2 Southeast Planning Strategy

This chapter introduces the Planning Strategy and describes the Pedestrian Realm/ Mobility Plan, the Land Development Concept Plan and Infrastructure Plan.

C2.1

The Combined Pedestrian Realm/ Mobility/ Land Development Concept Plan

The diagram on the facing page illustrates the combination of the Pedestrian Realm/Mobility Plan and the Development Concept Plan, which are described in detail in the sections that follow. The resulting plan is the Urban Design Plan for the Southeast Corridor. This plan illustrates broader elements of the Corridor that will eventually result in Transit Oriented Development and connections to the surrounding community.

The distinguishing characteristics of this corridor are the extensive areas of the corridor that abut exiting residential neighbourhoods. The line passes through a variety of conditions from the very urban areas abutting the downtown, though the University area, and past large portions of the Corridor that are open space, such as MacGregor Park.

The Plan illustrates detailed areas that were developed during the workshop for the Southeast Corridor. It indicates that stable neighborhoods, located in proximity to the Transit Street, should be protected from redevelopment in the future. This corridor has components of the downtown as well as development opportunity areas. There are a variety of existing uses along the corridor. The east end, near the downtown, is characterized by a tight grid pattern of streets with relatively compact blocks. Full blocks can be developed here with some ease. At the middle of the corridor is the University of Houston and Texas Southern University where the University Line will connect with the Southeast line. This area offers the opportunity to locate mixed-use development that supports the Universities. At the east end of the line is the Palm Centre which could be a large block mixed-use development centred on the intermodal station at that location.

The important connector streets lead to stations on the line as illustrated. It is clear from the Plan that such streets as Polk and Wheeler function as pedestrian links to the Transit Street. The suggested policies of this report and the accompanying street cross sections demonstrate how the pedestrian environment can be enhanced.

Pedestrian Realm/Mobility/Development Concept Plan

Southeast

- Stable Area
- Opportunity Area 2 - Corridor
- Opportunity Area 1 - Downtown
- Park
- School
- Existing Pedestrian Crossings
- Link Streets
- Demonstration Plans
- Stations
- Proposed Pedestrian Crossing

C2.2

Pedestrian Realm/ Mobility Plan

The Pedestrian Realm/Mobility Plan illustrates recommendations to improve and enhance the pedestrian realm and mobility conditions within the Southeast Corridor. The goal of these recommendations is to provide a safe, vibrant, attractive and highly functional pedestrian experience along the Southeast Corridor Transit Line (Capitol/Rusk – Paige/Delano – McKinney – York/Sampson – Scott - Wheeler – Martin Luther King Blvd. - Griggs) adjacent to proposed Transit Stations/Transit Centers and along key connecting streets.

Beautiful, tree lined, pedestrian focused streets are the framework of the Pedestrian Realm/Mobility Plan. Streets comprise a large percentage of public space and as such must be enhanced and treated as important public places. When streets function well, they are lively places where cafes, corner flower shops, public art and gardens create vibrant outdoor rooms. They are the place where the eyes of the community are view activities of the street and serve as the frontage for developments.

Foremost, the Transit Street is recommended for substantial pedestrian realm enhancements: Capitol/Rusk, Paige/ Delano, McKinney, York/Sampson, Scott, Wheeler, Martin Luther King Boulevard and Griggs.

Streets intersecting the proposed Southeast Corridor transit line will provide access to and from the surrounding facilities, businesses and communities to the Transit Stations. These pedestrian connections are also recommended for pedestrian realm enhancements and include key segments of: Sampson, Roberts, McGowen, Cullen Blvd., Calhoun, Anita, Alabama, S. Lockwood, Cleburne, Blodgett and Scott.

Streetscape enhancements should include street tree plantings with the ambition to create a continuous pedestrian canopy. Street trees will clearly identify the important pedestrian streets and should provide shade to clear, wide, continuous sidewalks extending from back of curb to building fronts along the Transit Line Streets and connecting streets. In addition, pedestrian level lighting and street furnishings are appropriate on these streets.

Lighting along the Southeast Corridor Rail Line is recommended to be consolidated, as possible onto the catenary poles to be installed for the electrical service to the light rail cars. Both street lighting and pedestrian lighting can be attached to these catenary poles effectively. Consolidating lighting on these poles will avoid the visual clutter and expense of multiple poles.

Ample pedestrian crosswalks are crucial to the perception of accessibility to both sides of the Southeast Corridor Transit Line. Great care to provide safe, well-marked and unimpeded crossing opportunities especially within retail zones is critical. Bulb-outs reduce crossing distances and should be designed where on-street parking is proposed. Intersections along the Transit Corridor in need of crosswalk enhancements are identified above. Additional cross-walks are recommended for the intersections of: Hutchins and Capitol, Hutchins and Rusk, Palmer at McKinney, University Oaks Boulevard at Wheeler, South MacGregor at Martin Luther King Boulevard, Arvilla Lane at Martin Luther King Boulevard, and Cavanaugh at Griggs.

