AN ORDINANCE AMENDING ARTICLES 18 AND 26 OF THE ZONING ORDINANCE AND AMENDING THE PLANTING MANUAL TO DESIGNATE ALL COLUMNAR TREE VARIETIES AS SMALL TREES; TO REDUCE THE CANOPY CREDIT TO 100 SQUARE FEET; AND TO OFFICIALLY TRANSFER OVERSIGHT OF TREE CANOPY REQUIREMENTS IN THE PLANTING MANUAL FROM THE DIVISION OF BUILDING INSPECTION TO THE DIVISION OF ENVIRONMENTAL SERVICES. (LFUCG TREE BOARD).

WHEREAS, the Lexington-Fayette Urban County Planning Commission has considered a text amendment to Articles 18-4(a), (b), 18-4(c)(2), and 26-2-Interpretations and Definitions-Greenway and 26-5(e) of the Zoning Ordinance and the Planting Manual to designate all columnar tree varieties as small trees and reduce the canopy credit to 100 square feet and to provide that all references to oversight of tree canopy requirements in the Planting Manual will be updated from the Division of Building Inspection to the Division of Environmental Services. Planning Commission did recommend APPROVAL of the Staff Alternative Text by a vote of 8-0; and

WHEREAS, this Council agrees with the recommendation of the Planning Commission; and

WHEREAS, the recommendation form of the Planning Commission is attached hereto and incorporated by reference herein.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT:

Section 1 – That Article 18-4(a) of the Lexington-Fayette Urban County Government Zoning Ordinance is hereby amended as follows:

18-4(a) WALLS AND FENCES - Walls shall be constructed of natural stone, brick or other weatherproof materials arranged in a linear, serpentine, or other alignment; while fences shall be constructed of wood or other weatherproof, durable materials generally used in the exterior construction of buildings. Fence posts shall be structurally stable based on the material used, and shall have a maximum spacing of 8' on center (o.c.). If wood is used, the posts shall be 4" x 4" minimum. Posts shall be set in or anchored to crowned concrete footers at least six (6) inches larger in each direction than the post it supports. The base of the footer shall be at least twenty-four (24) inches below finished grade. If wood is used for any member, it shall be softwood treated with water-borne preservative to the American Wood Preservers Institute standard LP-2 for above ground use or LP-22 for ground contact use, or all heart redwood, or all heart cedar. All cut surfaces of pressure treated lumber shall be waterproofed. If another material is used, it shall be weatherproof. Slats are to be minimum one-half (1/2) inch in thickness and are to be placed on the outside of the fence unless the design is two-sided (shadow-box, etc.). All hardware is to be galvanized or otherwise rust-proofed. Wood horizontal members shall be installed bark-side up. Chain link fencing may not be used to meet the requirements of this Article. Chain link fencing may be installed in the required landscape area only if it is in addition to the required continuous planting, hedge, fence, wall or earth mound. All walls or fences shall have a minimum opacity of eighty (80) percent. Walls and fences allowed to meet the requirements of this Article shall not be used for the erection or display of any sign or other advertising device. Height limitations for walls and fences are regulated by zone and land use in Article 15-4(b).

Section 2 – That Article 18-4(c)(2) of the Lexington-Fayette Urban County Government Zoning Ordinance is hereby amended as follows:

18-4(c)(2) DECIDUOUS TREES (Trees which normally shed their leaves in the Fall) - Shall be species having an average mature crown spread of greater than fifteen (15) feet in Fayette County and having trunk(s) which can be maintained with over five (5) feet of clear wood in areas which have visibility requirements. Trees having an average mature spread of crown less than fifteen (15) feet may be substituted by grouping of the same so as to create the equivalent of a fifteen (15) crown spread. A minimum of ten (10) feet overall height or a minimum caliper (trunk diameter, measured 6 inches above ground for trees up to 4 inches caliper) of at least one and three-fourths (13/4) inches immediately after planting shall be required. Trees of species whose roots are known to cause damage to public roadways or other public works shall not be planted closer than fifteen (15) feet to such public works, unless the tree root system is completely contained within a barrier for which the minimum interior container dimensions shall be five feet square and five feet deep and for which the construction requirements shall be four (4) inches thick, reinforced concrete. Columnar variety trees of any species may only be permitted upon the express approval of the Division of Environmental Services in accordance with Section 18-6. Any columnar variety tree shall be shall be considered as a small tree and be granted new canopy credit of 100 square feet according to Article 26-5(e).

