



Town of Hilton Head Island
Planning Commission
LMO Rewrite Committee Meeting
July 25, 2013
8:30 a.m.
Benjamin M. Racusin Council Chambers

AGENDA

As a Courtesy to Others Please Turn Off All Cell Phones and Pagers during the Meeting.

- 1. Call to Order**
- 2. Freedom of Information Act Compliance**
Public notification of this meeting has been published, posted, and mailed in compliance with the Freedom of Information Act and the Town of Hilton Head Island requirements.
- 3. Approval of the Agenda**
- 4. Approval of the Minutes – July 17, 2013 Meeting**
- 5. Unfinished Business**
- 6. New Business**
 - a. Review of Tree Protection
- 7. Adjournment**

Please note that a quorum of Town Council may result if four (4) or more of Town Council members attend this workshop.

TOWN OF HILTON HEAD ISLAND
Planning Commission
LMO REWRITE COMMITTEE MEETING
July 17, 2013 Minutes
8:30a.m. – Benjamin M. Racusin Council Chambers

Draft

Committee Members Present: Chairman Tom Crews, David Ames, David Bachelder, Irv Campbell, Chris Darnell, Jim Gant, Walter Nester, Kim Likins, *Ex-Officio*

Committee Members Absent: Vice Chairman Gail Quick and Charles Cousins, *Ex-Officio*

Planning Commissioners Present: None

Town Staff Present: Teri Lewis, LMO Official
Kathleen Carlin, Administrative Assistant

1) **CALL TO ORDER**

Chairman Crews called the meeting to order at 8:30a.m.

2) **FREEDOM OF INFORMATION ACT**

Public notification of this meeting has been published, posted and mailed in compliance with the Freedom of Information Act and Town of Hilton Head Island requirements.

3) **APPROVAL OF THE AGENDA**

The committee **approved** the agenda as presented by general consent.

4) **APPROVAL OF THE MINUTES**

The committee **approved** the July 11, 2013 meeting minutes as presented by general consent.

Chairman Crews welcomed the public and asked Ms. Teri Lewis to present the staff's update on Adjacent Street and Adjacent Use Setbacks and Buffers. The committee began their review of this subject on July 11, 2013.

5) **UNFINISHED BUSINESS**

Adjacent Street and Adjacent Use Setbacks and Buffers

Ms. Lewis reported that at the last meeting the committee recommended some changes be made to the proposed Adjacent Use and Adjacent Street Setback and Buffer sections. The committee's recommended changes are listed below:

- Require a 6' adjacent use buffer between similar uses (currently a buffer is not proposed between similar uses)
- Add back in language that provides for the setback and buffer to be eliminated between properties that function together

- Ask the consultant if they can develop a list of incentives that can be used to encourage interconnectivity (pedestrian, vehicular or both) between properties that have similar uses
- Notes need to be provided that specify what A-E refer to in Tables 16-5-103.G and 16-5-103.H
- Ensure that the definitions for ‘Overstory’, ‘Understory’ and ‘Evergreen Shrub’ are easy to understand and make sense in the context that they are used
- The setbacks and buffers need to be ‘tested’ on some parcels to ensure that they work in conjunction with one another and that the desired flexibility is being achieved
- Create different setbacks and buffers for Coligny – these should be less stringent than other districts but should not be a zero buffer and setback
 - The setbacks and buffers should apply to major and minor arterials in the district but not to other streets
 - Consider how buildings can get closer to the street without creating a ‘wall’ effect
- Add back in the specific language regarding which portions of PD-1s are exempt from the setback and buffer standards
- Look into inconsistencies between requirements for open space in PD-1s versus PD-2s
- Section 16-5-103.D.2: eliminate ‘minor arterials’, add ‘requested’ in front of ‘permitted’, make the language less subjective
- Section 16-5-103.O: make the language less subjective

Ms. Lewis showed a graphic of the recommendations related to the Coligny District. Ms. Lewis showed and described the graphics that Mike Roan, the previous Urban Designer had developed for the Coligny District, including patio/amenity areas, on-street parking, low vegetation areas/landscaping areas and the building facades. There was a lot of discussion about the building edge along the right of way and if there would be green space between the building and the road and how the height would be addressed. Chris Darnell stated that he was in agreement with the street section that Ms. Lewis presented.

Mr. Ames stated that he felt that the design treatment for the area seems appropriate for most of the district, but not necessarily for Lagoon Road or for the smaller roads. The comments from the Committee were that there needs to be greened areas while also allowing the energy of the sidewalk activity. This green area should be narrow enough for people on the sidewalk to feel the energy of the amenity area. Other comments were that we should encourage floodproofing of buildings to avoid raising them. The committee asked if the consultants could provide input on whether or not they think this would even work with the high volume of pedestrians and bikes in the area and brought up the concept of complete streets and would that concept help.

The Committee also expressed concern as to whether or not it is even possible to have on street parking on Pope Avenue in the Coligny area. Councilwoman Likins further discussed concerns she has heard about the safety issues with on-street parking and how we deal with incredibly high volumes of bikes and pedestrians as well as cars and on street parking. There was a great deal of discussion about on-street parking.

Mr. Ames stated that we need to be careful in our urban areas that we do not over-separate uses so much that we lose the energy that we have from a mix of uses.

The committee and the staff reviewed the above referenced items on an item by item basis. The committee presented statements regarding the 6’ adjacent use buffer (it should function like the 12’ area in parking lots not a heavily undisturbed vegetative area.) More flexibility is needed with

regard to what is allowed in a buffer (i.e. bike racks and benches). They inquired whether or not there is something different to use (other method) other than buffers. The buffers should vary by districts and maybe relax these buffer standards are okay for non-residential areas. They also stated that maybe we have two different types of buffers, A. and B. that have different levels of function and one that may be more flexible and allowing limited uses. Different areas and environments may warrant different types of buffers.

Committee comments on the staff’s graphics were that we need to make sure the sidewalk area is narrow enough for people on the sidewalk to feel the energy of the amenity area. It was suggested by Chet Williams that we have a ‘test’ case to see what works and he questioned what the SCDOT would even allow within their right of way. Christ Darnell agreed with his concerns.

