

Sec. 26-176. Landscaping standards.

(a) *Purpose and applicability.*

(1) *Purpose.* Recognizing that trees and landscaping contribute to the public health, safety, and welfare, Richland County has set standards for landscaping throughout the unincorporated areas of the county. Among the benefits of trees, shrubs, and other plants are: improved air quality; beneficial climate modification; reduction of glare, noise, odors and dust; reduction of storm water runoff and flooding; screening of undesirable views; provision of buffers between incompatible land uses; shelter and food for birds and other wildlife; and the aesthetic enjoyment provided by the diversity and dynamism of the planted landscape. All of these benefits contribute to a higher quality of life, enhancing the appeal and economic value of both residential and business properties in the county. It is the intent of the requirements set forth in this section to provide for landscaping along public rights-of-way (road protective yards), between dissimilar uses (buffer transition yards); and in and around parking lots (vehicular surface area landscaping). Screening for loading, trash collection, display, and utility areas is required and tree protection standards must be met for all developments to which this section applies. To ensure that landscaping continues to thrive and enhance the quality of life in Richland County, requirements for maintenance are also included.

(2) *Applicability.*

a. Any new development must fully comply with the pertinent requirements of this section unless specifically exempted elsewhere in this chapter.

Exemptions: These requirements shall not apply to:

1. *Single-family detached and two-family dwellings.* Individual single-family detached and two-family dwellings that are located on separate lots recorded with the Richland County Register of Deeds office, and any existing lots zoned for single-family or two-family dwellings shown by a recorded plat on or before July 1, 2005, shall not be subject to the requirements set forth in this section. However, the construction in a subdivision of single-family or two-family homes shall be subject to buffer transition yards (Section 26-176(f)); tree protection (Section 26-176(j)), excluding street protective yards; and completion and maintenance (Section 26-176(k)).

2. *Public and private utilities.* Public and private utilities are not subject to the requirements of this section, except when a land development permit or subdivision approval is required. Such utilities may include, but are not limited to, storm drainage installation, road construction, water and sewer construction, and electric, gas, communications, and other similar service installations.
 3. *Existing structures and vehicular surface areas.* Existing buildings, structures, and vehicular surface areas are exempt from the requirements of this section, unless they are involved in new construction or expansion as explained in Section 26-176(a)(2)b. below.
- b. *Extent of compliance required.* Any new development, other than those exempted above, must fully comply with the requirements set forth in this section: (Ord. 055-12HR; 10-16-12)
1. *Vehicular surface area expansions.* Any new, additional or expanded portions of vehicular parking areas must fully comply with the requirements for vehicular surface area landscaping (Section 26-176(g)).
 2. *Expansions.* Any structure for which there is an expansion that, singularly or collectively, equals twenty-five percent (25%) or more of the gross floor area of an existing building and/or twenty-five percent (25%) or more of the existing vehicular parking area, must comply with the regulations of this section as follows:
 - [a] *Vehicular surface area requirements (Section 26-176 (g)).* Full compliance with vehicular surface area requirements in the area of expansion of said vehicular surface area and fifty percent (50%) compliance with the interior vehicular surface area planting requirements for the existing portions of the vehicular surface area.
 - [b] *Buffer transition and street protective yard requirements (Section 26-176(f) and Section 26-176(e)).* Full compliance is required.
 - [c] *Screening (Section 26-176(h)).* Full compliance with the screening standards is required for all trash collection, loading, or display areas.

3. *Parking reductions to facilitate compliance in existing developments.* In order to facilitate compliance in situations involving expansion, the planning department may allow up to a ten percent (10%) reduction in the number of off-street parking spaces. (Section 26-173; TABLE 26-VII-1).
4. Any existing vehicular surface that is used to satisfy the parking requirements for a new building must fully comply with buffer transition and street protective yard requirements (Section 26-176(f) and Section 26-176(e)).

(b) *Alternative compliance.*

- (1) *Generally.* Alternative landscaping plans or plant materials may be used where unreasonable or impractical situations would result from application of the landscaping requirements. Such situations may result from streams, natural rock formations, topography, or other physical conditions; or from lot configuration, utility easements, or other unusual site conditions.
- (2) *Approval of alternative compliance.* The planning department may approve an alternate plan that proposes different plant materials or plans provided that the quality, effectiveness, durability, and performance are equivalent to that required by this section. In assessing equivalent performance of landscaping, the planning department shall take into account the number of plantings, species, arrangement and coverage, location of plantings on the lot, and the level of screening, height, spread, and canopy of the plantings at maturity.
- (3) *Appeal.* Decisions of the planning department regarding alternate methods of compliance may be appealed to the board of zoning appeals.