Section 3 - That definition of "GREENWAY" in Article 26-2, INTERPRETATION

AND DEFINITIONS, of the Lexington-Fayette Urban County Government Zoning

Ordinance is hereby amended as follows:

<u>GREENWAY</u> – A lineal open space system, as described in shown on the Comprehensive Plan or depicted in the Greenway Master Plan, that is designed to conserve floodplains, abandoned railroads, and other linkage opportunities for use as stormwater management, natural resource protection, alternative transportation, recreation, and similar uses.

Section 4 - That Article 26-5(e) of the Lexington-Fayette Urban County Government Zoning Ordinance is hereby amended as follows:

26-5(e) CALCULATION OF TREE CANOPY COVER - Tree canopy coverage may be determined by one of the following:

## 1. Existing Canopy Area:

a. By calculating the percent of cover in relation to developable area using aerial photography interpretation.

b. By field measurement of the square footage of the existing tree canopy using the following formula:

 $C = \pi R2$ , where

C = canopy area in square feet, and

R = the radius of the canopy measured in feet

2. New Canopy Credit: In areas where the predevelopment canopy is less than the canopy required by Article 26-5, a landscape credit shall be used to determine post development canopy for trees that are to be planted. Trees shall be planted in accordance with the landscaping requirements set forth in Article 18-4(c), Plants, of the Zoning Ordinance and the LFUCG Planting Manual for the following sizes of the trees.

Landscape credit is given for planted trees only. The following credits represent categories of trees only, not installation sizes:

- a. Each Small Tree = 100 square feet
- b. Each Medium Tree = 400 square feet
- c. Each Large Tree = 750 square feet

Mass or grouped plantings of trees are encouraged in all cases. In the case of single family detached residential or similar fee simple lot development, the total number of required tree credits shall be reduced ten (10) percent of the portion of new tree credits planted in a common or public area.

Any planting materials that are not on the Plant Material List in the Planning Manual shall be considered on an individual basis to determine the suitability of the specific tree in the proposed location. A plant not on the Plant Materials List shall be permitted only upon the expressed approval of the Division of Environmental Services. If any columnar tree variety, regardless of species, is permitted by the Division of Environmental Services, the tree shall be considered as a small tree and be granted new canopy credit of 100 square feet according to the table above.

Section 5 – That the Section I-B.2 of the Lexington-Fayette Urban County Government Planting Manual is amended as follows:

- I. INTRODUCTION
- B. ZONING ORDINANCE ARTICLE 26
  - 2. New Canopy Credit

In areas where the predevelopment canopy is less than the canopy required by Article 26-5, a landscape credit shall be used to determine post development canopy for trees that are to be planted. Trees shall be planted in accordance with the landscaping requirements set forth in Article 18-4(c) PLANTS, of the Zoning Ordinance and the LFUCG Planting Manual for the following sizes of trees. Landscape credit is given for planted trees only. The following credits represent categories of trees only, not installation sizes:

- a. Each Small Tree 100 square feet
- b. Each Medium Tree 400 square feet
- c. Each Large Tree 750 square feet

NOTE: Any planting materials that are not on the Plant Material List in the Planning Manual shall be considered on an individual basis to determine the suitability of the specific tree in the proposed location. A plant not on the Plant Materials List shall be permitted only upon the expressed approval of the Division of Environmental Services. If any columnar tree variety, regardless of species, is permitted by the Division of Environmental Services, the tree shall be considered as a small tree and be granted new canopy credit of 100 square feet according to the table above.

Section 6 – That Section IV-I.3 of the Lexington-Fayette Urban County Government Planting Manual is amended as follows:

- IV. PLANTING SPECIFICATIONS
- I. PLANTING METHODS

# 3. Planting for Article 26 Compliance

Developers are encouraged to plant the required trees in groupings to accentuate habitat. A 10% reduction in the number of trees required is given to do this. For example, a developer is required to plant 10,000 square feet of new tree canopy per the landscaping credit provided below. If the developer groups these trees, the required planting will only be 9,000 square feet. The proposed grouping must be annotated to its size and location in the Tree Preservation Plan and approved by the LFUCG Urban Forester.

This Planting Manual sets forth the species selection and planting requirements for Article 26. Developers shall consult this manual for ensuring the compliance to Article 26. Any departure from the procedures of this manual can only be done through an amendment of the Tree Preservation Plan and submitted to the Division of Planning for review. Planting installation requirements are set forth in Section B of this chapter for lawn areas and apply as the planting requirements for Article 26.

Planting designs in the tree preservation plan for single family detached developments will be approved and enforced by the LFUCG Urban Forester. Planting designs for commercial and multifamily residential developments will also be set forth in the tree preservation plan and reviewed by the LFUCG Urban Forester but shall be approved and enforced by Building Inspection the Division of Environmental Services.