The next committee meeting will be held on Thursday, July 25th at 8:30a.m. The committee will discuss trees. Mr. Irv Campbell presented statements with regard to native islander communities and that it should be referred as native islander communities instead of heirs’ property.

The committee discussed how best to prepare the native islander communities for a meaningful discussion that addresses the thoughts and comments that have been previously received by staff and the committee. The neighborhood POAs should be provided with an outline of issues that will provide some structure. Ms. Lewis stated that the staff will send the requested Outline of Issues out next week. The information will be included on the Town’s website.

7) ADJOURNMENT

The meeting was adjourned at 9:30a.m.

Submitted by:

Approved by:

Kathleen Carlin
Administrative Assistant

Tom Crews
Chairman



TOWN OF HILTON HEAD ISLAND

Community Development Department

TO: LMO Rewrite Committee
FROM: Teri Lewis, *LMO Official*
DATE: July 16, 2013
SUBJECT: Review of Proposed Tree Protection

At the meeting on July 25th the committee will review the **Tree Protection** portion of the draft LMO.

Copies of the relevant sections are included for your review prior to the meeting.

Per the consultant:

Section 16-6-104, Tree Protection, carries forward and expands current specimen tree preservation regulations and consolidates and reorganizes general provisions regarding replacement trees. Current standards required development sites to include trees whose trunk diameters add up to 900 inches per acre. To simplify the tree protection regulations and focus them more on preserving tree canopy rather than individual trees, this section replaces the current 900 inches per acres standard with one with a sliding scale of requirements for retention of existing tree canopy. Such a standard provides more flexibility and reduces impediments to redevelopment. The section also includes a waiver process for use where application of the tree protection standards essentially precludes any reasonable development of a site. Measures for protecting trees during the development process are also substantially expanded.

General Notes about Tree Protection

- Recommend changing 30 days to 5 days in Footnote c at bottom of page 6-15
- Recommend removing 'or a diseased tree posing a threat to adjacent trees in Footnote c at bottom of page 6-15
- Staff has concerns and questions about the tree canopy provisions as currently drafted – questions and concerns include:
 - A typical site often has an understory, middlestory and overstory layer. If the overstory layer is the only layer then habitat, humidity and diversity will be lost. Additionally what will be left will be a non-diverse area of similarly aged trees.
 - Staff is more comfortable if it is clear that the canopy includes all trees under the overstory canopy, not just the overstory trees.
 - Table 16-6-104.E.2 is very confusing and even the examples given do not make it easier to understand. The new LMO is supposed to be easier to understand – the flexibility provided by protection of the canopy is not acceptable if it is too difficult to understand.
 - There also appears to be a disconnect between preserving the trees in the canopy but then allowing activities within 12 feet of the dripline of a specimen tree,

-
- Staff recommends deleting the 'Relocation of Specimen Trees' section.
- Under 16-6-104.H, 'generally' should be removed from 1 and 4 should be eliminated.
- Staff has concerns about the BZA waiving the tree retention requirements:
 - This will slow down the process
 - The criteria seem somewhat subjective
 - How will the request be reviewed by the BZA
- Determine whether the tree mitigation fee section is still necessary

(i.e., where little dune vegetation exists or where existing vegetation is non-native), and the pruning of trees and vegetation adjacent to the corridor can be done in a manner that maintains the health of such trees and other vegetation.

- b. No healthy specimen tree may be removed to create a view corridor. Selective pruning of trees (including specimen trees) is allowed, in accordance with accepted International Society of Arboriculture practices.
- c. Any trees removed shall be cut flush with existing grade and their root systems left intact. All removed vegetation shall be replaced with shrubs or other low-growing vegetation (not turf) that will enhance the stabilization of the dune system.

Sec. 16-6-104. Tree Protection

A. Purpose and Intent⁴²⁸

The purpose and intent of the standards in this section is to preserve and protect the tree canopy and specimen trees that contribute so much to the ambience, economy, and quality of life on Hilton Head Island. Specifically, the standards are intended to:

1. Lessen air pollution and promote clean air quality by increasing dust filtration;
2. Prevent soil erosion;
3. Improve surface drainage and minimize flooding, and minimize the cost of constructing and maintaining drainage systems necessitated by the increased flow and diversion of surface waters;
4. Conserve energy by reducing heating and cooling costs
5. Ensure that noise, glare, and other distractions of movement in one area do not adversely affect activity within other adjacent areas;
6. Reduce noise, heat, dust, and glare, and their potential impacts on adjacent areas;
7. Provide a visual buffer between adjacent developments and ensure that distractions of movement and other aspects of development do not adversely impact activity in adjacent developments and areas;
8. Beautify and enhance improved and undeveloped land and views from the Town's entryways and streets;
9. Maintain the ambience of the Town and enhance property values; and
10. Treat all sites equitably for the purpose of protecting and replanting trees and maintaining existing tree canopy.

⁴²⁸ This carries forward the purpose statement in Sec. 16-6-401 of the current LMO, reorganized to use an easier-to-read list of related benefits.

B. Applicability⁴²⁹

1. No person shall cut, destroy, cause to be destroyed, move or remove, transplant, prune, or limb any protected tree in the Town without first receiving approval of a Tree Removal Permit in accordance with the procedures and standards of, Sec. 16-2-103.K, Tree Removal Permit.
2. Consistent with the purposes of this section, all persons are encouraged to make all reasonable efforts to preserve and retain any existing stands of trees, individual trees, and other self-supporting plants, whether or not such plants are protected under this section, as well as such other flora that make up part of the understory, shrub layer, or herb layer.⁴³⁰
3. Failure to comply with the standards of this section shall be a violation of this Ordinance and subject to the remedies and penalties specified in Chapter 16-8: Enforcement.

C. Pre-Development Underbrushing⁴³¹

No underbrushing of property other than single-family lots and public utility easements shall not occur before final development approval unless approved by the Official as in compliance with this section.

