisions of this Ordinance and with all other applicable codes and ordinances, such as the Malvern Borough Building Code, and Malvern Borough Subdivision and Land Development Ordinance.
2. Under no circumstances shall any use, activity and/or development adversely affect the capacity of the channels of any watercourse, drainage ditch or any other drainage facility or system.
3. Prior to any proposed alteration or relocation of any stream, watercourse, etc., within the municipality, a permit shall be obtained from the PA Department of Environmental Protection, Bureau of Dams and Waterway Management. Further notification of the proposal shall be given to all affected adjacent municipalities. Copies of such notification shall be forwarded to the Federal Insurance Administration.
4. Development Which May Endanger Human Life – Hazardous Materials. In a Floodplain Overlay district, no building or structure may be used for the production or storage of any of the following materials or substances, or which will be used for any activity requiring the maintenance of a supply of any of the following materials or substances on the premises, in addition to all other applicable provisions:
  - 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. Sulfur and sulfur products
  - q. Pesticides (including insecticides, fungicides and rodenticides)
  - r. Radioactive substances, insofar as such substances are not otherwise regulated
  - s. Any other substances added by further amendment by Pennsylvania DCED.
5. Prohibited Uses. The following obstructions and activities are prohibited if located partially or entirely within any identified Floodplain Overlay District:
  - a. Hospitals – public or private.
  - b. Nursing homes – public or private.

- c. Jails.
- d. New individual mobile home or new mobile home parks or new mobile home subdivision and substantial improvements to existing mobile home parks.
- e. Cemeteries.
- f. Sanitary Landfills, dumps, and junkyards.

F. **Existing Structures and Nonconforming Uses in the Floodplain Overlay District.** A building, structure or use of a building, structure or premises which lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions, may be continued, subject to the following conditions:

1. No expansion or enlargement of an existing structure and/or use shall be allowed within any Floodplain Overlay District that would cause any increase in flood heights.
2. Any modification, alteration, reconstruction or improvement of any kind to an existing structure and/or use to an extent or amount of fifty (50) percent or more of its market value shall constitute a substantial improvement and shall be undertaken only as a variance pursuant to Section 2201.G of this Ordinance.
3. Any modification, alteration, reconstruction or improvement of any kind to an existing building, structure and/or use to an extent or amount of less than 50 percent of its market value, shall be elevated and/or floodproofed to the standards for completely dry floodproofing contained in the publication, "Flood Proofing Regulations" (U.S. Army Corps of Engineers, June 1972), or some other equivalent watertight standard.

G. **Variances within the Floodplain Overlay District.** If compliance with any of the requirements of this Ordinance would result in an unnecessary hardship for the applicant or landowner, the Zoning Hearing Board may, upon request, grant relief from the strict application of the requirements.

1. Procedures and Requirements. Requests for variances shall be considered by the Zoning Hearing Board in accordance with Article XXVIII and the following:
  - a. No variance shall be granted which would allow any of the development specifically prohibited in Section 2201.E.
  - b. If granted, a variance shall involve only the least modification necessary to provide relief.
  - c. In granting any variance, the Zoning Hearing Board shall attach whatever reasonable conditions and safeguards it considers necessary in order to protect the public health, safety and welfare and to achieve the objectives of this Ordinance.
  - d. Whenever a variance is granted, the Zoning Hearing Board shall notify the applicant in writing that:
    - 1) The granting of the variance may result in increased premium rates for flood insurance.
    - 2) Such variances may increase the risks to life and property.

- e. In reviewing any request for a variance, the Zoning Hearing Board shall consider, but not be limited to the following:
    - 1) That there is good and sufficient cause.
    - 2) Failure to grant a variance could result in exceptional hardship to the applicant.
    - 3) The granting of the variance will not result in an unacceptable or prohibited increase in flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with any other applicable local or state ordinance regulations.
  - f. A complete record of all variance requests and related actions shall be maintained by the Zoning Hearing Board. In addition, a report of all variances granted during the year shall be included in the annual report to the Federal Insurance Administration.
2. Review Factors. In passing upon applications for variances, the Zoning Hearing Board shall consider all relevant factors and procedures specific in other sections of the Zoning Ordinance, and:
- a. The danger to life and property due to increased flood heights or velocities caused by encroachments.
  - b. The danger that materials may be swept onto other lands or downstream to the injury of others.
  - c. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions.
  - d. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.
  - e. The importance of the services provided by the proposed facility to the community.
  - f. The availability of alternative locations not subject to flooding for the proposed use.
  - g. The compatibility of the proposed use with existing development and that anticipated in the foreseeable future.
  - h. The relationship of the proposed use to the Borough Comprehensive Plan.
  - i. The safety of access to the property in times of flood of ordinary and emergency vehicles.
  - j. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters expected at the site.
  - k. The requirements of the National Flood Insurance Program Regulations, Part 60 – Criteria for Land Management and Use, Section 60.3 a and b.
  - l. Such other factors which are relevant to the purposes of this Ordinance.

