

**AN ORDINANCE OF THE CITY OF HENDERSONVILLE CITY COUNCIL TO AMEND ARTICLE XII – DEVELOPMENT REVIEW, SECTION 7-3-3 AND SECTION 7-3-4 AND ARTICLE XV – BUFFERING , SCREENING, AND LANDSCAPING, SECTIONS 15-4 THROUGH 15-6, SECTION 15-9, SECTION 15-13, AND TO ADD NEW SECTIONS 15-14 AND 15-15 OF THE CITY OF HENDERSONVILLE ZONING ORDINANCE TO ESTABLISH ADDITIONAL REQUIREMENTS FOR THE PROVISION AND PROTECTION OF TREES.**

**WHEREAS**, The City of Hendersonville has authority pursuant to N.C.G.S. Chapter 160D to adopt development regulations; and

**WHEREAS**, The City of Hendersonville recognizes that tree canopy within the City is beneficial to the health and welfare of the citizens of Hendersonville; and

**WHEREAS**, Preserving existing tree canopy and promoting new growth thereof promotes the natural beauty of the City, reduces soil erosion, enhances property values, improves air quality, aids in water absorption, and reduces energy consumption; and

**WHEREAS**, The City’s Comprehensive Plan encourages the preservation of mature trees; and

**WHEREAS**, The City also wishes to balance requirements related to the preservation of tree canopy with individual rights to develop private property; and

**WHEREAS**, the City now desires to enact the following regulations regarding the preservation and provision of tree canopy within the City’s planning and development regulation jurisdiction.

**NOW, THEREFORE, BE IT ORDAINED** by City Council of the City of Hendersonville, North Carolina that:

**SECTION 1.** This Ordinance shall be known as “An Ordinance to Establish New Requirements for the Provision and Protection of Trees.”

**SECTION 2.** Article XII. Development Review is hereby amended as follows:

**Sec. 7-3-3. Review of preliminary site plans.**

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**7-3-3.2 Contents of preliminary site plan.** Applicants for developments required to undergo preliminary site plan review shall, as a part of the application for such development, submit a preliminary site plan which shall show the following:

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n) A plan showing tree line before site preparation, identifying existing tree canopy, tree canopy proposed to be preserved, and new canopy installation areas, identifying the acreage of each, as well as areas to be screened, fenced, walled and/or landscaped;

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t) Proposed limits of land disturbing activity.

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**Sec. 7-3-4. Review of final site plans.**

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**Sec. 7-3-4.3 Contents of final site plan.** A site plan showing the following shall accompany an application for site plan approval:

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w) A plan showing tree line before site preparation, identifying existing tree canopy, tree canopy proposed to be preserved, and new canopy installation areas, identifying the acreage of each, as well as areas to be screened, fenced, walled and/or landscaped.

x) Proposed limits of land disturbing activity.

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**Sec. 7-4-6 Conditions to approval of conditional zoning district.**

In considering an application for the reclassification of property to a conditional zoning district, the planning board may recommend, and the city council may recommend that reasonable and appropriate conditions be attached to the approval of the rezoning. Conditions and site specific standards shall be limited to those that address the conformance of the development and use of the site to City of Hendersonville ordinances and comprehensive plan. Any such conditions should relate to the impact of the proposed use on surrounding properties, support facilities, pedestrian and vehicular circulation systems, screening and buffering areas, timing of development, road and right-of-way improvements, water and sewer improvements, stormwater drainage, open space and other matters that the planning board and/or city council may find appropriate or the applicant may propose. The applicant shall have a reasonable opportunity to consider and respond to any such conditions prior to the final action by the city council. Only those conditions mutually approved by the city council and the applicant may be incorporated into the rezoning approval.

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**SECTION 3.** Article XII. Definition of Terms is hereby amended as follows:

**Sec. 12-2. Definition of commonly used terms and words.**

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**Canopy tree:** A tree with a large, broad spreading crown, usually broadleaf and deciduous with a minimum mature height of 50 feet.

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**Recommended Species List:** The Recommended Landscape Species List for Street Trees and Land Development Projects adopted by the Hendersonville Tree Board, as amended.

