

## Article 22 - Screening and Trees

**Section 16-22.1 Board Findings Concerning the Need for Screening Requirements.** The Board finds that:

- a) Screening between two lots lessens the transmission from one lot to another of noise, dust, and glare.
- b) Screening can lessen the visual effects that may otherwise occur within an urbanized area. Even minimal screening can provide an impression of separation of spaces, and more extensive screening can shield entirely one use from the visual assault of an adjacent use.
- c) Screening can establish a greater sense of privacy from visual or physical intrusion, the degree of privacy varying with the intensity of the screening.
- d) The provisions of this part are necessary to safeguard the public health, safety and welfare.

**Section 16-22.2 General Screening Standard.** Every development shall provide sufficient screening so that:

- a) Neighboring properties are shielded from any adverse external effects of that development;
- b) The development is shielded from the negative impacts of adjacent uses such as streets or railroads.

Screening shall be located and maintained so as not to interfere with vehicular and pedestrian traffic.

**Section 16-22.3 Compliance With Screening Standard.** To determine the required screening, the following steps shall be taken:

- a) Identify the classification of the proposed land use and all adjacent uses listed in Section 16-22.4 Screening Land Use Classification.
- b) Use the Table of Screening Requirements in Section 16-22.5 to determine the appropriate letter designation for each abutting area. Match the letter designation obtained from the Table of Screening Requirements in Section 16-22.5 with the Description of Screening in Section 16-22.4 to determine the required screening.
- c) The screening requirements established in this article apply to all land uses except where specific requirements are established for uses elsewhere in this ordinance.

**Section 16-22.4 Screening Land Use Classification.** Listed below are the classifications of land uses that will determine the required screening established in Section 16-22.5, Table of Screening Requirements. The land uses are keyed to the Table of Permissible Uses contained in Section 16-10.1.

**16-22.4.1 Classification I:** single-family residences (1.100); single-family development with an accessory apartment (1.130) golf courses and parks (privately and publicly owned) not

constructed pursuant to a permit authorizing the construction of another use such as a residential development or a school (6.210, 6.220).

**16-22.4.2 Classification II:** two-family residences (1.200); multi-family residences (1.300); homes emphasizing special services, treatment or supervision (1.400); miscellaneous, rooms for rent situations (1.500, excluding 1.530); educational, cultural, religious, philanthropic, social, fraternal uses (5.000); recreation, amusement, entertainment activity conducted primarily outside enclosed buildings or structures (6.200); agricultural operations, and farming excluding livestock (14.110); cemetery (21.000); commercial greenhouse operations (25.000).

**16-22.4.3 Classification III:** hotels, motels and other similar businesses or institutions providing overnight accommodations (1.630); sales and rental of goods, merchandise and equipment (2.000); office, clerical, research and services not primarily related to goods or merchandise (3.000); manufacturing, processing, creating, repairing, renovating, painting, cleaning, assembling of goods, merchandise and equipment (4.000); recreation, amusement, or entertainment activity conducted entirely within building or substantial structure (6.100); institutional residence or care or confinement facilities (7.000); restaurants, bars, night clubs (8.000); motor vehicle related sales and service operations (9.000); storage and parking (10.000); services and enterprises related to animals (12.000); emergency service operations (13.000); agricultural operations, and farming including livestock (14.120); post office (15.100); airports (15.200); dry cleaner and Laundromat (16.000); utility facilities (22.000); open air markets and horticultural sales (19.000); funeral home (20.000); nursery schools, day care centers (22.000); bus station (24.000).

**16-22.4.4 Classification IV:** scrap materials salvage yards, junkyards, automobile graveyards (11.000); mining or quarrying operations, including on-site sales of products (14.300); telecommunication towers and related structures (18.000).

**Section 16-22.5 Table of Screening Requirements.** The Table of Screening Requirements shall be used to determine screening requirements between adjacent land uses.