Section 7 - All references the Division of Building Inspection within the Planting Manual shall be replaced with the Division of Environmental Services.

Section 8 - That this Ordinance shall become effective on the date of its passage.

PASSED URBAN COUNTY COUNCIL:

July 2, 2019

MAYOR

ATTEST:

Clerk of Urban County Council

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PUBLISHED: July 11, 2019-1t

# RECOMMENDATION OF THE URBAN COUNTY PLANNING COMMISSION OF LEXINGTON AND FAYETTE COUNTY, KENTUCKY

ZOTA 2019-1: AMENDMENT TO ARTICLE 18 AND ARTICLE 26, AND THE IN RE: PLANTING MANUAL TO REFLECT CREDIT GIVEN FOR COLUMNAR VARIETY TREES - petition for a Zoning Ordinance text amendment to update Articles 18 and 26 of the

LFUCG Zoning Ordinance and Planting Manual to designate all columnar tree varieties as small trees and reduce the canopy credit to 100 square feet. Additionally, all references to oversight of tree canopy requirements in the Planting Manual will be updated from the Division of Building

Inspection to the Division of Environmental Services.

Having considered the above matter on May 23, 2019, at a Public Hearing and having voted 8-0 that this Recommendation be submitted to the Lexington-Fayette Urban County Council, the Urban County Planning Commission does hereby recommend APPROVAL of the Staff Alternative text for this matter for the following reasons:

- 1. The proposed text amendments will satisfy the intent of Article 26 by properly counterbalancing the effects of the urban setting by applying the appropriate tree canopy coverage for the columnar tree varieties. The amendments will establish the maximum canopy credit of 100 square feet for any columnar variety tree, regardless of overall height.
- 2. The proposed text amendments support Imagine Lexington, the 2018 Comprehensive Plan because the modification of the tree canopy coverage for columnar tree varieties seeks to apply environmentally sustainable practices to protect, conserve and restore landscapes and natural resources (Theme B, Goal
- 3. The proposed text amendments will implement the Urban Forestry Management Plan, as referenced by Theme B: Protecting the Environment, Restoration Policy #1, which calls for the protection and recovery of Lexington's urban forest by strategically planting new trees and creating walkable streetscapes. The amendment also supports the specific goals of ensuring tree-related ordinances and land subdivision regulations support the growth of a sustainable urban forest (Goal #4.2), and ensuring ordinances and regulations are consistent with each other, and other applicable LFUCG planning documents and manuals (Goal #4.3).

**ATTEST:** This 7<sup>th</sup> day of June, 2019.

WILLIAM WILSON

At the Public Hearing before the Urban County Planning Commission, this petition was represented by Hal Baillie, Planner Senior, Division of Planning, Planning Services Section.

**OBJECTORS** 

**OBJECTIONS** 

None

None

### **VOTES WERE AS FOLLOWS:**

AYES:

(8) Bell, Berkley, Forester, Nicol, Owens, Penn, Pohl and Wilson

NAYS:

(0)

ABSENT:

(3) Brewer, Mundy, and Plumlee

ABSTAINED:

(0)

DISQUALIFIED: (0)

Motion for Approval of ZOTA 2019-1 carried.

Enclosures:

Application

Staff Report, with Recommended Text attached Applicable excerpts of minutes of above meeting

## STAFF REPORT ON PETITION FOR ZONING ORDINANCE TEXT AMENDMENT

# ZOTA 2019-1: AMENDMENT TO ARTICLE 18 AND ARTICLE 26, AND THE PLANTING MANUAL TO REFLECT CREDIT GIVEN FOR COLUMNAR TREE VARIETIES

REQUESTED BY: LFUCG Tree Board

PROPOSED TEXT: See attached

### **STAFF REVIEW:**

A request to amend the LFUCG Zoning Ordinance and Planting Manual was made by the Lexington Tree Board and was initiated by the Urban County Planning Commission on September 27, 2018. In the Tree Board's request for initiation of a text amendment, the Board expressed a desire to update Article 26-5(e) of the Zoning Ordinance and related text in the Planting Manual to designate all columnar tree varieties as small trees and reduce the canopy credit to 100 square feet.

In an effort to maintain consistency across the Zoning Ordinance, amendments to portions of Article 18 and Article 26 are also proposed to address an inconsistency related to fence and wall heights, which are more specifically related in Articl15-4(b), to update the definition of greenway to reference the adopted Greenway Master Plan, and to update all references to oversight of the tree canopy requirements in the Planting Manual to refer to the Division of Environmental Services.

