

ARTICLE XV. BUFFERING, SCREENING AND TREES

Section 208: Applicability

This article shall apply to all site plan and subdivision applications approved after the effective date of this ordinance. This article applies to the construction of any parking lot containing more than five parking spaces. This article shall apply to the enlargement of any parking lot resulting in more than five spaces but not to the resurfacing of an existing lot. (Amended 2/10/05)

PART I. BUFFERING AND SCREENING

Section 209: Purpose

- A. Minimal buffering and screening can provide an impression of separation of spaces and more extensive screening can shield entirely one use from another;
- B. Buffering and screening can provide a greater sense of privacy from visual or physical intrusion varying with the intensity of the screening;
- C. Buffering and screening can protect and enhance property values; and
- D. Buffering and screening protect the general health, safety and welfare of the town and its residents.

Section 210: General Buffering and Screening Standards

Every development shall provide sufficient buffering and screening so that neighboring properties are screened from any adverse effects of the development and the development is screened from any adverse effects of adjacent uses such as streets.

Section 211: Compliance with Buffering and Screening Standards

- A. The following buffer yards shall be provided between various uses:
 - 1. Commercial adjacent to residential: 15 feet
 - 2. Commercial adjacent to institutional: 10 feet
 - 3. Commercial adjacent to agricultural conservancy: 15 feet
 - 4. Multi-family residential next to single family, duplex, townhouses or commercial: 20 feet
 - 5. Residential adjacent to agricultural conservancy: 15 feet
 - 6. Institutional adjacent to residential: 15 feet
 - 7. Institutional adjacent to commercial: 10 feet
 - 8. Institutional adjacent to agricultural conservancy: 15 feet

A solid wall or fence at least six (6) feet in height may be used to reduce the required buffer yard by 50 percent, if the remaining yard can be effectively planted. (Amended 2/10/05)

- B. Buffer yards shall contain sufficient trees and shrubs to provide an opaque screen between uses. An opaque screen is intended to exclude all visual contact between uses and to create a strong impression of separation. In general, small trees planted at a rate of 1 tree per 30 feet or large canopy trees planted at a rate of 1 tree per 40 feet and 1 evergreen tree planted at a rate of 1 tree per 20 feet shall be deemed to meet the requirements of this section. Evergreen shrubs planted at a rate of 3 shrubs per 10 feet in buffer yards of 10 feet and doubled in buffer yards of 25 feet shall be deemed to meet the requirements of this section. Plants should be placed to achieve maximum screening from intensive use areas of adjoining properties. Existing vegetation, such as hedgerows and trees, may be used to satisfy the requirements of this Section.
- C. No required buffer yard shall exceed 10 percent of the lot area of the subject property, but in no instance shall the buffer yard be less than five feet.

Section 211.1 Special Buffering Requirements for Rural Resort (Added 5/12/06)

- A. A minimum of the first 50 feet of setback or yard area adjacent to any lot three acres or less in size shall be landscaped and screened with solid fencing and/or landscaped area the provides year-round screening and shall be planted in accordance with the provisions of Section 211.2. The use of natural topography, vegetation and trees that provide screening at the required density, depth and height shall be credited towards this buffer yard requirement.
- B. Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.
- C. Plant materials shall be provided within the required buffer yard in accordance with the provisions of Section 211.2 and shall be selected in accordance with the requirements of Section 217.

Section 211.2 Special Planting Requirements for Rural Resort Buffers (Added 5/12/06)

Required buffer yards in rural resorts shall be planted in accordance with the following requirements:

	Required plant units - minimum per 100 lineal feet:
A. Front yard buffer width: 20' minimum	3 canopy trees 3 understory trees 24 shrubs 3 evergreen trees
B. Rear yard buffer width 25' minimum	4 canopy trees 7 understory trees 30 shrubs (75% evergreen) 4 evergreen trees
C. Side yard buffer width 20' minimum	2 canopy trees 5 understory trees 20 shrubs 2 evergreen trees

Section 212: Flexibility in Administration Required

- A. The council recognizes that the buffering and screening requirements of this article cannot address every situation because of the wide variety of developments and the relationships between them. The council may permit deviations from the presumptive requirements of Section 211 whenever such deviations meet or exceed the standards contained in Section 210.
- B. Whenever the council allows or requires a deviation from the requirements of Section 211, it shall include the screening requirement on the zoning permit along with the reasons for allowing or requiring the deviation.

