# Planting and Preservation Standards for Trees and Landscaping

#### A) Purpose and Intent.

The purpose of this section is to promote the proper planting and preservation of trees in the Town of Beaufort. The Board of Commissioners (BOC) has determined the planting and preservation of trees within the Town of Beaufort is not only desirable but essential to the present and future health, safety, and welfare of all the citizens. It is the intent of this section to enhance the Town of Beaufort by:

- Regulating the preservation of protected and exceptional trees.
- Regulating the planting of street trees.
- Providing standards for trees, shrubs and their planting.
- Providing a list of native trees, shrubs and their characteristics.

Encouraging the preservation and planting of trees is in the best interest of the health, safety and welfare of present and future citizens. This also helps the Town comply with EPA storm water Phase II rules for small municipal separate storm sewer systems. These rules govern storm water runoff, aquifer recharge, and other environmental concerns.

#### B) Tree Preservation.

It shall be unlawful to cut down any protected or exceptional specimen tree or to cut down any tree in the public right-of-way without the written approval of the BOC or their appointed agent(s).

# 1) Applicability.

This subsection applies to all trees within the Town and its ETJ meeting the standards of a protected or exceptional tree.

## 2) Exceptions.

The provisions of this Ordinance shall have the following exemptions:

- a) All lots dedicated as a school site or a playing field or other similar non-wooded recreational areas.
- b) Any public utility, cable television company, or other such utility which clears, moves, cuts down, or destroys any trees for the purpose of erecting, installing, moving, removing, altering, or maintaining any structures or fixtures necessary for the supply of electricity, communication, network, or cable television services upon any privately owned lands in which it has acquired an easement or right-of-way.
- c) Any utility which trims trees around electrical lines and fixtures in public street rights-of-way, and other public rights-of-way, according to state or federal requirements, but only to the extent necessary for minimum compliance with state or federal requirements.
- d) Upon the advice of the Town's Public Works Department, and in accordance with commonly accepted forestry practices, the Town may authorize the removal of trees to prevent the transmission of disease or infestation, to prevent danger of falling limbs and trees, or to prevent potential injury to life and/or property.
- e) In an emergency such as a hurricane, ice storm, fire, or other such disaster, the requirements of this Ordinance may be waived by the Town during the emergency period.

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f) Where practical difficulties or unnecessary hardships inconsistent with the purposes of this Ordinance resulting from its literal interpretation or enforcement, the Board of Adjustment (BOA) may waive, modify or delay the enforcement of these provisions, upon written request by the developer or the property owner.

# 3) Credit for Required Landscaping.

The preservation of existing trees may be used as credit towards required landscaping as detailed in section 15-F of this Ordinance.

#### 4) Private/Public Protected Tree Qualification Standards.

Protected tree includes all of the following:

- a) Public protected tree means any tree native to North Carolina with an eight inch (8") or more DBH (diameter breast height), located on lands owned by the Town or other governmental agencies or authorities, or on any land upon which easements are imposed for the benefit of the Town or other governmental agencies or authorities, or upon which other ownership control may be exerted by the Town or other governmental agencies or authorities, including rights-of-way, parks, public areas, and easements for drainage, sewer, water, and other such utilities.
- b) Private protected tree means any tree native to North Carolina with a DBH of eight inches or more.

# 5) Exceptional Trees.

Exceptional specimen tree means any tree which is determined by the Town to be of unique and intrinsic value to the general public because of any of exceptional size, age, unique location, historic association, or ecological value. This includes any tree designated a Carteret County Champion by the Carteret County Tree Awareness Group.

# 6) Right to Appeal.

Any person may appeal any ruling or order of the BOC or their designee(s) to the BOA who may hear the matter and make a final decision.

# 7) <u>Damaged Tree Replacement Calculations</u>.

This includes any damage or destruction caused by willful action, negligence, or neglect. If a tree is destroyed or damaged to such an extent it is no longer viable and must be removed, the owner of the property shall be liable to replace it. The number of replacement trees shall be double the number of trees removed and the replacement trees must be eight inches (8") DBH at time of replacement.

