City of Dunwoody Georgia
Community Development

4800 Ashford Dunwoody Road
Dunwoody, GA 30338
Phone: (678) 382-6800
dunwoodyga.gov

MEMORANDUM

To: Mayor and City Council

From: Amy Bledsoe, City Arborist

Date: May 23, 2022

Subject: Text Amendment
Chapter 16— Residential Regulations for Tree Ordinance

ITEM DESCRIPTION

This item is a proposed text amendment that requires tree removal permits in certain instances for single-family residential properties. It establishes that owners can remove up to six non-specimen sized trees without obtaining a tree removal permit. This item also increases the number of trees that are required on single-family residential lots to meet site density requirements and makes further changes to facilitate the tree removal requirement.

DISCUSSION

Currently, residents of single-family residential neighborhoods do not have to obtain tree removal permits for tree removal that occurs outside of the City's 75-ft stream buffer. On one hand, the proposed amendments protect the tree canopy in Dunwoody's residential neighborhoods by applying sections of the tree ordinance to single-family residential properties that are currently only applicable to non-single-family residential properties. On the other hand, it provides allowances to ensure that regulations do not become burdensome for homeowners and developers.

This item WOULD require a tree removal permit for the following actions:

Removal of 6 or more non-specimen-sized trees	Permit REQUIRED
Removal of any number of specimen trees*	Permit REQUIRED
Removal of healthy trees within the 75-ft. buffer	Permit REQUIRED

This item WOULD NOT require a tree removal permit under the following specific circumstances:

Trees damaged during an emergency or other act of nature	Permit NOT REQUIRED
Trees that are to be removed as part of a utilities project	Permit NOT REQUIRED

*Specimen-Sized Trees:

- Hardwoods = Greater than or equal to 24" DBH
- Softwoods = Greater than or equal to 30" DBH
- Understory Trees = Greater than or equal to 6" DBH

**Note: DBH refers to "Diameter at Breast Height." It is a measurement of the diameter of a tree, taken 4 1/2 ft. above the ground. A soft measuring tape is used to calculate DBH by taking the circumference of a tree and dividing it by pi (3.14).

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CURRENT COSTS

The chart below highlights current costs associated with tree removal in the City of Dunwoody.

Tree Removal Permit	$25 administration fee, plus $25 to remove 1-5 tree(s) and an additional $25 for every additional tree
Tree Fund Donation	$1000 per every 1.0 unit of density credit*

*The density units associated with donating into the tree fund for the removal of specimen-sized trees are listed below. These costs only apply if an applicant decides not to replant replacement trees – replacement trees are strongly encouraged as a preferred option.

TREE	DENSITY UNIT	TREE FUND DONATION
24" Hardwood	3.1 units	$3,100
30" Softwood	4.9 units	$4,900
6" Understory	0.3 units	$300

SCENARIOS

The following scenarios have been derived to provide additional clarity regarding the proposed Tree Ordinance amendments.

SCENARIO 1
Homeowner wishes to remove five trees from her property to expand outdoor seating opportunities in her backyard.

A permit is *NOT REQUIRED.*

SCENARIO 2:
Homeowner wishes to expand visibility and minimize the amount of maintenance in his backyard by removing 7 trees. None of the trees are specimen-sized trees (*none have a DBH above 24").

A permit *IS REQUIRED*. The cost of the permit is $100 ($25 administration fee, $25 for trees 1-5, $25 for tree #6, $25 for tree #7).

SCENARIO 3:
Homeowner wishes to remove a tall 30" specimen pine tree from his backyard because the tree is leaning and its roots are beginning to become exposed, and he is worried about its location over his children's bedrooms. For a second opinion, he calls a tree-removal company that has a certified arborist on staff and learns that there is no fee for a consultation.

Both a permit and arborist report *ARE REQUIRED*. The cost of the permit is $50 ($25 administration fee plus a $25 fee for tree removal) and the cost of the arborist report is an estimated $75 to $150. However, because the tree was deemed hazardous, recompense is *NOT REQUIRED.*

SCENARIO 4:
A builder wishes to demolish an existing house and build a larger new single-family home. To accommodate the larger foundation, the builder is proposing to remove a healthy 27" oak as well as four 12" pine trees

Both a tree removal permit and recompense *ARE REQUIRED.* The cost of the permit is $50 ($25 administration fee plus a $25 fee for tree removal). The builder could also decide to submit the

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tree removal information as part of a construction permit application. In addition, the builder would need to compensate for the 27" specimen tree (equal to 4 density units) he wishes to remove by replanting 1.5 times the density units of the existing tree (equal to 6 density units). The builder would need to either (1) pay $6,000 into the City's Tree Fund or (2) replant ten 3" cal. trees (with a density unit of .6 each). The estimated cost of these ten trees is $5,750.

CONCLUSION

Tree removal in Dunwoody's established neighborhoods is a common concern amongst the City's residents. The 2021 Sustainability Plan included an action item to consider a residential tree policy, which this item addresses.

This item attempts to strike a balance between protecting the tree canopy in Dunwoody's neighborhoods and allowing residents to utilize their properties as they see fit. To make it less burdensome on both homeowners, this item provides generous allowances for smaller trees – residents can remove up to six trees per year. On the other hand, this item slightly increases tree density standards and requires residents to provide mitigation for removed trees by planting new trees or contributing to the City's Tree Fund. The mitigation of specimen trees that are removed would apply only to *healthy* trees that meet the conditions outlined in Sec. 16-110(a)(2) below:

- Relatively sound and solid trunk with no extensive decay.
- No more than one major and several minor dead limbs.
- No major insect or pathological problems.
- No major pruning deficiencies, i.e., topping.
- At least 75 percent of the critical root zone in a natural, undisturbed state.

The proposed Code amendments were made after comparing Dunwoody's Tree Ordinance to that of three local government agencies – City of Atlanta, City of Brookhaven, and Dekalb County. These three agencies were chosen for the following reasons: (1) Both Atlanta and Brookhaven's tree ordinances have recently been amended to promote the preservation of tree canopy, and (2) Homeowners often reference one or more of these codes in comparison to Dunwoody's.

RECOMMENDATION

Staff recommends **APPROVAL.** To increase awareness of the proposed ordinance amendments, staff recommends that the new ordinance go into effect on September 1, 2022.

PLANNING COMMISSION RECOMMENDATION

At its May 10th meeting, the Planning Commission recommended **APPROVAL**. This recommendation passed 4-1 with Chairman Thomas O'Brien against.

Discussion at the Planning Commission centered around the costs associated with proposed mandatory tree removal permits for single-family residential homeowners. A second line of discussion focused on proposed changes to site density requirements and what such changes might mean for homeowners applying for permits unrelated to tree removal.

ATTACHMENTS

Chapter 16, Division 6. TREE PRESERVATION - current.
Chapter 16, Division 6. TREE PRESERVATION - proposed.

DIVISION 6. - TREE PRESERVATION[7]

Footnotes:

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***Editor's note—** Section 1 of Ord. No. 2015-01-04, adopted Jan. 26, 2015, renumbered former §§ 16-126—16-135 as §§ 16-106—16-115.*

Sec. 16-105. - General.

(a) *Intent.* The intent of this section is to provide standards for the preservation of trees as part of the land development and building construction process for the purpose of making the City of Dunwoody a more attractive place to live, provide a healthy living environment, and to better maintain control of flooding, noise, glare and soil erosion.

(b) *Purpose.* The purpose of this section is to facilitate the preservation and/or replacement of trees as part of the land development, construction, and tree removal permit process as defined in section 16-106.

(c) *Benefits.* Benefits derived from tree protection and replanting include:

(1) Improved control of soil erosion;

(2) Moderation of stormwater runoff, and improved water quality;

(3) Interception of airborne particulate matter, and the reduction of some air pollutants;

(4) Enhanced habitat for desirable wildlife;

(5) Reduction of noise and glare;

(6) Climate moderation and the reduction of the heat island effect;

(7) Aesthetics, scenic amenity;

(8) Increased property value; and

(9) Assistance in traffic calming.

(d) *Applicability.* The terms and provisions of this section apply to any activity on real property which requires the issuance of a development permit, substantial building permit, or tree removal permit within the City of Dunwoody. No development permit or substantial building permit may be issued by the city without it being determined that the proposed development is in conformance with the provisions of these regulations.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.10), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017)

Editor's note— Ord. No. 2017-10-19, § I, adopted Oct. 9, 2017, renumbered former § 16-106 to § 16-105.

Sec. 16-106. - Tree removal permit.

(a) *Applicability.* The tree removal permit is established for tree removal occurring outside of a land development permit or substantial building permit. A tree removal permit is required for the removal of:

(1) Any hardwood with a diameter at breast height (DBH) of ten inches or greater, softwoods with a DBH of 20 inches or greater, and understory with a DBH of six inches or greater on non-residential, mixed-use, and multi-family zoned lots; and

(2) Any tree located within the city's 75-foot stream buffer.

(b) *Requirements.* To obtain a tree removal permit, the owner/applicant shall submit the following information:

(1) A completed tree removal permit application;

(2) A site plan, or a detailed map sketch illustrating the species, approximate size, and location of each existing tree to be removed and preserved;

(3) Picture of each tree to be removed, including any particular evidence of dead, diseased, dying, insect-infested, or hazardous trees;

(4) Payment of the applicable tree removal permit fee as listed on the City of Dunwoody fee schedule; and

(5) In cases where the aforementioned information is not sufficient to accurately review the removal and replacement of trees, the city arborist may request additional information from the applicant (i.e. tree survey, tree replacement plan, third party arborist report, and/or planting plan).

(c) *Exemptions.* A tree removal permit is not required for the removal of:

(1) Any hardwood less than ten inches, softwood less than 20 inches, and understory trees less than six inches on non-residential, mixed-use, and multi-family zoned lots, with exception of any tree located within the city's 75-foot stream buffer;

(2) Any tree as necessary for construction, repair, or maintenance of public assets, including but not limited to the right-of-way, public roads, utilities, or drainage structures;

(3) Any trees found on single-family lots, located outside of the 75-foot city stream buffer; and

(4) Any trees damaged during the period of an emergency, such as a tornado, ice storm, wind storm or other act of nature whereby the community development director or his/her designee may waive the requirements of this section.

(d) *Tree removal permit application.* The community development director and their designee(s) shall develop such forms as necessary to facilitate the tree removal permit application process.

(e) *Approval.* The city arborist will approve the removal of the tree(s) within five business days of receipt of a completed tree removal application, provided the following applicable standards are met:

(1) On non-residential, mixed use, and multi-family lots, the site plan and/or tree replacement plan must be sufficient to produce a total site density factor of 20 units per acre;

(2) For specimen trees located outside of a stream buffer on non-residential, mixed use and multi-family lots, the tree replacement plan shall demonstrate that the removed trees will be replaced

by species with potential for comparable size and quality as noted in section 16-110(d) "removal of specimen trees"; and

(3) Stream buffer tree(s) that are deemed dead, dying, diseased, insect-infested or hazardous.

(d) *Denial.* If tree(s) are denied removal, they may be appealed per section 16-114(c).

(Ord. No. 2017-10-19, § I, 10-9-2017; Ord. No. 2018-07-13, § I, 7-23-2018)

Sec. 16-107. - Permit procedure.

(a) *Submittal of tree protection plan.* All applications for a development permit or a substantial building permit must be accompanied by a tree protection plan prepared and sealed by a registered landscape architect, certified arborist, or registered forester. The tree protection plan must include the following information:

(1) *Tree survey.* The tree survey must be a to-scale map or site plan that has been prepared and sealed by a registered landscape architect, certified arborist, registered forester, registered surveyor, or registered engineer. The tree survey must include the following minimum requirements:

a. All specimen trees are to be located and labeled with their size and species. Their critical root zone must be delineated and the spot elevation at the base of their trunk must be indicated. They must also be labeled in a way to determine if they are intended for removal or preservation.

b. All trees with a DBH measurement of ten inches or larger over-story and six inches or greater for understory must be located and their size and species must be indicated.

c. Sampling methods may be used to determine tree density calculations for forested areas over five acres.

(2) *Definition of spatial limits.*

a. Limits of land-disturbance, clearing, grading, and trenching.

b. Tree protection zones.

c. Areas of revegetation.

d. Indication of staging areas for parking, material storage, concrete washout, debris burn, and other areas where tree protection may be affected.

e. Locations of existing and proposed structures, paving, driveways, cut and fill areas, detention areas, utilities, etc.

(3) *Detail drawings of tree protection measures (where applicable).*

a. Protective tree fencing;

b. Erosion control fencing;

c. Tree protection signs;

d. Transplanting specifications;

e. Tree wells and aeration systems;

f. Staking specifications; and

g. Other applicable drawings.

(4) *Tree density calculations.* See appendix A.

(5) *Installation and maintenance measures* Procedures and schedules for the implementation, installation, and maintenance of tree protection measures.

(b) *Site inspection.* An on-site inspection will be made by the city arborist prior to the commencement of any development activity.

(c) *Review.* All landscape plans, tree protection plans, and related documentation must be reviewed by the city arborist for conformance to the provisions of these regulations and either approved, returned for revisions, or denied within 30 days of receipt. If denied, the reasons for denial must be annotated on the landscape plan or otherwise stated in writing.

(d) *Permit issuance.* Issuance of the development permit or a substantial building permit is contingent upon approval of the required tree protection plan and landscape plan and an on-site inspection by the city arborist for tree protection measures.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.20), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2018-07-13, § I, 7-23-2018)

Sec. 16-108. - Protected zones.

(a) Nothing in these regulations may be construed as allowing the removal of vegetation in a natural, undisturbed buffer required by zoning or land development regulations.

(b) Trees may not be removed from any protected zone. When preserving trees in a protected zone will result in a documented hardship, an appeal may be made to the community development director or the zoning board of appeals, pursuant to section 116-114(c). The documentation proving the hardship must be submitted as part of the tree protection plan and submitted variance application.

(c) When no trees are present in a protected zone or when it is proposed that any portion of a protected zone be disturbed, it is the responsibility of the owner/developer to landscape the areas (where improvements are not constructed) with trees or other plant materials.

(d) Trees may not be removed from a floodplain or stream buffer except as follows:

(1) Those trees found to be hazardous, dead, diseased, or insect-infested by the city arborist as prescribed in section 16-106; and

(2) As necessary for construction, repair, or maintenance of public roads, utilities, or drainage structures.

