

JOINT REVIEW COMMITTEE for the Draft Community Development Code Wednesday, December 4, 2013 2:00 – 5:00 p.m. Executive Conference Room, County Administration Building 100 Ribaut Road, Beaufort, South Carolina 29902 Phone: (843) 255-2140

Committee Members: County Council: Cynthia Bensch Gerald Dawson Brian Flewelling, Committee Chairman William McBride Planning Commission: Diane Chmelik Mary LeGree W. Edward Riley Randolph Stewart Staff: Anthony Criscitiello, Planning Director

- 1. CALL TO ORDER 2:00 P.M.
- 2. REVIEW DRAFT COMMUNITY DEVELOPMENT CODE:
  - A. Continued Discussion of Article 5. Supplemental to Zones, Division 5.6.80 Awning / Canopy-Sign Type
  - B. Summary of Requested Changes from November 20, 2013, meeting (backup)
  - C. For Future Review: Division 5.11 (Revised) Resource Protection Standards (backup)

# 3. OTHER BUSINESS

- A. Next Meeting: Wednesday, December 18, 2013, at 2:00 P.M. in Executive Conference Room, County Administration Building, 100 Ribaut Road, Beaufort, SC 29902
- 4. ADJOURNMENT

# Notes:

- The November 20, 2013, Joint Review Committee meeting video can be viewed at <a href="http://beaufort.granicus.com/MediaPlayer.php?view\_id=2&clip\_id=1274">http://beaufort.granicus.com/MediaPlayer.php?view\_id=2&clip\_id=1274</a>
- The Draft Community Development Code can be viewed on the County website at <a href="http://www.bcgov.net/departments/Planning-and-Development/planning/cdc/">http://www.bcgov.net/departments/Planning-and-Development/planning/cdc/</a>
- If you have any questions, please contact the County Planning Office at (843) 255-2140 or you may leave a comment using at the above link.

# COMMUNITY DEVELOPMENT CODE REVIEW TEAM Summary of Requested Changes – November 20, 2013

- Table 5.2.30.A Revise the definition for Gallery and Arcade to allow its use on Townhouses and Apartment Houses.
- 5.2.40 Indicate on each of the private frontage pages which transect zones in which they are permitted.
- 5.2.50.C Reword to read "Projecting porches are open on three sides and must have a roof. <u>Sideyard</u> projecting porches may incorporate a door on the front open side."
- 5.2.50 Provide a variant of the projecting porch for a sideyard (Charleston single) house.
- 5.2.70.C Revise note to read "The entry door all doors must face the street."
- 5.2.100 Replace bottom photo with a photo that better illustrates a shop front private frontage.
- 5.2.110 Replace top photo with a photo of Beaufort Town Center to better illustrate a local example of a terrace private frontage.
- 5.2.110 (page 5.2-12): Utilize white space at bottom half of page with more photos of a terrace private frontage.
- 5.2.130.B Change the minimum clear ground floor height to 11 feet to match the requirement for gallery.
- 5.4.30.C Reword to read "Fences and Walls near Fire Hydrants. Fences and walls shall not be located where they would prevent immediate view from the street of, use of, or access to, fire hydrants or other fire-fighting water supply devices, in accordance with the Fire Code." Staff will contact the fire districts and determine whether this language is adequate to insure unimpeded access to fire hydrants.
- 5.4.50.C.2a Reword to read "Painted Wood or products designed to resemble wood."
- 5.4.50.C.3 Reword to read "PVC, fiberglass, and chain link should be avoided are not encouraged."
- Figure 5.4.60.A should be incorporated into the document, rather than take up a whole page.
- Table 5.4.60.A revise the photos to eliminate the faded edges.

- 5.4.80.A Reword to read "Chain Link fences in Residential Areas. Chain link fences in residential areas may be permitted in rear yards only. Single family lots in <u>all T1 and T2 districts T1 Natural Preserve, T2 Rural Low, and T2 Rural Neighborhood</u> shall be exempt from this restriction."
- 5.5.30 Add a new subsection "C" that reads as follows "C. *Pervious parking:* The use of pervious parking spaces is strongly encouraged to promote on-site stormwater infiltration, aquifer recharging, and improved water quality."
- 5.5.40.A.2f Add a new subsection "e" that reads as follows "Golf Cart Parking: Where it can be demonstrated that a sizable percentage of parking demand will be utilized by golf carts, the Director may permit a substation at a rate one golf cart vehicle parking space for one motor vehicle parking space. Golf cart parking spaces shall have a minimum length of 10 feet and a minimum width of 5 feet." Subsections "e" and "f" shall be renumbered accordingly.
- Table 5.5.40.B Dwelling: Single-Family: Provide a notation in the table that residential parking space requirements can be satisfied by garage or covered spaces.
- Table 5.5.40.B Restaurant, Café, Coffee Shop: Change restaurant parking requirements to have number of spaces dependent on the square footage of both indoor and outdoor dining areas.
- Table 5.5.40.B School, Grades K-8: Consult with school district to determine what ratio they use to determine the total number of parking spaces needed for elementary and middle schools.
- 5.6.20.B Revise to read "Flashing, animated, or scrolling signs;"
- 5.6.30.C Add a new subsection "f" to read "f. LED Message board signs are not permitted except for schools, houses of worship, gasoline price signs, and signs advertising films and live entertainment which change on a regular basis. These items shall be included in the overall maximum allowed square footage of the sign. The text on an electronic reader board may be changed no more frequently than every thirty (30) minutes. Lighting levels are limited to a maximum luminous intensity of 200 nits (candela per square meter), full white mode, from sunset to sunrise."
- Table 5.6.40.A Allow awning signs in T3
- Table 5.6.40.A Change illustration of freestanding signs to look more like a monument sign and a pole sign.
- 5.6.50.A Revise to read "A. New Commercial Off-Premise signs are prohibited." Delete following items 1 and 2.
- 5.6.50.B Provide examples of non-commercial off-premise signs.

