

Environmental Protection Ordinances (Performance Zoning) Bedminster Township, Bucks County

ARTICLE VI. PERFORMANCE STANDARDS

Section 600 Compliance

All uses, activities, subdivisions and/or land developments proposed within Bedminster Township shall comply with this Article and all other provisions of the Zoning Ordinance unless specifically exempted.

Section 601 Environmental Performance Standards

Any Use permitted under Article IV, Use Regulations, may be undertaken and maintained only if it conforms to all district regulations as well as the environmental protection standards of this Section. Site alterations, regrading, filling, or clearing of vegetation by a landowner or developer which would violate the following standards shall be a violation of this Ordinance. The developer shall determine the presence of environmental or natural features on the site and shall meet the following standards for environmental protection.

- (1) Floodplains - See performance standards in Sections 613 et. seq., Floodplain Performance Standards.
- (2) Floodplain Soils - See performance standards in Sections 613 et. seq., Floodplain Performance Standards.
- (3) Steep Slopes - In areas of steep slopes, the following standards shall apply:
 - a. Fifteen percent to twenty-five percent (15%-25%) - No more than thirty percent (30%) of such areas shall be developed and/or regraded or stripped of vegetation, except for tracts ten (10) acres or greater in the AP District where no more than seventy-five percent (75%) of such areas shall be developed and/or regraded or stripped of vegetation.
 - b. Twenty-five percent (25%) or more - No more than fifteen percent (15%) of such area shall be developed and or regraded or stripped of vegetation, except in the AP District for parcels which are ten (10) acres or greater in size, in which case no more than seventy percent (70%) of such area shall be developed and/or regraded or stripped of vegetation.
- (4) Woodlands - The following standards shall apply to woodlands.
 - a. Woodlands in Environmentally Sensitive Areas. No more than twenty percent (20%) of woodlands located in environmentally sensitive areas

shall be altered, regraded, cleared or built upon. Environmentally sensitive areas shall include floodplains, floodplain soils, steep slopes, wetlands, wetland margins and lake or pond shorelines.

- b. Other Woodland Areas. No more than fifty percent (50%) of woodlands which are not located in environmentally sensitive areas (as defined in a. above) shall be altered, regraded, cleared or built upon.
 - c. AP District. On a tract consisting of ten (10) acres or more, no more than seventy-five percent (75%) of woodlands which are not located on environmentally sensitive areas defined in a. above shall be altered regraded, cleared or built upon.
- (5) Lakes, Ponds, Wetlands, Swales or Streams - Such areas shall not be altered, regraded, developed, filled, piped, diverted or built upon except that roads may cross streams, watercourses and wetlands where design approval is obtained from the township, the Pennsylvania Department of Environmental Protection and the U.S. Army Corps of Engineers (for wetlands).
 - (6) Lake and Pond Shorelines - From the landside edge of a lake or pond extending outward for a distance of one hundred (100) feet shall constitute a lake or pond shoreline. No more than thirty percent (30%) of such an area shall be altered, regraded, filled or built upon, and no more than ten percent (10%) of the area that may be disturbed shall be impervious surface.
 - (7) Wetlands margins - No more than twenty percent (20%) of such areas shall be altered, regraded, filled, or built upon. In addition, any Department of Environmental Protection regulations under Chapter 105 concerning activities in wetlands margins shall be met.

For the purpose of this Ordinance, the wetlands margin shall extend one hundred (100) feet from the wetland boundary or to the limit of the hydric soils, whichever is less. The limit of hydric soils shall be as mapped in the Soil Survey of Bucks and Philadelphia Counties, Pennsylvania, U.S. Department of Agriculture, Soil Conservation Service, July 1975, unless reclassified by a Certified Soil Scientist.

- (8) Prime Farmland and Agricultural Soils in AP District - On a tract(s) containing ten (10) acres or more, no more than forty percent (40%) of prime farmland or farmland of statewide importance as defined in Section 216 of this Ordinance may be developed (Capability Classes I, II and III).
- (9) Stormwater - All uses, activities, subdivisions and/or land developments shall comply with the stormwater management provisions of the Bedminster Township Subdivision and Land Development Ordinance as applicable, and any stormwater management ordinances of Bedminster Township adopted pursuant to the

Stormwater Management Act, Act of October 4, 1978, 32 P.S. 680.1, et seq., as amended.