(e) No person shall intentionally or unintentionally damage, cut, carve, transplant, or remove any tree in a stream buffer; attach any rope, wire, nails; allow gaseous liquid or solid substance which is harmful to such trees to come in contact with them; or set fire or permit any fire to burn when such fire or the heat thereof will injure any portion of any tree.

(f) No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of

vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.30), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017; Ord. No. 2018-07-13, § I, 7-23-2018)

Editor's note— Ord. No. 2018-07-13, § I, adopted July 23, 2018, changed the title of § 16-108 from "Tree removal" to read as herein set out.

Sec. 16-109. - Tree replacement and revegetation.

(a) *Applicability.* Replacement of trees in the minimum required landscape areas, as determined by this section, must occur under the following conditions:

(1) To establish the minimum tree density requirements for the site.

(2) Where grading occurs outside the buildable area of the lot.

(3) If the buildable area of the lot leaves no protected zone.

(4) If no trees are present within an existing protected zone.

(5) Where specimen trees or specimen stands of trees within the buildable portion of the lot are to be removed.

(6) Where specimen trees or specimen stands of trees, and trees within otherwise designated tree protective zones have been irreparably damaged or removed through development or construction activities.

(b) *Replacement quantity.*

(1) Except as specified for single-family residential lots in subsection (b)(2), the quantity of replacement trees on a site must be sufficient to produce a total site tree density factor of no less than 20 density units per acre (Note: the terms unit and tree are not interchangeable). Procedures for determining the site density requirements and the subsequent tree replacement requirements are provided in appendix A. A required buffer or trees located in the floodplain may not be counted towards tree density. Understory trees may constitute no more than 25 percent of the required replacement trees, but lots smaller than 8,000 square feet in area are exempt from this limit.

(2) The following number of trees must be planted or preserved on all single-family residential lots developed in the city:

Lot Size	**Number of Required Trees**

≤8,000 square feet	1 tree
8,001 to 15,000 square feet	2 trees
15,001 to 20,000 square feet	3 trees
20,001 to 25,000 square feet	4 trees
25,001 to 30,000 square feet	5 trees
≥30,001 square feet	1 tree per 5,000 square feet of lot size

(c) *Spacing.* The spacing of replacement trees must be compatible with spatial limitations, and within responsible considerations towards potential species size.

(d) *Specimen trees.* All reasonable efforts be made to save specimen trees. ("Reasonable effort" includes alternate building design, building location, parking area layout, parking area location, water retention location and equivalent or similar measures).

(e) *Tree save areas.* Tree save areas are encouraged and will be given credit of up to 50 percent individual lot requirements when the number of trees in the tree save areas is equal to or greater than the total number of trees required on the total number of lots within the subdivision.

(f) *Tree replacement fund.* Occasionally, the tree replacement requirements of this section cannot be met because a project site will not accommodate the required density of trees. In this case, the city arborist is authorized to approve a contribution to the City of Dunwoody Tree Replacement Fund. The following standards have been established for administering these contributions:

(1) The city arborist must review and approve all requests for alternative compliance. In no instance may 100 percent of the required site density be met through alternative compliance. As many trees as can reasonably be expected to survive must be planted on the site in question.

(2) No permit may be issued until the required contribution has been made to the tree replacement fund.

(3) The amount of the contribution must be determined from the fee schedule for the community development department.

(4) The City of Dunwoody Tree Replacement Fund must be used for planting trees on public property. Funds may be used for the purchase of trees, installation of trees and irrigation, and the purchase of mulch and soil amendments for the planted areas.

(5) Species selected for replacement must be quality specimens and must be ecologically compatible with the specifically intended growing site. No single tree species may be used for more than 35 percent of replacement trees. Evergreens may not be used for more than 25 percent of the trees in non-buffer areas. Standards for transplanting and selecting quality replacement stock must be in accordance with standards of the International Society of

Arboriculture, National Association of Arborists, American Standard for Nursery Stock and appendix B.

(6) Understory replacement trees may account for no greater than 25 percent of the required tree density units. The city arborist is authorized to approve the additional use of understory trees for meeting density requirements on single-family lots if the size and/or layout of the lot does not allow for large overstory trees.

(7) Species selection and replacement densities are subject to approval by the city arborist.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.40), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017)

Sec. 16-110. - Specimen and special trees.

(a) *Criteria.* Some trees on a site warrant special consideration and encouragement for preservation. These trees are referred to as specimen or special trees. The following criteria are used by the city arborist to identify specimen and special trees. Both the size and condition must be met for a tree to qualify.

(1) *Tree size.*

Criteria	**Special Trees**	**Specimen Trees**
Minimum size for hardwoods	14" to 23" DBH	24" DBH
Minimum size for softwoods	20" to 29" DBH	30" DBH
Minimum size for understory trees	4" to 5" DBH	6" DBH
Minimum Life Expectancy	25 years	15 years

(2) *Tree condition.*

a. Relatively sound and solid trunk with no extensive decay.

b. No more than one major and several minor dead limbs.

c. No major insect or pathological problems.

d. No major pruning deficiencies, i.e. topping.

e. At least 75 percent of the critical root zone in a natural, undisturbed state.

(b) *Tree density credit.* In order to encourage the preservation of specimen and special trees and the incorporation of these trees into the design of projects, additional density credit will be given for

specimen and special trees which are successfully saved and maintained. Credit for any specimen or special tree thus saved would be one and one-half times the assigned unit value shown in appendix A. Should the property owner retain the services of a certified arborist to improve the quality of the trees (services include, but are not limited to, installation of cabling and bracing, installation of lighting protection, corrective pruning, removal of deadwood, supplemental irrigation, introduction of mycorrhizae, etc.), the density credit will be increased to two times the assigned value designated in appendix A. The property owner must supply a letter of commitment from the certified arborist and/or provide documentation of services provided in order to receive the increased density credit.

(c) *Preservation of tree stands.* The city arborist may identify and require the preservation of a tree stand if it contains one or more specimen or special trees and the trees are interlocked with other members of the stand in such a manner as to imperil the individual tree if other members of the stand were to be removed.

(d) *Removal of specimen trees.* All specimen trees must be replaced by species with potential for comparable size and quality with three-inch caliper or larger trees at a density of one and one-half times the unit value of the tree removed; for example, a 30-inch DBH specimen tree (4.9 density units) must be replaced with 7.35 units. Specimen tree replacement density is in addition to the minimum required density for the site.

(1) Any specimen tree which is fatally damaged during construction, as determined by the city arborist, or removed without the appropriate review and approval of the city arborist, must be replaced with four-inch caliper or larger trees with a total density up to three times the unit value of the tree removed. Size alone will determine whether a tree was of specimen quality if the tree is removed without approval. Additionally, the area that encompassed the critical root zone of the specimen tree must remain undisturbed to allow for the planting of replacement trees.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.50), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2018-07-13, § I, 7-23-2018)

Sec. 16-111. - Tree protection measures.

The following minimum tree protection measures must be in place for all tree save areas:

(1) *Tree protection fencing.* Trees identified for preservation must have protection fencing that is a minimum of four feet high installed at the edge of the critical root zones. The city arborist is authorized to require the installation of four-foot fencing in those areas where the likelihood of possible encroachment occurs. All tree protection zones must be designated as such with signage posted visibly on all sides of the fenced area. Signs requesting workers' cooperation and compliance with tree protection standards are recommended at the site entrance(s).

(2) *Silt fences.* All tree protection zones must be designed to prevent the sedimentation of erosion material. Silt fences must be placed along the outer uphill edges of tree protection zones at the development interface.

(3) *Encroachment.* No person may encroach into the tree protection zones. Construction activities, including but not limited to, parking, vehicle and foot traffic, material storage, concrete washout, debris burning, and other activities must be arranged so as to prevent disturbance within the protected areas.

(4) *Utilities.* Reasonable efforts must be made to locate utility lines along corridors between tree protection zones. If utility lines must encroach into the protection zones, they must be installed by tunneling rather than trenching.

(5) *Maintenance of tree protection.* All tree protection devices must remain in fully functioning condition until the certificate of occupancy is issued.

a. Any tree, designated for preservation, which is negligently damaged during construction or removed without the appropriate review and approval, as determined by the city arborist, must be treated in accordance with the National Arborists Association Standards. If fatally damaged, the tree(s) must be replaced with four-inch caliper trees equal to the unit value of the tree removed. Any specimen tree damaged as described above must be replaced with trees equal to three times the unit value of the tree removed.

b. All tree protection zones must be mulched with at least four inches and not more than eight inches of organic mulch, such as pine straw, wood chips, tree leaves, or compost.

c. Construction activity is prohibited inside the tree save areas, including but not limited to, grading, paving, and construction of buildings and other structures.

d. The site must be designed and maintained in a manner to ensure proper drainage in tree save areas during and after construction.

(6) *Tree protection supervisors.* The developer must designate a tree protection supervisor. This person must demonstrate knowledge in the area of tree protection practices during construction and must be on-site to ensure tree protection measures are enforced. The tree protection supervisor must participate in a pre-construction conference with the city prior to the commencement of any development. The tree protection supervisor must notify the city arborist immediately should any tree damage occur on the site.

(7) *Inspections.* Tree protection inspections must be performed by a certified arborist or registered forester during construction. The inspections must be conducted prior to the commencement of development, immediately following the clearing and grubbing phase, immediately following the grading phase, and at the end of the project before a certificate of occupancy (commercial developments) is issued or the final plat approved (residential developments). The site must be inspected to ensure all tree protection regulations are being met and to identify any existing or developing tree-related problems that require treatment. An inspection report must be prepared and certified by the inspector and submitted to the city arborist. Any damage noted must be treated in accordance with the recommendation of the inspector prior to the issuance of a certificate of occupancy or approval of the final plat. The city arborist is authorized to require additional reports should he/she determine significant construction damage has occurred, the tree protection supervisor has failed to enforce minimum protection standards, or if other development processes, including but not limited to utility placement and building construction, may impact the tree save areas.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.60), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017)

Sec. 16-112. - Maintenance.

All maintenance activities performed on preserved or planted trees to be included in the tree density requirements must be performed in accordance with the most current professional standards, including, but not limited to, the standards described below. It is the responsibility of the property owner to ensure such work is in compliance. Should maintenance activities on the trees not be in compliance with such professional standards, the property owner will be responsible for replacing the damaged trees with new trees of an equivalent density value, based on the DBH at the time damage occurs.

(1) *Nursery stock.* All nursery stock must meet standards defined in the American Standard for Nursery Stock ANSI Z60.(1).

(2) *Pruning.* All pruning must be done in accordance with ANSI A300 (Part 1) Standards for Tree Care Operations—Pruning. Tree topping is not allowed. Crown reduction pruning must be used instead to reduce the height of a tree when necessary. Topped trees may not be counted toward tree density requirements.

(3) *Fertilization.* All tree fertilization must be performed in accordance with ANSI A 300 (Part 2) Standards for Tree Care Operations—Fertilization.

(4) *Cabling and bracing.* All cabling and bracing installation and maintenance must be performed in accordance with ANSI A300 (Part 3) Standards for Tree Care Operations—Cabling and Bracing.

(5) *Lightning protection.* All lightning protection installation and maintenance must be performed in accordance with ANSI A300 (Part 4) Standards for Tree Care Operations—Lightning Protection.

(6) *Safety.* All tree-related work must be performed in accordance with ANSI Z13(3)1 Standards for Tree Care Operations—Safe Work Practices.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.70), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015)

Sec. 16-113. - Alternative compliance.

The city arborist is authorized to approve alternate methods of compliance with the provisions of this division when he/she determines the overall intent of the division and/or specific guidelines can be met.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.80), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015)

Sec. 16-114. - Enforcement and penalties.

(a) *Enforcement.* It is city arborist's and his/her designee duty to enforce this section. The city arborist and his/her designee has the authority to revoke, suspend, or void any development permit and the authority to suspend all work on a site or any portion thereof.

(b) *Violation and penalties.* The person, firm, or corporation responsible for violating any of the provisions of this section may be deemed guilty of an ordinance violation. Each tree cut, damaged, or poisoned shall constitute a single offense and the responsible party shall be subject to a fine up to $1,000.00 per tree. The Dunwoody Municipal Court has jurisdiction to try offenses to these regulations.

(c) *Appeal.* Any person aggrieved or affected by any decision of the city arborist or his/her designee relating to the application of this section may appeal to the community development director for relief or reconsideration within 30 days from the date of the adverse determination by the city arborist. Decision by the community development director made pursuant to this division may be appealed to the zoning board of appeals (ZBA) subject to the process established in section 16-33.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.90), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017; Ord. No. 2018-07-13, § I, 7-23-2018; Ord. No. 2021-09-13, § III, 9-27-2021)

Sec. 16-115. - Additional information.

The following rules and regulations are approved by the city council from time to time and are kept and maintained by the community development department:

(1) Lists of approved street trees as listed in section 16-116;

(2) Standards for substantial building permits and tree removal permits; and

(3) Tree replacement and planting rules and regulations.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.100), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2018-07-13, § I, 7-23-2018)

Sec. 16-116. - General tree list and street trees.

		Growth Characteristics							Dunwoody Tree Classification				
Common Name (*Indicates native to Georgia)	**Scientific Name**	**Canopy Size Category**	**Mature Growth Form**	**Height**	**Growth Rate**	**Class**	**Flowering/Fruit/Nuts**	**Drought Tolerance**	***Street Tree (located between back of curb and sidewalk)***	***Understory Tree (Specimen - 6" dbh and larger)***	***Hardwood Tree (Specimen - 24" dbh and larger)***	***Softwood Tree (Specimen - 30" dbh and larger)***	**Characteristics and Ideal Locations**
American Beech*	*Fagus grandifolia*	Large	Oval	50—70 feet	Slow - Medium	Deciduous		Low	X		X		Riparian Zones and Drainage Areas.
American Elm	*Ulmus americana*	Large	Upright	100 feet	Medium	Deciduous		High	X		X		Road frontage-yard, Riparian Zones and Drainage Areas.
American Fringe (Grancy Grey Beard)	*Chionanthus virginicus*	Very Small	Oval	12—20 feet	Slow - Medium	Deciduous	X	Low	X	X			Road frontage-yard, Buffers, Utlity Corridors. Fragrant, lacy, white flowers in

													spring. Dark blue, grape-like clustered fruit.
American Holly	*Ilex opaca*	Very Small	Pyramidal	40—50 feet	Slow-Medium	Evergreen		High	X		X		Road frontage-yard, Buffers.
American Hornbeam (Ironwood, Blue Beech)*	*Carinus caroliniana*	Medium	Oval	20—40 feet	Slow	Deciduous		Medium	X	X			Parking Lots, Road Frontage-Yard, Riparian Zones and Drainage Areas, Buffers.
American Snowbell	*Stryrax americanus*	Very Small	Irregular	6—10 feet	Slow	Deciduous	X	Low	X	X			White, bell-shaped flowers in spring. Hairy, grayish-brown fruit in fall.
American Sycamore	*Platanus occidentalis*	Large	Oval	80—100 feet	Fast	Deciduous		Medium			X		Road frontage-yard. Parking lots, riparian zones.
American Yellowwood	*Cladrastis kentukea*	Medium	Upright	30—50 feet		Deciduous	X	Medium	X		X		White flower in spring, Road Frontage-yards, Parking Lots.