1. Applicants for final development approval shall schedule an on-site inspection with the Official to explain the extent and purpose of the underbrushing activity. Purposes that will be considered justification for pre-development underbrushing activity

⁴²⁹ NOTE TO STAFF: This carries forward applicability provisions in Sec. 16-6-402.A and B of the current LMO. As with current provisions, applicability relates to the requirement for a Tree Removal Permit, which exempts several activities. Those activities are listed below, with proposed modifications highlighted in yellow.

The modifications include adding selective removal of vegetation in sight triangles, pre-development underbrushing, and tree removal associated with forestry activities. The last is consistent with the State's Right to Practice Forestry Act (S.C. Code Ann. § 48-23-205) as interpreted by the S.C. Attorney General. That Act, however, does allow local governments to enforce regulations requiring deferred consideration of development applications submitted soon after forestry activities. The addition of underbrushing is intended to clarify the current LMO's apparent authorization of underbrushing prior to development without a Tree Removal Permit.

- a. Removal or moving of trees in accordance with an approved Subdivision Plan (see Sec. 16-2-103.F), Development Plan (Minor or Major) (see Sec. 16-2-103.G), Small Residential Development (see Sec. 16-2-103.H) or Public Project (see Sec. 16-2-103.Q);
- b. Damage or removal of protected trees during an emergency such as a hurricane, tornado, ice or wind storm, flood, wildfire or any other such act of nature;
- c. Removal of **a dead or naturally fallen tree, or a diseased tree posing a threat to adjacent trees, or a tree that constitutes an imminent danger to the environment, property, public health, safety, or welfare due to the hazardous or dangerous condition of such tree, provided such removal is reported to the Official within 30 days after removal;**
- d. **The selective and limited removal of trees or vegetation within sight triangles (see Sec. 16-5-105.H.4, Sight Triangles) as necessary to obtain clear visibility at street and driveway intersections;**
- e. Necessary tree removal by a utility company consistent with plans submitted periodically to the Official for approval in accordance with Sec. 16-5-109, Utility Standards, provided such plans include appropriate provision for removal of any felled trees;
- f. Topping of trees on land of the Hilton Head Island Airport for the maintenance of the slope approaches to the airport as referenced in Sec. 16-3-106.E, Airport Overlay (A-O) District;
- g. **Pre-development underbrushing in accordance with Sec. 16-6-104.C, Pre-Development Underbrushing; and**
- h. **Tree removal associated with forestry activities shielded from local development regulation in accordance with S.C. Code Ann. § 48-23-205, subject to the limitations on subsequent development in Sec. 16-6-104.D, Limitations on Development Applications Subsequent to Exempt Forestry Activity.**

⁴³⁰ Modified to encourage the general preservation of vegetation and incorporate a similar provision in Sec. 16-3-405.B of the current LMO.

⁴³¹ This carries forward provisions in Sec. 16-6-402.C of the current LMO, which apparently authorizes certain tree and vegetation removal without a Tree Removal Permit.

- include showing property for sale and facilitating surveying work in very densely vegetated areas.
2. In all cases, applicants shall be required to maintain all vegetation in required buffers except for a six-foot-wide path providing access to the interior of the property. Such buffer areas shall be clearly marked and protected prior to the commencement of the underbrushing activity.
 3. The intent of this provision is to retain suitable species of native understory (see Administrative Manual) that can be incorporated into landscape plans and development plan approvals so as to conserve water, preserve indigenous plant species and dependent wildlife species, and save the applicant landscaping and irrigation costs.
 4. Following the receipt of final development approval, the applicant shall work with the Official to preserve understory in the front and side buffers.
 5. Any property owner who fails to abide by this restriction shall be required to restore the affected property to a condition as close to its original condition as practicable.

D. Limitations on Development Applications Subsequent to Exempt Forestry Activity⁴³²

Clearing of a site to circumvent the requirements of this section is prohibited. If the forestry exemption in Sec. 16-2-103.K.3, Exemptions, is used to remove all or substantially all of the trees that would have been protected by this section pursuant to a development application, no such application shall be accepted for a period of one year after completion of the timber harvest, or for a period of five years after completion of the timber harvest if the tree removal constituted a wilful violation of this section.

E. Tree Inventory⁴³³

1. Purpose

The purpose of the tree inventory is to clearly demonstrate the location and area of existing tree canopy coverage for stands of trees on a development site as well as the location and size of individual specimen trees on the site.

2. Inventory Required

A tree inventory prepared by an arborist or other qualified professional shall be submitted as part of any application for development subject to this section except for development of a single-family detached, duplex, or manufactured home dwelling on an existing lot. The Official may allow an applicant to forego a tree inventory or modify inventory content requirements where justified by a centerline filed inspection of the development site.

3. Contents

The tree inventory shall include:

⁴³² This is a new provision authorized by S.C. Code Ann. § 48-23-205(C)(1) to deter abuse of the statutory exemption of forestry activities from local tree protection regulations.

⁴³³ This carries forward the tree survey requirements in Sec. 16-3-405 of the current LMO, modified to refer to a tree inventory rather than a more formal survey, require the inventory to be prepared by an arborist rather than a registered surveyor, and relate inventory content requirements better to the standards that follow.

- a. The latest available aerial photograph or satellite image of the development site;
- b. A plan depicting:
 - i. The location, area, predominant category (see subparagraph F.1 below), general health, estimated tree number, and average DBH of stands of trees;
 - ii. The location, species, general health, and DBH (diameter at breast height) of all individual specimen trees on the site;
 - iii. Known dead or diseased trees, where practical; and
 - iv. The percentage of the development site area (excluding proposed street rights-of-way, existing utility easements, and natural water surface areas) that is covered by existing tree canopy.

