

ARTICLE 3

CHAPTER 4 LANDSCAPING AND SCREENING REQUIREMENTS

SEC 3.401 PURPOSE:

- (A) The purpose of this Chapter is to establish minimum standards for the design, installation, and maintenance of landscaping along public streets, within buffer areas, between uses, on the interior of a site, within parking lots and adjacent to buildings. Landscaping is viewed as a critical element contributing to aesthetics, development quality, environmental integrity, stability of property values, and the overall character of the County zoning jurisdiction.
- (B) The landscape standards of this Chapter are considered the minimum necessary to achieve the intent. In several instances, the standards are intentionally flexible to encourage creative design. Applicants are encouraged to provide additional landscaping to improve the function, appearance, and value of their property.

SEC 3.402 OBJECTIVES: Consideration of site landscaping, screening, and buffering is intended to reflect the purpose of this Chapter per the following objectives:

- (A) Site landscaping is encouraged to be innovative and creative in design, and to reflect the unique conditions and accommodate the specific circumstances of the site.
- (B) At the time of installation, landscaping, screening, and buffering elements are intended to be immediately effective in meeting the objectives of this Chapter.
- (C) To preserve significant natural, historical, and cultural site features, including but not limited to large trees, hedgerows, water bodies, steep slopes, wetlands, archeological sites, and historic elements.
- (D) To apply landscaping standards to re-development of existing sites that have been developed without adequate landscaping, screening, or buffering.
- (E) Screening is intended to:
 - (1) Mitigate the adverse effects of a proposed use on adjacent uses, including but not limited to headlight glare, lighting, noise, and trash disposal area.
 - (2) Create a physical visual transition zone between the uses of a significantly different scale or character, to reduce the adverse effects of a proposed use on adjacent uses, or to break-up the visual pattern of large monotonous areas of a site, such as parking lots.
- (F) Berms and earth forms are encouraged to be designed with physical variations in heights and alignment through their length.

SEC 3.403 EXPANSIONS OR ALTERATIONS: The provisions of this Chapter shall apply to an existing development when expansion or alteration is as follows:

- (A) The entire site if the expansion of the square footage of an existing building exceeds twenty-five percent (25%) of the gross floor area of the existing building; or

- (B) The entire site if the expansion of the square footage of the parking area exceeds twenty-five percent (25%) of the existing vehicular use area. For the purpose of this Chapter, parking area shall include parking spaces, parking aisles, access drives, and loading areas.
- (C) The affected area if neither (A) or (B) applies.

SEC 3.404 **LANDSCAPING AND MATERIALS:** At the time of installation, landscaping, screening and buffering elements shall be immediately effective in meeting the objectives of this Chapter, and shall maintain that effectiveness as the plant materials mature.

- (A) **General Location Requirement:** Landscaping shall be installed in locations such that, when mature, it does not obscure traffic signs or light nor obstruct access to fire hydrants nor interfere with adequate motorist sight distance or overhead utility lines.
- (B) **Existing Landscape Material:** Unless otherwise noted, existing landscape material in healthy condition can be used to satisfy the requirements of this article in whole or in part provided that the existing landscape material meets the minimum standards of this Chapter. The Zoning Inspector shall determine satisfaction of this requirement.
- (C) **Easements:** Required landscaping shall not be installed within any underground or overhead utility, drainage, or gas easement without the consent of the easement holder.
- (D) **Landscaping Materials:** Existing vegetation shall be preserved as much as possible in accordance with acceptable nursery industry standards. The following items are suitable for landscaping materials used individually or in combination with each other, subject to the requirements of this Zoning Code and the review and approval by the Zoning Inspector.
 - (1) **Walls and Fences:** In addition to any other requirements for walls and fences established in this Zoning Code, walls and fences shall be subject to the following:
 - (a) When walls or fences are used to fulfill screening requirements, a detailed drawing shall be shown on the plan.
 - (b) Where materials are not otherwise specified, walls and fences shall be constructed of weather-proof and non-corroding materials such as pressure treated or painted lumber, redwood, cedar, vinyl, aluminum, or galvanized metal.
 - (c) Chain link fences shall not be allowed to satisfy the buffer/screening requirements of this chapter.
 - (d) Walls and fences shall be designed to orient the best or most attractive side, away from the subject lot, or be equally attractive on both sides.
 - (2) **Plants:**
 - (a) Plant materials used to satisfy the provisions of this Chapter shall be installed in conformance with the standards of the American Standard for

Nursery Stock, latest edition from American Nursery and Landscape Association (ANLA) and approved by the American National Standards Institute, Inc. (ANSI) and shall have passed any inspections required under state regulations.