# **Division 5.11 Resource Protection Standards**

## Sections:

5.11.10	Purpose and Intent
5.11.20	General
5.11.30	Tidal Wetlands
5.11.40	Non-Tidal Wetlands
5.11.50	Beach Dune System
5.11.60	River Buffer
5.11.70	Endangered Species and Bird Nesting Habitat
5.11.80	Flood Hazard Area
5.11.90	Forests
5.11.100	Tree Protection
5 11 110	Allowed Activities in Resource Protection Areas

#### 5.11.10 Purpose and Intent

- A. **Background.** Natural systems are self-balancing, provided enough of the system is left in a functioning condition. A natural system's health or function is measured by the quality of its wildlife habitat, species diversity, and water quality. Preserving the County's natural systems, wildlife habitat, species diversity, and water quality is important to the County's community character, and enhances property values and the quality of life for residents and businesses.
- B. **Purpose.** To protect and maintain the County's community character and natural resources, this Division establishes basic standards to protect natural systems, wildlife habitat, species diversity, and water quality.

#### 5.11.20 General

- A. **Applicability.** These resource protection standards apply to all development in the unincorporated County, unless expressly stated otherwise in this Division.
- B. **Natural Resources Survey Required.** Each property proposed for development shall, at the time of development plan or subdivision application submittal, submit a natural resources survey showing all of the following natural resources and flood hazard areas on the property. The boundaries of all protected resources shall be field surveyed and delineated on the protected resources survey certified by a registered land surveyor.
  - 1. Tidal Wetlands (see Sec. 5.11.30);
  - 2. Non-Tidal Wetlands (see Sec. 5.11.40);
  - 3. Beach-Dunes (see Sec. 5.11.50);
  - 4. River Buffers (see Sec. 5.11.60);
  - 5. Endangered Species and Bird Nesting Habitats (see Section 5.11.70);
  - 6. Flood Hazard Areas (see Section 5.11.80);
  - 7. Forests (see Section 5.11.90); and
  - 8. Tree Survey (see Section 5.11.100)

- C. **Exemptions from Natural Resources Survey.** The following are exempt from the requirement for a natural resources survey:
  - 1. Planned Unit Developments (PUDs) shall comply with Section 1.6.60 (Planned Unit Development (PUD) Approved Prior to *<insert effective date of this Development Code>*).
  - 2. Single-family detached development on an individual lot shall be required to survey the river buffer and trees only.
  - 3. Minor subdivisions (four lots or less), provided no new street is proposed.
  - 4. Family compounds.
- D. **Plan for Development Required.** Development subject to the standards of this Division shall provide a plan for development illustrating how the proposed development complies with these standards.
- E. **Uses Permitted Within Natural Resource Areas.** Uses permitted within natural resource areas are summarized in Section 5.11.110.
- F. **Protection of Natural Resources During Construction.** Unless expressly stated otherwise in this Division, resource protection zones shall be established prior to commencement of construction activities on a site in accordance with the following standards and shall remain in place until the Certificate of Compliance is issued.
  - 1. **Resource Protection Barrier.** Prior to commencing construction, clearing or any site alterations, a conspicuous four-foot-high barrier to prevent encroachment by people and vehicles shall be erected around the resource protection zone that shall require on-site approval by the Director or designee. No building materials, dirt, debris, oils, paints, or any other materials, equipment or vehicles shall be placed or deposited within the resource protection areas.
  - 2. **Silt Fencing.** Where wetlands and/or river buffers are involved, a silt fence shall be erected and the required barrier described in subsection F.1. above installed at least one foot into the buildable area of the site.
  - 3. **Underground Utility Lines.** No utilities shall be permitted in resource protection areas. Underground utility lines shall be routed around and away from resource protection zones. No trenching or paving shall be done within the resource protection zone.

# 5.11.30 Tidal Wetlands

Development in tidal wetlands is prohibited, except for water-oriented facilities that comply with Section 4.2.190 (Water/Marine-Oriented Facilities) and the following:

- A. **Approved by USACE and OCRM.** The plan for development of the water-dependent facilities shall be approved by the United States Army Corps of Engineers (USACE) and the S.C. Office of Resource Management (OCRM);
- B. **Appropriate Design.** It is demonstrated the design of the plan for development of the water-dependent facilities:
  - 1. Minimizes Impact. Minimizes the impact on tidal wetlands; and
  - 2. **Maximizes Sharing of Facility.** Maximizes the sharing of the facility to avoid having every property in the area seek a similar request. (This may mean shared facilities for the entire development or facilities that can serve several adjoining properties.)

C. **Tidal Wetlands not Included in Density Calculations.** Tidal Wetlands shall not be included in gross density calculations (See Division 10.1 for definition of gross density).

## 5.11.40 Non-Tidal Wetlands

Development in non-tidal wetlands is prohibited, except in the following instances:

A. **Structures.** Where structures are necessary to a permitted use and cannot be located outside the wetland, as determined by the Director, the structure shall be located on piles. Where needed, access shall be provided on structures such as boardwalks. All structures located in wetlands shall be approved by USACE/OCRM.

