The Challenges with Planting Trees in an Urban Environment



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CITY CODE - ARTICLE 2. RESTRICTIONS ON TREE OR PLANT MAINTENANCE.

§ 6-3-22 PLANTING RESTRICTED BY FIRE HYDRANT.

A person may not place, maintain, or permit a tree or plant within five feet of a fire hydrant.

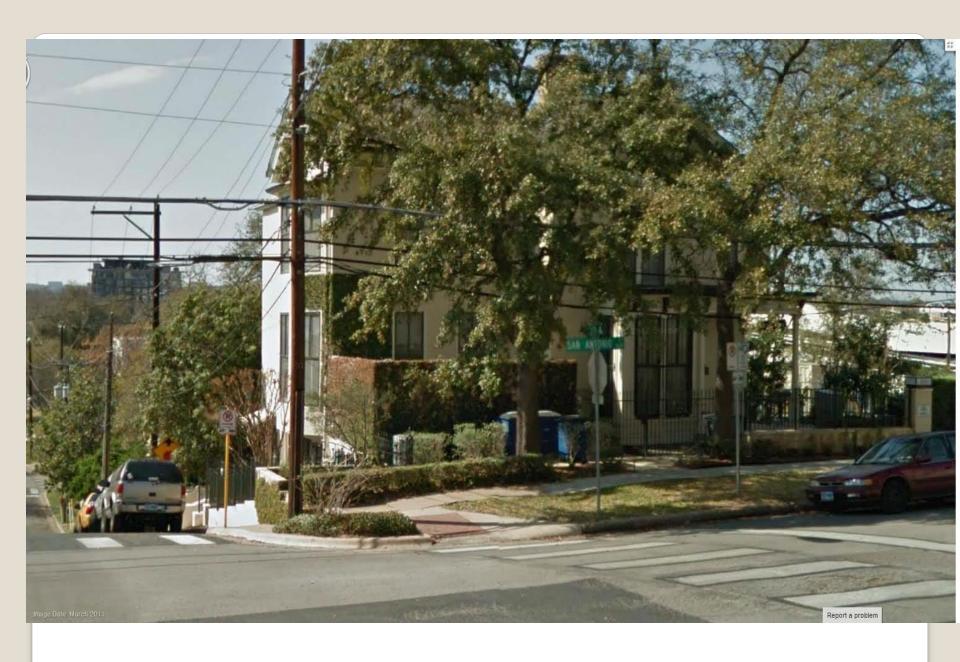
§ 6-3-23 PLANTING RESTRICTED BY SIDEWALKS.

- (A) A person may not place, maintain, or permit a tree or plant to overgrow or obstruct a sidewalk to prevent public use of the area.
- (B) A person shall trim tree limbs growing over a sidewalk at a minimum clearance of 14 feet above the street level measured at the nearest curb-line.

§ 6-3-62 RESTRICTION ON LOCATION OF TREE ON PUBLIC PROPERTY.

A person may not plant a tree on public property within:

- (1) 10 lateral feet of an overhead utility line if the tree may reach a height of 20 feet; or
 - (2) five lateral feet of an underground utility line.



TRANSPORTATION CRITERIA MANUAL 6.2.3 Transportation Guidelines for Landscaping

| TABLE 6-1 MINIMUM SETBACK REQUIREMENTS FOR EXISTING AND NEWLY PLANTED TREES | | | | | |
|---|---------------------------------|-------------------------------|-----------------------|----------------------------|------------------------|
| Design Speed mph (KPH) | Tree Diameter At Maturity | Roadways with Barrier Curb | | Roadways with Shoulders* | |
| | | Existing (x) | New (y _t) | Existing (x ₁) | Tree (y ₁) |
| = 50 (80) | = 6" (150 mm) | 2' (200 mm) | 4' (1.20 m) | 10' (3 m) | 18' (5.4 m) |
| | >6" (150 mm) | 6′ (1.8 m) | 6′ (1.8 m) ** | 30′ (9 m) | 30′ (9 m) |
| = 45 (72) | = 6" (150 mm) | 1.5′ (150 mm) | 3′ (900 mm) | 8′ (2.4 m) | 10' (3 m) |
| | >6" (150 mm) | 4′ (1.2 m) | 6′ (1.8 m) ** | 18' (5.4 m) | 25′ (7.5 m) |

^{*} Includes roadways with side slope of 6:1 or flatter and average daily traffic volumes of over 6000 vehicles. The values may be adjusted for lower traffic volumes with guidelines presented in Source #2.