(c) *Landscape plan required.* Prior to obtaining a land development permit or grading permit, an applicant must receive approval of a landscape plan. A landscape plan is to be submitted with the site plan and shall include all information specified in the Development Design Manual. The plan shall be prepared by a landscape architect or other qualified landscape designer. (Ord. 055-12HR; 10-16-12)

(d) *Planting specifications.*

- (1) *Species.* Trees, shrubs, and other vegetative material shall be selected from those listed in the “Development Design Manual” or shall be approved by the planning department. Plants shall be adapted to the site conditions where they will be planted and native plantings shall be planted where possible. Trees to be planted shall meet or exceed minimum

industry standards as described in ANSI Z60.1 (current version) – American Standards for Nursery Stock. Planting shall be done according to specifications developed from the most recent edition of the “Best Management Practices for Tree Planting”, published by the International Society of Arboriculture (www.isa-arbor.com). (Ord. 055-12HR; 10-16-12)

(2) *Trees.*

a. *Size.* All large and medium-maturing trees planted in accordance with the requirements of this section, unless otherwise listed, shall be a minimum of ten (10) feet in height, and small-maturing trees shall be a minimum of eight (8) feet in height, when planted. All trees must be at least two (2) inches in caliper (measured one-half foot above ground level) when planted. However, any new trees above four (4) inches in caliper shall be measured twelve (12) inches above the ground. (Ord. 055-12HR; 10-16-12)

b. *Multi-trunk trees.* All multi-trunk trees must be in “tree form” with a maximum of five (5) stems or trunks and a minimum height of eight (8) feet at planting.

c. *Spread relationship.* The height-to-trunk caliper ratio, root ball sizes, or spread relationship for any tree to be planted shall meet the current “American Standards for Nursery Stock” as set forth by the American Association of Nurserymen.

(3) *Shrubs.* All shrubs planted to meet the requirements of this section, unless required to be larger as set forth elsewhere, shall be a minimum of three (3) gallon container size, eighteen (18) inches in height, or fifteen (15) inches in spread (depending on whether the growth habit is upright or spreading) measured from the top of the root zone. Shrubs with fifteen (15) to twenty-three (23) inches of spread shall be planted on three (3) foot centers. Shrubs with greater than twenty-three (23) inches of spread shall be planted on five (5) foot centers. In no event shall spacing exceed five (5) feet on center nor shall plants be closer than two (2) feet to the edge of any pavement.

(4) *Mulch.* All planted materials shall be mulched with an approved material in the amount (depth and area) specified in the “Development Design Manual”.

(5) *Design.* All required landscape areas shall conform to the design principles and standards set forth in the county’s “Development Design Manual”.

(6) *Diversity.* To curtail the spread of disease or insect infestation in a tree species, required plantings shall comply with the following standards: (Ord. 055-12HR; 10-16-12)

- a. When fewer than twenty (20) trees are required on a site, at least two (2) different species shall be utilized, in roughly equal proportions.
- b. When more than twenty (20), but fewer than forty (40), trees are required to be planted on site, at least three (3) different species shall be utilized, in roughly equal proportions.
- c. When forty (40) or more trees are required on a site, at least four (4) different species shall be utilized, in roughly equal proportions.
- d. Nothing in this paragraph (6) shall be construed so as to prevent the utilization of a larger number of different species than specified above.

(e) *Street protective yards.*

(1) *Location.* Street protective yards shall be located within twenty (20) feet of all existing or proposed road rights-of-way that are adjacent to the property to which this section is applicable. Such street protective yards must be located on private property and not within any road right-of-way. Portions of the property needed for driveways are exempt from street protective yard requirements. No vehicular surface, storage, utility surface, display, loading, or service area shall be permitted in a required street protective yard. (Ord. 055-12HR; 10-16-12)

(2) *Width/square footage.* The width of a required street protective yard may vary on the property, but the minimum width cannot be less than seven (7) feet and the minimum square footage of the street protective yard shall equal the length in linear feet of the property adjacent to the right-of-way times ten (10) feet.