The purpose of the proposed amendment to the Zoning Ordinance is to address the small canopy coverage of the columnar tree varieties (improved cultivars), due to the increased frequency that such tree varieties are being proposed in various urban environments with the Urban County. Columnar tree varieties typically grow as tall as the common species; however, the canopy associated with the columnar varieties only reach a few feet in diameter. Currently, columnar tree varieties count toward the same canopy credit as the common species, which are designated as either medium (400 square feet) or large (750 square feet) canopy trees, despite the reduced canopy coverage. For example the sweetgum tree typically has a mature canopy spread of 40 feet or more, but the canopy of the columnar variety, which has a "slender silhouette" only reaches 4 feet in diameter.

The Lexington Tree Board noted the recent proliferation of the use of columnar variety trees in new commercial developments. When columnar trees are planted, the canopy coverage credit is far greater than the actual canopy coverage provided by columnar trees on the site, even once they reach maturity. The Tree Board is seeking to explicitly state that columnar varieties shall receive 100 square feet of credit to rectify the disparity between the planned and the actual tree canopy for commercial developments.

The amendments to the Zoning Ordinance and the Planting Manual are justified on two separate levels: the minimizing of the effects of urban development within the community, and the application of sustainable practices. The purpose of Article 26 of the LFUCG Zoning Ordinance states that:

"The Urban County Government recognizes the importance of trees as a vital component in counterbalancing the effects of an urban setting by providing cooling shade; by reducing noise and glare; by significant contribution to urban aesthetics; by improving air quality through carbon dioxide reduction and replenishing oxygen to the atmosphere; by improving surface drainage and reducing the effects of storm drainage flooding; by filtering non-point source pollution from area streams; by stabilizing soil, thereby minimizing erosion; and providing habitat for wildlife. The purpose of this

Article is to establish standards and procedures for county-wide tree protection and planting in new developments and redevelopments subject to review by the Planning Commission."

As such, in an effort to "counterbalance the effects of the urban setting," it is imperative to update the Zoning Ordinance and the Planting Manual when there are clear deficiencies in the categorization of canopy coverage for certain tree varieties. When a species of trees is not satisfying the need for the providing cooling shade; by reducing noise and glare; by significant contribution to urban aesthetics; by improving air quality through carbon dioxide reduction and replenishing oxygen to the atmosphere due to a low canopy coverage credit, the tree variety must be re-categorized to appropriately fit its capabilities.

Additionally, Theme B: Protecting the Environment, Goal #3 of *Imagine Lexington*, the 2018 Comprehensive Plan, seeks to apply environmentally sustainable practices to protect, conserve and restore landscapes and natural resources. While the planting of columnar variety trees is not an inherently negative activity, utilizing the community's urbanized land for trees that will provide the greatest canopy and have the greatest likelihood of long term viability is a far more environmentally sustainable practice. With the proposed amendment, an applicant would still be welcome to utilize the columnar tree variety to satisfy their tree canopy coverage requirements if approved by the Division of Environmental Services; however, they would need to plant more trees to reach the required canopy threshold.

Lastly, Lexington completed an *Urban Forestry Management Plan* in 2017, which is referenced in *Imagine Lexington*, Theme B: Protecting the Environment, Restoration Policy #1 (pages 95-97). The *Urban Forestry Management Plan* establishes a mission for the city to achieve a sustainable urban forest. Further, the Management Plan identifies the benefits of the urban forest, provides data about the historical and existing tree canopy coverage for the city, and establishes goals for the urban forest. Goal #4: Provide Appropriate Regulatory Protection, has two sub-goals that relate to the proposed update to the tree canopy regulations. They are to ensure tree-related ordinances and land subdivision regulations support the growth of a sustainable urban forest (Goal #4.2), and to ensure ordinances and regulations are consistent with each other, and other applicable LFUCG planning documents and manuals (Goal #4.3). The proposed text amendments support the overall policy of protecting and enhancing the urban forest, as well as support Goal #4.2 and Goal #4.3 listed above.