PART II. TREES

Section 213: Purpose

- A. The preservation of existing trees and the planting of trees, shrubs and other vegetation reduces erosion and sedimentation;
- B. Trees provide shade in summer and windbreaks in winter;
- C. Trees restore soils and land cleared as a result of construction or grading;
- D. Trees are proven producers of oxygen, an element necessary for human survival;
- E. Trees are an invaluable physical, aesthetic and psychological counterpoint to the town setting; and,
- F. Trees protect the general health, safety and welfare of the town and its residents.

Section 214: Preservation of Trees

- A. Every development shall retain all existing, healthy trees at least 18 inches or more in diameter measured at three feet above the ground unless such retention would unreasonably burden the development.
- B. No excavation, embankment, or other subsurface disturbance shall be undertaken within an area equal to one foot of horizontal distance for every inch of diameter of any tree 18 inches in diameter or greater and no impervious surface may be located within 12.5 feet of any such tree unless compliance with this section would unreasonably burden the development.
- C. A development is unreasonably burdened if the proposed activities on a lot would have to be substantially altered to accomplish such retention and such alteration would result in an unreasonable hardship on the developer as determined by the council.
- D. If the preservation of trees required in subsections A. and B. above results in the elimination of space that would otherwise be devoted to parking and, as a result, the parking requirements of Section 222 cannot be met, the number of parking spaces required may be reduced by the number of spaces "lost", up to a maximum of 15 percent of the required parking spaces.

Section 215: Street Tree Planting

Street trees shall be required along both sides of all newly constructed streets which are dedicated for public use. Street trees shall be planted in an area generally within 20 feet of the public right-of-way. The developer shall provide an average of at least one deciduous canopy tree for every 40 feet of street frontage. All trees shall have a minimum caliper of two inches when planted and a trunk at least 12 inches in diameter when fully mature.

Section 216: Parking Lot Landscaping

- A. Perimeter Landscaping Adjacent to Public Street - 5 Spaces or More (Added 6/10/04)
 - 1. A minimum ten-foot (10') wide perimeter landscape strip shall be provided between any parking lot and public right-of-way. If the perimeter landscaping strip is used for best management practices, such as a rain garden, the Commission upon the recommendation of

the Town Engineer and Zoning Administrator may reduce the perimeter landscape strip to eight feet (8').

2. The perimeter strip shall include the following minimum landscape requirements (Amended 06/10/04):
 - a. One (1) canopy tree per 30 linear feet (lf) of street frontage;
 - b. Two (2) ornamental trees per 30 lf of street frontage;
 - c. Canopy trees shall have a minimum caliper of 4 inches and be of a species selected from the Town of Middleburg Approved Tree/Shrub List;
 - d. Ornamental trees shall have a minimum caliper of 2 inches and be of a species selected from the Town of Middleburg Approved Tree/Shrub List;
 - e. Shrubs and ground cover shall be installed, as appropriate to planting size and species, to provide full coverage of the area and placed to complement tree landscaping. Invasive species are to be avoided. Maximum mature height of shrubs shall not exceed 4' so as not to impair automobile sight distance. The requirements of Section 215 may be met if in accordance with Section 216.A.. (Amended 2/10/05).
- B. Perimeter Landscaping Adjacent to Abutting Properties (Added 6/10/04)
 1. A minimum five foot (5') wide perimeter landscape strip shall be provided between any parking lot and abutting properties. The landscape strip shall be a combination of shrubs, groundcover, fences, brick or stone walls, seat walls or planter boxes to provide a semi-opaque screen that has a minimum height of 30".
 2. The Commission may approve the perimeter landscape width to be a minimum of three feet (3') if two or more of the following conditions are met:
 - a. a semi-opaque screen is installed consisting of a stone or brick wall, planter boxes, seat walls, evergreen hedge or combination of these elements not less than 30" in height;
 - b. an existing durable barrier, such as a hedge or wall is located on the abutting property adjacent to the perimeter landscape strip;
 - c. the perimeter landscape strip is used for best management practices, such as a rain garden.
- C. Interior Landscaping – 5 Spaces or More (Added 6/10/04)
 1. A minimum of five percent (5%) of the interior parking lot area shall be landscaped. No landscaped area shall be less than 50 square feet. The landscaped area shall be planted at a rate of one tree and three shrubs per ten parking spaces. Each parking lot island shall contain a minimum of one canopy tree. For parking lots with less than 10 spaces, this requirement can be met by increasing the perimeter landscaping by the equivalent square footage.
 2. The following interior landscaping requirements shall be provided for lots of 10 spaces or more:
 - a. One (1) landscape island per 10 parking spaces. Landscape islands shall be a minimum of 162 square feet (sf), with a dimension of not less than 9' x18';
 - b. Each landscape island shall contain one (1) canopy tree with a minimum caliper size of 4 inches and be of a species selected from the Town of Middleburg approved Tree/Shrub List;

