



Section 12.01 Preferred Landscape Material
Category 1: Large Evergreen Trees

Large Evergreen Trees											
Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Deodar cedar	<i>Cedrus deodara</i>	BF	Sun or part shade	Mesic, sub-xeric	Rapid	Height: 70'; Spread: 20-40'	Bluish-green	Needs space; excellent specimen tree	Green seeds	Yes	No
Japanese cedar	<i>Cryptomeria japonica</i>	BF	Sun to part shade	Mesic	Moderate	Height: 50-60'; Spread: 25-30'	Green to bronze	Needs space, screening material	Cones 1/2-1"	No	No
 American holly	<i>Ilex opaca</i>	BF, TC, RB, PL	Full-sun, shade	Medium, semi-dry	Slow	Height: 50'; Spread: 18-40'	Green	Small white flowers in the spring	Red Mature fruit in fall lasting into winter	Yes	No
 Eastern red cedar	<i>Juniperus virginiana</i>	PL, BF, TC, RB	Sun or part shade	Dry	Moderate	Height: 40-50'; Spread: 8-15'	Green	Doesn't tolerate wet sites; needs full sun. White flowers	Gray brown with red seeds	Yes	Yes
Cucumber magnolia	<i>Magnolia acuminata</i>	RB	Part-Sun, Shade	Mesic, sub-xeric	Moderate to Rapid	Height: 50-80'; Spread: 40'	Red to yellow	Needs space. greenish yellow flowers in spring	Knobby Fruit	No	Yes
Southern magnolia	<i>Magnolia grandiflora</i>	BF, TC	Sun, part shade	Mesic	Moderate	Height: 40-80'; Spread: 30-40'	Dark green	Most varieties need space; White flowers	Gray with red seeds	Yes	Yes
Sweetbay magnolia	<i>Magnolia virginiana</i>	BF, TC, RB	Full Sun	Tolerate Acidic	Moderate	Height: 40-50'; Spread: 15-25'	Green	Prefers wetter sites	2" long red fruit	Yes	No
Red spruce	<i>Picea rubens</i>	RB, BF	Full-sun, shade	Mesic, Sub-xeric, Moist	Slow to moderate	Height: 60-70'; Spread: 30-40'	Green	No	Cones	No	Yes



Landscape Value
 Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

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Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
White Pine	<i>Pinus strobus</i>	BF, TC, RB	Sun to part shade	Fertile, moist, well drained soil	Slow	Height: 50-80'; Spread: 20-40'	Green	Tends to die out in zones 7b and 8 due to stress	6 to 8" cones	Yes	No
Laurel Oak	<i>Quercus laurifolia</i>	ST	Sun to part shade	Medium Drainage	Slow to moderate	Height: 60'; Spread: 30-40'	Green	No	5/8" acorn	Yes	No
Live Oak	<i>Quercus virginiana</i>	TC, BF	Sun to part shade	Drainage	Slow	Height: 30-50'; Spread:	Green to bronze	Long life span	acorns	Yes	No
Carolina hemlock	<i>Tsuga caroliniana</i>	RB	Part Shade	Mesic	Moderate	Height: 40-70'; Spread: 20-25'	Green	Red, brown with tinged orange bark. Needs space	Brown acorns	Yes	No



Section 12.01 Preferred Landscape Material
Category 2: Small Evergreen Trees

Small Evergreen Trees											
Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Burford holly	<i>Ilex cornuta</i>	BF, TC	Full-sun, shade	Moist, Semi-dry	Moderate	Height: 15-25'; Spread: 15-25'	Green	Can trim into tree; white flowers in the spring	Red fruit in fall lasting into winter	No	Yes
Yaupon holly	<i>Ilex vomitoria</i>	BF	Full-sun, shade	Moist, Semi-dry	Moderate	Height: 15-25'; Spread: 15-20'	Green	Upright or weeping. Small white flowers in the spring	Red fruit in fall lasting into winter	Yes	Yes
Nellie Stevens holly	<i>Ilex x 'Nellie R. Stevens'</i>	PL, BF, TC	Full-sun, shade	Moist, Semi-dry	Rapid	Height: 15-25'; Spread: 7-12'	Green	Small white flowers in the spring	Red fruit in fall lasting into winter	Yes	Yes
Hybrid hollies	<i>Ilex x attenuata hybrids</i>	PL, BF, TC	Full-sun, shade	Moist, Semi-dry	Moderate	Height: 20-30'; Spread: 7-10'	Green	Small white flowers in the spring	Red fruit in fall lasting into winter	Yes	No
Umbrella tree	<i>Magnolia tripetala</i>	RB	Sun, part shade	Moist	Slow to Moderate	Height: 30'; Spread: 30'	Green	Vigorous, unkempt. Cream to white flowers	Rosy-red berries	Yes	No
Saucer magnolia	<i>Magnolia x soulangiana</i>	BF, TC	Sun, part shade	Moist	Moderate	Height: 20-30'; Spread: 25'	Green	Gray brown bark; Can be used in Parking lots. Purple to white flowers	4" fruit	No	Yes
Wax myrtle	<i>Myrica cerifera</i>	PL, BF, TC, RB	Sun, part shade	Moist	Rapid	Height: 20-40'; Spread: 20'	Yellow green	Can be trained to tree form	Gray-green fruit	Yes	Yes
Carolina cherry laurel	<i>Prunus caroliniana</i>	PL, BF, TC, RB	Sun, part shade	Dry	Moderate	Height: 20-40'; Spread: 15-20'	Green	Tree form only. White flowers	Black berries	Yes	Yes

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value


Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 3: Large Deciduous Trees

Large Deciduous Trees											
Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate and Life Expectancy	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Sugar maple	<i>Acer barbatum</i>	ST, BF, TC, RB	Full Sun, Shade	Wet to Dry	Slow	Height: 50-75 ft; Spread: 30-45 ft.	Yellow to orange red	Legacy is more narrow than other species and works well in Paving lots and Downtown Areas	Seed Containers	Yes	Yes
Trident Maple	<i>Acer buergerianum</i>	ST, DT	Sun	Moist Drainage	Slow to Moderate	Height: 25-35 ft; Spread: 20-30 ft.	Red Orange	Exfoliating Bark; greenish white flowers	Brown red	Yes	Yes
Hedge maple	<i>Acer campestre</i>	PK, BF, TC	Full Sun, Shade	Wet, Dry	Slow	Height: 25-30 ft; Spread 25-30 ft.	Yellow to green fall color	Often multi-stemmed	Seed Containers	Yes	No
Paperbark maple	<i>Acer griseum</i>	PK, BF	Full Sun, Shade	Wet to Dry	Slow	Height: 20-30 ft; Spread 15-25 ft.	Bright scarlet and orange	Cinnamon Brown Peeling Bark; Upright and narrow shape	Seed Containers	Yes	No
Chalkbark or whitebark maple	<i>Acer leucoderme</i>	BF, TC	Full Sun, Shade	Wet, Dry	Slow	Height: 25-30 ft; Spread 25 ft.	Brilliant yellow-orange to cardinal crimson fall color	Gray to chalky white bark on upper part of trunk; Often multi-stemmed	Seed Containers	Yes	Yes
Japanese maple	<i>Acer palmatum</i>	BF, PK	Full Sun, Shade	Wet, Dry	Slow to Moderate	Height and Width varies	Scarlet	Often a specimen	Red	Yes	No
 Red maple	<i>Acer rubrum</i>	DT, ST, PK, BF, TC	Full-sun, shade	Wet to dry	Moderate to Rapid	Height: 40-60 ft; Spread: 25-45 ft.	Red or yellow	Cultivars preferred for consistency. Red Sunset Maple is smaller than other red maples	Red	Yes	No

Attracts:

Birds
 Humming Birds
 Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB



Section 12.01 Preferred Landscape Material
Category 3: Large Deciduous Trees

Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate and Life Expectancy	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Purple Blow maple	<i>Acer truncatum</i>	ST, BF, TC	Full-sun, shade	Wet to Moist	Moderate	Height: 20-25 ft; Spread: 20-25 ft.	Yellow, orange, red fall color	Yellow flowers in spring	Seed Containers	No	No
Yellow buckeye	<i>Aesculus flava</i>	TC	Part-sun, shade	Moist to semi-dry	Moderate	Height: 50-70 ft; Spread: 30-40 ft.	Yellow Orange	6" pinnacle of creamy yellow flowers in late spring	Seed Containers	Yes	Yes
Yellow birch	<i>Betula alleghanienses</i>	TC, BF	Full-sun, part-sun	Moist to semi-dry	Moderate	Height: 60-75 ft; Spread: 35-45 ft.	Yellow	Catkins	Cones	Yes	No
Sweet birch	<i>Betula lenta</i>	BF, PK	Full-sun, shade	Moist to semi-dry	Moderate	Height: 40-55 ft; Spread: 35-45 ft.	Yellow	Catkins	Seed Containers	Yes	Yes
River birch	<i>Betula nigra</i>	BF, TC	Full-sun, part-sun	Wet, semi-dry	Moderate to Rapid	Height: 40-70 ft; Spread: 40-60 ft.	Yellow	Catkins	Seed Containers	Yes	Yes
 Bitternut hickory	<i>Carya cordiformis</i>	BF, RB	Full-sun, shade	Moist to Semi-dry	Rapid	Height: 50-70 ft; Spread: 30-40 ft.	Yellow	Yellow Buds	Seed containers	Yes	No
 Bitternut hickory	<i>Carya cordiformis</i>	RB	Full-sun, shade	Moist, Semi-dry	Rapid	Height: 50-70 ft; Spread 30-45ft.	Fall color is yellow to golden	Needs Space; Yellow Buds	Seed Containers	Yes	No
 Pignut hickory	<i>Carya glabra</i>	RB	Full Sun, Shade	Moist	Rapid	Height: 50-60 ft; Spread: 25-35 ft.	Golden yellow fall color	Needs space	Bitter Nuts	Yes	Yes

Attracts:

Birds
 Humming Birds
 Butterflies

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Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate and Life Expectancy	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Shagbark hickory	<i>Carya ovata</i>	RB	Full-sun, shade	Moist to Semi-dry	Slow	Height: 70-90 ft; Spread: 30-40 ft.	Yellow to golden brown fall color	Yellow Green Flowers; needs space	Nuts that squirrels eat	Yes	No
 Mockernut hickory	<i>Carya tomentosa</i>	RB	Full Sun, Shade	Moist to Dry	Moderate	Height: 60-80 ft; Spread 45-60 ft.	Yellow	Needs space	Nuts	Yes	Yes
 Sugar hackberry	<i>Celtis laevigata</i>	BF, TC, RB	Sun	Moist to Semi-dry	Moderate to Rapid	Height: 60-80 ft; Spread: 60-80 ft.	Dull Yellow	Needs space	Orange to dark purple	Yes	Yes
 Prairie Pride hackberry	<i>Celtis occidentalis</i>	BF, TC	Sun	Moist, Semi-dry	Rapid	Height: 60ft; Spread: 40-50ft.	Dull Yellow	More compact than species in youth	Orange to dark purple	No	Yes
Yellowwood	<i>Cladrastis kentuckea</i>	TC	Full-sun, part-sun	Moist to semi-dry	Moderate	Height: 30-45 ft; Spread: 40-45 ft.	Yellow	Winter Bark; White fragrant flowers in early summer	Seed Containers	Yes	No
Smoke tree	<i>Cotinus coggygria</i>	PK,	Sun	Moist	Moderate to Rapid	Height: 10-15 ft; Spread: 8-14 ft.	Red, orange, and yellow	Multi-stemmed; shrubby	Light pink to gray		Yes
 American Beech	<i>Fagus grandiflora</i>	BF, TC, RB	Sun	Wet	Slow; long lived	Height: 60-80 ft; Spread: 40-80 ft.	Golden-brown	Needs space; shades out all others; needs irrigation	Small three wided nut	Yes	No
Green ash cultivars	<i>Fraxinus pennsylvanica</i>	BF, RB	Sun	Moist	Rapid	Height: 50-60 ft; Spread 25-30 ft.	Yellow	Green to reddish purple flowers in panicles. Borers seem to be a problem, even with the cultivar.	Samaras are 1" to 2" long and narrow	Yes	Yes

Attracts:

