



MONTROSE
TAX INCREMENT REINVESTMENT ZONE 27

Montrose Boulevard Segment I Improvements

From W Clay Street to
Allen Parkway

October 16, 2023



PROJECT OBJECTIVES

Proposed conditions will achieve the following



Improve Mobility and Safety for All Users



TYPE

FULL ROADWAY RECONSTRUCTION
0.5 miles



Promote a Pedestrian and Bicycle-Friendly Environment



SEGMENT I COST

\$14 Million



Drainage Improvements



SEGMENT I STATUS

90% DESIGN



TREE PROTECTION AND PLANTING

- Protecting trees is a core value of this project.
- NO HEALTHY, MATURE LIVE OAK TREES IN THE MEDIAN WILL BE REMOVED OR REPLACED.**
- Existing mature trees will be protected and preserved.

SEGMENT I: West Clay St to Allen Parkway



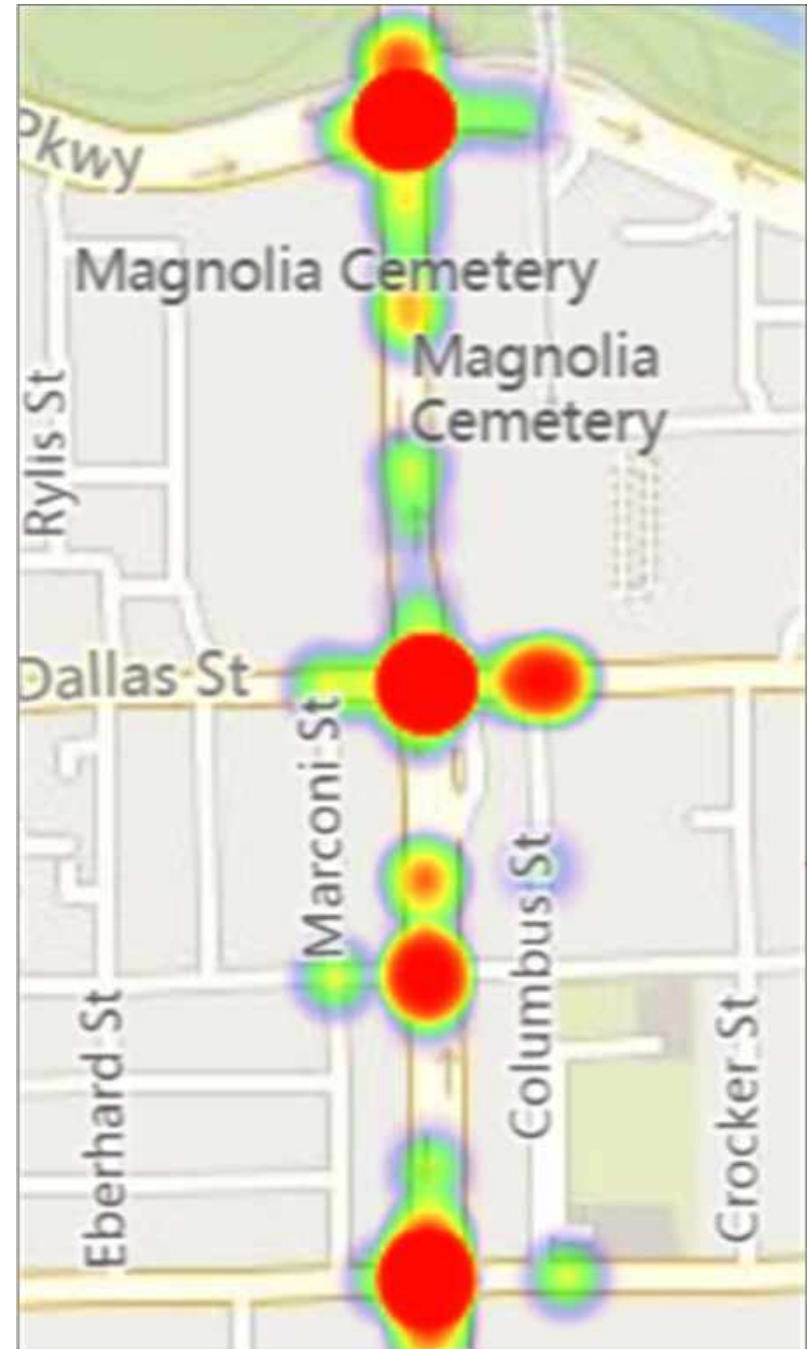
**Depends on when construction begins*



SAFETY IMPROVEMENTS

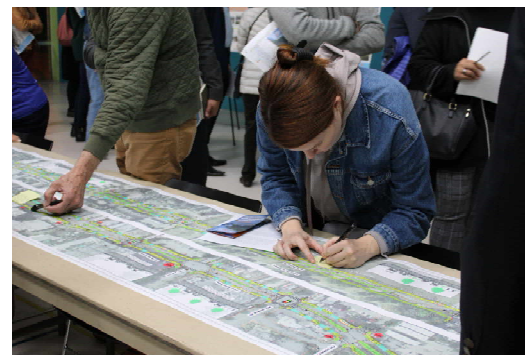
- Majority of corridor is on **City of Houston 2022 High Injury Network (HIN)**
- Segment I – W Dallas to south of W Clay
 - High Injury Network
 - From 2018 –2022, **253 crashes** at intersections
- **Recommendations** for a safer street for all users
 - Improved pavement, sidewalks & shared use path
 - Intersection enhancements and new signals
 - Safer crossings

