

## **ARTICLE - 16**

### **BUFFERING, LANDSCAPING, AND RESOURCE PRESERVATION**

#### **Section 1600 Intent**

The purpose of this Article is to improve the appearance of vehicular use areas and property abutting public rights of way; to require buffering between incompatible land uses; and to protect, preserve and promote the aesthetic appeal, character and value of the surrounding neighborhoods; and to promote public health and safety through the reduction of noise pollution, air pollution, visual pollution, air temperature, artificial light glare, and protection of sight triangles. It is further the purpose of this article to specifically promote the preservation and replacement of trees and significant vegetation removed in the course of land development, and to promote the proper utilization of landscape as a buffer between certain land uses to minimize the opportunities of nuisance.

#### **Section 1601 Applicability**

No structure on land which abuts a right-of-way or boundary between two Land Use Classes as defined in Table 16A shall be developed, or redeveloped, unless a buffer, if required as indicated in Table 16B, is established in accordance with the requirements of this Article.

#### **Section 1602 Permits**

No zoning permit or certificate of occupancy shall be issued hereafter for any site development or the construction or improvement of any building, structure or vehicular use area except where landscaping and/or buffering for such development, construction, or improvements are in compliance with the provisions of this article.

#### **Section 1603 Plan Review**

For any buffer required by this Chapter, a plan shall be submitted with the application for Zoning Permit to the Zoning Inspector to review for compliance with these regulations and any other applicable regulations. The plan shall show:

- A. The topography of the site;
- B. The location of driveway entrances;
- C. Provisions for vehicular and pedestrian circulation;
- D. The location of sidewalks on or adjacent to the property;
- E. The location of utilities, barriers, shelters, and signs;
- F. The location of landscaped areas and the types, quantity, sizes and location of vegetation to be planted in the areas of existing vegetation and existing and proposed topography;
- G. Maintenance and protection measures; and
- H. Any other relevant information requested by the Zoning Inspector.

#### **Section 1604 Modifications and Waivers**

In the event that the unusual topography or elevation of a development site, the size of the parcel to be developed, the extent of expansion or redevelopment of the site or parking area is deemed to be insignificant, or the presence of existing buffers on adjacent developed property would make strict adherence to the requirements of this Chapter serve no meaningful purpose or would make it physically impossible to install and maintain the required buffer, the Etna Township Board of Zoning Appeals may, upon proper application for a variance by the property owner, and upon making findings of fact, modify and/or waive the requirements of this Chapter provided the existing or resulting boundary features of the development site comply with the spirit and intent of this Article and other related articles.

## **Section 1605 *General Standards For Buffer Yards***

- A. Responsibility for Installation of Buffer.** The boundary buffer area shall be provided by the person in charge of or in control of developing the property whether as owner, lessee, tenant, occupant or otherwise.
- B. Location.** Boundary buffers shall be located along the rear and side boundaries of a lot or parcel. On sloped areas the boundary buffer should be located to maximize its screening effectiveness. Streetscape buffers shall be located along the public right-of-way and may be required along private street easements.
- C. Structures Within Required Buffer.** No structure shall be permitted within a required buffer other than a wall, fence or berm, or a driveway in the front yard connecting a parking area on the lot to the street or to a parking area on an abutting lot. A driveway in the side yard that connects a paving area on the lot to the street shall not encroach into the boundary buffer area.
- D. Adjacent Parcels Owned by Same Owner.** When both parcels are owned and being developed by the same owner, the buffer may be placed on either adjoining parcel or astride the boundary.
- E. Adjacent Parcels Owned by Different Owners.** When adjoining parcels have different owners the buffer shall be placed on the parcel being developed. However, a buffer that meets the requirement of both parcels may be placed astride the boundary if a written agreement, signed by both owners, is filed with the Zoning Inspector, and is recorded in the real property records of the County and runs with the property.
- F. Existing Fence, Wall, Berm, or Landscaping on Adjacent Parcel.** When the adjoining parcel has an existing fence, wall, berm, or landscaping within ten feet (10') of a developing parcel boundary that fulfills the buffer requirements of the developing parcel, the existing landscape material on the adjacent lot may be used towards the material requirement for the boundary buffer required for that boundary edge only. All credits for existing landscape material must be in accordance with Section 1606.3, and other related chapters. Any additional landscape material necessary to meet the boundary buffer requirements shall be added.
- G. Existing Development on Both Sides.** Where development already exists on both sides of a property line, a buffer shall be established as a condition of any new development. The property owner shall provide the maximum buffer possible under the standards of this Article given the location of existing buildings and driveways. If the width available for the buffer is less than fifty percent (50%) of the minimum required buffer width, then a solid fence or wall, meeting the standards of Article 10, shall be located at the side of the buffer facing the proposed development.