- c. Shrubs and ground cover in the landscape islands shall be installed, as appropriate to planting size and species, to provide full coverage of the area and placed to complement tree landscaping. Invasive species are to be avoided. Maximum mature height of shrubs shall not exceed four feet (4') so as not to impair automobile sign distance;
 - d. Landscaping materials shall be located within planting islands to allow for the mature size of the species and in a manner which will protect the plants from vehicles. Vehicles are presumed to have a body overhang of 3'6".
3. The Commission may approve some or all of the required landscape islands to be aggregated provided that the aggregate total of internal landscaping shall equal or exceed the landscaped area otherwise required within the landscaped islands.
- D. Other General Matters:
1. Parking lots shall be designed to prevent vehicles from striking trees. Vehicles are presumed to have a body overhang of three feet, six inches. (Amended 6/10/04)
 2. Berms shall have a maximum slope of 3:1 (Amended 6/10/04)
 3. The council may waive the requirements of this Section in any commercial district when such landscaped areas cannot be reasonably provided because of existing structures or other unique features of the central business area; provided, however, that if landscaping requirements are waived, the applicant shall make an in lieu cash payment to the town in an amount equivalent to the cost of the landscaping so waived to be used by the Town solely for public landscaping purposes. (Amended 6/13/02, 6/10/04)

Section 217: Approved Tree/Shrub Material (Added 6/10/04)

- A. Trees and shrubs included in the list in subsection 217.D. may be used to satisfy the planting requirements of this article. The list is divided into the following categories: canopy trees, ornamental trees and shrubs. Selections must conform to the varieties and functions identified on this list unless an alternative is approved per subsection 217.B.
- B. Any applicant may apply to the Zoning Administrator for approval of substitute plants for any plant listed on the Town of Middleburg Approved Tree/Shrub List. The Zoning Administrator shall refer such requests to the Streetscape Committee for review and recommendation. The Zoning Administrator shall approve or disapprove the substitute plant request within sixty (60) days of such application.
- C. The Streetscape Committee shall annually review the Town of Middleburg Approved Tree/Shrub List and recommend any changes to the Town Council, which shall refer the matter to the Planning Commission for hearing and recommendation in accordance with the provisions of this ordinance.
- D. Town of Middleburg Approved Tree/Shrub List: (Tree/Shrub List Begins on Following Page)