Segment 1 Crash Heatmap 2018-2022
TxDOT CRIS database



COMMUNITY MEETINGS

- The TIRZ seeks public input through dedicated public meetings.
- The TIRZ has held four public meetings.
 - December 12th, 2022 – Board Meeting
 - Workshop Presentation for Board and Public
 - January 23rd, 2023 – Public Meeting
 - Open House
 - August 21st, 2023 – Board Meeting
 - Workshop Presentation for Board and Public
 - September 18th, 2023 – Public Meeting
 - Open House
 - October 16th, 2023 – Board Meeting
 - Workshop Presentation for Board and Public



PUBLIC COMMENTS INCORPORATED

Montrose Boulevard-Segment I Improvements



Bicycle Facility:

Incorporated as a Shared Use Path on east side.



Shaded Pedestrian Realm:

Many trees will be preserved and planted for shade.



Tree Preservation:

Many median trees will be preserved.

PUBLIC COMMENTS INCORPORATED

Montrose Boulevard-Segment I Improvements



Pedestrian Safety at Intersections:

Leading Pedestrian Intervals for signalized intersections.



Rectangular Rapid Flashing Beacons (RRFB) are not effective enough:

Signals at intersections are being used in lieu of the RRFBs.



Public Art:

Public art will be incorporated after the roadway construction.

BALANCE OF GOALS AND BENEFITS

- ONCE-IN-A-LIFETIME OPPORTUNITY TO:

- Privilege the Montrose neighborhood with the features and benefits sought by the community.
- Create a beautiful, safe boulevard that will last for the next 80 years.

GOALS AND BENEFITS

- Improve Mobility and Safety
 - Maintain two lanes in each direction for vehicular traffic.
 - Add a boulevard with trees on the north section.
- Improve Drainage
 - Install large 10-ft x 10-ft storm boxes
- Accommodate Pedestrians and Bicyclists
 - Shared Use Path
 - Enhance walkability
- Improve Quality of life
 - Preserve healthy, well-positioned, mature trees.
 - Beautify the area by installing wider planting space to enhance tree growth.
 - Allows for development of a continuous tree canopy that will reduce the heat island effect.
- Public Art

DESIGN TEAM

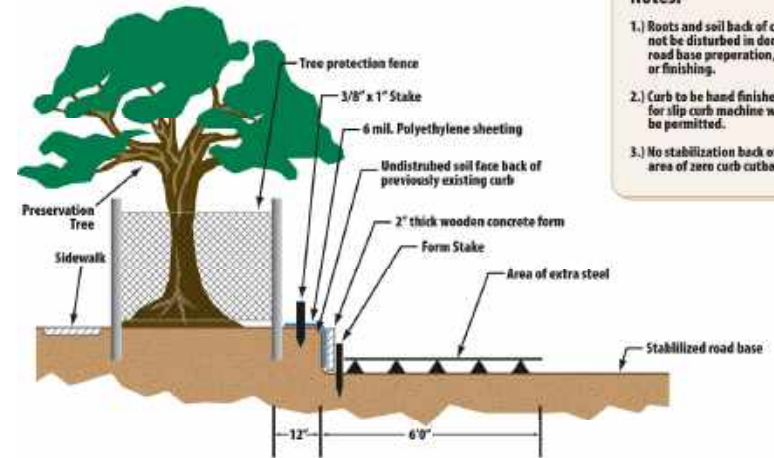
- Tree protection led by Urban Forester.
 - Experience with mature trees in West University Place.
- Tree planting led by an experienced Landscape Architect.



TREE PROTECTION AND PRESERVATION

TREE PROTECTION AND PRESERVATION

- Tree Preservation has been a primary project design consideration.
- City of Houston Forestry has reviewed and approved tree removals and median narrowing.
- All thirteen mature Live Oak trees within the median will be protected.
- Tree Protection Plan specifies protection treatment for each tree on project.
- Median narrowing from 30-ft to 20-ft will not contribute to tree loss.



- Notes:**
- 1.) Roots and soil back of curb shall not be disturbed in demolition, road base preparation, forming or finishing.
 - 2.) Curb to be hand finished, access for slip curb machine will not be permitted.
 - 3.) No stabilization back of curb in area of zero curb cutback.