Ann Magnolia	*Magnolia liliflora* 'Nigra' *x stellate* 'Rosea'	Small	Spreading	8—10 feet	Medium		X	High	X	X			Deep purple-red blooms that resemble tulips in March.
Bald Cypress*	*Taxodium distichum*	Medium	Pyramidal	50—70 feet	Medium	Deciduous conifer		High	X		X		Road frontage-yard, Parking Lots, Buffers, Riparian Zones and Drainage Areas.
Black Tupelo*	*Nyssa sylvatica*	Large	Spreading-Oval	30—50 feet	Slow - Medium	Deciduous		Medium			X		Bluish-black fruit in late September to early October. Greenish-white flowers in spring.
Black Walnut	*Juglans nigra*	Large	Rounded	50—75 feet	Medium	Deciduous	X	Low	X		X		Edible nuts in early to mid-autumn. Road frontage-yard. Riparian zones.
Carolina Cherry Laurel	Primus caroliniana	Medium	Oval	15—36 feet	Medium	Evergreen	X	High		X			Stalked white-cream flowers in spring. Tiny black cherries in winter. Road

													frontage-yard, buffers.
Carolina Silverbell	*Halesia tetraptera*	Medium	Irregular	30—40 feet	Medium	Deciduous	X	Low	X				White blooms in April. Road frontage-yard, Parking lots, Riparian zones.
Chalkbark Maple	*Acer leucoderme*	Medium	Spreading	20—40 feet		Deciduous		High	X		X		Road frontage-yard, Parking Lots, Buffers
Chaste Tree	*Vitex angus-castus*	Very Small	Multi-stemmed	10—20 feet	Medium	Deciduous	X	High		X			Fragrant lilac blooms in summer. Road frontage-yard, parking lots, utility corridors.
Cherrybark Oak	*Quercus pagoda*	Large	Rounded	100—130 feet		Deciduous		Medium	X		X		Road frontage-yard, Parking Lots, Riparian and Drainage Areas
Chinese Evergreen Oak	*Quercus myrsinifolia*	Large	Rounded	30—50 feet	Slow	Evergreen	X	High			X		Acorns, Road frontage-yard.

Chinese Pistache	*Pistacia chinesis*	Small	Oval-Rounded	25—35 feet	Medium	Deciduous	X	High		X			Xeriscape tree. Greenish flowers in April-May.
Chinese Redbud	*Cercis chinesis*	Very Small	Irregular	8—15 feet		Deciduous	X	Medium		X			Rosy-purple spring blooms.
Chinkapin Oak	*Quercus muehlenbergii*		Rounded	40—50 feet	Slow - Medium	Deciduous	X	Medium	X		X		
Contorted Willow (Corkscrew Willow)	*Salix matsudana* 'tortuosa'	Small	Multi-stemmed	20—30 feet		Deciduous	X	Low		X			Pale yellow blooms from April - May. Raingarden
Crabapple	*Mains callaway*	Small	Rounded	15—25 feet	Slow	Deciduous	X	Medium	X	X			Pink buds to white blooms and bright red crabapples in April.
Crapemyrtle	*Lagerstroemia indica x* I. fauriei 'Tuscarora'	Very Small	Multi-stemmed	15 feet	Medium	Deciduous	X	High		X			Pink blooms in summer. Road frontage-yard, buffers, utility corridors.
Dawn Redwood	*Metasequoia glyptostroboides*	Medium	Pyramidal	70—200 feet	Fast	Deciduous conifer		Medium				X	

Deodar Cedar	*Cedrus deodara*	Medium	Pyramidal	40—70 feet	Medium	Evergreen		High				X	Reddish-brown oval cones.
Dolgo Crabapple	*Malus* x 'dolgo'	Small	Spreading	25—30 feet	Medium	Deciduous	X	Mediu m		X			White bloom in spring. Fruit in fall.
Downy Serviceberry	*Amelanchier arborea*	Small	Irregular	15—25 feet	Medium	Deciduous	X	Mediu m	X	X			White clustered blooms in March-April. Road frontage-yard, buffers, riparian zones, utility corridors.
Eastern Hophornbeam (American)	*Ostrya virginiana*	Medium	Oval	20—30 feet		Deciduous	X	High	X	X			Road frontage-yard, parking lots, Riparian zones. Papery capsules containing nuts. Sensitive to deicing salts.
Eastern Red Cedar (Aromatic Red Cedar)	*Juniperus virginiana*	Medium	Pyramidal	40—50 feet	Medium	Evergreen		High	X			X	Road frontage-yard, Parking Lots, Riparian and Drainage Areas, Buffers.

Eastern Redbud*	*Cercis canadensis*	Small	Spreading	20—30 feet	Medium	Deciduous	X	Mediu m	X	X			Rosy-pink flowers in April. Road frontage-yard, buffers, riparian, utility areas. Softwood.
Flowering Dogwood*	*Cornus florida*	Small	Spreading	15—30 feet	Medium	Deciduous	X	Low	X	X			White showy spring blooms, Bright red fruit in late summer and early fall. Road frontage- yard, buffers, utility corridors.
Georgia Oak*	*Quercus georgiana*	Large	Rounded	26—49 feet	Medium	Deciduous	X	Mediu m	X		X		Threatened species. Road frontage-yard. Pale reddish-green blooms in late spring. Acorns.
Ginkgo (Maidenhair)	*Ginkgo biloba (male)*	Large	Pyramidal	25—50 feet	Medium	Deciduous		High	X		X		Heat tolerant, Shade, Ornamental, Road frontage-yard

Goldenraintree	*Koelreuteria paniculata*	Small	Rounded	30—40 feet	Medium - Fast	Deciduous	X	High					Fruit like a three-sided lantern. Yellow blooms in summer. Road frontage-yards, parking lots, buffers.
Greenleaf Holly (American Holly)	*Ilex opaca* 'Greenleaf	Very Small	Pyramidal	20—25 feet	Slow	Broadleaf evergreen	X	High		X			Road frontage-yard, Parking lots, buffers. Greenish-white blooms in May. Bright red or orange berries in fall.
Hackberry*	*Celtis laevigata* 'Sugar'	Large	Irregular	60—80 feet	Medium	Deciduous	X	Low			X		Green blooms April - May. Dull, red fruit. Raingarden. Wind tolerant.
Hawthorn	*Crataegus virdis* 'Winter King'	Small	Spreading	25—35 feet	Slow-Medium	Deciduous	X	High	X	X			White flowers in spring, small red edible fruit in fall.
Higan Cherry	*Prunus subirtella* var. 'Autumnalis'	Small	Round-Symmetrical	20—35 feet		Deciduous	X	Medium		X			Pink blooms in April, sparodic blooms in Fall.

Japanese Apricot	*Prunus mume*	Small	Spreading	25 feet	Fast	Deciduous	X	Low		X			Pale pink fragrant flowers in early spring. Small yellow-orage, tart fruit.
Japanese Crabapple	*Malus florib unda*	Small	Rounded	15—25 feet	Medium	Deciduous	X	Low		X			Fragrant deep pink to red blooms. Yellow and red fruits in fall. Road frontage-yard, buffers, utility corridors.
Japanese Flowering Cherry (Yoshino Cherry)	*Prunus* x yedoensis	Small	Rounded	40—50 feet	Medium	Deciduous	X	Low			X		White-pink spring flowers. Road frontage-yard, Buffers, Utilitiy corridors.
Japanese Magnolia	*Magnolia* x soulangiana	Medium	Upright	15—25 feet	Medium	Deciduous	X	Low		X			Pink saucer-like blooms in late winter. Road frontage-yard, Utility corridors.
Japanese Maple	*Acer palmatum*	Small	Oval	15—20 feet	Slow	Deciduous		Low		X			Road frontage-yard, Utility corridors.

Japanese Zelkova	*Zelkova serrata*	Large	Upright	50—80 feet	Medium	Deciduous	X	High			X		Road frontage-yard, Parking Lots. Fruit in fall.
Japanese-Cedar	*Cryptomeria japonica* 'Yoshino'	Medium	Pyramidal	30—40 feet	Fast	Needled evergreen		High				X	Screen, wind break, Road Frontage-yards, Buffers
Kousa Dogwood (Japanese Dogwood)	*Cornus kousa*	Small	Rounded	15—25 feet	Slow - Medium	Deciduous	X	Low		X			White star-like spring blooms. Road frontage-yard, buffers, utility corridors.
Kwanzan Cherry	*Prunus serrulata* 'Kwanzan'	Small	Rounded	15—25 feet	Medium	Deciduous	X	Low		X			Deep-pink double blooms in April. Buffers and Utility corridors.
Lacebark Elm	*Ulmus parvifolia* 'Emer II' ALLEE	Large	Rounded to Spreading	60—70 feet	Fast	Deciduous	X	Mediu m			X		Green blooms in September.
Lacebark Elm	*Ulmus parvifolia* Athena	Large	Spreading	30—40 feet	Fast	Deciduous		High			X		
Laurel Oak	*Quercus hemisphaerica*	Large	Rounded	60—90 feet	Fast	Semi-evergreen		High			X		

Leyland Cypress	*Cupressocyparis lelandii*	Small	Pyramidal	60—70 feet	Fast	Evergreen		Medium				X	Buffers
Loblolly pine*	*Pinus taeda*	Large	Pyramidal	60—90 feet	Fast	Evergreen		Medium				X	
London Planetree	*Platanus x acerifolia*	Large	Irregular	75—100 feet	Medium	Deciduous	X	High			X		Red blooms in April. Yields pendulous ball-like clusters of tightly packed seeds.
Northern Red Oak	*Quercus rubra*	Large	Rounded	60—75 feet	Fast	Deciduous		Medium	X		X		Road frontage-yard, Parking Lots.
Nuttal Oak	*Quercus nuttallii*	Large	Rounded	100 feet	Fast	Deciduous		Medium	X		X		Road frontage-yard, Parking Lots
Okame Cherry	*Prunus* x 'okame'	Small	Upright-Rounded	20—30 feet	Fast	Deciduous	X	Medium		X			Early spring rosy pink blooms. Buffers.
Oklahoma Redbud	*Cercis reinformis* 'Oklahoma'	Small	Rounded	15—25 feet	Medium	Deciduous	X	High		X			Purple blooms in spring. Road frontage-yard, Parking Lots, Utility Corridors.

Overcup Oak	*Quercus lyrata*	Large	Rounded	45—70 feet	Medium	Deciduous		Medium	X		X		Road frontage-yard, Parking Lots, Riparian and Drainage Areas
Pawpaw	*Asiminia triloba*	Small	Pyramidal	35 feet	Slow	Deciduous	X	Low	X	X			Deep purple-red blooms that resemble tulips in March. Edible large, yellowish-green to brown fruit.
Pecan	*Carya illinoinensis*	Large	Upright	60' or greater	Slow	Deciduous	X	Low			X		Pecan nuts. Lifespan of 300+ years.
Pignut Hickory	*Carya glabra*	Large	Oval	100 feet	Slow	Deciduous		High	X		X		Road frontage-yard.
Pin Oak	*Quercus palustris*	Large	Pyramidal	60—70 feet	Fast	Deciduous	X	Medium			X		Produces yellow-green catkins 5"—7" long in April—May. Yields acorns.
Pond Cypress	*Taxodium ascendens*	Medium	Pyramidal	49—59 feet	Fast	Deciduous conifer		High	X		X		Sidewalks, ponds, swampy areas.

Post Oak	*Quercus stellata*	Large	Rounded	40—50 feet		Deciduous		High	X		X		Road frontage-yard
Purpleleaf Plum	*Prunus cerasifera*	Small	Rounded	25 feet	Medium	Deciduous	X	Mediu m		X			Pink and white blooms in spring. Road frontage-yard, Buffers, Utilitiy corridors.
Red Maple	*Acer rubrum* 'October Glory'	Medium	Rounded, Oval, Upright, and Erect	40—50 feet	Medium	Deciduous	X	Low	X		X		Small, red, clustered flowers winter to spring. Good for shade, and rain garden.
Red Sunset Maple	*Acer rubrum* 'Franksred'	Large	Pyramidal to Rounded	45—50 feet	Medium - Fast	Deciduous	X	Mediu m			X		Red clusters of small flowers winter to spring. Winged, reddish fruit in summer.
River Birch	*Betula nigra* 'bnmtf dura-heat	Medium	Pyramidal to Rounded	30—40 feet	Medium	Deciduous	X	Low	X		X		Brownish-green blooms April - May. Shade tree, rain garden, Riparian Zones.
Sassafras	*Sassafras albidum*	Medium	Oval/Roun ded	30—60 feet	Medium - Fast	Deciduous	X	High	X		X		Road frontage-yard, Buffers, Riparian Zones and Drainage Areas, Yellow

													flowers in early spring, Dark blue fruit in fall.
Scarlet Oak*	*Quercus coccinea*	Large	Rounded	60—80 feet	Medium	Deciduous	X	High	X		X		Road frontage-yard, Parking Lots, Acorns.
Shumard Oak	*Quercus shumardii*	Large	Rounded	60—80 feet	Medium	Deciduous		High	X		X		Road frontage-yard, Parking Lots, Acorns.
Smoke Tree, Common	*Cotinus coggygria*	Very Small	Oval	10—15 feet	Slow-Medium	Deciduous	X	High		X			Road frontage and utility corridors. Pink-Purple blooms in late spring.
Sourwood	*Oxydendrum arboreum*	Medium	Spreading	25—30 feet	Medium	Deciduous	X		X	X			Road frontage-yard. Parking lots. White, fragrant blooms June to early July. Oval shaped fruit. Can live 100—200 years.
Southern Magnolia	*Magnolia grandiflora*	Large	Pyramidal	60—80 feet	Medium		X	Mediu m	X		X		White blooms May-June. Road frontage-yard, buffers.