CANOPY TREES

COMMON NAME	Scientific Name	Height (ft.)	Spread (ft.)	Deciduous /Evergreen	NATIVE	Sun/ Shade	Special Features
Bald Cypress	Taxodium distichum	50-70	20-30	D	Yes	Sun	Long-living
Birch, River	Betula nigra 'Duraheat'	60-70	20-30	D	Yes	Sun	Exfoliating bark
Black Gum	Nyssa sylvatica	30-50	20-30	D	Yes	Sun	Good Fall color
Maple, Red	Acer rubrum	40-70	30-50	D	Yes	Sun	Good Fall color
Maple, Sugar	Acer saccharum	60-75	2/3 ht.	D	Yes	Sun	Legacy & Green Mountain cultivars recommended
Oak, Northern Red	Quercus rubra	60-75	=/> ht.	D	Yes	Sun	
Oak, Willow	Quercus phellos	40-60	30-40	D	Yes	Sun	Needs space, fast growing, small leaves, good shade
Oak, White	Quercus alba	50-80	=/> ht.	D	Yes	Sun	Needs space
Oak, Swamp White	Quercus bicolor	50-60	=/> ht.	D	Yes	Sun	Needs space
Oak, Chestnut	Quercus prinus	60-70	=/> ht.	D	Yes	Sun	Dry, rocky sites
Plane Tree, London	Platanus x acerifolia	75-100	75-100	D	Yes	Sun	
Sweetgum	Liquidambar rotundiloba	60-75	2/3 ht.	D	Yes	Sun	Fruitless variety
Dawn Redwood	Metasequoia glyptostroboides	70-100	25-30	D	No	Sun	Pyramidal habit, wet areas, requires space
Elm, Lacebark	Ulmus parvifolia	40-50	40-50	D	No	Sun	Recommend 'Allee'
Ginkgo	Ginkgo biloba	50-80	=/> ht.	D	No	Sun	Only male trees as fruit are messy
Golden Raintree	Koelreuteria paniculata	30-40	=/> ht.	D	No	Sun	Summer blooming
Hornbeam, European	Carpinus betula	40-60	30-40	D	No	Sun	Recommend 'Columnaris,' a good narrow habit.
Linden, Littleleaf	Tilia cordata	60-70	1/2 - 2/3 ht	D	No	Sun	Summer bloom
Linden, Silver	Tilia tomentosa	50-70	1/2 - 2/3 ht	D	No	Sun	Summer bloom, leaves have silver underside
Pagoda, Japanese	Sophora japonica	50-75	50-75	D	No	Sun	Blooms July – August, fine leaf
Zelkova, Japanese	Zelkova serrata	50-80	50-80	D	No	Sun	Vase shaped, ascending branches

CANOPY TREES (continued)

COMMON NAME	Scientific Name	Height (ft.)	Spread (ft.)	Deciduous /Evergreen	NATIVE	Sun/ Shade	Special Features
Arborvitae	Thuja plicata	50-70	15-20	E	Yes	Sun/P. Shade	Recommend 'Green Giant,' narrow, compact with good winter color
Cedar, Blue Atlas	Cedrus atlantica	40-60	30-40	E	No	Sun	Specimen use, bluish green foliage
Cedar, Deodora	Cedrus deodora	40-50	30-40	E	No	Sun	Specimen or grouping
Cedar of Lebanon	Cedrus libani	40-60	40-60	E	No	Sun	Specimen, wide spreading
Cryptomeria, Japanese	Cryptomeria japonica	50-60	20-30	E	No	S/PS	Conical, slow growing
Douglas-Fir	Psuedotsuga menziesii	40-80	12-20	E	No	Sun	Specimen use, better at this altitude/zone than Fraser Fir
Fir, White	Abies concolor	30-50	15-30	E	Yes	Sun	Drought and cold tolerant
Hinoki False Cypress	Chamaecyparis obtuse	50-75	30-40	E	No	S/PS	Pyramidal, useful specimen
Holly, American	Ilex opaca	40-50	18-40	E	Yes	S/Sh.	Pyramidal when young, requires male and female
Magnolia, Southern	Magnolia grandiflora	60-80	30-50	E	Yes	Sun	Waxy leaves, late spring flowering
Pine, Austrian	Pinus nigra	30-40	20-25	E	No	Sun	Beautiful but may be prone to disease
Pine, Limber	Pinus flexilis	30-50	15-30	E	Yes	Sun	Dark bluish green leaf
Spruce, Norway	Picea, abies	40-60	25-30	E	No	Sun	Pyramidal, Windbreak
Spruce, Serbian	Picea omorika	50-60	20-25	E	No	Sun	Protect drooping lower branches for full beauty

