

Section II.2.1. Definitions

Tree, Heritage - A Post Oak or Blackjack Oak tree of 12 inches or greater and any tree of 26 inches or greater, except for species deemed invasive.

Tree, Protected - Tree, Protected — Bois d’Arc and Cottonwood, Hackberry trees 12 inches in DBH and any other tree six (6) inches in DBH except for trees with the common names of Bois d’Arc, cottonwood, Chinese pistache, junipers, mesquite, all Callery pear cultivars and any tree species determined to be invasive by the Parks and Recreation Director.

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Commented [1]: Rational: Large-Scale Ecosystem Services: Mature trees over 26" DBH provide exponentially greater benefits than smaller trees. Studies show that large trees sequester more carbon, intercept more stormwater, and produce significantly higher oxygen output per year than multiple smaller trees combined.

Urban Heat Island Mitigation: Large-canopy trees provide the most effective cooling benefits, reducing ambient temperatures by up to 10°F in high-heat areas. Preserving these trees is directly tied to public health outcomes, especially in vulnerable neighborhoods.

Slow Replacement Rate: It can take 75–100 years for a newly planted tree to reach the ecological and visual impact of a 26" DBH tree. Removal without designation undermines long-term canopy goals.

Regional Best Practice: Many Texas municipalities (e.g., Austin, Plano, Frisco) have adopted size-based heritage or specimen tree protections. A 26" DBH cutoff aligns Lewisville with proven regional policy frameworks.

Commented [SA2R1]: Oct 2025: Planning and Zoning Commission suggested moving Post Oak and Black Jack Oak trees of 12 inches or greater after removal from tree credit calculation.

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Commented [3]: Rationale: The city's Tree Canopy Study showed that 60% of the canopy is composed of trees that measure six (6) caliper inches or less. We recommend that the changing the tree survey requirements to include trees that are six (6) caliper inches or more, in order to preserve more of the existing tree canopy.

Commented [SA4R3]: Oct 2025: Planning and Zoning recommended consideration of Cottonwood as protected tree