

## ARTICLE 14

### Landscaping, Screening & Outdoor Lighting

#### 14.1. Purpose and Intent

The purpose of this Article is to regulate the planting and preservation of landscape materials to promote the general health, safety and welfare of the Town's citizens; to enhance the community by the creation of an attractive environment; to protect property values and to further the design and economic development objectives of the Round Hill Comprehensive Plan and the Round Hill Streetscape Master Plan. To these ends, these regulations are intended to promote the planting and preservation of landscape materials ~~which~~ that:

- a. Provide screening and buffering between incompatible land uses.
- b. Provide parking lot landscaping to reduce the harmful effects of heat, noise and glare associated with motor vehicle use.
- c. Provide shade and windbreaks and enhance the appearance of public areas.
- d. Provide for the creation of safe, attractively landscaped areas adjacent to public streets by using landscape materials ~~which~~ that separate vehicular and pedestrian areas.
- e. Provide for the protection of ground water, improve air quality and stormwater management through the mitigating effects of trees and other landscape materials.
- f. Provide for useful and attractive open space areas.
- g. Provide for preservation, planting, and replacement of trees in the development process to create a specified tree canopy or cover in twenty years as per the Code of Virginia, and to reduce soil erosion and sedimentation.
- h. Promote the use of native tree and plant species to encourage biodiversity and stewardship of our natural heritage

#### 14.2. Applicability

This Article shall apply to all site plan and subdivision applications submitted for approval after the effective date of this Ordinance. This Article shall not apply to single-family residential uses where there are no newly constructed streets which are to be dedicated for public use.

#### 14.3. Preservation of Trees

- a. Every development shall retain existing, healthy trees at least 12 inches or more in caliper measured at 3 feet above the ground unless such retention would unreasonably burden the development. 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 Planning Commission.
- 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 12 inches in diameter

or greater that is to be retained, and no impervious surface shall be located within 12 feet of any such tree.

#### 14.4. General Screening and Buffering

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

b. The following buffer yards shall be provided between various uses:

(1)	Commercial adjacent to residential:	25 feet
(2)	Commercial adjacent to institutional:	10 feet
(3)	Multi-family residential next to single-family, duplex, townhouses or commercial:	25 feet
(4)	Industrial adjacent to residential	25 feet
(5)	Industrial adjacent to commercial	10 feet
(6)	Industrial adjacent to any other zone:	25 feet
(7)	Institutional adjacent to residential:	25 feet
(8)	Institutional adjacent to commercial:	10 feet
(9)	Bed & Breakfast Facility adjacent to residential	10 feet
(10)	Boutique Hotel adjacent to residential	25 feet

A solid wall or fence at least six feet in height may be used to reduce the required buffer yard by 50 percent. Posts and bracing shall not be exposed to the adjoining property(ies). No woven wire fence, chain link fence or poultry fence is permitted to reduce the required buffer yard. No construction fence or fence that is more than fifty percent open is permitted to reduce the required buffer yard.

Buffer yards shall contain sufficient trees and shrubs to provide a solid screen between uses once the trees and shrubs have reached maturity. A solid screen is intended to exclude most visual contact between uses and to create a strong impression of separation. To meet the requirements of this section, buffer yards must contain all of the following: (i) understory trees planted at a rate of 1 tree per 30 feet or canopy trees planted at a rate of 1 tree per 40 feet; (ii) evergreen trees planted at a rate of 1 tree per 15 feet; and (iii) shrubs planted at a rate of 3 shrubs per 10 feet in required buffer yards of 10 feet and 6 shrubs per 10 feet in required buffer yards of 25 feet. Trees and shrubs shall be staggered and 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 if determined by the Zoning Administrator to be adequate.

c. The Planning Commission may reduce the requirements of this Section when such landscaped areas cannot be reasonably provided because of parking lot size, existing structures or other unique features.

#### 14.5. 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 that has or will have a trunk at least 12 inches in diameter when fully mature.