- (10) Soil Erosion and Sedimentation - All developments shall protect streams, lakes and ponds against sedimentation damage and control erosion in accordance with the "Clean Streams Law PL 1987", Chapter 102, except that in addition all developments shall submit a soil erosion and sedimentation plan as part of the preliminary development plan even where there is less than twenty-five (25) acres involved.
- (11) The Permanent Removal of Topsoil - The permanent removal of topsoil from any parcel of land shall be prohibited, except as follows:
 - a. During actual construction on premises, that portion of the topsoil present which covers an area to be occupied by permanent structures or permanently located materials of an impervious nature or ponds and lakes may be considered excess, and may be removed by the owner.
 - b. During regrading operations conducted upon premises, whether or not carried on in conjunction with on-site construction, excess topsoil remaining after restoring proper topsoil cover to the areas of the parcel upon which regrading operations were conducted may be removed by the owner.
- (12) Permanent Removal of Sub-Surface Solids - The permanent removal of subsurface soils, whether soil, clay, or mineral in nature, for other than the on-site construction or grading purpose shall be prohibited except in permitted extraction operations.
- (13) Riparian Buffer - No land disturbance shall be permitted within any riparian buffer except as permitted below. The measurement of the riparian buffer shall extend a minimum of seventy-five (75) feet from each defined edge of an identified watercourse or surface water body at bankfull flow or level, or shall equal the extent of the one-hundred (100) year floodplain, whichever is greater. The buffer area will consist of two (2) distinct protection zones.
 - a. Zone 1. This buffer area will begin at the edge of the identified waterway (which includes wetlands and intermittent watercourses) and occupy a margin of land with a minimum width of twenty-five (25) feet measured horizontally on a line perpendicular to the edge of water at bankfull flow.

Open space uses that are primarily passive in nature may be permitted in Zone 1, including:

 - i. Open space uses such as wildlife sanctuaries, nature

- preserves, forest preserves, fishing areas, passive areas for public or private parklands, and reforestation;
- ii. Customary agricultural practices in accordance with a soil conservation plan approved by the Bucks Conservation District and a nutrient management plan in accordance with State requirements, if applicable;
- iii. Regulated activities permitted by the Commonwealth and Township for stream or wetland crossing or other encroachment (i.e., farm vehicle and livestock, recreational trails, roads, sewer or water lines, and utility transmission lines) provided that any disturbance is offset by riparian corridor improvements as approved by the Township;
- iv. Vegetation management in accordance with an approved landscape or open space management plan.

Runoff or wastewater to be buffered or filtered by Zone 1 will be limited to sheet flow or subsurface flow only. Concentrated flows must be converted to sheet flow or subsurface flows prior to entering Zone 1.

- b. Zone 2. This buffer zone will begin at the outer edge of Zone 1 and occupy a minimum width of fifty (50) feet in addition to Zone 1. However, where the width of the one-hundred (100) year floodplain extends greater than seventy-five (75) feet from the waterway, Zone 1 shall remain a minimum of twenty-five (25) feet and Zone 2 shall extend from the outer edge of Zone 1 to the outer edge of the one-hundred (100) year floodplain.

Uses permitted in this buffer area include open space uses that are primarily passive in nature including;

- i. Open space uses such as wildlife sanctuaries, nature preserves, forest preserves, passive areas for public or private parklands, recreational trails and reforestation;
- ii. Customary agricultural practices in accordance with a soil conservation plan approved by the Bucks Conservation District;
- iii. Regulated activities permitted by the Commonwealth and Township for stream or wetland crossing or other encroachment (i.e., farm vehicle and livestock, recreational trails, roads, sewer or water lines, and utility transmission lines) provided that any disturbance is offset by riparian corridor improvements as approved by the Township;
- iv. Recreational activities or uses not involving impervious surfaces such as ball fields or golf courses;
- v. Naturalized stormwater basins provided the entire basin is located a minimum of fifty (50) feet from the defined edge

of the identified water course and situated outside the one-hundred (100) year floodplain.

- c. Prohibited uses. Any use or activity not authorized within Subsection a. or b. above shall be prohibited within the Riparian Buffer. The following activities and facilities are specifically prohibited:

- i. Clear cutting of trees and other vegetation;
- ii. Selective cutting of trees and/or the clearing of other vegetation, except where such clearing is necessary to prepare land for a use permitted under Subsection a. or b. above or where removal is necessary as a means to eliminate dead, diseased or hazardous trees.