Zero Curb Cutback Detail
Not to scale



TREE REMOVAL AND REPLACEMENT

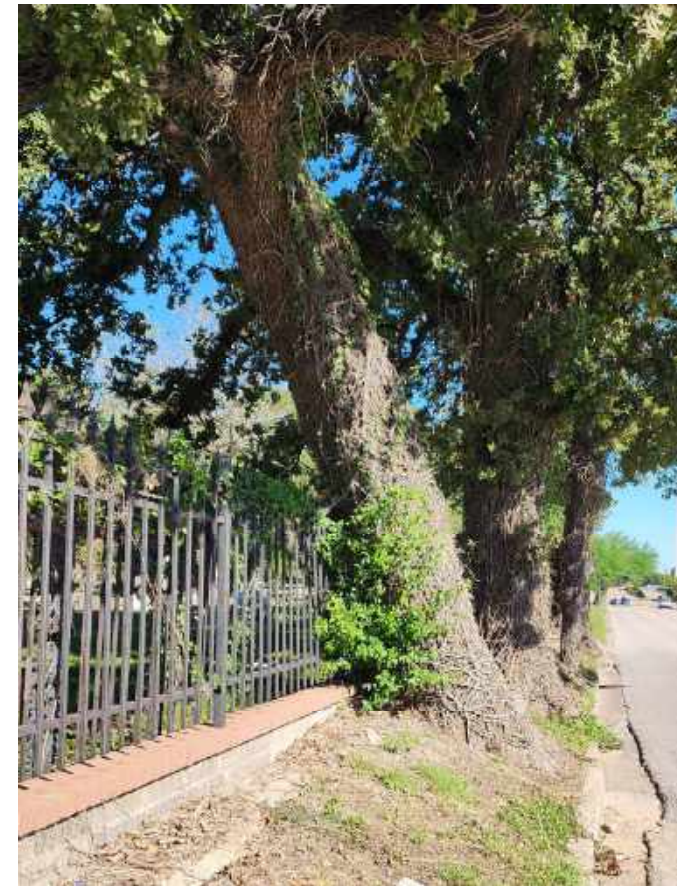
- Only trees in direct conflict with proposed construction to be removed and replaced, most of which are:
 - Trees growing in a **restricted growing space**, without adequate soil volume to support tree long-term.
 - Trees directly **underneath overhead utility lines**, that will be continuously topped by utility provider long-term.



Top of Tree Removed/Pruned for Utilities



Restricted Grow Space Condition



Restricted Grow Space Condition

TREE REPLACEMENT BY CALIPER

Ordinance Protected Trees to be Replaced: 53 total

- Nine Eastern Redbud trees: 2-inch to 5-inch caliper.
- Twenty-two Live Oak and Cedar Elm trees: 3-inch to 9-inch caliper.
- Fourteen Live Oak and Cedar Elm trees: 10-inch to 14-inch caliper.
- Three Live Oak trees: 15-inch to 18-inch caliper.
- Three Post Oak trees: 25-inch to 27-inch caliper.
- Two Crepe Myrtles: 24-inch and 28-inch caliper.

Ordinance Not Protected Tree. No replacement is required: 4 total

- One Huisache tree: 17-inch caliper
- One Bradford Pear tree: 10-inch caliper
- Two Crepe Myrtles: 17-inch to 18-inch caliper

Trees to be planted: 137 total

- Between W Dallas Street and W Clay Street:
 - Forty-four 65-gallon, 3.5-inch caliper Live Oak trees replace 40 trees.
- Between W Dallas Street and Allen Parkway:
 - Ninety-three 65-gallon, 3.5-inch caliper Lanana Cypress trees replace 17 trees.



Lanana Cypress in Winter

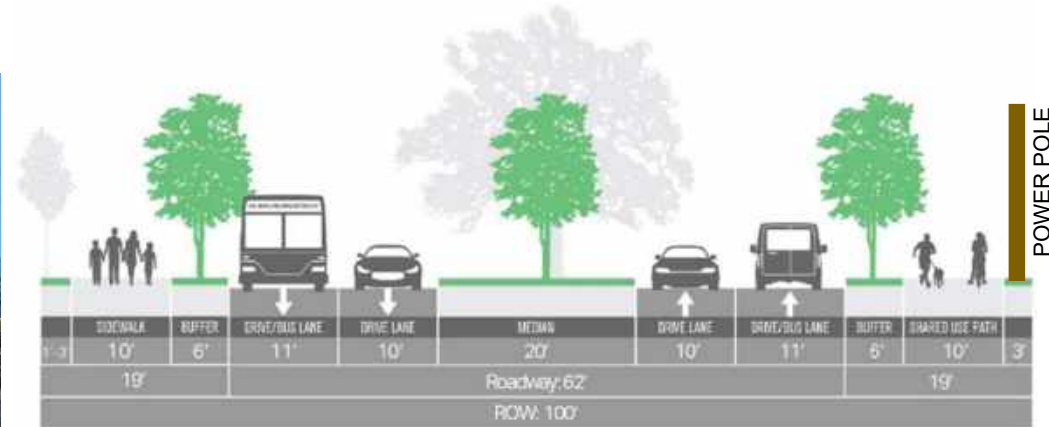


Lanana Cypress

W DALLAS STREET TO W CLAY STREET

- 37 trees will be removed and replaced that are protected by Ordinance.
- 3 trees will be removed that are not protected by Ordinance.
- 44 trees will be planted.

Typical Section



Median Trees to be Protected.

W DALLAS STREET TO W CLAY STREET

Median

- Where the trees are predominantly preserved.
- Tree preservation is a primary project design consideration.

Trees to be Preserved and Protected:

- Ten Live Oak trees 10-inch to 19-inch caliper
- Two Live Oak trees 20-inch to 22-inch caliper
- Three Eastern Redbud trees 4-inch caliper

Trees to be Planted:

- Eight Live Oak trees 65-gallon, 3.5-inch caliper

Ordinance Protected Trees to be Replaced:

- Nine Eastern Redbud trees 2-inch to 5-inch caliper



Trees to be Protected and Removed/Replaced on Aerial.



Eastern Redbud trees to be Removed.