Birds
 Humming Birds
 Butterflies

Landscape Value
 Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

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Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate and Life Expectancy	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Pumpkin ash	<i>Fraxinus profunda</i>	RB	Full Sun	Wet	Rapid	Height: 80 ft; Spread: 30-50 ft.	Yellow	Flowers April to May. Needs space; prefers moist sites; some diseases.	Dangling clusters of fruits.	Yes	No
Ginkgo cultivars (male only)	<i>Ginkgo biloba</i>	DT, ST, PK, TC	Sun	Wet	Slow	Height: 40-70 ft; Spread 20-40 ft.	Yellow	Female: Plum shaped, foul smelling fruit	Tan-orange oval fruits are pendulous from the spur shoots	No	Yes
Thornless honeylocust varieties	<i>Gleditsia triacanthos</i> var. <i>inermis</i>	TC	Sun	Moist	Rapid	Height: 30-70 ft; Spread: 30-40 ft.	Yellow	Many insect and disease problems	Yellow	Yes	Yes
 Fruitless sweetgum	<i>Liquidambar styraciflua</i>	BF, RB	Sun to part shade	Moist	Moderate to Rapid	Height: 60-100 ft; Spread 50-75 ft.	Scarlet to purple	Needs space	Brown Acorns	Yes	Yes
 Tulip poplar	<i>Liriodendron tulipifera</i>	BF, RB	Full, part Sun	Moist to semi-dry	Rapid	Height: 40-100 ft; Spread: 20-40 ft.	Yellow Green	Yellowish Green and Orange Cup Shaped fragrant flowers in later spring. Too large for most sites.	Cone shaped aggregate fruit	Yes	No
Dawn redwood	<i>Metasequoia glyptostroboides</i>	ST	Sun	Dry	Rapid	Height: 50-90 ft; Spread 15-25 ft.	Orange to brown	Needs Space; Red-brown becoming gray with age	Dark brown	No	No
 Black gum	<i>Nyssa sylvatica</i>	BF, TC, RB	Sun to partial shade	Wet, Moist	Slow to Moderate	Height: 40-60 ft; Spread 20-30 ft.	Yellow, orange, red to purple fall color	Too large for most sites, swamp gum prefers a moist site	1/2" bluish black fruit in fall	Yes	No
Black tupelo	<i>Nyssa sylvatica</i>	TC	Full-sun, shade	Moist to dry	Slow to Moderate	Height: 40-60 ft; Spread: 20-30 ft.	Red to Maroon	White flowers in Spring	Yellowish fruit that turns black in fall	Yes	No


Attracts:

Birds
Humming Birds
Butterflies

Landscape Value

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Power Line: PL; Parking Lot: PK
Buffer/Natural: BF; Tree Canopy: TC
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Persian parrotia	<i>Parrotia persica</i>	BF, TC	Sun to light shade	Dry	Moderate	Height: 20-40 ft; Spread 15-30 ft.	Yellow-gold, pumpkin orange, crimson)	Bark peels to reveal silver, green, white, and cinnamon colors; Modest maroon flowers; Single stem preferred as street trees.	1/2" light brown fruit	No	Yes
Chinese pistachio	<i>Pistacia chinensis</i>	TC	Sun	Wet	Medium to Rapid	Height: 25-40 ft; Spread 25-35 ft.	Red, yellow, or orange fall color	Modest exfoliating bark; Small green flowers	Blue/red fruit on female trees	No	Yes
Sycamore	<i>Platanus occidentalis</i>	TC	Full-sun, part-sun	Moist to Wet	Moderate to Rapid	Height: 70-100 ft; Spread: 60-80 ft.	Brown	No	Globes fruit	Yes	Yes
Eastern cottonwood	<i>Populus deltoides</i>	RB	Sun	Moist	Rapid	Height: 75-100 ft; Spread 50-75 ft.	Modest Fall Color	Flowers; cottony mass. Needs space; prefers wetter sites.	Seeds	Yes	No
 Black cherry	<i>Prunus serotina</i>	TC	Full-sun, part-sun	Moist to Dry	Rapid	Height: 50-80 ft; Spread: 30-40 ft.	Yellow to Red	White flowers in Spring	Black berries in summer	Yes	Yes
White oak	<i>Quercus alba</i>	RB	Sun to part shade	Wet to Medium	Moderate	Height: 60-100 ft; Spread: 50-90 ft.	Dark red	Pale yellow flowers. Needs space. Swamp Oaks needs irrigation prefers wetter sites	Brown Acorns	Yes	Yes
Scarlet oak	<i>Quercus coccinea</i>	BF, TC, RB	Sun	Wet to Moist	Rapid	Height: 50-80 ft; Spread: 40-50 ft.	Red	Pale yellow flowers; needs space	Brown Acorns	Yes	Yes
Overcup oak	<i>Quercus lyrata</i>	BF, TC, RB	Sun	Wet	Moderate	Height 35-45 ft; Spread 35-40 ft.	Brown	Needs space, irrigation	Acorns are 1/2 to 1 inch long	Yes	Yes
Swamp Chestnut Oak	<i>Quercus michauxii</i>	RB	Sun	Wet to Medium	Moderate	Height: 60-80 ft; Spread: 50-70 ft.	Bronze red fall color	Needs space, irrigation	Acorns	Yes	No


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Street Tree: ST; Accent: ACT; VDAP: DT
Power Line: PL; Parking Lot: PK
Buffer/Natural: BF; Tree Canopy: TC
Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 3: Large Deciduous Trees

Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate and Life Expectancy	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
 Chestnut oak	<i>Quercus montana</i>	TC, BF	Full-sun, part-sun	Moist to dry	Moderate to Rapid	Height: 60-70 ft; Spread: 40-60 ft.	Yellow to Red	White flowers in spring	Red berries in summer	Yes	No
Water oak	<i>Quercus nigra</i>	BF, RB	Sun to part shade	Moist to Wet	Moderate to Rapid	Height: 50-75 ft; Spread: 30-40 ft.	Yellow	Needs space, irrigation; has problems with untreatable decay	Brown Acorns	Yes	No
Willow oak	<i>Quercus phellos</i>	ST, BF, TC, RB	Sun	Wet	Moderate to Rapid	Height: 60-80 ft; Spread: 30-40 ft.	Light yellow	Needs space; variable form	Brown Acorns	Yes	No
Chestnut oak	<i>Quercus prinus</i>	RB	Sun	Dry	Medium to Rapid	Height: 60-70 ft	Orange yellow to yellow brown fall color	Needs space	Acorns	Yes	Yes
Red oak	<i>Quercus rubra</i>	BF, TC, RB	Sun to part shade	Moist	Rapid	Height: 60-70 ft; Spread: 60-70 ft.	Red	Needs space, prefers sandy loam	Brown Acorns	Yes	No
Post oak	<i>Quercus stellata</i>	TC, RB	Sun	Moist	Slow	Height: 40-50 ft; Spread: 35-50 ft.	Brown to dull yellow	Needs space, prefers sandy loam	Acorns	Yes	Yes
Black oak	<i>Quercus velutina</i>	RB	Sun to part shade	Moist	Slow to Moderate; long lived	Height: 60-80 ft; Spread: 30-60 ft.	Dull red	Needs space	Brown Acorns	Yes	Yes
Black locust	<i>Robinia pseudoacacia</i>	RB	Sun	Moist	Moderate	Height: 30-50 ft; Spread 20-25ft.	Yellow brown fall color	White flowers in spring; very fragrant; flat brown black pods. Many diseases; should be used sparingly since it may take over.	Legume two-valved, smooth 3 to 4" long	Yes	Yes


Attracts:

Birds
 Humming Birds
 Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 3: Large Deciduous Trees

Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate and Life Expectancy	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Princeton Upright pagoda tree	<i>Sophora japonica</i>	ST	Sun or shade	Moist	Moderate to Rapid	Height: 50-70 ft; Spread: 50 ft.	Yellow-brown	Black trunk; Yellowish white flowers. Can be messy	Yellow turning brown	No	Yes
Japanese snowbell	<i>Styrax japonicus</i>	BF, TC	Sun to partial shade	Moist	Moderate	Height: 20-30 ft; Spread 20-30 ft.	Modest yellowish to reddish fall color	Cluster of large white mildly fragrant flowers in May & June; best in partial shade	1/2" gray fruit in fall	No	No
Horse-sugar, sweetleaf	<i>Symplocos tinctoria</i>	RB	Sun to partial shade	Dry to Moist	Moderate	Height: 15-30 ft; Spread 15-20 ft.	Shiny green above, yellow-green below.	Compact cluster of yellow to cream fluffy flowers in early spring. Suckering; semi-evergreen.	Orange to brown fruit	Yes	Yes
Bald cypress	<i>Taxodium distichum</i>	ST, PK, BF, TC, RB	Sun or part shade	Moist	Slow	Height: 50-100 ft; Spread 20-30 ft.	Reddish-brown	Needs space; Deciduous conifer.	Seed cones green turning brown	Yes	Yes
Little leaf linden	<i>Tilia cordata</i>	DT, ST, BF, TC	Sun to part shade	Wet to Moist	Slow to Moderate	Height: 30-50 ft; Spread 25-40 ft.	Yellow	Ivory to cream flowers	Buff or mustard color	No	No
 Chinese elm	<i>Ulmus parvifolia</i>	ST, BF, TC	Sun to part shade	Moist	Medium to Rapid	Height: 40-50 ft; Spread 40-50 ft.	Yellow, brown	Gray green and orange bark; Needs space Allee is larger than the other varieties.	By seed	No	Yes
Japanese zelkova	<i>Zelkova serrata</i>	ST, PK, TC	Sun to part shade	Moist	Moderate to Rapid	Height: 50-80 ft; Spread 40-50 ft.	Yellow to reddish brown	Needs space	A small drupe	No	Yes





Attracts:

Birds
Humming Birds
Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
Power Line: PL; Parking Lot: PK
Buffer/Natural: BF; Tree Canopy: TC
Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 4: Small Deciduous Trees

Small Deciduous Trees											
Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Painted buckeye	<i>Aesculus sylvatica</i>	RB	Shade	Moist well drained soil	Moderate	Height: 20 ft; Spread: 30 ft.	Yellow	No	No	No	No
 Service-berry cultivars	<i>Amelanchier</i> spp.	PL, BF, TC, RB	Full, Part-Sun	Moist to semi-dry	Moderate	Height: 6-15ft; Spread: 15-20 ft.	Yellow orange	Multi-stemmed, shrubby. small white flowers in the spring	Berries turn magenta to purple black	Yes	No
*Devil's-walkingstick	<i>Aralia spinosa</i>	PL	Full, part-sun	Wet, Dry	Rapid	Height: 14 ft; Spread: 11 ft.	Yellow to red-orange	3-4" cluster of creamy white flowers in summer	Compact clusters of purple black berries	Yes	No
 Pawpaw	<i>Asimina tribloba</i>	BF, TC, RB, PL	Part-Sun, Shade	Moist to semi-dry	Moderate	Height: 15-20ft; Spread: 15-20 ft.	Yellow	Prefers moist sites; edible fruit. Maroon Flowers in early Spring	yellowish green fruit ripens to dark	Yes	Yes
River birch	<i>Betula nigra</i>	BF, TC, RB, PL	Full, Part-Sun	Wet, semi-dry	Rapid	Height: 6-15ft; Spread: 15-20 ft.	Yellow	Multi-stemmed or single, Heritage prefers some shade and is a good street and parking lot tree	Seed containers	Yes	No
 European hornbeam	<i>Carpinus betulus</i>	BF, TC, PL	Part-Sun, Shade	Moist to semi-dry	Slow to Moderate	Height: 50ft; Spread: 35ft.	Orange Yellow	Species needs more space than cultivars	Black berries	No	Yes
 American hornbeam	<i>Carpinus caroliniana</i>	PL, BF, TC, RB	Part-Sun, Shade	Moist to semi-dry	Slow	Height: 50ft; Spread: 40ft.	Orange Yellow	Difficult to transplant	Black berries	Yes	Yes
Chinquapin	<i>Castanea pumila</i>	BF, PL	Full-sun, shade	Semi-dry to Dry	Moderate	Height: 40-50 ft; Spread: 40-50 ft.	Yellow	Slender spikes of strongly scented staminate flowers	Dark brown sweet nut	Yes	No



Landscape Value
 Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 4: Small Deciduous Trees

Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
 Forest Pansy redbud	<i>Cercis canadensis</i>	PL, BF, TC, RB	Full-sun, shade	Moist to dry	Rapid	Height: 20-30 ft; Spread: 15-20 ft.	Purple	Avondale is different than the other varieties because it is a good downtown tree and power line tree. rosy pink pea like flowers	No	Yes	No
 Eastern redbud	<i>Cercis canadensis</i>	PL, BF, RB	Full-sun, shade	Moist to dry	Rapid	Height: 20-30 ft; Spread: 30ft.	Yellow green	Cultivars more disease resistant. rosy pink pea like flowers	No	Yes	No
 Texas redbud	<i>Cercis reniformis</i>	PL, BF	Full-sun, shade	Moist to dry	Rapid	Height: 25-30 ft; Spread: 15-25 ft.	Yellow green	'Oklahoma' 'Texas White'; two common varieties	No	Yes	Yes
 Fringetree	<i>Chionanthus virginicus</i>	BF, TC, RB, PL	Full to partial shade	Moist to dry	Slow to Moderate	Height: 25-30 ft; Spread: 15-25 ft.	No	Tree form only. creamy white fragrant flowers	Dark blue fruit	Yes	No
 Flowering dogwood	<i>Cornus florida</i>	BF, RB, PL	Sun, shade	Moist to dry	Moderate	Height: 10-40 ft; Spread: 15-30 ft.	Yes	Cultivars more disease resistant	Glossy red fruit	Yes	No
 Kousa or Japanese	<i>Cornus kousa</i>	BF, TC, PL	Sun, shade	Moist to dry	Slow	Height: 20-25 ft; Spread: 15-30 ft.	Yes	Milky Way Select' best as single stem	Glossy red fruit	No	Yes
Washington hawthorn	<i>Crataegus phaenopyrum</i>	BF, PL	Full-sun, part-sun	Moist to semi-dry	Rapid	Height: 25-30 ft; Spread: 25 ft.	Yellow	2" cluster of small white flowers in Spring.	1/4" orange red berries persists into winter	Yes	No
 Persimmon	<i>Diospyros virginiana</i>	BF, RB, PL	Sun	Moist	Moderate	Height: 30-50 ft; Spread: 20-30 ft.	Orange	Needs space; some leaf spot problems	Yellow to orange, marked with purple	Yes	Yes

Attracts:






Birds
 Humming Birds
 Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 4: Small Deciduous Trees

Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Chinese Parasol	<i>Firmiana simplex</i>	ST, DT	Sun	Moist Drainage	Rapid	Height: 30-60 ft; Spread: 30-40 ft.	Bright Yellow	Lemon yellow flowers	Light Brown	Yes	No
 Carolina silverbell, snowdrop tree	<i>Halesia carolina</i>	BF, TC, RB, PL	Full-sun, shade	Moist to semi-dry	Moderate	Height: 20-40 ft; Spread: 15-30 ft.	Yellow	White bell shaped flowers in April to early May	1-1 1/2" fruit in fall	Yes	Yes
Common witch-hazel	<i>Hamamelis virginiana</i>	BF, PK, ST, PL	Full-sun, shade	Moist to Semi-dry	Slow to Moderate	Height: 15-30 ft; Spread: 15-25 ft.	Yellow	Yellow flowers in Fall	No	Yes	No
Goldenraintree	<i>Koelreuteria paniculata</i>	PL, BF, TC	Sun to part shade	Dry	Rapid	Height: 30-40 ft; Spread: 20-30 ft.	Green	No	Light brown	No	Yes
 Fantasy Crape myrtle	<i>Lagerstroemia faurei</i>	PL, PK, TC	Sun, shade	Moist to semi-dry	Rapid	Height: 10-30 ft; Spread: 15-25 ft.	Yes	Tree form only; may not be used for street trees on suburban sites. Pink, White and Purple Flowers	Seed Pods	No	Yes
 Crape myrtle cultivars	<i>Lagerstroemia indica</i>	DT, PL, TC	Sun, shade	Moist to semi-dry	Moderate	Height: 6-22 ft; Spread: 10-15 ft.	Yes	Tree form only; may not be used for street trees. Pink, White and Purple Flowers	Seed Pods	No	Yes
Umbrella tree	<i>Magnolia tripetala</i>	BF, RB, PL	Full-sun, part-sun	Moist to semi-dry	Moderate	Height: 30 ft; Spread: 18 ft.	Greenish Yellow	6-8" creamy white flowers in mid spring	Rosy red fruit in fall	Yes	No
Flowering crab apple hybrids	<i>Malus spp.</i>	PL	Sun	Wet to Moist	Slow to Moderate	Height: 18-20 ft; Spread: 18-20 ft.	Yellow	Do not plant with junipers. White to rose flowers	Red to yellow	No	No

Attracts:






Birds
 Humming Birds
 Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 4: Small Deciduous Trees

Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
 Eastern hophornbeam, ironwood	<i>Ostrya virginiana</i>	PK, BF, TC, RB, PL	Sun to partial shade	Wet	Slow	Height: 25-40 ft; Spread: 20-30 ft.	Yellow, orange, and scarlet fall color	Tolerates city conditions	Small pods that look like hops	Yes	No
 Sourwood	<i>Oxydendron aboreum</i>	BF, TC, RB, PL	Sun to partial shade	Moist	Slow	Height: 20-30 ft; Spread: 10-15 ft.	Variable fall color - yellow, red, purple	Fragrant, lily-of the valley like flowers in summer	Greenish yellow seed pods that last into fall	Yes	Yes
Pistachio	<i>Pistacia chinensis</i>	ST, DT	Sun	Good Drainage	Moderate to Rapid	Height: 25-30 ft; Spread: 25-30 ft.	Orange Red	Gray, inner layers salmon-rapid	Red to Purple	No	Yes
American plum	<i>Prunus americana</i>	PL, BF	Full-sun, part-sun	Semi-dry	Rapid	Height: 12-20 ft; Spread: 12-20 ft.	Yes	White fragrant flowers in early spring	Purple, red or yellow fruit in mid summer	Yes	Yes
 Japanese apricot	<i>Prunus mume</i>	PL, BF, TC	Full Sun	Clay loamy sand acidic and well drained	Rapid	Height: 20 ft; Spread: 20 ft.	No Fall Color Change	Best in groupings, medium growth rate and has pink flowers	1-3" fleshy yellow round fruit	No	No
 Sargent cherry	<i>Prunus sargentii</i>	BF, TC, PL	Sun	Moist	Moderate	Height: 30 ft; Spread: 30 ft.	Orange and red	Shiny black bark; Bright pink flowers	Black	No	Yes
 Higan cherry	<i>Prunus subhirtella</i>	BF, TC, PL	Sun	Wet	Rapid	Height: 20-30 ft; Spread: 15-25 ft.	Yellow Fall color	Best in groupings. .5" white to pinkish flowers in early spring	Oval Red	No	No
Akebono cherry	<i>Prunus x yedoensis</i>	BF, TC, PL	Sun	Wet	Moderate	Height: 25-30 ft; Spread: 15-20 ft.	Brown to red	White to pink flowers	Purplish black	No	Yes

Attracts:





Birds
 Humming Birds
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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 4: Small Deciduous Trees

Common Name	Scientific Name	Landscape Value	Light	Soil Type	Growth Rate	Height & Spread at Maturity	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Native to North Carolina	Drought Tolerant
Hoptree	<i>Ptelea trifoliata</i>	PK, PL	Full-sun, shade	Moist to semi-dry	Moderate	Height: 15 ft; Spread: 10-15 ft.	Yellow Green	Greenish white fragrant flowers	No	Yes	Yes
 *Silky (weeping) willow	<i>Salix babylonica</i>	BF, PL	Full-sun, shade	Wet to Semi-dry	Rapid	Height: 30-50 ft; Spread: 30-50 ft.	Greenish yellow	Yellow, borne on short catkins blooming from April-May; Spring; Invasive roots; avoid planting near sewer and water lines.	Fruit 1/4 inch in diameter	Yes	No
 Sassafras	<i>Sassafras albidum</i>	BF, TC, RB, PL	Full, part sun	Moist to semi-dry	Moderate	Height: 30-60 ft; Spread: 25-40 ft.	Clear yellow orange pink to to scarlet	Tends to sprout from roots and form extensive thickets. yellow fragrant flowers in spring	Dark Blue drapes on female plants	Yes	Yes
Blackhaw Viburnum	<i>Viburnum rufidulum</i>	BF, PL	Full-sun, shade	Moist to Dry	Moderate	Height: 12-15 ft; Spread: 6-12 ft.	Red Maroon	White flowers 2-4" clusters in early spring	Large yellowish fruit turns blue black in fall	Yes	Yes



Section 12.01 Preferred Landscape Material
Category 5: Large Shrubs

Large Shrubs												
Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
 *Tag alder	<i>Alnus serrulata</i>	15-20'	Perimeter landscape	Full-sun part-sun	Wet to Medium	Rapid	Yellow catkins in spring	Yellow and orange	No	Cone shaped fruit	No	No
Shadblow serviceberry, thicket serviceberry	<i>Amelanchier canadensis</i>	6-20'	BF, RB	Sun, partial shade	Moist, yet well drained	Moderate	White, light pink	Yellow orange	Upright, suckering, tightly multi-stemmed. Native to swamps, along streams, and on hillsides. Not very pollution tolerant.	Purple to black berries	No	Yes
Japanese camellia	<i>Camellia japonica</i>	8-15'	BF, ACT	Partial shade	Acidic moist drains well high organic matter	Slow to moderate	White, pink and rose	Green yellow	Numerous cultivars. Cultivars may be hardier.	No	No	No
 Allegheny chinkapin	<i>Castanea pumila</i>	10-20'	Bf, RB	Sun to shade	Wet to Medium	Moderate	Strong Scented Flowers	Yellow or purple	Provides food for wildlife	Dark brown sweet nut	No	Yes
'Snow Sprite', 'Compacta'	<i>Cedrus deodara</i> (dwarf cultivars)	10-20'	BF, ACT	Sun	Wet to Medium	Moderate	No Flowers	Green	Graceful, pendulous habit.	Cones	Yes	No



Landscape Value
 Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
Fragrant wintersweet	<i>Chimonanthus praecox</i>	10-15'	BF, ACT	Sun, partial shade	Soil types with good drainage	Slow	Yellow and white flowers with purple centers	Green yellow	Shrub borders; best along walks and entrances to buildings where fragrance can be appreciated; multi-stemmed shrub becoming leggy with age.	Non-showy fruit	No	No
 Fringe tree	<i>Chionanthus virginicus</i>	12-20'	BF, ACT, RB	Sun, partial shade	Moist well drained	Native	White	Yellow, green and brown	Prefers stream banks; pollution tolerant; good in borders, groups, as accent or near large buildings.	Dark blue	No	Yes
Fragrant winterhazel	<i>Corylopsis glabrescens</i>	8-15'	BF	Sun, partial shade	Well drained soils	Slow to moderate	Yellow	Green yellow	Dense, best against an evergreen background; need winter protection.	Non-showy fruit	No	No
American filbert	<i>Corylus americana</i>	12-20'	RB	Partial shade, shade	Wet to Medium	Rapid	Yellow brown male catkins	Orange, rose, purplish red, yellow and green	Many diseases, none serious; should be limited in number because squirrels love the nuts.	Nuts	No	Yes
 Willowleaf cotoneaster	<i>Cotoneaster salicifolia</i>	10-15'	BF, Act	Sun, partial shade	Well drained	Moderate	White	Green	Spreading, arching habit; purplish tinge in winter	No	Yes	Yes

Attracts:



Birds
 Humming Birds
 Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
Red-vein Enkianthus	<i>Enkianthus campanulatus</i>	12 -30'	BF, ACT	Sun, partial shade	Moist, well drained soil, does well in clay	Slow	White clusters	Yellow, orange, red	May be marginally hardy; good flower and fall color; needs acidic soils.	No	No	No
Pearlbush	<i>Exochorda racemosa</i>	9-15'	BF	Sun, partial shade	Well drained acidic soils	Moderate	White	No	Heat and drought tolerant; shrub border best; floppy and unkempt with age.	No	Yes	No
Border forsythia	<i>Forsythia x intermedia</i>	8-10'	BF, ACT	Sun, partial shade	Medium, semi-dry	Rapid	Large pale to deep yellow flowers in early spring	Green to yellowish green fall color, sometimes purplish	Size varies with cultivars; valued for early spring flowers; arching stems root and sucker. Withstands city conditions. Many diseases, none troubling.	No	Yes	No
Large fothergilla	<i>Fothergilla major</i>	6-10'	BF, ACT	Partial shade	Moist to Dry	Slow to moderate	White	Red, yellow, orange	Leathery foliage; acid soils a must.	Yellow	Yes	Yes
Chinese witchhazel	<i>Hamamelis mollis</i>	10-15'	BF	Sun, partial shade	Moist fertile acidic soil	Slow	Yellow and fragrant	Yellow to yellow orange	Prefers acidic, moist, well-drained, organic soils. Least hardy <i>Hamamelis</i>	A capsule	Yes	No