Removal is subject to revegetation by native plants that are most suited to the riparian corridor;

- iii. Storage of any hazardous or noxious materials;
- iv. Roads or driveways, except as permitted as corridor crossings by the Township;
- v. Parking lots;
- vi. Subsurface sewage disposal areas.

- d. Revegetation of Riparian Area. In cases where a major subdivision or land development is proposed, replanting of the riparian corridor shall be required where there is little or no existing streamside vegetation. Native vegetation approved by the Township must be used in replanting efforts. Three (3) layers of vegetation are required when replanting the riparian corridor.

These layers include herbaceous plants that serve as ground cover, understory shrubs, and trees that form an overhead canopy. The revegetation plan shall be prepared by a qualified professional such as a landscape architect or engineer and shall comply with the following minimum requirements, unless modified by the Board of Supervisors upon recommendation of the Planning Commission:

- i. Ground Cover. Ground cover consisting of a native seed mix extending a minimum of twenty-five (25) feet in width from the edge of the stream bank must be provided along

the portion(s) of the stream corridor where little or no riparian vegetation exists. Appropriate ground cover includes native herbs and forms exclusive of noxious weeds as defined by the Pennsylvania state Department of Agriculture. This twenty-five (25) foot wide planted area shall be designated on the plan as a "no mow zone" and shall be left as natural cover except in accordance with the maintenance instructions stated on the plan.

- ii. Trees and Shrubs. These planting layers include trees that form an overhead canopy and understory shrubs. Overstory trees are deciduous or evergreen trees that include oak, hickory, maple gum, beech, sycamore, hemlock, pine and fir. Evergreen and deciduous shrubs should consist of elderberry, viburnum, azalea, rhododendron, holly, laurel and alders. These plants shall be planted in an informal manner clustered within Zone 1 of the riparian buffer as indicated in Subsection a. above. These plants shall be provided at a rate of at least one (1) overstory tree and three (3) shrubs for every twenty (20) linear feet of waterway.
- iii. Exceptions. These planting requirements shall not apply to existing farm fields located within the riparian buffer or the farmland tract areas within an AP subdivision if farming operations are to be continued and the required State nutrient management plan is met.

Section 602 Site Capacity Calculations

Each site is unique; it has physical features which are rarely duplicated precisely on another site. Portions of some sites may not be usable due to the existence of sensitive natural features. A minimum amount of buildable land should be retained for recreation and in some cases land is to be set aside for agricultural purposes. The purpose of this Section is to determine the appropriate intensity of use to which a specific tract may be put. For each tract, the following calculation shall be submitted by the applicant:

- (1) Base Site Area - Certain portions of tracts may not be usable for the activities proposed for the site; these shall therefore be subtracted from the site area to determine Base Site Area.
 - a. Site Area as determined by actual on-site survey _____ Ac.
 - b. Subtract - land within the ultimate right-of-way of existing roads, utility rights-of-way or easements, land which has been preserved through easements or TDRs. _____ Ac.

- c. Subtract - land which is not contiguous; i.e.,
 - (i) A separate parcel which does not abut or adjoin, nor share common boundaries with, the rest of the development; and/or
 - (ii) Land which is cut off from the main parcel by a road, railroad, existing land uses, or major stream so as to serve as a major barrier to common use, or so that it is isolated and unavailable for building purpose _____ Ac.
 - d. Subtract - land which in a previously approved subdivision, was reserved for resource reasons such as flooding, or for recreation _____ Ac.
 - e. Subtract - land used or zoned for another use, i.e., land which is used or to be used for commercial or industrial uses in a residential development, or land in a different zoning district than the primary use. _____ Ac.
- = Base Site Area _____ Ac.

(2) Resource Protection Land - All land within the Base Site Area shall be mapped and measured for the purpose of determining the amount of land that is nonbuildable due to the presence of natural resources. First, indicate the entire amount of natural resources that exist on the tract. Calculate the amount of land containing the natural resource that is required to be preserved by multiplying the amount of Land in Resource by the Resource Protection Ratio. In the event that two (2) or more natural resources overlap, only the resource with the highest protection ratio shall be used in the calculations.

- a. The following standards shall apply to all zoning districts, except the AP District unless the tract of land in the AP District is less than ten (10) acres in size.