#### 14.6. Parking Lot Landscaping

- a. A 10-foot wide perimeter strip shall be provided between any parking lot and the right-of-way. The strip shall contain at least one deciduous canopy tree that has or will have a trunk at least 12 inches in diameter when fully mature for every 40 feet of street frontage.
- b. At least 5 percent of the parking lot area shall be landscaped. No landscaped area shall be less than 50 square feet. The landscaped area shall contain one tree and three shrubs for each 10 parking spaces. A minimum of 75 percent of the required trees shall be deciduous canopy trees that have or will have trunks at least 12 inches in diameter when fully mature.
- c. The Planning Commission may waive the requirements of this Section in the B-1 district when such landscaped areas cannot be reasonably provided because of parking lot size, existing structures, or other unique features.

#### 14.7 Maintenance

- a. The owner, or his agent, of commercial, institutional, or industrial uses shall be responsible for the maintenance, repair, and replacement of all landscape materials, fences, berms, and walls required by this Article. All landscape materials shall be kept in a healthy condition free of all disease and infestation and kept free of refuse and debris. All fences, berms, and walls shall be maintained in a safe and attractive condition. The owner, or his agent, upon written notification by the Zoning Administrator, shall repair or replace any landscape materials, fences, berms, or walls not meeting the requirements of this Article within thirty (30) days of receipt of said notice.
  - a. Landscaping materials required by this Article shall be maintained and all dead or dying landscaping materials shall be replaced by July 1 each year.

#### 14.8 Landscape Plan

A landscape plan shall be required for all uses subject to this Article.

- a. Review Procedures – The Zoning Administrator shall be responsible for the review of all landscape plans according to the procedures and time frames for review of site plans and subdivision applications. The Zoning Administrator will approve or disapprove the plan with notice provided in writing and addressed to the owner, or their designated agent.

b. Landscape Plan Requirements – Every landscape plan required by this Article shall be prepared by a person in the practice of landscape design who is certified by the State of Virginia. All landscape plans shall contain the following information:

- (1) Plans shall be drawn to a scale of not less than thirty (30) feet to the inch on sheets no less than eighteen by twenty-four inches (18" x 24") or greater than twenty-four by thirty-six inches (24" x 36").
- (2) All plans shall illustrate with sufficient detail the location of all proposed construction including, but not limited to, driveways, parking areas, curbs, sidewalks, utility lines, structures, and landscape areas. Landscape areas shall indicate dimensions, and all proposed locations of trees and plants and all proposed trees shall be illustrated at their full canopy spread.
- (3) All plans shall be accompanied by a schedule of plants proposed, including the number proposed, their height, diameter, or gallon size, and the common and botanical name.
- (4) All plans shall include a table calculating the amount of open space and/or parking lot area and the number of plants and trees required by the ordinance and the amount of open space and trees and plants provided.
- (5) Any existing vegetation proposed to be saved shall be identified by name, location, and size. Methods of protecting the vegetation during construction activities shall be illustrated and/or explained. Plans shall indicate how existing trees are to be protected and how soil aeration, drainage and moisture are to be preserved.

#### 14.9 Tree & Shrub Species

Native species adapt to the local climate and soil conditions, require less water and pesticides and provide multiple benefits to both people and wildlife including shelter and food. The ~~trees and shrubs~~ flora listed below are native species approved for use; any other ~~tree or shrub~~ species used to meet the requirements of this Article requires the approval of the Zoning Administrator.

#### **CANOPY/STREET TREES:**

A deciduous tree, usually single trunked, with a definitely formed crown of foliage, which attains a mature height of at least 30 feet. Approved species include:

<u>Common Name</u>	<u>Botanical Name</u>
<u>American Basswood</u>	<u>Tilia americana</u>
<u>American Hornbeam</u>	<u>Carpinus caroliniana virginiana</u>
<u>American Sycamore</u>	<u>Platanus occidentalis</u>
<u>Baldcypress</u>	<u>Taxodium distichum</u>
<u>Black Tupelo</u>	<u>Nyssa sylvatica</u>
<u>Common Persimmon</u>	<u>Diospyros virginiana</u>