#### In addition:

- a) At least one replacement tree will be planted as near as possible to the site of the removed tree.
- b) If the required number of replacement trees cannot all be planted within the same property, the Town may designate alternate planting locations as street trees.

#### C) Street Tree Ordinance.

This subsection regulates trees planted in or to be planted in the public right-of-way.

#### 1) Tree Species Allowed.

No species other than those included in Appendix A of this Ordinance may be planted as street trees without written permission by the BOC or their designee(s).

#### 2) Spacing of Street Trees.

The spacing of street trees will be in accordance with the three species size listed below and no closer together than the following:

Table 14-1 Spacing of Street Trees

Size	Spacing Between Trees	
Small Trees, 10'-20' Tall (see Appendix A, Table A-3)	Thirty feet 30')	
Medium Trees, 20'-50' Tall (see Appendix A, Table A-4)	Forty feet (40')	
Large Trees, 50' or Taller (see Appendix A, Table A-5)	Fifty feet (50')*	

<sup>\*</sup>Except in special plantings designed or approved by a landscape architect.

#### 3) Rights of the Town.

- a) The Town shall have the right to plant, prune, maintain, and remove trees, plants, and shrubs within the road right-of-way lines of all streets, alleys, avenues, lanes, squares, sidewalks, and public grounds as may be necessary to insure public safety or to preserve or enhance the symmetry and beauty of such public grounds.
- b) The BOC or their designee(s) may remove or order to be removed any tree or part thereof which is in an unsafe condition or, by reason of its nature, is potentially injurious to sewers, electric power lines, gas lines, water lines, or other public improvements or is affected with any injurious fungus, insect, or other pest. This section does not prohibit the planting of street trees by adjacent property owners providing the selection and location of said trees is in accordance with this subsection.
- c) The Town shall have the right to require the removal of any dead or diseased trees on private property within the Town when such tree constitutes a hazard to life and/or other property or harbors insects or disease which constitutes a potential threat to other trees within the Town. The BOC or their designee(s) will notify, in writing, the owners of such trees. Removal shall be completed by said owner at their own expense within sixty days after notification of the letter to the owner has been served. In the event of failure of said owner to comply with this provision, the Town shall have the authority to remove such trees and charge and collect the cost of the removal pursuant to N.C.G.S. 160A-193. Notwithstanding the provisions hereof, if a dead or diseased tree constitutes a threat of immediate harm to persons or property, the Town Manager is authorized to use the summary abatement provisions of N.C.G.S. 160A-193 to remove or abate such tree and to recover the costs of such removal or abatement.

# 4) Topping of Trees.

It shall be unlawful, as a normal practice, for any person, firm, or town department to top any street tree, park tree, or other tree on public property. Topping is defined as the severe cutting back of limbs to stubs larger than three inches (3") in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. Trees severely damaged by storms or other causes, or certain trees under utility wires or other obstructions, where other pruning practices are impractical, may be exempted from this Ordinance at the determination of the BOC or their designee(s).

# 5) Responsibilities of Owners.

The owner of any tree or shrub shall prune the branches overhanging any street or right-of-way within the Town so such branches shall not obstruct the light from any street lamp or obstruct the view of any street intersection. There shall be a clear space of eight feet (8') above the surface of the street or sidewalk from such trees or shrubs. Said owners shall remove all dead, diseased, broken or decayed limbs, or dangerous trees or shrubs which constitute a menace to the safety of the public. The Town shall have the right to

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prune any tree or shrub on private property when it interferes with the proper spread of light along the street from a street light, interferes with visibility of any traffic control device or sign, or impedes upon the flow of traffic on the sidewalk.

#### 6) Stumps.

All stumps of street and park trees shall be removed below the surface of the ground so the top of the stump shall not project above the surface of the ground.

#### 7) Unlawful to Interfere.

It shall be unlawful for any person to prevent, delay, or interfere with the BOC or their designee(s) while engaging in and about the planting, cultivating, mulching, pruning, spraying, or removal of any street trees, park trees, or other trees on public grounds, as authorized in this Ordinance.