3. **Supplemental Technical Review.** The Zoning Hearing Board may refer any application and accompanying documentation pertaining to any request for a variance to any qualified engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities and the adequacy of the plans for protection and other related matters.

H. **Construction.** All building and structures, whether residential or nonresidential, shall be designed, located, constructed and maintained in a manner which shall be consistent with the following:

1. Fully protect the health and safety of the general public and any occupants of the structure. At a minimum, all new structures shall be designed, located and constructed so that:
  - a. The structure will have the capability of resisting the one hundred (100) year flood without any lateral movement or damage to either the structure itself, or to any of its equipment or contents below the one hundred (100) year flood elevation.
  - b. The lowest floor elevation (including basement) will be at least one and one-half (1½) feet above the one hundred (100) year flood elevation.
  - c. The occupants of the structure can remain inside for an indefinite period of time and be safely evacuated at any time during the one hundred (100) year flood.
  - d. All buildings and structures shall be designed, located and constructed so as to offer the minimum obstruction to the flow of water and shall be designed to have a minimum effect upon the flow and height of floodwater.
2. Prevent any significant possibility of pollution, increased flood levels or flows or frequency of floods, obstructing or impeding the direction, velocity, or flow of flood waters, or debris endangering life and property.
3. All public and private utilities and facilities, such as sewer, gas, electricity and water systems, must be located and constructed to minimize or eliminate flood damage and infiltration. Sewer facilities and systems shall be designed to prevent the discharge of untreated sewage into floodwaters. No part of any on-site sewage system shall be located within any identified floodplain area, except in strict compliance with all state and local regulations for such systems. If any such system is permitted, it shall be located so as to avoid impairment to it, or contamination. Adequate drainage must be provided to reduce exposure to floods and convey the flow of run-off in a safe and efficient manner, designed to ensure proper drainage along streets and appropriate channels or pipe, and provide positive drainage away from buildings. The proposed development shall comply with all applicable requirements of the National Flood Insurance Program, Regulations Sections (Sec. 60.3 a and b).
4. The finished elevation of all new streets shall not be below the one hundred (100) year flood elevation.
5. Proposed building, structures, or uses shall be setback a minimum of fifty (50) feet from the edge of a watercourse.
6. All materials that are buoyant, flammable, explosive, or, in time of flooding, could be injurious to human, animal or plant life, and not listed in Section 2201.E, shall be stored at or

above the one hundred (100) year flood elevation and/or be flood-proofed to the maximum extent possible.

- I. **Permitting.** If any proposed construction or development is located entirely or partially within any identified floodplain area, applicants for building permits shall provide all the following information in sufficient detail and clarity to enable the Zoning Officer to determine that such proposals minimize flood damage and conform to this and all other applicable ordinances, that all utilities and facilities are located and constructed to minimize flood damage, and that adequate drainage is provided so as to reduce exposure to flooding.
1. A completed building permit application form.
  2. Evidence as to conformance with applicable state and federal laws and permits.
  3. A site plan at a scale of one (1) inch equals one hundred (100) feet or less, depicting the following information:
    - a. North arrow, scale, date, and topographic contour lines at two (2) foot intervals.
    - b. Description of the proposed use.
    - c. All property and lot lines including dimensional standards.
    - d. The elevation of the one hundred (100) year flood, and the location of any existing bodies of water or watercourses, identified floodplain areas, and, if available, the flow of water including direction and velocities.
    - e. Location of all existing and proposed buildings, structures, streets, and other improvements, and elevations of buildings and streets showing the one hundred (100) year flood.
    - f. Regarding Section 2202.E, information about any materials to be stored within the one-hundred (100) year floodplain, and safeguard being taken to prevent spills or leaks during a one hundred (100) year flood.
    - g. Where any excavation or grading is proposed, proof of meeting the requirements of the Department of Environmental Protection, to implement and maintain erosion and sedimentation control.
    - h. A statement from a qualified registered professional engineer or architect stating that the proposed construction or development has been adequately designed to withstand the pressures, velocities, impact, and uplift forces associated with the one hundred (100) year flood. Such statement shall include a description of the type and extent of floodproofing measures incorporated into the design of the structure and/or the development.