Southern Red Oak*	*Quercus falcata*	Large	Rounded	70—90 feet	Medium	Deciduous	X	High	X		X		Road frontage-yard, Parking Lots, Acorns.
Sparkleberry, Tree	*Vacciniuim arboreum*	Very Small	Irregular	15—20	Slow	Deciduous	X	Mediu m		X			Riparian zones and drainage areas. Utilitity corridors. White blooms in spring.
Star Magnolia	*Magnolia stellata*	Very Small	Multi-stemmed	15—20 feet	Medium		X	Mediu m		X			White, showy fragrant flowers in spring. Road frontage-yard, Utility Corridor.
Sugar Maple	*Acer saccharum* 'Legacy'	Large	Spreading	60—75 feet	Medium	Deciduous	X	Mediu m	X		X		Small greenish-yellow blooms April—May.
Swamp Laurel Oak*	*Quercus laurifolia*	Large	Rounded	65—80 feet	Medium	Semi-evergreen	X	Mediu m			X		Yellow-green bloom March to April. Acorns.
Sweetbay Magnolia	*Magnolia virginiana*	Medium	Oval	10—20 feet	Medium - Fast		X	Low	X	X			White lemon scented blooms May - June. Road frontage-yard, Parking lots, Buffers, Riparian zones.

Sweetgum*	*Liquidambar styracifula*	Large	Oval	60—75 feet	Medium - Fast	Deciduous	X	Low			X		Burr-like rounded fruit.
Trident Maple	*Acer buergerianum*	Small	Rounded	20—35 feet	Fast	Deciduous		Medium		X			Road frontage-yard, parking lots, buffers, utility corridors.
Tulip Poplar	*Liriodendron tulipfera*	Large	Oval	70—90 feet	Fast	Deciduous	X	Low			X		Yellow blooms with orange band from May to June.
Virginia Pine	*Pinus virginiana*	Medium	Irregular	15—40 feet	Slow	Evergreen conifer		High				X	
Walking Stick	*Corylus avellana* 'Contorta'	Very Small	Irregular	8—10 feet	Slow	Deciduous	X	Medium	X	X			Pale yellow-gray blooms in March—April. Nuts ripen in late August—September.
Washington Hawthorn	*Crataegus phaenopyrum*	Small	Rounded	25—30 feet	Slow	Deciduous	X	Medium		X			White blooms in spring and red berries in fall. Road frontage-yard, utility corridors.

Water Oak	*Quercus nigra*	Large	Rounded	50—80 feet	Fast	Deciduous	X	Medium			X		Acorns. Riparian zones.
Weeping Willow	*Salix babylonica*	Large	Rounded	30—40 feet	Fast	Deciduous	X	Medium			X		Yellow flowers in April—May. Road frontage-yard.
White Oak*	*Quercus alba*	Large	Rounded	50—80 feet	Slow - Medium	Deciduous	X	Medium	X		X		Road frontage-yard, Acorns.
Willow Oak	*Quercus phellos*	Large	Rounded	40—60 feet	Medium	Deciduous	X	High	X		X		Acorns, Road frontage-yard, Parking Lots Riparian Zones and Drainage Areas.
Winged Elm	*Ulmus alata*	Large	Upright	45—70 feet	Slow	Deciduous	X	High	X		X		Road frontage-yard, Parking Lots, Flowering in March and April.
Winterberry, Common	*Illex verticillata*	Very Small	Multi-stemmed	5—15 feet	Medium	Deciduous		Low	X	X			Buffers. Riparian Zones and Drainage Areas. Utilitiy Corridors.
Witchhazel	*Hamamelis virginiana*	Small	Spreading	15—30 feet	Medium	Deciduous	X	Medium	X	X			Fragrant yellow blooms October—December. Ornamental.

													Riparian Zones and Drainage Areas, Utility Areas.
Yellow Buckeye	*Aesculus flava (octandra)*	Large	Oval	60—75 feet	Medium	Deciduous	X	Medium	X		X		Yellow blooms in May. Pale brown fruit.

(Ord. No. 2018-07-13, § I, 7-23-2018)

Secs. 16-117—16-125. - Reserved.

APPENDIX A - TREE REPLACEMENT DENSITY FACTOR CALCULATIONS

The following abbreviations are used in the examples below:

TDF—Tree Density Factor

RTF—Remaining Tree Factor

RRD—Required Replacement Density

Step 1. Calculate the tree density factor (TDF) for the site multiplying the number of site acres by 20.

EXAMPLE: A 2.2 acre site has a TDF OF 2.2 × 20 = 44.

Step 2. Calculate the existing trees, which will remain, or the Remaining Tree Factor (RTF). These will remain on-site and be protected during construction. The RTF is determined by converting the DBH of individual existing trees to density factor units, using table .) These units are then totaled to determine the RTF for the site.

EXAMPLE: A total of 15 trees will remain on the 2.2 acres site in step 1. These trees include:

7, 12″ pines
3, 14″ pines
3, 18″ oaks
1, 20″ hickory
1, 30″ oak

When converted to density factor units using step 1, we arrive at the following values:

DBH	**UNITS**		**QUANTITY**		**# TREES**
12″	0.8	x	7	=	5.6
14″	1.1	x	3	=	3.3
18″	1.8	x	3	=	5.4
20″	2.2	x	1	=	2.2
30″	4.9	x	1	=	4.9
			RTF	=	**21.4**

The sum total of units, 21.4, is the RTF.

Step 3. Calculate the required replacement density (RRD) by subtracting RTF (step 2) from TDF (step 1).

RRD = TDF - RTF
EXAMPLE: RRD = 44 - 21.4
RRD = 22.6

Step 4. The RRD can be converted back to caliper inches using table 3. Any combination of transplantable trees can be used so long as their total density factor units will equal or exceed the RRD.

EXAMPLE: On the 2.2-acre site the following number and size of trees will be planted:

Number	**Size**	**Species**	**Density Factor**
15	6'	Pines	(12 x 0.4) = 6.0
20	2"	Red Maples	(20 x 0.5) = 10.0
7	6"	Oaks	(7 x 1.0) = 7.0
			23.0

23.0 is greater than the RRD of 22.6. Thus, the minimum requirements have been met.

TABLE 1. SAMPLE TREE DENSITY CALCULATION

Required TDF
2.2 acres × 20 units/acre = 44 units required
RTF (remaining tree factor)

SIZE	**UNITS**	**NUMBER**	**TOTAL UNITS**
24”	3.1	2	6.2
18”	1.8	10	18.0
10”	0.6	8	4.8
		TOTAL RTF	29.0

RRD (Required Replacement Density)

SIZE	UNITS	NUMBER	TOTAL UNITS
2”—3”	0.5	10	5.0
1”	0.4	100	40.0
		TOTAL RRD	45.0

RTF + RRD > or = TDF

29.0 + 45.0 = 74.0. Thus, the tree density requirement is satisfied.

TABLE 2.EXISTING TREES TO REMAIN. Conversion from DBH to density factor units for RTF, or remaining tree factor.

DBH	UNITS	DBH	UNITS	DBH	UNITS
1—4	0.1	22	2.6	37	7.5
5—7	0.3	23	2.9	38	7.9
8—9	0.5	24	3.1	39	8.3
10	0.6	25	3.4	40	8.7
11	0.7	26	3.7	41	9.2
12	0.8	27	4	42	9.6
13	0.9	28	4.3	43	10.1
14	1.1	29	4.6	44	10.6
15	1.2	30	4.9	45	11

16	1.4	31	5.2	46	11.5
17	1.6	32	5.6	47	12
18	1.8	33	5.9	48	12.6
19	2	34	6.3	49	13.1
20	2.2	35	6.7	50	13.6
21	2.4	36	7.1	51	14

TABLE (3) REPLACEMENT TREES. Conversion from caliper to density factor units for replacement trees. (1, 2)

Caliper: Single-Stem Deciduous Trees	**Density Units**
2”	0.5
3”	0.6
4”	0.7
5”	0.9
6”	1.0

Height: Multi-Stem Deciduous Trees	**Density Units**
12’ to 14’	0.5
14’ to 16’	0.6
16’ to 18’	0.7

18′ to 20′	0.9

Height: Evergreen Trees	**Density Units**
6′ to 8′	0.4
8′ to 10′	0.5
10′ to 12′	0.6
12′ or greater	0.7

Tree relocation: Replacement units will be granted to trees relocated on-site. Tree relocation is subject to city arborist and/or zoning enforcement officer approval.

(Ord. No. 2013-10-14, App. A, 10-14-2013)

APPENDIX B - TREE SELECTION

(1) Trees selected for planting must meet minimum requirements as provided below and in the American Standard of Nursery Stock.

(2) Trees selected for planting must be free from injury, pests, disease, or nutritional disorders.

(3) Trees selected for planting must be of good vigor. The determination of vigor is a subjective evaluation, and dependent upon species variability. The following criteria is generally used for the determination of vigor:

(4) Foliage should have a green or dark green color. Vigorous trees will have large leaves and dense foliage when compared to trees with poor vigor.

(5) Shoot growth for most vigorous trees will be at least one foot per year. At least one-half of the branches should arise from the top one-third and one-half from the center one-third.

(6) Bark texture can denote vigor. Smooth or shiny bark on the trunk and branches of a young tree usually signifies good vigor, conversely, rough and full bark could indicate poor vigor.

(7) Trunk taper. The trunks of vigorous trees will generally have an increase in diameter with a decrease in height. Trees with reverse tapers or no taper should be avoided.

(8) Root color. Young roots of most trees will be light in color.

(9) Trees selected for planting must be free of root defects. Two types of root defects generally occur:

(10) Kinked roots, in which taproots, major branch roots, or both are bent more than 90 degrees with less than 20 percent of the root system originating above the kink. A tree with such roots will probably bend at the soil line when released from a supporting stake.

(11) Circling or girdling roots which circle 80 percent or more of the root system by 360 degrees or more. A tree with such roots would ultimately have less than 20 percent of its system available for support.

(Ord. No. 2013-10-14, App. B, 10-14-2013)

APPENDIX C - TREE TRANSPLANTING

The transplanting of new trees can result in major injury to their root system. If proper transplanting techniques are employed, conditions will be more favorable for tree recovery, and the rate of attrition for newly planted trees will be reduced. Transplanting procedures must follow standards established by the International Society of Arboriculture in the Trees and Shrub Transplanting Manual, and the booklet by the Georgia Extension Service entitled "Plant Trees Right!" The following is a summary several of the more important considerations provided in the manual and booklet.

Preplanting considerations:

(1) Only healthy trees with a well-developed root system and a well-formed top, characteristic of the species should be planted.

(2) Trees selected for planting must be compatible with the specific site conditions.

(3) The ability of a species to regenerate a new root system and to become reestablished should be considered. Generally, deciduous trees should be planted in the fall after leaf drop, or in early spring before bud break. There are indications that bare root trees will reestablish more readily if planted in early spring just prior to bud break.

Planting procedures:

(1) Planting holes should be at least three times the diameter of the root ball.

(2) Trees should not be planted deeper than they were in their former location or container.

(3) Spade compacted bottom and sides of the planting hole should be roughed or scarified to allow the penetration of developing roots.

(4) Good water drainage from the bottom of the planting hole is essential for root regeneration.

(5) Once the transplanted tree is set, the hole should be backfilled with soil of good texture and structure. Traditionally, backfill material is comprised of a mix of negative soil, organic matter such as peat, and inorganic material such as perlite or vermiculite in a 1:1:1 ratio. There are indications that a backfill with native soil alone may be adequate.

(6) The addition of fertilizer to backfill soil can cause root injury, and is therefore not recommended. If fertilizer must be added, a low rate should be used. Approximately 1.5 pounds of nitrogen per cubic yard of backfill is recommended for bare root plants, and 2.5 pounds of nitrogen per cubic yard of backfill for balled and burlapped trees.

(7) The backfill should be gently tamped (but not compacted), and soaked for settling.

(8) The soil should be slightly mounded to allow for settling; a ridge or dike around the perimeter of the hole can facilitate watering.

(Ord. No. 2013-10-14, App. C, 10-14-2013)

APPENDIX D - PLANTING STANDARDS

(1) After selecting a suitable location, mark out a planting area that is five times the diameter of the planting ball. Use a rototiller or shovel to loosen and mix the soil in this entire area to a depth of about 12 inches.

(2) In the center of the prepared area, dig a shallow hole to set the tree or shrub. The hold should allow the root ball to sit on solid ground rather than loose soil. Once the ball is set the hole, its upper surface should be level with the existing soil.

(3) After the tree is properly situated, cut and remove the rope or wires holding the burlap in place and securing any part of the tree.

(4) Backfill around the root area, and gently firm the soil to prevent major air pockets. Do not pack the soil. Water can be used to help the soil settle and prevent overpacking. Rake the soil even over the entire area, and cover it with two to four inches of mulch. Maintaining the mulch layer carefully will improve tree growth substantially.

(5) Water berms or dikes are not recommended as they encourage abnormal root growth.

(6) It is best not to stake the tree, but if wind is a problem or the tree starts to lean, support it with a flexible stake so the trunk will sway in the wind. The movement is necessary for building the trunk's strength. Remove the stake and wire after one growing season since leaving wire or string around the tree can cause death.

(7) Do not wrap the trunk with "protective" tape. It will slow the tree's ability to adapt to the site and provide a home for insects. Tree bark needs air and sunlight in order to build a healthy protective sheath.

(Ord. No. 2013-10-14, App. D, 10-14-2013)

STATE OF GEORGIA
CITY OF DUNWOODY **ORDINANCE 2022-__-__**

AN ORDINANCE TO AMEND CHAPTER 16, DIVISION 6 (TREE PRESERVATION) OF THE CODE OF THE CITY OF DUNWOODY, GEORGIA TO MODIFY AND ADD PROVISIONS PERTAINING TO PERMITTED AND UNPERMITTED TREE REMOVAL ON SINGLE-FAMILY RESIDENTIAL PROPERTIES, SITE DENSITY REQUIREMENTS, AND FOR OTHER PURPOSES

WHEREAS, the City of Dunwoody is charged with preserving the health, safety and welfare of the citizens of the City; and

WHEREAS, the Mayor and City Council have determined that it is appropriate from time to time to modify the Code of Ordinances of the City of Dunwoody (the "Code") to further protect the public health, safety, and welfare of the citizens of Dunwoody; and

WHEREAS, a healthy tree canopy has long been recognized as improving health, livability, aesthetics, and land values in cities; and

WHEREAS, numerous studies show that living near trees provides environmental, physical, mental, and social health benefits; and

WHEREAS, the citizens of Dunwoody value trees and the benefits they bring to the community, and have expressed concerns regarding unpermitted tree removal from single-family residential properties; and

WHEREAS, the City of Dunwoody does not currently have a requirement for the removal of trees on single-family residential properties located outside of the City's 75-ft. stream buffer.