## **Section 1606 *Boundary Buffer Requirements***

To determine the type of buffer boundary required between two adjacent parcels, the following procedure and standards shall be utilized:

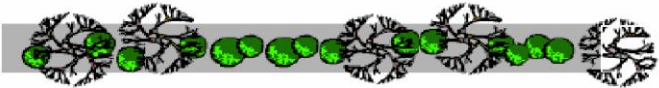



### **A. Procedure**

- 1. Identify the Zoning District of the Developing Parcel.**
- 2. Identify the Zoning District of each Adjoining Parcel.**
- 3. Determine the Boundary Buffer Requirement for each Edge of the Developing Parcel.** Refer to Tables 16A & 16B and determine what the Boundary Buffer Requirement will be.
- 4. Determine Width of Buffer.** For each Boundary Buffer, alternative widths may be utilized. The width of each buffer defines the Landscape Material Requirements. For each width range, options for Landscape Material Requirements are given as minimum number of plants required per one hundred (100) linear feet.
- 5. Determine Length of Buffer.** Measure the length of the property boundary requiring the buffer and subtract any length covered completely by a clear sight triangle under Section 1607.
- 6. Determine Landscape Material Requirements.** Divide the length of the Required Boundary Buffer (the result of 1606.1(e) above) by one hundred (100). Multiply the result by the number of plants for the required boundary buffer shown in Figure 16B for the selected width. Any fractional number of plants (shrubs and trees) should be calculated to the next highest whole number.
- 7. Location and Placement of Landscape Material Requirements.** All landscape material requirements shall remain within the designated area and shall otherwise meet the standards of the Boundary Buffer. Although landscape material requirements typically are located within each 100 foot increment, their placement may vary in order to screen objectionable views.

**Table 16A – Adjoining Zoning Districts/Use**

<b>When the Following Zoning District/Use</b>	<b>Adjoins the Following Zoning District/Use</b>	<b>The Minimum Buffer Width Shall Be:</b>
Any MHP District/Use	Any residential or agricultural district/use	10 ft.
Any LB District/Use	Any residential or agricultural district/use	15 ft.
Any GB1 District/Use	Any residential or agricultural district/use	20 ft.
Any GB2 District/Use	Any residential or agricultural district/use	30 ft.
Any GB3 District/Use	Any residential or agricultural district/use	30 ft.
Any PRO District/Use	Any residential or agricultural district/use	15 ft.
Any M1, M2, or M3 District/Use	Any residential or agricultural district/use	30 ft.
Any M1, M2, or M3 District/Use	Any office or commercial district/use	15 ft.
A freeway or arterial street	Any residential district/use (except agricultural)	20 ft.
A freeway or arterial street	Any district/use (except residential or agricultural)	10 ft.
A railroad	Any district/use (except agricultural or industrial)	20 ft.
Any vehicular use or parking area	Any zone	3 ft. continuous planting, hedge, fence, or wall of 3 ½ ft. average height.
Utility substation, sewage plant, or similar	Any district/use	30 ft.
A freeway or arterial street	Any property used for vehicular sales or service	30 ft. (adjacent to freeway or arterial street only)