Current bike lanes serving the Southeast Corridor area should be connected to Transit Stations. These existing bike lanes are also recommended to be widened to AASHTO standards to improve their functionality and safety for bikers.

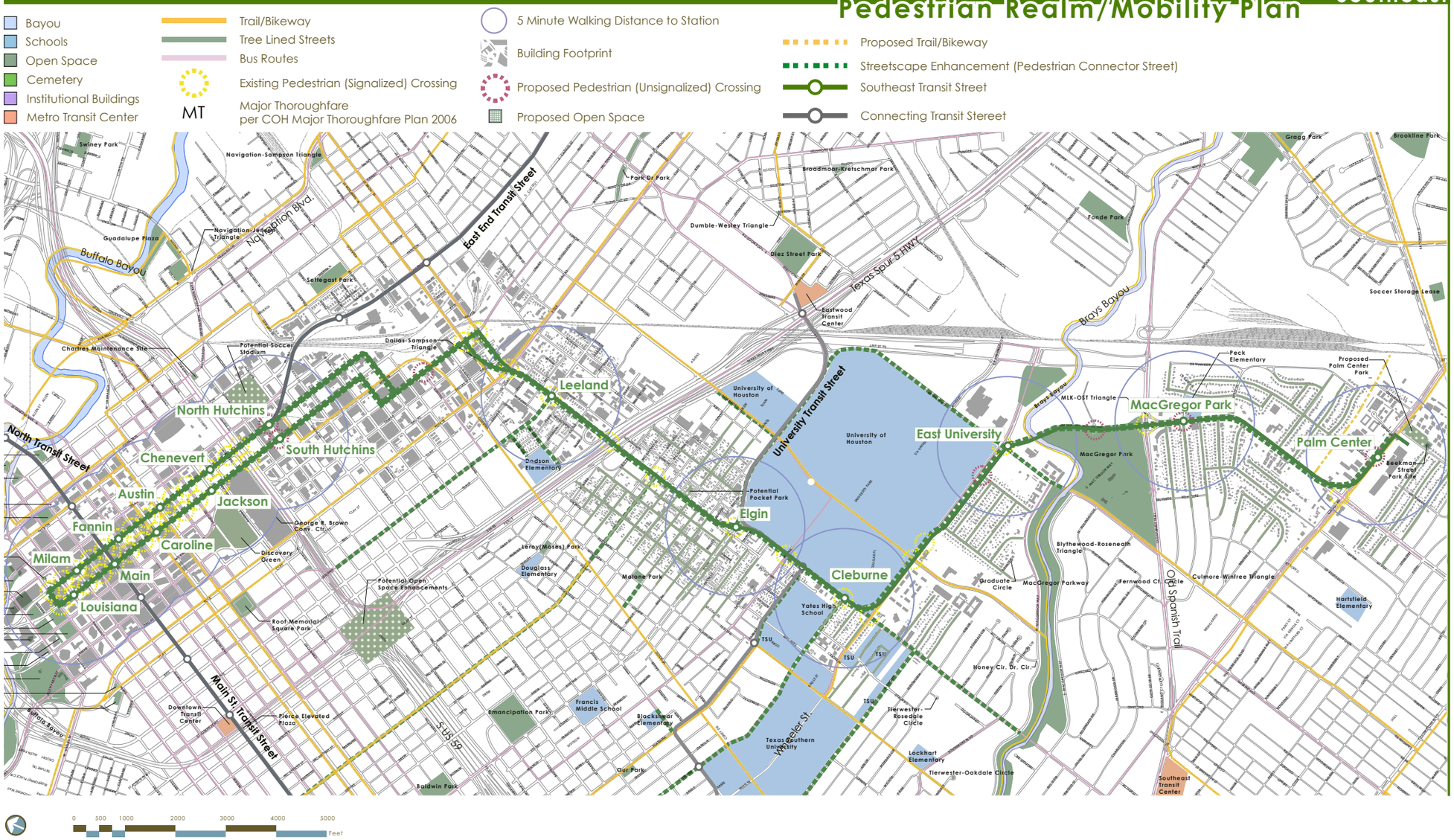
Two regional bikeway trails are recommended to be extended to the Southeast Corridor Transit Stations to improve regional accessibility to the line: Brays Bayou tributary at Palms Center Park and Buffalo Bayou Trail System.

Discovery Green and McGregor Park are ideally located on the Southeast Transit Line to provide key focal points at existing public spaces. These regional parks can provide amenities for adjacent Transit Oriented Development.

