

3.18 TREE PROTECTION AND LANDSCAPE PRESERVATION

A. GENERAL

The overarching goal of this section is to proactively manage the City of Southport's Urban Maritime Forest and its tree canopy. This management will take the form of tree preservation when at all possible, and mitigation through the replanting of trees when others must be removed.

A healthy and expansive tree canopy provides a wide range of benefits to the citizens of Southport. Aesthetically, the nurturing of trees and tree canopy provides for a pleasant and beautiful community in which both residents and visitors alike benefit from. Economically, a robust tree canopy provides a consistent cooling effect on our community and on individual properties that can significantly reduce cooling costs for homeowners and businesses alike. Property values on both public and private land are increased when trees form part of the landscape. A healthy tree can increase residential property values by as much as 27 percent.

One large tree can lift up to 100 gallons of water out of the ground and discharge it into the air in a day, helping to filter the air that we breathe and control storm water. In our coastal location, Southport's tree canopy protects our community and helps mitigate the damage caused by wind during tropical storms and hurricanes.

The city finds that the preferred method used by developers of proposed development for minor, major, or PUD development in the city is to clearcut the entire area to be developed and then to replant trees in mitigation of the damage done by the clearcutting. The City finds that, even when fully mitigated pursuant to this ordinance, both the aesthetic and environmental damage done by the mass and indiscriminate destruction of forest by such clearcutting can never be fully restored until the trees planted in mitigation reach maturity many years in the future. For this reason, the City seeks to limit the environmental and aesthetic damage done in the process of development to the extent reasonably possible by reducing the number of trees removed in development rather than planting new trees in substitution therefore.

For all these reasons, the City of Southport places great value on our Urban Maritime Forest and the tangible and intangible benefits that it provides. This section provides a plan to ensure that existing trees are protected, in particular our signature heritage Live Oaks, and at the same time provides guidelines for mitigation through the replanting of native species when it is necessary to remove trees.

B. PURPOSE

1. The general purpose of this section is to regulate and control the planting maintenance, and removal of trees and vegetation on both public and private property.
2. The specific purposes of this section are:
 - a) To safeguard and enhance property values and to protect public and private investment through the maintenance and protection of significant existing trees.
 - b) To prevent lot clearing;

- c) To outline the City's responsibilities with regard to protection and maintenance of Southport's urban forest trees and landscaping on public property; and
- d) To prevent the indiscriminate removal of trees and ensure mitigation when trees are necessarily removed.

C. AUTHORITY TO TREAT OR REMOVE TREES ON PRIVATE PROPERTY

- 1. The UDO Administrator may cause or order the removal of any tree or part thereof on public or private property which is in an unsafe condition, damaging or likely to damage sewers or other public improvements facilities, or which is infested by an injurious fungus, disease, insect or other pest.
- 2. The UDO Administrator may cause or order necessary treatment for any tree on public or private property which is infested by any injurious fungus, disease, insect or other pest when they determine such action is necessary to prevent the spread of any such injurious condition or pest and to prevent danger therefrom to persons or property or to vegetation planted on adjacent property.
- 3. Before exercising the authority conferred by this section, the UDO Administrator shall order the owner or occupant of the property to take corrective action. The order shall be in writing and shall state that the action specified therein must be taken within 10 consecutive calendar days after the order is mailed. The order shall be mailed by certified or registered mail, return receipt requested. Failure to comply with the order of the UDO Administrator shall be a violation of this section. If the condition has not been corrected or if action that would lead to a timely correction of the condition has not been taken within the time specified above, the UDO Administrator or their designee may seek an injunction, order of abatement or other equitable remedy in a court of competent jurisdiction against the property owner to ensure compliance in accordance with NCGS 160A-175.