F. Minimum Tree Canopy⁴³⁴

1. Existing Tree Canopy Defined⁴³⁵

For the purposes of this section, “existing tree canopy” consists of the crowns of all healthy self-supporting trees included in the following categories:

- a. Category I trees: Broad-leaved evergreen overstory hardwood trees and endangered tree species, as identified in the Administrative Manual, that have a DBH of six inches or more;
- b. Category II trees: Deciduous overstory hardwood trees and broad-leaved evergreen understory trees, as identified in the Administrative Manual, that have a DBH of six inches or more;
- c. Category III trees: Cone-bearing evergreen trees, as identified in the Administrative Manual, that have a DBH of eight inches or more; and
- d. Category IV trees: Ornamental trees, palm trees, and small understory trees, as identified in the Administrative Manual, that have a DBH of two inches or more.

⁴³⁴ As discussed and recommended in pp. 2-45 and 3-15 of the Code Assessment and p. 36 of the Response to LMO Rewrite Committee Comments on Code Assessment, this subsection replaces the minimum tree coverage requirements in Sec. 16-6-406 with a requirement for retention of a minimum percentage of existing tree canopy. The minimum percentages represent a sliding scale based on the percentage of the development site covered by existing tree canopy. As explained in the code Assessment, such a requirement is simpler, more easily understood, more easily administered, more flexible, and better accommodating of redevelopment site constraints than the current tree coverage requirements—and should be as effective in preserving the tree canopy so important to defining the character of Hilton Head Island. To address situations where the a development site is bare or virtually bare of trees, this section also includes a provision setting a minimum tree canopy as a percentage of site area, and requiring a development to supplement retained tree canopy with planted trees as necessary to meet that minimum

⁴³⁵ NOTE TO STAFF: This paragraph uses the various “categories” currently listed in current Sec. 16-6-407, along with the minimum size thresholds in current Sec. 16-6-16-6-402.B, to identify trees counting as existing tree canopy subject to these retention standards. We recommend that the current list of tree species falling within the various categories not be included in the LMO, but rather in the Administrative Manual.

Alternatively, existing tree canopy might be defined as the crowns of specimen trees and all other trees with a DBH of than ten inches or more. An even simpler, more generic, definition might be as existing tree canopy as evidenced by aerial photography or satellite imagery approved for accuracy by the Official. Does Town staff have a preference?

2. Applicability

The minimum tree canopy requirements of this subsection shall apply to all development except the development of an athletic field, airport runway, or golf courses.

3. Retention of Existing Tree Canopy⁴³⁶

Existing tree canopy on the development site shall be retain and protected in accordance with the minimum percentages in Table 16-6-104.E.2, Minimum Existing Tree Canopy Retention, based on the percentage of the site covered by existing tree canopy and the zoning district in which the development site is located.

Exemption

The table represents a sliding scale in which minimum percentage of existing tree canopy that must be retained varies inversely with the percentage of existing tree canopy. Where the existing tree canopy cover falls between two percentage points shown on the table, the minimum required tree canopy retention shall be prorated between the corresponding percentage points for minimum required tree canopy retention in the applicable district. For example, if existing tree canopy cover is 65% (25 percent of the difference between 60% and 80%), minimum required tree canopy retention shall fall at 25 percent of the difference between 60% and 52%, or 60%.

16-6-104.E.2: MINIMUM EXISTING TREE CANOPY RETENTION		
EXISTING TREE CANOPY COVER (AS A PERCENTAGE OF TOTAL SITE AREA)	MINIMUM REQUIRED TREE CANOPY RETENTION (AS A PERCENTAGE OF TOTAL PRE-DEVELOPMENT TREE CANOPY COVER) ^{1,2,3}	
	I-MX-COLIGNY DISTRICT	ALL OTHER ZONING DISTRICTS
100%	35%	44%
80%	41%	52%
60%	47%	60%
40%	53%	68%
20%	59%	76%
0%	65%	84%

NOTES:
 1. Existing tree canopy cover is the percentage of the area a development site covered by existing tree canopy (as defined in Sec. 16-6-104.F.1) before development or land disturbance of the site.
 2. Minimum required tree canopy retention is the percentage of the existing tree canopy that must be retained during development or land disturbing activity.
 3. Where the existing tree canopy cover falls between two percentage points on the table, the following calculations shall be undertaken to determine the minimum required canopy retention. In the I-MX Coligny district, add 0.33 to the minimum required tree percentage for each percentage point the existing tree falls below the percentage point in the first column on the table. For all other districts, add 0.40 to the minimum required tree percentage for each percentage point the existing tree falls below the percentage point in the first column on the table.

⁴³⁶ NOTE TO STAFF: The percentages proposed in the table are among the highest we have proposed in various codes. This is because of the very high importance Hilton Head Island has always placed on preserving tree canopy. Reduced percentages are proposed for the I-MX-Coligny District because it is the town’s most dense area of existing development with a high potential for redevelopment. Even though the retention requirement is based on a sliding scale, such a redevelopment area may still have difficulty meeting the generally applicable requirement.

As a test of these percentages, it would be useful for Town staff to review development plans for some existing development and redevelopment sites to measure the actual percentage of pre-development tree canopy that was preserved through the current tree coverage requirements.

Also, although the table singles out the I-MX-Coligny District for more lenient treatment due to its redevelopment potential, there may be other districts where reduced retention percentages may be appropriate.

16-6-104.E.2: MINIMUM EXISTING TREE CANOPY RETENTION		
EXISTING TREE CANOPY COVER (AS A PERCENTAGE OF TOTAL SITE AREA)	MINIMUM REQUIRED TREE CANOPY RETENTION (AS A PERCENTAGE OF TOTAL PRE-DEVELOPMENT TREE CANOPY COVER) ^{1,2,3}	
	I-MX-COLIGNY DISTRICT	ALL OTHER ZONING DISTRICTS
<p>ILLUSTRATIVE EXAMPLE: The tree inventory establishes that 65% of a 50,000 square foot development site in the I-MX-Coligny District is covered by existing tree canopy. The minimum required existing tree canopy retention for the site is 47% of the existing tree canopy cover (41% + 15 x 0.40), or 30.5% of the total development site (65% x 47%), yielding a minimum area of retained existing tree canopy equal to 15,275 square feet (30.55% x 50,000). See Figure 16-6-104.E.2: Example of Existing Tree Canopy Retention.</p>		

4. Minimum Tree Canopy as Percentage of Site Area

If application of the minimum existing tree canopy percentages in paragraph 2 above yields a minimum area of retained existing tree canopy that is less than five percent of the total area of a development site in the I-MX-Coligny District, or less than ten percent of the total area of a development site in any other zoning district, the development shall supplement the retained tree canopy with planted trees that will, at maturity, result in a total tree canopy covering at least five percent of the development site if in the I-MX-Coligny District, or at least ten percent of the development site if in any other zoning district.