Urban Squares are smaller scale publicly accessible open spaces that should be located in association with Transit Oriented Development. These small plazas are more urban in nature and do not include active/sports facilities. Urban Squares are generally accessible to public use, often privately owned and may be gated or well lit for night security. These squares are primarily paved with planting areas, shade trees, planters, public art, fountains and seating for passive, outdoor enjoyment.

Pedestrian Realm/Mobility Plan

Southeast



C2.3

Land Development Concept Plan

The Land Development Concept Plan divides the Southeast Corridor into three categories based on their development potential:

Development Opportunity Area 1 - Downtown – The Downtown is likely to experience large-scale redevelopment activity as a result of the planned transit facilities and proximity to the City center. It includes existing employment, office and commercial uses – uses that are typically subject to more frequent redevelopment. The Downtown also includes vacant and underdeveloped lands within the 1/4 mile station radius where Transit Oriented Development is most probable.

Development Opportunity Area 2 - Corridor – The Development Opportunity Area 2 is concentrated at a few key points along the Southeast Corridor, including: the area within a ¼ mile of the proposed Leeland Station which consists of mainly older underdevelopment industrial and employment lands; along the western frontage of Scott Street between the proposed Elgin and Cleburne Stations which is characterized by small plaza-type retail commercial uses, between the proposed East University and MacGregor Park Stations which include a major vacant parcel and plaza-type retail at the Martin Luther King Jr. Boulevard - Old Spanish Trail interchange; and, around the Palm Center on Griggs Road which is characterized by the Palm Center's service commercial uses and adjacent commercial and light industrial uses along Griggs Road.

Stable Areas – Stable Areas are comprised of the predominately residential neighborhoods, parks and the major university campuses within the Southeast Corridor Study Area. Stable Areas are those areas that are not likely to experience large-scale redevelopment activity as a result of the planned Urban Corridor. Areas designated as Stable include existing stable residential neighborhoods, existing parks and open space as well as significant institutional uses both within and outside of the 1/4 mile stations radius.