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**Site:** The spatial location of actual or planned development. A site may be a single lot, or a combination of lots under a unified plan of development.

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**Specimen Tree:** A large or medium maturing tree that is 25 inch DBH or greater; or a small maturing tree that is 10 inch DBH or greater, as designated on the Recommended Species List.

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**Tree Canopy:** The area of a tree or trees where the outermost leaves, stems, and branches extend. Tree canopy is measured on a horizontal plane and is typically represented in square feet or acres.

**SECTION 3.** Article XV. Buffering, Screening, and Landscaping is hereby amended as follows:

**Sec. 15-2. Landscaping, buffering and screening required.**

Landscaping, buffering and screening shall be required for developments within the planning jurisdiction of the City of Hendersonville, including its extraterritorial jurisdiction, as set forth herein.

- a) The following developments must bring the entire site into full compliance with the requirements of this article:
  - 1) Any new public or private development, with the exception of single or two-family homes on lots that were created by a method excluded from subdivision authority pursuant to G.S. 160D-802(1)-(5);
  - 2) A change of use to a higher impact. For purposes of this section, the following list ranks differing uses from lowest to highest impact: residential, mobile home park, institutional & cultural, commercial, industrial;
  - 3) Renovations with a total cost exceeding 50 percent of the assessed value of the building according to Henderson County tax records or an appraisal by a state licensed appraiser;
  - 4) Expansions exceeding 50 percent of the pre-expansion floor area or paved surface;
  - 5) Existing unpaved parking lots which are paved over.

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**Sec. 15-4. Existing vegetation.**

- a) **Preservation of existing vegetation.** 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 a proposed development. It is recommended that groups of trees be preserved, as well as individual trees. Existing preserved trees and shrubs may be credited towards required buffer trees, street trees, and parking lot trees, in accordance with paragraph b), below.

b) **Credits and other incentives to preserve vegetation.** Preserved trees may be credited at the following rate:

2—12 inch DBH (diameter at breast height) tree = 1 tree

13—18 inch DBH tree = 2 trees

19—24 inch DBH tree = 3 trees

25+ inch DBH tree = 4 trees

In order to receive credit, preserved vegetation must be in good health and condition, and must not be listed as an Invasive Plant on the Recommended Species List. Trees designated to be preserved must be indicated on the site plan and on landscape and grading plans. Protective barriers, if utilized in accordance with paragraph d), below, must also be shown on the landscape and grading plans. A preserved tree shall be replaced with the total number of trees which were credited to the existing tree if the preserved tree dies within ten years of completion of the project.

c) **Tree Canopy Preservation.** All developments required to comply with this Article pursuant to Sec. 15-2 herein, with the exception of development of sites with existing tree canopy of less than 30,000 square feet, shall preserve existing tree canopy in compliance with this Section.

- (1) **Tree Canopy Coverage Map:** The Tree Canopy Coverage Map is hereby adopted. The Tree Canopy Coverage Map is based on the existing tree canopy data as established by the City’s tree canopy cover assessment. The Tree Canopy Coverage Map shall be rendered digitally and maintained via GIS or similar software. The Tree Canopy Coverage Map shall be updated at least every five-years to reflect the City’s most recent tree canopy cover assessment.
- (2) **Existing Tree Canopy:** Any reference in this Chapter to existing tree canopy shall refer to the most recent Tree Canopy Coverage Map created by the City of Hendersonville.

Developers must comply with the requirements of Sections 7-3-3.2(n) and 7-3-4.3(w) by one of the following methods:

- a. Using the Tree Canopy data shown on the Tree Canopy Coverage Map (reference definition of Tree Canopy in Section 12-2);
- b. For any development site for which the Tree Canopy Coverage Map

does not provide data, the developer shall submit a plan, showing the dripline of the existing tree canopy, and such plan shall be prepared by a land surveyor, civil engineer, landscape architect licensed by the State of North Carolina or Arborist certified by the International Society of Arboriculture; or

- c. A developer may submit a plan showing the existing tree canopy as of the date of the most recent Tree Canopy Coverage Map, such plan prepared and sealed by a land surveyor, civil engineer, landscape architect licensed by the State of North Carolina or Arborist certified by the International Society of Arboriculture.