D. TREE IMPACT PERMIT

- 1. Removal or damage to any protected tree or development activities within the critical root zone of any protected tree without the prior issuance of a tree impact permit or the failure to conform to the terms and conditions thereof is hereby prohibited. A protected, or Regulated Tree, is defined as follows:

Regulated Tree: The subsurface roots, crown, and trunk of any self-supporting woody perennial plant such as a large shade tree, which usually has one (1) main stem or trunk, and has a measured DBH as follows:

- A. A hardwood tree, having a single trunk at least eight (8) inches in DBH. Trees may have a single or multiple trunks, but at least one trunk must measure eight (8) inches in diameter.
 - B. A coniferous tree, having a single trunk at least twelve (12) inches DBH.
 - C. Any tree, of any species, with a DBH of thirty (30) inches or greater
(Specimen Tree)
- 2. For previously platted residential lots or one or two-family residential uses, a tree impact permit shall be required to remove or conduct any development

within the critical root zone of any protected regulated tree located within any setback and for a protected specimen tree located anywhere on said property. An as-built tree survey will be required prior to the Certificate of Occupancy for new residential construction.

3. For nonresidential, multi-family, or major subdivisions, a tree impact permit shall be required to remove any protected tree located anywhere on site. An as-built tree survey shall be required for Major Site Plans prior to the Certificate of Occupancy and for Major Subdivisions prior to Final Plat approval.
4. Any protected trees permitted to be removed pursuant to any tree impact permit shall be mitigated pursuant to subsection H (entitled "Mitigation") of this section of this ordinance. All persons seeking a permit for removal of a protected tree as provided above shall make application to the city via the tree impact permit application.

E. EXCEPTIONS

1. The UDO Administrator may waive the requirements of this section during a city declared state of emergency in accordance with NCGS 166A-19.22.
2. If any regulated tree shall be determined to be a hazard tree such that it may:
 - a) Immediately endanger the public health, safety or welfare; or
 - b) Cause an immediate disruption of public services.

F. TREE PLAN

1. A tree plan must be submitted to, reviewed, and approved by the UDO Administrator prior to the issuance of a tree impact permit.
2. For nonresidential, multi-family, major subdivisions, or planned unit developments the tree plan shall be a scaled plan not less than 1"= 30' and shall be prepared by a landscape architect registered in the state and the tree plan shall provide the following information:
 - a) Two separate zones during the planning phase:
 - i) Tree Removal Zones – Zones that show the impacts of utility, infrastructure, and drainage improvements. These improvements would still require mitigation.
 - ii) Tree Safe Zones/Lot Preservation – The area designated on a preliminary plat of a minor or major subdivision or PUD that makes up the individual lots where trees are to be left untouched. 80% of the lot is to be left untouched prior to lot development.
 - b) Property line with bearings and distances, easements, marsh and wetland delineations and other information necessary to depict the development area;
 - c) All existing and proposed buildings, paving, infrastructure, and utilities;
 - d) All protected regulated and specimen trees located on the site indicating the diameter, species, and the critical root zone for each protected tree;