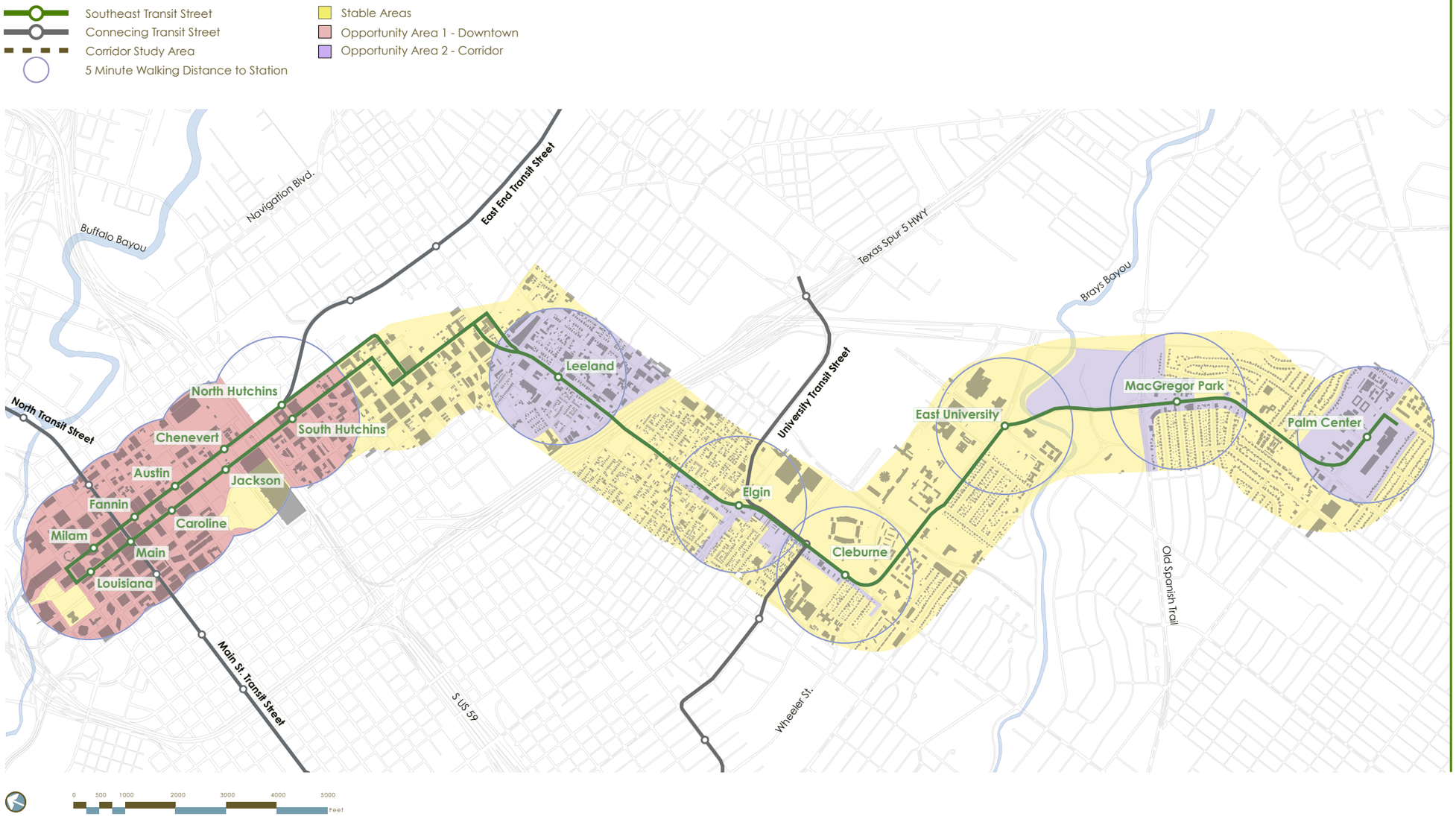
C2.3.1 Demonstration Plans

Four Demonstration Plans for prototypical sites were prepared to demonstrate conceptually how Transit Oriented Development could manifest itself given the context and condition of the Southeast Corridor.

The following diagrams provide a collection of images including a site plan, photographs of development precedents and photo simulations of large lot redevelopment, a large lot with minimum frontage on the Transit Line and a large through lot.

Land Development Concept/Infrastructure Plan

Southeast

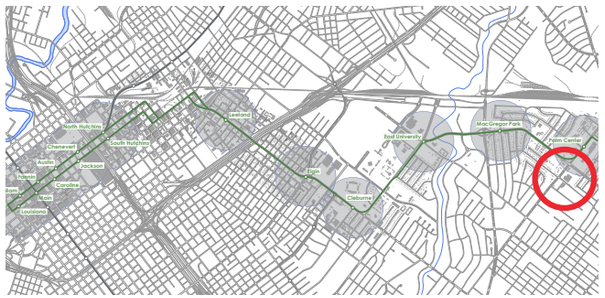


1 Large Through Lot

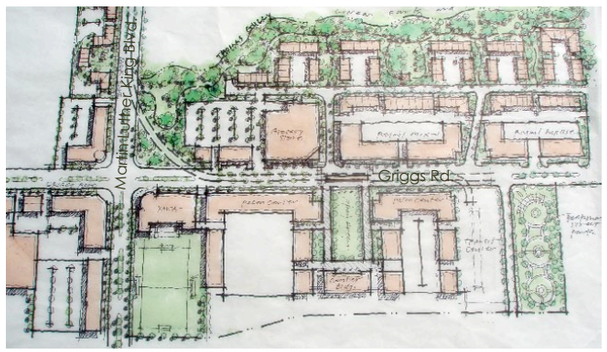
Griggs Road and Martin Luther King Blvd

This site is an example of large through-lot development

Existing Site Conditions



Location of site in corridor



Demonstration Plan created during the workshop

Site Characteristic

- the site comprises approximately 1,412,868 sf of area (32.42 acres);
- an extensive length of frontage of 1,796 linear feet on Griggs Rd and 1,375 linear feet on MLK Blvd;
- the north edge of the site is formed by a ravine extending from Martin Luther King Blvd to Beekman Road;
- the area surrounding the site is low density residential with an underutilize plaza that is being use for public service uses; and,
- the site includes an internal transit terminal.

The Program

- the program for the site includes a mix of transit supportive multi-family residential over retail, rear structured parking, town houses along the north side of the site and open space to connect community activity. A new YMCA will be built on the SW corner of the intersection; existing Palm Center-Business and Technology Center functions will be incorporated into the development along with the inter-modal transit station.