WHEREAS, the City of Dunwoody's extensive tree canopy is a well-recognized and integral part of the City's identity, and one that coincides with its designation as a "Tree City USA"; and

THEREFORE, BE IT ORDAINED by the Mayor and City Council of the City of Dunwoody, Georgia that the City's Code of Ordinances is amended as follows:

STATE OF GEORGIA
CITY OF DUNWOODY **ORDINANCE 2022-__-__**

Section I: Chapter 16, Article II, Division 6 of the Code relating to "Tree Preservation";

Sec. 16-105. - General.

(a) *Intent.* The intent of this section is to provide standards for the preservation of trees as part of the land development and building construction process for the purpose of making the City of Dunwoody a more attractive place to live, provide a healthy living environment, and to better maintain control of flooding, noise, glare and soil erosion.

(b) *Purpose.* The purpose of this section is to facilitate the preservation and/or replacement of trees as part of the land development, construction, and tree removal permit process as defined in section 16-106.

(c) *Benefits.* Benefits derived from tree protection and replanting include:

(1) Improved control of soil erosion;

(2) Moderation of stormwater runoff, and improved water quality;

(3) Interception of airborne particulate matter, and the reduction of some air pollutants;

(4) Enhanced habitat for desirable wildlife;

(5) Reduction of noise and glare;

(6) Climate moderation and the reduction of the heat island effect;

(7) Aesthetics, scenic amenity;

(8) Increased property value; and

(9) Assistance in traffic calming.

(d) *Applicability.* The terms and provisions of this section apply to any activity on real property which requires the issuance of a development permit, substantial building permit, or tree removal permit within the City of Dunwoody. No development permit or substantial building permit may be issued by the city without it being determined that the proposed development is in conformance with the provisions of these regulations.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.10), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017)

Editor's note— Ord. No. 2017-10-19, § I, adopted Oct. 9, 2017, renumbered former § 16-106 to § 16-105.

Sec. 16-106. - Tree removal permit.

(a) *Applicability.* The tree removal permit is established for tree removal occurring outside of a land development permit or substantial building permit. A tree removal permit is required for the removal of:

(1) Any hardwood with a diameter at breast height (DBH) of ten inches or greater, softwoods with a DBH of 20 inches or greater, and understory with a DBH of six inches or greater on non-residential, mixed-use, and multi-family zoned lots; and

(2) Any tree located within the city's 75-foot stream buffer~~.~~; and

(3) Any specimen tree from a single-family residential property as defined in Sec. 16-110(a)(1) with a condition that meets the requirements of Sec. 16-110(a)(2); and

(4) More than six hardwood or softwood trees, other than specimen trees, that meet the size requirements of Sec. 16-106(a)(1) from an owner-occupied single-family residential property within a single calendar year.

(b) *Requirements.* To obtain a tree removal permit, the owner/applicant shall submit the following information:

(1) A completed tree removal permit application;

(2) A site plan, or a detailed map sketch illustrating the species, approximate size, and location of each existing tree to be removed and preserved;

(3) Picture of each tree to be removed, including any particular evidence of dead, diseased, dying, insect-infested, or hazardous trees;

(4) Payment of the applicable tree removal permit fee as listed on the City of Dunwoody fee schedule; and

(5) In cases where the aforementioned information is not sufficient to accurately review the removal and replacement of trees, the city arborist may request additional information from the applicant (i.e. tree survey, tree replacement plan, third party arborist report, and/or planting plan).

(c) *Exemptions.* A tree removal permit is not required for the removal of:

(1) Any hardwood less than ten inches, softwood less than 20 inches, and understory trees less than six inches on residential, non-residential, mixed-use, and multi-family zoned lots, with exception of any tree located within the city's 75-foot stream buffer;

(2) Any tree as necessary for construction, repair, or maintenance of public assets, including but not limited to the right-of-way, public roads, utilities, or drainage structures;

(3) ~~Any~~ -Six or less non-specimen, hardwood or softwood trees found on single-family lots, located outside of the 75-foot city stream buffer; and

(4) Any trees damaged during the period of an emergency, such as a tornado, ice storm, wind storm or other act of nature whereby the community development director or his/her designee may waive the requirements of this section; and~~.~~

(5) Six or less u~~U~~nderstory trees found on single-family lots, located outside of the 75-foot city stream buffer.

(d) *Tree removal permit application.* The community development director and their designee(s) shall develop such forms as necessary to facilitate the tree removal permit application process.

(e) *Approval.* The city arborist will approve the removal of the tree(s) within five business days of receipt of a completed tree removal application, provided the following applicable standards are met:

(1) On non-residential, mixed use, and multi-family lots, the site plan and/or tree replacement plan must be sufficient to produce a total site density factor of 20 units per acre; and

(2) On single-family residential lots, the site plan must be sufficient to meet the site density requirements of Sec. 16-109(b)(2).

(3)~~(2)~~ For specimen trees located outside of a stream buffer ~~on non-residential, mixed use and multi-family lots~~, the tree replacement plan shall demonstrate that the removed trees will be replaced by species with potential for comparable size and quality as noted in section 16-110(d) "removal of specimen trees"; and

(4)~~(3)~~ Stream buffer tree(s) that are deemed dead, dying, diseased, insect-infested or hazardous.

(d) *Denial.* If tree(s) are denied removal, they may be appealed per section 16-114(c).

(Ord. No. 2017-10-19, § I, 10-9-2017; Ord. No. 2018-07-13, § I, 7-23-2018)

Sec. 16-107. - Permit procedure.

(a) *Submittal of tree protection plan.* All applications for a development permit or a substantial building permit must be accompanied by a tree protection plan prepared and sealed by a registered landscape architect, certified arborist, or registered forester. The tree protection plan must include the following information:

(1) *Tree survey.* The tree survey must be a to-scale map or site plan that has been prepared and sealed by a registered landscape architect, certified arborist, registered forester, registered surveyor, or registered engineer. The tree survey must include the following minimum requirements:

a. All specimen trees are to be located and labeled with their size and species. Their critical root zone must be delineated and the spot elevation at the base of their trunk must be indicated. They must also be labeled in a way to determine if they are intended for removal or preservation.

b. All trees with a DBH measurement of ten inches or larger over-story and six inches or greater for understory must be located and their size and species must be indicated.

c. Sampling methods may be used to determine tree density calculations for forested areas over five acres.

(2) *Definition of spatial limits.*

a. Limits of land-disturbance, clearing, grading, and trenching.

b. Tree protection zones.

c. Areas of revegetation.

d. Indication of staging areas for parking, material storage, concrete washout, debris burn, and other areas where tree protection may be affected.

e. Locations of existing and proposed structures, paving, driveways, cut and fill areas, detention areas, utilities, etc.

(3) *Detail drawings of tree protection measures (where applicable).*

a. Protective tree fencing;

b. Erosion control fencing;

c. Tree protection signs;

d. Transplanting specifications;

e. Tree wells and aeration systems;

f. Staking specifications; and

g. Other applicable drawings.

(4) *Tree density calculations.* See appendix A.

(5) *Installation and maintenance measures* Procedures and schedules for the implementation, installation, and maintenance of tree protection measures.

(b) *Site inspection.* An on-site inspection will be made by the city arborist prior to the commencement of any development activity.

(c) *Review.* All landscape plans, tree protection plans, and related documentation must be reviewed by the city arborist for conformance to the provisions of these regulations and either approved, returned for revisions, or denied within 30 days of receipt. If denied, the reasons for denial must be annotated on the landscape plan or otherwise stated in writing.

(d) *Permit issuance.* Issuance of the development permit or a substantial building permit is contingent upon approval of the required tree protection plan and landscape plan and an on-site inspection by the city arborist for tree protection measures.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.20), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2018-07-13, § I, 7-23-2018)

STATE OF GEORGIA
CITY OF DUNWOODY **ORDINANCE 2022-__-__**

Sec. 16-108. - Protected zones.

(a) Nothing in these regulations may be construed as allowing the removal of vegetation in a natural, undisturbed buffer required by zoning or land development regulations.

(b) Trees may not be removed from any protected zone. When preserving trees in a protected zone will result in a documented hardship, an appeal may be made to the community development director or the zoning board of appeals, pursuant to section 116-114(c). The documentation proving the hardship must be submitted as part of the tree protection plan and submitted variance application.

(c) When no trees are present in a protected zone or when it is proposed that any portion of a protected zone be disturbed, it is the responsibility of the owner/developer to landscape the areas (where improvements are not constructed) with trees or other plant materials.

(d) Trees may not be removed from a floodplain or stream buffer except as follows:

(1) Those trees found to be hazardous, dead, diseased, or insect-infested by the city arborist as prescribed in section 16-106; and

(2) As necessary for construction, repair, or maintenance of public roads, utilities, or drainage structures.

(e) No person shall intentionally or unintentionally damage, cut, carve, transplant, or remove any tree in a stream buffer; attach any rope, wire, nails; allow gaseous liquid or solid substance which is harmful to such trees to come in contact with them; or set fire or permit any fire to burn when such fire or the heat thereof will injure any portion of any tree.

(f) No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.30), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017; Ord. No. 2018-07-13, § I, 7-23-2018)

Editor's note— Ord. No. 2018-07-13, § I, adopted July 23, 2018, changed the title of § 16-108 from "Tree removal" to read as herein set out.

STATE OF GEORGIA
CITY OF DUNWOODY **ORDINANCE 2022-__-__**

Sec. 16-109. - Tree replacement and revegetation.

(a) *Applicability.* Replacement of trees in the minimum required landscape areas, as determined by this section, must occur under the following conditions:

(1) To establish the minimum tree density requirements for the site.

(2) Where grading occurs outside the buildable area of the lot.

(3) If the buildable area of the lot leaves no protected zone.

(4) If no trees are present within an existing protected zone.

(5) Where specimen trees or specimen stands of trees within the buildable portion of the lot are to be removed.

(6) Where specimen trees or specimen stands of trees, and trees within otherwise designated tree protective zones have been irreparably damaged or removed through development or construction activities.

(b) *Replacement quantity.*

(1) Except as specified for single-family residential lots in subsection (b)(2), the quantity of replacement trees on a site must be sufficient to produce a total site tree density factor of no less than 20 density units per acre (Note: the terms unit and tree are not interchangeable). Procedures for determining the site density requirements and the subsequent tree replacement requirements are provided in appendix A. A required buffer or trees located in the floodplain may not be counted towards tree density. Understory trees may constitute no more than 25 percent of the required replacement trees, but lots smaller than 8,000 square feet in area are exempt from this limit.

(2) Not including trees that are located within the 75-foot stream buffer, t~~T~~he following number of overstory trees must be planted or preserved on all single-family residential lots developed in the city:

Lot Size	**Number of Required Trees**
≤8,000 square feet	1 tree
8,001 to 15,000 square feet	3~~2~~ trees
15,001 to 20,000 square feet	4~~3~~ trees
20,001 to 25,000 square feet	5~~4~~ trees
25,001 to 30,000 square feet	6~~5~~ trees

≥30,001 square feet	1 tree per 5,000 square feet of lot size

(c) *Spacing.* The spacing of replacement trees must be compatible with spatial limitations, and within responsible considerations towards potential species size.

(d) *Specimen trees.* All reasonable efforts be made to save specimen trees. ("Reasonable effort" includes alternate building design, building location, parking area layout, parking area location, water retention location and equivalent or similar measures).

(e) *Tree save areas.* Tree save areas are encouraged and will be given credit of up to 50 percent individual lot requirements when the number of trees in the tree save areas is equal to or greater than the total number of trees required on the total number of lots within the subdivision.

(f) *Tree replacement fund.* Occasionally, the tree replacement requirements of this section cannot be met because a project site will not accommodate the required density of trees. In this case, the city arborist is authorized to approve a contribution to the City of Dunwoody Tree Replacement Fund. The following standards have been established for administering these contributions:

(1) The city arborist must review and approve all requests for alternative compliance. In no instance may 100 percent of the required site density be met through alternative compliance. As many trees as can reasonably be expected to survive must be planted on the site in question.

(2) No permit may be issued until the required contribution has been made to the tree replacement fund.

(3) The amount of the contribution must be determined from the fee schedule for the community development department.

(4) The City of Dunwoody Tree Replacement Fund must be used for planting trees on public property. Funds may be used for the purchase of trees, installation of trees and irrigation, and the purchase of mulch and soil amendments for the planted areas.

(5) Species selected for replacement must be quality specimens and must be ecologically compatible with the specifically intended growing site. No single tree species may be used for more than 35 percent of replacement trees. Evergreens may not be used for more than 25 percent of the trees in non-buffer areas. Standards for transplanting and selecting quality replacement stock must be in accordance with standards of the International Society of Arboriculture, National Association of Arborists, American Standard for Nursery Stock and appendix B.

(6) Understory replacement trees may account for no greater than 25 percent of the required tree density units. The city arborist is authorized to approve the additional use of understory trees for meeting density requirements on

single-family lots if the size and/or layout of the lot does not allow for large overstory trees.

(7) Species selection and replacement densities are subject to approval by the city arborist.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.40), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017)

Sec. 16-110. - Specimen and special trees.

(a) *Criteria.* Some trees on a site warrant special consideration and encouragement for preservation. These trees are referred to as specimen or special trees. The following criteria are used by the city arborist to identify specimen and special trees. Both the size and condition must be met for a tree to qualify.

(1) *Tree size.*

Criteria	**Special Trees**	**Specimen Trees**
Minimum size for hardwoods	14" to 23" DBH	24" DBH
Minimum size for softwoods	20" to 29" DBH	30" DBH
Minimum size for understory trees	4" to 5" DBH	6" DBH
Minimum Life Expectancy	25 years	15 years

(2) *Tree condition.*

a. Relatively sound and solid trunk with no extensive decay.

b. No more than one major and several minor dead limbs.

c. No major insect or pathological problems.

d. No major pruning deficiencies, i.e. topping.

e. At least 75 percent of the critical root zone in a natural, undisturbed state.

