

**ACTION REQUEST FORM**

**DATE:** September 23, 2009  
**TO:** The Honorable Mayor and City Council  
**FROM:** A. Paul Norby, FAICP, Director of Planning

**COUNCIL ACTION REQUEST:**

Request for Public Hearing on zoning text amendment proposed by Planning and Inspections staff

**SUMMARY OF INFORMATION:**

Zoning text amendment proposed by Planning and Inspections staff to amend Chapter B of the *Unified Development Ordinances* to clarify existing regulations concerning tree preservation and planting (UDO-206).

**PLANNING BOARD ACTION:**

**MOTION ON PETITION:** APPROVAL  
**FOR:** UNANIMOUS  
**AGAINST:** NONE  
**SITE PLAN ACTION:** NOT REQUIRED

## STAFF REPORT

DOCKET # UDO-206  
STAFF: [Kirk Ericson](#)

### REQUEST

This text amendment is proposed by City-County Inspections and Planning staff to amend Chapter B of the *Unified Development Ordinances* to clarify recently adopted tree preservation and planting requirements.

### BACKGROUND

In July 2009, the Winston-Salem City Council adopted standards for tree preservation and planting (UDO-122). This ordinance amendment was developed over a five year period and existed in several different versions before being finally adopted by Council this summer. Following adoption, Inspections staff began studying the finally adopted version of the ordinance in preparation for its implementation on September 21, 2009. During this review, Inspections determined that the tree ordinance language, as currently written, required further clarification if it was to be interpreted the way planning staff believes the ordinance was intended to read.

### ANALYSIS

The aspect of the tree ordinance which requires clarification is the distinction between how the ordinance applies to new, Greenfield sites, and how the ordinance applies to additions on existing sites. The currently adopted language leads Inspections to believe that both new and existing sites must be treated the same when calculating the minimum required tree preservation and planting area. Under this interpretation, the required 10-12% tree save area for both new development and additions to existing development would be calculated using the land area of the entire development parcel. However, planning staff believes the intent of the UDO-122 is that tree save area for additions should not be based on the area of the entire development parcel, but should simply be calculated using the area which is being disturbed by the addition (the area tied to the proposed grading permit). Staff believes this distinction was understood by various stakeholders during the course of the ordinance development.

While staff recognizes this amendment only makes minor changes to the existing tree ordinance language, and closely follows the adoption date of UDO-122, staff believes this amendment is necessary in preventing potential unintended consequences associated with the interpretation of the current ordinance language. Under this interpretation, a minor addition to an existing site could trigger tree preservation and planting requirements far beyond the impacts generated by such an addition. This revised tree ordinance language will provide clarity to Inspections staff in enforcing the ordinance as well as to petitioners who must consider these new standards when planning future development. Staff recommends approval of this text amendment.

### RECOMMENDATION

### APPROVAL.

Kirk Ericson presented the staff report.

**PUBLIC HEARING**

FOR: None

AGAINST: None

**WORK SESSION**

During discussion by the Planning Board, the following points were made:

1. Carol Eickmeyer: I will vote against this because I think the unintended consequence might be worth discussion.
2. Arnold King: I am still opposed to the basic document, but I will vote in favor of this amendment.
3. In response to a question by Brenda Smith, staff explained that the wording in UDO-122 will simply be replaced by this text.

MOTION: Clarence Lambe moved approval of the zoning text amendment.

SECOND: Wesley Curtis

VOTE:

FOR: Wesley Curtis, Arnold King, Arthur King, Clarence Lambe, Darryl Little, Lynne Mitchell, Paul Mullican, Brenda Smith

AGAINST: Carol Eickmeyer

EXCUSED: None

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A. Paul Norby, FAICP  
Director of Planning

**UDO-206**  
**AN ORDINANCE PROPOSED BY**  
**INSPECTIONS AND PLANNING STAFF**  
**AMENDING CHAPTER B OF**  
**THE *UNIFIED DEVELOPMENT ORDINANCES***  
**TO CLARIFY EXISTING TREE PRESERVATION**  
**AND PLANTING REGULATIONS**