- (b) Plants shall be non-invasive and should be selected based on insect and disease resistance and long life expectancy.

(3) **Species Diversity:**

- (a) When fewer than forty (40) trees are required on a site, at least two (2) different species shall be utilized, in roughly equal proportions.
- (b) When forty (40) or more trees are required on-site, at least three (3) different species shall be utilized, in roughly equal proportions.
- (c) Required shrubs shall utilize the same species diversity requirements.
- (d) Nothing in this Subsection shall be construed to prevent the utilization of a larger number of different species than specified above.

(4) **Earth Mounds:**

- (a) Earth mounds shall conform to the grading requirements of the Warren County Soil and Water Conservation District and shall be designed to not be an impediment for drainage.
- (b) Landscaping plant materials may be installed on berms and earth mounds and shall be arranged in an irregular pattern to accentuate the physical variation and to achieve a natural appearance.
- (c) Berms and earth mounds shall be located and designed to minimize the disturbance of existing trees located on, or adjacent to, the site.
- (d) Adequate ground cover shall be used and maintained to prevent erosion of the earth mound.
- (e) No mound wastewater treatment system or other similar on-site wastewater treatment system shall count toward the buffering requirement.

SEC 3.405 BUFFERING AND SCREENING REQUIREMENTS:

(A) **Streetscape Buffer:**

- (1) The front yard of each site shall be landscaped with street trees. Street trees may be credited toward the minimum requirements specified in Section 3.407(A) (Landscaping and Screening for Parking and Loading Areas).
- (2) Trees are required at a rate of one (1) tree per forty (40) feet of frontage with a minimum of one (1) tree per parcel.

(B) **Lot Perimeter Buffer:**

- (1) Table 3.405-1 establishes the buffer type required, based on adjacent zoning districts and uses. Table 3.405-2 establishes the minimum buffer requirements.
- (2) Where a use or district falls under more than one of the categories listed, the most stringent requirements shall be applied.
- (3) Driveways and parking areas are prohibited within the required buffer area, excepting for cross-access purposes.

Table 3.405-1: Lot Perimeter Buffer Type					
PROPOSED USE	ADJACENT TO				
	Single-Family or Two-Family Residential District, Recorded Subdivision or lot used for single family residential purposes	Multi-Family Residential Use or District	Office Use or District	Commercial/Business Use or District	Industrial Use or District
Single-Family or Two-Family	None	None	None	None	None
Multi-Family	Buffer "C"	None	None	None	None
Commercial/Business	Buffer "D"	Buffer "C"	Buffer "A"	Buffer "A"	Buffer "B"
Office	Buffer "D"	Buffer "B"	Buffer "A"	Buffer "A"	Buffer "C"
Industrial	Buffer "D"	Buffer "D"	Buffer "C"	Buffer "B"	Buffer "A"

Community Facility and Essential Service uses and uncategorized Non-Residential uses that proposes structures shall provide a minimum of Buffer Type C adjacent to Single-Family and Two-Family uses. This requirement may be moderated during Site Plan Review or Conditional Use Review, base on the nature of the proposal.

Table 3.405-2: Minimum Requirements For Buffer Type			
Buffer Type	Minimum Buffer Width	Minimum Screen Height	Minimum Plant Materials
"A"	10 Feet	None [1]	1 deciduous or evergreen tree per every 40 lineal feet as required in Note [4]
"B"	20 Feet	6 feet	1 tree per 25 lineal feet with a minimum of 40% evergreen trees as required in Note [4]
"C"	30 Feet	8 feet	1 tree per 20 lineal feet with a minimum of 50% evergreen trees as required in Note [4]
"D" [2]	50 Feet	10 feet [3]	1 evergreen, 1 deciduous tree and 1 shrub per 10 lineal feet along the residential side of the wall or fence as required in Notes [3] and [4]

NOTES:

[1] No minimum screen height is required unless the County Commissioners or Zoning Inspector finds that screening is needed between similar uses that have varying degrees of density or land use intensity.