(b) *Tree density credit.* In order to encourage the preservation of specimen and special trees and the incorporation of these trees into the design of projects, additional density credit will be given for specimen and special trees which are

successfully saved and maintained. Credit for any specimen or special tree thus saved would be one and one-half times the assigned unit value shown in appendix A. Should the property owner retain the services of a certified arborist to improve the quality of the trees (services include, but are not limited to, installation of cabling and bracing, installation of lighting protection, corrective pruning, removal of deadwood, supplemental irrigation, introduction of mycorrhizae, etc.), the density credit will be increased to two times the assigned value designated in appendix A. The property owner must supply a letter of commitment from the certified arborist and/or provide documentation of services provided in order to receive the increased density credit.

(c) *Preservation of tree stands.* The city arborist may identify and require the preservation of a tree stand if it contains one or more specimen or special trees and the trees are interlocked with other members of the stand in such a manner as to imperil the individual tree if other members of the stand were to be removed.

(d) *Removal of specimen trees.* All specimen trees must be replaced by species with potential for comparable size and quality with three-inch caliper or larger trees at a density of one and one-half times the unit value of the tree removed; for example, a 30-inch DBH specimen tree (4.9 density units) must be replaced with 7.35 units. Specimen tree replacement density is in addition to the minimum required density for the site.

(1) Any specimen tree which is fatally damaged during construction, as determined by the city arborist, or removed without the appropriate review and approval of the city arborist, must be replaced with four-inch caliper or larger trees with a total density up to three times the unit value of the tree removed. Size alone will determine whether a tree was of specimen quality if the tree is removed without approval. Additionally, the area that encompassed the critical root zone of the specimen tree must remain undisturbed to allow for the planting of replacement trees.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.50), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2018-07-13, § I, 7-23-2018)

STATE OF GEORGIA
CITY OF DUNWOODY **ORDINANCE 2022-__-__**

Sec. 16-111. - Tree protection measures.

The following minimum tree protection measures must be in place for all tree save areas:

(1) *Tree protection fencing.* Trees identified for preservation must have protection fencing that is a minimum of four feet high installed at the edge of the critical root zones. The city arborist is authorized to require the installation of four-foot fencing in those areas where the likelihood of possible encroachment occurs. All tree protection zones must be designated as such with signage posted visibly on all sides of the fenced area. Signs requesting workers' cooperation and compliance with tree protection standards are recommended at the site entrance(s).

(2) *Silt fences.* All tree protection zones must be designed to prevent the sedimentation of erosion material. Silt fences must be placed along the outer uphill edges of tree protection zones at the development interface.

(3) *Encroachment.* No person may encroach into the tree protection zones. Construction activities, including but not limited to, parking, vehicle and foot traffic, material storage, concrete washout, debris burning, and other activities must be arranged so as to prevent disturbance within the protected areas.

(4) *Utilities.* Reasonable efforts must be made to locate utility lines along corridors between tree protection zones. If utility lines must encroach into the protection zones, they must be installed by tunneling rather than trenching.

(5) *Maintenance of tree protection.* All tree protection devices must remain in fully functioning condition until the certificate of occupancy is issued.

a. Any tree, designated for preservation, which is negligently damaged during construction or removed without the appropriate review and approval, as determined by the city arborist, must be treated in accordance with the National Arborists Association Standards. If fatally damaged, the tree(s) must be replaced with four-inch caliper trees equal to the unit value of the tree removed. Any specimen tree damaged as described above must be replaced with trees equal to three times the unit value of the tree removed.

b. All tree protection zones must be mulched with at least four inches and not more than eight inches of organic mulch, such as pine straw, wood chips, tree leaves, or compost.

c. Construction activity is prohibited inside the tree save areas, including but not limited to, grading, paving, and construction of buildings and other structures.

d. The site must be designed and maintained in a manner to ensure proper drainage in tree save areas during and after construction.

(6) *Tree protection supervisors.* The developer must designate a tree protection supervisor. This person must demonstrate knowledge in the area of tree protection practices during construction and must be on-site to ensure tree protection measures are enforced. The tree protection supervisor must participate in a pre-construction conference with the city prior to the commencement of any development. The tree protection supervisor must notify the city arborist immediately should any tree damage occur on the site.

(7) *Inspections.* Tree protection inspections must be performed by a certified arborist or registered forester during construction. The inspections must be conducted prior to the commencement of development, immediately following the clearing and grubbing phase, immediately following the grading phase, and at the end of the project before a certificate of occupancy (commercial developments) is issued or the final plat approved (residential developments). The site must be inspected to ensure all tree protection regulations are being met and to identify any existing or developing tree-related problems that require treatment. An inspection report must be prepared and certified by the inspector and submitted to the city arborist. Any damage noted must be treated in accordance with the recommendation of the inspector prior to the issuance of a certificate of occupancy or approval of the final plat. The city arborist is authorized to require additional reports should he/she determine significant construction damage has occurred, the tree protection supervisor has failed to enforce minimum protection standards, or if other development processes, including but not limited to utility placement and building construction, may impact the tree save areas.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.60), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017)

Sec. 16-112. - Maintenance.

All maintenance activities performed on preserved or planted trees to be included in the tree density requirements must be performed in accordance with the most current professional standards, including, but not limited to, the standards described below. It is the responsibility of the property owner to ensure such work is in compliance. Should maintenance activities on the trees not be in compliance with such professional standards, the property owner will be responsible for replacing the damaged trees with new trees of an equivalent density value, based on the DBH at the time damage occurs.

(1) *Nursery stock.* All nursery stock must meet standards defined in the American Standard for Nursery Stock ANSI Z60.(1).

(2) *Pruning.* All pruning must be done in accordance with ANSI A300 (Part 1) Standards for Tree Care Operations—Pruning. Tree topping is not allowed. Crown reduction pruning must be used instead to reduce the height of a tree when necessary. Topped trees may not be counted toward tree density requirements.

(3) *Fertilization.* All tree fertilization must be performed in accordance with ANSI A 300 (Part 2) Standards for Tree Care Operations—Fertilization.

(4) *Cabling and bracing.* All cabling and bracing installation and maintenance must be performed in accordance with ANSI A300 (Part 3) Standards for Tree Care Operations—Cabling and Bracing.

(5) *Lightning protection.* All lightning protection installation and maintenance must be performed in accordance with ANSI A300 (Part 4) Standards for Tree Care Operations—Lightning Protection.

(6) *Safety.* All tree-related work must be performed in accordance with ANSI Z13(3)1 Standards for Tree Care Operations—Safe Work Practices.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.70), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015)

Sec. 16-113. - Alternative compliance.

The city arborist is authorized to approve alternate methods of compliance with the provisions of this division when he/she determines the overall intent of the division and/or specific guidelines can be met.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.80), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015)

Sec. 16-114. - Enforcement and penalties.

(a) *Enforcement.* It is city arborist's and his/her designee duty to enforce this section. The city arborist and his/her designee has the authority to revoke, suspend, or void any development permit and the authority to suspend all work on a site or any portion thereof.

(b) *Violation and penalties.* The person, firm, or corporation responsible for violating any of the provisions of this section may be deemed guilty of an ordinance violation. Each tree cut, damaged, or poisoned shall constitute a single offense and the responsible party shall be subject to a fine up to $1,000.00 per tree. The Dunwoody Municipal Court has jurisdiction to try offenses to these regulations.

(c) *Appeal.* Any person aggrieved or affected by any decision of the city arborist or his/her designee relating to the application of this section may appeal to the community development director for relief or reconsideration within 30 days from the date of the adverse determination by the city arborist. Decision by the community development director made pursuant to this division may be appealed to the zoning board of appeals (ZBA) subject to the process established in section 16-33.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.90), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-10-19, § I, 10-9-2017; Ord. No. 2018-07-13, § I, 7-23-2018; Ord. No. 2021-09-13, § III, 9-27-2021)

STATE OF GEORGIA
CITY OF DUNWOODY **ORDINANCE 2022-__-__**

Sec. 16-115. - Additional information.

The following rules and regulations are approved by the city council from time to time and are kept and maintained by the community development department:

(1) Lists of approved street trees as listed in section 16-116;

(2) Standards for substantial building permits and tree removal permits; and

(3) Tree replacement and planting rules and regulations.

(Ord. No. 2013-10-14, 1(Exh. A § 16-8.100), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2018-07-13, § I, 7-23-2018)

Section 2: This Amendment shall become effective immediately upon its adoption by the City Council and incorporated into the Code of the City of Dunwoody, Georgia. This Amendment hereby repeals all conflicting ordinances and amendments.

SO ORDAINED, this ___ day of _____, 2022.

Approved:

_____
Lynn Deutsch, Mayor

ATTEST:

_____
Sharon Lowery, City Clerk
(Seal)

Approved as to Form and Content:

_____
City Attorney

DIVISION 2. - DEFINITIONS

Sec. 16-301. - Terms defined.

For this division, the terms below have the following meanings:

The words and terms expressly defined in this division have the specific meanings assigned, unless the context clearly indicates another meaning. Other terms used but not defined in this division shall be interpreted based on how such terms are defined and used in the GSMM and the City of Dunwoody's MS4 permit.

(a) *Terms beginning with "A."*

Accessory structure means a structure, the use of which is customarily incidental and subordinate to that of the principal building of the same lot, such as a detached garage, toolshed or gazebo.

Accessory use means a use customarily incidental and subordinate to the principal use of the principal building or to the principal use of the premises.

Addition (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected to a common load-bearing wall other than a firewall. Any walled and roofed addition that is connected by a firewall or is separated by independent perimeter load-bearing walls is considered new construction.

Adjacent to the future-conditions floodplains means those areas located within the defined horizontal distance from the future-conditions floodplain boundary that are at or lower in elevation than either three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is higher, unless the area is hydraulically independent (meaning absolutely no connection to the flooding source such as through pipes, sewer laterals, down drains, foundation drains, ground seepage, overland flow, gated or valved pipes, excavated and backfilled trenches, etc. with no fill or other manmade barriers creating the separation).

Administrator means the person appointed to administer and implement this division on post-construction stormwater management for new development and redevelopment in accordance with section 16-91(b)(4).

Aggrieved person means a person whose property is the subject of the action appealed from or a person who has a substantial interest in the action appealed from, who is in danger of suffering special damage or injury not common to all property owners similarly situated.

Agricultural operations means those practices involving the establishment, cultivation or harvesting of products of the field or orchard; the preparation and planting of pasture land and farm ponds; dairy operations; livestock and poultry management practices; and the construction of farm buildings.

Alley means a minor way that is used primarily for vehicular service access to the back or side of properties otherwise fronting on a street.

Applicant means any person submittng a land development application for approval.

Area of shallow flooding means a designated AO or AH zone on the flood insurance rate map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard. See "special flood hazard area."

Arterial (street) means a street, road or highway shown as an arterial in the City of Dunwoody Comprehensive Transportation Plan.

As-built drawings means amended site plans specifying the location, dimensions, elevations, capacities and operational capabilities of public improvements, including water, sewer, road and drainage structures and stormwater management facilities as they have been constructed.

(b) *Terms beginning with "B."*

Bank (stream bank) means as measured horizontally from that point where vegetation has been wrested by normal stream flow or wave action.

Base flood means a flood that has a one percent chance of being equaled or exceeded in any given year (also called the 100-year flood).

Base flood elevation means the highest water surface elevation anticipated at any given point during the base flood.

Basement means any area of a building having its floor below ground level on three or more sides.

Best management practices (BMPs) means both structural devices to store or treat stormwater runoff and non-structural programs or practices which are designed to prevent or reduce the pollution of the waters of the State of Georgia.

BMP landscaping plan means a design for vegetation and landscaping that is critical to the performance and function of the BMP including how the BMP will be stabilized and established with vegetation. It shall include a layout of plants and plant names (local and scientific).

Bicycle lane means that part of a street or highway adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles.

Block means a piece or parcel of land entirely surrounded by public highways or streets, other than alleys. In cases where the platting is incomplete or disconnected, the community development director may delineate the outline of the block.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting system.

Buffer area means that portion of a lot set aside for open space and/or visual screening purposes, pursuant to the applicable provisions of this Code and all conditions of zoning, to separate different use districts or to separate uses on one property from uses on another property of the same use district or a different use district.

Buffer, stream, means the portion of a lot and/or area of land immediately adjacent to the banks of streams as regulated by the land development regulations of this Code.

Buffer zone, state, means the area of land immediately adjacent to the banks of state waters in its natural state of vegetation that facilitates the protection of water quality and aquatic habitat.

Buildable area means the area of a lot remaining after all applicable zoning and land development regulations have been met (i.e., that portion of a lot where a building may be located).

Builder means a person who constructs a structure or dwelling for residential occupancy by humans.

Building. See "structure".

Building, elevated. See "elevated building."

Building permit means required written permission issued by the community development director or a building inspector for the construction, repair, alteration or addition to a structure.

Building setback line means the minimum horizontal distance required between the public right-of-way or the utility easement abutting a private street and the principal building or structure on a lot or any projection thereof, except projections that are authorized exceptions to building setback line requirements in the city zoning ordinance and any zoning conditions approved by the city council pursuant thereto. The size of the utility easement for a private street is equal to the required size of the public right-of-way and may not be any smaller in width or length than what would be required for a public right-of-way.

(c) *Terms beginning with "C."*

Caliper means the diameter of a tree trunk, taken six inches above the ground for up to and including four-inch caliper size, and 12 inches above the ground for larger sizes.

Certified arborist means an individual who has been certified as an arborist by the International Society of Arboriculture and maintains the certification in good standing.

Channel means a natural or artificial watercourse with a definite bed and banks that conveys continuously or periodically flowing water.

Channel protection means the protection of stream channels, in accord with the Georgia Stormwater Management Manual, from bank and bed erosion and degradation by preserving or restoring the applicable stream buffer, by providing extended detention and by integrating erosion prevention measures such as energy dissipation and velocity control.

City arborist means the community development director or the community development director's designee having primary administration and enforcement responsibilities for landscaping and tree regulations.

City manager means the city manager of the City of Dunwoody.

City of Dunwoody Stormwater Management Manual means the Georgia Stormwater Management Manual.

Collector street means a street or road designated as a collector street in the City of Dunwoody Comprehensive Transportation Plan.

Commission means the Georgia Soil and Water Conservation Commission (GSWCC).

Comprehensive plan means the comprehensive plan adopted by the city council, as it may be amended from time to time, that divides the city into land use categories and that constitutes the official policy of the city regarding long-term planning and use of land.

Construction means any alteration of land for the purpose of achieving its development or changed use, including particularly any preparation for, building of or erection of a structure.

Construction waste means waste building materials and rubble resulting from construction, remodeling, repair and demolition operations on pavements, houses, commercial buildings and other structures. Such waste includes, but is not limited to, asbestos-containing waste, wood, tree stumps, tree tops, bricks, metal, concrete, wall board, paper, cardboard, glass, wire, plastics and other typical construction waste products and refuse.