Proposed Land Use Class	Adjacent Existing Land Use				Adjacent Zoning Type (For Vacant Property)		Adjacent Public or Private Street
	I	II	III	IV	Residential	Non-Residential	
II	A	B	B	C	A	C	B
III	A	B	C	C	A	B	B
IV	A	A	A	A	A	A	A

**Section 16-22.6 Descriptions of Screens.** The following three basic types of screens are hereby established and are used as the basis for the Table of Screening Requirements set forth in Section

**16-22.6.1 Opaque Screen, Type "A".** A screen that is opaque from the ground to a height of at least six feet, with intermittent visual obstructions from the opaque portion to a height of at least twenty feet. An opaque screen is intended to exclude completely all visual contact between uses and to create a strong impression of spatial separation. The opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The opaque portion of the screen must be opaque in all seasons of the year. At maturity, the portion of intermittent visual obstructions should not contain any completely unobstructed openings more than ten feet wide. The portion of intermittent visual obstructions may contain deciduous plants. Suggested planting patterns that will achieve this standard are included in Appendix E.

**16-22.6.2 Semi-Opaque Screen, Type "B".** A screen that is opaque from the ground to a height of three feet, with intermittent visual obstruction from above the opaque portion to a height of at least twenty feet. The semi-opaque screen is intended to partially block visual contact between uses and to create a strong impression of the separation of spaces. The semi-opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. At maturity, the portion of intermittent visual obstructions should not contain any completely unobstructed openings more than ten feet wide. The zone of intermittent visual obstruction may contain deciduous plants. Suggested planting patterns which will achieve this standard are included in Appendix E.

**16-22.6.3 Broken Screen, Type "C".** A screen composed of intermittent visual obstructions from the ground to a height of at least twenty feet. The broken screen is intended to create the impression of a separation of spaces without necessarily eliminating visual contact between the spaces. It may be composed of a wall, fence, landscaped earth berm, planted vegetation or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The screen may contain deciduous plants. Suggested planting patterns which will achieve this standard are included in Appendix E.

**16-22.7 Width of Landscaping Screen.** Unless otherwise provided in this Land Use Code, the minimum width of a landscaping screen shall conform to the following table. However, the permit-issuing authority may permit deviations from the presumptive requirements of the

following table and may require either more intensive or less intensive screening whenever it finds such deviations are more likely to satisfy the standard set forth in Section 16-22.3 without imposing unnecessary costs on the developer.

<i>Type of Screen</i>	<i>Width - Front Lot Line</i>	<i>Width - Side Lot Line</i>	<i>Width - Rear Lot Line</i>
Opaque Screen, Type "A"	8 feet	16 feet	16 feet
Semi-Opaque Screen, Type "B"	8 feet	16 feet	16 feet
Broken Screen, Type "C"	8 feet	8 feet	8 feet

**16-22.6.8 Town Center and Central Business District Requirements.** Street yard buffer area screening/landscaping requirements shall be established using Section 16-12.6.b, 16-12.6.2, 16-12.6.2.1. The minimum width for landscape screening along side and rear lot lines of properties less than one (1) acre (in TC or CB District) may be reduced to half of the required width for other zoning districts, except in cases where other screening widths are authorized by a specific conditional use permit. (Ex: The table below requires a 16-foot wide screen along a side lot line, but in the TC or CB District a buffer 8 feet wide may be approved.)

<i>Type of Screen</i>	<i>Width - Front Lot Line</i>	<i>Width - Side Lot Line</i>	<i>Width - Rear Lot Line</i>
Opaque Screen, Type "A"	8 feet	16 feet (8 ft – CB/TC)	16 feet (8 ft – CB/TC)
Semi-Opaque Screen, Type "B"	8 feet	8 feet (4 ft – CB/TC)	16 feet (8 ft – CB/TC)
Broken Screen, Type "C"	8 feet	8 feet (4 ft – CB/TC)	8 feet (4 ft – CB/TC)

**Section 16-22.9 Flexibility in Administration Required.** The Board recognizes that because of the wide variety of types of developments and the relationships between them, it is neither possible nor prudent to establish inflexible screening requirements. Therefore, as provided in Section 16-22.3, the permit-issuing authority may permit deviations from the presumptive requirements of Section 16-22.5 and may require either more intensive or less intensive screening whenever it finds such deviations are more likely to satisfy the standard set forth in Section 16-22.3 without imposing unnecessary costs on the developer.