(3) *Plantings.*

- a. *Required trees for residential subdivisions and commercial developments.* Each street protective yard shall contain at least one (1) large-maturing tree, unless overhead utility lines are present. Any tree planted within the right-of-way of an overhead utility line shall be a small-maturing tree. If a large maturing tree is planted, a spacing of thirty-five (35) feet must be used. If a small or medium maturing shade tree is planted, a spacing of twenty-five (25) feet must be used. No street protective yard shall contain less

than one (1) tree. Existing trees 2-inch caliper or greater within the street protective yard and right-of-way will be counted towards meeting this requirement. Existing pine trees will be reviewed on a case-by-case basis. (Ord. 055-12HR; 10-16-12)

- b. *Ground cover.* The entire street protective area must be covered with living material so that no soil is exposed, including ground cover and/or shrubs, except for mulched areas directly around the trees.
- (f) *Buffer transition yards.* The buffer transition yard is a landscaped area designed to provide separation and screening between land uses of different impacts.
- (1) *Determination of buffer transition yard requirements:* To determine the buffer transition yard required between two (2) adjacent land uses, the following procedure shall be followed:
 - a. Identify the proposed new or expanding land use and each existing adjacent land use. Identify the land use impact of each of these identified uses as set forth in Table VII-6 below. A proposed land use is considered existing on an adjacent property when a building permit is issued for the use. If adjacent property is vacant, and no building permit has been issued for its use, its use shall be determined by assigning it the highest level of impact in its zoning classification.
 - b. Determine the type of buffer transition yard required on each boundary (or segment thereof) of the subject parcel by referring to Table VII-7 below. The letter designations in the table refer to the type of buffer yard required.
 - c. Identify the buffer transition yard width and planting requirements for the required yard type as set forth in Table VII-8 below.

This process must be applied to each property line, except where the requirements of Section 26-176(e) concerning street protective yards apply.

- (2) *Location.*
 - a. *General.* Buffer transition yards shall be located on the property of the proposed or changing land use that is to be screened. Such transition yards shall be located between the property line and any vehicular use areas, buildings, storage, service areas, or other areas of activity on the property to be screened and shall extend along the entire property line abutting the less intensive land use.

Ornamental entry columns and gates, flagpoles, lamp or address posts, mailboxes, approved driveway openings, public utility wires and poles, fences, retaining walls, or similar structures are permitted in required buffer transition yards, provided that the general separation of land uses is achieved and that the total number of required plantings is still met. Plantings shall not obstruct the view of motorists using any road, driveway, or parking aisle.

- b. *Planting/screening in easements.* No vegetative screening or fencing that is required by this section shall be planted inside utility and/or drainage easements, excluding overhead easements, without the consent of the planning department and the easement holder. If plantings or fences inside utility and/or drainage easement areas are allowed, these plantings and fences shall be maintained in accordance with the terms of consent and any applicable maintenance provisions. Any tree planted within the right-of-way of overhead utility lines shall be a small-maturing tree.
- c. *Buffer transition yards and required yards (setbacks).* Where front, side, or rear yards (setbacks) are required by this chapter, buffer transition yards may be established within such setbacks. If the setback requirement is less than the buffer transition yard requirement, the buffer transition yard width requirement shall prevail.

(3) *Land use impact table.*

TABLE 26-VII-6

<i>Residential uses</i>	Single-family detached and duplexes	Low Impact Use
	Single-family low density	Low Impact Use
	Single-family medium density	Low Impact Use
	Single-family high density	Medium Impact Use*
	Manufactured home parks	Medium Impact Use*
	Multifamily, single-family attached – three (3) to ten (10) units	Medium Impact Use
	Multifamily, more than ten (10) units or high-rise	High Impact Use

<i>Institutional uses (public and semi-public)</i>	25,000 square feet or less	Medium Impact Use
	Over 25,000 square feet	High Impact Use
<i>Office/commercial uses</i>	25,000 square feet or less	Medium Impact Use
	Over 25,000 square feet	High Impact Use
<i>Industrial uses</i>	All industrial uses	High Impact Use
<i>Recreational uses</i>	Passive recreational uses	Low Impact Use
	Active recreational uses	High Impact Use
<i>Other uses</i>	For land uses not listed, the zoning administrator shall determine the land use impact based on the classification of similar uses.	

* Denotes required buffer for the outer perimeter of the entire contiguous site abutting any public right-of-way.