Eastern Redbud trees planted in 2015

W DALLAS STREET TO W CLAY STREET

East Side

- Trees are growing in a very restricted grow space.
- Trees are directly underneath overhead utility lines.

Trees to be Planted:

- Fifteen Live Oak trees 65-gallon, 3.5-inch caliper

Ordinance Protected Trees to be Replaced:

- One Live Oak tree 8-inch caliper
- Twelve Live Oak trees 10-inch to 19-inch caliper

Ordinance Not Protected Tree. No replacement is required.

- One Bradford Pear tree 10-inch caliper



Trees to be Removed/Replaced on Aerial.



Tree Canopy Topped for Utilities



Tree Canopy Topped for Utilities



Overhead utilities through tree canopy



Restricted Grow Space

W DALLAS STREET TO W CLAY STREET

West Side

- Trees are growing in a very restricted grow space.
- Trees do not allow enough room for the minimum sidewalk.

Trees to be Planted:

- Eighteen Live Oak trees 65-gallon 3.5-inch caliper

Ordinance Protected Trees to be Replaced:

- Nine Live Oak trees 3-inch to 6-inch caliper
- Four Live Oak trees 10-inch to 12-inch caliper
- Two Crepe Myrtle trees 24-inch to 28-inch caliper

Ordinance Not Protected Tree. No replacement is required.

- Two Crepe Myrtle trees 17-inch to 18-inch caliper



Trees to be Removed/Replaced on Aerial



Restricted Grow Space



Restricted Grow Space



Restricted Grow Space

ALLEN PARKWAY TO W DALLAS STREET

- Devoid of trees both along the sidewalk (east side) and median.
- 16 trees will be removed and replaced that are protected by Ordinance.
- 1 tree will be removed that is not protected by Ordinance.
- 93 trees will be planted.



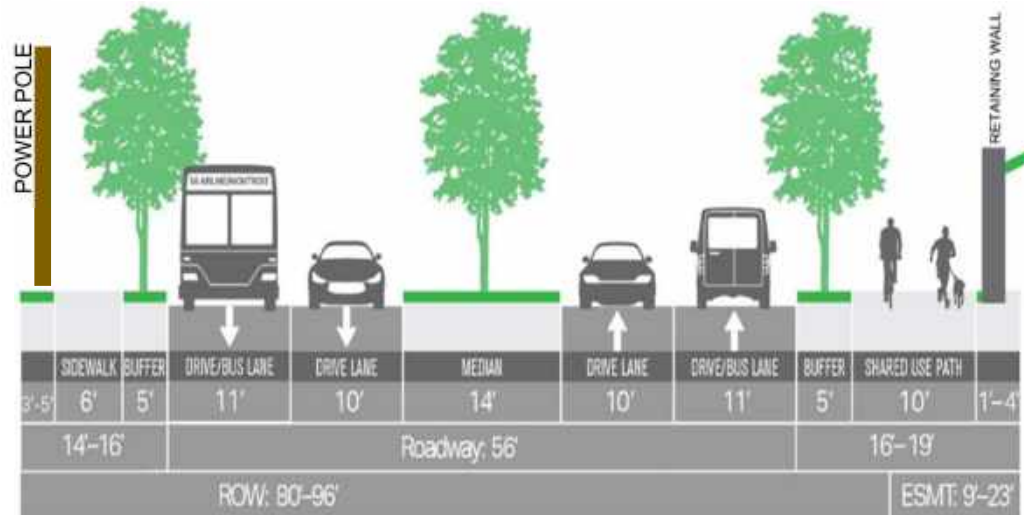
Lanana Cypress in Winter



Lanana Cypress



Devoid of trees



Typical Section

ALLEN PARKWAY TO W DALLAS STREET

East Side

- The roadway will shift east.
- Places the road in conflict with small Cedar Elm trees.

Trees to be Planted:

- 37 Lanana Cypress trees 65-gallon, 3.5-inch caliper

Ordinance Protected Trees to be Replaced:

- 12 Cedar Elm trees 6-inch to 10-inch caliper



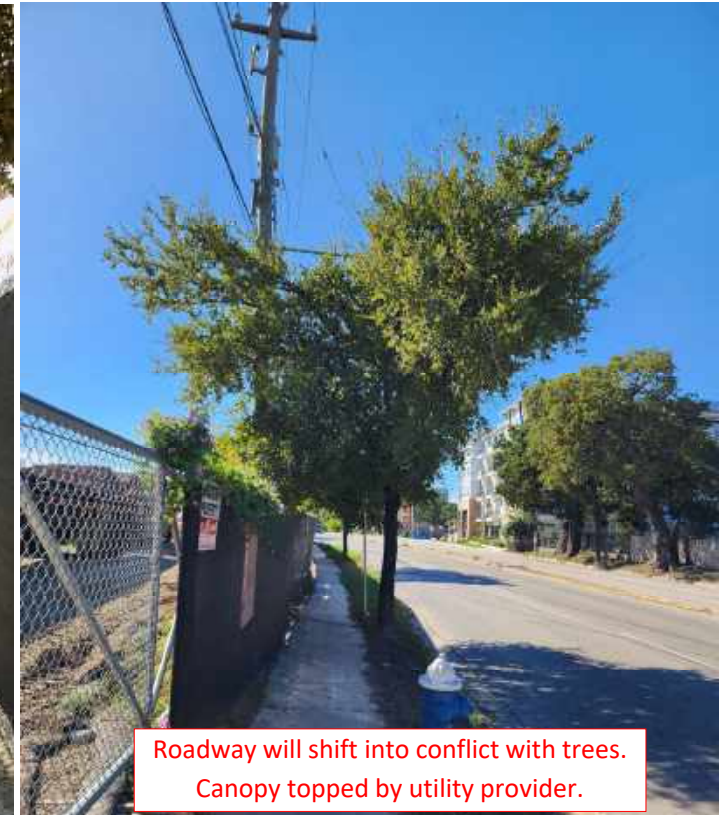
Trees to be Removed/Replaced on Aerial.