#### B. Mitigation for Filling Wetlands

- 1. T3N, T3NO, T4HC, T4HCO, T4VC, T4NC, C4, C5, and S1 Zoning Districts
  - a. Mitigation may be considered when the development intensity on the site is so high that retained non-tidal wetlands of less than one acre would:
    - 1) Have increased potential to become degraded habitat;
    - 2) Become isolated and difficult to provide adequate water levels to preserve existing vegetation, subjecting it to invasive and/or non-native species that would result in a greatly reduced habitat value; or
    - 3) Serve no significant stormwater or water quality benefit.
  - b. **On-Site Mitigation.** If such non-tidal wetlands are filled, they shall be subject to a mitigation plan approved by the USACE/OCRM that:
    - 1) Designates the area where the site is located as a mitigation area; or
    - 2) Identifies if the mitigation will provide larger, more easily protected and managed on-site wetland areas. (This permits consolidating many small wetlands into a single wetland management unit.)
  - c. **Off Site Mitigation.** If the County and/or OCRM develop a mitigation bank, or the USACE and other agencies establish a fee-based mitigation program, the County in consultation with OCRM will permit off-site mitigation on finding the mitigation meets all standards of this Development Code and:
    - The site cannot be developed to permitted development intensities without mitigation, or would be an undesirable development without the off-site mitigation;
    - 2) The wetlands to be mitigated are not, and cannot, easily become part of an interconnected area that provides drainage and flood storage; and
    - 3) The wetland area to be filled is not more than one acre or 20 percent of the mitigation area, whichever is less.
- 2. **All Zoning Districts.** Minor filling can be used to reshape a non-tidal wetland boundary and to provide a reasonable building site if it is necessary due to parcel shape and interaction with topography. Minor filling is permitted in such instances, provided that:
  - a. Disturbance is limited to less than ten percent of the wetland area or less than two acres, whichever is less;

- b. Disturbance avoids high-quality wetland areas and wetlands containing rookeries (bird nesting areas); and
- c. A revegetation plan is submitted and approved for those areas of the wetland to be disturbed.
- 3. Local and USACE/OCRM Permit Required. All fill and mitigation shall meet this Development Code's requirements and USACE/OCRM permit requirements.
- 4. **Drainage Pattern and Stormwater Management.** The current drainage pattern shall be submitted for all subdivision plat or land development plans that contain a non-tidal wetland. The stormwater management system shall ensure an adequate flow of water to maintain the wetland. OCRM shall sign off on the adequacy of the drainage before a final subdivision plat is approved in accordance with this Development Code.
- C. Access. Public/private road crossings and access drives are allowed as a Special Use; see Section 7.2.130 (Special Use Permit), in non-tidal wetlands only where no reasonable alternative exists. Roads and access drives shall receive permits from USACE/OCRM prior to receiving a special use permit from the county.
- D. **Sewer/Water**. Crossings for sewer/potable water facilities are allowed as a Special Use; see Section 7.2.130 (Special Use Permit), in non-tidal wetlands only where no reasonable alternative exists. Such crossings shall receive permits from USACE/OCRM prior to receiving a special use permit from the county.
- E. **Trails**. Trails are allowed in non-tidal wetlands where it is demonstrated they are essential to establish a crossing between different areas, or where the trail has an historical purpose. Trails shall be of boardwalk construction. The height of the boardwalk shall be above normal high water to ensure the boardwalk minimally disrupts plant life.
- F. Setbacks.
  - 1. Vegetative strips shall be retained or created along the banks or edges of all freshwater wetlands as part of the required setback distance shown below. The following minimum setbacks shall be established (unless already established by OCRM, whichever is greater) for construction from the edge of all wetlands.
    - a. Single-family residential: 20 feet.
    - b. Multifamily residential: 50 feet.
    - c. Commercial or industrial: 50 feet.
    - d. Impervious parking areas/roads/driveways: 50 feet.
  - 2. Vegetative strips are areas completely pervious to the ground in nature and are intended to prevent polluted runoff from entering fragile wetland systems. For this purpose, they shall be a minimum of 20 feet in width and contain living plant material including but not limited to trees, shrubs, vines, ferns, mosses, flowers, grasses, herbs and ground cover. Slatted lawn furniture, accessories and decks are permitted in the vegetative strips.

# 5.11.50 Beach Dune System

Development in the beach-dune system shall comply with the following:

## A. Preservation of Primary Dunes

- 1. **No Impact on Primary Dunes.** No primary dunes shall be leveled, breached, altered, or undermined in any way.
- 2. **No Destruction of Vegetation.** Vegetation on the primary dunes shall not be disturbed or destroyed.
- 3. **Boardwalks.** Boardwalks or similar beach accesses may be developed if they are designed and oriented to have minimal effect on the natural features or vegetation of the primary dunes. Specific solutions to address handicap access may be approved on a case-by-case basis by the Director.
- 4. **Shared Accesses.** The County may require shared access to the beachfront by elevated walkways that cross over beach dune systems.
- B. **Structures, Septic Tanks, or Tile Fields within 50 Feet of OCRM Baseline.** On the seaward side only of the barrier islands (i.e., Bay Point, Little Capers, Daufuskie, Fripp, Harbor, Hilton Head, Hunting, Pritchards and St. Phillips Islands), no structure, septic tank, or tile field shall be constructed within 50 feet landward of the OCRM baseline, or as required by OCRM, whichever is greater, except:
  - 1. **Beach Cabanas.** Beach cabanas that are 144 square feet or less in size and do not have a permanent roof; and
  - 2. **Beach Boardwalks.** Beach boardwalks constructed perpendicular to the shoreline in accordance with this Section.

#### C. Lighting

- 1. Findings
  - a. The federal Endangered Species Act prohibits all killing, harming and harassment of six species of sea turtles, including the loggerhead, that nest on the County's beaches.
  - b. Lighting from development on the barrier island beaches and on and around the beach dune system can adversely impact endangered and threatened sea turtles by disorienting and repelling female turtles that seek safe nesting sites on the beach and misdirecting newly-hatched turtles away from the ocean towards inland danger and eventual death.
  - c. To comply with federal law and protect the loggerhead and other species that nest on the beach, it is important that the County regulate lighting along the beachfront and beach dune system.
- 2. Lighting Standards. All lighting visible from the beach shall comply with the following:
  - a. Outdoor lighting shall be held to the minimum necessary and, where possible, shall be low pressure sodium for security.
  - b. Pole lighting shall be bollard louver lighting that is no greater than five feet in height. It shall block the light source from view and contain illumination within an area of three to less than 73 degrees on the seaward side of the pole.
  - c. Lighting in parking lots shall be bollard lighting. It shall be positioned so that no light is visible from the barrier island beaches or beach dune system.
  - d. Lights mounted on walls, steps, and balconies shall be fitted with louvers or hoods at a height from the floor of less than three feet in order that the lights

illuminate only the balcony and will not be visible from the barrier island beach or beach dune system.