Attracts:



Birds

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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
Common witchhazel	<i>Hamamelis virginiana</i>	20-30'	BF	Sun to shade	Prefers a moist, cool, acidic soil	Slow to moderate	Spider-like with 4 narrow, crinkled petals	Clear yellow	Naturalized areas, mass plantings, shrub borders in shady areas. Avoid extremely dry situations.	0.5" long capsule	Yes	Native
Witch hazel	<i>Hamamelis x intermedia</i>	8-20'	BF, ACT	Sun to shade	Well drained	Slow to moderate	Yellow, orange, red	Yellow, orange	Many cultivars with red or yellow flowers, with similar fall colors.	No	Yes	No
Pee Gee hydrangea	<i>Hydrangea paniculata</i>	8-20'	BF, ACT	Sun, partial shade	Moist well drained does well in Clay soil	Rapid	White	Green yellow	Extremely coarse texture, unattractive in late fall and winter; shrub borders best	No	Yes	No
'Little Red', 'Robin', 'Festive', 'Cardinal', 'Oak Leaf'	<i>Ilex 'Red Hollies'</i>	10-15'	BF, ACT	Sun to light shade	Wet to Medium	Moderate	Small white flowers	Green	New foliage usually reddish in color.	0.2 to 0.3" red fruit	Yes	Yes
English holly	<i>Ilex aquifolium</i>	15-50'	BF	Sun, partial shade	Well drained soils	Slow	No	Green	Need male and females for red berries; good hedges	Red, yellow orange berries	No	No

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
Possomhaw holly	<i>Ilex decidua</i>	7-30'	BF, ACT	Sun, partial shade	Moist to dry soils	Moderate	White	Yellow	May be large shrub or small tree; more tolerant of alkaline soils than <i>I. verticillata</i> .	Orange and red fruit	Yes	Yes
Mountain winterberry	<i>Ilex montana</i>	15-40'	BF, ACT	Part-sun	Medium, semi-dry	Moderate	No	Yellow red	No	Red Berries on Female Plant	No	Yes
Yaupon holly	<i>Ilex vomitoria</i>	10-20'	BF, ACT, RB	Sun to shade	Tolerates a range of soil types (dry, moist)	Moderate to Rapid	Small white flowers in spring;	Green	Use for background or naturalizing; 'Pendula' weeping form.	Red-orange berries clustered along the stems of female plants that	Yes	Yes
Shadow's Female yaupon	<i>Ilex vomitoria</i> 'Shadow's Female	10-12'	BF, ACT, RB	Sun	All types of soils	Moderate to rapid	White	Green	Richer, thicker foliage than most yaupons, good accent plant, can be topiary	Red orange berries	Yes	Yes
Aquipern holly	<i>Ilex x aquipernyi</i>	10-25'	BF, ACT	Sun, partial shade	Wet to Medium	Slow to moderate	No	Green	Tall, showy shrub; 'Brilliant', 'San Jose' female clones. 'Aquipern' is a male clone. Deer Resistant	Red, yellow or orange berries	No	No

Attracts:



Birds

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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT


Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
Japanese anise-tree	<i>Illicium anisatum</i>	8-20'	BF, ACT	Partial shade	Well drained organic soil	Moderate	Yellow and white	Green	Often confused with <i>I. parviflorum</i> .	No	No	No
 Virginia sweetspire	<i>Itea virginica</i>	3-10'	BF, ACT, RB	Sun to shade	Dry to moist soils	Moderate	White	No	Prefers moist, fertile soils, wet places. More dense under cultivation.	No	Yes	Yes
Japanese spice bush	<i>Lindera obtusifolium</i>	15-20'	ACT	Sun, partial shade	Moist well drained	Moderate	Green, yellow	Yellow	There are no serious disease or insect problems.	Red and black berries	Yes	Yes
Burgundy loropetalum	<i>Loropetalum chinense</i> var. <i>rubrum</i> 'Burgundy'	15-20'	BF, ACT	Sun, partial shade	Prefers acidic, moist, well-drained, does well in clay	Moderate	Cluster of 0.7" fragrant cream to white flowers in spring	No	A JC Raulston Arboretum selection	No	Yes	No
 Star magnolia	<i>Magnolia stellata</i>	10-20'	BF, ACT	Sun	All types of soils	Slow	White	Yellow bronze	Recommended cultivars: Royal Star, Waterlily, Centennial, rosea	Fruit non-showy	Yes	No
Star magnolia	<i>Magnolia stellata</i>	15-20'	PL, BF, TC	Sun	Well-drained, light, Acidic	Moderate	Avoid southern exposure. White Flowers	Bronze	No	Rosy-red berries	Yes	Yes
Southern wax myrtle	<i>Myrica cerifera</i>	10-15'	BF, ACT, RB	Sun, partial shade	Sand or clay soils	Rapid	Non-showy flower	Green	Native to coast; deer tolerant; may be tree-form	Gray globose fruit	Yes	No

Attracts:



Birds

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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
 Fragrant tea olive	<i>Osmanthus fragrans</i>	10-30'	BF, ACT	Sun, partial shade	Well drained acidic soils	Moderate	White fragrant	Green	Marginally hardy here; winter protection needed.	No	No	No
Japanese photinia	<i>Photinia glabra</i>	10-12'	ACT	Sun	Well drained	Rapid	White	Green	Smallest of photinias.	No	Yes	No
Chinese photinia	<i>Photinia serrulata</i>	20-30'	BF, ACT	Sun, partial shade	Well drained soils	Moderate to rapid	White	Green	Offensive odor in spring. May have some disease problems and affected by colder winters.	Red fruit in late summer lasting into early fall	Yes	No
Fraser photinia	<i>Photinia x fraseri</i>	10-20'	BF, ACT	Sun, partial shade	Well drained	Rapid	White	Green	"Red tip" photinias, have been affected by cold winters, diseases.	Red Berries	Yes	No
Dwarf Alberta spruce	<i>Picea glauca</i> (dwarf cultivars) 'Conica', etc.	3-10'	ACT	Sun	Well drained	Slow	No	Green	Very slow growing; some mite problems.	No	Yes	No
English laurel	<i>Prunus laurocerasus</i>	10-18'	BF, ACT	Sun, partial shade	Well drained soils	Moderate	Small white flowers	Green	Many diseases affect the <i>Prunus</i> species.	Purple to black berries	Yes	No
Pomegranate	<i>Punica granatum</i>	12-20'	BF, ACT	Sun, partial shade	Range of soils, will tolerate sandy loamy soils	Moderate	Orange, red, purple, yellow or white	Yellow green	Large shrub to small tree; good in borders, groups; not good in hedges.	Edible fruit	Yes	No

Attracts:



Birds
 Humming Birds
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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
 Rosebay Rhododendron	<i>Rhododendron maximum</i>	4-15'	perimeter landscape	Part-sun, shade	Medium to Semi-dry	Moderate	5" rose purplish pink to white flowers in early summer	Green	Requires cool, moist, well-drained soils; not suited to normal landscape situations.	Seed containers	Yes	Yes
 Flameleaf (shining) sumac	<i>Rhus copallina</i>	20-30'	RB	Sun,	All types of soils	Moderate	White	Maroon	Use with discretion since it tends to form large colonies	Dark red berries	Yes	Yes
 *Smooth sumac	<i>Rhus glabra</i>	10-15'	BF, RB	Full-sun part-sun	Drains well yet retains some water	Moderate to Rapid	Greenish yellow flowers on 6-10" pinnacles	Yellow scarlet and red velvet	No	Red fruit in summer on female plants	Yes	Yes
Mountain Stewartia	<i>Stewartia ovata</i>	10-15'	BF, ACT, RB	Partial Shade	Moist acidic	Slow	White	Scarlet white	Needs some shade here during hottest periods; should be planted when small; acid soils best.	Wood brown fruit	Yes	Yes
Bigleaf snowbell	<i>Styrax grandifolius</i>	8-12'	RB	Partial shade, shade	Medium	Slow	0.7 to 1" white flowers	No	Naturalized along stream banks	No	No	Yes
Le AnnTM Ternstroemia	<i>Ternstroemia gymnanthera</i> 'Contherann'	10-12'	BF, ACT	Partial shade, shade	Moist well drained	Slow to moderate	White yellow	Purple red bronze	Good sound attenuation plant if grown as hedge; more hardy than species	Red speckled fruit	No	No

Attracts:






Birds
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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
 Sparkleberry; farkleberry	<i>Vaccinium arboreum</i>	15-20'	RB	Partial shade, shade	Dry to moist soils	Slow	White	Red	Naturalized in rather dry woods	Gritty non-juicy berries	Yes	No
Chindo sweet viburnum	<i>Viburnum awabuki</i> 'Chindo'	10-15'	BF, ACT	Sun, partial shade	Range of all soils except wet	Rapid	White	Green	Moisture tolerant; great for hedges; a JC Raulston Arboretum selection; fast grower to 8' wide	Red Cluster fruit	Yes	No
Emerald luster viburnum	<i>Viburnum bracteatum</i> 'Emerald Luster'	10-12'	BF, ACT	Sun, partial shade	All soil types except wet soils	Moderate	White	Bronze and yellow	Wide as tall; good background plant for border; year-round interest.	Blue and purple berries into later summer	Yes	No
 Arrowwood	<i>Viburnum dentatum</i>	6-10'	Border screen parking lots	Full-sun/part-sun	Medium to Semi-Dry	Moderate	Creamy white flowers in 2-4" flat top clusters	Yellow crimson purplish red	No	Blue to black berries in late summer to fall	Yes	Yes
 Northern Burgundy Viburnum	<i>Viburnum dentatum</i> 'Morton', 'Synnesvedt'	10-12'	BF, ACT, RB	Sun to shade	Moist to dry soils	Moderate	White	Yellow crimson purplish red	Excellent for borders, screens and mass plantings.	Black and blue berries	Yes	No

Attracts:




Birds
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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
Nannyberry viburnum, sheepberry	<i>Viburnum lentago</i>	Height: 12-30'; Spread: 6' to 10'	BF, ACT	Sun to shade	Range of soil types	Moderate to rapid	White	purple red	Some mildew problems in shade; suckers to form thickets; good for naturalizing, shrub borders, as screen or background; use with discretion.	Blue/black drupe	Yes	No
 Smooth viburnum cultivars	<i>Viburnum nudum</i> cultivars 'Earth Shade', 'Winterthur'	10-15'	BF, ACT, RB	Sun, partial shade	Moist, yet well drained	Moderate	White	Red purple	'Winterthur' more compact, narrower; both good for shrub borders, screens, mass plantings. Deer Resistant	Green, pink, red, purple, black	Yes	Yes
Red Tip viburnum	<i>Viburnum odoratissimum</i> 'Red lip'	10-15'	BF, ACT	Sun, partial shade	Average to moist.	Rapid	Tiny white fragrant flowers inside panicles in spring	Green	Fast, vigorous growth; good hedge, background plant; It's beautiful, versatile and rarely bothered by pests or disease.	Drupes that turn from red to black	Yes	No
Eastern snowball	<i>Viburnum opulus</i> 'Sterile'	12'	BF, ACT	Sun, partial shade	Range of soil types	Moderate	Flat topped white flowers	Yellow, red to purple	Specimen, hedge or border, windbreak; deer resistant	Red berries in Fall lasting into winter	Yes	No

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value




Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
 Doublefile viburnum	<i>Viburnum plicatum</i> var. <i>tomentosum</i>	8-10'	BF, ACT	Sun, partial shade	Well drained light weight soils	Moderate	Yellow	Red purple	Excellent specimen, hedge, border.	Red to black fruit	Yes	No
Blackhaw viburnum, blackhaw stagbrush	<i>Viburnum prunifolium</i>	12-15'	BF, RB	Sun to shade	Semi-dry	Moderate	White flowers in 2 to 4" clusters in early spring	Red to maroon fall foliage	Excellent tall screen, hedge or background plant; songbird food source	Large yellowish fruit turns blue black in fall	Yes	Yes
Leatherleaf viburnum	<i>Viburnum rhytidophyllum</i>	10-15'	BF, ACT	Shade	Moist well drained	Moderate	White yellow	Green	*Protect from wind, winter sun; coarse in all seasons; massing or background plant.	Red drupe turn black	No	No
 Rusty blackhaw viburnum	<i>Viburnum rufidulum</i>	10-20'	ACT, RB	Sun to shade	Well drained soils	Moderate	White	Burgandy	More dense in full sun, more open in shade	Dark blue drupe	Yes	No
 Chastetree	<i>Vitex agnus castus</i>	15-20'	BF	Sun	Range of soil types	Rapid	Lilac, pale violet, white flowers on 6 to 10" racemes in summer	No	'Alba' (white), 'Rosea' (pink)	No	Yes very drought tolerant	No