Crimson King Maple	<i>Acer plantanoides</i>
English Oak	<i>Quercus robur</i>
Ginkgo (Male)	<i>Ginkgo bilboa</i>
Japanese Pagoda	<i>Sophora japonica</i>
Japanese Zelkova	<i>Zelkova serrata</i>
Japonica Regent	<i>Sophora japonica regent</i>
Littleleaf Linden	<i>Tilia cordata</i>
London Plane	<i>Plantanus acerifolia</i>
Pin Oak	<i>Quercus palustris</i>
Pitch Pine	<i>Pinus rigida</i>
Red Maple	<i>Acer rubrum</i>
Red Oak	<i>Quercus borealis</i>
<u>River Birch</u>	<u><i>Betula nigra</i></u>
Silver Linden	<i>Tilia tomentosa</i>
Sugar Maple	<i>Acer saccharum</i>
Thornless Honey Locust	<i>Gleditsia triacanthos inermis</i>
<u>White Oak</u>	<u><i>Quercus alba</i></u>
Willow Oak	<i>Quercus phellos</i>
Yellowwood	<i>Cladrastis lutea</i>

### **EVERGREEN TREES:**

A non-deciduous tree used for the purposes of screening, weather barrier, or accent planting. Approved species include:

<b><u>Common Name</u></b>	<b><u>Botanical Name</u></b>
American Holly	<i>Ilex opaca</i>
Dark American Arborvitae	<i>Thuja occidentalis nigra</i>
Eastern Red Cedar	<i>Juniperus virginiana</i>
Norway Spruce	<i>Picea abies</i>
<u>Red Spruce</u>	<u><i>Picea rubens</i></u>
<u>Shortleaf Pine</u>	<u><i>Pinus echinate</i></u>
<u>White Pine</u>	<u><i>Pinus strobus</i></u>

### **UNDERSTORY TREES:**

A deciduous or evergreen tree which attains a mature height of no greater than 30 feet. Understory trees often times prefer shade and grow naturally under a canopy of larger trees. Approved species include:

<b><u>Common Name</u></b>	<b><u>Botanical Name</u></b>
American Plum	<i>Prunus americana</i>
Amur Maple	<i>Acer griseum</i>
<u>Canada Serviceberry</u>	<u><i>Amelanchier canadensis</i></u>

Cockspur Hawthorn	<u>Crataegus crus-galli</u>
Common PawPaw	<u>Asimina triloba</u>
Downy Serviceberry	Amelanchier arborea
Flowering Dogwood	<u>Cornus florida</u>
Koosa Dogwood	<u>Cornus kous</u>
Flowering Cherry	Prunus (various species)
Flowering Crabapple	Malus (various species)
Golden Chain	Laburnum Vossi
Golden Raintree	Koelreuteria
Purple Leaf Plum	Prunus cerasifera bliricana
Red Bud	Cercus canadensis
Sweetbay Magnolia	<u>Magnolia virginiana</u>
Shadblow	Amelanchier canadensis
Washington Hawthorne	Crataegus plaenopyrum

### **HEDGES/SHRUBS:**

An evergreen multi-trunked woody plant that usually attains a mature height of no greater than 10 feet. Approved species include:

<b><u>Common Name</u></b>	<b><u>Botanical Name</u></b>
Azalea	various species
Buttonbush	<u>Cephalanthus occidentalis</u>
Chinese Holly	Llex cornuta
Common Elderberry	<u>Sambucus nigra</u>
Cotoneaster	various species
English Yew	Taxus baccata
Euonymus	various species
False Indigo Bush	<u>Amorpha fruticose</u>
Great Rhododendron	<u>Rhododendron maximum</u>
Japanese Holly	Llex crenata
Japanese Yew	Taxus cuspidata
Maple-leaved Viburnum	<u>Viburnum acerifolium</u>
Mountain Laurel	<u>Kalmia latifolia</u>
Ninebark	<u>Physocarpus</u>
Northern Spicebush	<u>Lindera benzoin</u>
Pasture Rose	<u>Rosa carolina</u>
Red Chokeberry	<u>Aronia arbutifolia</u>
Strawberry-bush	<u>Euonymus americanus</u>
Teaberry	<u>Gaultheria procumbens</u>
Rhododendron	various species
Viburnum	various species
Virginia Sweetspire	<u>Itea virginica</u>
Wild Azalea	<u>Rhododendron periclymenoides</u>
Winged Euonymus	various species