**16-22.9.1** Without limiting the generality of this section the permit-issuing authority may modify the presumptive requirements for:

- a) Commercial developments located adjacent to residential uses in business zoning districts;
- b) Commercial uses located adjacent to other commercial uses within the same zoning district; and
- c) Uses located within planned unit developments.

**16-22.9.2** Whenever the permit-issuing authority allows or requires a deviation from the presumptive requirements set forth in Section 16-22.5, it shall enter on the face of the permit the screening requirement that it imposes to meet the standard set forth in Section 16-22.3 and the reasons for allowing or requiring the deviation.

**16-22.9.3** If the permit-issuing authority concludes, based upon information receives in consideration of a specific development proposal, that a presumption established by Section 16-22.5 is erroneous, it shall initiate a request for an amendment to the Table of Screening Requirements in accordance with the procedures set forth in Article 23.

**Section 16-22.10 Combination Uses.** In determining the screening requirements that apply between a combination use and another use, the permit-issuing authority shall proceed as if the principal uses that comprise the combination use were not combined and reach its determination accordingly, relying on the table set forth in Section 16-22.5, interpreted in the light of Section 16-22.6.

When two or more principal uses are combined to create a combination use, screening shall not be required between the composite principal uses unless they are clearly separated physically and screening is determined to be necessary to satisfy the standard set forth in Section 16-22.3. (For example, screening may be required in a residential combination use consisting of single-family and multi-family components.)

**Section 16-22.11 Maintenance of Screening and Landscape Plantings.** Screening required by this Article, including the shading provisions listed in Section 16-22.13, shall be maintained in accordance with these requirements.

**16-22.11.1** Landscaping shall not be installed or retained in any location that constitutes a hazard or infringement to the public health, safety, or welfare. Landscaping shall not obstruct the view of motorists using any street, private driveway, parking aisles, or the approach to any street intersection so as to constitute a traffic hazard or a condition dangerous to the public safety.

**16-22.11.2** Whenever any planting areas required by this Article are adjacent to parking or vehicular circulation areas, the planting areas shall be protected from vehicular intrusion or damage by either concrete wheel stops, concrete/asphalt curbs or retaining walls.

**16-22.11.3** All landscaping planting areas shall be stabilized from soil erosion immediately upon planting and shall be maintained for the duration of the use.

**16-22.11.4** The owner is responsible for maintaining all required plant material in good health. Any dead, unhealthy, or missing plants must be replaced with vegetation that conforms to the initial planting standards of this Article within one planting season.

**Section 16-22.12 Silvicultural Standards.** All silviculture operations shall be carried out in accordance with state approved best management practices for silviculture. All silviculture projects shall maintain buffers in a natural state where indicated below:

- a) An undisturbed buffer of a minimum 30 feet in width around the entire perimeter of any wetland, water body, or water course located on or adjacent to the project site;
- b) A buffer extending a minimum of 25 feet in width around the entire perimeter of the silviculture project site, except at necessary points of ingress and egress; and
- c) A buffer a minimum of 50 feet in width along perimeter areas of the site which adjoin any public road right-of-way, except at necessary points of ingress and egress, and except that marketable timber may be removed from the innermost 25 foot strip of buffer provided selective logging techniques are used which will minimize understory destruction, and provided no ground disturbance occurs.