Sources

- 1) Based on AASHTO Geometric Design of Highways and Streets, 1984
- 2) Based on AASHTO Guide for Selecting, Locating, and Designing Traffic Barriers, 1977
- 3) City of Austin, Department of Public Works and Transportation

^{**} For sidewalks 12′ (3.6 m) or greater in width the 6′ (1.8 m) minimum setback distance may be reduced, when appropriate measures, that are approved by the Engineer or designated representative, are adopted to protect the subgrade and base layer supporting the curb and gutter from tree root growth and water/moisture intrusions.

UTILITY CRITERIA MANUAL Section 1.10.5 Clearances for AE Underground Cable, Conduit, and Underground Facilities

B. Clearance from Customer building, foundations, or other permanent structures is as follows:

60-inches minimum

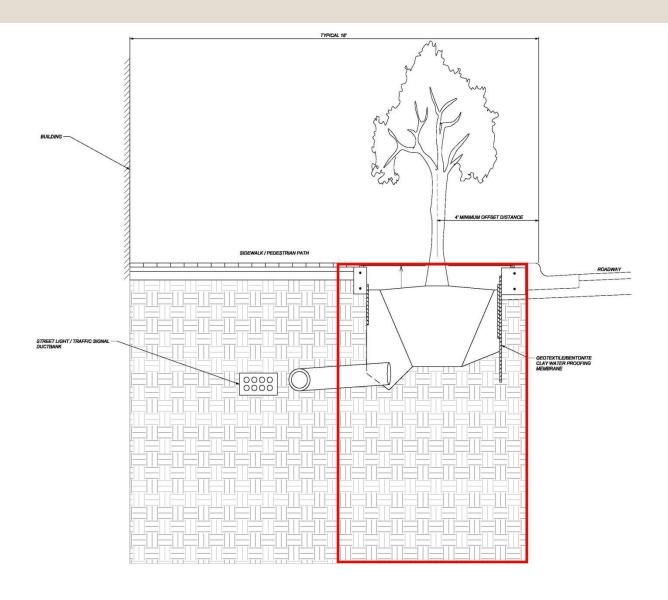
measured horizontally from AE's underground facilities (conduit, duct structure, pull-boxes, manholes, and such). No Customer building, foundation, or other permanent structure shall be installed over AE underground facilities. Variations permitted only for Customer-installed AE vault installations or by written permission from AE Design. (Clearance required for swimming pools. See 1.10.7)

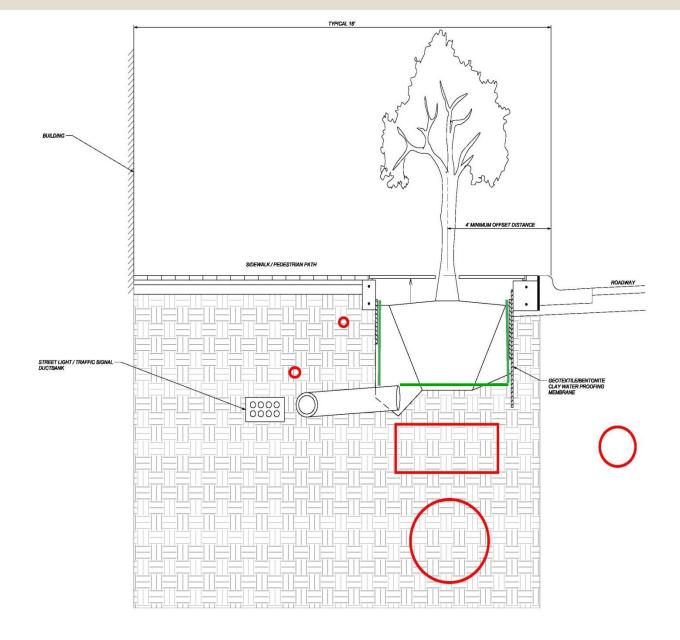
UTILITY CRITERIA MANUAL SECTION 2.9.0. DESIGN REQUIREMENTS FOR WATER, RECLAIMED WATER, AND WASTEWATER SYSTEMS

.... **trees** with root zones of 18 inches in depth or greater at maturity may be considered for inclusion provided the drip lines at maturity of the proposed **trees** are not located within a minimum horizontal separation of 7.5 feet from any water* infrastructure.

