

Sec. 21-96. Tree planting requirements.

(a) *Tree planting plan.* All applications for building permits or land use permits shall include a tree planting plan. The tree planting plan shall be submitted in written/design form and shall conform to the general provisions of this section and all specifications set out in the applicable Tree Ordinance Guidelines as issued by the City.

(b) *Tree and soil specifications.* All trees planted pursuant to this article must be planted in amended soils as specified in the Tree Ordinance Guidelines. The trees also must be from an approved list supplied by the City. Trees not on the list may be approved by the City on a case-by-case basis. Where trees are specified to be two (2) inch caliper, the minimum height shall be eight (8) feet. If a multi-stem tree is used, it must have three (3) to five (5) stems and be eight (8) to ten (10) feet tall at the time of planting. Where three (3) inch caliper trees are specified, the minimum height shall be ten (10) feet tall, and multi-stem trees shall be ten (10) to twelve (12) feet tall. All trees must comply with the American Standard for Nursery Stock, published by the American Association of Nurserymen.

(c) A minimum of fifty (50) percent of new trees must be native species, and sites with more than twenty (20) trees required will have to install multiple species pursuant to the Tree Ordinance Guidelines.

(d) Site lighting must be a minimum thirty (30) feet away from a tree. If pedestrian scale lighting is being used, then lighting must be a minimum of fifteen (15) feet away from a tree, unless approved otherwise by the City.

(e) *Perimeter planting requirements.* Requirements for perimeter planting are as follows:

(1) *Single-family development zones.* Trees of a minimum two (2) inch caliper must be planted within twenty (20) feet of the back of the curb on new streets, and any existing streets with lot frontage, in new single-family developments. Trees may be planted between the sidewalk and the curb if a minimum six (6) foot planting strip is provided. Spacing will be an average of forty (40) to fifty (50) feet apart for large maturing shade trees, and thirty (30) to forty (40) feet apart for small maturing shade trees. Where single-family development is directly across the street from multifamily development, the spacing between trees will be an average of forty (40) feet. Existing two (2) inch caliper or greater large maturing shade trees preserved within twenty (20) feet of the back of the curb may be counted towards the street tree requirement if they are adequately protected during construction. The City may grant a modification for other existing trees on a case-by-case basis.

(2) *Suburban commercial zones.* A continuous perimeter planting strip, located on private property abutting the public right-of-way, with a minimum width of eight (8) feet, shall be required. If large maturing trees are planted, each tree shall have a minimum two (2) inch caliper. One such tree shall be planted for every forty (40) feet of frontage or fraction thereof. If small maturing trees are planted, the same conditions apply, but the increment drops to thirty (30) feet.

(3) *Urban zones.* Planting requirements for urban zones are as follows:

a. *Planting strip.* A continuous perimeter planting strip, located between the street and sidewalk, with a minimum width of eight (8) feet, shall be required. If large maturing trees are planted, each tree shall have a minimum three (3) inch caliper. One such tree shall be planted for every forty (40) feet of frontage or fraction thereof. If small maturing trees are planted, each tree shall have a minimum two (2) inch caliper. One such tree shall be planted for every thirty (30) feet of frontage or fraction thereof.

b. *Urban retail sites.* The following options are available for urban retail developments:

1. *Relocation of trees.* The number of perimeter trees required in subsection (e)(3) of this section may be reduced by up to fifty (50) percent if the same quantity of trees reduced are planted elsewhere on the site and at least one perimeter tree is installed.

2. *Tree pits.* The perimeter trees required in subsection (e)(3) of this section may be installed in tree pits with irrigation and sub-drainage as specified in the Tree Ordinance Guidelines in lieu of a continuous perimeter planting strip. If large maturing trees are planted in the pits, each tree shall have a minimum three-inch caliper. One such tree shall be planted for every forty (40) feet of frontage or fraction thereof. If small maturing trees are planted in the pits, each tree shall have a minimum two (2) inch caliper. One such tree shall be planted for every thirty (30) feet of frontage or fraction thereof and as long as at least one perimeter tree is installed.

(4) *Renovated sites.* When a building permit is requested for renovation of a previously developed site where the required perimeter planting strip does not exist, trees are still required. However, in lieu of a minimum eight (8) foot wide planting strip, a pavement cutout equal to two-hundred (200) square feet and with a minimum width of five (5) feet may be substituted.

(5) *Railroad or utility rights-of-way.* When a railroad or utility right-of-way separates the perimeter planting strip from a city right-of-way, the perimeter planting strip and tree planting requirements must still be met.

(6) *Large shade trees required.* In locations without overhead power distribution lines that obstruct normal growth, seventy-five (75) percent of the trees required under subsections (e)(1), (2), and (3) of this section shall be large maturing shade trees.