Tree is dead



Roadway will shift into conflict with trees.
Restricted grow space.



Roadway will shift into conflict with trees.
Canopy topped by utility provider.

ALLEN PARKWAY TO W DALLAS STREET

Median

- No trees.

Trees to be Planted:

- Sixteen Lanana Cypress trees 65-gallon, 3.5-inch caliper



ALLEN PARKWAY TO W DALLAS STREET

West Side

- Right-of-way is too narrow.
- Power poles shift to west side.

Trees to be Planted:

- **Forty** Lanana Cypress trees 65-gallon, 3.5-inch caliper

Ordinance Protected Trees to be Replaced:

- **Two** Post Oak trees 25-inch to 26-inch caliper
- **One** Post Oak 27-inch

Ordinance Not Protected Tree. No replacement is required.

- **One** 17-inch caliper, very low branching Huisache tree.



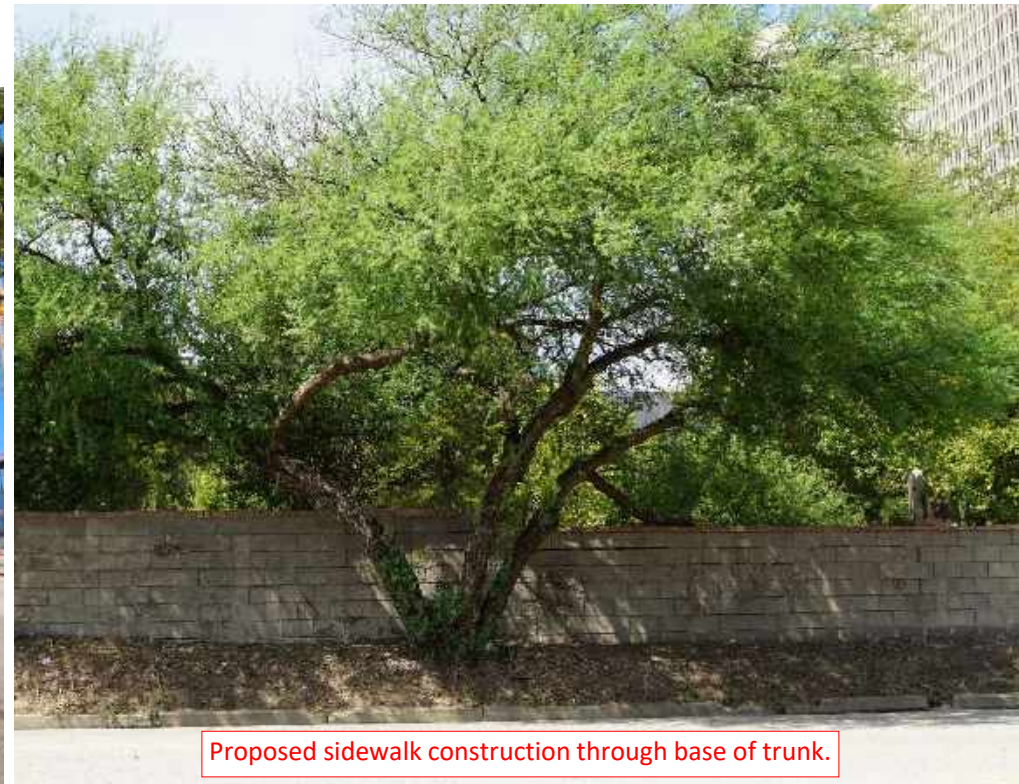
Trees to be Removed/Replaced on Aerial.



Restricted Growth Space



Significant Trunk Decay – 27”
Post Oak



Proposed sidewalk construction through base of trunk.

PROPOSED LANDSCAPE PLAN / TREE REPLACEMENT PLAN

PROPOSED LANDSCAPE PLAN / TREE REPLACEMENT PLAN

Allen Parkway and W Dallas Street:

- All suitable and available planting space will be planted with the new Lanana Cypress.
- A total of 325 caliper inches or 93 new trees will be planted.
- The Lanana Cypress will extend the character of the Buffalo Bayou Park with its abundance of beautiful, hearty Bald Cypress trees.

W Dallas Street and W Clay Street:

- All suitable and available planting space will receive new Live Oak trees.
- A total of 155 caliper inches or 44 new trees will be planted.
- Live Oaks will reinforce and build on the beautiful streetscape canopy that already exists along Montrose Boulevard.

Watering and Maintenance:

- Watering / maintenance period will be included in the construction contract.

TREE PLANTING

- All suitable and available planting space will receive new Lanana Cypress and Live Oak trees.