## Section 2202

## STEEP SLOPE REGULATIONS

- A. **Intent.** It is the intent of this Section to establish supplemental regulations to control the development of areas containing steeply sloped land for the purpose of promoting the health, safety and general welfare in order to minimize disturbance of steep slopes to:

1. Limit soil erosion and sedimentation;
2. Protect watersheds and limit increases in stormwater runoff;
3. Protect residents of the Borough from property damage and personal injury caused by runoff;
4. Erosion and landslides attributable to nearby development on steeply sloping land;
5. Protect the quality of stream water, subject to degradation by indiscriminate grading and development;
6. Protect the natural vegetative cover in steep slopes and to maintain adequate foliage and vegetative cover thereon;
7. Protect streams from increases in sediment and pollution; and
8. Minimize the necessity for expenditure of Borough funds for corrective public works caused by soil erosion and subsidence, sedimentation and landslides.

**B. Identification.**

1. Steep Slopes are defined as follows:
  - a. *Precautionary steep slopes.* Precautionary steep slopes are those sloping fifteen (15) percent to twenty (20) percent vertical to horizontal on the United States Geological Survey Topographic Maps or Topographical Survey Map prepared by a qualified registered architect or engineer licensed to practice in the Commonwealth of Pennsylvania.
  - b. *Prohibitive steep slopes.* Prohibitive slopes are those sloping more than twenty (20) percent vertical to horizontal on the United States Geological Survey Topographic Map or Topographical Survey Map prepared by a qualified registered architect or engineer licensed to practice in the Commonwealth of Pennsylvania.
2. Slope is defined as follows: The percentage of the change in vertical distance (rise) over the horizontal distance (run), as measured between consecutive contour lines. Contour intervals shall not exceed two (2) feet.

**C. Rules for Interpretation of Steep Slopes.** Steep slopes, as defined in Section 2202.B, shall be determined by the Zoning Officer by scaling distances on the United States Geological Survey Topographic Map or a Topographical Survey Map prepared by a qualified registered architect or engineer, where such interpretation is necessary. Initially, and upon any appeal, the person contesting the location of the boundary of any such slopes, as determined by the Zoning Officer, or the slope as stated, shall have the burden of establishing that the land in question does not lie within the applicable steep slopes, as defined above.

**D. Precautionary Steep Slopes.**

1. Plan Requirements. Where any map identified in Section 2202.B shows the existence of precautionary steep slopes, the applicant shall supply the following information in addition to

that required in Section 2205 prior to the issuance of any building permit or subdivision and land development approval:

- a. Site plan of the property indicating the existing grades with contour lines at two (2) feet intervals and proposed grades within the area of the proposed construction. It shall also indicate existing and proposed structures, a plan for on-site sewage disposal facilities, if connection to a public sanitary sewer system is not feasible, impervious surface coverage. All steep slope areas shall be shaded.
  - b. Landscaping plan indicating existing and proposed paved areas, storm drainage facilities, retaining walls, vegetation, and groundcover, together with trees and ornamental shrub locations.
  - c. Architectural plans, elevations and sections for all permitted buildings, structures or construction, accompanied by Conservation Plan including drainage facilities and an erosion and sedimentation control in compliance with the Malvern Borough Subdivision and Land Development Ordinance.
  - d. Plan, profile and typical cross-sections of the entrance drive and the proposed public street providing access to such drive.
  - e. A statement prepared, signed and sealed by a registered architect or a licensed civil or structural engineer describing in detail the building methods to be used in overcoming foundation and other structural problems created by slope conditions, how the natural slopes and watershed will be preserved substantially undisturbed, the method proposed to prevent soil erosion and details of how overground stormwater runoff and groundwater will be diverted away from all building areas below finish grade.
2. Standards for Disturbance or Development on Precautionary Steep Slopes. The construction, erection and development of buildings or structures on precautionary steep slopes shall be subject to the following limitations:
- a. No more than forty (40) percent of such areas shall be built-upon, altered, or disturbed. The maximum impervious surface coverage permitted on precautionary steep slopes shall be twenty (20) percent. These standards shall apply on a per lot basis.
  - b. Each such lot shall contain a minimum contiguous lot area having a slope of less than fifteen (15) percent equal to fifty (50) percent of the minimum lot size required in the zoning district.
  - c. Any stockpiles of earth occurring during or after any land disturbance activity shall be seeded or otherwise stabilized when stored for more than thirty (30) days.