Be it ordained by the City Council of the City of Winston-Salem, North Carolina, that the *Unified Development Ordinances* is hereby amended as follows:

**Section 1.** Chapter B, Article III of the UDO is amended as follows:

## **Chapter B - Zoning Ordinance**

### **Article III - Other Development Standards**

#### **3-4 LANDSCAPING AND TREE PRESERVATION STANDARDS**

##### **3-4.2.1 TREE PRESERVATION AND PLANTING**

- (A) **Tree Preservation and Planting Requirements where a grading permit is required for development of five (5) acres or less, development zoned PB, development entirely within Activity Centers designated in *Legacy* or adopted Area Plans, redevelopment of already-developed non-residentially zoned sites containing existing non-residential structures, and qualifying residential development zoned RS or RM-5.**
- (1) **Tree Save Area Defined.** Tree Save Area(s) (TSA) shall be one or more areas where existing trees, along with their critical root zones (CRZ), shall be preserved and maintained. The purpose of the TSA is to encourage the preservation of individual healthy trees that are six inches (6") or greater in diameter at breast height (DBH)(4.5 feet above ground), and/or healthy stands of trees containing a variety of tree species with trees of various ages, including mature and maturing trees, meeting the requirements of this ordinance. In determining the extent of a tree stand area, trees four inches (4") or greater DBH may be considered within the Tree Save Area boundaries. Tree Save Area(s) may also include new trees which satisfy the requirements of Section B.3-4.2.1(A)(4).
- (2) **Calculation of Required Tree Save Area.** Calculations for Tree Save Areas (TSA) shall exclude the square footage areas for existing and proposed public street rights-of-way, existing utility easements, and existing water bodies and new water bodies required to satisfy the stormwater management requirements otherwise required by law or ordinance. The combined square footage of these

areas shall be deleted from the total parcel area for new development and from the limits of disturbed areas for additional development to an already developed site before the required percentage of TSA is calculated. Tree Save Area shall be calculated as follows:

- (a) Stands of Trees. The Tree Save Area for a stand of trees shall be calculated as the acreage that stand of trees occupies. Stands of trees shall be exempt from the species requirements of this Ordinance (Section B.3-4.10) as long as a stand of trees is determined to meet the intent of the Tree Save Area requirements of this Ordinance; however, no stand consisting primarily of species prohibited from ordinance credit in accordance with Section B.3-4.10(G) shall be counted towards the Tree Save Area requirements of the Ordinance.
- (b) Individual Trees. The Tree Save Area for an individual existing tree shall be defined as the Critical Root Zone for that individual tree or the sum of the Critical Root Zones of multiple individual trees. Each large variety tree 6"-9" in caliper shall equal 500 square feet of TSA credit; each large variety tree 9.01" – 12" in caliper shall equal 750 square feet of TSA credit; each large variety tree 12.01" -24" in caliper shall equal 1800 square feet of TSA credit; each large variety tree 24.01"-36" in caliper shall equal 3000 square feet of TSA credit, and; each large variety tree greater than 36.01" in caliper shall equal 4000 square feet of TSA credit.
- (c) Either method of calculation listed above, or a combination of both methods, may be used to satisfy the Tree Save Area requirements of this Ordinance.

**(3) Required Tree Save Area in Areas Off-Limits to Development.**

- (a) New Residential Subdivisions, Multifamily Development, and Non-Residential Development which requires a grading permit. The minimum Tree Save Area for new residential subdivisions, multifamily development, and non-residential development which requires a grading permit shall be ten (10) percent of the development site, except where less than ten (10) percent of the development site exists in trees all existing trees must be saved. Ten (10) percent of any existing developed area being redeveloped shall be saved for TSA credit. This Tree Save Area shall be in the form of areas off-limits to development.
- (b) Development projects are only required to save existing trees for TSA credit in the following areas, which are considered off-limits to development by the governmental authority:
  - (i) Floodplains
  - (ii) Undisturbed Stream Buffers
  - (iii) Wetlands