Allen Parkway and W. Dallas Street.



Lanana Cypress



Lanana Cypress in Winter

W. Dallas Street and W. Clay Street.



Live Oak

TREE PLANTING



Trees at 65-gallon size at planting.
This is ideal size for replanting in urban environments.

PROPOSED STREETScape CHARACTER

ALLEN PARKWAY TO W DALLAS STREET

PROTOTYPICAL STREET SECTION

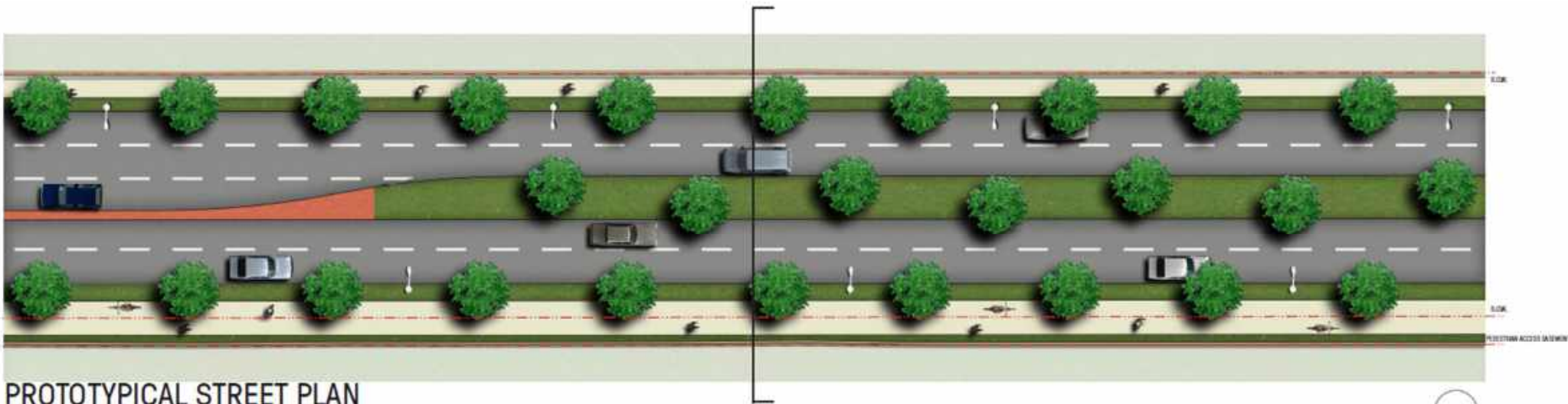
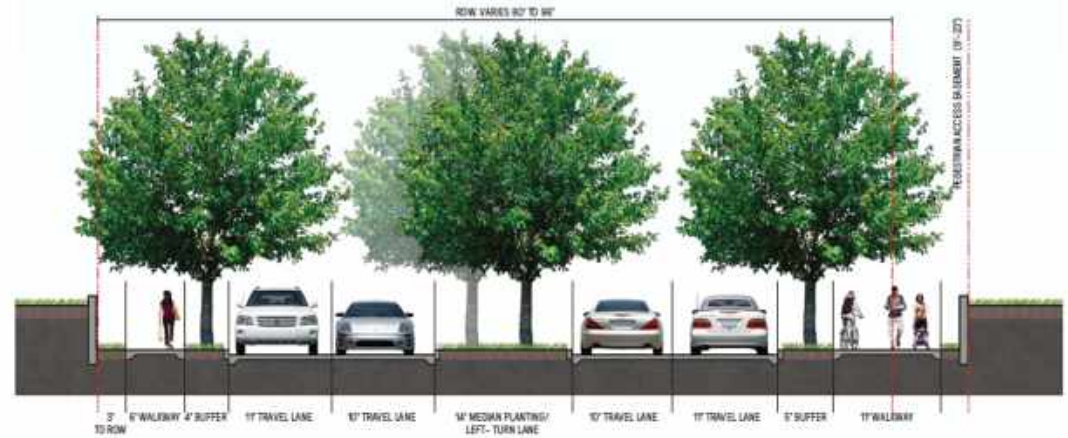
LEGEND