(7) *Streetscape plans.* In applicable cases where the City Council has approved a streetscape plan, its provisions shall supersede those set forth in subsections (e) (2), (3) and (5) of this section.

(f) *Internal planting requirements, excluding single-family development.* Requirements for internal planting, excluding single-family development, are as follows:

(1) *Planting areas.* Whenever the impervious cover exceeds ten-thousand (10,000) square feet, a planting area equal to ten (10) percent of the total impervious surface must be provided for landscape purposes and tree planting. Internal tree planting is required at the rate of one large maturing shade tree per ten-thousand (10,000) square feet of impervious cover or fraction

thereof. This planting area must be located on private property and in urban zones shall be in addition to any perimeter planting requirements. In the mixed use development district (MUDD) and the uptown mixed use district (UMUD) outside the I-277/I-77 loop, the planting area may equal five (5) percent of the total impervious surface. The planting requirements for UMUD zoned sites within the I-277/I-77 expressway loop are set out in subsection 9.906(4) (e) of the zoning ordinance in appendix A to this Code.

(2) *Parking areas.* Internal planting requirements for parking areas are as follows:

a. *Suburban commercial zones.* Planting in suburban commercial zones shall be in accordance with the following:

1. Trees must be planted so that each parking space is no more than forty (40) feet from a tree trunk, unless the parking lot has continuous islands running the length of the parking lot with minimum eight (8) feet width; then the requirement will increase to sixty (60) feet from a tree trunk.

2. Bus and tractor-trailer lots will be required to plant trees forty (40) feet apart around the perimeter of the parking lot in a minimum ten (10) foot wide planting strip. If there is parking on the perimeter of the bus and tractor-trailer lots, bollards or wheel stops are required.

3. Seventy-five (75) percent of the trees planted must be large maturing shade trees except as provided in subsection (f)(2)a.4 of this section. Minimum planting area per tree shall be two-hundred-seventy-four (274) square feet with a minimum width of eight (8) feet. The entire planting area must contain amended on-site soil or a soil mix, as specified in the Tree Ordinance Guidelines, to a depth of eighteen (18) inches.

4. Where small maturing shade trees are used, the minimum planting area shall be two-hundred (200) square feet, with a minimum width of eight (8) feet. The entire planting area must contain amended on-site soil or a soil mix, as specified in the Tree Ordinance Guidelines, to a depth of eighteen (18) inches. Small maturing shade trees may be planted where overhead power distribution lines would interfere with normal growth (normally within twenty-five (25) feet of overhead power distribution lines or within the Duke Power right-of-way for overhead transmission lines).

b. *Urban zones.* Planting in urban zones shall be in accordance with the following:

1. Trees must be planted so that each parking space is no more than forty (40) feet from a tree trunk. Trees planted must be large maturing shade trees except as provided in subsection (f) (2) b.2 of this section.

i. Minimum planting area per large maturing shade tree shall be two-hundred-seventy-four (274) square feet with a minimum dimension of eight (8) feet. The entire planting area must contain amended on-site soil, as specified in the Tree Ordinance Guidelines, to a depth of eighteen (18) inches.

ii. Minimum planting area per large maturing shade tree may be reduced to a minimum surface area and a minimum dimension of eight (8) feet, if the entire planting area contains an approved soil mix, as specified in the Tree Ordinance Guidelines, to a depth of eighteen (18) inches.

2. Small maturing trees may be planted where overhead power distribution lines would interfere with normal growth. Minimum planting area per small maturing tree shall be two-hundred (200) square feet with a minimum dimension of eight (8) feet. The entire planting area must contain amended on-site soil, as specified in the Tree Ordinance Guidelines, to a depth of eighteen (18) inches.

(3) *Renovated sites.* When a building permit is requested for the renovation of a site previously developed, internal tree planting is still required, and the minimum planting area shall be two-hundred (200) square feet per tree. However, only five (5) percent of the total impervious cover must be set aside for landscape purposes.

(4) *Existing trees.* In meeting these internal planting requirements, credit may be given for existing trees if the following are met:

a. The property owner must include in the tree survey referenced in section 21-91 all existing trees of two (2) inch dbh or greater which he/she proposes to satisfy these planting requirements.

b. Only healthy trees and those that have been protected during the entire development period, beginning prior to the commencement of site work and continuing through to issuance of the certificate of occupancy in accordance with approved tree protection requirements, may satisfy these tree planting requirements.

c. If the minimum protection standards are not met, or if trees are observed by the City to be injured or threatened, it may be deemed ineligible for meeting these requirements.

The City shall have the authority to modify the planting requirements of this subsection to preserve existing trees.