## The Staff Recommends: Approval, for the following reasons:

- The proposed text amendments will satisfy the intent of Article 26 by properly counterbalancing the
  effects of the urban setting by applying the appropriate tree canopy coverage for the columnar tree
  varieties. The amendments will establish the maximum canopy credit of 100 square feet for any
  columnar variety tree, regardless of overall height.
- 2. The proposed text amendments support *Imagine Lexington*, the 2018 Comprehensive Plan because the modification of the tree canopy coverage for columnar tree varieties seeks to apply environmentally sustainable practices to protect, conserve and restore landscapes and natural resources (Theme B, Goal #3).
- 3. The proposed text amendments will implement the *Urban Forestry Management Plan*, as referenced by Theme B: Protecting the Environment, Restoration Policy #1, which calls for the protection and recovery of Lexington's urban forest by strategically planting new trees and creating walkable streetscapes. The amendment also supports the specific goals of ensuring tree-related ordinances and land subdivision regulations support the growth of a sustainable urban forest (Goal #4.2), and ensuring ordinances and regulations are consistent with each other, and other applicable LFUCG planning documents and manuals (Goal #4.3).

(<u>NOTE</u>: <u>Underlined text</u> indicates an addition to the current Ordinance or Planting Manual, and strike through text indicates a deletion to the current Ordinance or Planting Manual.)

#### ARTICLE 18: LANDSCAPE AND LAND USE BUFFERS

- **18-4 LANDSCAPE MATERIALS** The landscaping materials shall consist of the following, and are described in more detail in the Planting Manual and Plant Materials List available at the Division of Planning and the Division of Environmental Services.
  - WALLS AND FENCES Walls shall be constructed of natural stone, brick or other weatherproof materials arranged in a linear, serpentine, or other alignment; while fences shall be constructed of wood or other weatherproof, durable materials generally used in the exterior construction of buildings. Fence posts shall be structurally stable based on the material used, and shall have a maximum spacing of 8' on center (o.c.). If wood is used, the posts shall be 4" x 4" minimum. Posts shall be set in or anchored to crowned concrete footers at least six (6) inches larger in each direction than the post it supports. The base of the footer shall be at least twenty-four (24) inches below finished grade. If wood is used for any member, it shall be softwood treated with water-borne preservative to the American Wood Preservers Institute standard LP-2 for above ground use or LP-22 for ground contact use, or all heart redwood, or all heart cedar. All cut surfaces of pressure treated lumber shall be waterproofed. If another material is used, it shall be weatherproof. Slats are to be minimum one-half (½) inch in thickness and are to be placed on the outside of the fence unless the design is two-sided (shadow-box, etc.). All hardware is to be galvanized or otherwise rust-proofed. Wood horizontal members shall be installed bark-side up. Chain link fencing may not be used to meet the requirements of this Article. Chain link fencing may be installed in the required landscape area only if it is in addition to the required continuous planting, hedge, fence, wall or earth mound. In industrial zones, there shall be no height limitation on walls or fences; in all other zones, however, there shall be a six (6) foot height restriction for walls or fences in front yards and side street side yards, and an eight (8) foot height restriction in side and rear yards. All walls or fences shall have a minimum opacity of eighty (80) percent. Walls and fences allowed to meet the requirements of this Article shall not be used for the erection or display of any sign or other advertising device. Height limitations for walls and fences are regulated by zone and land use in Article 15-4(b).
  - **18-4(b) EARTH MOUNDS** Earth mounds shall be physical barriers which block or screen the view similar to a hedge, fence, or wall. Mounds shall be constructed with proper and adequate plant material to prevent erosion. A difference in elevation between areas requiring screening does not constitute an earth mound.
  - **18-4(c) PLANTS** All plant materials shall be living plants (artificial plants are prohibited) and shall meet the following requirements:
    - 18-4(c)(1) QUALITY Plant materials used in conformance with provision of this Ordinance shall conform to the standards of the American Association of Nurserymen and shall have passed any inspections required under State regulations. Bare root plants, with the exception of shrubs and hedges, vines and ground covers shall be prohibited.
    - 18-4(c)(2) DECIDUOUS TREES (Trees which normally shed their leaves in the Fall) Shall be species having an average mature crown spread of greater than fifteen (15) feet in Fayette County and having trunk(s) which can be maintained with over five (5) feet of clear wood in areas which have visibility requirements. Trees having an average mature spread of crown less than fifteen (15) feet may be substituted by grouping of the same so as to create the equivalent of a fifteen (15) crown spread. A minimum of ten (10) feet overall height or a minimum caliper (trunk diameter, measured

(NOTE: <u>Underlined text</u> indicates an addition to the current Ordinance or Planting Manual, and strike through text indicates a deletion to the current Ordinance or Planting Manual.)