(4) *Buffer transition yard types.*

**TABLE VII-7
BUFFER TRANSITION YARD TYPES**

<i>PROPOSED USE</i>	<i>EXISTING ADJACENT LAND USE</i>				
	LOW IMPACT	MEDIUM IMPACT RESIDENTIAL	MEDIUM IMPACT NON-RESIDENTIAL	HIGH IMPACT RESIDENTIAL	HIGH IMPACT NON-RESIDENTIAL
LOW IMPACT	NONE	B	C	C	D
MEDIUM IMPACT RESIDENTIAL*	B	NONE	C	B	D
MEDIUM IMPACT NON-RESIDENTIAL	C	C	NONE	B	A
HIGH IMPACT RESIDENTIAL	C	B	B	A	C
HIGH-IMPACT NON-RESIDENTIAL	D	D	A	C	NONE

* Denotes required buffer for the outer perimeter of the entire contiguous site abutting any public right-of-way.

(5) *Buffer transition yard description table.* All proposed material planted to meet the descriptions set forth in the table below shall be equally spaced in a staggered formation along the length of the required landscape buffer or placed so as to create one hundred percent (100%) opacity at plant material maturity. (Ord. 055-12HR; 10-16-12)

**TABLE 26-VII-8
BUFFER TRANSITION YARD STANDARDS**

TYPE “A” BUFFER			
Buffer Width	1 Large-maturing Tree Per: (Ord. 055-12HR; 10-16-12)	1 Medium or Small-maturing Tree Per: (Ord. 055-12HR; 10-16-12)	1 Shrub Per:
10 - 15 Feet	300 Square Feet	400 Square Feet	50 Square Feet
16 – 20 Feet	400 Square Feet	450 Square Feet	50 Square Feet
21 – 30 Feet	500 Square Feet	500 Square Feet	75 Square Feet
31 – 50 Feet	600 Square Feet	550 Square Feet	125 Square Feet
51 + Feet	800 Square Feet	600 Square Feet	200 Square Feet
TYPE “B” BUFFER			
Buffer Width	1 Large-maturing Tree Per: (Ord. 055-12HR; 10-16-12)	1 Medium or Small-maturing Tree Per: (Ord. 055-12HR; 10-16-12)	1 Shrub Per:
10 - 15 Feet	300 Square Feet	250 Square Feet	50 Square Feet
16 – 20 Feet	400 Square Feet	325 Square Feet	75 Square Feet
21 – 30 Feet	500 Square Feet	400 Square Feet	75 Square Feet
31 – 50 Feet	600 Square Feet	450 Square Feet	125 Square Feet
51 + Feet	800 Square Feet	500 Square Feet	200 Square Feet
TYPE “C” BUFFER			
Buffer Width	1 Large-maturing Tree Per: (Ord. 055-12HR; 10-16-12)	1 Medium or Small-maturing Tree Per: (Ord. 055-12HR; 10-16-12)	1 Shrub Per:
10 - 15 Feet	300 Square Feet	200 Square Feet	25 Square Feet
16 – 20 Feet	400 Square Feet	250 Square Feet	50 Square Feet
21 – 30 Feet	500 Square Feet	300 Square Feet	50 Square Feet
31 – 50 Feet	600 Square Feet	350 Square Feet	75 Square Feet
51 + Feet	800 Square Feet	400 Square Feet	125 Square Feet
TYPE “D” BUFFER			
Buffer Width	1 Large-maturing Tree Per: (Ord. 055-12HR; 10-16-12)	1 Medium or Small-maturing Tree Per: (Ord. 055-12HR; 10-16-12)	1 Shrub Per:
*10 - 15 Feet	300 Square Feet	200 Square Feet	25 Square Feet (Ord. 055-12HR; 10-16-12)
16 – 20 Feet	400 Square Feet	225 Square Feet (Ord. 055-12HR; 10-16-12)	50 Square Feet (Ord. 055-12HR; 10-16-12)
21 – 30 Feet	500 Square Feet	275 Square Feet	50 Square Feet
31 – 50 Feet	600 Square Feet	325 Square Feet	75 Square Feet
51 + Feet	800 Square Feet	375 Square Feet	125 Square Feet

- ◆ * Note – Eight (8) foot stockade fence required for ten (10) – fifteen (15) foot Type “D” buffer.
- ◆ All existing healthy trees retained in buffer areas may be credited toward meeting the buffer yard requirements. (Ord. 055-12HR; 10-16-12)
- ◆ All buffer widths greater than fifteen (15) feet must be rounded up to the next whole number.