Attracts:



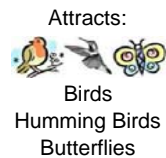
Birds
 Humming Birds
 Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Category 5: Large Shrubs

Common Name	Scientific Name	Height at Maturity	Landscape Value	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seed	Drought Tolerant	Native to North Carolina
Chastetree	<i>Vitex negundo</i>	10-15'	BF	Sun	Loose, moist, well-drained soil	Rapid	Small blue-purple, lilac, or lavender flowers on 5 to 8" panicles	No	Does best in hot weather	No	Yes	No



Landscape Value
 Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 6: Medium Shrubs

Medium Shrubs												
Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Chinese Abelia	<i>Abelia chinensis</i>	5-7'	BF, ACT	Sun, Partial Shade	Prefers moist, well-drained site	Slow to Moderate	White, fragrant flowers in small clusters from July to Sep.	Lighter green beneath; serrated margins	Attracts butterflies; flowers on new growth	Upright; spreading, rounded, loose	Yes	No
 Abelia	<i>Abelia</i> hybrids	Varies	BF, ACT	Sun, partial shade	Moist preferred; well drained	Moderate to Rapid	White, Pink, lilac	Varies	'Edward Goucher' (4'- 6'); 'Prostrata' and 'Sherwood' (3'- 4')	No	Yes	No
Aucuba	<i>Acuba Japonica</i>	6-10'	BF, ACT	Partial shade	Moist well drained	Slow	Purple male flowers	Green	Prefers warmer temperatures, tolerates pollution	Scarlet fruit	Yes	No
 Bottlebrush Buckeye	<i>Aesculus parviflora</i>	8-12'	BF	Sun, partial shade	Moist soil	Moderate	white flowers	Golden yellow	Suckering, multi-stem, wide-spreading shrub.	No	Yes	Yes
 Red Chokeberry	<i>Aronia arbutifolia</i>	6-10'	BF, ACT, RB	Sun, partial shade	Range of soil types	Slow	White to pinkish	Salmon, red, purple to scarlet	'Brilliantissima' (6'-8'), excellent fall color. Suckering, forming colonies over time, leggy. Tolerates both wet and dry soils	round red berries	Yes	Yes
 Black Chokeberry	<i>Aronia melanocarpa</i>	3-5'	BF, RB	Full-sun, shade	Semi-dry, Moist	Slow	Small off white to pink flowers in spring	Wine red	No	Shiny blackish colored fruit	No	No
Groundsel-bush	<i>Baccharis halimifolia</i>	5-12'	RB	Sun	Range of soil types	Moderate	No	Gray green	Salt tolerant	Cottony fruit	Yes	Yes

Attracts:



Birds
 Humming Birds
 Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Alternative leaf butterfly bush	<i>Berberis x mentorensis</i>	5'	BF, ACT	Sun to part shade	Wet to Moist	Moderate to Rapid	Yellow flowers in spring	Yellow orange red fall color	Very hardy and first to flower; prefers loose, loamy soils. Can be used as a small tree.	Red fruit	Yes	No
Bodinier Beautyberry	<i>Callicarpa bodinieri</i>	6-10'	BF	Sun, partial shade	Dry to Moist	Rapid	Lilac to pink	Purplish	May be difficult to find in America	Bluish lilac fruit	Yes	No
American Beautyberry	<i>Callicarpa Carolinas</i>	3-8'	BF, RB	Sun, partial shade	Dry to Moist	Rapid	White to pink	Yellow green	Coarse, open habit, good for naturalizing.	Pink to purple berries	Yes	Yes
 Common sweetshrub, Carolina Allspice, Strawberry Shrub	<i>Calycanthus floridus</i>	6-9'	BF, ACT, RB	Sun to shade	Range of soil types	Moderate	Maroon to dark rust brown	Yellow	Dense, bushy, rounded in cultivation; easily adaptable; trouble-free; not as tall in sun.	No	Yes	Yes
Sasanqua Camellia	<i>Camellia sasanqua</i>	6-10'	BF, ACT	Sun, partial shade	Acidic Moist Well drained	Rapid	White, red, pink	Dark green	Numerous cultivars available. Blooms in fall. Less hardy than <i>C. japonica</i> .	No	Yes	No
Buttonbush	<i>Cephalanthus occidentalis</i>	3-15'	BF, RB	Partial shade	Moist to Wet	Moderate	White	Yellow	Prefers wet conditions and will grow in water; will not tolerate dryness; looks dead until mid-May; naturalized, wet areas best	No	No	Yes
Cinnamon-bark	<i>Clethra acuminata</i>	15-20'	BF, RB	Full-sun, shade	Semi-dry, Dry	Slow to Moderate	White lily of the valley like fragrant flowers in early summer	Gold	Gold to cinnamon red trunk	No	No	Yes

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Clethra, Pepperbush, Summer-sweet	<i>Clethra</i> spp. <i>Cleyera</i> (see <i>Ternstroemia</i>)	3-8'	BF, ACT	Sun to shade	Moist to Wet	Moderate	White	Yellow	Prefers moist soil, tolerates wetness, and heavy shade, acidic soils.	No	No	Yes
Silky Dogwood	<i>Cornus amomum</i>	6-10'	BF, RB	Sun, partial shade	Wet to dry	Moderate to Rapid	White	Red	Maroon twigs in winter. Native to low woods, streams and swamps; becoming more straggly, unkempt with age;	Red berries	No	Yes
Spike Winterhazel	<i>Corylopsis spicata</i>	4-8'	BF	Sun, partial shade	Light moist well drained	Moderate	Yellow	Dark purple	Twice as wide as high; early flowering	No	Yes	No
Spreading Cotoneaster	<i>Cotoneaster divaricatus</i>	5-6'	BF, ACT	Sun	Range of soils	Moderate to Rapid	Small rosy	Yellow red	Spreading to 6-8 feet; multi-stemmed shrub.	Red to dark red pome	Yes	No
Parney's Red Clusterberry Cotoneaster	<i>Cotoneaster lacteus</i>	6-10'	BF, ACT	Sun, partial shade	Perfers moist well drained	Moderate	White	Dark green	Once established needs only occasional water	Red pome	Yes	No
Fuzzy deutzia	<i>Deutzia scabra</i>	6-10'	BF	Sun, partial shade	Well drained	Moderate	White to pink	Not significant	Brown peeling bark. 'Pride of Rochester' popular old cultivar	No	Yes	No
Southern bush-honeysuckle	<i>Diervilla sessilifolia</i>	3-5'	BF, RB	Full-sun, shade	Moist, Dry	Moderate	Small Yellow Flowers in summer	Red	No	Seed containers	Yes	Yes

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Hearts-a-bustin	<i>Euonymus americanus</i>	4-6'	BF, ACT	Part-sun, shade	Moist, Semi-dry	Slow to Moderate	Small White flowers in early summer	Green to yellow	No	Warty scarlet capsules with raspberry-orange berries	No	Yes
Spreading euonymus	<i>Euonymus kiautschovicus</i>	5-10'	BF, ACT	Sun, partial shade	Range of soils except wet	Rapid	Greenish white	Discolors in winter	Not as susceptible to scale as other euonymus. Not good near patios, decks, etc. – draws flies in flower. Foliage usually “burns” in winter and looks unkempt.	Pink fruit capsules with orange seeds	Yes	No
 Gardenia	<i>Gardenia augusta (G. jasminoides)</i>	4-6'	BF, ACT	Sun, partial shade	Acidic Moist Well drained	Moderate	White waxy	Dark green	Marginally hardy	No	Yes	No
Vernal witchhazel	<i>Hamamelis vernalis</i>	6-10'	BF	Sun, partial shade	Range of soils	Moderate	Yellow orange red	Yellow	Multi-stemmed, dense, rounded; best in moist situations; pH adaptable.	No	Yes	Yes
Rose of Sharon, Althea	<i>Hibiscus syriatus</i>	8-12'	ACT	Sun, partial shade	Moist well drained	Moderate to Rapid	Red white violet	Yellow	Grows in any soils except those extremely wet or dry; prefers hot weather.	No	Yes	No
Annabelle hydrangea	<i>Hydrangea arborescens</i> ‘Annabelle’	3-6'	BF, ACT	Sun, partial	Moist well drained	Rapid	White	Not showy	Suckers freely and will cover large area; many diseases. Shrub borders best.	No	No	Yes
Bigleaf hydrangea	<i>Hydrangea macrophylla</i>	3-6'	BF, ACT	Partial shade, shade	Moist well drained	Rapid	Pink, white violet blue	Not showy	Best for shrub borders.	No	No	No

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

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Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Oakleaf hydrangea	<i>Hydrangea quercifolia</i>	4-8'	BF, ACT	Sun, partial shade	Moist well drained	Rapid	White fades to pink	Wine orange	Exfoliating bark; leaf blight may be a problem	Seeds	Yes	No
Needlepoint holly	<i>Ilex cornuta</i> 'Needlepoint'	10'	BF, ACT	Sun, partial shade	Range of soils	Moderate	White	Green	Upright shrub or small tree.	Red fruit	Yes	No
Tall Japanese hollies	<i>Ilex crenata</i> cultivars: 'Hetzi', 'Rotundifolia', 'Soft Touch'	4-10'	BF, ACT	Sun, partial shade	Moist well drained	Moderate	White	Green	No	Varies red purple	Yes	No
Inkberry holly, Nigra inkberry	<i>Ilex glabra, I. glabra</i> 'Nigra'	6-8'	BF, ACT	Sun, partial shade	Moist acidic	Slow to Moderate	Not showy white	Dark green	Excellent foundation or naturalistic plantings. Spreads by underground stems (suckering); becomes leggy with age.	Black berry	Yes	No
Lusterleaf holly	<i>Ilex latifolia</i>	8-12'	BF, ACT	Partial shade	Well drained	Rapid	Not showy	Green	'Mary Nell' has heavy fruit; excellent specimen or hedge; needs well-drained soils.	Dull red fruit	Yes	No
Perny holly	<i>Ilex pernyi</i>	9-12'	ACT	Sun, partial shade	Well drained	Slow	Small yellow	Green	Upright habit, open outline	Red fruit	Yes	No
Common winterberry	<i>Ilex verticillata</i>	6 -15'	BF, RB	Full-sun, shade	Wet	Slow to Moderate	Small creamy white flowers	Purple green	No	Bright red berry like drupes on the female	No	Yes
Common winterberry, black alder	<i>Ilex verticillata</i>	6-10'	ACT, RB	Sun, partial shade	Perfers moist organic	Slow to Moderate	Small white	Purplish green	Native to swamps; will grow in water; suckering to form large, multi-stemmed clumps; best for shrub borders	Bright red on female	No	Yes