The Design Solution

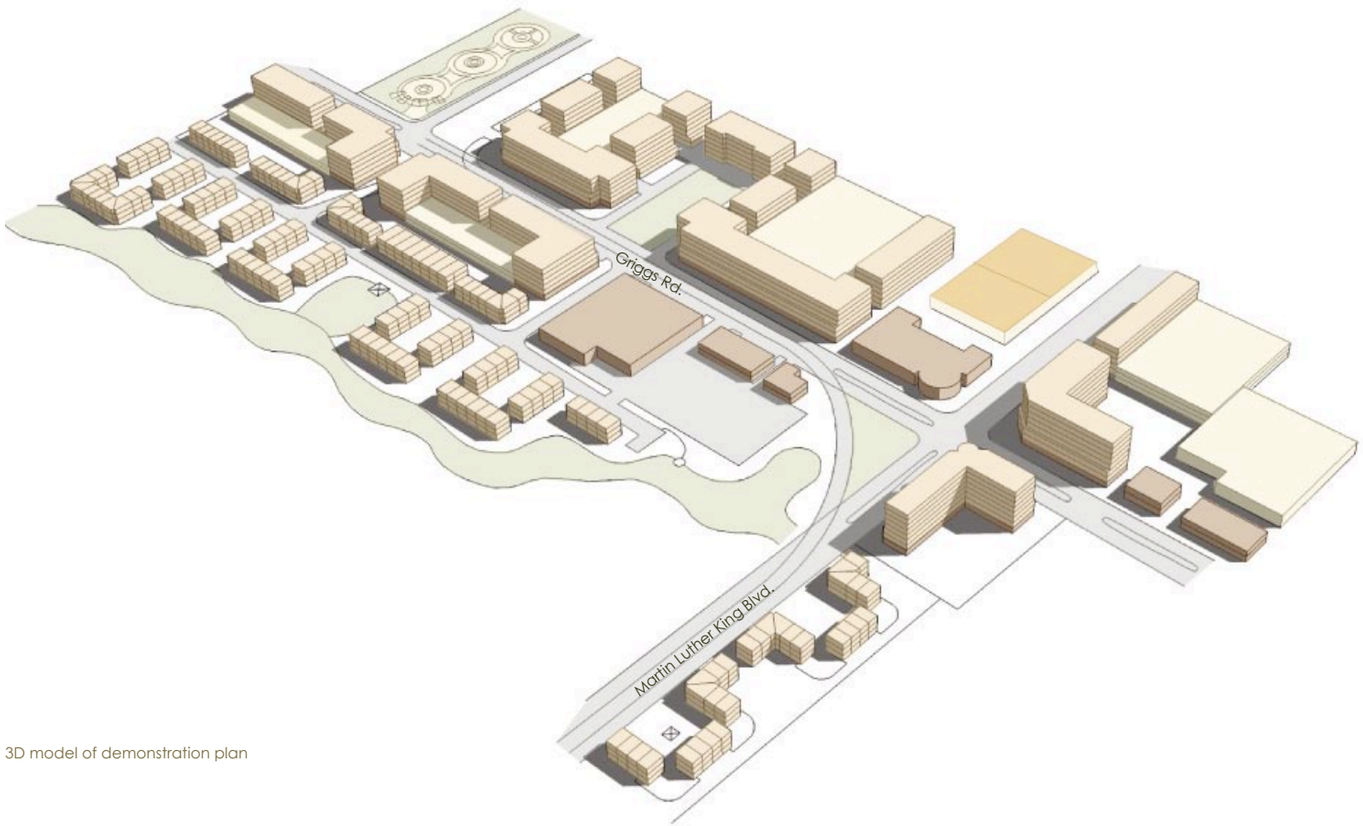
- a mix of town houses along the ravine and Martin Luther King Blvd;
- a range of 1-8 storey buildings along Griggs Road and Martin Luther King Blvd;
- development of small public spaces along the main the streets to act as a focus for the community; and,
- new YMCA, inter-modal station and Palm Center-Business and Technology Center uses.

The Results

- 2,162 linear feet of frontage on the Transit Corridor;
- 211,849 sf of retail;
- 475 Town Houses;
- 1,004 apartments; and,
- parking structures at 548,347 sf.

Demonstration Plan

Southeast



3D model of demonstration plan

Precedent- 5-storey street related apartments

Precedent- At grade retail with apartment above

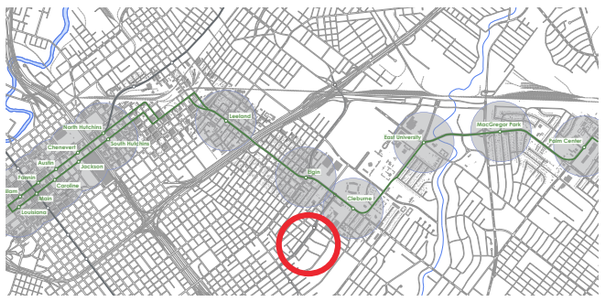
Precedent- Mixed use street related building

2 1/2 Lot Single Frontage

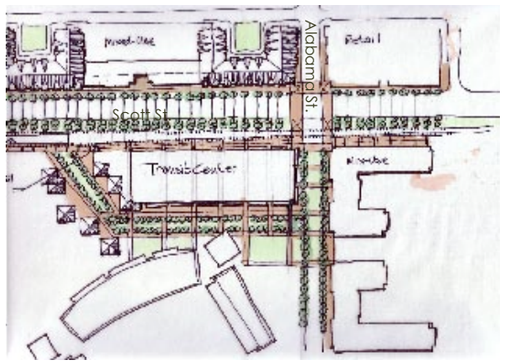
Scott Street, from Alabama Street to Cleburne Avenue

Located near the University of Houston-Stadium, the site is an example of 1/2 lot single frontage development.