#### D) Standards for Planting Trees and Shrubs.

#### 1) Applicability.

Trees and shrubs planted in compliance with this section or with section 15 of this Ordinance shall meet or exceed the requirements of this subsection. In all other cases this section provides guidelines.

# 2) Standards for Trees.

Trees planted are encouraged to have most or all of the following qualities or shall be the best combination of these characteristics:

- Hardy;
- Resistant to extreme temperatures;
- Resistant to drought;
- Resistant to storm damage;
- Resistant to salt water when planted in low lying areas or near salt water areas;
- Able to survive physical damage from human activity;
- Tend to branch high above the ground;
- Wide spreading growth pattern.

New trees and shrubs may be evergreen or deciduous and shall conform to the American Standard for Nursery Stock published by the American Association of Nurserymen.

#### 3) Tree Size Measurement.

Measurements of the diameter of a tree shall be determined at DBH. In the case of multiple stems, only the largest shall be measured.

#### 4) Minimum Installed Tree Dimensions.

When planting is required, trees shall have the following minimum dimensions unless otherwise provided in this Ordinance:

Table 14-2 Minimum Installed Tree Dimensions

Tree Size Category (all trees at maturity size)	Minimum DBH	Minimum Height (at planting)
Small Trees, 10'-20' Tall (see Appendix A)	1"	4'
Medium Trees, 20'-50' Tall (see Appendix A)	1.5"	6'
Large Trees, 50' or Taller (see Appendix A)	2"	8'

# 5) Planting Distance from Curb, Curb Line, or Sidewalk.

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The distance trees may be planted from any curb, curb line, or sidewalk will be in accordance with the three species size classes listed below and no trees may be planted closer to any curb, curb line, or sidewalk than the following:

Table 14-3 Tree Planting Distance from Curb, Curb Line, or Sidewalk

Size	Distance from Curb, Curb Line, or Sidewalk
Small Trees, 10'-20' Tall (see Appendix A)	Two feet (2')
Medium Trees, 20'-50' Tall (see Appendix A)	Three feet (3')
Large Trees, 50' or Taller (see Appendix A)	Four feet (4')

#### 6) Distance from Street Corner and Driveways.

- a) No tree shall be planted closer than thirty-five feet (35') from any street corner except when the intersection contains a stop sign in every direction in which case no tree shall be planted within twenty feet (20') of the corner, measured from the point of the nearest intersecting curbs or curb line.
- b) No trees shall be planted in sight triangle(s) of driveways and streets without approval from the Town's Planning and Inspections Department. On state maintained roads, both NCDOT and town standards shall apply.

#### 7) Distance from Overhead Electrical Wires.

- a) No street trees other than those species designated as small trees in Appendix A of this Ordinance may be planted under or within ten lateral feet of any overhead electrical distribution wire.
- b) No street trees other than those species designated as small or medium trees in Appendix A of this Ordinance may be planted under or within fifteen lateral feet of any overhead electrical high-voltage transmission wire.

# 8) Distance from Underground Utilities.

- a) No trees shall be planted within five lateral feet of any underground water line, sewer line, transmission line, or other utility line.
- b) All tree plantings within the public right-of-way require a written statement from the Public Works Department determining the location where the tree is to be planted will not impact any underground municipal utilities. Applicants should call the 811 service for information on other buried utility lines.
- c) No street tree shall be planted closer than ten feet (10') of any fire hydrant.

#### 9) Shrubs Size.

Shrubs are required to satisfy requirements as follows:

Table 14-4 Shrub Size at Time of Planting

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Size of Shrub in Height or Spread at the Time of Planting	Requirement Fulfilled	
18"	The parking lot interior	
24"	The parking lot street frontage	
*18"	The foundation	
**36"	The loading dock screening	

<sup>\*</sup> Shrubs should be planted immediately adjacent to the building.

<sup>\*\*</sup> Shrubs shall be evergreen and shall reach a minimum height of 6' in three years.