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Hardy anise shrub	<i>Illicium parviflorum</i>	7-10'	BF, ACT	Sun, partial shade	Moist to dry heavy soil	Moderate	Yellow green in summer	Green	May be marginally hardy in North Carolina	No	Yes	No
Pfitzer juniper	<i>Juniperus chinensis</i> 'Pfitzeriana'	5-10'	BF, ACT	Sun	Well drained	Slow to Moderate	No	Variety of colors	Also some smaller cultivars such as 'Pfitzeriana Compacta' and 'Pfitzeriana Compacta Nicks'	No	Yes	No
Holger juniper	<i>Juniperus squamata</i> 'Holger'	6'	BF, ACT	Sun	Well drained	Slow to Moderate	No	Blue gray	Susceptible to bagworms; flat topped, spreading; new growth yellowish on blue-green older growth	No	Yes	Yes
'Blue Arrow', 'Blue cloud'	<i>Juniperus virginiana</i> cultivars	Varies	BF, ACT	Sun	Well drained	Slow to Moderate	No	Silver bronze purple brown	Cedar apple rust and bagworms are problematic	No	Yes	Yes
Mountain laurel	<i>Kalmia latifolia</i>	4-8'	BF, ACT, RB	Sun, partial shade	Moist well drained dry	Moderate	White to pink	Yellow	Cinnamon Bark; Shady borders best, natural areas; toxic to live stock	No	Yes	Yes
Japanese kerria	<i>Kerria japonica</i>	3-9'	BF	Partial shade, shade	Range of soils	Moderate	Yellow	Yellow	Tough; best in borders, masses	No	Yes	No
Beautybush	<i>Kolkwitzia amabilis</i>	6-15'	ACT	Sun	Well drained	Rapid	Pink	Yellow to red	Difficult plant to find location for.	No	Yes	No
Crapemyrtles 'New Orleans', 'Centennial' Chica', 'Tonto', Acoma', etc.	<i>Lagerstroemia indica</i> and hybridas	5-15'	BF, ACT	Sun	Moist well drained	Rapid	White pink purple red	Yellow orange red	Smooth to exfoliating bark; Mildew resistant hybrids best	Seed pods	Yes	No

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Thunberg lespedeza	<i>Lespedeza thunbergii</i>	4-8'	ACT	Sun	Moist well drained	Moderate to Rapid	Rose to purple	Not showy	Semi-woody and often killed back to ground in winter; accent plant	No	Yes	No
Sweetbells leucothoe	<i>Leucothoe racemosa</i>	6-12'	RB	Shade	Moist to Wet	Moderate	White	Red	Leaf spot is a major problem for this species; tends to sucker; use sparingly	No	No	Yes
 Spice bush	<i>Lindera benzoin</i>	6-12'	BF, ACT, RB	Sun, partial shade	Moist to dry alkaline ph	Moderate	Yellow	Yellow	Multi-trunked. Difficult to transplant; moist, well-drained soils best but tolerates dryness once established.	Scarlet red spray fruit	Yes	Yes
Boxleaf honeysuckle	<i>Lonicera nitida</i>	6-8'	BF, ACT	Sun, partial shade	Moist well drained	Moderate	White	Dark green	No	Bluish purple fruit	Yes	No
'Plum Delight', 'Ruby', 'Fire Dance', etc.	<i>Loropetalum hybrids</i>	4-10'	BF, ACT	Sun, partial shade	Moist well drained	Rapid	Pink to red	Maroon	No	No	Yes	No
Sweetbay magnolia	<i>Magnolia virginiana</i>	10-15'	BF, ACT	Sun, partial shade	Moist to Wet	Moderate to Rapid	Creamy white	Green	Smooth bark. Native coastal plant, somewhat hardy in NC.	Bright red seeds	Yes	Yes
Banana shrub	<i>Michelia figo</i>	6-15'	ACT	Sun, Partial	Moist well drained acidic	Slow	Yellow green	Yellow green	Marginally hardy in North Carolina	No	Yes	No
Northern bayberry	<i>Myrica pensylvanica</i>	5-12'	BF, ACT	Sun, partial shade	Range of soil	Moderate	Not showy	Not showy	Suckers to form large colonies.	Gray drupe	Yes	No

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Holly osmanthus	<i>Osmanthus heterophyllus</i>	6-20'	BF, ACT	Sun, partial shade	Moist well drained acidic	Slow to Moderate	White	Dark green	Several cultivars available.	Blue black drupes	Yes	No
Osmanthus, Fortune's tea olive	<i>Osmanthus x fortunei</i>	9-12'	BF, ACT	Sun	Moist well drained	Moderate	White	Dark green	Preferred over <i>O. heterophyllus</i> by Dirr.	No	Yes	No
 Mock orange	<i>Philadelphus inodorus</i>	6'	BF	Full-sun, part-sun	Moist to Semi-dry	Rapid	Fragrant White flowers in Spring	Yellow green	Smells like orange blossoms	No	No	Yes
Common (eastern) ninebark	<i>Physocarpus opulifolius</i>	5-10'	ACT	Sun, partial shade	Dry to wet	Moderate	White to pink	Not showy	Peeling bark; Easily transplanted, adaptable; ragged in winter	Red seeds	Yes	Yes
Japanese pieris (andromeda)	<i>Pieris japonica</i> cultivars (‘Christmas Cheer’, Mountain Fire’)	9-12'	BF, ACT	Partial shade, shade	Moist well drained acidic	Slow	White	Green	Needs some shelter from wind; good in shrub borders; slow growing	Seed pods	No	No
Low-dense pyracantha	<i>Pyracantha koidzumii</i>	4-6'	ACT, RB	Sun	Well drained	Rapid	White	Green	Good for hot, dry areas; mounded habit.	Red berries	Yes	No
Yeddo hawthorn	<i>Rhaphiolepis umbellata</i>	4-6'	BF, ACT	Sun	Moist well drained	Slow	White to pink	Purple	Marginally hardy; salt tolerant; leaf spot in moist locations; winter protection needed.	Purple black	Yes	No
P.J.M. Hybrid azaleas	<i>Rhododendron</i> 'P.J.M.' Hybrids	3-6'	BF, ACT	Partial shade	Moist acidic	Moderate	Lavender pink	Purple	Good for foundation, low hedge; tolerates heat.	No	No	Yes
Sweet Azalea	<i>Rhododendron aborescens</i>	3-6'	BF, ACT	Full-sun, shade	Wet	Rapid	White, pink with red stamens	Orange and crimson	No	Seed containers	No	Yes

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

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Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Florida azalea	<i>Rhododendron austrinum</i>	8-10'	BF, ACT	Partial shade	Moist well drained	Slow to Moderate	Yellow orange red	Yellow to bronze	Loose, multi-stemmed shrub;	No	Yes	Yes
 Flame azalea	<i>Rhododendron calendulaceum</i>	4-8'	BF, ACT	Partial shade	Moist well drained	Slow	Yellow orange pink scarlet salmon	yellow to red	Native to western NC, marginally hardy in North Carolina; excellent for naturalizing; late flowering	No	Yes	Yes
 Carolina Rhododendron	<i>Rhododendron carolinianum</i>	3-6'	BF, RB	Part-sun, shade	Moist, Semi-dry	Slow	3 to 4" flower truss in spring, white, pale rose, rose or lilac rose	Green with purple tinge	No	Seed containers	No	Yes
Catawba rhododendron	<i>Rhododendron catawbiense</i>	6-8'	BF, ACT	Partial shade	Moist well drained	Moderate	lilac purple pink	Yellow green	Often becomes leggy in unfavorable locations. May be marginally hardy here (too hot).	No	No	Yes
Southern Indica azalea hybrids	<i>Rhododendron indica</i>	6-12'	ACT	Sun to shade	Moist well drained acidic	Moderate	Range of colors	Dark green	Marginally hardy in North Carolina, killed during colder winters.	No	Yes	No
Kaempferi azalea hybrids	<i>Rhododendron kaempferi</i>	4-10'	BF, ACT	Sun, partial shade	Moist well drained	Moderate	Range of colors	Reddish	Easier, less demanding than Kurume azaleas; reddish purple foliage in winter.	No	No	No
 Wild or Pinxter Azalea	<i>Rhododendron periclymenoides</i>	6-10'	BF, ACT	Part-sun, shade	Moist, Semi-dry	Slow	Variable flower color	Dull Yellow	No	Seed containers	Yes	Yes
Pinxterbloom azalea	<i>Rhododendron periclymenoides</i>	5-8'	BF, ACT	Partial Shade	Moist well drained	Moderate	Range of colors	Dull Yellow	Size varies with habitat; fragrant, pale-pink flowers in late spring	No	Yes	Yes

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Roseshell azalea	<i>Rhododendron prinophyllum (roseum)</i>	2-8'	BF, ACT	Partial shade	Moist well drained	Moderate	Pink	Green to bronze	Very hardy and tolerant of high pH; numerous spreading branches.	No	Yes	Yes
Plumleaf azalea	<i>Rhododendron prunifolium</i>	8-15'	ACT	Partial shade	Moist well drained	Moderate	Orange to deep red	Red	Cultivars: 'Cherry-Bomb', 'Coral Glow', 'Lewis, Short', 'Peach Glow'	No	Yes	Yes
 Pinkshell azalea	<i>Rhododendron vaseyi</i>	5-10'	BF, ACT	Partial shade	Moist well drained	Moderate	Pink to white	Deep red	Native to NC mountains; irregular, upright habit.	No	No	Yes
Swamp azalea	<i>Rhododendron viscosum</i>	1-8'	BF, ACT	Partial shade	Moist well drained	Moderate	White	Red	Native to swamps, beside ponds	No	Yes	Yes
Black jethead	<i>Rhodotypos scandens</i>	3-6'	BF	Sun, partial shade	Range of soils	Moderate to Rapid	White	Green yellow	Mounded, arching branches, often shabby	Black drupe	Yes	No
Rugosa rose	<i>Rosa rugosa</i>	4-6'	BF, ACT	Sun	Moist well drained	Rapid	Rose to white	Yellow	Many diseases; tolerates salt.	Orange to red hips	Yes	No
Common elderberry	<i>Sambucus canadensis</i>	5-12'	RB	Sun	Moist	Rapid	White	Yellow green	Prefers moist sites; suckers profusely.	Edible purple black fruit	Yes	Yes
Double Reeves spirea	<i>Spiraea cantoniensis 'Lanceata'</i>	4-6'	BF, ACT	Sun, partial shade	Range of soils	Rapid	White	Yellow	Heat tolerant; prune after flowering in spring; fast grower. Prefers regular watering.	No	Yes	No
Persian lilac	<i>Syringa x persica</i>	4-8'	ACT	Sun, partial shade	Well drained	Rapid	Lilac	Yellow	May be more hardy than common lilac in North Carolina	No	Yes	No

Attracts:



Birds

Humming Birds

Butterflies

Landscape Value


Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Chinese yew	<i>Taxus chinensis</i>	5-10'	BF	Sun, partial shade	Range of soils	Rapid	No	Green	No	No	Yes	No
Japanese yew	<i>Taxus cuspidata</i>	4-10'	BF, ACT	Partial shade, shade	Range of soils	Slow	No	Dull green	Tolerates urban conditions; variable form; poisonous; some cultivars low growing.	Small red fruit	Yes	No
Deerberry	<i>Vaccinium stamineum</i>	6-15'	BF, RB	Full-sun, shade	Moist, Dry	Moderate	White Bell Shaped Blooms	Red	No	Fruits are green when ripe	Yes	No
 Highbush blueberry	<i>Vaccinium corymbosum</i>	6-12'	BF, ACT, RB	Sun, partial shade	Moist well drained	Slow	White	Bright Red	Native to swampy soils, likes acidic, sandy soils.	Black blue fruit	Yes	Yes
Witherod Vibernum	<i>Viburnum cassinoides</i>	5- 6'	BF, ACT	Full-sun, shade	Moist, Semi-dry	Moderate	Creamy white flowers	Orange red dull crimson and purple	No	Fruit changes from green to pink to red to blue then to black	No	Yes
Maple-leaf viburnum	<i>Viburnum acerifolium</i>	4-6'	BF, RB	Partial shade, shade	Moist well drained	Moderate	Yellow white	Red purple	Low, sparse shrub reserved for naturalizing	Black fruit	Yes	Yes
Hobblebush	<i>Viburnum alnifolium</i>	6-10'	BF, ACT	Part-sun, shade	Moist	Slow	3-5" flat white flowers	Yellow orange red or maroon	No	Red to black drupe in late summer	No	Yes

Attracts:



Birds
Humming Birds
Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
Power Line: PL; Parking Lot: PK
Buffer/Natural: BF; Tree Canopy: TC
Riparian Buffer: RB