- e. Tinted or filmed glass or solar screens or drapes shall be used in windows facing the barrier island beaches and beach dune system between May 1 and October 31 of every year.
- f. All other lighting shall be shielded so that it is not visible from any barrier island beach or beach dune system between May 1 and October 31 of every year.
- D. **Trails.** Where trails are allowed over the beach dune system, they shall be of boardwalk construction. The boardwalk shall be constructed to ensure minimal erosion and avoid well-established vegetation.
- E. **Public Beach Access Required.** If a plan for development of land submitted in accordance with Article 7 (Procedures), includes more than 1,000 feet of beach frontage, the County may request from the landowner the right to purchase reasonable access to the beach from the public ROW, as deemed necessary for the benefit of the public.
- F. **Additional Studies/Reports.** A beach protection plan shall be submitted as part of the initial plan for development submitted in accordance with Article 7 (Procedures). The plan shall demonstrate how the applicant plans to protect threatened and endangered sea turtle nesting, and preserve the beach dune system and shore vegetation in accordance with the requirements of this Section.
- G. **Covenants and Restrictions to Ensure Compliance.** Subdivision plats and land development plans shall include covenants and restrictions that ensure compliance with the standards of this Section.

# 5.11.60 River Buffer

- A. **Purpose and Intent.** A vegetated river buffer is established as shown in Table 5.11.60.A, landward of the OCRM Critical Line, in order to:
  - 1. Provide for removal or reduction of sediments, nutrients, and potentially harmful or toxic substances in runoff entering waterways;
  - 2. Minimize erosion and help stabilize stream banks;
  - 3. Provide a natural habitat for the flora and fauna that exist in this important transition area between tidal waters and wetlands and upland areas; and
  - 4. Encourage the retention of the visual character of the County's waterways.
- B. **Setbacks:** All development shall be set back a minimum of 50 feet inland from all tidal waters and wetlands beginning at the OCRM critical line, except as otherwise shown in Table 5.11.60.A.

Table 5.11.60.A: River Buffer Setbacks						
District	River Buffer	Single Family Duplex Setback	Other Residential Buildings and Nonresidential Buildings Setback	Parking Lots and Drives Setback	Septic Tank/ Tile Field Setback	Agriculture/ Golf Course Setback
TI and T2	50 feet	60 feet	100 feet	100 feet	100 feet	150 feet
All Conventional Districts	50 feet	60 feet	100 feet	100 feet	100 feet	150 feet
T3 Edge	40 feet	50 feet	75 feet	75 feet	50 feet <sup>1</sup>	150 feet
Т3	25 feet	35 feet	35 feet	35 feet	50 feet <sup>1</sup>	150 feet
T4	20 feet	30 feet	30 feet	30 feet	50 feet <sup>1</sup>	150 feet
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<sup>1</sup>Or as approved by SCDHEC.

- C. **Uses Allowed Between Building Setback and River Buffer.** The area located between the building setback and river buffer (see Table 5.11.60.A) is called the transitional buffer. The purpose of this buffer is to allow for a construction envelop between the building and river buffer in order for the river buffer to be protected from construction damage. The following uses are permitted within the transitional buffer once construction is completed:
  - 1. Residential playgrounds, fire pits, outdoor furniture, pervious hardscapes, etc.
  - 2. Non-Residential picnic shelters, pervious hardscapes such as sidewalks and patios, etc.
- D. **Setback Waiver.** Where existing lots (conforming or nonconforming) are so small that a single-family house cannot be developed on the lot and comply with the required setbacks from the OCRM critical line established in Table 5.11.60A, the Director may grant a waiver from these setbacks in accordance with the following standards:
  - 1. OCRM Critical Line Setback Significantly Limits House Size. The applicant shall demonstrate that the size of the home (GFA) would have to be less than the average size of homes (GFA) within five lots on either side of the lot for which the waiver is requested, due to the OCRM critical line. If there are no homes within five lots of either side of the lot for which the waiver is requested a floor area ratio of three-tenths or a maximum building footprint (heated area) of 15 percent of the total lot area, whichever is less, shall guide the need for a waiver.
  - 2. **Reduction of Street or Front Yard Setback to Avoid Waiver.** The Director may reduce the street or front yard setback by up to 30 percent in order to avoid the need for a waiver where such reduction is not in conflict with any applicable covenant or restriction.
  - 3. Limit on Reduction of OCRM Critical Line Setback. The OCRM critical line setback shall not be reduced to less than a 35-foot setback, except in areas where homes that already exist are located closer than 35 feet to the OCRM critical line setback. In those cases, the average critical line setback of adjoining lots shall be used, provided that in no case shall a setback of less than 20 feet be granted though an administrative waiver unless the setback is to preserve a specimen tree, historic resource, or to prevent a lot from becoming unbuildable with comparable houses as described in Subsection D.1 above. Where the setback is to preserve a specimen tree or historic

resource, the building envelope allowed shall optimize the protection of the resources.