#### 10) Minimum Planter Width.

All planters will have a minimum width corresponding with the size tree planted within,

**Table 14-5 Minimum Planter Width** 

Tree Size at Maturity	Minimum Planter Width
Small Trees, 10'-20' Tall (see Appendix A, Table A-3)	Four feet (4')
Medium Trees, 20'-50' Tall (see Appendix A, Table A-4)	Four feet (4')
Large Trees, 50' or Taller (see Appendix A, Table A-5)	Six feet (6')

## 11) Required Tree Variety.

Trees shall be of a native variety including but not limited to those species listed in Appendix A of this Ordinance (palm trees do not conform as trees to the intent of this section; however, they may be planted in addition to those required by this section). In no case should any tree or plant be planted which is on the NCSU's list of invasive exotic plants. When planting multiple trees, more than one variety may be required.

Table 14-6 Required Tree Variety

Number of Required Trees	Varieties
More than 10 trees required	Two or more types
20-40 trees required	No more than 50% of one type
40+ trees required	No more than 25% of one type

The Town encourages at least 20% of large trees planted to be live oak trees.

# APPENDIX A Native Shrubs and Trees of Carteret County, N. C.

When not required, the planting of trees and shrubs native to eastern North Carolina and/or adaptable to coastal conditions and climate, is strongly encouraged. A list of desirable trees and shrubs, in three classes based on size, is listed below.

Table A-1 Special Characteristics Key

Code	Special Characteristics Key	Code	Special Characteristics Key
AuF	Autumn flowering	S	Stately
AW	Attracts wildlife	SF	Spring flowering
D	Drought tolerant	ST	Salt tolerant
Е	Evergreen	SuF	Summer flowering
F	Fragrant	TW	Tolerates wet areas
FC	Fall color	W	Resistant to wind damage
LL	Long-lived	WI	Winter interest
LM	Low maintenance	WK	Weak wood
S	Stately	YLI	Year-long interest

# 1) Native Shrubs.

Shrubs may reach up to ten feet (10') high at maturity.

Table A-2 Native Shrubs

Common Name	Botanical Name	Special Characteristics*
		FC, SF-white, fuchsia berries in fall,
American beauty berry	Callicarpa Americana	AW
Bear grass	Yucca filamentosa	E, SF-white, ST, AW
Cabbage palmetto**	Sabal palmetto	E, ST, W
Carolina allspice	Lindera benzoin	FC, SF-white, berries, AW, F
Coastal, dwarf azalea	Rhododendron atlanticum	SF-white, F, TW
Dahoon (Holly)	Ilex cassine	E, SF-white, red berries, AW
	77	E, SF-white, red berries, AW, culinary
Dwarf Yaupon Holly	Ilex vomitoria	leaves (tea)
Fetterbush, leucothoe	Leucothoe axillaris	E, SF-white, AW
Fringe tree, old man's beard	Chionanthus virginicus	FC, SF-white
Groundsel tree	Baccharis halimifolia	E, FC-white
Heart's-a-bustin'	Euonymus americanus	SF-white, striking fruit, WI
High bush blueberry	Vaccinium corymbosum	FC, very early SF-white, AW
Hydrangea	Hydrangea sp.	SuF-white, WI, ST
Inkberry holly	Ilex glabra	E, SF-white, berries, AW
Lyonia, fetterbush	Lyonia lucida	E, SF-pink, AW
New Jersey tea	Ceanothus americanus	SF-white, TW, AW
Red chokeberry	Sorbus arbutifolia	FC, SF-white/pink, AW, F
Smooth sumac**	Rhus glabra	FA, SuF-white, AW
Spanish dagger	Yucca aloifolia	E, SuF-white, ST, AW
St. John's wort	Hypericum perforatum	SuF-yellow
Swamp honeysuckle	Rhododendron viscosum	SF-white, TW
Swamp rose	Rosa palustris	SuF-pink, winter red hips, AW, TW
Sweet pepper bush	Clethra alnifolia	FC, SuF-white, AW, ST
Sweet shrub**	Calycanthus floridus	SF-maroon, F
Virginia sweet spire	Itea virginica	FC, SF-white, AW, F
Wax myrtle (myrkle)	Myrica cerifera	E, ST, AW, leaves fragrant
	Rhododendron	SF & SuF-white/pink, TW
Wild azalea	nudiflorum	
Winter berry, black elder	Ilex verticillata	Red berries, AW, TW
Witch alder	Fothergill gardenia	FC, SF-white
Zenobia	Zenobia pulverulenta	SF, SuF-white, TW

<sup>\*</sup>All special characteristics are found in Table A-1.