(6) *Buffer yard reductions.* Below are listed mechanisms by which the width of a required buffer transition yard may be reduced. Notwithstanding any of the provisions set forth in this section, no property on which a buffer transition yard is required shall have such a yard that is less than ten (10) feet in width.

a. *Fences.* The addition of a closed wooden fence in the required transition yard allows reduction of the required width of the applicable buffer transition yard by fifty percent (50%) if said fence meets the following standards:

1. *Height and arrangement.* The fence must be a minimum of eight (8) feet in height, measured on the side facing away from the property to be screened. Such fence must also have its finished side facing away from the property to be screened. The fence shall be solid and opaque, and shall include provision for access to all landscape materials.
2. *Materials.* Rot-resistant wood is the acceptable material. Chain link fencing does not meet buffer yard standards. Materials used should be consistent with materials, other than chain link fencing, commonly used in surrounding neighborhoods.
3. *Required plantings.* The number of required trees and shrubs is reduced by fifty percent (50%) in a buffer yard in which a fence is installed. At least one-half (½) of the required plantings shall be installed and maintained on the side facing the less intensive use.
4. *Construction.* The buffer fence installation shall be incorporated as early as possible in the sequence of construction.

b. *Masonry walls.* The addition of a masonry wall along the length of the required buffer yard allows reduction of the required width of the yard by fifty percent (50%) and the amount of required plantings by fifty percent (50%), if said wall meets the following standards:

1. *Height.* The wall must be a minimum of six (6) feet in height measured on the side of the wall facing away from the property to be screened.

2. *Materials.* Materials shall be brick, stone, stucco, or textured block. The exterior surface of the wall shall not be of cinder block.
 3. *Required plantings.* If a masonry wall that meets the above standards is installed, the planting of shrubs shall be optional and not mandatory, and small-maturing trees may replace one-half (½) of the required shade trees. The requirement that one-half (½) of the buffer yard's trees shall be evergreen still applies.
- c. *Grade elevation changes.* The existence of a natural or man-made grade separation in the required buffer transition yard allows reduction of such yard by twenty-five percent (25%) in width if said elevation change achieves a screening effect similar to a fence and meets the following standards:
1. *Elevation.* The grade change must be at least six (6) feet in elevation.
 2. *Slope.* The side slopes of such grade shall not be greater than three to one (3:1). (Ord. 055-12HR; 10-16-12)
 3. *Retaining wall.* A greater slope is allowable if it is retained by a structurally sound retaining wall that meets engineering standards for such a wall.
 4. *Relationship to properties from which developing property is to be screened.* The developing property must be located at an elevation lower than the properties from which it is to be screened.
 5. *Location of required plantings.* In order to maximize the effectiveness of the screen, the required plantings shall be located at the top of the slope in the reduced buffer transition yard.
- (7) *Buffer material specifications.* See Section 26-176(d) for general specifications for trees, shrubs, and other vegetation.
- a. *Trees.*
 1. *Size.* Except as provided above under subsection (6), trees planted in a buffer transition yard shall be large maturing trees unless within fifteen (15) feet of an overhead power line, in which case small maturing trees that will not exceed

fifteen to twenty (15-20) feet in height at maturity shall be used. (Ord. 055-12HR; 10-16-12)

2. *Species.* One-half (½) of the required trees shall be locally adapted evergreen species.
3. *Distribution.* Trees shall be distributed throughout the yard so as to minimize gaps between them. Trees counted to meet the required number shall be spaced at least ten (10) feet apart.

- b. *Shrubs.* All shrubs are to be evergreen and shall be a minimum of three (3) feet in height and have a minimum crown width of twenty-four (24) inches when planted. All shrubs shall be expected to reach a height of eight (8) feet or greater (to maximize screening potential) within three (3) years of planting, and shall not be spaced greater than six (6) feet on center.

(g) *Vehicular surface area landscaping.*

- (1) *General.* Vehicular surface areas shall comply with the following landscape standards. There are two (2) vehicular surface area planting requirements that may apply to a development. One requirement deals with screening and the other deals with interior parking lot plantings.