Existing Site Conditions



Location of site in corridor



Demonstration Plan created during the workshop

Site Characteristic

- the site comprises approximately 566,187 sf of area (13 acres);
- the site has 1, 765 linear feet on Scott St; and,
- the area surrounding the site is a mix of low density residential, surface parking lots and the University. Along Scott St there is a commercial plaza and the Robertson Stadium.

The Program

- the program for the site includes mixed-use residential over retail and parking over retail.

The Design Solution

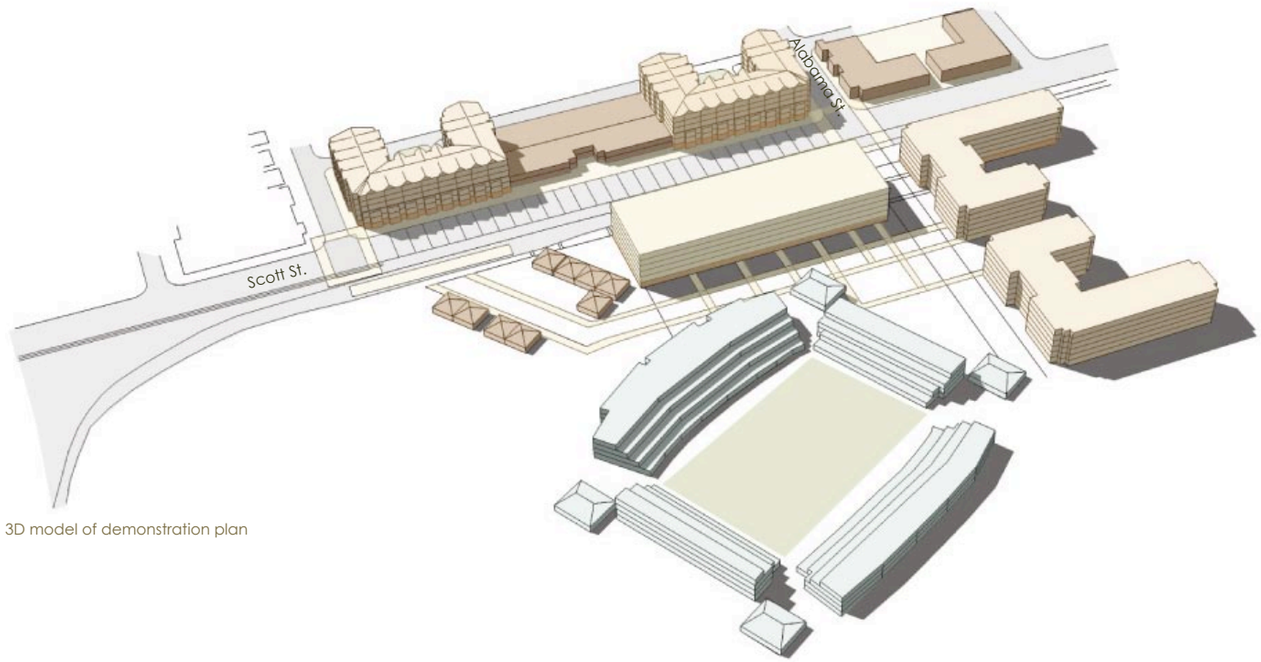
- provide a for a range of to 2-6 storey buildings;
- a mixed-use TOD development on Scott St;
- contain a mix of transit supportive uses such as multi-family residential, and commercial; and,
- create a pedestrian friendly environment next to the existing stadium as a focus to the university and the neighborhood by developing both sides of Scott St around the station.

The Results

- 1, 765 linear feet of frontage on the Transit Corridor;
- 175,913 sf of retail;
- 623 apartments; and,
- parking structures at 232,375.

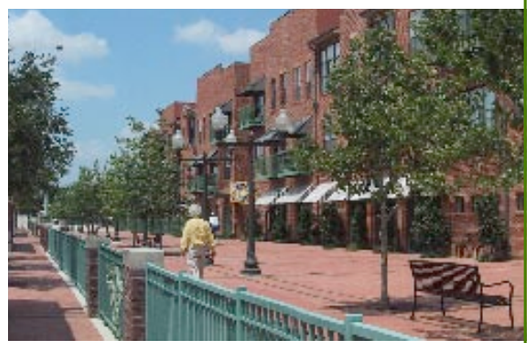
Demonstration Plan

Southeast



3D model of demonstration plan

Photomontage illustrating the potential enhanced streetscape and built form on Scott Street adjacent to the Transit Center of University of Houston