**(3) Preservation Requirements**

- a. **Tier One Requirement:** 20 percent of the existing tree canopy on the site shall be preserved. The specific tree canopy preserved shall be at the discretion of the developer. Tier One Canopy is not eligible for fee-in-lieu without a variance issued by the Board of Adjustment.
- b. **Tier Two Requirement:** In addition to the Tier One Requirement, existing tree canopy on the site shall be preserved, and new tree canopy shall be installed, in accordance with one of the options in the table below:

<b>Tier Two Tree Canopy Requirement</b>			
<b>Select One:</b>	<b>Percentage of Tier Two Tree Canopy Preserved (in addition to Tier One Canopy)<sup>1</sup></b>	<b>Percentage of New Tree Canopy Installation Required<sup>2</sup></b>	<b>Percentage of Total Tier Two Canopy Required</b>
Option 1	10%	0%	10%
Option 2	5%	7%	12%
Option 3	0%	15%	15%
<p><sup>1</sup> Percentages of Tier Two Tree Canopy Preserved refer to the total existing Tree Canopy on a site before calculation of the Tier One Requirement and are in addition to the Tier One Requirement.</p> <p><sup>2</sup> Percentages of New Tree Canopy Installation refer to the total existing Tree Canopy on a site and shall be installed in accordance with the Credit for New Tree Canopy Installation table below.</p>			

<b>Credit for New Tree Canopy Installation</b>	
<b>Size of Tree*</b>	<b>Tree Canopy Credit</b>

Large Maturing	872 sq. ft.
Medium Maturing	350 sq. ft.
Small Maturing	144 sq. ft.
*As designated in the Recommended Species List	

The developer may request to pay a fee-in-lieu of the Tier Two Canopy preservation requirements pursuant to this section.

- c. In calculating the percentage preserved, only trees that are fixtures on the site shall be counted towards existing tree canopy preserved.
- d. Specimen trees preserved shall receive 1.5 times their actual canopy coverage in the calculation of preserved tree canopy if such tree is protected during construction in accordance with the standards contained in Sec. 15-4(d) below.
- e. As an example, a five-acre development site with two-acres, or 87,120 sq. ft., of existing tree canopy would be required to preserve existing tree canopy as shown in the table below:

<b>Example of Tree Canopy Preservation Requirement</b>				
<b>Select One:</b>	<b>Tier One Tree Canopy Preservation Requirement</b>	<b>Tier Two Tree Canopy Preserved (in addition to Tier One Canopy)</b>	<b>Tier Two New Tree Canopy Installation Required</b>	<b>Total Tree Canopy Requirement</b>
Option 1	17,424 sq. ft. (20%)	8,712 sq. ft. (10%)	0 sq. ft. (0%)	26,136 sq. ft. (30 %)
Option 2	17,424 sq. ft. (20%)	4,356 sq. ft. (5%)	6,098 sq. ft. (7%)	27,878 sq. ft. (32%)
Option 3	17,424 sq. ft. (20%)	0 sq. ft. (0%)	13,068 sq. ft. (15%)	30,492 sq. ft. (35%)

- (4) **Protection of trees during construction:** All trees required to be preserved by this Section shall be protected during construction in accordance with the standards contained in Sec. 15-4(d) below.
- (5) **Credit for existing vegetation:** All trees preserved pursuant to this Section may be credited towards the requirements of this Article in accordance with the provisions of Sec. 15-4(b) above.
- (6) **Fee in lieu.** Where specifically provided, Community Development Director shall, in lieu of preserving trees pursuant to this Section, allow the developer to pay a fee-in-lieu of tree preservation to the City’s Tree Fund. The fee-in-lieu shall be established in the City’s Fee Schedule.