<u>Winterberry</u>	<u>Ilex verticillata</u>
<u>Witch Hazel</u>	<u>Hamamelis</u>

### **GROUNDCOVER/GRASSES:**

Low growing, spreading plants that grow over an area and provide protection of topsoil from erosion and drought as well as prevent the growth of weeds. Groundcover/Grasses usually attains a mature height of no more than 4 feet. Approved species include:

<b><u>Common Name</u></b>	<b><u>Botanical Name</u></b>
<u>Christmas Fern</u>	<u>Polystichum acrostichoides</u>
<u>Cinnamon Fern</u>	<u>Osmundastrum cinnamomeum</u>
<u>Creeping Phlox</u>	<u>Phlox stolonifera</u>
<u>Foamflower</u>	<u>Tiarella cordifolia</u>
<u>Golden Ragwort</u>	<u>Packera aurea</u>
<u>Green-and-Gold</u>	<u>Chrysogonum virginianum</u>
<u>Indian Grass</u>	<u>Sorghastrum nutans</u>
<u>Little Bluestem</u>	<u>Schizachyrium scoparium</u>
<u>Northern Maidenhair Fern</u>	<u>Adiantum pedatum</u>
<u>Oak Sedge</u>	<u>Carex pensylvanica</u>
<u>Ostrich Fern</u>	<u>Matteuccia struthiopteris</u>
<u>Purple Love Grass</u>	<u>Eragrostis spectabilis</u>
<u>Seersucker Sedge</u>	<u>Carex plantaginea</u>
<u>Tussock Sedge</u>	<u>Carex stricta</u>
<u>Wild Geranium</u>	<u>Geranium maculatum</u>
<u>Wild Ginger</u>	<u>Asarum canadensis</u>
<u>Woodland Phlox</u>	<u>Phox divaricata</u>
<u>Woodland Stonecrop</u>	<u>Sedum ternatum</u>

### **PERENNIALS:**

Small flowering plants that continue to return for several years, usually with new herbaceous growth, and have little or no woody growth. Approved species include:

<b><u>Common Name</u></b>	<b><u>Botanical Name</u></b>
<u>American Alumroot</u>	<u>Heuchera americana</u>
<u>Bergamot</u>	<u>Monarda fistulosa</u>
<u>Black Cohosh</u>	<u>Actaea racemose</u>
<u>Blazing Star</u>	<u>Liatris spicata</u>
<u>Blue Wild Indigo</u>	<u>Baptisia australis</u>
<u>Blue Wood Aster</u>	<u>Syphyotrichum cordifolium</u>
<u>Butterfly Weed</u>	<u>Asclepias tuberosa</u>
<u>Cardinal Flower</u>	<u>Lobelia cardinalis</u>