- e) All regulated and specimen trees located on the site proposed to be removed, including species and size;
 - f) All proposed newly planted trees indicating the DBH and height at planting, and species;
 - g) Tree protection zones, protective fencing details, and tree wall and/or tree well details;
 - h) Maintenance plan identifying the methods to ensure the viability of all trees and the party responsible for continuing maintenance;
 - i) Listing of total number of trees and DBH inches to be removed and the total number of trees and DBH inches to be planted by species; and
 - j) Seal of the design professionals with signature and date.
3. For residentially zoned vacant lots or one and two-family residential uses, the tree plan to be submitted as part of the permitting process shall include a hand drawn sketch, rendering, or copy of an existing plat or survey of the property indicating the location of those regulated or specimen trees proposed to be removed, as well as any trees proposed to be planted as mitigation (if applicable).
- a) TREE RETENTION REQUIREMENTS PER LOT IN THE R10, R20, MF, AND PUD ZONING DISTRICTS
 - 1. 3,000 sq ft - 1 broadleaf canopy tree
 - 2. 6,500 sq ft - 2 broadleaf canopy trees
 - 3. 11,000 sq ft - 3 broadleaf canopy trees
 - 4. 14,000 sq ft - 4 broadleaf canopy trees
 - 5. 20,000+ sq ft - 5 broadleaf canopy trees
 - b) In cases where the tree retention requirements above prohibit the development of a lot, mitigation will be required.
 - c) In cases where the lot does not have canopy trees, the developer must plant to the requirements in 3 a).
4. Distance from utilities. Any tree required by this section which is placed within 20 feet lateral distance from the centerline of an above ground electric utility line (the line connecting pole centers) should have a maximum expected maturity height as follows:
- a) Zero (0) to 10 feet lateral distance of the centerline, 15-foot maximum expected maturity height; and
 - b) Zero (0) to 10 feet lateral distance of the centerline, 15-foot maximum expected maturity height; and
 - c) Outside 20 feet of lateral distance, trees should be placed in the most feasible manner to avoid future conflict with aboveground electric utilities and violations of the National Electric Safety Code, and to avoid conflict with any below ground utilities and drainage facilities. Variations to such distance requirements may be made with the approval of the Public Services Director.

G. CRITERIA FOR ISSUANCE OF TREE IMPACT PERMIT

1. Unless the applicant for a permit under this section is engaged in new construction, no tree impact permit shall be issued unless one (1) or more of the following criteria are met:
 - a. The protected tree is dead, severely diseased, injured or in danger of falling close to existing or proposed structures.
 - b. The protected tree is causing disruption of existing utility service or causing drainage or passage problems upon the rights-of-way.
 - c. The protected tree is posing an identifiable threat to pedestrian or vehicular safety.
 - d. The protected tree to be removed is located within 15 feet of the principal structure, within five (5) feet of detached buildings (sheds, accessory structures, garages), pools, hardscape patios, and driveways.
 - e. The protected tree violates state or local safety standards.
 - f. Removal of the protected tree is necessary to enhance or benefit the health or condition of adjacent trees or property.
2. Any tree removed requiring mitigation shall be mitigated through the planting of new material as provided in 3.18 H Mitigation. Mitigation shall not be required for trees that are dead, severely diseased, injured or if the tree poses a threat to an existing structure due to the poor condition of the tree.

H. MITIGATION

1. The indiscriminate removal of trees is not allowed. A tree impact permit request must be accompanied by a clarification of purpose/need. Mitigation is required when it is determined that a tree may be removed. The removal of any protected regulated tree within any setback or the removal of any protected specimen tree located anywhere on site, if approved, must be mitigated in accordance with the following standards:
 - a. The total diameter at breast height (DBH) of all applicable protected trees proposed for removal shall be totaled. The resultant number of DBH inches to be removed must be planted back on the site with an appropriate number of trees to replace the equivalent DBH of those trees removed. For example, if 72 inches DBH of specimen trees are proposed for removal from a site, the equivalent number of new trees required to meet the 72 inches of DBH removed shall be planted back on site (24 trees installed at three (3) inches Caliper would meet this requirement).
 - b. Existing residentially zoned vacant lots or one and two-family residential uses shall only be required to mitigate 25% of the total DBH of regulated or specimen trees removed. All other development types and/or proposals for any major subdivision shall be subject to the full mitigation replacement ratio requirement provided in subsection 1 (a).
 - c. A minimum of one (1) regulated or specimen tree of the same species removed shall be installed through mitigation. Where regulated or specimen canopy trees are removed, the replanting requirement shall consist of a minimum 25% heritage Live Oak (*Quercus virginiana*) and an overall minimum of 50% canopy trees. Where regulated or specimen Live