- (2) *Vehicular surface area separation/screening.*

- a. *Separation.* When any vehicular use area is located within twenty (20) feet of an abutting property and no buffer yard is required, a planting strip shall be provided to ensure that parking lots are separated from one another. The planting strip shall be a minimum of five (5) feet wide and shall be planted between the parking, loading or other vehicular use area and the abutting property, except along approved driveway openings. Five (5) evergreen or deciduous shrubs, at least twenty-four (24) inches in height and maintained at thirty-six (36) inches in height, shall be planted for every twenty (20) linear feet of property line that parallels the vehicular surface area. The remaining ground area shall be mulched or planted in a variety of evergreen plants, hydro-seed or sod. Adjacent businesses on separate lots that share parking or driveways shall be exempt from this requirement. (Ord. 055-12HR; 10-16-12)
- b. *Screening from roads, sidewalks, or alleys.* In addition to requirements for street protective yards (see Section 26-176(e)), vehicular use areas shall be screened from adjacent roads,

sidewalks, or alleys. The space in which this screening is to be located (which shall be at least the width required for the street protective yard, or where no street protective yard is required, a minimum of five (5) feet) shall be planted with a screen that meets the following standards:

The space shall be planted with a fifty percent (50%) opaque, continuous screen that must be at least three (3) feet high and consist of plant material alone or berms, fences, walls, or grade changes combined with plant material.

A vegetative buffer shall consist of at least one (1) evergreen or deciduous shrub planted for every five (5) feet of vehicular use area screen required. Such shrubs shall be at least twenty-four (24) inches in height and shall be maintained at a height of thirty-six (36) inches.

If a fence or wall is used, at least one (1) shrub must be planted for every eight (8) linear feet of fence or wall.

Berms and grade changes must be completely covered with vegetation. (Ord. 055-12HR; 10-16-12)

- c. *Groundcover.* Grass or other ground cover shall be placed on all areas within all perimeter landscape areas not occupied by other landscape material or permitted access ways.
- d. *Use of perimeter landscape areas.* Vehicle stops or other design features shall be used in all parking facilities without curbing so that parked vehicles do not overhang more than two (2) feet into perimeter landscape areas. The vehicle side of the wheel stop shall be no more than eighteen (18) inches from the end of the parking space.

(3) *Vehicular surface area interior landscaping.*

- a. *Placement.* The required interior landscaped planting areas shall be placed in any of the following locations: within or adjacent to the parking lot area as tree islands; at the end(s) of parking bays; inside medians that are eight (8) feet or greater in width; as part of a continuous street protective yard; or as a vehicular surface area separation yard. (Ord. 055-12HR; 10-16-12)
- b. *Plants.* Vehicular parking areas shall be planted with one (1) large shade tree for every twenty (20) parking spaces. Each planting area shall contain at least one (1) large maturing shade tree. Within

fifteen (15) feet of overhead power lines, small maturing trees shall be planted in place of large shade trees at a rate of two (2) small trees for each required large shade tree. When planted in groupings, trees must be planted a minimum of twenty-five (25) feet apart. Planted trees shall be a minimum of two (2) inch caliper to a maximum of three (3) inch caliper. The tree species used shall be limited to those that are listed in the current and approved “Tree Listings”, which is on file in the planning department, and can tolerate wet and dry conditions. Trees and plants that are planted in parking lot islands that function as stormwater quality treatment BMPs must consist of native trees and plants. (Ord. 055-12HR; 10-16-12)

- c. *Distance from parking spaces.* No vehicular parking space shall be located farther than fifty (50) feet from the tree trunk of a shade tree in a planting area with one (1) tree. Distances between trees and parking spaces separated by intervening building(s) shall not be considered in meeting this requirement. (Ord. 055-12HR; 10-16-12)
- d. *Size of planting areas.* Unless otherwise provided, a minimum of two hundred (200) square feet of planting area is required for each tree. No portion of the planting area shall be less than five (5) feet in width or length.
- e. *Large vehicular surface areas greater than two (2) acres in size (parking lots and vehicular display areas).* In addition to the requirements set forth in subsection b, above, all new and expanded vehicular surface areas greater than two (2) acres in size shall meet all of the following (unless exempt under Section 26-176(a)(2)b.2.):
 - 1. *Planted Median Strips.* Large vehicular surface areas (parking lots and vehicular display areas) must be broken by continuous planted medians. Four (4) planted medians, each containing at least one thousand one hundred thirty four (1,134) square feet of planted area, are required for every two (2) acres, rounded off to the closest two (2) acre increment. The minimum median width shall be eight (8) feet. The length of the planted median shall be uninterrupted except for access ways. (Ord. 055-12HR; 10-16-12)
 - 2. *Industrial and Warehouse (storage, loading, and maneuvering areas).* All existing, new, and expanded storage, loading, and maneuvering areas are exempt from subsection (3)e. above. All

other parking areas (excluding trailer parking) shall be subject to subsections (3) a., b., c., and d. above.