ORNAMENTAL TREES

COMMON NAME	Scientific Name	Height (ft.)	Spread (ft.)	Deciduous /Evergreen	NATIVE	Sun/ Shade	Special Features
Buckeye, Red	<i>Aesculus pavia</i>	10-20	=/> ht.	D	Yes	Sun	Blooms June-July, single trunk only
Carolina Silverbell	<i>Halesia tetrapteria</i>	30-40	20-35	D	Yes	S/Sh	Moist soil
Dogwood, Flowering	<i>Cornus florida</i>	20-30	=/> ht.	D	Yes	S/Sh	Recommend 'Appalachian Spring', 'Aurora', 'Cloud Nine', and Rutgers Hybrids
Fringetree, White	<i>Chioanthus virginicus</i>	25-30	25-30	D	Yes	S/PS	Blooms summer, fragrant
Hornbeam, American	<i>Carpinus caroliniana</i>	20-30	20-30	D	Yes	S/PS	Good fall color
Magnolia, Sweet Bay	<i>Magnolia virginiana</i>	10-20	10-20	D	Yes	S/PS	Wet areas, summer bloom, fragrant flowers
Maple, Amur	<i>Acer ginnala</i>	15-20	=/> ht.	D	Yes	Sun	Small specimen tree
Paw Paw	<i>Asimina triloba</i>	15-30		D	Yes	PS	Mid-spring bloom, purple flowers
Redbud	<i>Cercis canadensis</i>	20-30	25-30	D	Yes	S/PS	Spring bloom. 'Forest Pansy' is purple leaf variety
Serviceberry, downy	<i>Amelanchier arborea</i>	15-20	Variable	D	Yes	S/PS	Recommend 'Autumn Brilliance'
Sourwood	<i>Oxydendrum arboreum</i>	25-30	20	D	Yes	Sun	Can be difficult to establish
Witchhazel, Common	<i>Hamamelis virginiana</i>	20-30	20-25	D	Yes	S/PS	Yellow flowers in autumn
Cherry, Flowering	<i>Prunus serrulata</i>	20-25	20-25	D	No	Sun	Recommend Kwanzan, Okame and Yoshino
Dogwood, Korean	<i>Cornus kousa</i>	20-30	20-30	D	No	S/PS	Spring bloom, exfoliating bark
Dogwood, Cornelian Cherry	<i>Cornus mas</i>	20-25	15-20	D	No	Sun	Blooms very early, yellow flowers
Maackia, Amur	<i>Maackia amurensis</i>	20-30	20-30+	D	No	Sun	Late summer flower
Magnolia, Star	<i>Magnolia stellata</i>	15-20	10-15	D	No	Sun	Early bloom, fragrant white flowers
Maple, Paper Bark	<i>Acer griseum</i>			D	No	Sun	Beautiful exfoliating bark, specimen use
Maple, Trident	<i>Acer buergeranum</i>	20-25	20-25	D	No	PS	Good small specimen
Snowbell, Japanese	<i>Styrax japonicus</i>	20-30	20-30	D	No	S/PS	Spring bloom
Arborvitae	<i>Thuja 'Emerald Green'</i>	15-20	4-5	E	No	Sun/	Pyramidal
Holly, American	<i>Ilex opaca</i>	40-50	15-20	E	Yes	Sun or Shade	Can be sheared to keep formal appearance & limit growth
Holly, Nellie Stevens	<i>Ilex x 'Nellie Stevens'</i>	15-25	10-15	E	Yes	Sun	Pyramidal, pretty leaf
Umbrella Pine	<i>Sciadopitys verticillata</i>	20-25	15-20	E	No	Sun	Pyramidal, unusual texture
Yew	<i>Taxus cuspidate capitata</i>	10-12	4-6	E	No	Sun or Shade	Slow growing