- Oak (*Quercus Virginiana*) trees are removed, the replanting requirement shall consist of a minimum of 50% such species.
- d. Any replanted trees shall be canopy or understory trees as provided in Tables 3.5 or 3.6.
 - e. Utilization of understory trees shall not exceed 50% of the required mitigation plantings.
 - f. A mitigation plan that contains between 10 to 50 understory trees shall include, with balanced representation, a minimum of three understory tree species as provided in Table 3.6.
 - g. A mitigation plan that contains over 50 understory trees shall, with balanced representation, include a minimum of four understory tree species as provided in Table 3.6.
 - h. Minimum sizes for mitigation plantings are canopy trees 3" diameter at breast height and understory trees 2" diameter at breast height.
2. Any mitigation trees required as a result of the removal of regulated or specimen trees may be counted to meet the requirements of the street yard, buffer, or parking facility landscaping requirements.
 3. Significant Heritage Live Oak Trees retained on site will be eligible for a mitigation credit as follows:
 - a. 10" to 20": Retaining and preserving Heritage Live Oaks of this size will receive credit with a multiplier of 2. For example, retaining a 10" Live Oak would equal 20" of mitigation credit.
 - b. 20" to 30": Retaining and preserving Heritage Live Oaks of this size will receive credit with a multiplier of 3. For example, retaining a 20" Live Oak would equal 60" of mitigation credit.
 - c. Greater than 30": Retaining and preserving Heritage Live Oaks of this size will receive credit with a multiplier of 4. For example, retaining a 30" Live Oak would equal 120" of mitigation credit.
 4. Mitigation trees must be planted within a year of the tree permit being issued. Failure to do so will constitute a violation of this section.

I. LOT CLEARING AND PREPARATION

1. No alteration of vegetation, trees, or landscape material in excess of three (3) inches DBH shall occur on a lot or building site prior to the issuance of a zoning or tree impact permit. Some clearing of understory trees and shrubs may be required to prepare a site for survey, inspection by governmental agencies as part of any permitting process, or to stake the proposed building site.
2. On densely vegetated lots, a walking access trail not to exceed three (3) feet may be cleared for access purposes. Permission to clear any understory trees and shrubs less than three (3) inches DBH for said walking access trail shall be permitted following consultation with the UDO Administrator; however, clearing shall be kept to an absolute minimum.
3. Violations of the lot clearing and preparation section shall constitute a minimum (1) one-year delay in the issuance of any city issued development approval.
4. In the event that a lot has been cleared without obtaining all proper permits from the city and the UDO Administrator is unable to determine the exact number of

trees which have been removed in violation of this ordinance, a civil penalty shall be levied under this subsection as follows:

- a) If the property is located within a residential district, the offender shall be subject to a civil penalty in the amount of \$1.00 for each square foot of the total size of the lot that was cleared (not based on the lot area cleared). In addition, the offender shall be required to plant two (2) replacement canopy trees per 10,000 sf or fraction thereof.
- b) If the property is located within a nonresidential district, the offender shall be subject to a civil penalty in the amount of \$2.00 for each square foot of the total size of the lot that was cleared (not based on the area cleared). In addition, the offender shall be required to plant four (4) replacement canopy trees per 10,000 sf or fraction thereof.
- c) In addition to the civil penalties set forth in subsections 4(a) and 4(b) above, the offender shall be subject to all enforcement provisions of Section 2.15.D of this Unified Development Ordinance.