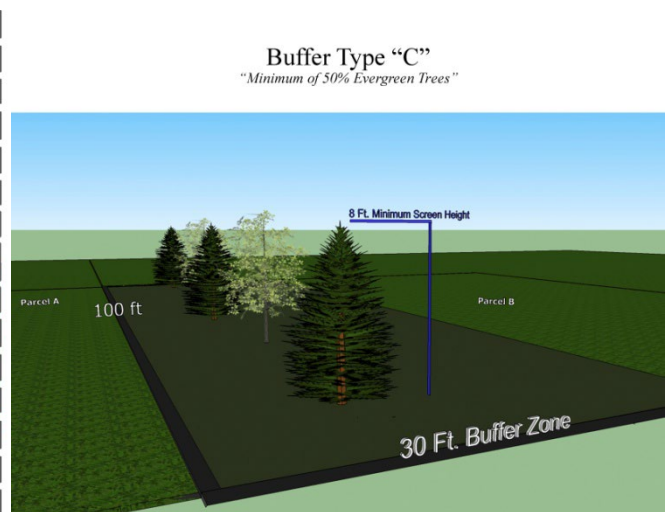
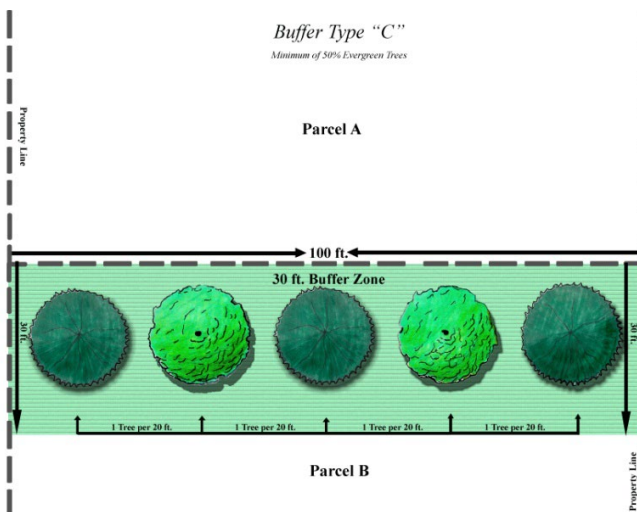
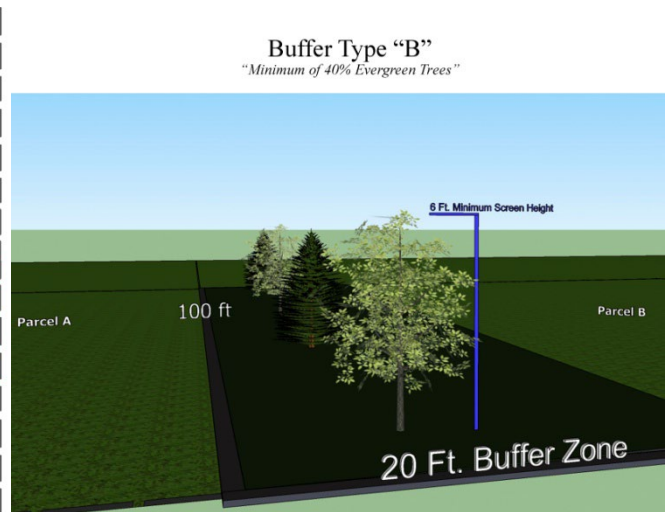
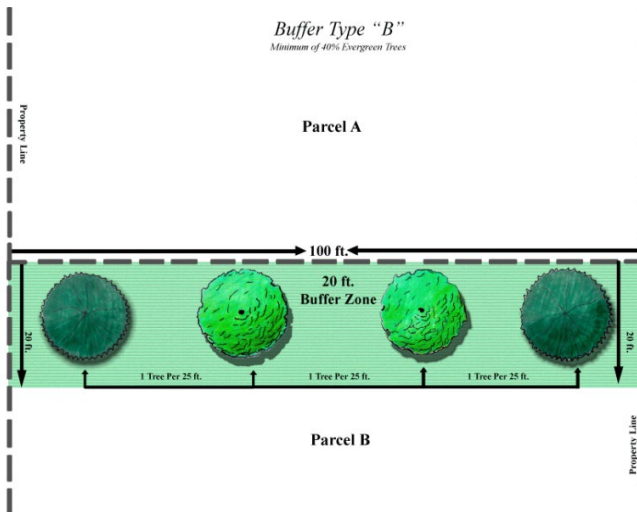
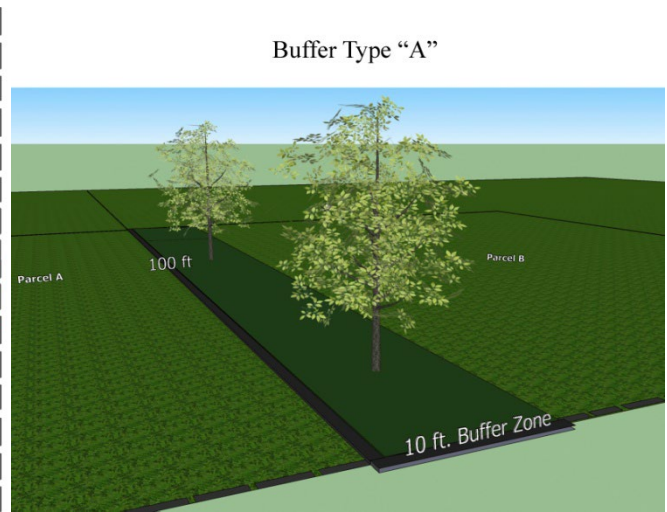
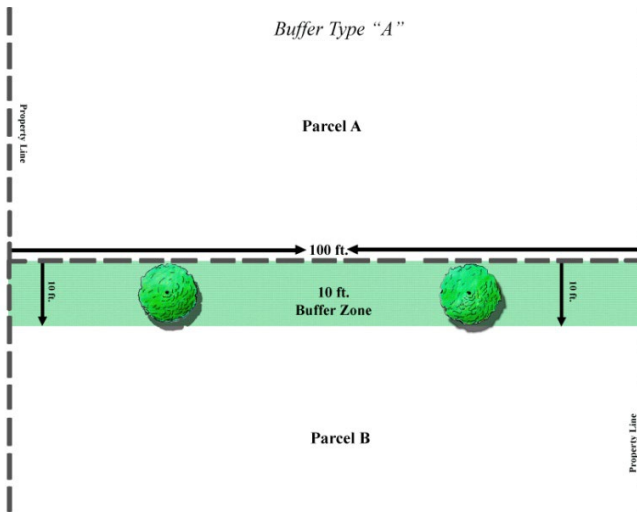
[2] The slope of the mound shall not exceed a 3:1 ratio.