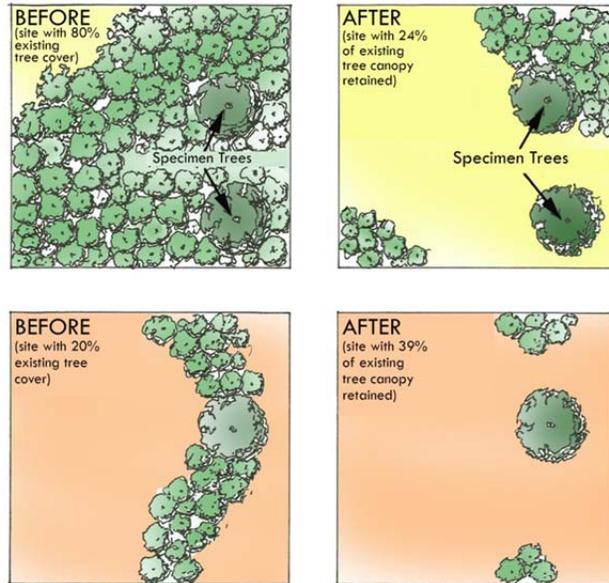


Figure 16-6-104.E.2: Example of Existing Tree Canopy Retention [to be revised to match example in text]

Illustrative Example: The tree inventory establishes that only 2.5% of a 50,000 square foot development site in the I-MX-Coligny District is covered by existing tree canopy. The minimum required existing tree canopy retention for the site is 66% of the existing tree canopy cover (59% + 18 x 0.40), or 1.65% of the total development site (2.5% x 66%) (825 square feet, or about 3+ large trees). In such a case, the development must plant a sufficient number of trees to expand the existing tree canopy from 2.5% of the site area to 5% of the site area (2,500 square feet, or about 10 large trees).

5. Priority Retention Areas⁴³⁷

Priority areas for retention of existing tree canopy shall include the following, listed in priority order:

- a. Existing tree canopy containing specimen trees, and their associated root zones;
- b. Existing tree canopy located in wetlands and wetland buffers (see Sec. 16-6-102.D);
- c. Existing tree canopy containing stands or groups of mature deciduous trees;
- d. Existing tree canopy needed for required adjacent street or use buffers (Sec. 16-5-103) and parking lot landscaping (Sec. 16-5-106.G); and
- e. Existing tree canopy that is a part of wildlife habitat and other sensitive natural areas.

G. Specimen Tree Preservation⁴³⁸

1. Specimen Tree Defined⁴³⁹

For purposes of this section, a specimen tree is any tree of a species designated by the State or federal government as an endangered, threatened, or rare species, or any tree of a type and with a DBH exceeding that indicated in Table 16-6-104.F.1, Specimen Trees, for the tree type.

TABLE 16-6-104.F.1: SPECIMEN TREES		
TREE TYPE		DBH (INCHES)
Live oak	Single trunk	35
	Multiple trunks	60 (sum of all trunks)
Laurel oak		35
Water oak		30
Red oak		25
White oak		20
All hickories		20
American elm		15
Loblolly and slash pines		25
Longleaf and pond pines		15
Red bay		20
Southern magnolia		30
Bald cypress and pond cypress		15
Black gum and sweet gum		30
Red maple		30
Spruce pine		Any size
Red cedar		20
Sycamore		30
Black cherry		25

⁴³⁷ This new subsection establishes priorities developers are to use in determining which portions of existing tree canopy should be preserved versus converted for development.

⁴³⁸ This carries forward the standards in Sec. 16-6-608 and Sec. 16-6-410 of the current LMO, clarifying that specimen trees are generally required to be preserved.

⁴³⁹ This carries forward the list from Sec. 16-6-408 of the current LMO.

TABLE 16-6-104.F.1: SPECIMEN TREES	
TREE TYPE	DBH (INCHES)
Sassafras	12

2. General Requirements

- a. No specimen tree may be removed except in accordance with paragraph b below or Sec. 16-6-104.I, Waiver of Tree Retention Requirements. In addition, all specimen trees shall have the following protections, whether located on public or private land:
 - i. Any activities performed within the drip line of a specimen tree shall have the prior approval of the Official.
 - ii. Specimen trees shall not be cut, removed, pushed over, killed, or otherwise harmed.
 - iii. The area within the drip line of any specimen tree shall not be subject to paving or soil compaction greater than ten percent of the total area within the drip line, or within 12 feet of the tree trunk. (See Figure 16-6-104.F.4: Limits of Paving or Compaction near Specimen Trees.)
- b. If preservation of a specimen tree causes unnecessary hardship, the applicant may apply for a variance from this subsection (see Sec. 16-2-103.T, Variance) once any required State or federal government agency approval to remove the tree is received in writing.