The fee-in-lieu shall be based on the average cost of tree canopy replacement per square foot, and shall be calculated using a weighted average of large, medium, and small maturing trees as shown below:

<b>Calculation of Fee-in-Lieu of Tree Canopy Preservation</b>			
<b>Size of Tree</b>	<b>Average Tree Canopy</b>	<b>Trees per Acre</b>	<b>Weight Factor</b>
Large Maturing	872 sq. ft.	49.943	0.105
Medium Maturing	350 sq. ft.	124.305	0.261
Small Maturing	144 sq. ft.	301.507	0.634
<b>Weighted Average:</b>			228.84 sq. ft. per tree

As an example, assume the City’s cost to plan and establish a tree is \$350.00. \$350.00 divided by 228.84 square feet equals \$1.53 per square foot of tree canopy. Now assume the Tier Two Requirement for tree canopy preservation is 8,712 square feet. The fee-in-lieu of tree canopy preservation would be 8,712 square feet multiplied by \$1.53 for a total fee-in-lieu of \$13,329.36.

- (7) **Delay of development approval.** In addition to any other method of enforcement or remedy available, the City may refuse to issue a development approval for a period of three years following the removal of all or substantially all of the trees that are required to be protected under this Article.
  - (8) **Civil penalties.** Civil penalties for violation of this subsection, including but not limited to removal of tree canopy required to be preserved and failure to protect trees during construction, shall be assessed on a per tree basis.
- d) **Protection of existing trees during construction.** The regulations contained in this paragraph shall apply in those circumstances when a developer has either: (1) elected to protect trees during construction in order to receive credit under Sec. 15-2(b), or (2) been required to preserve canopy under Sec. 15-2(c).
- 1) 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 landscaping requirements until protective barriers are installed by the developer and approved by the community development director or a designee appointed by the community development director. Trees designated for preservation which are counted toward the landscape requirements must be protected by barriers, while trees designated for preservation which do not count toward the landscape requirements are encouraged to be protected by barriers. The diameter of the preserved trees and the location of protective barriers must be shown on landscape and grading plans with the dimension between the tree

trunk and barrier indicated.

Barricades shall be placed around the critical root zone of preserved trees that are within 50 feet of any grading or construction activity. The critical root zone is a circle extending around the tree with a one-foot radius for every one inch of tree diameter. For example, a ten-inch diameter tree would have a barricade surrounding it, erected ten feet away from the trunk. All protective barriers must be maintained throughout the building construction process.

Protective barriers shall consist of either:

- A) A fence which is at least three feet high and constructed in a post and rail configuration, using two-by-four posts and one-by-four rails; or
  - B) A fence with two-by-four posts placed no farther than ten feet apart covered with a four-foot orange polyethylene laminar safety fencing.
- 2) All contractors must be made aware of the areas designated for protection. No disturbance can occur within the tree protection areas including the following:
- A) Grading;
  - B) Filling, unless an aeration system, certified by a registered landscape architect, certified arborist, or North Carolina Agricultural Extension Specialist, is installed to protect the tree from suffocation;
  - C) Parking;
  - D) Storage of debris or materials, including topsoil;
  - E) Disposal of hazardous wastes or concrete washout; and
  - F) Attaching of nails, ropes, cables, signs, or fencing to any tree designated for preservation.

If any area within the critical root zone will be disturbed for any reason, a registered landscape architect, certified arborist, or North Carolina Agricultural Extension Specialist must recommend measures to minimize any potential impact and certify that the activity will not damage the tree under normal circumstances.

- 3) The developer should coordinate with utility companies early in the design process to resolve potential conflicts about the placement of utilities and landscape requirements. Utilities must either be placed outside of the tree protection area or, with planning department approval, tunneled at least two feet directly below the tree roots, to minimize root damage.
  - 4) If silt fencing is required to control sedimentation, the fencing must be placed along the uphill edge of a tree protection zone in order to prevent sediment from accumulating in the critical root zone area.
- e) Trees in public rights-of-way. Trees located in any public right-of-way cannot be pruned or removed without a permit from the public works department in accordance with the City of Hendersonville Tree Ordinance.



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**Sec. 15-5. General standards.**

The following general standards shall apply to all landscaping requirements in this article.

a) Unless otherwise specified, the exact placement of required plants and structures shall be the decision of the developer. The type of plants used shall be limited to those on the Recommended Species List. No plants listed as an Invasive Plant in the Recommended Species List may be used to meet the requirements of this ordinance. Required landscaping shall be designed in such a manner as to impart its aesthetic character when viewed from any area accessible to the public or from adjacent properties.