- (c) In addition, RS and RM-5 zoned sites greater than five (5) acres shall have a minimum Tree Save Area of twelve (12) percent of the development site, to be determined as follows:
  - (i) Existing trees shall be saved in the areas specified in paragraph (b) above up to the 12 percent of site requirement.
  - (ii) If insufficient trees exist in the areas covered by (i) above to meet the 12 percent requirement, then existing trees anywhere on the site may be saved to meet the 12 percent of site requirement; or
  - (iii) If the site plan otherwise fails to save a minimum of 12 percent of the site in existing trees, then it shall at a minimum in addition to the trees saved under (i) and (ii) above, also save the existing trees in a forty (40) foot deep streetyard across the full length of adjoining major and minor thoroughfares, and the existing trees in a thirty (30) foot deep zone along the remainder of the site perimeter, excluding any perimeter adjoining existing local or connector streets (except where site plan identified public right-of-way or utility easements, development signage and access to the development are located).
  - (iv) If a minimum of 12 percent of the site is not saved in existing trees under (i) through (iii) above, then the difference shall be met through new tree planting meeting the standards of section 4.2.1(A)(4).
- (d) Alternative compliance or removing existing trees for recreational purposes in floodplains. Refer to Section B.3-4.2.1(C).

- (4) **Tree Planting Requirements for Multifamily and Non-Residential Development.** On multifamily and non-residential development sites where less than ten (10) percent of a development site contains trees preserved in accordance with Section B.3-4.2.1(A)(3), supplementary new large variety tree plantings in accordance with Section B.3-4.10(A) and Section B.3-4.3(B)(3) shall be required until the minimum Tree Save Area requirements of the development site have been met.

Each new large variety tree planted shall be equal to seven hundred and fifty (750) square feet of required Tree Save Area. Alternatively, trees existing outside of areas defined as off-limits to development in Section B.3-4.2.1(A)(3)(b) may be saved for credit in accordance with Section B.3-4.2.1(A)(2)(a).

- (5) **Exemptions from Tree Preservation and Planting Requirements.** The following are exempt from the Tree Preservation and Planting requirements of this Ordinance.
  - (a) Development sites located in areas zoned CB, CI, sites zoned PB in Growth Management Area (GMA) 1, and all sites in GMA 5
  - (b) Individual residential lots platted prior to the adoption of this Ordinance

- (c) Minor subdivisions
  - (d) Redevelopment of sites zoned PB, GB, MU-S, and C which demonstrate a pedestrian-oriented urban form in accordance with Section B.2-1.5(C)(1)(b). Redevelopment of sites zoned PB, GB, MU-S, and C shall be exempt from the requirements of Section B.3-4.2.1(A). Instead, such development shall include one large variety street tree per fifty (50) feet of street frontage. These trees shall be spaced forty (40) to sixty (60) feet apart and shall be located within the street right-of-way.
  - (f) Existing development and all development with plans or applications approved or accepted into the review process prior to the effective date of this ordinance.
- (6) Tree Protection During Construction.** To receive credit for existing trees proposed for preservation, the TSA must be protected from direct and indirect root damage, and trunk and crown disturbance. The following standards shall apply:
- (a) The Tree Save Area (TSA) shall include all area located within the Critical Root Zone.
  - (b) Construction site activities, such as parking, material storage, dirt stockpiling, concrete washout, and other similar activities, shall not be permitted within a Tree Save Area (TSA).
  - (c) Protective barriers shall be installed around the Tree Save Area (TSA) as necessary prior to the issuance of a grading permit.
- (B) Tree Preservation and Planting Requirements where a grading permit is required for development greater than five (5) acres, development which is not zoned PB, and development which is not located within Activity Centers as designated in *Legacy* or adopted Area Plans.**
- (1) Tree Save Area Defined.** Tree Save Area(s) (TSA) shall be one or more areas where existing trees, along with their critical root zones (CRZ), shall be preserved and maintained. The purpose of the TSA is to encourage the preservation of individual healthy trees that are six inches (6") or greater in diameter at breast height (DBH)(4.5 feet above ground), and/or healthy stands of trees containing a variety of tree species with trees of various ages, including mature and maturing trees, meeting the requirements of this ordinance. In determining the extent of a tree stand area, trees four inches (4") or greater DBH may be considered within the Tree Save Area boundaries. Tree Save Area(s) may also include new trees which satisfy the requirements of Section B.3-4.2.1(B)(4).
  - (2) Calculation of Required Tree Save Area.** Calculations for Tree Save Areas (TSA) shall exclude the square footage areas for existing and proposed public street rights-of-way, existing utility easements, and existing water bodies and new water bodies required to satisfy the stormwater management requirements

