

Appendix: Street Tree Canopy Credit and Alternative Planting Standard 12/16/2022

Note: This appendix applies to the following districts where Urban Design Guidelines are used in the development review and site plan review processes.

- *Annandale CRD*
- *Bailey's Crossroads/Seven Corners CRD*
- *Huntington TSA*
- *Lake Anne CRA*
- *Lincolnia CRA*
- *McLean CRD*
- *Merrifield CRA*
- *Reston TSAs*
- *Richmond Highway Corridor (inclusive of the CRDs and SNAs)*
- *Springfield CRD and TSA*
- *Tysons Urban Center*
- *West Falls Church TSA*

Introduction

This Appendix amends the [Tysons Urban Design Guidelines](#), [Reston TSA Urban Design Guidelines](#) and [Volume 1: Urban Design Guidelines](#) (UDGs) with the following:

- It permits new developments to receive a ten-year Tree Canopy credit for street trees installed, with appropriate agency/organization permission, within VDOT right-of-way, private streets, and utility easements. Canopy credit is awarded incrementally. Bonus credit is given to trees planted per the [Public Facilities Manual \(PFM\)](#) (PFM § 12-0310.4), while full credit is given when soil volume requirements are met.
- It recognizes that older activity centers are characterized by large areas of paving and conditions that often preclude tree planting per PFM and UDG standards. To encourage a more equitable distribution of tree canopy as supported by [OneFairfax](#) and [Resilient Fairfax](#), the *Alternative Tree Planting Standard for Constrained Sites (Alternative Planting Standard)* is provided.
- To promote a balance between long-term tree health and place-making, a street tree caliper size of 2.5 to 4 inches is required at installation.

Canopy Credit for Street Tree Planting

For street trees to receive 10-year Tree Canopy credit when planted within VDOT right-of-way, a replacement agreement must be executed with Fairfax County and a perpetual maintenance agreement must be executed with VDOT. For trees to receive credit when planted along private streets or within easements, a perpetual maintenance and replacement agreement must be executed with Fairfax County. Tree canopy credit is calculated as follows:

- a. Refer to PFM Table 12.14 for base line 10-year Tree Canopy credits.
- b. A multiplier of 1.5 times the 10-year Tree Canopy credit may be applied to the canopy area if PFM § 12-0310.4E (“Standards for Tree Location”) is met.

- c. Full (1.0) 10-year Tree Canopy credit may be applied to the canopy area if:
 - Soil volumes in PFM § 12-0310.4E(9) are met, but other provisions of PFM § 12-0310.4E are not; and,
 - A contiguous soil panel meeting the minimum soil volumes is provided.
- d. A multiplier of 0.50 times the 10-year Tree Canopy credit may be applied for Category III and IV trees when the *Alternative Planting Standard* described in the next section, is used.
- e. Smaller soil volumes can be used, but trees planted in these areas cannot be counted for 10-year Tree Canopy credit or tree replacement.
- f. Street trees planted within utility easements may receive canopy credit under any of the above scenarios. Adequate depth may be an issue for underground utilities. For overhead utilities, the right species is important to avoid excessive trimming. Applicants should coordinate with the Urban Forest Management Division Director on planting details and species selection.
- g. Trees planted within bioretention facilities may receive 10-year Tree Canopy credit if planting areas meet PFM § 12-0310.4.E standards.
- h. Other multipliers found in the PFM do not apply.

Alternative Tree Planting Standard for Constrained Sites (Alternative Planting Standard)

Where constrained site conditions make tree planting unlikely to occur, the *Alternative Planting Standard* may be considered as an option. It is intended for use in older urban activity centers where paved roadways and utilities occupy most of the right-of-way; it should not be used for the purpose of maximizing developable area on adjacent parcels.

As an alternative to the PFM standard § 12-0310.4.E and Table 12.14, tree planting space may be reduced in width and soil volume without requiring additional rooting space below pavement. All other locational provisions of PFM § 12-0310.4.E apply. The *Alternative Planting Standard* may be considered an option only when one or more of the following site conditions occurs:

- There is insufficient space between the back-of-curb and the right-of-way line to fit the required widths for both the sidewalk and the landscape panel.
- There are conflicts with existing utility easements, manholes, pull boxes, traffic cabinets, and other structures within the landscape panel.
- The right-of-way width varies and/or has an unusual or irregular shape. Street sections allow the full planting width for most of a block, while narrowing in short stretches. In this situation, full or bonus credit may be possible for most of the street trees, with the *Alternative Planting Standard* used for only a few trees.

Tree planting using the *Alternative Standard* must meet the following specifications:

- a. Soil volumes must be a minimum of 300 cubic feet per tree; minimum planting width should be five (5) feet wide; and open soil area at the surface must be a minimum of 87.5 square feet.
- b. The typical minimum tree planting dimensions are seventeen and one half (17.5) feet long by three and one half (3.5) feet deep. Alternative dimensions may be permitted so long as the distance from the center point of a tree to any barrier that restricts root growth is a minimum of two (2) feet on no more than two sides and a minimum of four (4) feet on remaining sides.
- c. Soil volume depth should be calculated at no greater than three and one half (3.5) feet deep within two (2) feet of the tree on no more than two sides and four (4) feet on remaining sides. Soil depth beyond these areas may be shallower so long as soil volumes are met.
- d. Native herbaceous perennials, ornamental grasses, and non-woody plants are acceptable within the tree planting area. Annual plant materials should not be installed within eight (8) feet of trees, to avoid root damage. Turfgrass should not be used within the tree planting areas.
- e. Signs, traffic signals, streetlights, site furnishings, and other objects should not be placed within eight (8) feet of the center-point of the tree trunk.
- f. Bioretention areas are not permitted to use the Alternative Standard.

Street Tree Size at Installation

To receive Tree Canopy credit, street tree size should be between 2.5 inches and 4 inches in caliper at time of planting.