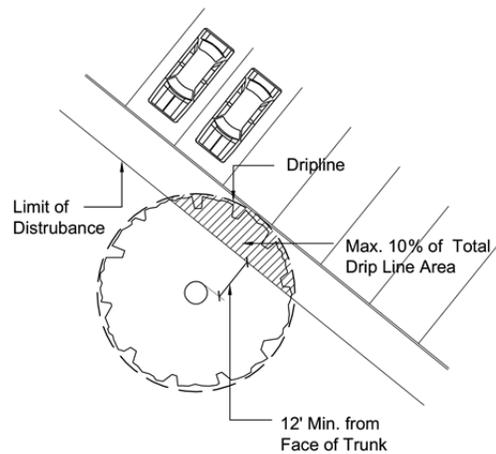


Figure 16-6-104.F.4: Limits of Paving or Compaction near Specimen Trees

3. Relocation of Specimen Trees

The relocation of a specimen tree is a labor and cost-intensive undertaking that may fail even under the best of conditions. Specimen trees may be relocated, however, if the relocation meets all of the following standards:

- a. The applicant has made all reasonable efforts to design around the tree in the existing location.
- b. The tree is in suitable condition for relocation, as determined by the Official.
- c. There shall be another suitable location for the tree on the development site.
- d. The future location shall not require excessive removal of additional existing trees and/or understory vegetation.
- e. Trees shall only be dug and moved during the planting season (October 1 through June 1).
- f. The applicant shall employ a Town approved-tree moving company.
- g. The applicant shall submit and obtain the Official's approval of a detailed tree care plan that includes both pre-move and post-move care specifications.

- h. If the relocated tree dies, a replacement tree shall be provided in accordance with Sec. 16-6-104.L, Standards for Supplemental and Replacement Trees.

H. Tree Protection Zones

1. Tree protection zones shall generally include the areas of a development site that is within the drip lines of the all individual trees and stands of trees proposed to be retained and protected in accordance with Sec. 16-6-104.F.3, Retention of Existing Tree Canopy, and Sec. 16-6-104.G, Specimen Tree Preservation, as well as areas for any planted, relocated, or replacement trees proposed to be provided in accordance with Sec. 16-6-104.I, Waiver of Tree Retention Requirements, or Sec. 16-6-104.K, Tree Damage During Development.
2. The Official may modify tree protection zone boundaries to locate them within the drip lines of protected trees near development areas where the development application proposes special protective measures to prevent damage to the protected tree's canopy and root system during development activity and to mitigate potential adverse impacts of nearby development on the health and survival of the protected tree. Such measures may include, but are not limited to: extended use of the tree protection measures listed in Sec. 16-6-104.J.3, Tree Protection Zone Encroachments, outside the tree protection zone; constructing tree wells; installing aeration and drainage systems; using hand labor to remove soil around root systems and prune roots; tunneling or boring utility lines under root systems; designing adjacent structures and rooflines to accommodate and incorporate tree trunk and canopy growth; using pervious pavement; and incorporating pre- and post-construction programs for fertilization, watering, and canopy and root maintenance.
3. Tree protection zones shall be depicted on all development plans.
4. Within tree protection zones, specimen trees and trees making up existing tree canopy may be removed only if they are certified by an arborist or other qualified professional as severely diseased, high risk, or dying, or in accordance with Sec. 16-6-104.I, Waiver of Tree Retention Requirements.

I. Waiver of Tree Retention Requirements⁴⁴⁰

1. General

On determining that features of a development site make it unfeasible to meet the minimum existing tree canopy retention standard in Section 5.4.4, Tree Canopy Retention, or the specimen tree preservation requirement in Section 5.4.5, Specimen Tree Preservation, the Board of Zoning Appeals may waive or partially waive such standard or requirement and allow removal of trees in accordance with this section.

⁴⁴⁰ This is a new subsection that establishes a formal process whereby an applicant may obtain a partial or full waiver from this section's existing tree canopy retention and specimen tree preservation requirements on showing that such requirements essentially preclude reasonable development of a site. This is a process less formal than the Variance process. Because of the discretion involved, waiver requests are proposed to be decided by the Board of Zoning Appeals rather than Town staff. The subsection sets out factors the Board should consider in deciding whether a waiver is warranted, and identifies a two-stage requirement for mitigation of the tree removal.

2. Criteria for Waiver

Before the Board of Zoning Appeals may waive or partially waive the minimum existing tree canopy retention standard or the specimen tree preservation requirement, the applicant shall clearly demonstrate that compliance with the standard or requirement would necessarily preclude reasonable development of the site in accordance with the provisions of this Ordinance and of other Town, State, and federal regulations. Factors that may be considered include, but are not limited to, the following:

- a. The extent to which the size and features of the development site (e.g., wetlands, wetland buffers, and existing utility lines and easements) pose constraints on the developability of areas containing existing tree canopy and specimen trees;
- b. The feasibility of relocating, resizing, or reconfiguring building footprints, parking areas, utility lines, or other development features to accommodate compliance with the minimum existing tree canopy retention standard or specimen tree preservation requirement as well as other applicable regulations; and
- c. The opportunity and feasibility of using the Administrative Adjustment procedure (Sec. 16-2-103.S) or an alternative parking plan (Sec. 16-5-106.H.1) to provide the flexibility needed to accommodate compliance with the minimum existing tree canopy retention standard or specimen tree preservation requirement as well as other applicable regulations.

3. Mitigation Required

- a. Each specimen tree or tree making up existing tree canopy that is removed pursuant to a waiver or partial waiver of the minimum existing tree canopy retention standard shall be replaced in accordance with the replacement tree standards in Sec. 16-6-104.L, Standards.
- b. If the Board of Zoning Appeals determines that adequate tree replacement cannot be provided in accordance with Sec. 16-6-104.L, the removal of unreplaced trees shall be mitigated through payment of a Tree Mitigation Fee in accordance with Sec. 16-6-104.M, Tree Mitigation Fee.

J. Tree Protection During Development Activity⁴⁴¹

1. Responsibility

During any development activity (including demolition activity), the property owner or developer shall be responsible for protecting existing or replacement trees within a tree protection area.

2. Protective Fencing, Marking, and Signage

a. Protective Fencing

- i. Continuous tree protective fencing shall be provided along the boundaries of tree protection zones. The Planning Director shall consider

⁴⁴¹ This substantially expands the tree protection requirements in Sec. 16-4-603-4 of the current LMO.

existing site conditions and the species and size of the trees to be protected in determining the exact location of tree protective fencing, and may require the fencing to be extended to include the critical root zones of trees.