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h) **Native species.** For each development site, at least 75 percent of the trees required to be planted under the provisions of this article shall be native species as listed on the Recommended Species List.

**Sec. 15-6. Bufferyards.**

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TABLE OF BUFFER REQUIREMENTS

Proposed Land Use	Existing Land Use /Zoning District <sup>1</sup>					
	Residential <sup>2</sup>	Residential, multi-family <sup>3</sup>	Mobile Home Park <sup>4</sup>	Institutional & Cultural <sup>5</sup>	Commercial <sup>6</sup>	Industrial <sup>7</sup>
Residential	X	X	X	X	X	X
Residential, multi-family	8-foot A	X	X	X	X	X
Mobile Home Park	10-foot B	10-foot B	X	8-foot A	10-foot B	X
Institutional & Cultural	10-foot B	10-foot B	8-foot A	X	X	X
Commercial	10-foot B	10-foot B	10-foot B	8-foot A	X	X
Industrial	25-foot C	25-foot C	25-foot C	15-foot B	15-foot B	X

**Notes for Table of Buffer Requirements:**

1 Buffering is required if adjacent parcel of land is used or zoned for the category noted regardless whether adjacent parcel is located in the city, the city's extraterritorial jurisdiction (ETJ), or the planning jurisdiction of another governmental entity. Existing adjacent land use takes precedence over zoning

district. Buffer requirement for the district will be used if adjacent land is vacant.

- 2 Includes the following use districts: R-40, R-20, R-15, R-10, R-6, RCT, PRD.
- 3 Includes only those sites developed as multi-family.
- 4 Includes the PMH district or an existing mobile/manufactured home park.
- 5 This category includes religious, recreational, child care and educational uses and the following use districts: MIC and PID.
- 6 Includes the following use districts: C-1, C-2, C-3, C-4, PCD, CMU, GHMU, HMU, UV, UR and CHMU.
- 7 Includes the following use districts: I-1, PMD.

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### **Sec. 15-9. Landscaping for vehicular use areas.**

Trees and shrubs are required in and around vehicular use areas with more than six spaces to provide attractive views from roads and adjacent properties, provide shade to reduce the heat generated by impervious surfaces, reduce glare from vehicular use areas, and to help filter exhaust from vehicles.

- a) **Perimeter and interior plantings.** Vehicular use areas must be planted with at least one tree and two shrubs for every 3,000 square feet of vehicular use area, which includes parking spaces, aisles, driveways, and loading areas. Trees shall be evenly distributed throughout the vehicular use area, . At least 75 percent of the required parking lot trees must be broadleaf canopy trees. Trees and shrubs must be planted within 20 feet of the vehicular use area to count as parking lot landscaping; provided, however, all street trees required by other provisions of this zoning ordinance shall count as parking lot landscaping.

When a parking lot contains 20 or more parking spaces, 50 percent of the trees and shrubs required by paragraph a), above, must be planted in islands or medians located within the parking lot. Tree islands shall be evenly distributed throughout the parking lot in order to provide an even tree canopy throughout the lot. At a minimum, such tree islands shall consist of an area at least equal in size to two parking places side-by-side (360 square feet). Parking bays shall be broken up with landscaped islands or medians to avoid long monotonous rows of parking. Planting trees in groups is encouraged to increase the total amount of planting area for roots to grow.

- b) **Planting strips.** When a vehicular use area lot is located within 100 feet of an abutting property and no bufferyard is required, a planting strip which is a minimum of five feet wide shall be planted between the vehicular use area and the abutting property, except along approved driveway openings which run perpendicular to the planting strip. One large evergreen or deciduous tree and five evergreen or deciduous shrubs shall be planted for every 40 linear feet of property line that parallels the vehicular use area. Fifty percent of these trees and shrubs may be counted toward the parking lot trees and shrubs required in paragraph a), above, if the planting strip is located within 20 feet of the vehicular use area. Adjacent businesses on separate lots which share parking or driveways shall be exempt from this requirement provided

that the required planting strip would interfere with the reasonable use of the shared parking or driveway. Vehicular use areas located behind buildings and screened from view from public rights-of-way shall be exempt from this requirement.