J. TREE PROTECTION DURING CONSTRUCTION

1. A major objective of this section is to encourage the preservation of existing vegetation wherever possible while allowing quality development to take place. As a result, the following measures shall be required for protected trees during the construction process.
2. Protective fencing not less than four (4) feet high or other construction barrier shall be placed at and completely encompass the critical root zone of all protected trees.
3. Any tree whose critical root zone will be affected by soil removal shall have roots cut clearly by trenching at a point at least one (1) foot outside the construction barrier installed as required above.
4. The following shall be prohibited within the critical root zone of any protected tree, except as may be necessary when constructing, repairing or replacing public utilities:
 - a) Grading and excavation which involves cutting or filling to a depth of more than three (3) inches.
 - b) Pouring of any material onto ground which is toxic to plants.
 - c) Installing, depositing, placing, storing, or maintaining any stone, brick, sand, concrete or other materials which may impede the free unobstructed growth of or passage of water, air, and fertilizer to the roots.
 - d) Storing of any construction materials within the critical root zones of the protected trees.
 - e) Attaching any sign, poster, notice or other object, or fastening any guy wire, cable, rope, nail, screw, or other device to any protected tree for any reason other than that of a protective nature to the tree.
 - f) Causing or encouraging any fire or burning of any kind near or around any tree.
5. In the event that a developer is unable to meet the critical root zone requirements of this section, the developer must have a Landscape Architect or ISA Certified Arborist prepare guidelines on how to protect the Critical Root Zone to the maximum extent possible during the development process.

K. DAMAGE TO TREES

1. It shall be unlawful to intentionally damage or destroy trees planted on municipally owned or controlled property except as a part of a city-authorized improvement program.
2. It shall also be a violation of this section to attach or place any rope or wire (other than one to support a young or broken tree), sign, poster, handbill, or anything to any such public tree.
3. A person damaging a tree on public property in violation of this section shall be liable to the city for such damage, including any loss of value. In the event damage is so pervasive as to result in the treatment or removal of the tree, the person damaging such tree shall also be liable for costs of treatment or removal. Values of public trees or the amount of damages thereto will be determined by a certified arborist retained by the City of Southport.
4. The monies collected for damages and loss of value will be placed in the City of Southport Tree Mitigation Fund and are to be used solely for restitution for damages or for other costs incurred by the city for violation of this section.

L. HAZARD TREE

1. Every owner of any tree overhanging a street or sidewalk within the city is responsible for pruning the branches so that such branches shall not obstruct vehicles or pedestrians. Provided further, that all property owners within the city are hereby required to cause the removal of any dead or diseased trees on their property whenever such trees constitute a hazard to life and property or harbor insects or diseases which constitute a potential threat to other trees. Failure to take such action shall be a violation of this section.
2. The UDO Administrator or his designated representative shall give written notice to any owner violating the terms of this section of said violation and give said owner no less than 10 days to perform the duties in connection with his or her property as specified in (a). If said owner or occupant shall refuse or neglect to perform the duties hereof, the UDO Administrator or his designee may seek an injunction, order of abatement or other equitable remedy in a court of competent jurisdiction against the property owner to ensure compliance in accordance with NC GS 160A-175.
3. In case the owner(s) of any lot or other real property is unknown or their whereabouts is not known after diligent efforts to identify and locate said person, then a copy of the written notice herein above referred to shall be posted upon the premises. The City Clerk shall make an affidavit setting out the facts and circumstances justifying the posting of said property.

M. PROTECTION OF UTILITIES

Public utilities shall exercise reasonable care and utilize best management practices to avoid damage and injury to public trees during the installation and maintenance of its facilities. The City's Public Services Director or their designee will provide assistance on any utility project to see that the public utilities can be installed or repaired with minimal damage to any public tree utilizing standards outlined in the City of Southport Urban Forest Management Plan (2011).

N. NOTIFICATION FOR WORK NEAR PUBLIC TREES

1. As part of any new construction project, no person or business shall perform any grading, excavation, place any fill, compact the soil or construct any building structure, street, sidewalk, driveway, pavement or public utility within 25 feet of any public tree without first notifying and consulting with the UDO Administrator. Any such work shall be conducted in accordance with this section.
2. Any public utility constructing or maintaining any overhead wires or underground pipes or conduits within 25 feet of public trees shall consult with the Public Services Director prior to performing work which may cause injury to public trees.

O. PRUNING REQUIREMENTS

A permit is not required for the pruning of trees. However, in order to prevent excessive pruning and topping of trees and to prevent pruning that will be hazardous to the health and natural appearance to the tree, compliance with approved pruning standards is required, and failure to meet these standards is a violation of this section. The UDO Administrator shall maintain on file at all times a copy of the current edition of Pruning Standards by the American Society of Consulting Arborists and shall make copies of such standards available for the cost of reproduction upon request.