NEW TREES

NOTE: PRELIMINARY DESIGN CONCEPT ONLY NOT FOR CONSTRUCTION

TREES ARE SHOWN AT APPROXIMATE SIZE FOR EXISTING AND AT TIME OF PARTIAL MATURITY FOR NEW TREES



N
NOT TO SCALE

PROPOSED STREETScape CHARACTER

W DALLAS STREET TO W CLAY STREET

LEGEND



EXISTING TREES



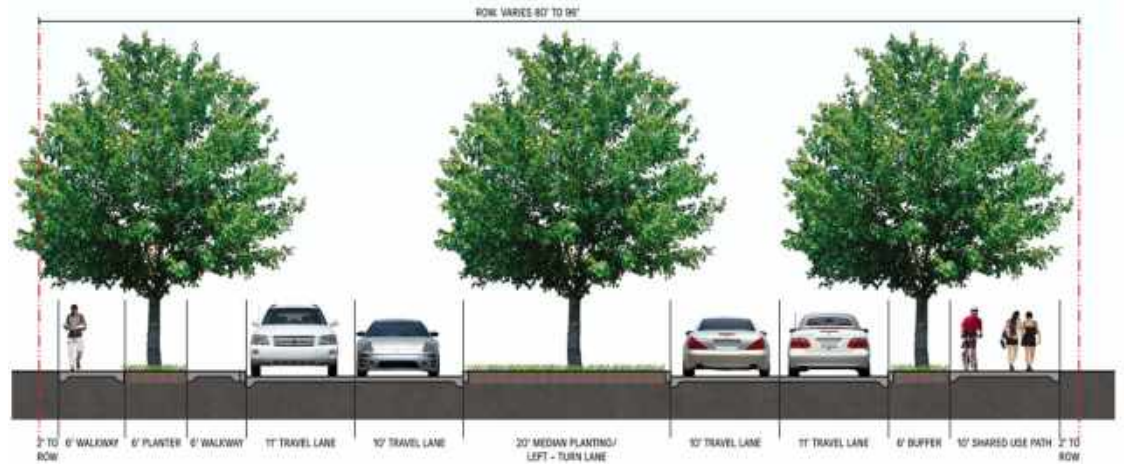
NEW TREES

NOTE: PRELIMINARY DESIGN CONCEPT ONLY NOT FOR CONSTRUCTION

TREES ARE SHOWN AT APPROXIMATE SIZE FOR EXISTING AND AT TIME OF PARTIAL MATURITY FOR NEW TREES

SIDEWALK WIDTHS VARY - 10' IS TYPICAL BUT MAY RANGE UP TO 18' INCLUDING TREE ZONES (SEE STREET PLAN).

PROTOTYPICAL STREET SECTION



PROTOTYPICAL STREET PLAN



NOT TO SCALE



TREES FOR HOUSTON RESPONSES

BARRY WARD RESPONSES

- **After walking the project with the design and engineering team, please provide your overall impression of the portion of the project related to trees.**

If implemented as designed, my overall impression is favorable. While I never like to see trees removed, those in question are poorly located and in direct conflict with infrastructure at three levels – aerial, subterranean, and ground level. Simply put, due to their location, these trees will never flourish.

- **For trees that need to be removed, can these be relocated to other places outside the project including gifting to other for their planting projects?**

Some of these trees could be, hypothetically, moved. However, the high cost of moving trees under the best of circumstances, the lack of an adequate root ball due to the limited planting area, and the poor morphology and structure of the trees due also to limited soil area and pruning due to power-line conflict all make transplanting infeasible.

- **What is your opinion of the trees back of curb in terms of condition and proposed removal?**

As stated above, they are planted in a zone where there is simply no place for their root ball to develop. While some are in “ok” shape, most are of poor quality and, unfortunately, will never flourish in the current setting.

- **What would be a recommended scope and duration for tree maintenance following construction?**

If hand watering, a minimum of two years with three or four preferred and highly recommended.

BARRY WARD RESPONSES

- **The 30' median is being narrowed to 20'; will the existing oaks in the median continue to thrive?**

If done correctly, the reduction in root zone will not harm the existing esplanade trees. Care will need to be given pre- and post-construction, as well as during the project, to ensure they thrive, but the amount in itself should not be an issue.

- **What if any pre-construction practices are recommended around these median trees to protect them?**

The City has standards for this.

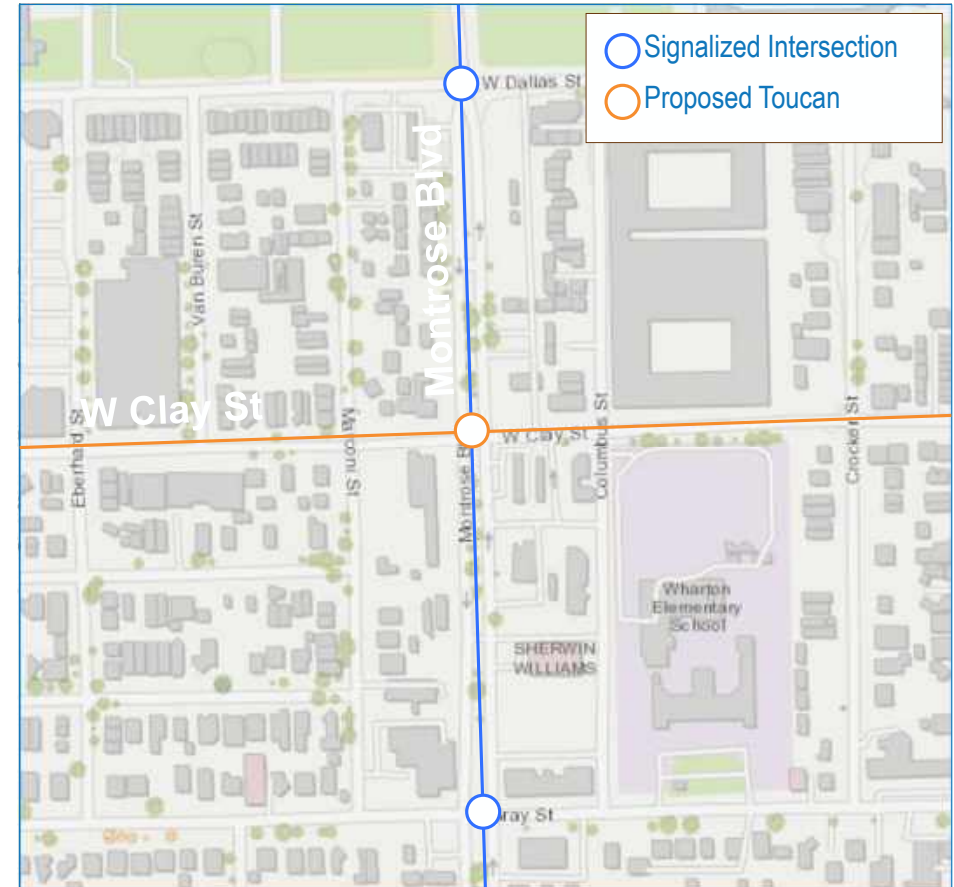
- **Any comments on what you have observed about the existing conditions of the trees and the proposed project plan?**