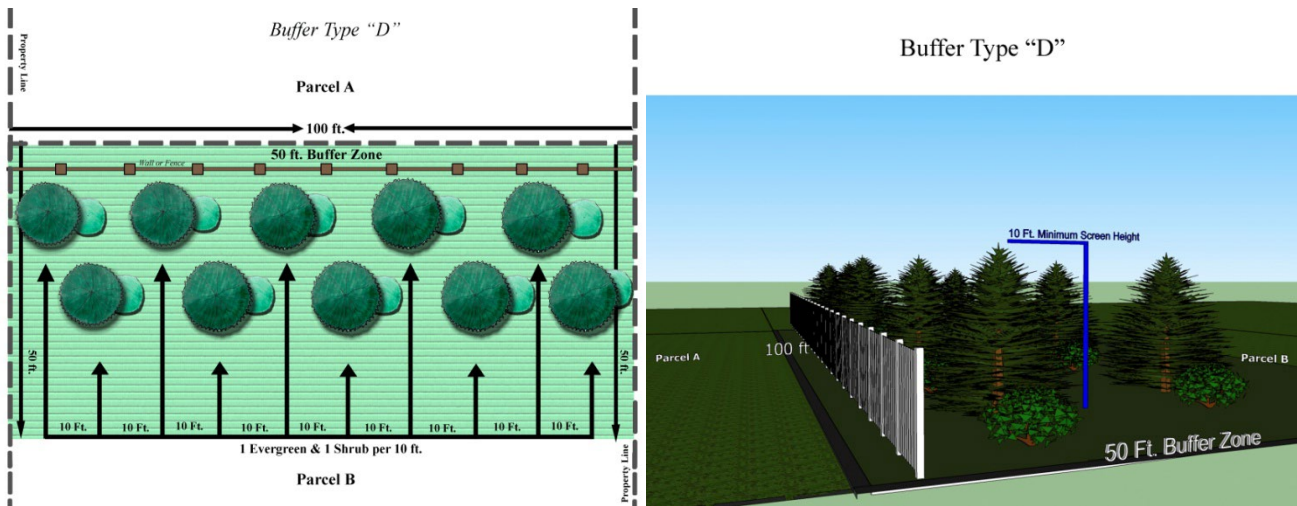
[3] Landscaping and/or screening elements of Buffer Type "D" shall collectively consist of trees, shrubs, fencing/walls or berms, to a height of ten (10) feet and be installed to one hundred percent (100%) opacity. Fencing/walls or berms are limited to four (4) feet high in the front yard or as the Approving Authority requires.