P. PENALTIES FOR VIOLATIONS OF THIS SECTION

1. Any person removing any tree in violation of this section, in addition to mitigation requirements, shall be subject to a civil penalty of one hundred dollars (\$100.00) per inch diameter at breast height (DBH) of the tree.
2. Any person removing any regulated tree after notice of the requirements of this section, in addition to the mitigation requirements, shall be subject to a civil penalty of two hundred dollars (\$200.00) per inch DBH of the tree.
3. Any person removing any City Owned Tree in violation of this section, in addition to the mitigation requirements, shall be subject to a civil penalty of three hundred dollars (\$300.00) per inch DBH of the tree.

Q. CITY OF SOUTHPORT; RESPONSIBILITY

1. It is the responsibility of the City of Southport to maintain the City's iconic, Urban Maritime Forest. The City shall undertake a program of review, maintenance, and regulatory oversight in order to maintain the current and future health of our forest landscape.

R. FORESTRY COMMITTEE; RESPONSIBILITY.

1. The City of Southport Forestry Committee shall review and recommend actions to preserve and enhance the community's trees. The committee's actions will include protection of existing trees, tree replenishment, public education, and any other function related to the community's urban forest environment.

S. APPROVED TREE LIST

1. The City shall maintain a list of approved native trees for various applications. A copy of the approved native tree list can be found in Section 3.17.

T. DEVELOPMENT OF ANNUAL TREE PROGRAM.

1. The City Manager, in cooperation with the Forestry Committee, shall annually review its tree maintenance and installation needs including new projects, pruning of existing trees and replacement of diseased or damaged trees in conjunction with development of the City's annual budget. The City, in coordination with the Forestry Committee, will undertake an annual planting program, focusing on Southport's iconic live oaks (*Quercus virginiana*) on the City's public areas and rights of way. The Forestry Committee will identify planting locations with a focus on replacing trees that have been lost/removed as well as to expand the forest canopy.

U. COMMUNITY AWARENESS

1. The City shall undertake programs, as may be determined by the Forestry Committee, Director of Tourism, and/or the Director of Parks and Recreation, which enhance the community's awareness of the value of trees and qualify for points toward the Tree City, USA Growth Award. The City shall annually hold an Arbor Day Ceremony, planned and organized by the Southport Forestry Committee, which focuses attention on the value of trees in the urban environment, and encourages public participation in tree planting or other activities supporting Southport's urban forest.

V. MAINTENANCE OF PUBLIC TREES/PROJECTS

1. The Public Services department shall be responsible for the maintenance of trees on municipal property with the advice of the City Manager or his designee. The Public Works department and Forestry Committee will annually assess trees located on public property and identify those that require maintenance or removal. The City will undertake any required maintenance utilizing City Staff, or when required, contract the work to be completed within current ANSI standards and/or International Society of Arboriculture (ISA) Best Management Practices.
2. The City shall have the right to prune, maintain and remove any tree on public grounds which interferes with the safe flow of traffic, any traffic control device or sign.
3. It shall be unlawful for any person to top or cut back to stubs the crown of any tree on City property or ROW.
4. Trees severely damaged by storms or other causes where required pruning practices are impractical may be exempted from this section as determined by the City Manager. This also includes dead, dying, or diseases determined by the City Manager or their designee and which pose a threat to the safety of the community.
5. All other City departments shall cooperate fully with the City Manager or his designee in carrying out the responsibilities of this section.
6. The planting, maintenance, and/or removal activities of public trees shall meet current arboricultural best management practices (ANSI A300 Standards) and follow guidelines outlined in the 2011 City of Southport Urban Forest Management Plan. City departments, contractors, community organizations and individuals performing tree related activities on City-managed property are required to adhere to these standards.