- 4. **Stormwater Management.** If the house and lot do not drain into a stormwater management system that uses BMPs in accordance with the requirements of Subsection E below, the landowner shall provide the necessary stormwater management on the lot; See Section 5.12.30.A (On-Lot Volume Control).
- E. Drainage.
  - 1. **Apply Stormwater Best Management Practices (BMPs).** Development adjacent to and affecting the river buffer shall apply BMPs in accordance with the County Manual for Stormwater BMPs, as amended, in the design of drainage and detention basins. Additional special engineering may be required where the County Engineer determines it is necessary to protect nearby waters or wetlands.
  - 2. **Divert Drainage Away from OCRM Critical Line.** All drainage shall be diverted away from the OCRM critical line, through a County-approved stormwater system employing BMPs.
  - 3. **Lots Adjoining River Buffer.** Lots adjoining the river buffer shall be designed and engineered to prevent direct discharge from impervious surfaces across the river buffer. All discharges shall be diverted into the development's stormwater system and treated in accordance with the requirements of this Development Code.
  - 4. **Stormwater Runoff.** Stormwater runoff generated closer than 50 feet from the OCRM critical line shall be directed to County approved treatment before discharge.
- F. **Buffer Disturbance.** There shall be no disturbance of the river buffer established in Table 5.11.60.A, except as allowed for bulkheads, rip-rap and erosion control devices, view corridors, and other allowable disturbances authorized in this Section.
  - 1. **Re-vegetation.** Any disturbance of the shoreline within the river buffer landwards of the OCRM critical line shall require submission of a re-vegetation plan. A principle objective of the plan is to preserve and replace as much of the on-site pre-construction native vegetation to the extent possible. Other acceptable landscaping plants are found in the SCDHEC publication entitled "*Backyard Buffers*", publication CR-003206 (11/00). The re-vegetation plan shall be prepared by a landscape designer or landscape architect. The re-vegetation plan shall be designed so that upon plant maturity, the disturbed area is completely vegetated.
  - 2. **Removal of Trees.** Except for invasive species; see Section 5.11.100.I (Removal of Invasive Tree Species), removal of any tree within a river buffer shall require a tree removal permit; see Section 7.2.50 (Tree Removal Permit). Removal of trees shall require plant back inch for inch (DBH) of trees removed. If all tree inches cannot be planted back on site due to site constraints, the remaining tree inches shall be subject to a general county reforestation fee; see Section 5.11.100.D.3 (Reforestation Fee).
  - 3. **Slope Stabilization of Re-Vegetated Areas.** Re-vegetation of areas landward of the OCRM critical line with slope topography in excess of a 1:3 slope shall also include slope stabilization measures in compliance with SCDOT standards, as set forth in Section 205, Embankment Construction, of the SCDOT Standard Specifications for Highway Construction, Edition of 2000, as amended.
- G. **Bulkheads**, **Rip-Rap**, **and Erosion Control Devices**. All bulkheads, rip-rap, or other erosion control devices in the river buffer shall comply with the following:

- 1. **Approved by OCRM.** A permit to construct the bulkhead, rip-rap or erosion control device shall be approved by OCRM.
- 2. **Bulkhead, Rip-Rap, or Other Erosion Control Device More Than 48 Inches High.** A proposal to install a bulkhead, rip-rap, or other erosion control device more than 48 inches in total vertical height from the existing ground elevation shall be accompanied by design plans and certification from a South Carolina registered professional engineer stating the design is adequate to prevent collapse or other failure.
- 3. **Tree Protection.** The bulkhead, rip-rap, or erosion control device shall be in compliance with Section 5.11.100 (Tree Protection).
- 4. **Re-vegetation.** Any disturbance of shoreline within the river buffer landwards of the OCRM critical line shall require submission of a re-vegetation plan in compliance with Subsection F.1. above.
- H. **View corridor.** A view corridor across the river buffer may be established by a landowner in accordance with the following:
  - 1. **Width.** The width of the view corridor crossing the river buffer shall be no more than 75 feet or one-third of the lot width, whichever is less.
  - 2. **Management.** Management of vegetation within the view corridor shall be limited to only pruning needed to provide views, except that a landowner may submit a selective clearing and selective landscaping program for the view corridor, prepared by a landscape designer or landscape architect, which shall be approved if the net result provides both ample screening of the shoreline and filtering of runoff from lawns on the lots.
- I. Access. Public/private road crossings and access drives are allowed as a Special Use; see Section 7.2.130 (Special Use Permit), in the river buffer only where no reasonable alternative exists.
- J. **Sewer/Water.** Crossings for sewer/potable water facilities are allowed as a Special Use; see Section 7.2.130 (Special Use Permit), in the river buffer only where no reasonable alternative exists.
- K. **Trails.** Trails shall be permitted to cross the river buffer at reasonable intervals for access to the water. Horizontal trails through the river buffer, such as walking paths and bikeways, will be allowed with the following requirements:
  - 1. Such trails shall be designed and constructed in a manner that does not result in them becoming channels for stormwater, that does not result in erosion, or that does not damage surrounding vegetation.
  - 2. The County may require trails to be of boardwalk construction, pervious paving systems, or stepping stones if needed to ensure meeting the objectives of the buffer, and for long term maintenance of the trail.
  - 3. The trails shall be no more than 5 feet wide.

# 5.11.70 Endangered Species and Bird Nesting Habitat

A. **General.** Applicants shall refer to South Carolina Department of Natural Resources (SCDNR) and United States Fish and Wildlife Service (USFWS) data to assist in determining whether there is endangered species habitat or an active rookery (bird nesting area) on a proposed development site.

- B. SCDNR AND USFWS Approval of Endangered Species Protection Plan Required. A proposed development that contains endangered species habitat or will potentially affect endangered species habitat of nearby property, or will potentially "take" (harass, harm, or kill) an endangered species as defined by the federal Endangered Species Act, shall have an endangered species protection plan approved by SCDNR and USFWS prior to the County's review of a subdivision plat or land development plan, see Article 7 (Procedures). The protection plan shall demonstrate that the proposed development will not "take" an endangered species in accordance with the federal Endangered Species Act, except in accordance with an "incidental take permit."
- C. **Nesting Bird Habitat.** No vegetation shall be removed from an active rookery (bird nesting area) even during the non-nesting season. An active rookery (bird nesting area) is defined as one that has been used by nesting birds within the past five years.