- (4) *Standards for vehicular display areas.* Interior plantings for vehicular surface display areas shall meet those standards contained in subsection (3) above. No stored vehicle shall be located farther than forty (40) feet from the edge of any landscaped planting area. For interior landscaped planting areas in such display areas, it is acceptable to replace shade trees with small maturing trees.
- (h) *Screening for loading areas, trash collection areas, outdoor storage display areas, and utility service areas.* All loading areas, trash collection areas (including dumpsters), outdoor storage display areas, and utility service areas visible from a public road or adjacent property line shall be screened from such adjacent road or property unless already screened by an intervening building or buffer transition yard. Landscaping shall not interfere with the access and operation of any such structure or facility. Screen types include:
 - (1) *Hedge.* A continuous hedge of evergreen and/or densely twigged deciduous shrubs planted in a five (5) foot strip spaced a maximum of five (5) feet apart or a row of evergreen trees planted no more than eight (8) feet apart. The shrubs shall be planted at a minimum height of forty-eight (48) inches and the hedge shall exceed the height of the receptacle by at least six (6) inches at the plants' maturity. (Ord. 055-12HR; 10-16-12)
 - (2) *Fence or wall.* A fence or wall that matches the height of the receptacle and with the finished side of the fence facing the abutting road or property. Fences longer than twenty-five (25) linear feet shall be landscaped with trees and/or shrubs planted in a minimum five (5) foot planting area, except around access areas, spaced no farther than eight (8) feet apart in order to screen at least fifty percent (50%) of the fence or wall. (Ord. 055-12HR; 10-16-12)
- (i) *Screening for stormwater management area.* Unless designated as an integral part of a landscape plan or features as an amenity (i.e., water features in a wet bottom basin or recreation/open space in a dry bottom basin), all detention ponds, retention ponds, or other similar holding area shall be screened from view from any existing or future private or public street and from adjoining developable property. (Ord. 055-12HR; 10-16-12)
- (j) *Visual screening for thoroughfares and arterial roadways.* Thoroughfares or arterial roadways, when constructed within areas zoned for residential use, shall provide a continuous visual screen consisting of vegetation, berms, embankments, or a combination of such materials, as appropriate. The use of existing vegetation is encouraged. When the existing vegetation is inadequate to function as a visual

screen, it shall be augmented by two (2) staggered rows of shrub material, which will provide such a screen at maturity.

- (k) *Protection of existing trees during development.* No grand tree shall be removed unless it is determined that there is no alternative due to unavoidable grading or because of required configuration of essential utilities or buildings. In addition, where tree protection is required, no grading or other land-disturbing activity can occur on a site until protective barriers are installed by the developer. Protective barriers must protect the entire critical root zone. No grading, trenching or equipment shall occur within the protective barrier unless an alternative plan has been submitted to and approved by the planning department. All work performed inside the protective barrier, including tunneling underneath the critical root zone, must be approved by the planning department and under the supervision of a certified arborist. The diameter of the preserved trees and the location of protective barriers must be shown on the landscape and grading plans, with the dimension between the tree trunk and barrier indicated. A description of acceptable protective barriers is set forth in the “Design Manual”, which is on file in the planning department. (Ord. 055-12HR; 10-16-12)
- (1) *Trees to be protected:* On sites where compliance with this section is required, the owner/developer shall protect the following trees:
- a. Grand trees.
 - b. All trees in fair or better condition that are ten (10) inches in diameter or larger that are located in a protected zone (a portion of the property required by permit to remain in natural open space or areas required by permit to be landscaped, or to be used as buffer transition yards and/or street protective yards). (Ord. 055-12HR; 10-16-12)
- (2) *Tree replacement plan.* In accordance with subsection (j)(1) above, a tree replacement plan shall be submitted and approved before any protected trees are removed. Grand trees that have been approved for removal shall be replaced at a ratio of 6:1, with trees at a minimum of two (2) inch caliper to a maximum of three (3) inch caliper. All other protected trees that have been approved for removal shall be replaced at a ratio of 3:1, with trees at a minimum of two (2) inch caliper to a maximum of three (3) inch caliper. (Ord. 055-12HR; 10-16-12)
- (3) *Exemptions – tree protection.* Commercial timber, tree farms, agricultural operations, or timber clearing on private property are exempt from tree protection requirements. (Ord. 071-12HR; 11-20-12)