- ii. Protective fencing shall consist of a bright orange plastic mesh or more durable material that is at least four feet high.

b. Warning Signage

Warning signs shall be installed along any required tree protective fencing at points no more than 150 feet apart. The signs shall be clearly visible from all sides of the outside of the fenced-in area. The size of each sign must be a minimum of two feet by two feet. The sign message shall identify the fenced or marked area as a tree protection zone and direct construction workers not to encroach into the area (e.g., "Tree Protection Zone: Do Not Enter").

c. Duration of Protective Fencing or Signage

Required protective fencing and signage shall be erected before any grading or other development activity begins and shall be maintained until issuance of a Certificate of Compliance following completion of all development in the immediate area of the fencing or signage.

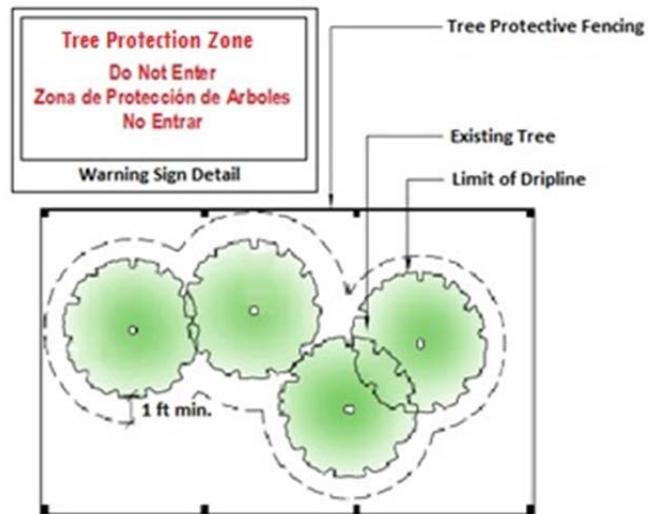


Figure 16-6-104.J.2: Tree Protective Fencing and Signage.

(See Figure 16-6-104.J.2: Tree Protection Fencing and Signage.)

3. Tree Protection Zone Encroachments and Protective Measures

Encroachments into tree protection zones may occur only when no other alternative exists, and shall comply with landscaping best management practices and the following limitations and requirements:

a. Construction Activity, Equipment, or Materials Storage

No development or demolition activity—including grading, the operation or parking of heavy equipment, or the storage of material—shall be allowed within the tree protection zone.

b. Soil Compaction

Where compaction might occur due to construction traffic or materials delivery through a tree protection zone, the area must first be mulched with a minimum

four-inch layer of wood chips. Equipment or materials storage shall not be allowed within a tree protection zone.

c. Fill, Retaining Walls, and Drywells

No fill shall be placed within a tree protection zone unless retaining walls and drywells are used to protect trees to be preserved from severe grade changes and venting adequate to allow air and water to reach tree roots is provided through any fill.

d. Chemical Contamination

Trees located within a tree protection zone shall be protected from chemical contamination from liquids or other materials, including but not limited to paint, chemical solvents, gasoline, oil, diesel fuel, hydraulic fluid, concrete spoils, or rinse water from vehicle cleaning, including rinsing of concrete truck tanks and chutes.

e. Impervious Surface

No impervious surface is allowed within a tree protection zone.

f. Trenching Prior to Clearing

The removal of trees adjacent to tree protection zones can cause inadvertent damage to the protected trees. Prior to clearing activities, trenches with a minimum width of one-and-one-half inches and a minimum depth of 12 inches shall be cut along the limits of land disturbance, so as to cut, rather than tear tree roots.

4. Inspections

- a. All tree protection measures shall be inspected by the Official before start of any land disturbing activities and during the development process. The Official may continue to conduct random inspections to ensure that retained trees, supplemental trees, and replacement trees are maintained in a healthy state.
- b. If any tree protected by this section is removed, dies, or is destroyed at any time during development activities or after completion of the development, it shall be replaced in accordance with Sec. 16-6-104.L, Standards for Supplemental and Replacement Trees.

K. Tree Damage During Development⁴⁴²

- 1. If a specimen tree or other existing tree to be preserved under the tree protection plan is damaged during development of the development site, an arborist or other qualified professional shall, at the expense of the applicant, assess the damage and provide a written report to the Official that documents the following:
 - a. Severity of the tree damage;
 - b. Determination on whether corrective measures can be taken to save the tree or whether the tree has been damaged beyond repair; and

⁴⁴² This is a new subsection intended to hold an applicant accountable for damage done to protected trees during development.

TABLE 16-6-104.L.3: MINIMUM PLANTING SIZE FOR SUPPLEMENTAL AND REPLACEMENT TREES

TREE CATEGORY	MINIMUM HEIGHT (FEET)	MINIMUM TRUNK DIAMETER (INCHES)
Category I	10	2
Category II	10	2
Category III	6	1
Category IV	6	1

4. Planting Standards

Planting, staking, mulching, and care of all supplemental and replacement trees shall be in accordance with the guidelines of the International Society of Arboriculture, as published in the latest edition of the Arborist Certification Study Guide.

5. Timing

Replacement trees for trees removed pursuant to Sec. 16-6-104.I, Waiver of Tree Retention Requirements, shall be planted before issuance of a final Certificate of Compliance. All other replacement trees shall be planted within 120 days after removal of the tree being replaced. The Official may extend this time period into accommodate the planting season (October 1 through June 1).

M. Tree Mitigation Fee⁴⁴⁵

1. General

The tree mitigation fee is established to allow the future planting of replacement trees removed for development in limited cases where this section’s requirements for retention of existing tree canopy or preservation of specimen trees cannot be reasonably achieved (see Sec. 16-6-104.I, Waiver of Tree Retention Requirements), and to allow the future planting of trees following a disaster.

2. Airport

On Hilton Head Island Airport property, The Official may allow a tree mitigation fee payment to be paid in lieu of the removal of trees beneath the side and approach slopes to the airport runway on determining that adequate buffers are being established in addition to those required in Sec. 16-5-103, Adjacent Setback and Buffer Standards, and Sec. 16-6-102.D, Wetland Buffer Standards.