Resource	Resource Protection Ratio	X	Acres of Land in Resource	=	Resource Protection Land
Watercourses	1.00*	X		=	acres
Floodplain	1.00*	X		=	acres
Floodplain Soils	1.00*	X		=	acres
Wetlands	1.00*	X		=	acres
Lakes and Ponds	1.00	X		=	acres

Riparian Buffer	1.00*	X		=	acres
Wetlands Margin	.80	X		=	acres
Lake and Pond Shorelines	.70	X		=	acres
Steep Slope (25% or more) (15% to 25%)	.85	X		=	acres
	.70	X		=	acres
Woodlands Environ. Sensitive	.80	X		=	acres
	.50	X		=	acres
Total Land With Resources					_____ acres
Total Land for Resource Protection					_____ acres

* Minor road crossings may be permitted where design approval is obtained from the Township in accordance with Sections 601 and 613 of this Ordinance

- b. The following standards shall apply to any lot or tract of land in the AP District which contains a lot area of ten (10) acres or greater.

Resource	Resource Protection Ratio	X	Acres of Land in Resource	=	Resource Protection Land
Farmland Prime Statewide Importance	.60	X		=	acres
	.60	X		=	acres
Watercourses	1.00*	X		=	acres
Floodplain	1.00*	X		=	acres
Floodplain Soils	1.00*	X		=	acres
Wetlands	1.00*	X		=	acres
Lakes and Ponds	1.00	X		=	acres
Riparian Buffer	1.00*	X		=	acres
Wetlands Margin	.80	X		=	acres
Lake and Pond Shorelines	.70	X		=	acres
Steep Slope (25% or more) (15% to 25%)	.85	X		=	acres
	.70	X		=	acres
Woodlands Environ. Sensitive	.80	X		=	acres
	.50	X		=	acres

Total Land With Resources	_____ acres		
Total Land for Resource Protection	_____ acres		

* Minor road crossings may be permitted where design approval is obtained from the Township in accordance with Sections 601 and 613 of this Ordinance

- (3) Recreation Land - While some of the open space required in the R -3 zoning District may be resource protection land, the intent is to provide for usable public or common open space as near to each unit as possible. Thus, there is a need for specific guidelines insuring that a minimum amount of land not restricted by 1. or 2.a. above is retained for this purpose. Therefore, take:

take	Base Site Area		_____
subtract	Total land with Resource Restriction	-	_____
equals	Total Unrestricted Land	=	_____
multiply	by 0.2	X	_____
equals	Total Recreation Land	=	_____

- (4) Determination of Site Capacity in R-3 district - Individual site capacity is found by calculating net buildable site area. Lots may be located only on net buildable site area. For a Single-Family Cluster, Use B-2; Performance Standard Dev., Use B-3; Mobile Home Parks, Use B-5; or Elderly Housing, Use B-4. The number of allowable dwelling units is determined by multiplying the density by the net buildable site area. The calculations are as follows:

- a. Single-Family Cluster or Performance Subdivision or Mobile Home Park or Elderly Housing

take	Resource Protection land (from (2) a.)		_____ Ac.
add	Recreation Land	+	_____ Ac.
equals	Total Open Space	=	_____ Ac.

take	Base Site Area		_____ Ac.
multiply	by Open Space Ration	x	_____ Ac.
equals	Minimum Required Open Space	=	_____ Ac.

take	Base Site Area		_____ Ac.
subtract	Total Open Space or Minimum Required Open Space, whichever is greater	-	_____ Ac.
equals	Net Buildable Site Area	=	_____ Ac.

multiply	by Density	x	_____ Ac.
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equals Number of Dwelling Units = _____ Du's.

b. Calculate the Impervious Surface Ratio

	Impervious surfaces	_____
	Street	_____
	Buildings	_____
	Driveways	_____
	Sidewalks	_____
	Patios	_____
	Parking Lots	_____
	Other	_____
equals	Total Impervious Surface	= _____
divided by	Base Site Area as defined in Section 224 of this Ordinance	_____

Map Resource Protection Land in accordance with the resources described in Section 602 and locate development on Net Buildable Site Area.

(5) Determination of site capacity in AP District - For subdivisions in the AP District the site capacity is based on the net buildable site area.

take	Base Site Area	_____
subtract	Non-buildable Site Area (from (2) b.)	- _____
equals	Net buildable Site Area	= _____

Map Resource Protection Land in accordance with the resources described in Section 602 and locate development on Net Buildable Site Area.