

# ARTICLE X – URBAN FOREST CONSERVATION – PROTECTED TREE REPLACEMENT

(7/2/18)

## PROTECTED TREE

- A tree of any species that has a minimum diameter of EIGHT INCHES that is not classified as unprotected;
- Any tree in a stand which projects a tree canopy over a building site when identified within a FOREST STAND DELINEATION review;
- A tree planted as a replacement tree.

## CLASSIFICATIONS (status for replacement):

**HISTORIC TREES –** 3:1 replacement ratio (RV: \$579/in.)

**SIGNIFICANT TREES –** 1.5:1 replacement ratio (RV: \$290/in.)

12" diameter and greater: Post oak

24" diameter and greater: American elm, bois d'arc, cedar elm, chittamwood, common persimmon, eastern redcedar, green ash, all other oaks, pecan, all walnut species, and white ash.

**CLASS 1 TREES –** 1:1 replacement ratio (RV\$: \$193/in.)

Associated with primary natural areas or geologically similar areas within 50 feet above the escarpment zone.

**CLASS 2 TREES –** 0.7:1 replacement ratio (RV\$: \$135/in.)

Species not otherwise associated with other classifications and unprotected trees.

**CLASS 3 TREES –** 0.4:1 replacement ratio (RV\$: \$77/in.)

Arizona ash, black willow, cottonwood, hackberry, honeylocust, mesquite, mimosa, mulberry, ornamentals, *Pinus spp.*, Siberian elm, silver maple, sugarberry, or small tree (as defined).

## **UNPROTECTED TREES – NO REPLACEMENT REQUIRED**

Callery pear (all cultivars), chinaberry, Chinese tallow, Ilex species (except yaupon holly and Possumhaw), palm (all plants in *Palmae*), tree-of-heaven (*Ailanthus*), other trees listed as invasive plants; and trees with a diameter of less than 10 inches at the point on the trunk 4.5 feet above the ground, located on a lot with an existing single family or duplex use that is occupied at the time of removal.

**Reforestation Value (RV\$):** The fee is applicable only when payment is made in lieu of tree replacement by planting or other available means of mitigation. The Replacement Value per diameter inch of tree as of July 2, 2018: **\$193.00.**

- **Updated formula** (*derived* from the Trunk Formula Method\* located in the Guide for Plant Appraisal, 9<sup>th</sup> Edition, with the 2015 Texas Supplement) is now calculated for planting a **3" cal. Tree**, being the specified Largest Commonly Available Transplantable Tree Size (LCA) for Texas, and with the standard rate of a tree at **\$82/inch.**

Base formulation (using diameter of the tree):

- $(3" \times 3") \times 0.7854 \times \$82/\text{square in.} = \$579.63$
- $\$579.63 / 3" = \$193.21$  per diameter inch.
- The rate per inch is rounded to the whole dollar as \$193.00 (base rate at 1:1 ratio).
- All classification reductions are calculated from the rounded base and rounded to the whole dollar (ex.: \$135.10 = \$135.00, and \$77.20 = \$77.00).

\*The Trunk Formula Method is the formula for appraising "the monetary value of a trees considered too large to be replaced with nursery or field-grown stock." – *Guide for Plant Appraisal, 9<sup>th</sup> Edition* (p. 70).