

# 1.7 Acre Property (74,560 sf) - Commercial



Tree Survey provides:

150" from 8 protected trees on site

**26" oak – Significant (1.5x)**

22" oak – Class 2 (0.7x)

16" oak – Class 2 (0.7x)

**15" hackberry – Class 3 (0.4x)**

12" A. elm – Class 2 (0.7x)

28" oak – Significant (1.5x)

19" mulberry – Class 3 (0.4x)

**12" oak – Class 2 (0.7x)**

Remove 97" of tree diameter:

$28" \times 1.5 = 42"$

$(22" + 16" + 12") \times 0.7 = 35"$

$19" \times 0.4 = 8"$

**85" of replacement required**

**Retained 3 trees with 4,720 sf of canopy**

# 1.7 Acre Property (74,560 sf) - Cleared



Site to be developed along Commercial Corridor.  
Canopy GOAL for Commercial Is 30% tree canopy cover.

$74,560 \text{ sf} \times 30\% = \mathbf{22,368 \text{ sf}}$   
4,720 Square Feet tree canopy from remaining 2 oak trees and 1 hackberry to be protected on site.  
Need **17,648 sf** to achieve goal of 30% canopy.

85" tree replacement is required.

# 1.7 Acre Property (74,560 sf) - Commercial



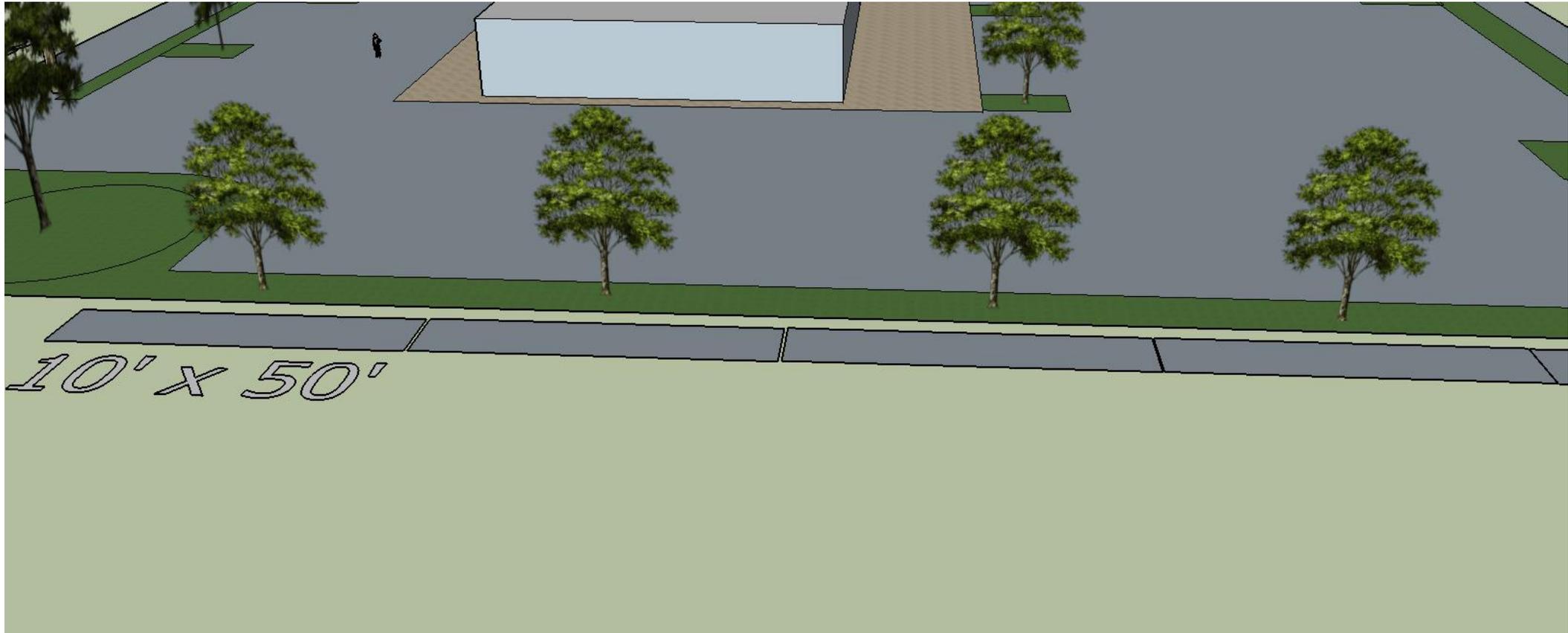
## OPTIONS:

Provide required 19 landscape trees, by planting and retention, at standard soil requirement (160 sf+) for all hospitable soil conditions and 'adequate' space. Meet all minimum landscape conditions and mitigation on site when applicable.