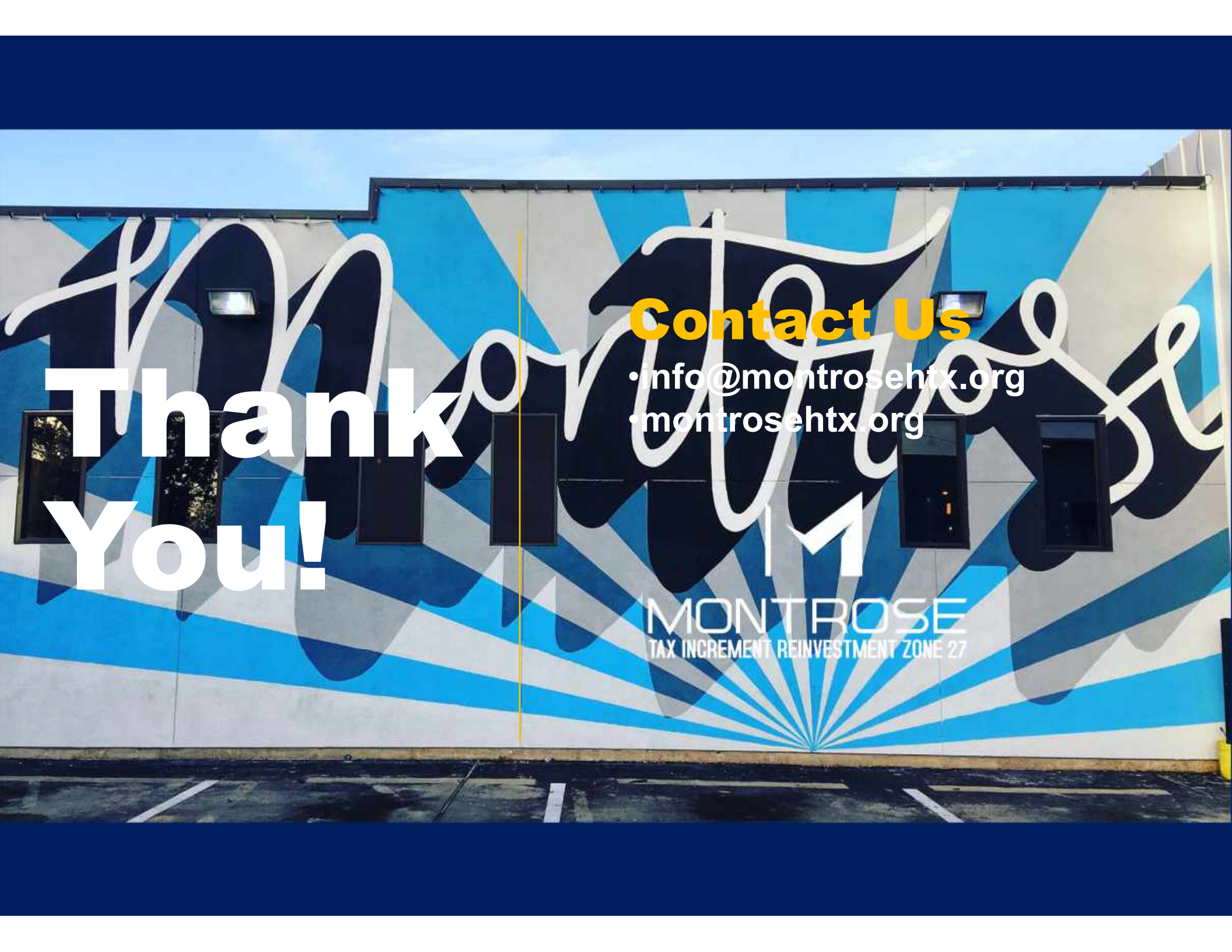
If done as designed, this plan removes poor quality trees from insufficient and in appropriate planting zones and provides a new planting zone that is far more salubrious. Simply put, the existing trees cannot thrive in the current context. The new streetscape will allow for trees that can grow to something analogous to those around Rice University or on South Boulevard.

MONTROSE BLVD AT W CLAY STREET

CLOSED MEDIAN AND TOUCAN SIGNAL

- Right-In, Right-Out
- Safe pedestrian and bicycle crossing
- Minimize angled crashes
- Peak hour counts:
 - 23 people crossing
 - ~25 vehicles use median opening
- Access at W Dallas and W Gray.





**Thank
You!**

Contact Us

- info@montrosehtx.org
- montrosehtx.org

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