Sec. 5.05.02. Tree replacement and protection requirements.

A. *Historic trees and specimen trees.* Historic trees and specimen trees located within that portion of a development site to be developed shall be protected or replaced in accordance with the following criteria. No historic or specimen trees shall be removed without a tree removal permit, unless:

   a. The tree is located on residential property and an arborist or landscape architect has provided documentation that the tree presents a danger to persons or property; or

   b. The removal is in conjunction with an approved development order where a tree survey was submitted.

B. If required, a tree removal permit must be issued by the city development department for work undertaken pursuant to this section. Application for such permit shall be on forms prescribed by the city development director. The fee for such permit shall be set by the city manager.

C. *Specimen trees.* Unless the specimen tree is located on a residential property where an arborist or landscape architect provides documentation that the tree presents a danger to persons or property, then all practical measures shall be taken to leave specimen trees in place and preserved within development sites.

   a. Specimen trees within parking areas shall be preserved with tree wells or other appropriate measures, if practical. Any parking space requirement that would require the removal of a specimen tree may be waived by the city development director if no fewer than 90 percent of the required parking spaces will be provided. Otherwise, specimen trees shall be relocated within the development site.

   b. Specimen trees within building envelopes or for which there is no practical alternative for preservation shall be relocated within the development site.

   c. Specimen trees, excluding slash pine trees, for which relocation is not possible or is not expected to be successful, shall be replaced with like species within the development site. Replacement trees shall have a combined DBH of two and one-half times the DBH of the trees replaced. The minimum size for replacement trees is four and one-half inches DBH. Determination of the number of replacement trees or contribution to city tree fund shall be calculated in accordance with table 1 below. Replacement trees shall be native to Florida or not documented as an invasive species.

   d. Specimen trees, specifically and only slash pines, for which relocation is not possible or is not expected to be successful, shall be replaced with like species within the development site. Replacement trees shall have a combined DBH of one and one-half times the DBH of the trees replaced. The minimum size for replacement trees is two and one-half inches DBH. Determination of the number of slash pines or contribution to city tree fund shall be calculated in accordance with table 1 below.

   e. When not feasible to replant with like species of slash pine, replacement trees may be substituted with the following trees (or other approved native shade trees) on a 1:1 ratio:

      • Alexander Palm.

      • Coconut Palm.

      • Chinese Fan Palm.

      • Date Palm.

      • Majesty Palm.

      • Royal Palm.

      • Christmas Palm.

      • Washington Palm.

• Sabal Palmetto.

Shade trees (may count towards canopy coverage calculations):

• American Holly.

• Dahoon Holly.

• Laurel Oak.

• Live Oak.

• Mahogany.

• Red Bay.

• Red Maple.

• Royal Poinciana.

• Slash Pine.

• Southern Magnolia.

• Sweet Bay.

• Sweet Gum.

• Sycamore.

• Variegated Mahoe.

For every one foot of clear trunk of palm tree exceeding minimum palm tree size per section 6.04.02.A.2 and for each additional inch of DBH of canopy or specimen trees of the landscape code, credit will be given for one inch of replacement.

f. Additional preservation of native habitat beyond that required by section 5.04.00 may be substituted for a proportion of the tree replacement requirements of this section as approved by the city development director. Such preservation is additional to requirements for wetlands and preserve areas and shall include sufficient native trees to meet the DBH replacement requirements in subsection C.c of this section.

g. Credit towards tree replacement requirements shall be provided for landscaping required by section 6.04.00 only if all required trees are planted at a minimum DBH of four and one-half inches and all required palms are planted at a minimum of 14 feet clear trunk. If required trees or palms, as proposed for a development site in accordance with the landscape code, are planted at minimum landscape code requirements, then no credit is obtainable.

h. As determined by the city development director, monies may be contributed as part of tree replacement requirements. This tree replacement mitigation, through payment into the city tree replacement fund, shall only provide for a 50 percent mitigation of the required number of trees to be replaced. The city development director shall coordinate the recovery and disbursement of said funds in accordance with the general provisions of this chapter.

i. Innovative stormwater treatment design which is demonstrated to exceed water quality treatment above that required in section 6.03.00 and South Florida Water Management District best management practice and reduces post-development stormwater pollutant loading of total nitrates and phosphates by 81 or more percent may be substituted for a proportion of the tree replacement fund payment in accordance with table 2 of this section and as approved by the city development director.

j. Proposals that incorporate low impact development (LID) practices that include, but are not limited to, a combination of sustainable drainage design, preservation of open space above code requirement, bio-swales and pervious pavement may be substituted for a proportion of the tree replacement requirements of this section and as approved by the city development director.

k. Proposals that demonstrate a tree canopy coverage greater than 30 percent of the site area may qualify for a reduction in a proportion of the city tree replacement fund payment in accordance with the provisions of table 3 of this section and as approved by the city development director. Tree canopy coverage is calculated as the area of shade generated by tree foliage at ground level.

l. Additional inches required under the tree replacement calculation may be credited through the planting of native understory shrubs that are made in addition to landscaping code requirements and listed here; credit will be at a proportion in accordance with table 4 of this section and as approved by the city development director.