6 inches above ground for trees up to 4 inches caliper) of at least one and three-fourths (1¾) inches immediately after planting shall be required. Trees of species whose roots are known to cause damage to public roadways or other public works shall not be planted closer than fifteen (15) feet to such public works, unless the tree root system is completely contained within a barrier for which the minimum interior container dimensions shall be five feet square and five feet deep and for which the construction requirements shall be four (4) inches thick, reinforced concrete. Columnar variety trees of any species may only be permitted upon the express approval of the Division of Environmental Services in accordance with Section 18-6. Any columnar variety tree shall be shall be considered as a small tree and be granted new canopy credit of 100 square feet according to Article 26-5(e).

18-4(c)(3) EVERGREEN TREES - Evergreen trees shall be a minimum of five (5) feet high with a minimum caliper of one and one-half (1½) inches immediately after planting.

18-4(c)(4) SHRUBS AND HEDGES - Shall be at least twelve (12) inches with three (3) canes for Section 18-3(a)(2) lines 3 and 5, at least two (2) feet with three (3) canes for all other lines of Section 18-3(a)(2), and three (3) feet with four (4) canes for Section 18-3(a)(1) in average height when installed. After approval by the Division of Environmental Services and with the exception of the 12" plants, shrubs and hedges may be pruned to one-half the height in accordance with accepted horticultural practices. All plants shall conform to opacity, mature height, and other requirements within four (4) years after the date of the final approval of each planting or replanting. Privet (Ligustrum species) cannot meet the opacity requirements and may not be used to satisfy the requirements of this Article. The height of the planting shall be measured from the level of the surface of the vehicular use area at the edge closest to the screening.

18-4(c)(5) VINES - Shall be at least twelve (12) or fifteen (15) inches high at planting, and are generally used in conjunction with walls or fences.

**18-4(c)(6)** GRASS OR GROUND COVER - Grass of the fescue (Gramineak) or Bluegrass (Poaceae) family shall be planted in species normally grown as permanent lawns in Fayette County, and may be sodded, plugged, sprigged, or seeded; except in swales or other areas subject to erosion, where solid sod, erosion reducing net, or suitable mulch shall be used, nurse-grass seed shall be sown for immediate protection until complete coverage otherwise is achieved. Grass sod shall be clean and free of weeds and noxious pests or diseases. Ground cover such as organic material shall be planted not more than fifteen (15) inches on center and in such a manner as to present a finished appearance and have seventy-five percent (75%) of complete coverage after two complete growing seasons. In certain cases, ground cover also may consist of rocks, pebbles, sand, and similar approved materials.

(NOTE: <u>Underlined text</u> indicates an addition to the current Ordinance or Planting Manual, and strike through text indicates a deletion to the current Ordinance or Planting Manual.)

#### ARTICLE 26: TREE PROTECTION STANDARDS

#### 26-2 INTERPRETATION AND DEFINITIONS

GREENWAY – A lineal open space system, as <u>described in shown on</u> the Comprehensive Plan <u>or depicted in the Greenway Master Plan Land Use Map</u>, that is designed to conserve floodplains, abandoned railroads, and other linkage opportunities for use as stormwater management, natural resource protection, alternative transportation, recreation, and similar uses.

**26-5(e) CALCULATION OF TREE CANOPY COVER -** Tree canopy coverage may be determined by one of the following:

1. Existing Canopy Area:

- a. By calculating the percent of cover in relation to developable area using aerial photography interpretation.
- b. By field measurement of the square footage of the existing tree canopy using the following formula:

 $C = \pi R^2$ , where

C = canopy area in square feet, and

 $R = the \ radius \ of \ the \ canopy \ measured \ in \ feet$ 

2. New Canopy Credit:

In areas where the predevelopment canopy is less than the canopy required by Article 26-5, a landscape credit shall be used to determine post development canopy for trees that are to be planted. Trees shall be planted in accordance with the landscaping requirements set forth in Article 18-4(c), Plants, of the Zoning Ordinance and the LFUCG Planting Manual for the following sizes of the trees. Landscape credit is given for planted trees only. The following credits represent categories of trees only, not installation sizes:

- a. Each Small Tree = 100 square feet
- b. Each Medium Tree = 400 square feet
- c. Each Large Tree = 750 square feet

Mass or grouped plantings of trees are encouraged in all cases. In the case of single family detached residential or similar fee simple lot development, the total number of required tree credits shall be reduced ten (10) percent of the portion of new tree credits planted in a common or public area.

Any planting materials that are not on the Plant Material List in the Planning Manual shall be considered on an individual basis to determine the suitability of the specific tree in the proposed location. A plant not on the Plant Materials List shall be permitted only upon the expressed approval of the Division of Environmental Services. If any columnar tree variety, regardless of species, is permitted by the Division of Environmental Services, the tree shall be considered as a small tree and be granted new canopy credit of 100 square feet according to the table above.