**E. Prohibitive Steep Slopes.**

1. Plan Requirements. Where any map identified in Section 2202.B shows the existence of prohibitive steep slopes, the applicant shall delineate their limits in accordance with Section 2202.D.1, as applicable, and Section 2205 prior to the issuance of any building permit or subdivision and land development approval.

2. Standards for Disturbance or Development on Prohibitive Steep Slopes. Disturbance on prohibitive steep slopes shall be subject to the following limitations:
  - a. There shall be no erection or construction of any building, structure, road, driveway, parking area or other similar structure or impervious surface on prohibitive steep slopes, except for one (1) primary road or driveway which is designed and intended to serve as sole access to a subdivision or lot therein, provided there is no other access to the property or lot which complies with this Article and the access is approved by the Borough Council as part of the final subdivision plan.
  - b. If a driveway is to be located on a prohibitive steep slope, a driveway grading plan shall be submitted for approval to the Zoning Officer and Borough engineer, subject to accepted engineering criteria consistent with the other applicable requirements of Borough ordinances. The grading plan shall be prepared by a licensed civil engineer and shall show:
    - 1) Existing and proposed contour grades at two (2) foot contour intervals within twenty-five (25) feet of either side of the proposed driveway; and
    - 2) The centerline profile of the driveway showing slopes and vertical alignment of the proposed driveway.
  - c. No more than fifteen (15) percent of such areas shall be altered or disturbed. The maximum impervious surface coverage of such areas shall be five (5) percent. These standards shall apply on a per lot basis.
  - d. Any stockpiles of earth occurring during or after any land disturbance activity shall be seeded or otherwise stabilized when stored for more than thirty (30) days.
3. Uses. The uses permitted on prohibitive steep slopes shall be limited to the following:
  - a. Open space reserved as part of a land development so long as no more than twenty-five (25) percent of the open space has a slope greater than twenty-five (25) percent.
  - b. Wildlife sanctuary, woodland preserve, arboretum (exclusive of buildings or structures) and recreation areas (exclusive of buildings or structures).
  - c. Tree farming, forestry and other agricultural uses (exclusive of buildings or structures) when conducted according to conservation measures approved by the Soil Conservation Service.
4. Special Exception Uses on Prohibitive Steep Slopes. The following uses shall be permitted as a special exception when authorized by the Zoning Hearing Board, subject to the requirements of this Article. In addition to the criteria contained in Article XXVIII, the Board shall consider the extent to which the requested use will disrupt the stability of soils and natural vegetation and contribute to erosion before and after construction or installation of the permitted use. The Board shall attach such reasonable conditions as it determines necessary and reasonable in furthering the intent and purpose of this Article.
  - a. Sealed public water supply wells that have been approved by all regulatory agencies having jurisdiction.

- b. Sanitary or storm sewers that have been approved by all regulatory agencies having jurisdictions.
  - c. Access roads suitable for passage of emergency vehicles in the event of fire or accident. Such roads shall be constructed only when no viable alternative for emergency access exists, providing all requirements of applicable codes and ordinances are met, and subject to approval by all regulatory authorities having jurisdiction.
- F. **Liability.** Neither the approval, nor the granting of any building permit, subdivision or land development approval, or site development plan involving any land governed by the provisions of this Article, by an officer, employee or agency of the Borough, shall constitute a representation, guarantee or warranty of any kind by the Borough, or its officers, officials, employees or agencies, of the practicality or safety of any structure, use or development, and the same shall create no liability upon or cause of action against the Borough, its officers, agencies, agents or employees for any damage that may result pursuant thereto. This Ordinance does not imply that areas outside defined steep slopes areas or land uses permitted within steep slope areas will always be totally free from the adverse effects of erosion or the effects of nearby steep slopes.

### Section 2203 WETLANDS PROTECTION REGULATIONS

All uses and activities established after the effective date of this Ordinance shall comply with the following standards.