**Section 16-22.13 Board Findings and Declaration of Policy on Shade Trees.** The Board finds that:

- a) Trees are proven producers of oxygen, a necessary element for human survival;
- b) Trees appreciably reduce the ever-increasing, environmentally dangerous carbon dioxide content of the air and play a vital role in purifying the air we breathe;
- c) Trees precipitate dust and other particulate air-borne pollutants from the air and allow air-borne pollutants to settle to the ground;
- d) Trees transpire considerable amounts of water each day and thereby purify the air;
- e) Trees have an important role in neutralizing waste water passing through the ground from the surface to ground water tables and lower aquifers;
- f) Trees, through their root systems, stabilize the ground water tables and play an important and effective part in soil conservation, erosion control and flood control;
- g) Trees are an invaluable physical, aesthetic and psychological counterpoint to the urban setting, making urban life more comfortable by providing shade and cooling the air and land, reducing noise levels and glare and breaking the monotony of human developments on the land, particularly parking areas; and
- h) For the reasons indicated in Section 16-22.13.g trees have an important impact on the desirability of land and, consequently, on property values.

Based upon the findings set forth herein the Board declares that it is not only desirable but essential to the health, safety, and welfare of all persons living or working within the Town's planning jurisdiction, present and future, to protect certain existing trees and, under the

circumstances set forth in this article, to require the planting of new trees in certain types of developments.

**Section 16-22.14 Required Trees Along Dedicated Streets.** Along both sides of all newly created streets with respect to which an offer of dedication is required to be made by this chapter, the developer shall either plant or retain sufficient trees so that, between the paved portion of the street and a line running parallel to and fifty feet from the centerline of the street, there is, for every thirty feet of street frontage, at least an average of one deciduous tree that has or will have when fully mature a trunk at least twelve inches in diameter. The trunk of all trees to be planted by the developer shall be located at least 8 feet from the edge of the street pavement or six feet from the edge of the existing or proposed sidewalk. When trees are planted by the developer pursuant to this section, the developer shall choose trees that meet the standards set forth in Appendix E.

**Section 16-22.15 Retention and Protection of Large Trees.** Every (non single-family) development in the Town Center and Central Business District shall retain all existing healthy eight (8) inch diameter (dbh) trees with drip lines outside the building and paving area footprint to the greatest extent possible. A developer may be required to modify his/her design in order to preserve healthy trees provided the redesign can be accommodated without reducing the intensity of development on the site.

**16-22.15.1** All other commercial (non single-family) development and single-family subdivisions requiring a conditional use permit shall retain all existing healthy significant trees eighteen (18) inches in diameter (dbh) or more unless the retention of such trees would unreasonably burden the development.

**16-22.15..2** Every commercial (non single-family) development and single-family subdivisions requiring a conditional use permit shall retain all existing healthy historic trees thirty (30) inches in diameter (dbh) or more with drip lines outside the building footprint. A developer will be required to modify his/her design in order to preserve healthy historic thirty (30) inch diameter trees, provided the redesign can be accommodated without reducing the intensity of development on the site. The Town Council, through the conditional use process, shall approve the removal of healthy historic trees on commercial property.

**16-22.15.3** No excavation or other subsurface disturbance may be undertaken within the drip line of any tree eighteen inches in diameter (dbh) or more, and no impervious surface (including, but not limited to, paving or buildings) may be located within 12.5 feet (measured from the center of the trunk) of any tree eighteen inches in diameter or more unless compliance with this subsection would unreasonably burden the development. For purposes of this subsection, a drip line is defined as a perimeter formed by the points farthest away from the trunk of a tree where precipitation falling from the branches of that tree lands on the ground.

**16-22.15.4** The retention or protection of trees eighteen (18) inches in diameter (dbh) or more as provided in herein unreasonably burdens a development if, to accomplish such retention or protection, the desired location of improvements on a lot or the proposed activities on a lot would have to be substantially altered and such alteration would work an unreasonable hardship upon the developer.

**16-22.15.5** Trees that are dead, dying, or which pose a risk to life, property, or utilities may be removed. In these scenarios, a clearing permit is required for tree removal but no fee will be charged. If the Planning Director disagrees with the Applicant that a tree is diseased or damaged, the Applicant shall provide documentation from a Certified Arborist that the specified tree poses a hazard.

Utility companies and their agents responsible for right-of-way clearing operations shall consult with the Planning Director or the Director's designee prior to tree pruning and/or removal.