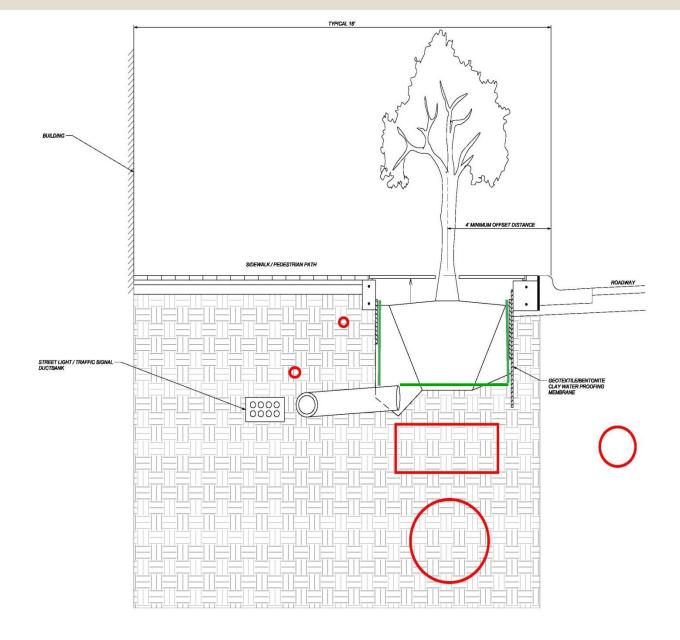
* Applicable to existing, new, and future, water and wastewater infrastructure "beneath circular intersections or other geometric street features" (round-a-bouts and medians).