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Koreanspice viburnum	<i>Viburnum carlesii</i>	4-8'	BF, ACT	Sun, partial shade	Moist well drained	Moderate	White	Not showy	Very fragrant; plant in shrub borders, behind perennials, foundation planting.	Black blue drupe	Yes	No
Blue Muffin™ arrowwood viburnum	<i>Viburnum dentatum</i> 'Christom'	5-6'	BF, ACT, RB	Sun to shade	Moist well drained	Moderate	White	Orange to purple red	Slow-growing; good low hedge, back of border, woodland or natural areas. More compact than species; resilient and care-free.	Blue berries	Yes	Yes
Mohican viburnum	<i>Viburnum lantana</i> 'Mohican'	6-8'	BF, ACT	Sun	Well drained	Moderate	White	Purple red	Coarse winter shape; good hedge, deciduous screen, massing, shrub border; more compact than species and more disease resistant.	Yellow red black drupe	Yes	No
Dwarf Walter's viburnum	<i>Viburnum obovatum</i> 'Densa'	4-5'	BF, ACT	Sun, partial shade	Well drained	Moderate	White	Red	Half the size of species; compact; good hedge.	Red black	Yes	No
Compact cranberrybush viburnum	<i>Viburnum opulus</i> 'Compactum'	4-5'	BF, ACT	Sun, partial shade	Range of soil	Moderate	White	Yellow red purple	Beautiful specimen or use in informal hedge, border, foundation plant; good for wildlife	Red drupe	Yes	No
Doublefile viburnum cultivars	<i>Viburnum plicatum</i> var. <i>tomentosum</i> cultivars Mariesii', 'Pink Beauty' Shasta'	5-8'	BF, ACT	Sun, partial shade	Moist well drained; no clay	Moderate	White	Red purple	Smaller than species; all make good hedges, specimens, borders, foundation plantings; deer resistant.	Red fruit	Yes	No
Laurustinus	<i>Viburnum tinus</i>	6-12'	BF, ACT	Sun, partial shade	Moist well drained	Moderate	White	Green	Good screen, hedge; insect and disease free; salt tolerant; 'Variegata' clone.	Blue black	Yes	No

Attracts:



Birds

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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 6: Medium Shrubs

Common Name	Scientific Name	Height	Landscap e Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Drought Tolerant	Native to North Carolina
Burkwood viburnum	<i>Viburnum x burkwoodii</i>	8-10'	BF, ACT	Sun, partial shade	Range of soil	Slow to Moderate	White	Orange red	'Mohawk' is disease resistant; somewhat straggly with age; tolerates pollution; hedge, screen or accent	Red fruit to black	Yes	No
Pragense viburnum	<i>Viburnum x pragense</i>	8-10'	BF, ACT	Sun, partial shade	Moist well drained	Rapid	White	Green	Similar to <i>V. rhytidophyllum</i> .	No	Yes	No
Lantana phyllum viburnum	<i>Viburnum x rhytidophylloides</i>	8-15'	BF, ACT	Sun, partial shade	Range of soil	Moderate	White	Orange red	Screen, foundation plant, blended with other broadleaf evergreens; needs other viburnums for fruit set. 'Alleghany' good cultivar.	Reddish drupe to black	Yes	No
Weigela	<i>Weigela florida</i>	6-9'	BF	Sun	Well drained	Moderate to Rapid	White pink red	Not showy	Spreading, dense rounded; coarse; best in shrub borders, grouping or massing	No	No	No
Spanish dagger yucca	<i>Yucca gloriosa</i>	6-8'	ACT	Sun	Range of soils	Slow	White tinged red or purple	Green and white	May be somewhat marginal in this area; spine-tipped leaves	No	Yes	No

Attracts:



Birds

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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 7: Small Shrubs

Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Evergreen	Glossy abelia	<i>Abelia x grandiflora</i>	3-6'	BF, ACT	Sun, partial shade	Acidic moist well drained	Moderate	Lilac, pink clusters	Bronze	Attracts bees; Deer resistant	N/A	No	Yes
Deciduous	White forsythia	<i>Abeliophyllum distichum</i>	3-5'	BF, ACT	Sun, partial shade	Well drained	Slow to Moderate	White and pink	Purplish	Easily transplanted and adaptable to many soils, wide, arching, ragged	Fruit	No	Yes
Evergreen	Japanese boxwood	<i>Buxus Microphylla var. japonica</i>	3-6'	BF, ACT	Partial shade	Well drained; range	Rapid	4-10" panicles lavender, lilac, white, purple, yellow and pink	Blue green	More heat and nematode resistant than species.	White	No	Yes
Evergreen	English boxwood	<i>Buxus sempervirens 'Suffruticosa'</i>	2-5'	BF, ACT	Partial Shade	Requires excellent drainage	Very Slow	Non-showy in Spring	Green with Orange Cast	Can be kept very low by pruning	N/A	No	Yes
Evergreen	'Green Mountain', 'Green Velvet'	<i>Buxus sempervirens hybrids</i>	2-4'	BF, ACT	Partial shade	Moist Well Drained	Moderate	Creamy Yellow	Green	Supposedly do not discolor much in winter.	N/A	No	Yes
Deciduous	Purple beautyberry	<i>Callicarpa dichotoma</i>	3-4'	ACT	Sun, partial shade	Moist Soil	Rapid	N/A	Green Yellow	Treat as herbaceous perennial. Considered the best of all <i>Callicarpa</i> .	Pink and Lavender Berries in Summer	No	Yes
Evergreen	Amethyst Scotch heather and other cultivars	<i>Calluna vulgaris 'Amethyst', etc.</i>	3-4'	ACT	Sun, partial shade	Moist Well Drained; Prefer acid, sandy, organic soils	Slow to Moderate	Rose, Purple, Pink Flowers in Summer lasting into Fall	Bronze	Do not over- fertilize; mulch and water during dry periods; good in rock gardens, edging, ground cover	No	No	Yes

Attracts:



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Landscape Value


Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Evergreen	Blue mist shrub, blue caryopteris	<i>Caryopteris x clandonensis</i>	2-3'	ACT	Sun	Well Drained Loose Loamy Soil	Moderate	Blue Flowers in Late Summer	No	Prefers loose, loamy soil; treat as herbaceous perennial.	No	No	Yes
Deciduous 	New Jersey tea	<i>Ceanothus americanus</i>	3-4'	BF, PK	Full-sun, part-sun	Moist to dry	Slow to Moderate	Small creamy white to light pink flowers in summer, not fragrant	Yellow to tan	No	Seed containers	Yes	Yes
Evergreen	Feelin' Blue Deodar cedar	<i>Cedrus deodara</i> 'Feelin' Blue'	2'	PK, ACT	Sun	Well Drained Dry Soil	Moderate	N/A	Green	Spreading to 6 feet wide	Cones	No	Yes
Evergreen	Dwarf Hinoki falsecypress, Compact Bronze Hinoki cypress	<i>Chamaecyparis obtusa</i> 'Nana', 'Pygmaea Aurescens', 'Minima'	1.5-3'	BF, ACT	Sun	Sun Moist Well Drained	Very Slow	N/A	N/A	Very slow growing, mounded; border, rock gardens, specimen	Cones	No	Yes
Semi-evergreen	Sweetfern	<i>Comptonia peregrina</i>	2-4'	PK	Full-sun/part-sun	Semi-dry to Dry	Slow to Moderate	Yellow and green flowers	Greenish brown	No	Seed containers	No	Yes
Evergreen	Creeping cotoneaster	<i>Cotoneaster adpressus</i>	1-2'	PK, ACT	Sun, partial shade	Moist Well Drained	Slow	White Flowers	No	Spreading to 4-6 feet. 'Little Gem' 'Tom Thumb'(see below) good cultivar.	No	No	Yes



Section 12.01 Preferred Landscape Material
Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Evergreen	Tom Thumb cranberry cotoneaster	<i>Cotoneaster apiculatus</i> 'Tom Thumb'	1-2'	PK, ACT	Sun	Well drained soil but tolerates a range of site conditions except wet	Slow to Moderate	Small pink flowers	Bronzy red in Fall to purplish in Winter	Spreading 5 feet; more susceptible to mites in dry situations; good on banks, slopes and rock gardens; 'Tom Thumb'; best in cooler climates	Cranberry fruit in Fall	No	Yes
Evergreen	Bearberry cotoneaster	<i>Cotoneaster dammeri</i>	1-2'	PK, ACT	Sun	Perfers Moist	Rapid	Small White Flowers	Red, purple	Spreading to 6 feet+; roots along stems.	Red	No	Yes
Semi-evergreen	Rockspray cotoneaster	<i>Cotoneaster horizontalis</i>	2-3'	PK, ACT	Sun	Perfers Moist; well drained	Moderate	Small pink flowers	Red, purple	Spreading 5-8 feet; horizontal branching.	Red	No	Yes
Evergreen	Little-leaf or thyme rockspray cotoneaster	<i>Cotoneaster microphyllus</i> var. <i>thymifolius</i>	2-3'	PK, ACT	Sun, partial shade	Moist; well drained		Small White Flowers	Green	Dwarf or prostrate. Good groundcover	Red	No	Yes
Evergreen	Winter daphne	<i>Daphne odora</i>	3-4'	BF, ACT	Sun to shade	Moist; well drained	Slow	Rose, Purple, Pink Flowers in Spring	Green	May be marginally hardy; maintained areas and winter protection best	Red	No	No
Deciduous	Slender deutzia	<i>Deutzia gracilis</i>	3-6'	BF	Sun, partial shade	Well drained	Slow to Moderate	White	Green	Easily rooted. Best in shrub borders	N/A	No	Yes
Deciduous to Semi-evergreen	Leatherwood	<i>Dirca palustris</i>	3-6'	BF, ACT	Partial shade, shade	Moist to wet acidic soil high organic; doesn't like dry soil	Moderate	3-6" white drupe	Maroon, Yellow, Orange	Thrives in moist, shady areas; prefers deep, organic soils; follows water courses naturally.	Seed containers	No	Yes
Deciduous	Snowhill (Smooth) Hydrangea	<i>Hydrangea aborescens</i>	3-5'	BF, ACT	Part-sun, shade	Moist to Semi dry	Rapid	3 to 6" clusters of white flowers	Yellowish Brown	No	No	Yes	Yes

Attracts:



Birds

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Butterflies

Landscape Value


Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Deciduous	Pia hydrangea	<i>Hydrangea macrophylla</i> 'Pia'	2-3'	BF, ACT	Partial shade, shade	Moist well Drained Organic soils	Rapid	Pink, White, Blue and Purple	Green	No	N/A	No	No
Evergreen	Aaronsbeard St. Johnswort	<i>Hypericum calycinum</i>	1-2'	PK, BF, ACT	Sun, partial shade	Loamy well drained acidic soils	Rapid	3" Yellow flowers	Purple	Spreading to 2'; good for dry, heavy soils.	N/A	No	Yes
 Deciduous	Shrubby St. Johnswort	<i>Hypericum prolificum</i>	1-4'	PK	Sun, partial shade	tolerates dry	Slow	.7-1" yellow flowers	No real Fall Color	Small, dense bush with stiff, upright stems.	Capsules	Yes	Yes
Evergreen	Carissa holly	<i>Ilex cornuta</i> 'Carissa'	3-4'	BF, ACT	Sun, partial shade	Range of soils	Slow	N/A	Green	No	N/A	No	Yes
Evergreen	Rotunda holly	<i>Ilex cornuta</i> 'Rotunda'	3-4'	BF, ACT	Sun, partial shade	Moist well drained; tolerates a range of soils	Slow	Small White Flowers	Green	No	Red	No	Yes
Evergreen	Dwarf Japanese hollies	<i>Ilex crenata</i> cultivars: 'Helleri', 'Tiny Tim', 'Repandens', 'Carefree', 'Hoogendorn', etc	2-4'	PK, BF, ACT	Sun, partial shade	Moist well drained	Moderate	White flowers in Spring	Green	Many of these are slow growing and may eventually need pruning to maintain low height.	Small Black Drupe	No	Yes
Evergreen	Nordic™ inkberry holly	<i>Ilex glabra</i> 'Chamzin'	3-4'	BF, ACT	Sun, partial shade	Perfers Moist Acidic Soils	Slow to Moderate	White	Green	Compact; hardy; good hedge plant	Black Drupe	No	Yes

Attracts:



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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material

Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Evergreen	Dwarf yaupon holly	<i>Ilex vomitoria</i> 'Nana', Cultivars 'Stoke's Dwarf', 'Condeaux'	3-5'	PK, BF, ACT, RB	Sun, partial shade	Range of Soils	Moderate to Rapid	White	Green	Spreading 8-10 ft wide over time; Good for border, some wider than tall	Scarlet Drupe	Yes	Yes
Evergreen	Blue Pacific* , 'Emerald Sea*' , 'Blue Lagoon' , Boulevard' , Parsons juniper; Horizontal cultivars: 'Blue Vase' , 'Blue Chip' , 'Wiltonii' (Blue Bee)	<i>Juniperus conferta</i> cultivars; <i>Juniperus davurica</i> 'Expansa' (<i>'Parsoni'</i>); <i>Juniperus horizontalis</i>	1-3'	PK, ACT	Sun	Range of Soils	Rapid	N/A	Blue Green	<i>Juniperus conferta</i> : Spreading 6 to 9 feet wide; <i>Parsons</i> : Spreads to 9 feet across, mounding. <i>Juniperus horizontalis</i> cultivars: Spreading 4 to 8 feet wide	Blue	No	Yes
Evergreen	Japanese garden juniper	<i>Juniperus procumbens</i>	0.5-2'	PK, ACT	Sun	Well Drained; with good air circulation	Moderate	N/A	Green	Spreads 10 to 15 feet (22 feet); 'Nana' is shorter; may be very susceptible to juniper blight, depending upon source	N/A	No	Yes
Evergreen	'Calgary Carpet' juniper	<i>Juniperus sabina</i> cultivars	3'	PK, ACT	Sun	Well Drained	Moderate	N/A	Green	May be very susceptible to juniper blight depending upon source	N/A	No	Yes
Evergreen	'Blue Star' juniper	<i>Juniperus squamata</i> 'Blue star'	2-3'	PK,BF, ACT	Sun	Well Drained	Slow	N/A	Green	Susceptible to bagworms;slow-growing, grayish-green foliage color.	N/A	No	Yes

Attracts:



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Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Evergreen	Common lavender	<i>Lavandula angustifolia</i>	1-2'	ACT	Sun	Well Drained Site doesn't like to be wet	Slow	1.5-2.5" purple spikes with pink flowers	Green Blue	Needs well-drained soil	No	No	Yes
Evergreen	Coastal leucothoe	<i>Leucothoe axillaris</i>	3-4'	Act, RB	Shade; dislikes winter sun	High moisture	Slow to Moderate	White to Pink in Early Spring	Bronze red purple	Needs high moisture; may contract leaf spot.	No	Yes	No
Evergreen	Drooping leucothoe	<i>Leucothoe fontanesiana</i>	6'	BF, ACT	Part-sun, shade	Moist to dry	Slow to Moderate	Creamy White fragrant flowers	Evergreen	Prune to control height	No	Yes	No
Evergreen	Russian sage	<i>Perovskia atriplicifolia</i>	3-5'	ACT	Sun	Well Drained of moderate fertility	Moderate	9-12" violet blue in late summer	Green	Woody, herbaceous plant; prune in early spring	N/A	No	Yes
Evergreen	Dwarf Norway spruce	<i>Picea abies</i> (dwarf cultivars) 'Little Gem', 'Pendula', etc.	Varies	ACT	Sun	Well Drained	Moderate	N/A	Green	Prefers colder climate but adaptable if sufficient moisture when planted.	Globose	No	Yes
Evergreen	Mugo pine, Swiss mountain pine	<i>Pinus mugo</i> (dwarf cultivars) 'Compacta', 'Pumilio', 'Mughus'	Varies, usually <8'	ACT	Sun	Deep Moist loamy soils	Moderate	N/A	Green	Use grafted plants for true dwarf forms. Highly variable size and form even among the same cultivars.	N/A	No	Yes
Evergreen	Dwarf Scotch pine	<i>Pinus sylvestris</i> (dwarf cultivars) 'Nana', 'Hillside Creeper', etc.	Varies	ACT	Sun	Well Drained, but does tolerate dry sites	Rapid	N/A	Yellow Green	May be marginally hardy here (too hot).	Cones	No	Yes

Attracts:



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Section 12.01 Preferred Landscape Material
Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Evergreen	Dwarf Japanese black pine	<i>Pinus thunbergii</i> (dwarf cultivars) 'Nana'	Varies	ACT	Sun	Range of soils; prefers well drained	Slow to Moderate	N/A	Green	Tremendously salt tolerant	Cones	No	Yes
Deciduous	Shrubby potentilla	<i>Potentilla fruticosa</i> and cultivars	1-4'	PK, BF, ACT	Sun, partial shade	Perfers Moist well drained soil but does well in poor sites	Slow	1 to 1.5" Yellow Flowers in the Summer	Yellow Brown	Shrubby borders, edges, mass plantings; spider mites can be a problem; should be pruned regularly.	N/A	No	Yes
Evergreen	Dwarf English laurel	<i>Prunus laurocerasus</i> cultivars	3 to 4	BF, ACT	Sun to shade	Moist Well Drained Organic	Moderate	White Flowers in Spring	Green	'Otto Luyken'* and 'Zabeliana'* common varieties	Black Purple Drupe	No	Yes
Semi-evergreen	'Mohave', 'Navaho', 'Red Elf', 'Tiny Tim'	<i>Pyracantha coccinea</i> hybrids	Varies	ACT, RB	Sun	Well Drained	Moderate to Rapid	.3" white on 1-2"spire	Green	Thorns; more resistant to scab and fireblight than species.	Orange and Red Berries in the Fall	No	Yes
Evergreen	Indian hawthorn	<i>Rhaphiolepis x delacourii</i>	3-4'	BF, ACT	Sun, partial shade	Perfer moist well drained	Moderate	White, Pink, Rose 2-3" Flowers in Spring	Dark Green	Marginally hardy in North Carolina. More resistant to leaf spot	Purple or Blue to Black fruit	No	Yes
Evergreen	Dwarf indica azalea (Gumpo)	<i>Rhododendron eriocarpum</i>	1-2'	ACT	Partial shade	Well Drained Slightly Acidic Soils	Slow to Moderate	White and pink in spring	Green	Good border plant.	N/A	No	No
Deciduous	Gro-low fragrant sumac	<i>Rhus aromatica</i> 'Gro-Low'	2-3'	PK	Sun, partial shade	Acidic Well Drained	Slow to Moderate	Male Plants will have 1" Yellow Flowers	Red, Purple	Spreads 6 to 8 feet; use with discretion	Female Plants have red drupe in the Summer	No	Yes

Attracts:



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Street Tree: ST; Accent: ACT; VDAP: DT

Power Line: PL; Parking Lot: PK

Buffer/Natural: BF; Tree Canopy: TC

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Section 12.01 Preferred Landscape Material
Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
 Deciduous	Carolina rose	<i>Rosa carolina</i>	3-6'	BF, ACT	Full-sun, part-sun	Moist to dry	Slow	2" rose pink fragrant flowers	Dull red	Blooms in Summer	Seed containers	Yes	No
 Deciduous	Swamp rose	<i>Rosa palustris</i>	4-6'	BF, ACT	Full-sun/part-sun	Wet to Moist	Moderate	Dark rose pink fragrant flowers in summer	Red	No	Seed containers	Yes	Yes
Evergreen	Rosemary	<i>Rosmarinus officinalis</i>	2-4'	PK, BF, ACT	Sun	Well Drained	Moderate	Pale and Dark Blue Flowers	Green Gray	Salt tolerant; any soil except those permanently wet; can be maintained below 30" tall.	N/A	No	Yes
Evergreen	Santolina; lavender cotton	<i>Santolina chamaecyparissus</i>	1-2'	PK, ACT	Sun	Excellent Drainage required	Moderate	Button like yellow flowers	Silver gray	Mounding, slow-growing, sub-shrub; adaptable; prefers low fertility.	N/A	No	Yes
Evergreen	Himalayan sarcococca	<i>Sarcococca hookeriana humilis</i>	2'	ACT	Partial shade	Well Drained Organic Soil	Slow to Moderate	Cluster white	Green	Suckers to form large colonies; pollution tolerant; spreads to 8 feet; tall ground cover for shady spots.	0.4" round black fruit	No	Yes
Evergreen	Fragrant sarcococca	<i>Sarcococca ruscifolia</i>	3-5'	BF, ACT	Partial shade	Acidic Moist Well Drained	Slow to Moderate	Milky White Flowers in Winter	Dark Green	Slow grower; good for shady spots.	Round red fruit	No	Yes
Evergreen	Japanese skimmia	<i>Skimmia japonica</i>	2-5'	BF, ACT	Partial shade, shade	Perfers Moist well drained	Slow	Glossy red, Maroon buds open into creamy white flowers	Yellows with summer sun	Need both male and female plants for fruit; needs to be moist but not soggy.	Red Berries on Female Plant	No	No

Attracts:



Birds
 Humming Birds
 Butterflies

Landscape Value

Street Tree: ST; Accent: ACT; VDAP: DT
 Power Line: PL; Parking Lot: PK
 Buffer/Natural: BF; Tree Canopy: TC
 Riparian Buffer: RB

Section 12.01 Preferred Landscape Material
Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Evergreen	Wall germander	<i>Teucrium chamaedrys</i>	1-2'	ACT	Sun	Well Drained prefers dry sandy soil	Moderate	Rose purple 2-5" Flowers	Green	Mounding evergreen sub-shrub; low hedge or edging plant; good for rock gardens.	N/A	No	Yes
Evergreen	Hetz Midget arborvitae	<i>Thuja occidentalis</i> 'Hetz Midget'	3-4'	BF, ACT	Sun, partial shade	Well Drained; protect from strong wind	Very Slow	N/A	Blue green	Slow growing; rounded; many diseases and pest, none serious; good in mixed borders, containers; often brown in winter; prefers moist air and soil.	N/A	No	No
Evergreen	Cranberry	<i>Vaccinium macrocarpon</i>	2-6'	BF, ACT	Full-sun, part-sun	Wet to Moist	Moderate	Small White to pink flowers	Evergreen	No	Scarlet red waxy berries	Yes	No
Deciduous	Lowbush blueberry	<i>Vaccinium pallidum</i>	3-5'	BF, PK	Full-sun, part-sun	Moist to dry	Moderate	Yes	Red	No	Flowers in spring and fruit in July	Yes	Fair
 Deciduous	Maple-leaf Viburnum	<i>Viburnum acerifolium</i>	4-6'	BF, ACT	Full-sun, part-sun	Moist to dry	Moderate	Yellowish white flowers	Reddish purple	No	Black fruit in Fall and winter	Yes	Yes
Evergreen	David viburnum	<i>Viburnum davidii</i>	2 to 3	PK, BF, ACT	Sun to shade	Moist well drained	Moderate	Pink bud opens to white flower	Blue green	Low-mounding; acid-loving; good in borders, as foundation planting.	Berries change green to pink to red to blue to black	No	Yes

Attracts:



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Section 12.01 Preferred Landscape Material

Category 7: Small Shrubs

Type	Common Name	Scientific Name	Height	Landscape Values	Light	Soil Type	Growth Rate	Flower Color	Fall Color	Interesting Growth Patterns	Fruits, Berries, Seeds	Native to North Carolina	Drought Tolerant
Deciduous	Dwarf cranberry-bush viburnum	<i>Viburnum opulus 'Nanum'</i>	2'	BF, ACT	Sun, partial shade	Range of soils	Moderate	2-3" flat top white flowers	Yellow, red, purple fall	Dense, mounding; good low hedge, filler plant.	Red drupe	No	Yes
Deciduous	Dwarf variegated weigela	<i>Weigela florida 'Variegata Nana'</i>	3'	PK, BF	Sun	Perfers well drained, but tolerates a range of soils	Moderate to Rapid	White pink red trumpet shaped flowers	Non-showy fall color	Most dwarf of weigelas; some specimens larger; tolerates air pollution	N/A	No	No
Deciduous	Yellowroot	<i>Xanthorhiza simplicissima</i>	2-3'	PK, RB	Sun, partial shade	Perfers moist Well drained heavy soils	Moderate	Brownish purple flowers in spring	N/A	Freely suckering, spreading, flat-topped ground cover for difficult sites; less invasive in dry soils; prefers moist stream banks	N/A	No	Yes
Evergreen	Adam's needle yucca	<i>Yucca filamentosa</i>	2'	PK, ACT	Sun	Moist to dry soil with good drainage	Moderate	Waxy creamy white bell shaped flowers	Green	Sharp, long, upright, spreading leaves.	N/A	Yes	Yes
Evergreen	Weakleaf yucca	<i>Yucca flaccida</i>	1-2'	PK, ACT	Sun	Range of soils	Slow	N/A	Green	Differs from <i>Y. filamentosa</i> by bend in leaves, thread-like fibers.	N/A	Yes	Yes
Deciduous	Dusty zenobia	<i>Zenobia pulverulenta</i>	2-3'	ACT, RB	Sun to shade	Moist Soils	Moderate	Small Bell Shaped Cream Flowers	Yellow	Requires acid, moist, well-drained soil.	N/A	Yes	No

Attracts:



Birds

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Riparian Buffer: RB