Provide Legacy Tree planting conditions for sufficient trees to meet landscaping and replacement requirements.

Based on scale of replacement to landscape required, plant Legacy trees for Site Improvement credits at 12" credit per tree.

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- Each large legacy tree is planted in a dedicated area of at least 500 square feet. Perimeter locations are favored to encourage their preservation during redevelopment of the property in future generations.
- Each large legacy tree provides for a predetermined canopy coverage credit of a minimum of 1200 square feet.

# Conditions after development

150 diameter inches (8 trees) were on site before classifying the trees.

3 large trees were preserved with 4,720 square feet of tree canopy, being 21% of the canopy goal for the lot.

**85" of replacement is required with the completion of the project.**

## Landscape

19 site trees required, including the SBZ. 16 optional site tree credits are provided by the 3 preserved trees.

SBZ: 5 SBZ trees required and planted, plus the 26" oak provide a street tree status for being within maximum distance of the property line.

Parking lot requirements met.

20 points are required for Design Options; some may be obtained with 9 points for tree preservation.

## Tree Replacement by Canopy Cover

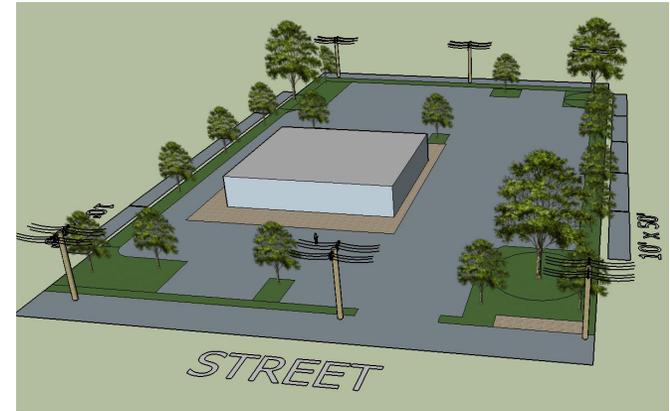
22,368 sf goal for 30% canopy cover over property

- 4,720 sf provided by existing trees (17,648 sf required to achieve full mitigation by SDI)
- 15 legacy trees provided (x 1200 sf per tree) = 18,000 sf
- **85.7" mitigation credit completed.**
- Alternative: Based on relatively small amount of mitigation, planting 8 legacy trees under the **Site Improvement Method** could achieve full replacement when combined with the three tree retention.



# Case Study: Mitigation 300"

After assessing tree class, final tree replacement requirement is 300".  
3 large trees were preserved with 4,720 square feet of tree canopy.



## Landscape

19 site trees required, including the SBZ. 16 optional site tree credits are provided by the 3 preserved trees.

SBZ: 5 SBZ trees required and planted, plus the 26" oak provide a street tree status for being within maximum distance of the property line.

Parking lot requirements met.

20 points are required for Design Options; some may be obtained with 9 points for tree preservation.

## Tree Replacement by Canopy Cover

22,368 sf goal for 30% canopy cover over property

- 4,720 sf (63" reduction) provided by existing trees (17,648 sf required to achieve full mitigation by SDI)
- **15 legacy trees** provided (x 1200 sf per tree) = 18,000 sf
- **22,720 square feet of canopy provided PLUS inches of all trees planted.**
- Alternative: Planting less than the area required for Legacy Trees would garner fewer inches of trees and not match the **236"** remaining after reduction for existing canopy cover. For instance, 15 trees at 2" is only 30".
- Also, **the Site Improvement Method** would provide only 180" reduction (15 Legacy Trees x 12 inches).