# 2) Small Native Trees.

Small trees will typically reach ten to twenty feet (10'-20') tall at maturity.

Table A-3 Small Native Trees

Common Name	Botanical Name	Special Characteristics*
Georgia fever tree (rare)	Pinckneya bracteata	SuF-pink, YLI
Loblolly bay	Gordonia lasianthus	SuF-white, TW,F, semi-E
Persimmon	Diospyros virginiana	SF-white, edible fruit
Possum haw	Ilex deciduas	SF-white, AW, WI
Red buckeye	Aesculus Pavia	SuF-Red
Redbud	Cercis Canadensis	FC, FC-deep pink
Serviceberry	Amelanchier Canadensis	Early SF-pink/white
Tea olive	Osmanthus americanus	E, SF-white, ST,F
Titi, leatherwood	Cyrilla racemiflora	FC, SuF-white
Wax myrtle	Myrica cerifera	E, fast growing, AW, fragrant leaves
Witch hazel	Hamamelis virginiana	FC, early SF-orange/yellow
Yaupon holly	Ilex vomitoria	E, WI-red berries, SF-white, culinary leaves (tea), dwarf varieties up to 10'

<sup>\*</sup>All special characteristics are found in Table A-1.

# 3) Medium Native Trees.

Trees in this category will typically reach twenty to fifty feet (20'-50') tall at maturity.

Table A-4 Medium Native Trees

Common Name	Botanical Name	Special Characteristics*
Black cherry	Prunus serotina	SF-white, AW
Carolina cherry laurel	Prunus caroliniana	E, SF-white
Dogwood	Cornus florida	SF-white, YLI
Eastern red cedar	Juniperus virginiana	E, LM
Margaretta or Post oak	Quercus margaretta	AW
Pawpaw	Asimina triloba	SF-maroon, edible fruit
Red bay	Persea borbonia	E, fragrant culinary leaves
Sassafras	Sassafras albidum	FC, SF-yellow, culinary
Sourwood	Oxydendrum arboreum	FC, SuF-white, YLI
Sweet Bay magnolia	Magnolia virginiana	SF-white, F, semi-E

<sup>\*</sup>All special characteristics shall be found in Table A-1.

#### 4) Large Native Trees.

Trees in this category will typically reach over fifty feet (50') tall at maturity.

Table A-5 Large Native Trees

Common Name	Botanical Name	Special Characteristics*
American holly	Ilex opaca	E, SF-white, YLI
Bald cypress	Taxodium distichum	FC, LL, TW
Laurel oak	Quercus laurifolia	E, LL, S, AW
Live oak	Quercus virginiana	E, LL, S, AW
Longleaf pine	Pinus palustris	E, large attractive pinecones
Pond Cypress	Taxodium ascendens	FC, LL, TW
Red Maple	Acer rubrum	FC, SF-red
Southern magnolia	Magnolia grandiflora	E, late SF-white, F
Southern red oak	Quercus falcata	AW, TW
Sweet gum	Liquidambar styraciflua	FC, fruitless variety available
Sycamore	Platanus occidentalis	Exfoliating bark
Tulip poplar	Liriodendron tulipifera	Late SF-yellow
Tupelo, black gum	Nyssa sylvatica	FC, M, TW, used in decoys
Water oak	Quercus nigra	AW

<sup>\*</sup>All special characteristics are found in Table A-1.

The Town would like to acknowledge the use of the charts used in this section which come from the Carteret County Master Gardener Volunteers, Sharon Bailey and Carolyn Hoss (1999); Carolyn Hoss and Claire Honodel (2006).

<sup>\*\*</sup>Native to North Carolina, but not to Carteret County.

<sup>\*\*\*</sup>Use as under story plants or at woodland edges.