Precedent - Urban Streetscape

Precedent - Parking structure with enhancced streetscape

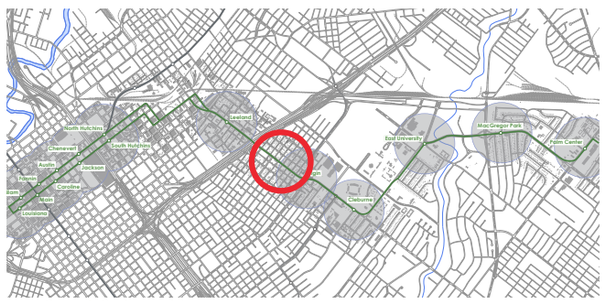
Precedent - 4-storey apartments with at grade retail

3 Small Infill and 1/2 Lot Single Frontage

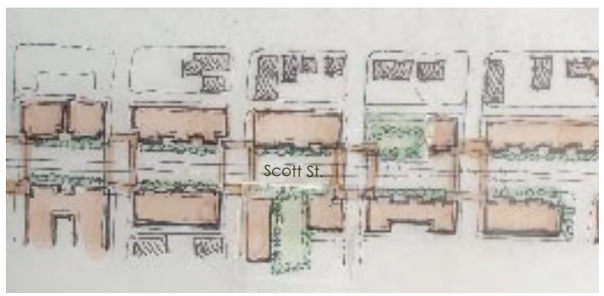
Scott Street

The site is located on Scott Street, from Hadley Avenue to Rosalie Street. This site is an example of small infill lots and 1/2 lot single frontage developments.

Existing Site Conditions



Location of site in corridor



Demonstration Plan created during the workshop

Site Characteristic

- the site comprises approximately 448,843 sf of area (11 acres);
- the site has 1,586 linear feet of frontage on Scott St.; and,
- the area around the site is predominantly low rise single family and vacant land with some retail.

The Program

- the program for the site includes residential and mixed-use apartments over retail. The objective is to generate development on small lots that are vacant or underutilize.

The Design Solution

- a site plan providing a mix of housing types along Scott Street, including a broad range of densities from town houses, live/work units and apartment buildings over retail up to 6 stories in height.

The Results

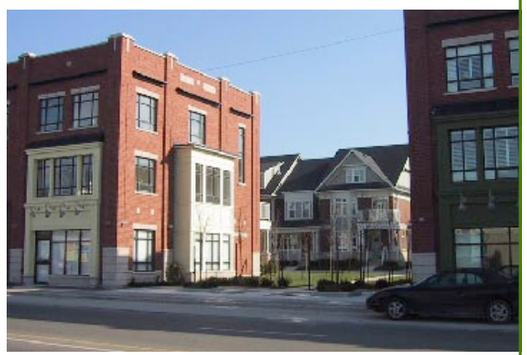
- 1, 586 linear feet of frontage on the Transit Corridor;
- 45,373 sf of retail;
- 152 live/work units;
- 84 town houses; and,
- 203 apartments.

Demonstration Plan

Southeast

3D model of demonstration plan

Photomontage illustrating the potential enhanced streetscape and built form on Scott Street



Precedent - Live-Work units with pedestrian link to adjacent housing

Precedent - 4-storey building with extended boulevard streetscaping

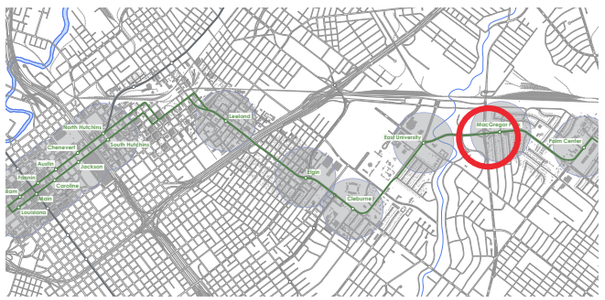
Precedent - Landscaped sidewalk

4 Large Through Lot

Martin Luther King and Old Spanish Trial

This site is an example of large through sites development.

Existing Conditions



Location of site in corridor

Demonstration Plan created during the workshop

Site Characteristic

- the site comprises approximately 360,806sf of area (8,28 acres);
- the site has 1,446 linear feet on Martin Luther King and 889 linear feet on Old Spanish Trial; and,
- the site surrounding the site is primary residential, vacant land, a retail plaza and a gas station service with McGregor park in proximity.

The Program

- the program for the site is multi-family residential with structured parking;
- fit new development along Martin Luther King and Old Spanish Trial so that they can improve street conditions; and,
- intensify development along the intersection and around the station.

The Design Solution

- provide for a range of 6-8 storey buildings;
- accommodate parking to the rear of the site so that it is accessible from inner roads; and,
- generate a strong pedestrian environment at the street level to support transit riders and the surrounding area.