SHRUBS

COMMON NAME	Scientific Name	Height (ft.)	Spread (ft.)	Problem Free	NATIVE	Sun/ Shade	Special Features
Abelia, Glossy	<i>Abelia x grandiflora</i>	3-5	3-5	Yes	No	Sun	Recommend 'Edward Goucher', 'Little Richard', 'Sherwood'; Blooms all summer
Boxwood, Littleleaf	<i>Buxus microphylla</i>	3-5	3-5	Yes	No	S/Sh.	Recommend 'Winter Gem' and 'Wintergreen'; slow growing
Buttonbush	<i>Cephalanthus occidentalis</i>	3-6	3-6	Yes	Yes	S/PS	Use in wet areas
Cherry Laurels	<i>Prunus laurocerasus</i>	4-8	3-6	Yes	No	S/Sh.	Recommend 'Otto Luykens' and 'Schipkaensis'
Dogwood, Red Osier	<i>Cornus sericea</i>	7-9	10+	Yes	Yes	S/Sh.	Prefers wet soils, red twigs
Dwarf Fothergilla	<i>Fothergilla gardenii</i>	2-3	3-4	Yes	Yes	PS	Fragrant white flowers, good fall color
Hydrangea	<i>Hydrangea macrophylla</i>	3-6	4-6	Yes	No	S/PS	Summer bloom
Hydrangea, Lacecap	<i>Hydrangea mortensias</i>	3-6	4-6	Yes	No	S/PS	Summer bloom
Hydrangea, Oakleaf	<i>Hydrangea quercifolia</i>	4-6	4-6	Yes	No	Shade	Provide room for spread
Leatherleaf Mahonia	<i>Mahonia bealei</i>	6-10	5-8	Yes	No	Shade	Large berries
Lilac	<i>Syringa vulgaris</i>	3-5	4-5	Yes	No	Sun	Recommend 'Miss Kim', 'Dalbin'
Oregon Grape Holly	<i>Mahonia aquifolium</i>	3-6	3-5	Yes		Shade	Glossy green leaf, dark blue berries
Pieris, Japanese	<i>Pieris japonica</i>	9-12	6-8	Yes	No	Shade	Evergreen, early bloom
Shamrocks Holly	<i>Ilex glabra</i> 'Shamrock'	3-4	3-4	Yes	No	S/PS	(also called Inkberry), Evergreen, wet areas, deer resistant
Skimmia	<i>Skimmia japonica</i>	3-4	3-4	Yes	No	PS	Evergreen, fruit, small
Summersweet	<i>Clethra alnifolia</i>	3-8	4-6	Yes	Yes	Shade	Attract hummingbirds; select smaller varieties, wet soil.
Sweet Box	<i>Sarcococca hookeriana</i> var. <i>humilis</i>	4-6 (In.)	Spread	Yes	No	Shade	Good evergreen ground cover, fragrant
Viburnum, Arrowwood	<i>Viburnum dentatum</i>	6-8	6-15	Yes	No	Sun	Spring flower
Viburnum, Blackhaw	<i>Viburnum prunifolium</i>	12-15	8-12	Yes	No	Sun	Small tree
Viburnum, Burkwood	<i>Viburnum x burkwoodii</i>	8-10	2/3 ht.	Yes	No	Sun	Fragrant
Viburnum, Korean Spice	<i>Viburnum carlesii</i>	4-5	3-5	Yes	No	S/PS	Very fragrant flowers
Viburnum, Lindenwood	<i>Viburnum dilatatum</i>	8-10	2/3 ht.	Yes	No	Sun	Spring flower
Virginia Sweetspire	<i>Itea virginica</i>	3-5,		Yes		Shade	Recommend 'Henry Garnet', Red Fall color
Winterberry	<i>Ilex verticillata</i>	6-10		Yes	Yes	Sun	Recommend 'Harvest Red', 'Red Sprite' and 'Sparkleberry'; requires male and female
Winter Daphne	<i>Daphne odora</i>	4	4		Yes	Shade	Mounded with winter flowers
Yew	<i>Taxus</i> spp.						Many cultivars, all shapes and sizes, good drainage required

Sections 218 through 220: Reserved