**Table 16B – Material Requirements for Boundary Buffer**

Minimum Width of Buffer	100 Linear Feet	Landscape Material	
		Canopy Trees	Shrubs
10 ft.		5	15
15 ft.		5	10
20 ft.		3	9
30 ft.		2	7

**Notes (Table 16A & Table 16B):**

1. Two (2) under story trees or two (2) evergreen trees may be substituted for 1 canopy tree for up to 25% of the required canopy trees.
2. A solid fence, wall, or berm 3 ft. to 6 ft. in height may be used and can substitute for shrub requirements.
3. All landscape materials required for the buffer shall be confined within the buffer boundaries.
4. Grass or ground cover shall be planted on all portions of the easements and buffers not occupied by other landscape materials.
5. Trees do not have to be equally spaced but may be grouped in a manner to allow for mature growth yet allow for flexibility in design. However, the number of trees to meet the requirements of Table 16B above must be maintained and undesirable sightlines must be screened as per the intent of this section.
6. Greater buffer boundaries may be required in approvals of conditional uses and Planned Development's when necessary to protect adjacent land uses.

**B. Overlap.** When any portion of a parcel edge is subject to more than one set of landscape requirements as set forth in this Article and other related Articles, the most stringent requirement will control that edge. The most stringent requirements shall be defined as those which require the highest fence, wall or screen or, if no fence, wall or screen is required, the requirements with the greatest quantity of landscaping.

**C. Credit.** Existing vegetation, fences, walls, or berms on a parcel may be counted toward the requirements for any class of buffer provided that it meets the standards established in this Article.

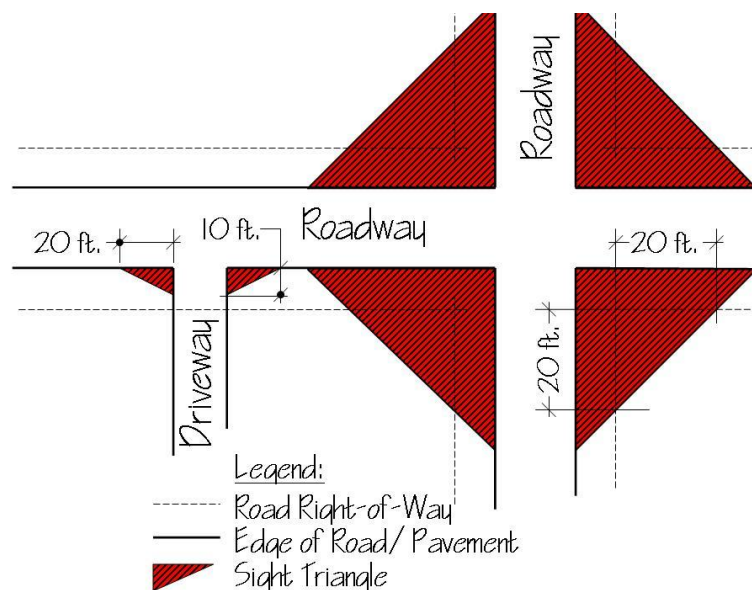
**D. Maintenance.**

1. All landscaping materials shall be installed and maintained according to accepted nursery industry procedures. The owner of the property shall be responsible for the continued property maintenance of all landscaping materials and shall keep them in a proper, neat, and orderly appearance free from refuse and debris at all times.
2. Unhealthy and dead plants that are required as part of these requirements shall be replaced within one year, or by the next planting season, whichever comes first.
3. Violation of these maintenance practices shall be a violation of this Zoning Resolution.
4. Any platted development shall provide a maintenance and replacement schedule in the restrictive covenants to address the maintenance and replacement of landscape materials.