[4] At the time of planting deciduous trees shall be a minimum of one and three fourths inch (1 ¾") diameter and evergreens shall be a minimum height of five (5) feet.

Note: The Approving Authority may approve the substitution of shrubs or other landscaping for required trees.

Figure 3.405-1: Buffer illustrations.





(C) **Mechanical Equipment, Service Structure and Dumpster Screening:**

- (1) All mechanical equipment, including both ground-mounted and roof-mounted equipment and Dumpster or similar container, shall be screened from view from adjacent public and private rights-of-way, as well as from all property zoned or used for residential purposes, through the use of landscaping or enclosures, as approved by the Zoning Inspector.
- (2) All electrical boxes, conduits, and similar items attached to a façade shall be painted the same color as the building.

(D) **Rural Subdivision Perimeter Buffer Requirements:** The below-listed requirements of this section apply to the perimeter of land proposed for a major subdivision in the R-1, R-1A, and R-1B districts. Minor subdivisions are excluded from these requirements.

- (1) The buffer that is required along a subdivision boundary that abuts a collector or arterial thoroughfare shall be as follows:
 - (a) Required trees shall be arranged to provide the maximum screening effect.
 - (b) Required berms shall have a slope that does not exceed a one (1) foot of rise for every three (3) feet of linear distance of the berm base width.
 - (c) Height of a required berm shall be measured from the elevation of the paved roadway.
 - (d) The minimum height of a deciduous or evergreen tree at the time of planting shall not be less than six (6) feet in height.
 - (e) The buffer shall be located on ground owned and maintained by the homeowners' association or by the lot owner in an easement for that purpose.
 - (f) The buffer shall be installed by the developer before the Zoning Inspector approves the record plat.

- (g) Existing vegetation may be used to satisfy the buffer requirements as determined by the Zoning Inspector. To qualify, trees shall be two (2) inches or greater in caliper.

(2) **Design Options:**

- (a) **Option 1:** Minimum buffer width less than one hundred (100) feet:

- 1. A landscaped berm seven (7) feet high located outside the road right-of-way and also outside of utilities easements unless approved, or,
- 2. Seven (7) trees and seven (7) shrubs per every one hundred (100) feet of road frontage.

- (b) **Option 2:** Minimum buffer width equal to or greater than one hundred (100) feet and less than three hundred (300) feet:

- 1. A landscaped berm four (4) feet high located outside of the road right-of-way and also outside of utilities easements unless approved, or,
- 2. Five (5) trees and five (5) shrubs per every one hundred (100) feet of road frontage.

- (c) **Option 3:** Sufficient existing vegetation that effectively screens and maintains rural character. The buffer shall be maintained in its natural state.

SEC 3.406 PARKING REQUIRMENTS: Parking and/or loading areas that are more than fifty (50) spaces or over ten thousand (10,000) square feet of area are subject to the following requirements:

(A) **Interior Landscape Requirements:**

- (1) **Minimum Area:** Ten percent (10%) of the total parking area shall contain islands for landscaping.