CPESC means certified professional in erosion and sediment control with current certification by EnviroCert, Inc. which is also referred to as CPESC or CPESC, Inc.

Critical root zone means a circular region measured outward from a tree trunk representing the essential area of roots that must be maintained or protected for the tree's survival. The critical root zone encompasses one foot of radial distance for every one inch of the tree's DBH, with a minimum radius of eight feet.

Crosswalk means a right-of-way within a block dedicated to public use, ten feet or more in width, intended exclusively for pedestrians and nonmotorized transportation and that is designed to improve or provide access to adjacent roads or lots.

Crown reduction pruning means a method of pruning to reduce the height or spread of a tree by performing appropriate pruning cuts.

Cut means a portion of land surface or area from which earth has been removed or will be removed by excavation or the depth below original ground surface to excavated surface. Also known as "excavation."

(d) *Terms beginning with "D."*

DBH (diameter at breast height) means the diameter of a tree trunk measured in inches at a height of four and one-half feet above the ground. If a tree splits into multiple trunks below four and one-half feet, then the trunk is measured at its most narrow point beneath the split.

Density factor means a unit of measurement used to calculate the required tree coverage on a site.

Design professional means a professional licensed by the State of Georgia in the field of: engineering, architecture, landscape architecture, forestry, geology, or land surveying; or a person that is a certified professional in erosion and sediment control (CPESC) with a current certification by EnviroCert, Inc. Design professionals shall practice in a manner that complies with applicable Georgia law governing professional licensure.

Detached means being separated from a principal structure by a minimum of three feet.

Detention means the temporary storage of stormwater runoff in a stormwater detention facility for the purpose of controlling the peak discharge.

Detention facility means a structure designed for storage and gradual release of stormwater runoff at controlled rates.

Development means new or redevelopment.

Development permit means a permit issued by the City of Dunwoody that authorizes the commencement of development on a specific parcel of land.

District means the DeKalb Soil and Water Conservation District.

Division means the Environmental Protection Division (EPD) of the Department of Natural Resources.

DNR means the Georgia Department of Natural Resources.

Drainage means the removal of surface or subsurface water from a given area, either by gravity or by pumping, commonly applied herein to surface water.

Drainage plan means a plan prepared using appropriate and commonly accepted engineering standards that specifies the means for alteration or development of a drainage system.

Drainage structure means a device composed of a virtually non-erodible material such as concrete, steel, plastic or other such material that conveys water from one place to another by intercepting the flow and carrying it to a release point for stormwater management, drainage control or flood control purposes.

Drainage system means the surface and subsurface system for the removal of water from the land, including, but not limited to, both the natural elements of streams, marshes, swales and ponds, whether of an intermittent or continuous nature and the manmade element that includes culverts, ditches, channels and detention facilities that comprise the storm drainage system.

(e) *Terms beginning with "E."*

Elevated building means a non-basement building built to have the lowest floor of the lowest enclosed area elevated above ground level by means of fill, solid foundation perimeter walls, pilings, columns, piers or shear walls that are adequately anchored so as not to impair the structural integrity of the building during a base flood event.

Encroachment means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain that may impede or alter the flow capacity of a floodplain.

EPD means the Environmental Protection Division of the Georgia Department of Natural Resources.

Erosion means the process by which land surface is worn away by the action of wind, water, ice or gravity.

Existing construction means any structure for which the "start of construction" commenced before October 14, 2009 the effective date of floodplain management regulations adopted by this community.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads) is completed before October 14, 2009, the effective date of floodplain management regulations adopted by this community as a basis for community participation in the National Flood Insurance Program.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads).

Extended detention means the detention of stormwater runoff for an extended period of time.

Extreme flood protection means measures taken to prevent adverse impacts from large low-frequency storm events with a return frequency of 100 years or more.

(f) *Terms beginning with "F."*

Fill means a portion of land surface to which soil or other solid material has been added; the depth above the original ground surface or an excavation.

Final stabilization means all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures, 100 percent of the soil surface is uniformly covered in permanent vegetation with a density of 70 percent or greater, or landscaped according to the plan (uniformly covered with landscaping materials in planned landscape areas), or equivalent permanent stabilization measures as defined in the manual (excluding a crop of annual vegetation and seeding of target crop perennials appropriate for the region). Final stabilization applies to each phase of construction.

Finished grade means the final elevation and contour of the ground after cutting or filling and conforming to the proposed design.

Flooding means a volume of surface water that exceeds the banks or walls of the BMP or channel and overflows onto adjacent land:

Flood hazard boundary map (FHBM) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated the special flood hazard areas as zone A.

Flood insurance rate map (FIRM) means an official map on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

Flood insurance study means the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the flood boundary floodway map and the water surface elevation of the base flood.

Floodplain means any land area susceptible to flooding.

Floodplain coordinator means the individual appointed to administer and enforce the flood protection regulations of article II, division 8.

Floodproofing means any combination of structural and nonstructural additions, changes or adjustments to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway means the channel of a river or other watercourse and the adjacent areas of the floodplain that is necessary to contain and discharge the base flood flow without cumulatively increasing the base flood elevation more than one foot; sometimes referred to as the "regulatory floodway."

Floor means the top surface of an enclosed area in a building, including basement (i.e., the top of slab in concrete slab construction or top of wood flooring in wood frame construction). The term does not include the floor of a garage used solely for parking vehicles.

Frontage, lot means the distance for which the front boundary line of the lot and the street line are coincident.

Functionally dependent use means a use that cannot perform its intended purposes unless it is located or carried out in close proximity to water.

Future-conditions flood means the flood having a one-percent chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100-year future-conditions flood.

Future-conditions flood elevation means the flood standard equal to or higher than the base flood elevation. The future-conditions flood elevation is defined as the highest water surface anticipated at any given point during the future-conditions flood.

Future-conditions floodplain means any land area susceptible to flooding by the future-conditions flood.

Future-conditions hydrology means the flood discharges associated with projected land-use conditions based on a community's zoning map, comprehensive land-use plans and/or watershed study projections, and without consideration of projected future construction of flood detention structures or projected future hydraulic modifications within a stream or other waterway, such as bridge and culvert construction, fill and excavation.

(g) *Terms beginning with "G."*

Grading means altering the shape of ground surfaces to a predetermined condition; this includes stripping, cutting, filling, stockpiling and shaping or any combination thereof and includes the land in its cut or filled condition.

Ground elevation means the original elevation of the ground surface prior to cutting or filling.

GSMM means the latest edition of the Georgia Stormwater Management Manual, Volume 2: Technical Handbook, and its Appendices.

(h) *Terms beginning with "H."*

Hardwood tree means a tree that does not bear either needles or cones. The term hardwood is based on the colloquialism and does not reflect any true qualities of the tree.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to construction, next to the proposed foundation of a building.

Historic structure means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the

Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary of the Interior to qualify as a registered historic district;

(3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

(4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program as determined by the Secretary of the Interior or directly by the Secretary of the Interior in states without approved programs. Hydrologic soil group (HSG) means a Natural Resource Conservation Service classification system in which soils are categorized into four runoff potential groups. The groups range from group A soils, with high permeability and little runoff produced, to group D soils, which have low permeability rates and produce much more runoff.

Hotspot means a land use or activity on a site that has the potential to produce higher than normally found levels of pollutants in stormwater runoff. As defined by the administrator, hotspot land use may include gasoline stations, vehicle services and maintenance areas, industrial facilities (both permitted under the industrial stormwater general permit and others), material storage sites, garbage transfer facilities, and commercial parking lots with high-intensity use.

Hydrologic soil group (HSG) means a natural resource conservation service classification system in which soils are categorized into four runoff potential groups. The groups range from group A soils, with high permeability and little runoff produced, to group D soils, which have low permeability rates and produce much more runoff.

(i) *Terms beginning with "I."*

Impervious surface means any surface composed of any material that significantly impedes or prevents the natural infiltration of water into the soil.

Industrial stormwater general permit means the National Pollutant Discharge Elimination System (NPDES) permit issued by Georgia Environmental Protection Division to an industry for stormwater discharges associated with industrial activity. The permit regulates pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies based on Standard Industrial Classification (SIC) Code.

Infiltration means the process of percolating stormwater runoff into the subsoil.

Inspection and maintenance agreement means a written agreement providing for the long-term inspection, operation, and maintenance of the stormwater management system and its components on a site.

(j) *Terms beginning with "J."*

RESERVED

(k) *Terms beginning with "K."*

RESERVED

(l) *Terms beginning with "L."*

Land development application means the application for a land development permit on a form provided by the city along with the supporting documentation required in section 16-94(b).

Land development permit means the authorization necessary to begin construction-related, land-disturbing activity.

Land-disturbing activity means any activity which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands within the state, including, but not limited to, clearing, dredging, grading, excavating, and filling of land, but not including agricultural practices as described in section 16-58 or silvicultural land management activities as described in O.C.G.A. 12-7-17(6) which areas zoned for these activities.

Landscape plan means a plan that identifies areas of tree preservation and methods of tree protection within the protected zone, as well as all areas or replanting. Within replanting areas, the common and botanical names of the proposed species, the number of plants of each species, the size of all plants, the proposed location of all plants and any unique features of the plants.

Larger common plan of development or sale means a contiguous area where multiple separate and distinct construction activities are occurring under one plan of development or sale. For the purposes of this definition, the term "plan" means an announcement; piece of documentation such as a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request or computer design; or physical demarcation such as boundary signs, lot stakes or surveyor markings indicating that construction activities may occur on a specific plot.

Linear feasibility program means a feasibility program developed by the city and submitted to the Georgia Environmental Protection Division, which sets reasonable criteria for determining when implementation of stormwater management standards for linear transportation projects being constructed by the city is infeasible.

Linear transportation projects means construction projects on traveled ways including but not limited to roads, sidewalks, multi-use paths and trails and airport runways and taxiways.

Live detention means that quantity of water capable of being effectively contained by a designated facility for stormwater storage for a specified period of time.

Local issuing authority means the governing authority of the city that is certified pursuant to O.C.G.A. §12-7-8(a).

Local street means a street used primarily for access to abutting properties in residential, industrial or other developments.

Lot means a designated parcel, tract or area of land legally established by plat, subdivision, or as otherwise permitted by law, to be separately owned, used, developed or built upon.

Lot, corner, means a lot abutting upon two or more streets at their intersection or upon two parts of the same street forming an interior angle of less than 135 degrees.

Lot, double-frontage, means a lot that abuts two parallel streets or that abuts two streets that do not intersect at the boundaries of the lot. A double-frontage lot may also be referred to as a through lot.

Lot, flag, means a lot that sits behind lots which face directly onto a street with access provided to the bulk of the lot by means of a narrow corridor, whether providing the minimum amount of street frontage and width or not.

Lowest floor means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood-resistant enclosure below the lowest floor that is usable solely for parking or vehicles, building access or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of other provisions of these land development regulations.

(m) *Terms beginning with "M."*

Maintenance of detention facility means preserving the enclosed walls or impounding embankments of the detention facility in good condition; ensuring structural soundness, functional adequacy and freedom from excessive sediment; removing obstructions affecting operation of outlet device; and rectifying any unforeseen erosion problems.

Manufactured home means a structure, transportable in one or more sections, built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term includes any structure commonly referred to as a "mobile home" regardless of the date of manufacture. The term also includes parked trailers, travel trailers and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market value means (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. This term includes structures that have incurred "substantial damage" regardless of the actual amount of repair work performed.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. It is used as a reference for establishing various elevations within the floodplain. For purposes of these regulations, the term is synonymous with National Geodetic Vertical Datum (NGVD) and/or the North American Vertical Datum (NAVD) of 1988.

MS4 Permit means the NPDES permit issued by Georgia Environmental Protection Division for discharges from the city's municipal storm sewer system.

Multiphase residential development means any development undertaken by a single developer or a group of developers acting in concert to develop lots for sale in a residential subdivision where such land is developed pursuant to multiple preliminary or final plats and such land is contiguous or is known, designated or advertised as a common unit or by a common name.

Multi-use trail means a recreation corridor intended for the use of nonmotorized forms of transportation such as, but not limited to, walking, wheelchairs, running, bicycles and inline skates, as identified in the Parks, Recreation and Greenspace Master Plan, the Comprehensive Transportation Plan or other plan adopted by the city council.

(n) *Terms beginning with "N."*

National Geodetic Vertical Datum (NGVD), as corrected in 1929, means a vertical control used as a reference for establishing varying elevations within the floodplain.

Natural ground surface means the ground surface in its original state before any grading excavation or filling.

Nephelometric turbidity units (NTUs) means numerical units of measure based upon photometric analytical techniques for measuring the light scattered by finely divided particles of a substance in suspension. This technique is used to estimate the extent of turbidity in water in which colloidally dispersed particles are present.

New construction means any structure for which the permitted date of construction commenced after adoption of this chapter, October 14, 2009. For the purposes of interpreting and administering the flood damage prevention regulations of article II, division 8, "new construction" means structures for which the start of construction commenced on or after the effective date of floodplain management regulations adopted by this community as a basis for community participation in the NFIP.

New development means land disturbing activities, structural development (construction, installation or expansion of a building or other structure), and/or creation of impervious surfaces on a previously undeveloped site.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads) is completed on or after October 14, 2009, the effective date of floodplain management regulations adopted by this community.

Nonpoint source pollution means a form of water pollution that does not originate from a discrete point such as a wastewater treatment facility or industrial discharge, but involves the transport of pollutants such as sediment, fertilizers, pesticides, heavy metals, oil, grease, bacteria, organic materials and other contaminants from land to surface water or groundwater via mechanisms such as precipitation, stormwater runoff and leaching. Nonpoint source pollution is a byproduct of land use practices such as agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

Nonstructural stormwater management practice or *nonstructural practice* means any natural or planted vegetation or other nonstructural component and practice of the stormwater management plan that provides for or enhances stormwater quantity and/or quality control or other stormwater management benefits and includes, but is not limited to, riparian buffers, open and green space areas, overland flow filtration areas, vegetated channels and natural depressions.

North American Vertical Datum (NAVD), as corrected in 1988, means a vertical datum used as a reference for establishing varying elevations within the floodplain.

(o) *Terms beginning with "O."*

100-year floodplain means land in the floodplain subject to a one-percent or greater statistical occurrence probability of flooding in any given year.