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**Sec. 15-13. Common open space landscaping.** In addition to all other landscaping required by this zoning ordinance, each development parcel required to provide common open space pursuant to Sec. 6-16 shall contain a minimum of one tree and five shrubs for every 1,200 square feet of common open space on such development parcel. A minimum of 50 percent of the trees shall be canopy trees.

At least 70 percent of the street trees planted shall be large-maturing trees (>50 feet in height). The remaining trees shall be medium maturing trees (25-50 feet in height).

No landscaped area shall be constructed with more than ten percent of the total area of gravel, stone, concrete, asphalt, or other similar material, excepting necessary walks.

**Sec. 15-14. Open space landscaping.** In addition to all other landscaping required by this zoning ordinance, each development parcel required to provide open space shall contain a minimum of one tree and five shrubs for every 4,000 square feet of common open space on such development parcel. A minimum of 50 percent of the trees shall be canopy trees.

At least 70 percent of the street trees planted shall be large-maturing trees (>50 feet in height). The remaining trees shall be medium maturing trees (25-50 feet in height).

No landscaped area shall be constructed with more than ten percent of the total area of gravel, stone, concrete, asphalt, or other similar material, excepting necessary walks.

**Sec. 15-15. Street Trees.** Street trees shall be required at the rate of one tree for every 35 linear feet of property abutting a street. Trees do not need to be spaced evenly. They may be clustered with a minimum spacing of 15 feet and a maximum spacing of 75 feet.

At least 70 percent of the street trees planted shall be large-maturing trees (>50 feet in height). The remaining street trees shall be medium maturing trees (25-50 feet in height).

Where overhead utility lines are present, streets trees shall be planted at the rate of one small-maturing tree (<25 feet in height) for every 25 linear feet of property abutting a street. Nothing herein shall be construed to prohibit a deviation from the mature height requirements or planting distance from the street right-of-way to accommodate existing overhead utility lines.

Street trees shall be placed in a planting strip on private property and not within the street right-of-way. No street tree can be planted farther than 35 feet from the edge of the right-of-way to count as a street tree. The width of the planting strip may vary, but the minimum width cannot be less than seven feet and the average width shall be at least ten feet. The planting area must be covered with living material, including ground cover and/or shrubs, except for mulched areas directly around trees and shrubs, so that no soil is exposed. When a sidewalk is proposed to be constructed on a development site and right-of-way configuration requires that it be constructed on the developer's property, the width of the planting strip may be reduced to an average of seven feet.

Street trees shall not be required on a property line abutting a street when the minimum setback provided is less than ten feet. By way of example, if the minimum setback required for a development is less than 10 feet from a property line abutting a street, but the setback provided is 10 feet or more, street trees are required.

During the development review process, the approving authority for the city may permit minor deviations in the placement of trees in order to avoid conflict with utility structures and utility lines.

**SECTION 3.** Section 8 of the Fiscal Year 2023-24 Budget Ordinance for the City of Hendersonville shall be amended to adopt and incorporate the Fee-in-Lieu of Tree Canopy Preservation pursuant to 15-4(c)(6) of the Zoning Ordinance of the City of Hendersonville, North Carolina as follows:

<b>Fee-in-Lieu of Tree Canopy Preservation</b>	
Per square foot of Existing Tree Canopy required to be preserved	\$1.53

**SECTION 4.** If any provision of this ordinance or its application is held invalid, the invalidity does not affect other provisions or applications of this ordinance that can be given effect without the invalid provisions or application, and to this end the provisions of this ordinance are severable.

**SECTION 5.** It is the intention of the City Council and it is hereby ordained, that the provisions of this ordinance shall become and be made part of the Code of Ordinances, City of Hendersonville, North Carolina, and the sections of this ordinance may be renumbered to accomplish such intention.

**SECTION 6.** This Ordinance shall be effective upon its adoption.

Adopted by the City Council of the City of Hendersonville, North Carolina on this \_\_\_\_ day of \_\_\_\_\_ 202\_\_.

Attest:

\_\_\_\_\_  
Barbara G. Volk, Mayor, City of Hendersonville

\_\_\_\_\_  
Jill Murray, City Clerk

Approved as to form:

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Angela S. Beeker, City Attorney