## 5.11.80 Flood Hazard Area

All development in a flood hazard area shall comply with the following standards:

- A. **Indication of Flood Hazard Areas.** The 100-year flood elevation, as shown on official County floodplain maps, shall be delineated on the conceptual and final plat, and the conceptual and final land development plan. The line shall be determined by field measurement of the elevation on the site.
- B. **Engineering Plans and Specifications to Mitigate Flooding.** Engineering plans and specifications shall demonstrate that adequate design is incorporated into the proposed development to ensure, to the maximum extent possible, that:
  - 1. Water supply systems will be constructed to preclude infiltration by floodwaters;
  - 2. Wastewater disposal systems, including septic tanks, will be constructed to preclude infiltration by floodwaters; and
  - 3. Types and construction of fill materials used for building foundations will minimize settlement, slope erosion, siltation and facilitates drainage of potential surrounding floodwaters.
- C. **Disclosure Statement Required.** All subdivision plats and land development plans for which lots, sites, or structures are to be sold or leased shall include the following statement, which shall be clearly affixed to the plat or plan and be readily visible:

The areas indicated on this plat/plan as flood hazard areas have been identified as having at least a one percent chance of being flooded in any given year by rising tidal waters associated with extreme wind and storm surge. Local regulations require that certain flood hazard protective measures be incorporated in the design and construction of structures in these designated areas.

Reference shall be made to the development covenants and restrictions of this development and requirements of the County Building Codes Department. In addition, some agencies may require mandatory purchase of flood insurance as a pre-requisite to mortgage financing in these designated flood hazard areas.

D. **Protective Deed Restrictions Required in Coastal High Hazard Areas and Velocity Zones.** Covenant or deed restrictions shall be placed in the deeds to all lots of a development lying within a flood hazard area stipulating to the owner that within what is defined and designated as "Coastal High Hazard Areas and Velocity Zones":

- 1. Construction shall be elevated and securely anchored to well-anchored piles or columns and shall have the level of the bottom of the lowest horizontal support member one foot or more above the level of the 100-year flood;
- 2. Space below the level of the first floor level shall be free of obstruction or covered by breakaway facade material capable of producing free obstruction for the impact of abnormally high tides or wind-driven water;
- 3. Residential structures on lots existing before \_\_\_\_\_ <*insert effective date of this Development Code*> shall have a maximum floor area of 2,200 square feet per lot. (A larger home may be built only by acquiring additional lots.);
- 4. Residential structures built after \_\_\_\_ <*insert effective date of this Development Code*> shall not exceed a maximum floor area ratio of one-tenth; and
- 5. Development shall comply with all other requirements of the County Building Code related to construction in a flood hazard area.
- E. **County Building Code.** All development shall comply with the requirements of the County Building Code and FEMA requirements related to construction in flood hazard areas.

## 5.11.90 Forests

A. **Existing Forest Preservation.** Existing forest types listed below shall be protected in accordance with Table 5.11.90.A:

Table 5.11.90.A: Existing Forest Preservation					
Zone	Maritime Forest	Upland Forest (Mature)	Upland Forest (Young)		
TI, T2	70% minimum	55% minimum	25% minimum		
T3, C3, C4	65% minimum	45% minimum	20% minimum		
T4, C5, SI	60% minimum	20% minimum	10% minimum		

- B. **Mitigation.** Existing forests may be cut over a greater area than permitted in Table 5.11.90.A only if mitigation is provided and the following standards are met:
  - 1. The mitigation is determined by the Director to be necessary due to unique conditions on the site that make it impossible to meet the protection standards due to site size, shape, utilities, or other elements that are unique to the property.
  - 2. The best forests, in terms of percentage of tree size, tree health, and habitat value, shall be preserved.
  - 3. The protection level given forests shall not be less than 80 percent of that required in Table 5.11.90.A. Thus, a forest with a protection level of 45 percent could be reduced to 36 percent (45% X .80 = 36%).
  - 4. The land on which the mitigation is to occur shall be on the project site, except that within the T4 district only, where existing lots may be too small to permit on site mitigation, the land on which mitigation is to occur may be off-site, if within an approved mitigation bank area. All land used for mitigation shall be preserved as permanent open space.

5. Mitigation shall consist of planting 1.25 acres of new woodland of comparable species for every one acre of disturbed forest for which mitigation is required. Planting requirements are shown in Table 5.11.90.B.

Table 5.11.90.B: Fores	t Mitigation Planting Requirer	nents
	Maritime Forest	
Plant Type	Quantity Per Acre	Size
Canopy Tree	25	2 1/2-in. caliper
Understory Tree	50	l ½-in. caliper
Shrubs	325	3-gallon pot
	Upland Forest	
Plant Type	Quantity Per Acre	Size
Canopy Tree	15	2 <sup>1</sup> /2-in. caliper
Pine	25	8-foot height
Understory Tree	50	l ½-in. caliper
Shrubs	325	3-gallon pot

C. **Penalty for Disturbing Protected Forest Areas.** If a protected forest area is damaged or cut down during or after construction, the mitigation shall involve the creation of protected open space that is 1.25 times the area destroyed. This may result in a loss of buildable area and/or lots. The area shall be replanted at the rate specified in Table 5.11.90.B for the type of forest damaged or cut down.

## D. Uses Permitted Within Forest Preservation Area.

- 1. To support wildlife habitats and corridors, these areas shall be preserved from the understory herbaceous layer to the overstory canopy layer. However, in some cases, the Director may allow selective underbrushing depending on the approved use of the area. Examples include but are not limited to:
  - a. Underbrushing is not allowed in the River Buffer area as per Section 5.11.60 (River Buffer); and
  - b. Underbrushing may be allowed in a community park.
- 2. The following activities may be permitted within forest preservation areas with approval by the Director:
  - a. Low impact improvements such as bike paths, walking paths, picnic areas, wildlife viewing areas, etc.
  - b. Removal of invasive species and poisonous underbrush vegetation such as poison ivy, poison oak and poison sumac with hand-held equipment.
  - c. Removal of invasive species with hand-held equipment.
  - d. Low impact designed structures such as benches, shelters, and fences, as long as no specimen or preserved trees are removed, no structures are fastened to trees and there is minimal impact (trenching, grading) on the forest floor.