3. Amount of Fee

The tree mitigation fee shall be calculated by the Official based on the cost of the required replacement trees, the cost of planting them, and the cost of maintaining them for one year. Such costs shall be determined based on the average of three cost estimates received from local landscaping firms or through pricing information available through a project completed no more than one year earlier.

⁴⁴⁵ This carries forward Sec. 16-6-409 of the current LMO, modified to refer to allowed use of the tree mitigation fee where standards in this section are waived and tree replacement is not practicable.

4. Timing of Fee Payment

All required tree mitigation fees shall be paid prior to Development Plan approval.

5. Tree Replacement Fund

- a. The Town shall establish and maintain a separate accounting fund for the deposit of tree mitigation fees paid in lieu of providing required replacement trees. Such funds need not be segregated from other Town monies for banking purposes. Any yield on such accounting fund shall accrue to that fund and shall be used for the purposes specified for the fund.
- b. The Town shall maintain and keep financial records for such accounting fund showing the revenues to such fund and the disbursements from such fund, in accordance with normal Town accounting practices. The records of such fund shall be open to public inspection in the same manner as other financial records of the Town.
- c. Monies from the tree replacement fund shall only be spent on planting of trees on publicly owned and maintained property. Qualifying debits include the cost of the trees, cost of installation of the trees, and cost of one year of maintenance for the trees.

N. Credit Towards Open Space and Buffer Standards

Tree protection zones, and trees and other vegetation within such zones, may be credited towards compliance with buffer, open space, and landscaping requirements to the extent they comply with applicable adjacent street and use buffer standards (see Sec. 16-5-103), wetland buffer standards (see Sec. 16-6-102.D), common open space standards (see Sec. 16-5-104), or parking lot landscaping standards (see Sec. 16-5-106.G).

Definitions Added with Chapter 6 and 7

Beach⁷³⁵

Land subject to periodic inundation by tidal and wave action so that no nonlittoral vegetation is established.

Beach Nourishment⁷³⁶

A process by which sand lost through longshore drift or erosion is replaced from sources outside of the eroding beach.

Dune Boardwalk⁷³⁷

A pedestrian walkway constructed of (generally wood) planking that crosses a dune system to the beach. Boardwalks may also be used for bicycle traffic.

Dune or Dune System

One or a series of hills or ridges of wind-blown sand exhibiting varied topography, but generally running parallel to the beach, or one or a series of hills or ridges of sand resulting directly or indirectly from restoration or beach renourishment. Dunes may or may not be anchored by vegetation (e.g., sea oats) and are in the vicinity of the beach.

Existing Tree Canopy

See Sec. 16-6-104.F.1.

Existing Tree Canopy Cover

The percentage of the area a development site covered by existing tree canopy before development or land disturbance of the site

Overstory Tree

Trees that compose the top layer or canopy of vegetation.

Specimen Tree

A tree that is an outstanding representative of its species in size, as listed inSec. 16-6-104.G.1,Specimen Tree Defined.

Tree⁷³⁸

Any living woody or fibrous (e.g., palm) perennial plant having one or several self-supporting stems. Tress may be classified as conifer, deciduous, evergreen, or ornamental.

⁷³⁵ This is a new definition taken from the State's Coastal Tidelands and Wetlands Act.

⁷³⁶ This is a new definition.

⁷³⁷

⁷³⁸ This is a slightly modified definition.

Tree Inventory

An inventory of trees protected by Section

Tree Protection Zone

An area composed of a one or a close group of healthy trees designated for preservation and protection in accordance with Sec. 16-6-104, Tree Protection, delineated generally by the outermost drip line of the tree(s).

Underbrushing⁷³⁹

The removal of the shrub layer and/or understory from a site by hand or machine (also known as bush-hogging).

Understory Trees

Trees that grows beneath the overstory.

Upland

For purposes of the wetland protection standards in Sec. 16-6-102Wetland Protection, any area that does not qualify as a wetland because the associated hydrologic regime is not sufficiently wet to elicit development of vegetation, soils, and/or hydrologic characteristics associated with wetlands. Such areas occurring within floodplains are more appropriately termed non-wetlands.

Wetland

An area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. To be considered a wetland, the following three criteria must be met:

- 1) the presence of hydric soil;
- 2) the prevalence of hydrophytic vegetation; and
- 3) the presence of wetland hydrology.

Wetlands generally include swamps, marshes, bogs and similar areas.

Wetland Alteration⁷⁴⁰

Any human activity that causes changes in the hydrology, vegetation, or other physical, biological or chemical characteristics of regulated wetlands—including, but not limited to: dredging or filling; drainage; diking; addition of impervious surfaces; addition of sediment and pollutants; removal of or damage to vegetation; and planting of non-native vegetation.

Wetland Buffer

A strip of upland area along the outer edge of a wetland intended to consist of undisturbed vegetation. See Sec. 16-6-102.D, Wetland Buffer Standards.

⁷³⁹ This is a new definition.

⁷⁴⁰ This is a new definition.

Wetland Creation

Construction of a wetland where one did not previously exist.

Wetland Functions

The physical, chemical, and biological process or attributes of a wetland without regard to their importance to society.

Wetland Mitigation Banking⁷⁴¹

The restoration, creation, enhancement, or preservation of a wetland undertaken expressly for the purpose of compensating for unavoidable loss of wetland to a development project. The goal is to replace the exact function and value of wetlands that would be adversely affected by a proposed development project. Units of restored, created, enhanced, or preserved wetland are expressed as "credits" that may subsequently be withdrawn to offset "debits" occurring through the loss of wetland as a development site. Such credits may be bought and sold between those who restore, create, enhance, or preserve wetlands and those who must compensate or mitigate the loss of wetlands or wetland functions.

Wetland Preservation

Conservation of a wetland area in perpetuity through legal limitations on the use and disturbance of the area.

Wetland Restoration

Re-establishment of previously existing wetland functions at a site where they have ceased to exist, or exist only in a substantially degraded state.

Wetland Revegetation

The replanting of native vegetation in a wetland area where man-made changes have altered vegetation, but where hydrologic and soil conditions have been retained.

⁷⁴¹ This is a modified definition derived from various wetland mitigation programs.