**16-22.15.6** If space that would otherwise be devoted to parking cannot be so used because of the requirements of this section and, as a result, the parking requirements set forth in Article 20 cannot be satisfied, the number of required spaces may be reduced by the number of spaces "lost", up to a maximum of fifteen percent of the required spaces.

**Section 16-22.16 Tree Credits.** Preserving trees can improve the aesthetic quality of the site and improve property values, provide environmental benefits, mitigate the impacts of development on the community, and help minimize opposition to the proposed development. It is recommended that groups of trees, as well as individual trees, be preserved. Existing healthy preserved trees and shrubs may be credited towards required buffer trees, street trees, and parking lot trees according to the provisions set forth herein.

**16-22.16.1** Preserved trees may be credited at the rate of:

- 1) 2" – 6" caliper tree = 1 tree
- 2) 7" – 12" caliper tree = 2 trees
- 3) 13" – 18" caliper tree = 3 trees
- 4) 19" – 24" caliper tree = 4 trees
- 5) 25" + caliper tree = 5 trees

Note: All replacement trees are required to be a minimum 3-inch caliper with an average height of 12 - 15 feet.

**16-22.16.2** In order to receive credit, preserved vegetation must be certified in good health and condition by a Certified Horticulturist, Arborist or Forester, Landscape Architect, North Carolina Landscape Contractor, or N. C. Certified Plant Professional. Trees designated to be preserved must be indicated on the Landscape and Grading Plans. Protective barriers must be shown on the Landscape and Grading Plans. If a preserved tree dies after completion of



the project, it must be replaced with the total number of trees which were credited to the existing tree.

**16-22.16.3** Applicants for all commercial (non single-family) projects, and major subdivisions shall submit a current tree survey of the site proposed for development. The tree survey shall be drawn to engineers scale and accurately designate the species, location and diameter of all trees eight (8) inches in diameter (dbh) or greater on the site, and all trees proposed for credit as provided in Section 16-22.15.1.

**16-22.16.4** If a property owner contends a tree is or is not healthy and the Administrator is in disagreement with such claim, the property owner shall submit an evaluation of the tree's health, performed by an individual with verifiable expertise in such matters as provided in Section 16-22.15.2. If such evaluation determines the tree is not in good health or will not remain healthy under new conditions proposed for the site, the Administrator shall permit the removal of the tree(s).

**16-22.16.5** The permit-issuing authority may approve reductions in the requirements for the number of parking spaces or loading area requirements in order to facilitate preservation of historic and significant trees.

**16-22.16.6** The standard measurement for existing trees to be preserved shall be the diameter-at-breast-height (dbh) measured in inches at a height of 4.5 feet above ground. If a tree splits into multiple trunks below 4.5 feet, then each trunk is measured as a separate tree. A tree which splits into multiple trunks above 4.5 feet is measured as a single tree at 4.5 feet.

**Section 16-22.17 Protection of Existing Vegetation.** No grading or other land disturbing activity can occur on a site with existing trees which are designated to be preserved in order to meet the landscaping requirements until protective barriers are installed by the developer and approved by the Administrator. Protection measures to be used during grading and construction shall be specified on all landscaping, grading and erosion control plans.

**16-22.17.1** For purposes of this article, the Tree Protection Perimeter is defined as that area within a circle drawn with the tree's trunk as the center and a radius defined by the tree's drip line (which is the perimeter formed by the points farthest away from the trunk of a tree where precipitation falling from the branches of that tree lands on the ground). No storage of materials, dumping of waste materials, fill, or parking of equipment shall be allowed within this protected area, either during construction or after completion. No structures shall be permitted within the protected area unless approved by the Town Council, Director of Planning and Inspections or the Director's designee.

**16-22.17.2** A minimum 4-foot high protection fence constructed of a high visible material resistant to degradation by sun, wind and moisture for the duration of the construction

shall be used. A tree protection fence detail should be drawn on one plan submittal sheet and referenced on the landscaping, grading and erosion control sheets.