<u>Common Boneset</u>	<u>Eupatorium perfoliatum</u>
<u>Common Milkweed</u>	<u>Asclepias syriaca</u>
<u>Common Wild Petunia</u>	<u>Ruellia caroliniensis</u>
<u>Dwarf Crested Iris</u>	<u>Iris cristata</u>
<u>Eastern Prickly-pear</u>	<u>Opuntia Humifusa</u>
<u>Eastern Rose-mallow</u>	<u>Hibiscus moscheutos</u>
<u>Eastern Solomon's-plume</u>	<u>Maianthemum racemosum</u>
<u>Golden Alexanders</u>	<u>Zizia aurea</u>
<u>Goldenrod</u>	<u>Solidago</u>
<u>Meadow Phlox</u>	<u>Phlox maculata</u>
<u>Mountain Mint</u>	<u>Pycnanthemum</u>
<u>Narrow-leaved sunflower</u>	<u>Helianthus angustifolius</u>
<u>Orange Coneflower</u>	<u>Rudbeckia</u>
<u>Scarlet Beebalm</u>	<u>Oenothera fruticose</u>
<u>Smooth Oxeye</u>	<u>Heliopsis helianthioides</u>
<u>Southern Blue Flag</u>	<u>Iris virginica</u>
<u>Spotted Beebalm</u>	<u>Monarda punctata</u>
<u>Swamp Milkweed</u>	<u>Asclepias incarnata</u>
<u>Threadleaf Coreopsis</u>	<u>Coreopsis verticillata</u>
<u>Turk's-cap Lily</u>	<u>Lilium superbum</u>
<u>Viola</u>	<u>– all species</u>
<u>Virginia Bluebell</u>	<u>Mertensia virginica</u>
<u>Virginia Spring Beauty</u>	<u>Claytonia virginica</u>
<u>Water Lily</u>	<u>Nymphaea odorata</u>
<u>White Foxglove</u>	<u>Penstemon digitalis</u>
<u>White Turtlehead</u>	<u>Chelone glabra</u>
<u>White Wood Aster</u>	<u>Eurybia divaricate</u>
<u>Wild Bleeding Heart</u>	<u>Dicentra eximia</u>
<u>Wild Geranium</u>	<u>Geranium maculatum</u>
<u>Wild Pink Sticky Catchfly</u>	<u>Silene caroliniana</u>
<u>Wild Red Columbine</u>	<u>Aquilegia canadensis</u>
<u>Yellow Wild Indigo</u>	<u>Baptisia tinctorial</u>

#### 14.10 Condition and Size

a. All plants required by this Article shall be healthy, free of disease and shall have healthy, well-developed root systems. They shall be free from physical damage or other conditions that would prevent vigorous growth.

b. Size – All plant material installed to meet the requirements of this Article shall comply with the minimum size requirements below at the time of planting:

- (1) Canopy/Street trees: diameter: two and one-half inches measured at three feet above ground level.
- (2) Evergreen trees: height: 6 feet minimum, with branches along the trunk to ground level.
- (3) Understory trees: height: 6 feet minimum

- (4) Shrubs: height: 18 inch minimum
- (5) Hedges: planted and maintained to form a continuous, solid visual screen at least two feet in height within one year of planting.
- (6) Groundcover: spacing: planted based on the species growth habit

#### 14.11 Sight Distance

No tree, shrub, hedge or vegetation, whether or not required by this Article, shall be planted or maintained in any way that interferes with the sight distance of any entrance or street intersection.

#### 14.12 Monitoring and Enforcement

The enforcement of the provisions of this Article shall be the responsibility of the Zoning Administrator.

No occupancy permit shall be granted until the trees, plants and other screening and buffering materials required by this Article have been installed to the satisfaction of the Zoning Administrator.

In instances where trees are removed in violation of an approved site plan or subdivision application, the developer shall reimburse the Town for the assessed value of the tree(s) and associated administrative costs incurred by site inspection, enforcement, and tree replacement. Such funds shall be used to plant replacement trees in the area of the location of the trees removed.

#### 14.13 Outdoor Lighting

All new uses and/or new construction shall comply with outdoor lighting standards that include:

- b. A lighting plan shall be provided that indicates that all outdoor lighting fixtures exclusive of streetlights shall not have a source of illumination that is visible beyond the site or cause illumination of adjacent properties in excess of 0.5 foot-candles, as measured at the site boundary.
- c. All outdoor lighting shall be designed, fully shielded, downward pointing, aimed, located and maintained to shield adjacent properties and not produce glare onto adjacent properties or roadways. Parking lot light fixtures and all light fixtures on buildings shall be full cut-off fixtures that include flat glass lenses that eliminate or minimize direct glare and upright.
- d. Method of Measurement – Illumination levels shall be measured with a photoelectric photometer having a spectral response similar to that of the human eye, following the standard spectral luminous efficiency curve adopted by the International Commission on Illumination.
- e. Fixture Height – The maximum height of lighting fixtures shall be measured from the finished interior grade of the mounting area to the top point of the lighting fixture. The maximum heights are:

	Residential Zones and any light fixture installed within 25 feet of an existing single-family residence	Non-residential zoning district
Freestanding Lighting	20 feet in fixture height	30 feet in fixture height
Attached Lighting	Shall not exceed height of structure	

**[Amended October 2020]**