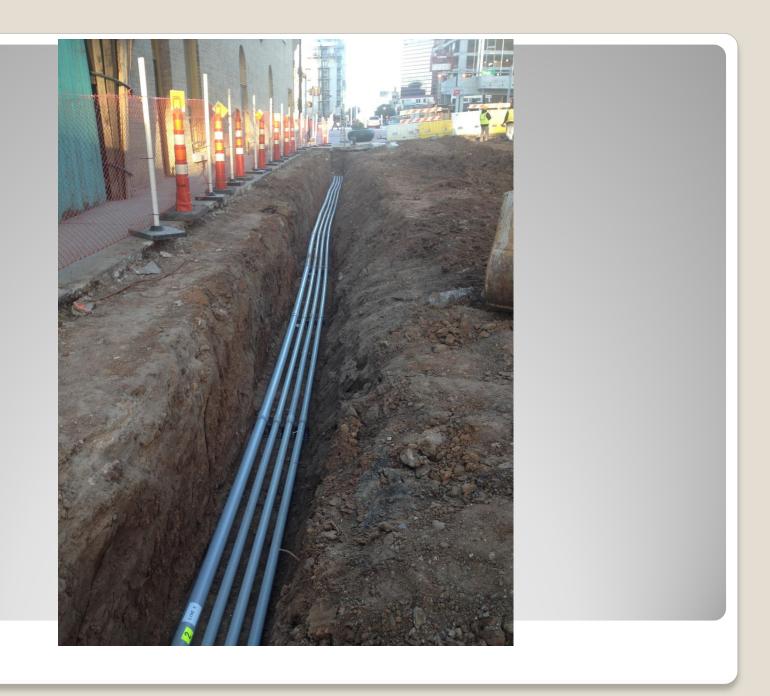




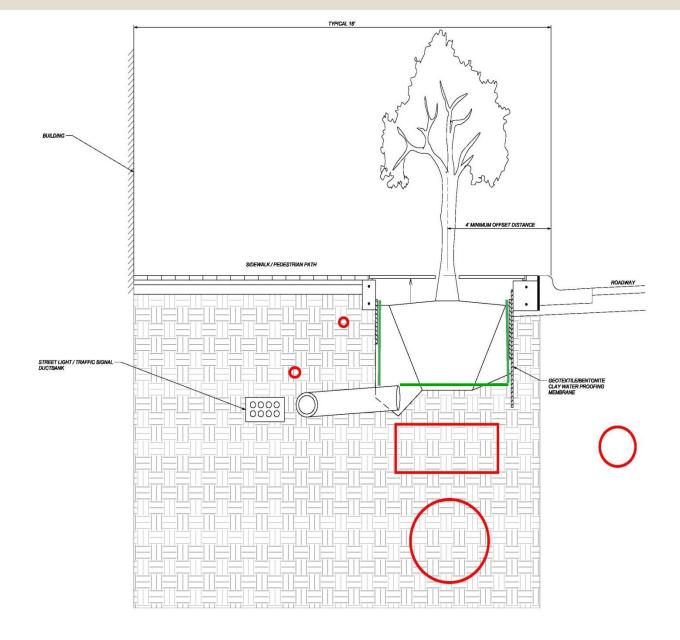




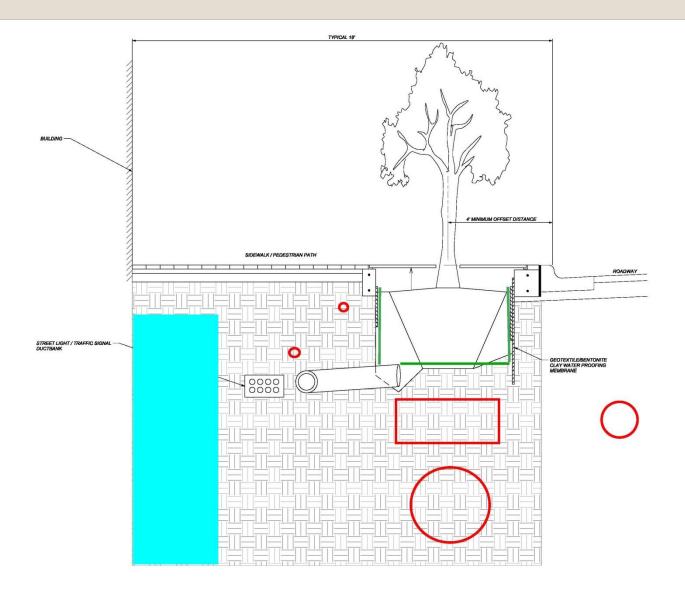


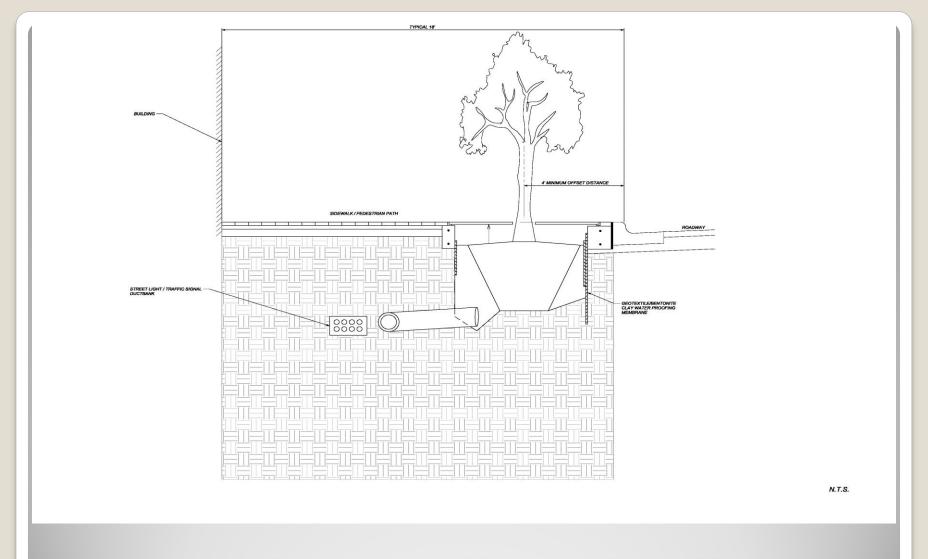












Growing Medium (Soils)?





Thank You.