

Site Capacity Calculations (Net-Out of Resources)

Tinicum Township, Bucks County

ARTICLE VIII ENVIRONMENTAL PERFORMANCE STANDARDS

Section 800- General

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

Section 801 Site Capacity Calculation

Each site is unique. It has physical features which are rarely duplicated precisely on another site. Portions of some sites may not be useable, and a minimum amount of buildable land should be retained for recreation. The purpose of this section is to determine the appropriate intensity of use to which a specific tract may be put.

The following calculation shall be a part of the initial plan submitted by the developer or landowner to determine the net buildable site area:

- (1) Base Site Area: Certain portions of tracts may not be useable for the activities proposed for the site; these shall therefore be subtracted from the site area to determine Base Site Area. Gross buildable site area shall not include any of the following classes of land:
 - (a) Land which is not contiguous or which is cut from the parcel by a road or easement,
 - (b) Land shown in previous subdivisions or land development plans as reserved from development for natural resource reasons such as floodplain lands.
 - (c) Calculate base site area - subtract existing road and utilities rights-of-way, easements and land in (a) and (b) from total site area.

- (2) Resource Protection Land: Calculate open space needed for resource protection.

<u>Resource</u>	<u>Open Space Ratio</u>	<u>Acres</u>	<u>Open Space (Acres x Open Space Ratio)</u>
Floodway	1.00		
Floodplain soils (Alluvial soils)	1.00		
Waterways	1.00		

Steep slopes exceeding 30%	1.00		
25% to 30%	.90		
20% to 25%	.85		
15% to 20	.70		
8% to 15%	.60		
Flood Fringe Areas	.75		
Wetlands	.75		
Shorelines of ponds and lakes	.70		
Forests	.70		
TOTAL		<u>acres with limitations</u>	<u>Resource Protection Space</u>

- (3) Unrestricted Land: Calculate area not needed for resource protection - Base Site Area (1) minimum total acres with limitations from above (2).

$$\begin{array}{r}
 \underline{\hspace{2cm}} \text{ BASE SITE AREA (1)} \\
 + \quad \underline{\hspace{2cm}} \text{ ACRES WITH LIMITATIONS (2)} \\
 = \quad \underline{\hspace{2cm}} \text{ TOTAL UNRESTRICTED LAND (3)}
 \end{array}$$

- (4) Recreation Space: Calculate open space required for RECREATION SPACE. While some open space may be required for resource protection, the intent is to provide for useable public or common open space for active recreation. TOTAL UNRESTRICTED LAND from (3) above times 1/3 standard minimum open space ratio of the development type (Article IV of the Tincum Township Zoning Ordinance), or the open space requirement of use C14).

$$\begin{array}{r}
 \underline{\hspace{2cm}} \text{ TOTAL UNRESTRICTED LAND (3)} \\
 \times \quad \underline{\hspace{2cm}} \text{ 1/3 Developments standard open space ratio} \\
 \text{ratio (Article IV of the Tincum Township} \\
 \text{Zoning Ordinance)} \\
 = \quad \underline{\hspace{2cm}} \text{ RECREATION SPACE}
 \end{array}$$

- (5) Calculated Open Space: Determine total CALCULATED OPEN SPACE - add TOTAL RESOURCE PROTECTION SPACE (2) and RECREATION SPACE (4).

$$\begin{array}{r} \underline{\hspace{10em}} \text{ TOTAL RESOURCE PROTECTION (2)} \\ + \quad \underline{\hspace{10em}} \text{ RECREATION SPACE (4)} \\ = \quad \underline{\hspace{10em}} \text{ CALCULATED OPEN SPACE} \end{array}$$

- (6) Standard Minimum Open Space: Determine the STANDARD MINIMUM OPEN SPACE RATIO for the particular development site. (Article IV of the Tincum Township Zoning Ordinance or Use 014). Standard: Minimum open space ratio for the site (Article IV of the Tincum Township Zoning Ordinance). Determine the standard minimum open space by multiplying the standard minimum open space ratio by the base site area.

$$\begin{array}{r} \underline{\hspace{10em}} \text{ BASE SITE AREA (1)} \\ \times \quad \underline{\hspace{10em}} \text{ STANDARD MINIMUM OPEN SPACE} \\ \text{RATIO (Article IV of the Tincum} \\ \text{Township Zoning Ordinance)} \\ = \quad \underline{\hspace{10em}} \text{ STANDARD MINIMUM OPEN SPACE} \\ \text{IN ACRES} \end{array}$$

- (7) Required Open Space: Determine the required open space by comparing the standard Minimum Open Space (6) with the Calculated Open Space (5). The required open space is whichever is greater.

$$\begin{array}{r} \underline{\hspace{10em}} \text{ STANDARD MINIMUM OPEN SPACE} \\ \text{IN ACRES (6)} \\ \underline{\hspace{10em}} \text{ CALCULATED OPEN SPACE IN} \\ \text{ACRES (5)} \\ \text{REQUIRED OPEN SPACE -} \\ \text{WHICHEVER IS GREATER} \end{array}$$

- (8) Net Buildable Site Area: Determine the net buildable site area by subtracting the Required Open Space (7) from the Base Site Area (1).

$$\begin{array}{r} \underline{\hspace{10em}} \text{ BASE SITE AREA (1)} \\ - \quad \underline{\hspace{10em}} \text{ REQUIRED OPEN SPACE (7)} \end{array}$$

= _____ NET BUILDABLE SITE AREA

- (9) Number of Dwelling Units: Determine the number of dwelling units. Multiply the maximum density for the development type (Article IV) by the net buildable site area (8).

_____ NET BUILDABLE SITE AREA (8)

x _____ MAXIMUM DENSITY

= _____ NUMBER OF DWELLING UNITS

- (10) Maximum Impervious Surface: Determine the maximum impervious surface. Multiply the maximum impervious surface ratio (Article IV) by the base site area (1).

_____ MAXIMUM IMPERVIOUS SURFACE RATIO

x _____ BASE SITE AREA (1)

= _____ MAXIMUM IMPERVIOUS SURFACE IN ACRES

- (11) Site Capacity Summary:

(7) Required Open Space (calculated open space or standard minimum acres open space whichever is greater)

(8) Net Buildable Site Area acres

(9) Maximum Number of dwelling Units dwellings

(10) Maximum Impervious Surface acres