- A. **Applicability.**
- 1. Site alterations, regrading, filling or clearing of vegetation prior to the submission of applications for zoning or building permits or the submission of plans for subdivision or land development shall be a violation of this Ordinance.
  - 2. Wetland areas shall not be altered, regraded, developed, filled, piped, diverted or built upon, except where state and federal permits have been obtained.
- B. **Identification.** An applicant shall identify and delineate wetlands on a site prior to the issuance of any building permit or subdivision and land development approval in accordance with this Section and Section 2205. Wetlands boundaries shall be delineated through a full wetlands report conducted by a qualified scientist and such report shall certify that the methods used correctly reflect current accepted technical approaches. 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. The wetland report 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. In the event that a wetlands delineation validated by the U.S. Army Corps of Engineers is shown to vary from the wetlands boundary derived from the wetlands report, the Corps delineation shall govern.
- C. **Federal and State Regulations.** For proposed uses, activities or improvements which would entail the regrading or replacement of fill in wetlands, the applicant shall provide the Borough with proof that the Pennsylvania Department of Environmental Protection (Bureau of Dams and Waterway Safety) and the U.S. Army Corps of Engineers have been contacted to determine the applicability of state and federal wetland regulations for areas identified as wetlands on National

Wetland Inventory (NWI) maps, U.S. Fish and Wildlife Service, or which meet these agencies' definitions of wetlands.

- D. No more than twenty (20) percent of a wetland margin area shall be altered, regraded, filled or built upon. Additionally, any Department of Environmental Protection regulations concerning activities related to wetland margins shall be met.

## **Section 2204                    WOODLANDS**

The intent of this Section is to promote conservation of woodland resources in the Borough through resource identification, planning and development limitations. An applicant shall identify and delineate woodlands on a site prior to the issuance of any building permit or subdivision and land development approval in accordance with this Section and Section 2205.

### **A.        Standards for Disturbance Allowance for Woodlands.**

1. Unless undertaken as an approved tree harvesting activity conducted in compliance with the requirements, as follows, no more than sixty (60) percent of woodlands shall be regraded, cleared, built upon or otherwise altered. Where woodlands overlap other protected natural resources, the more restrictive disturbance standard shall apply.
2. Where disturbance or removal of existing areas of woodlands and hedgerows exceeds twenty-thousand (20,000) square feet on any lot or tract, woodland replacement shall be required consistent with the standards of the Malvern Borough Subdivision and Land Development Ordinance.
3. Preserved woodlands may be used to provide vegetative buffers required by Article XXIII of this Ordinance.
4. A Tree Harvesting Plan may be required by the Borough, and shall include a description through text and maps of proposed actions involving the removal of trees from a tract of land. Such plan shall have been prepared by a licensed forester with demonstrable expertise in forest management, and shall document measures to be taken to: protect water quality; minimize impacts from skid trails and logging roads, land areas, and the tree removal process; and ensure site restoration.

### **B.        Guidelines for Determining Permitted Woodland Disturbance.** In determining where permitted woodland disturbance will occur, the following factors shall be considered:

1. Each building or structure shall be constructed in such a manner as to provide the least alteration necessary of the existing woodland. Where possible, clear-cutting shall be minimized and trees shall be selectively removed.
2. Where possible, the remaining undisturbed woodlands and other vegetation shall interconnect with woodlands or wooded areas of adjacent properties to preserve continuous woodland corridors and allow for the normal movement, dispersion, and migration of wildlife.
3. Woodland alterations that would threaten the growth of remaining trees shall be avoided.

**Section 2205      APPLICATION OF NATURAL RESOURCE PROTECTION STANDARDS**

In order to meet the natural resource protection standards of this Article, the following information shall be submitted by the Applicant. Where a subdivision or land development review is required, such information shall be included on the Conservation Plan by the Malvern Borough Subdivision and Land Development Ordinance.

- A.      A site plan which clearly delineates the limits of all natural resources on the site as outlined in this Article including areas of floodplain, steep slopes, wetlands and woodlands, and the proposed use of the site including any existing or proposed structures. This site plan shall include the site's watershed and the water quality designation of the watershed in which the property in question is located.
- 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 at two (2) foot intervals.
- C.      The identification of the minimum buildable area(s). The purpose is to ensure that sufficient area is provided for the general location of buildings, driveways, and other improvement while meeting the requirements of the natural resource protection standards.
- D.      Calculations indicating the area of the site with natural resources and the area of natural resources that would be disturbed or encroached upon. The calculations shall be shown on the site plan.