**16-22.17.3** If a violation of Section 16-22.15 occurs and as a result protected trees or shrubs die after a certificate of occupancy is issued for the development, then the owner of the property and their agents, heirs, or assigns shall be required to replace the tree using the credits in Section 16-22.16. Such replacement must take place within thirty (30) days after death and this condition shall be a continuing condition of the validity of the permit.

**Section 16-22.18 Tree Topping.** Tree topping, rounding, or “hat-racking” is defined as the severe cutting back of limbs to stubs larger than two inches in diameter within the tree’s crown to such a degree as to remove the normal canopy and to disfigure the tree. Tree topping shall be prohibited on all public property, designated public rights-of-way, and all trees falling under the jurisdiction of the ordinance, including protected and retained trees and newly planted trees. Proper pruning techniques recommended by the USDA Forest Service Urban and Community Forestry Program shall be used as a guide for pruning.

Tree topping shall be strongly discouraged on single-family property. It is encouraged that tree trimming be performed by selective cutting and proper pruning techniques recommended by the USDA Forest Service Urban and Community Forestry Program.

**Section 16-22.19 Shade Trees in Parking Areas.** Vehicle accommodation areas that are required to be paved by Section 16-20.7 must be shaded by deciduous trees (either retained or planted by the developer) that have or will have when fully mature a trunk at least twelve inches in diameter. When trees are planted by the developer to satisfy the requirements of this subsection, the developer shall choose trees that meet the standards set forth in Appendix E.

**16-22.19.1** Each tree of the type described in Section 16-22.19 shall be presumed to shade a circular area having a radius of fifteen feet with the trunk of the tree as the center, and there must be sufficient trees so that, using this standard, twenty percent (20%) of the vehicle accommodation area will be shaded. Large-scale retail developments defined by Section 16-22.21.21 shall be required to shade twenty-five percent (25%) of vehicle accommodation areas.

**16-22.19.2** No paving may be placed within 6 feet (measured from the center of the trunk) of any tree retained to comply with Section 16-22.19 and new trees planted to comply with Section 16-22.19 shall be located so that they are surrounded by at least 250 square feet of unpaved area.

**16-22.19.3** Vehicle accommodation areas shall be laid out and detailed to prevent vehicles from striking trees by the installation of either concrete wheel stops, concrete/asphalt curbs or retaining walls. Vehicles will be presumed to have body overhang of three feet six inches.

**16-22.19.4** Parking areas shall be separated from the exterior wall of a structure by a landscaped planting area of at least four (4) feet in width. Planting areas shall be located behind sidewalks and may be omitted at pedestrian entrance ways.

**16-22.19.5** No parking space shall be located further than 60 feet from a shade tree.

**Section 16-22.20 Mulching and Maintenance on Commercial Property.** Standard mulching practices shall allow for the use of pine straw, pine bark nuggets, hardwood mulch, or pine mulch. All mulch shall be natural in color and may not be colored or dyed. Dyed or colored mulch, brick chips, rubber or synthetic mulch, and/or non-earth tone gravel shall not be allowed within landscaped areas.

**16-22.20.1** Landscape areas shall be kept free of weeds and trash.

**16-22.20.2** Mulched areas must be surrounded by sod, grassed areas, natural areas, curbing, sidewalks, walls, landscape timbers, rocks, or other bordering devices.

**Section 16-22.21 Penalties.** If trees are removed unlawfully (without authorization) or severely damaged, and a violation of Section 16-22.15 occurs and/or protected trees or shrubs die during the development process or after certificate of occupancy is issued for a development, then the owner of the property and their agents, heirs, or assigns shall be required to replace the trees using the credits in Section 16-22.16 and shall be subject to a civil penalty according to the following schedule:

- a) Removing a protected tree from 8" dbh to less than 18" dbh = \$500.00.
- b) Removing a protected tree ranging from 18" dbh to less than 30" dbh = \$1,000.00
- c) Removing a protected tree with 30" dbh or greater = \$2000.00.