(NOTE: <u>Underlined text</u> indicates an addition to the current Ordinance or Planting Manual, and strike through text indicates a deletion to the current Ordinance or Planting Manual.)

#### LFUCG PLANTING MANUAL

#### I. INTRODUCTION

#### **B. ZONING ORDINANCE – ARTICLE 26**

#### 2. New Canopy Credit

In areas where the predevelopment canopy is less than the canopy required by Article 26-5, a landscape credit shall be used to determine post development canopy for trees that are to be planted. Trees shall be planted in accordance with the landscaping requirements set forth in Article 18-4(c) PLANTS, of the Zoning Ordinance and the LFUCG Planting Manual for the following sizes of trees. Landscape credit is given for planted trees only. The following credits represent categories of trees only, not installation sizes:

- a. Each Small Tree 100 square feet
- b. Each Medium Tree 400 square feet
- c. Each Large Tree 750 square feet

NOTE: Any planting materials that are not on the Plant Material List in the Planning Manual shall be considered on an individual basis to determine the suitability of the specific tree in the proposed location. A plant not on the Plant Materials List shall be permitted only upon the expressed approval of the Division of Environmental Services. If any columnar tree variety, regardless of species, is permitted by the Division of Environmental Services, the tree shall be considered as a small tree and be granted new canopy credit of 100 square feet according to the table above.

### IV. PLANTING SPECIFICATIONS

#### I. PLANTING METHODS

### 3. Planting for Article 26 Compliance

Developers are encouraged to plant the required trees in groupings to accentuate habitat. A 10% reduction in the number of trees required is given to do this. For example, a developer is required to plant 10,000 square feet of new tree canopy per the landscaping credit provided below. If the developer groups these trees, the required planting will only be 9,000 square feet. The proposed grouping must be annotated to its size and location in the Tree Preservation Plan and approved by the LFUCG Urban Forester.

The Ordinance specifies a landscaping credit given to developers to determine the numbers of tree required by planting. A large species category tree receives 750 square feet of credit, medium 400 square feet, and small 100 square feet. See the plant suitability lists for species in each category. If any columnar tree variety, regardless of species, is permitted by the Division of Environmental Services, the tree shall be considered as a small tree and be granted new canopy credit of 100 square feet.

This Planting Manual sets forth the species selection and planting requirements for Article 26. Developers shall consult this manual for ensuring the compliance to Article 26. Any departure from

(NOTE: <u>Underlined text</u> indicates an addition to the current Ordinance or Planting Manual, and strike through text indicates a deletion to the current Ordinance or Planting Manual.)

the procedures of this manual can only be done through an amendment of the Tree Preservation Plan and submitted to the Division of Planning for review. Planting installation requirements are set forth in Section B of this chapter for lawn areas and apply as the planting requirements for Article 26.

Planting designs in the tree preservation plan for single family detached developments will be approved and enforced by the LFUCG Urban Forester. Planting designs for commercial and multifamily residential developments will also be set forth in the tree preservation plan and reviewed by the LFUCG Urban Forester but shall be approved and enforced by Building Inspection the Division of Environmental Services.

(All other references within the Planting Manual shall be updated to replace the Division of Building Inspection with the Division of Environmental Services.)

#### C. PUBLIC HEARINGS ON ZONING ORDINANCE TEXT AMEMENDMENTS

ZOTA 2019-1: AMENDMENT TO ARTICLE 18 AND ARTICLE 26. AND THE PLANTING MANUAL TO REFLECT CREDIT GIVEN FOR COLUMNAR VARIETY TREES – a petition for a Zoning Ordinance text amendment to update Articles 18 and 26 of the LFUCG Zoning Ordinance and Planting Manual to designate all columnar tree varieties as small trees and reduce the canopy credit to 100 square feet. Additionally, all references to oversight of tree canopy requirements in the Planting Manual will be updated from the Division of Building Inspection to the Division of Environmental Services.

**INITIATED BY:** 

URBAN COUNTY PLANNING COMMISSION

PROPOSED TEXT:

Copies are available from the staff.

The Zoning Committee Recommended: Approval.

The Staff Recommends: Approval, for the following reasons:

1. The proposed text amendments will satisfy the intent of Article 26 by properly counterbalancing the effects of the urban setting by applying the appropriate tree canopy coverage for the columnar tree varieties. The amendments will establish the maximum canopy credit of 100 square feet for any columnar variety tree, regardless of overall height.