otherwise required by law or ordinance. The combined square footage of these areas shall be deleted from the total parcel area for new development and from the limits of disturbed areas for additional development to an already developed site before the required percentage of TSA is calculated. Tree Save Area shall be calculated as follows:

- (a) Stands of Trees. The Tree Save Area for a stand of trees shall be calculated as the acreage that stand of trees occupies. Stands of trees shall be exempt from the species requirements of this Ordinance (Section B.3-4.10) as long as a stand of trees is determined to meet the intent of the Tree Save Area requirements of this Ordinance; however, no stand consisting primarily of species prohibited from ordinance credit in accordance with Section B.3-4.10(G) shall be counted towards the Tree Save Area requirements of the Ordinance. Where a development exclusively uses the tree stand method of TSA calculation, it shall receive a reduction in the required TSA of one percent (1%) of the development site; alternatively, a residential development may elect to receive a ten percent (10%) bonus in allowed density.
- (b) Individual Trees. The Tree Save Area for an individual existing tree shall be defined as the Critical Root Zone for that individual tree or the sum of the Critical Root Zones of multiple individual trees. Each large variety tree 6"-9" in caliper shall equal 500 square feet of TSA credit; each large variety tree 9.01" – 12" in caliper shall equal 750 square feet of TSA credit; each large variety tree 12.01" -24" in caliper shall equal 1800 square feet of TSA credit; each large variety tree 24.01"-36" in caliper shall equal 3000 square feet of TSA credit, and; each large variety tree greater than 36.01" in caliper shall equal 4000 square feet of TSA credit.
- (c) Either method of calculation listed above, or a combination of both methods, may be used to satisfy the Tree Save Area requirements of this Ordinance.

**(3) Required Tree Save Area.**

- (a) Multifamily Development, excluding RM-5. The minimum Tree Save Area for new multifamily development, excluding RM-5, shall be twelve (12) percent of the development site. TSA requirements may be fulfilled by trees on commonly owned land or trees on privately owned individual residential lots.
- (b) New Non-Residential Development which requires a grading permit. The minimum Tree Save Area for non-residential development requiring a grading permit shall be ten (10) percent of the development site.
- (c) New Development zoned MU-S. The minimum Tree Save Area for development zoned MU-S shall be determined on an individual basis through the Special Use District zoning process.
- (d) Alternative Compliance. Refer to Section B.3-4.2.1(C).

- (4) **Requirements for Sites Without Adequate Existing Trees.** On development sites containing less than the minimum tree coverage required by Section B.3-4.2.1(B)(3), supplementary new large variety tree plantings in accordance with Section B.3-4.10(A) shall be required until the minimum Tree Save Area requirements of the development site have been met. Each new large variety tree planted shall be equal to seven hundred and fifty (750) square feet of required Tree Save Area.
- (5) **Exemptions from Tree Save Area Requirements.** The following are exempt from the Tree Save Area requirements of this Ordinance.
- (a) Development sites located in areas zoned CB, CI, sites zoned PB in Growth Management Area (GMA) 1, and all sites in GMA 5
  - (b) Individual residential lots platted prior to the adoption of this Ordinance
  - (c) Farm use activities and structures on Bona-Fide Farms
  - (d) Minor subdivisions
  - (e) Redevelopment of sites zoned PB, GB, MU-S, and C which demonstrate a pedestrian-oriented urban form in accordance with Section B.2-1.5(C)(1)(b). Redevelopment of sites zoned PB, GB, MU-S, and C shall be exempt from the requirements of Section B.3-4.2.1(A). Instead, such development shall include one large variety street tree per fifty (50) feet of street frontage. These trees shall be spaced forty (40) to sixty (60) feet apart and shall be located within the street right-of-way.
  - (f) Existing development and all development with plans or applications approved or accepted into the review process prior to the effective date of this ordinance.
- (6) **Tree Protection During Construction.** To receive credit for existing trees proposed for preservation, the TSA must be protected from direct and indirect root damage, and trunk and crown disturbance. The following standards shall apply:
- (a) The Tree Save Area (TSA) shall include all area located within the Critical Root Zone.
  - (b) Construction site activities, such as parking, material storage, dirt stockpiling, concrete washout, and other similar activities, shall not be permitted within a Tree Save Area (TSA).
  - (c) Protective barriers shall be installed around the Tree Save Area (TSA) as necessary prior to the issuance of a grading permit.