Native shrub and ground cover list:

- Beach Sunflower.
- Blue Eyed Grass.
- Buttonwood.
- Carolina Jessamine.
- Cherry Laurel.
- Cocoplum.
- Coontie.
- Coral Honeysuckle.
- Cordgrass.
- Dwarf Firebush.
- Dwarf Schillings Holly.
- Erect Swordfern.
- Fakahatchee Grass.
- Firebush.
- Florida Privet.
- Gallberry.
- Lantana species.
- Myrsine.
- Periwinkle.
- Pink Muhly.
- Sand Cord Grass.
- Shiny Blueberry.
- Silver Buttonwood.
- Simpson's Stopper.

- Spider Lily.
- Swamp Fern.
- Swamp Lilly.
- Trumpet Honeysuckle.
- Walter's Virburnum.
- Wax Myrtle.
- Wild Allamanda.

m. Relocated trees that do not survive at least two years shall, in turn, be replaced. A mechanism for financial assurance that relocated, and replacement trees will meet survival criteria shall be provided.

n. Wherever feasible, tree removal within single family and duplex properties shall substitute replacement trees with like species on a 1:1 ratio.

Table 1: Proposed Formulas for Tree Replacement and Contribution into City Tree Fund

Tree Replacement Formula—Slash Pine:														
Total # inches to remove	×	1.5	=	Total # inches to be replaced	/	Minimum size to replace 2.5"	=	Total # trees to plant	×	50% mitigation to pay into city tree fund	×	175% of plant finder wholesale	=	Total $ amount to pay into city tree fund
Tree Replacement Formula—All Trees Less Slash Pine:														
Total # inches to remove	×	2.5	=	Total # inches to be replaced	/	Minimum size to replace 4.5"	=	Total # trees to plant	×	50% mitigation to pay into city tree fund	×	175% of plant finder wholesale	=	Total $ amount to pay into city tree fund

Table 2: Credit for Providing Additional Nitrate and Phosphate Removal

Percentage of Nitrate and Phosphate Loading Reduction from Stormwater	Maximum Pollutant Removal Factor for Construction Value of Additional Stormwater Treatment[a]
81% to 85%	1.25
86% to 89%	1.5
90%+	2.0

Table 2 Notes:

a. The value of additional stormwater treatment measures as provided by an engineer's probable cost of construction is multiplied by the pollutant removal factor to provide an equivalent dollar amount, which may only be credited to offset all or part of the required city tree replacement fund.

Table 3: Credit for Providing Additional Tree Canopy

Total Site Tree Canopy Coverage	Maximum Credit Reduction to the Required City Tree Replacement Fund
30% to 35%	15%
36% to 40%	30%
40% +	50%

Table 4: Credit for Providing Additional Understory Native Planting

Size of Native Shrub	Maximum Credit Inches
1 gallon plant	1 inch per 24 plants
3 gallon plant	1 inch per 12 plants

D. *Historic trees.* Unless the historic tree is located on a residential property where an arborist or landscape architect provides documentation that the tree presents a danger to persons or property the tree shall be preserved.

a. A site plan, development permit, or plat application shall indicate the preservation of all historic trees in all areas proposed for development. The site application shall indicate protective measures to ensure the preservation and longevity of all historic trees, such as tree wells, construction barricades or fencing, or relocation.

b. Any parking space requirement or building envelope which would require the removal of a historic tree may be waived by the city development director if no fewer than 90 percent of the required parking spaces are provided.

In the event no practical alternative exists to locating structures on the site so as to accommodate a historic tree, the applicant for development may submit for major development plan approval or planned unit development (PUD) to consider the removal and replacement of the historic tree. The city commission shall be guided by a consideration of the environmental as well as aesthetic and economic value of the historic tree to be replaced in deciding the appropriate means and manner of its removal and replacement.

c. Wherever feasible, tree removal within single family and duplex properties shall substitute replacement trees with like species on a 1:1 ratio.

(Ord. No. 1788-01, § 1, 6-25-01; Ord. No. 2165-08, § 2, 11-24-08; Ord. No. 2432-2020 , § 1, 4-13-20)