Operator means the party that has:

(1) Operational control of construction project plans and specifications, including the ability to make modifications to those plans and specifications; or

(2) Day-to-day operational control of those activities that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions, such as a person authorized to direct workers at a site to carry out activities required by the stormwater pollution prevention plan or to comply with other permit conditions.

Ornamental trees means small growing trees, attaining a mature height of less than 40 feet, grown primarily for aesthetic purposes, i.e., flowers, fruit, etc.

Overbank flood protection means measures taken to prevent an increase in the frequency and magnitude of out-of-bank flooding (i.e., flow events that exceed the capacity of the channel and enter the floodplain) and that are intended to protect downstream properties from flooding for the two-year through 25-year frequency storm events.

Overstory tree means those trees that compose the top layer or canopy of vegetation and will generally reach a mature height of greater than 40 feet.

Owner means the legal or beneficial owner of a site, including, but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm or corporation in control of the site.

(p) *Terms beginning with "P."*

Person means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, city, county, or other of this state, any interstate body or any other legal entity.

Planning commission means the planning commission of the city.

Post-construction stormwater management means stormwater best management practices that are used on a permanent basis to control and treat runoff once construction has been completed in accordance with a stormwater management plan.

Post-development means the conditions anticipated to exist on a site immediately after completion of the proposed development.

Potential purchaser means a person purchasing property in a residential subdivision or a multiphase residential development from a developer and/or builder for occupancy as a residence or as a residence to be rented or leased to others.

Practicability policy means the latest edition of the Metropolitan North Georgia Water Planning Districts Policy on Practicability Analysis for Runoff Reduction.

Pre-development means the conditions that exist on a site immediately before the implementation of the proposed development. Where phased development or a plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time before the first item being approved or permitted shall establish pre-developed conditions.

Pre-development hydrology means (a) for new development, the runoff curve number determined using natural conditions hydrologic analysis based on the natural, undisturbed condition of the site immediately before implementation of the proposed development; and (b) for redevelopment, the existing conditions hydrograph may take into account the existing development when defining the runoff curve number and calculating existing runoff, unless the existing development causes a negative impact on downstream property.

Previously developed site means a site that has been altered by paving, construction, and/or land disturbing activity.

Protected zone means all areas of a parcel required to remain in open space, including all areas required as yard or setback areas, buffer areas, stream buffers, state buffer zones or landscaped areas in accordance with provisions of the city zoning ordinance or by conditions of zoning or variance approval.

Public facilities means the roads, water, sewer, schools, traffic control devices and electrical service.

(q) *Terms beginning with "Q."*

RESERVED

(r) *Terms beginning with "R."*

Reach means a longitudinal segment of a stream or river measured along specified points on the stream or river.

Reasonable access means a 15-foot wide access easement from the public right-of-way to the stormwater management facility and a drainage and maintenance easement encompassing the stormwater management facility and extending ten feet outside the pond's 100-year water ponding elevation.

Recreation areas mean those portions of open space designed and intended for active recreational use, such as sports fields and other play areas.

Recreational vehicle means a vehicle that is:

(1) Built on a single chassis;

(2) Four hundred square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light-duty truck; and

(4) Not designed primarily for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

Redevelopment means structural development (construction, installation, or expansion of a building or other structure), creation or addition of impervious surfaces, replacement of impervious surfaces not as a part of routing maintenance, and land disturbing activities associated with structural or impervious development on a previously developed site. Redevelopment does not include such activities as exterior remodeling.

Residential has the same meaning as given in the city zoning ordinance except that it does not include apartments.

Revegetation means replacement of trees and landscape plant materials into the minimum required landscape areas, as determined by the zoning ordinance, conditions of zoning approval or applicable tree preservation or protection regulations.

Roadway drainage structure means a device such as a bridge, culvert or ditch, composed of a virtually nonerodible material such as concrete, steel, plastic or other such material that conveys water under a roadway by intercepting the flow on one side of a traveled way consisting of one or more defined lanes, with or without shoulder areas and carrying water to a release point on the other side.

Rock outcropping means a single, contiguous piece of exposed rock that has a horizontal surface area equal to or greater than 200 square feet.

Runoff means stormwater runoff.

Runoff coefficient means the ratio of runoff to rainfall.

Routine maintenance means activities to keep an impervious surface as near as possible to its constructed condition. This includes ordinary maintenance activities, resurfacing paved areas, and exterior building changes or improvements which do not materially increase or concentrate stormwater runoff, or cause additional nonpoint source pollution.

(s) *Terms beginning with "S."*

Sediment means solid material, both organic and inorganic, that is in suspension, is being transported or has been moved from its site of origin by air, water, ice or gravity as a product of erosion.

Sediment basin means a detention facility specifically developed for the purpose of allowing the deposit of sediment resulting from the land development process that may be constructed as part of or separately from a detention facility.

Sedimentation means the process by which eroded material is transported and deposited by the action of water, wind, ice or gravity.

Seller means a builder or developer.

Significant tree means any existing, healthy, living tree eight inches DBH or greater in size.

Site means an area of land where development is planned, which may include all or portions of one or more parcels of land. For subdivisions and other common plans of development, the site includes all areas of land covered under an applicable land development permit.

Site plan means that plan required to acquire a development, construction or building permit that shows the means by which the applicant will comply with applicable provisions of this chapter and other applicable ordinances.

Softwood tree means any coniferous (cone-bearing) tree.

Soil and water conservation district approved plan means an erosion, sedimentation and pollution control plan approved in writing by the DeKalb Soil and Water Conservation District.

Special flood hazard area (SFHA) means an area in the floodplain subject to a one-percent or greater chance of flooding in any given year. This includes areas shown on an FHBM or FIRM as zone A, AO, A1-A30, AE, A99, AE, AO, AH or AR; all floodplain and floodprone areas at or below the future-conditions flood elevation; and all other floodprone areas as referenced in section 16-136. All streams with a drainage area of 100 acres or greater must have the special flood hazard area delineated.

Special tree means any tree that qualifies for special consideration for preservation due to its size, type, and condition.

Specimen tree means any tree that has been determined by the city arborist to be of high value because of its type, size, age, and/or of historical significance, or other professional criteria, and has been so designated in administrative standards established by the city. This is usually a plant with desirable form, foliage, fruit or flower that can be emphasized although isolated.

Spite strip means a piece of land used to separate a street or road rights-of-way from adjoining property and whose primary purpose is to preclude access to such rights-of-way.

Stabilization means the process of establishing an enduring soil cover of vegetation by the installation of temporary or permanent cover for the purpose of reducing to a minimum the erosion process and the resulting transport of sediment by wind, water, ice or gravity.

Standards and specifications means construction and technical requirements that govern construction and installation of streets and other public improvements in the City of Dunwoody.

Start of construction means the initial disturbance of soils associated with clearing, grading or excavating activities or other construction activities. The term "construction activities" means the disturbance of soils associated with clearing, grading, excavating, filling of land or other similar activities that may result in soil erosion. For the purposes of interpreting and administering the flood damage prevention regulations of article II, division 8, "start of construction" means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the date of the permit. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab for footings, the installation of piles, the construction of columns or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation of accessory buildings or structures appurtenant to the principal structure, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

State general permit means the national pollution discharge elimination system general permit for stormwater runoff from construction activities as is now in effect or as may be amended or reissued in the future pursuant to the state's authority to implement the same through federal delegation under the federal Water Pollution Control Act, as amended, 33 USC 1251 et seq. and O.C.G.A. § 12-5-30(f).

State waters means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the state that are not entirely confined and retained completely upon the property of a single individual, partnership or corporation.

Stormwater better site design means a nonstructural site design approach and technique that can reduce a site's impact on the watershed and can provide for nonstructural stormwater management. The term "stormwater better site design" includes conserving and protecting natural areas and greenspace, reducing impervious cover and using natural features for stormwater management.

Stormwater concept plan means an initial plan for post-construction stormwater management at the site that provides the groundwork for the stormwater management plan including the natural resources inventory, site layout concept, initial runoff characterization, and first round stormwater management system design.

Stormwater management means the collection, conveyance, storage, treatment and disposal of stormwater runoff in a manner intended to prevent increased flood damage, streambank channel erosion, habitat degradation and water quality degradation and to enhance and promote the public health, safety and general welfare.

Stormwater management manual means the Georgia Stormwater Management Manual.

Stormwater management plan means a plan for post-construction stormwater management at the site that meets the requirements of section 16-92(d) and is included as part of the land development application.

Stormwater management standards means those standards set forth in section 16-91(e).

Stormwater management system means the entire set of nonstructural site design features and structural BMPs for collection, conveyance, storage, infiltration, treatment, and disposal of stormwater runoff in a manner designed to prevent increased flood damage, streambank channel erosion, habitat degradation and water quality degradation, and to enhance and promote the public health, safety and general welfare.

Stormwater runoff means flow on the surface of the ground, resulting from precipitation.

Stream means natural, running water flowing continuously or intermittently in a channel on or below the surface of the ground. Field verification must be performed to make a final determination as to the existence of a stream where a dispute exists. Such field verification must be performed under the direction

of the community development director.

Streambank means a sloping land that contains a stream channel in the normal flows of the stream.

Stream channel means the portion of a watercourse that contains the base flow of the stream.

Stream, ephemeral (stormwater), means a feature that carries only stormwater in direct response to precipitation with water flowing only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the aquatic bed is defined always above the water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks the biological, hydrological and physical characteristics commonly associated with the continuous or intermittent conveyance of water.

Stream, intermittent, means a well-defined channel that contains water for only part of the year, typically during winter and spring when the aquatic bed is below the seasonally high water table. The flow may be heavily supplemented by stormwater runoff. An intermittent stream often lacks the biological and hydrological characteristics commonly associated with the conveyance of water.

Stream, perennial, means a well-defined channel that contains water year round during a year of normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water for a perennial stream, but it also carries stormwater runoff. A perennial stream exhibits the typical biological, hydrological and physical characteristics commonly associated with the continuous conveyance of water.

Street, private, means an access way similar to and having the same function as a public street, providing access to more than one property but held in private ownership. Private streets, when authorized, must be developed in accordance with the specifications for public streets established in this chapter.

Street, public, means any right-of-way set aside for public travel dedicated to the city and any right-of-way that has been accepted for maintenance as a street by the city.

Street right-of-way line means the dividing line between a lot, tract or parcel of land and a street right-of-way.

Structural erosion, sedimentation and pollution control measures means measures for the stabilization of erodible or sediment-producing areas by utilizing the mechanical properties of matter for the purpose of either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss. Examples of structural erosion and sediment control practices are riprap, sediment basins, dikes, level spreaders, waterways or outlets, diversions, grade stabilization structures, sediment traps and land grading. Such measures can be found in the Manual for Erosion and Sediment Control in Georgia.

Structure means a walled and roofed building (including a gas or liquid storage tank), that is principally above ground, or a manufactured home.

Subdivision means any division of a tract or parcel of land resulting in one or more new lots or building sites for the purpose, whether immediately or in the future, of sale, other transfer of ownership or land development, and includes divisions of land resulting from or made in connection with the layout or development of a new street or roadway or a change in an existing street or roadway.

Substantial building permit means a nonresidential building permit issued by the city with a total value in excess of 50 percent of the county tax assessor's 100 percent assessed value of the existing improvements only. The aggregate value of all building permits issued to the property over the previous 12 months must be included in this calculation (see appendix E).

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement means any combination of repairs, reconstruction, alteration or improvements to a building, taking place during a ten-year period, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. For the purposes of this definition, "substantial improvement" is deemed to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include those improvements of a building required to comply with existing health, sanitary or safety code specifications which are solely necessary to assure safe living conditions, which have been pre-identified by code enforcement officials, and not solely triggered by an improvement or repair project.

Substantially improved existing manufactured home parks or subdivision is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

(t) *Terms beginning with "T."*

Tree means any living, self-supporting, woody perennial plant that has a trunk caliper of two inches or more measured at a point six inches above the ground and that normally attains a height of at least ten feet at maturity, usually with one main stem or trunk and many branches.

Tree harvesting means the felling, loading, and transporting of timber products done pursuant to a special exception issued by the zoning board of appeals.

Tree replacement means the replacement of trees and landscape plant materials in the minimum required landscape areas, as determined by the zoning regulations or the tree protection ordinance.

Tree save area means the boundaries of the area surrounding trees wherein it is essential that they remain undisturbed in order to prevent damage and loss of trees that are to be retained on-site during the development and building process.

Tree topping means the removal of tree limbs, branches, or stems by cutting at the internodes and resulting in the failure of the tree to assume apical dominance.

(u) *Terms beginning with "U."*

Understory tree means those trees that grow beneath the overstory trees and will generally reach a mature height of less than 40 feet.

Used for includes the terms "arranged for," "designed for," "intended for," "maintained for" and "occupied for."

(v) *Terms beginning with "V."*

Vegetation means all plant growth, especially trees, shrubs, vines, ferns, mosses and grasses.

Vegetative erosion, sedimentation and pollution control practices means practices for the stabilization of erodible or sediment-producing areas by covering the soil with:

(1) Permanent seeding, sprigging or planting, producing long-term vegetative cover;

(2) Temporary seeding, producing short-term vegetative cover; or

(3) Sodding, covering areas with a turf of perennial sod-forming grass.

Such practices can be found in the Manual for Erosion and Sediment Control in Georgia published by the state soil and water conservation commission.

(w) *Terms beginning with "W."*

Water quality protection means the requirement that all developments must improve the quality of storm runoff from the development site.

Watercourse means any natural or artificial waterway, stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, or wash in which water flows either continuously or intermittently and that has a definite channel, bed and banks and including any area adjacent thereto subject to inundation by reason of overflow or floodwater.

Wetlands means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Width, lot, means the distance between the side lot lines, measured along a line drawn parallel to the front lot line at a distance from the front lot line equal to the minimum street yard setback. For lots with curvilinear frontage and setback lines (e.g.: cul-de-sac lots), the width shall be measured as a straight line through the points that intersect the side lot lines at a distance from the front lot line equal to the minimum street yard setback.

(x) *Terms beginning with "X."*

RESERVED

(y) *Terms beginning with "Y."*

RESERVED

(z) *Terms beginning with "Z."*

RESERVED

(Ord. No. 2013-10-14, 1(Exh. A § 16-18.10), 10-14-2013; Ord. No. 2015-01-04, § 1, 1-26-2015; Ord. No. 2017-03-06, § 2, 3-27-2017; Ord. No. 2018-10-16, § I, 10-8-2018; Ord. No. 2020-11-21, § II, 11-30-2020)