**(C) Alternative Compliance for Determination of Tree Save Area.**

- (1) Alternative Compliance for Removing Existing Required Trees.** In situations where the preservation of some or all of the required trees on site would prevent the reasonable development of a site, the Inspections Director or designee may waive some or all of the tree preservation requirements of this section. In making his decision, the Inspections Director may consider the following factors:
- (a) Site layout, including whether there are reasonable site layout options available that would further minimize the need to waive or reduce the tree preservation requirements
  - (b) Conformance of the proposed development with the *Legacy* recommendations of balancing open space preservation with encouraging an urban form of development
  - (c) Conformance of the proposed development with the recommendations of Area Plans and other adopted documents relating to or affecting the planned uses of land for the site in question
  - (d) Topography
  - (e) Surrounding development patterns
  - (f) The size, health, and species of existing trees proposed to be removed.
  - (g) Other site development issues not identified in items (a)-(f) above.

Where existing trees are not preserved, the replanting requirements of Section B.3-4.2.1(B)(4) shall be met. Alternatively, qualifying existing trees on contiguous parcels may also be preserved for alternative compliance credit. TSA credit may also be provided through the acquisition, donation, and acceptance of forested parkland by the governmental jurisdiction which holds zoning authority for the jurisdiction in which the development takes place.

Appeals of the decision of the Inspections Director may be made to the Elected Body.

- (2) Alternative Compliance for Removing Trees in Floodplains.** Development proposals for recreational purposes which remove existing trees in floodplains that would otherwise be required to be saved in accordance with Section B.3-4.2.1(A)(3)(b) may be approved where existing trees meeting the requirements of Section B.3-4.2.1(A) are preserved elsewhere on site.

Alternatively, development proposals may be approved through Special Use District zoning.

**(D) Incentives for Increased Tree Save Area.**

- (1) Setback Reduction for Increased Tree Save Area.** Developments which set aside twenty percent (20%) or more of a site as Tree Save Area in common open space shall receive reduced internal and sideyard setbacks of up to 35% of requirements.

- (2) **Ribbon Paving for Increased Tree Save Area.** Developments which set aside thirty percent (30%) or more of a site as Tree Save Area in common open space may utilize ribbon paving and reduced pavement widths for internal streets with the approval of the Assistant City Manager of Public Works or NCDOT. Additionally, such development may use gravel or other improved soft surface as a substitute for paved sidewalks which are internal to the development.

(E) **Tree Maintenance Requirements.**

(1) **Maintenance of Trees Satisfying the Tree Preservation Requirements.**

- (a) Residential Subdivisions. The landowner is responsible for maintaining all new trees on individual lots within residential subdivisions which satisfy the requirements of Sections B.3-4.2.1(A) and B.3-4.2.1(B) until a Certificate of Occupancy (CO) has been issued. All existing trees on individual lots and common open space within residential subdivisions shall be maintained until plat approval.
- (b) Multifamily and Nonresidential Development. New and existing trees which meet the tree preservation requirements in multifamily developments and nonresidential developments shall be maintained in accordance with the requirements of Section B.3-4.2(G). Existing or newly planted trees also used to satisfy the requirements of Section B.3-4.1(B) of this Ordinance shall also be maintained according to Section B.3-4.2(G).

**Section 2.** This ordinance shall become effective upon adoption.