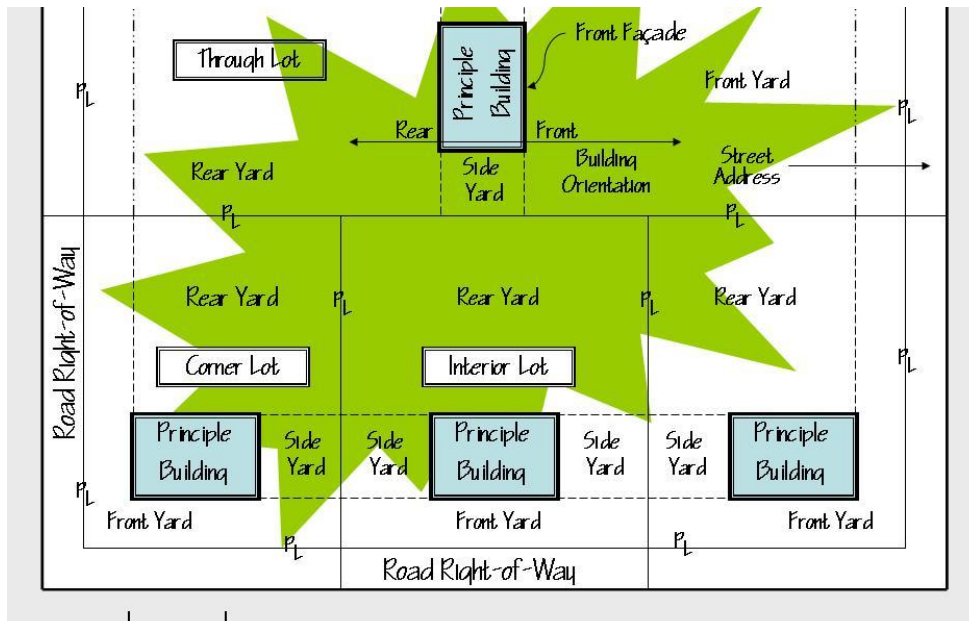
## Section 1607 Clear Sight Distance at Street & Access Drive Intersections

- A. Purpose.** To insure that landscape or building, whether temporary or permanent, materials do not constitute a driving hazard, a "clear sight triangle" will be observed at all street and access drive intersections.
- B. Definition.** A clear sight triangle is the triangular area formed by a diagonal line connecting two points located on intersecting lines of a right-of-way, each point being a defined distance from the intersecting lines. See Figure 16A.
- C. Design.** To insure that landscape or building, whether temporary or permanent, materials do not constitute a driving hazard, the entire area of the clear sight triangle should be designed as illustrated in Figure 16A to provide the driver of the vehicle entering the intersection with an unobstructed view to all points ten (10) feet above the roadway along the centerline.
1. At the intersection of driveways with streets, the sight triangle shall be established by locating the intersection of the street curb or edge with the driveway edge and by measuring from this point a distance of ten (10) feet along the driveway to a point and a distance of twenty (20) feet along the street curb to a point and connecting these points. See Figure 16A.
  2. At the street intersections, the sight triangle shall be formed by measuring at least twenty (20) feet along lines of right-of-way and connecting these points. See Figure 16A.
- D. Restrictions Within Clear Sight Triangles**
1. Within the sight triangle no landscape or building materials with a mature height greater than twelve inches (12") shall be permitted with the exception of required grass or ground cover or trees which conform to the following standards. Trees shall be permitted within the sight triangles as long as, except during early growth stages, only the tree trunk (no limbs, leaves, etc.) is visible between the ground and ten (10) feet above the ground, or otherwise does not present a traffic visibility hazard. Restrictions shall not apply to the following:
    - a) Existing natural grades which, by reason of natural topography, rise twelve (12) or more inches above the level of the center of the adjacent intersection;
    - b) Fire hydrants, public utility poles, street markers, governmental signs, mailboxes, and traffic control devices.
  2. No fences or walls which impede a clear view of oncoming traffic shall be permitted within the sight triangles.
  3. The restrictions contained in this Section shall also apply to any areas outside the clear sight distance triangle that fall within the sight distance requirements of the County Engineer or other more stringent Federal or State requirements.