- (4) *Tree protection plan.* A tree protection plan shall be submitted prior to any proposed grading or clearing on site. The following information shall be identified and submitted:
- a. An infra-red and/or aerial photograph (no more than 5 years old) may be utilized to assist in the location of the protected trees. A tree protection plan shall be submitted identifying the footprint or proposed footprint of any building or structure, areas of clearing, grading, trenching, and other earth moving activities, protected trees and/or groupings of trees designated to be saved (including estimated number and average diameter or circumference), tree protection zones, ponds, creeks, wetlands, and other important natural features.
 - b. If the information provided in subparagraph a. above is inadequate to develop an approved tree protection plan, a site visit or a tree survey or inventory of the affected area may be required. (Ord. 055-12HR; 10-16-12)
- (5) *Tree survey or inventory.* A tree survey or inventory is required for all areas that are intended for development, as well as all undisturbed areas that contain trees that are being retained to meet the requirements of this subsection (k). The tree survey shall be prepared by a licensed and/or certified arborist, engineer, forester, landscape architect, or surveyor that will determine the size, species, health, condition, and structural integrity of forest trees and whether or not said trees are in good enough condition and safe enough to live beyond construction activity. (Ord. 055-12HR; 10-16-12)
- (1) *Completion and maintenance.* The owner or lessee of the property where landscaping is required shall be responsible for the maintenance and protection of all plant and screening material and fencing. Landscaped areas shall be maintained in good condition. No required landscape area shall be used for accessory structures, trash collection, parking, or other functional use unless otherwise specified in this chapter. Deed restrictions may be placed on lots that require each owner to maintain that portion of screening or landscaping that is on his/her property. Where a homeowners' association and annual funding is required by appropriate, enforceable deed restrictions, the screening and landscaping may be either on a separately described private parcel of land or on private property in a landscape easement, in common ownership of the homeowners' association of said subdivision, and shall be maintained by the homeowners' association. Failure to maintain plant material, or to replace dead, damaged, or diseased material, or to repair a damaged buffer structure shall constitute a violation of this chapter. All landscaping shall be installed in accordance with the approved landscape plan unless revisions are approved by the planning department and noted in writing on the plan. Neither a certificate of

occupancy nor a business license for any business or use on a site with such an approved plan shall be issued until the installation of the required landscaping is approved or a performance guarantee is posted with the planning department in the minimum amount of one hundred twenty five percent (125%) of the total cost of the required uncompleted landscaping, including the labor. A site not requiring a certificate of occupancy shall not be used until the required landscaping is installed or a guarantee posted. The guarantee shall be released and returned to the party posting the guarantee upon installation of all required landscaping and acceptance by the planning department of such installation. If the landscaping is not complete and in accordance with approved plans, the guarantee shall be forfeited to and used by Richland County to complete the required landscaping with any remaining funds being returned to the party who posted the guarantee. (Ord. 055-12HR; 10-16-12)

- (m) *Irrigation.* All required planting areas, except stormwater management areas in residential subdivisions, shall be mechanically irrigated, provided that plant material in detention ponds, retention ponds, or other similar holding areas may be manually watered with water bags for at least one (1) year to ensure that the landscape is established. Bubbler or drip irrigation systems are required in order to reduce water consumption and overspray onto pedestrian and vehicle use areas. This shall include all required planting areas except areas within developments containing less than ten (10) parking spaces. However, these exempted areas shall have an exterior water source (such as a hose bib) located within one hundred (100) feet of all required planting areas. Irrigation systems should first make use of all available surface runoff or other retained or detained stormwater as the water supply source. If the project area is required to be irrigated, an irrigation plan must be provided, or the following statement must be provided on the site and landscaping plan: "All planting areas shall be mechanically irrigated". (Ord. 055-12HR; 10-16-12)
- (n) *Mitigation policy.* When protected trees have been removed or damaged without authorization, a restoration plan, depicting the type, size, and proposed location of each replacement tree, shall be submitted to the planning department for approval. The zoning administrator may require tree replacement at a ratio not to exceed 4:1, with trees at a minimum of 4-inch caliper. No certificate of occupancy shall be issued for any development until all applicable restoration conditions have been met.