# 5.11.100 Tree Protection

All trees that are not protected under Section 5.11.90 (Forests) shall be protected in accordance with this section.

- A. **General.** Careful site planning for new development shall, to the greatest extent practicable, preserve existing trees and vegetation on the property to be developed. This is to include all specimen trees in good health as well as groups of smaller healthy trees and understory vegetation that provide wildlife habitat, corridors, and bird nesting areas.
- B. Specimen Trees. A specimen tree is defined as follows:
  - 1. Understory trees Dogwood, Redbud, and Southern Magnolia that are equal to or greater than a diameter of 4 inches (DBH).
  - 2. Overstory trees American Holly, Bald Cypress, Beech, Black Oak, Black Tupelo, Cedar, Hickory, Live Oak, Palmetto, Pecan, Red Maple, Southern Red Oak, Sycamore, or Walnut that are equal to or greater than a diameter of 16 inches (DBH).
  - 3. All other trees equal to or greater than a diameter of 24 inches (DBH).
- C. **Tree Survey Required.** Prior to any development approval, except bona fide forestry, the applicant shall provide a tree survey of the areas in which building, clearing or construction activities are planned in accordance with the following:
  - 1. The tree survey shall include all trees 8 inches DBH and larger, and all dogwoods (*Cornus spp.*), redbuds (*Cercis canadensis*), and magnolias (*Magnolia spp.*) four inches DBH and larger.
  - 2. The tree survey shall indicate species type and size (DBH).
  - 3. The tree survey shall be conducted by a certified arborist, professional urban forester, registered landscape architect, or registered land surveyor. All tree surveys shall be certified by a registered land surveyor.
  - 4. A tree survey shall be less than five years old beginning from the application submission date for which the survey pertains. The Director shall require that a new tree survey be undertaken at the applicant's expense when it has been determined that a tree survey is more than five years old.
- D. Tree Removal.
  - 1. **Mitigation.** Where individual specimen trees are to be cut (see subsection B above), the developer shall plant sufficient trees having a caliper of 2.5 inches or more each so as to meet the DBH of the tree or total trees cut. Such trees shall be of the same species as those cut unless the Director approves other species to enhance the diversity to that similar to the native forest areas. All mitigation trees shall be planted within the disturbed area of the site.
  - 2. Existing Trees Used for Mitigation. The saving of existing non-specimen trees is encouraged and may be utilized to meet the mitigation requirement above. Existing trees used for mitigation must be located within the disturbed area of the site.
  - 3. **Reforestation Fee.** Where the director determines that the required replacement of trees is not feasible or not desirable due to the size and shape of property and/or structures, crowding of the trees to where thinning will be required, other design limitations, or other viable site constraints, such reduction shall be subject to a general reforestation fee. This fee shall be the actual and verified cost of the required tree replacement and shall be paid to the county before final approval is given for the development plan. The funds collected through this reforestation fee shall be used by the county to plant trees and other landscaping in highway medians, along roads, or on other public properties as deemed appropriate.

## E. Tree Protection During Construction

- 1. **Tree Protection Zone.** A tree protection zone shall be shown on the development plan for all trees to be preserved. This zone shall encompass the drip line for protected forest areas and other groupings of trees. For all other trees, the tree protection zone shall be a radius of one foot for every inch of trunk diameter (DBH).
- 2. Alternate Tree Protection Zone. The Director may approve an alternate tree protection zone if it can be determined by a certified arborist or professional urban forester that one or more specific protection measures will result in no injury to any tree whose tree protection zone (see subsection D.1.) will be encroached upon during construction. In no case shall a protection zone be reduced to less than one-half of the area specified in subsection D. 1. for any tree without approval of a variance; see Section 7.2.140 (Variance Permit). Approved special tree protection measures shall be made part of the conditions of the development permit, and compliance with these measures must be certified in writing by the developer prior to issuance of a Certificate of Compliance.
- 3. **Construction Requirements.** Tree protection zones shall be established and maintained for each preserved tree on a development site as follows:
  - a. **Fencing Required Prior to Construction.** Conspicuous, four-foot-high tree protection fences are required to be erected around all trees or groups of trees to be preserved prior to site work or construction commencing and remain in place until a Certificate of Compliance is issued. The Director or designee shall inspect and approve the tree protection fencing and location prior to the beginning of clearing and grading work on the site.
  - b. **No Encroachment Permitted.** The protection fences shall prevent encroachment by people, equipment and vehicles. No building materials, dirt, debris, oils, paints, or any other materials shall be placed or stored within the tree protection zone.
  - c. **Paving.** The area within the tree protection zone must be open and unpaved, except where approved perforated pavers may be utilized, or tree aeration systems and tree wells installed.
  - d. **Change in Grade.** Change in grade shall not be permitted within the tree protection zone except for a two-inch cut or a two-inch fill of topsoil, sod or mulch.
  - e. **Underground Utility Lines.** Underground utility lines shall be routed around and away from tree protection zones. Necessary installation through tree protection zones shall be accomplished through tunneling, rather than cutting open trenches.
- 4. **Penalty for Damaging or Cutting Protected Trees.** If trees are damaged or cut down as a result of the construction process, the mitigation shall be individual plantings of trees a minimum of 2.5 caliper inches with a total caliper equal to 1.25 times that of the DBH of the trees damaged or destroyed. Trees shall be planted within the disturbed area of the site. If all tree inches cannot be planted back on site due to site constraints, the remaining tree inches shall be subject to a general county reforestation fee; see Section 5.11.100.D.3 (Reforestation Fee).