**Figure 16A – Clear Sight Triangles**



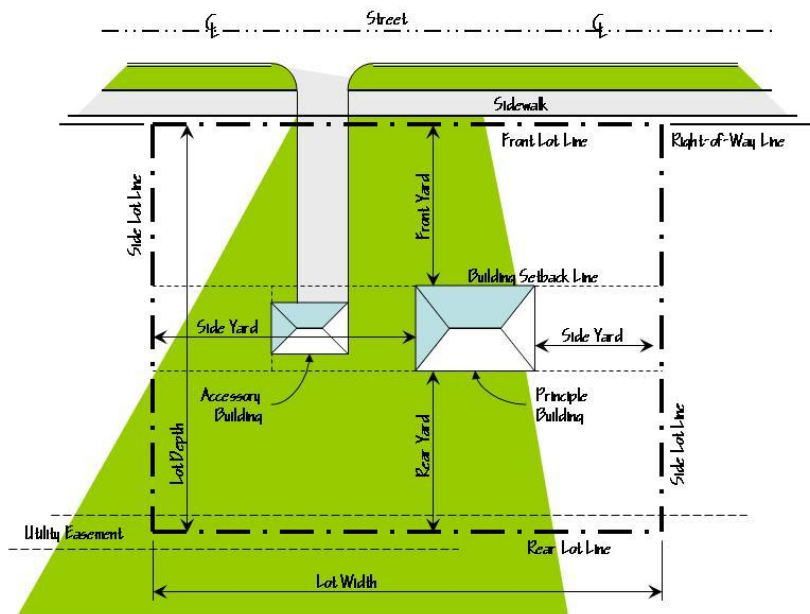
**Figure 16B – Corner & Through Lot Diagram**



Legend:

- Yard Definition
- PL ----- Property Line
- Curb/ Edge of Road/ Pavement
- Setback Line

**Figure 16C – Standard Lot Diagram**



## **Section 1608 Woodland & Resource Preservation**

It shall be required that efforts be made to preserve natural vegetation areas. Consideration shall be given to laying out streets; lots, structures, and parking areas to avoid unnecessary destruction of heavily wooded areas or outstanding tree specimens. It is further required that, whenever possible, heavily wooded areas be designated as park reserves. Certain credits are available for conservation efforts. To be eligible for these credits, the following criteria must be met:

- A. Quantity of Woodland.** The minimum amount of woodland preserved shall be one-eighth of an acre (5,445 sq. ft.). The woodland canopy shall be contiguous and fifty percent (50%) of the canopy shall be from trees that have an 18" DBH (diameter of trunk at breast height, typically four and one-half (4 ½) feet above ground level) or greater.
- B. Location.** Any woodland area eligible for credit must be located within one hundred feet (100') of the principal building or an impervious surface that directly serves the principal use on the site and is partially or wholly physically located within a required buffer area.
- C. Credit.** If the above conditions are met, credit may be granted as follows:
  1. **Buffer Reduction Bonus.** The buffer requirements, specified in this and other related chapters, that are applicable to the site may be reduced or eliminated upon the determination by the Zoning Inspector that the Woodland Preservation area amenities fully compensate for the reduced or eliminated landscape requirements.
  2. **Parking Reduction Bonus.** The Etna Township Zoning Commission may approve a reduction of up to ten percent (10%) of the required number of parking spaces if adequate parking will remain on the subject site and if land area for required number of spaces remains available for future development on the subject site.
  3. **Intensity Reduction Bonus.** The Etna Township Zoning Commission may approve an increase in the intensity of up to ten percent (10%) of the district limits for any use permissible as a PUD.
  4. **Square Footage Increase Bonus.** The Etna Township Zoning Commission may approve an increase in square footage in excess of established requirements of up to ten percent (10%) of the district restrictions (GB1 and GB2 only). All other requirements and restrictions shall be calculated from the actual square footage (i.e. parking spaces, loading spaces, etc).