2. The proposed text amendments support *Imagine Lexington*, the 2018 Comprehensive Plan because the modification of the tree canopy coverage for columnar tree varieties seeks to apply environmentally sustainable practices to protect,

conserve and restore landscapes and natural resources (Theme B, Goal #3).

3. The proposed text amendments will implement the *Urban Forestry Management Plan*, as referenced by Theme B: Protecting the Environment, Restoration Policy #1, which calls for the protection and recovery of Lexington's urban forest by strategically planting new trees and creating walkable streetscapes. The amendment also supports the specific goals of ensuring tree-related ordinances and land subdivision regulations support the growth of a sustainable urban forest (Goal #4.2), and ensuring ordinances and regulations are consistent with each other, and other applicable LFUCG planning documents and manuals (Goal #4.3).

Staff Text Amendment Presentation – Mr. Baillie presented and summarized the staff report and recommendations for this text amendment, and said that the request was made by the Lexington Tree Board and was initiated by the Urban County Planning Commission on September 27, 2018. He said that in the Tree Board's initial request, they expressed a desire to update Article 26-5(e) of the Zoning Ordinance and related text in the Planting Manual to designate all columnar tree varieties as small trees and reduce the canopy credit to 100 square feet.

In an effort to maintain consistency across the Zoning Ordinance, amendments to portions of Article 18 and Article 26 are proposed to address an inconsistency related to fence and wall heights, which are more specifically related in Article15-4(b), to update the definition of greenway to reference the adopted Greenway Master Plan, and to update all references to oversight of the tree canopy requirements in the Planting Manual to refer to the Division of Environmental Services.

The purpose of the proposed amendment to the Zoning Ordinance is to address the small canopy coverage of the columnar tree varieties (improved cultivars). He displayed pictures of many different trees and stated that the columnar tree does not extend its canopy in any significant way out. This change in the Ordinance is requested due to the increased frequency that such tree varieties are being proposed in various urban environments with the Urban County. Columnar tree varieties typically grow as tall as the common species; however, the canopy associated with the columnar varieties only reach a few feet in diameter. Currently, columnar tree varieties count toward the same canopy credit as the common species, which are designated as either medium (400 square feet) or large (750 square feet) canopy trees, despite the reduced canopy coverage. For example the sweetgum tree typically has a mature canopy spread of 40 feet or more, but the canopy of the columnar variety, which has a "slender silhouette" only reaches 4 feet in diameter.

The Lexington Tree Board noted the recent proliferation of the use of columnar variety trees in new commercial developments. When columnar trees are planted, the canopy coverage credit is far greater than the actual canopy coverage provided by columnar trees on the site, even once they reach maturity. The Tree Board is seeking to explicitly state that columnar varieties shall receive 100 square feet of credit to rectify the disparity between the planned and the actual tree canopy for commercial developments.

The amendments to the Zoning Ordinance and the Planting Manual are justified on two separate levels: the minimizing of the effects of urban development within the community, and the application of sustainable practices. The purpose of Article 26 of the LFUCG Zoning Ordinance states that the importance of trees as a vital component in counterbalancing the effects of an urban setting by providing cooling shade; by reducing noise and glare; by contribution to urban aesthetics; by improving air quality through carbon dioxide reduction and replenishing oxygen to the atmosphere; by improving surface drainage and

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reducing the effects of storm drainage flooding; by filtering non-point source pollution from area streams; by stabilizing soil, thereby minimizing erosion; and providing habitat for wildlife.

In an effort to "counterbalance the effects of the urban setting," it is imperative to update the Zoning Ordinance and the Planting Manual when there are clear deficiencies in the categorization of canopy coverage for certain tree varieties. When a species of trees is not satisfying the need for providing cooling shade; by reducing noise and glare; by significant contribution to urban aesthetics; by improving air quality through carbon dioxide reduction and replenishing oxygen to the atmosphere due to a low canopy coverage credit, the tree variety must be re-categorized to appropriately fit its capabilities.

The *Urban Forestry Management Plan*, which was completed in 2017, establishes a mission for the city to achieve a sustainable urban forest. Staff believes that by reducing the canopy size of the columnar trees is an effort to bring other large trees that actually fit the planned environment. He said that the staff and the Zoning Committee are recommend approval of this text amendment

Zoning Action – A motion was made by Mr. Pohl, seconded by Mr. Penn, and carried 8-0 (Brewer, Mundy, and Plumlee absent) to approve ZOTA 2019-1: AMENDMENT TO ARTICLE 18 AND ARTICLE 26, AND THE PLANTING MANUAL TO REFLECT CREDIT GIVEN FOR COLUMNAR VARIETY TREES, for the reasons provided by the staff.

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