## F. Tree Removal on Developed Properties

1. Single-Family Residential Lots.

- a. **Permit Required to Remove a Grand Tree.** On any individual single-family residential lot with an existing dwelling unit, a tree removal permit is required to remove a grand tree, see Section 7.2.50 (Tree Removal Permit). A grand tree is an exceptionally large tree for its species that is healthy and worthy of protection. It represents an individual that contributes aesthetically to the region's visual "sense of place" and serves as a seed stock for future generations. An individual tree is considered a grand tree by the following size criteria:
  - 1) Live Oak (*Quercus virginiana*), Black Walnut (*Juglans nigra*), or Longleaf Pine (*Pinus palustris*) that are equal to or greater than a diameter of 24 inches DBH.
  - 2) Loblolly Pine (*Pinus taeda*), Slash Pine (*Pinus ellitoi*), and Shortleaf Pine (*Pinus echinata*) that are equal to or greater than a diameter of 36 inches DBH.
  - 3) All other species of trees, not defined above, that are equal to or greater than a diameter of 30 inches DBH.
- b. **Tree Removal Permit Standards.** A tree removal permit will be issued to remove a grand tree from a residential lot if the tree is dead, diseased, hollow, or has another condition that poses a hazard to people or structures on the lot or adjoining lot as determined by a certified arborist.
- c. **Removal of All Other Trees on Residential Lots.** All other trees on a singlefamily residential lot with an existing dwelling, except those within required buffers, including river buffers, may be removed without a permit. Removal of trees within a buffer requires a tree removal permit; see Section 7.2.50 (Tree Removal Permit).
- 2. **Tree Removal on All Other Developed Lots.** For all other developed lots (excluding single family residential lots with existing homes), a property owner may remove dead or severely diseased trees upon receipt of a tree removal permit; see Section 7.2.50 (Tree Removal Permit). The application must be accompanied by a certified arborist's report stating that the tree is dead, diseased, hollow, or has another condition that poses a hazard to people or structures on the lot or adjoining lot. Upon removal, the tree shall be replaced with one 2.5 inch minimum caliper tree of the same species.
- 3. **Golf Course Tree Removal.** For new golf course developments, and for additions to, or renovations of, existing golf courses, the following tree standards apply:
  - a. Those areas in which golf course clubhouses, cart barns, snack bars, rest facilities, maintenance buildings, storage areas, and parking lots are to be located will adhere fully to all tree standards of this Section.
  - b. Within active playing areas (to include, but not limited to fairways, adjoining mowed grass rough, water hazards, sand traps, and golf cart paths) and outdoor practice/training areas (including driving ranges, practice putting greens, etc.) removal of any specimen tree will require a tree removal permit; see Section 7.2.50 (Tree Removal Permit). Removal of specimen trees shall either meet the mitigation requirements of Section 5.11.100.D. (Tree Removal), or, where approved by the Director, off-site mitigation may take the form of highway landscaping in the public road right-of-way subject to County and/or SCDOT encroachment permits. The off-site mitigation shall be installed and maintained by the golf course owner.
- 4. Utilities. Removal of specimen trees during the construction or maintenance of easements or rights-of-way for water, sanitary sewer, electricity, telephone, natural

gas, cable, storm drainage, or other service lines, shall be exempt from the requirements of this Section provided that the applicable company or agency has executed an agreement with the County that:

- a. Recognizes the need to minimize trimming of hardwood overstory trees that do not significantly interfere with the intended purpose of construction or maintenance;
- b. Establishes, to the extent practicable, design guidelines for construction and maintenance which identifies the saving of hardwood overstory trees as a factor to be considered in the design process;
- c. Establishes guidelines to avoid topping, or severe pruning of trees whenever reasonably practicable, and where it is unavoidable, to do so in the manner which is most aesthetically and ecologically acceptable to the County;
- d. Provides for a consultation process with the Department of Community Development, including, when necessary, review by a certified arborist approved by the County, prior to the commencement of major construction or maintenance or the removal of any hardwood tree over 16 inches DBH;
- e. Provides for submittal of annual line clearing plans to the Department of Community Development for review;
- f. Provides for submittal of annual herbicide spraying plans, including details of herbicides to be used as well as application methods, to the Department of Community Development for review. The public utility shall work with the Department of Community Development to identify procedures to contact citizens prior to spraying to advise of the date and approximate time that such activities will take place;
- g. Provides that a breach of such agreement constitutes a violation of this Section and thus a loss of exemption from the tree protection provisions of this Section; and
- h. Provides that appeals of administrative decisions made pursuant to such agreement shall be to the Zoning Board of Appeals.
- G. **Invasive Tree Species.** Native Lowcountry plant species should be protected from competition from invasive tree species. Invasive tree species are listed in Table 5.11.100.C.

Table 5.11.100.C: Invasive Tree Species			
Common Name	Scientific Name		
Chinaberry	Melia azedarach		
Chinese Tallow Tree / Popcorn Tree	Triadila sebifera		
Mimosa / Silk Tree	Albizia julibrissin		
Paper Mulberry	Broussonetia papyrifera		
Princess Tree	Paulownia tomentosa		
Tree of Heaven	Ailanthus altissma		

- 1. All invasive species less than 12 inches DBH may be removed without a tree removal permit.
- 2. Removal of an invasive species 12 inches DBH or greater requires a tree removal permit, see Section 7.2.50 (Tree Removal Permit) except when located on a single-family developed lot outside of a required buffer.

3. Each invasive tree over 12 inches DBH that is removed shall be mitigated with a 1<sup>1</sup>/<sub>2</sub> inches caliper or larger replacement tree.

## 5.11.110 Allowed Activities in Resource Protection Areas

Activities within resource protection areas shall be limited to those found within Table 5.11.100.A (Activities in Resource Protection Areas).

	Activities					
	Trails	Bike- way	Picnic Area	Public Road	Water Sewer Line	Additional Standards
Tidal Wetlands			С			Sec. 5.11.30
Non-Tidal	С			S	S	Sec. 5.11.40
Wetlands						
Beach-Dunes	С					Sec. 5.11.50
River Buffer	С	С		S	S	Sec. 5.11.60
Endangered	С				S	Sec. 5.11.70
Species Habitat						
Forests	С	С				Sec. 5.11.90

C = Conditional S = Special Use -- = Not Permitted

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