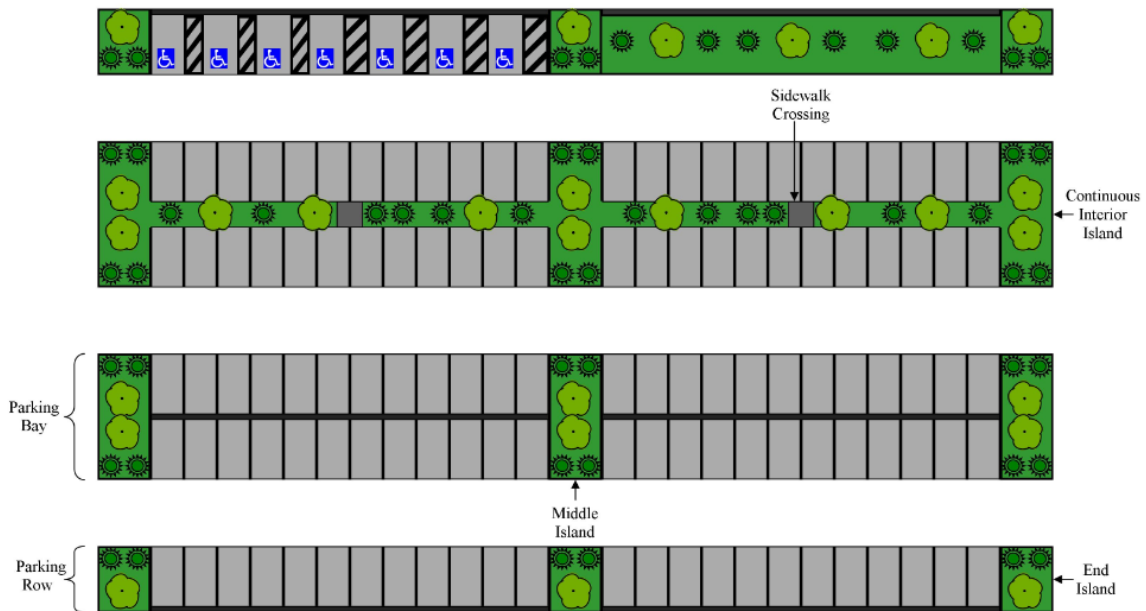
- (a) Landscape islands may be reduced to 5% of the total parking area if the parking lot surface is composed of permeable, dust-free materials. See Figure 3.406-1.

Figure 3.406-1: A permeable surface used in combination with a rain-garden.



- (2) **Island Dimensions/Area:** Islands shall be a minimum of eight (8) feet in width and have a minimum area of 144 square feet.
- (3) **Depth:** Islands shall be installed below the level of the parking lot surface to allow for capture of storm water runoff; however, the approving authority may reduce this requirement based on topography and storm water flow. Islands that sit below the parking lot surface must be composed of at least one of the following:
 - (a) Rain garden
 - (b) Subsurface storage vault, cistern, or aggregate base to accommodate for increased water intake.
- (4) **Distribution:** Islands shall be designed and distributed with the following standards:
 - (a) Islands shall be required at the end of each parking row.
 - (b) A maximum of 12 parking spaces in a row can occur before a landscaped island is required. See figure 3.406-3.
 - (c) A continuous island is required for every two (2) parking bays and shall be placed between every other parking bay or as determined by the approving authority to allow for safe automobile and pedestrian circulation. See figure 3.406-3.
 - 1. A sidewalk crossing shall be provided for every 60 feet within a continuous interior island.

Figure 3.406-3: Illustration of interior landscaping distribution.



- (5) **Trees and Shrub Specifications:** The following standards shall apply to islands within parking areas:
- (a) All trees shall have a one and three-fourths inch (1 ¾") diameter (as measured six [6] inches above ground) at the time of planting.
 - (b) There shall be a four (4) foot minimum distance to all tree centerlines from the edge of the parking area.
 - (c) For single-loaded parking rows, end islands and middle islands must contain one (1) tree and two (2) shrubs.
 - (d) For double-loaded parking rows, end islands and middle islands must contain two (2) trees and four (4) shrubs.
 - (e) For continuous islands, one (1) tree and two (2) shrubs per every 40 lineal feet is required.
 - (f) Trees shall retain visibility near the ground and provide for a clear sight distance.
 - (g) Shrubs shall not exceed more than three (3) feet in height or be placed in a location that could cause a traffic or visual hazard.

SEC 3.407 OTHER REQUIREMENTS:

- (A) **Street Buffer:** Minimum width of eight (8) feet containing plant material inclusive of non-invasive deciduous trees. Ground cover and shrubs shall provide a visual screen maintained at a height of not greater than three (3) feet. Refer to Section 3.405(A).
- (B) **Ground Cover:** Grass or ground cover shall be planted on all portions of the required buffer areas not occupied by other landscaped material.
- (C) **Detention and Stormwater Management Facilities:** Detention and storm water management facilities shall be landscaped and maintained per the applicable requirements of the Warren County Engineer's Office and the Warren County Soil and Water Conservation District. Detention basins and slopes shall be regularly maintained.
- (D) **Vehicle Overhang:** Parked vehicles may overhang into the interior landscaped area not more than two and one half (2 1/2) feet. Wheel stops shall be provided.

SEC 3.408 MAINTANENCE:

- (A) 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.
- (B) Unhealthy and dead plants shall be replaced within one (1) year, or by the next planting season, whichever comes first. The determination of whether a plant is unhealthy shall be at the discretion of the Zoning Inspector or a recognized landscape professional.
- (C) The effectiveness of screening shall be maintained as the plant materials mature.