The Results

- 1, 446 linear feet of frontage on the Transit Corridor;
- 1,163 apartments; and,
- parking 770.

Demonstration Plan

Southeast

3D model of demonstration plan

Precedent - Retail building with pedestrain area at street-level

Precedent - 6-storey mixed use apartment building with retail

Precedent - 6-storey mixed use apartment building with retail

C2.3.2
Development Analysis

The following analysis is intended to test underlying development economics in the Southeast Corridor market context. The development proforma is generic in nature and is not intended to represent specific site feasibilities. The form and scale of development, (an infill townhouse site) is indicative of the type of smaller scale, transit oriented development one could expect to occur over time in this area. Office buildings, for example, are unlikely to drive denser development in this Corridor given the absence of an existing nearby office node.

Development Scenario 1
Infill Townhouse Project

Description of Development

A generic development proforma was prepared for a 45-unit, 3-storey townhouse project. The land parcel measures 2 acres, and the units average 1,600 sf. There is one parking stall per unit, although additional surface parking may be available on a driveway, on-street parking or in a shared communal lot. The total development time horizon is 16 months from land acquisition to full occupancy. The proforma details are summarized on the following page.

Comparable Properties and Market Parameters

Two existing townhouse development projects were identified in proximity to the proposed Leeland and N. Huchins transit stops within the Southeast Corridor; the first being Park Townhomes, situated on Park Street, and the other known as Waterhill Homes on Rusk, situated on Rusk Street.

In terms of pricing, the Leeland Park townhouse unit was 1,538 sf, and had an asking price of $217,900. The Waterhill Homes on Rusk townhouse unit was 1,825 sf and had an asking price of $229,900. The prices for the two comparable projects are $142 psf and $126 psf, respectively. These projects are similarly sized to the 1,600 sf units proposed in the development proforma illustrated below.

New projects in the area, however, face considerable pricing pressure from the existing housing stock. As outlined in the Corridor overview above, based upon MLS data from the Houston Association of Realtors, the average resale townhouse/condominium price through September 2007 was in the range of $211,000. In contrast, single family homes were in the range of $127,000 (generally older supply compared to the newer townhouse/condominium units that were transacted).

Proforma Results

Understandably, the economic price required to justify new construction of townhouses in this area is within the range of current pricing at comparable projects, with land acquisition costs and construction costs projected near the middle point of market range. This produces a similar quality and character of building finish. The development proforma presented below suggests a required sale price of around $204,000, or $128 psf, compared to current asking prices for similar projects in the area in the $126 to $142 psf range. Consequently, there appears to be a potential to upgrade the building materials and finishes (and corresponding price for the project) closer to the $216,000 per unit range, or $135 psf, depending upon the depth of market demand, and be comfortably within the spectrum of current market pricing.

Some observations regarding the proforma for this type of project include the following:

- Hard construction costs (excluding parking) represent 52% of total project costs. The cost of parking accounts for an additional 5% of total end unit price. This represents a relatively small component since it is assumed the parking is at grade or structured underneath the units. Although underground parking can permit higher densities, it results in considerably more cost.
- Total land costs represent roughly 18% of total end unit price – this represents land values of roughly $720,000 per acre (or $20 per square foot buildable) plus some carrying costs. A more dense development, provided it can be successfully marketed, will generally achieve lower land costs per square foot, helping to reduce end unit prices (although for a different type of project – particularly smaller unit sizes).
- Of course, a developer needs to profit from any development at a rate consistent with the risk. Taking into account total project costs of approximately $8.2 million and assuming a 12% profit margin on the total project (higher when leveraged equity is considered), the required sale price per unit is $204,200 – translating to $128 per square foot.

Of note, the generic proforma outlined above can achieve relatively high densities (approximately 22 units

Economic Rent/Price Calculation- Southeast Corridor Townhouse Residential

Southeast

Assumptions

Timing Assumptions		
Land Acquisition	01-Jan-08	
Planning Period	4	months
Construction Commencement	03-May-08	
Construction Period	12	months
Occupancy	01-May-09	
Total Development Period	**16**	**months**
Interest Rate		
Interim Financing	7.00%	
Building Areas		
Number of Units	45	
Average Unit Size	1,600	sq.ft.
Number of Storeys	3	
Ground Floor Coverage	24,000	sq.ft.
Gross Building Area	72,000	sq.ft.
Site Coverage	0.83	times
Land Area	2.00	acres

Residential Units	G.B.A.	Avg. Size	G.F.A.	G.L.A.	
Bach & 1 Bedroom	0%	0	0	0	
2 & 2+ Bedroom	100%	1,600	72,000	72,000	
Other	0%	0	0	0	
TOTAL	100%	1,600	72,000	72,000	sq.ft.

Parking Ratio

1.0 stalls per residential unit — 45 stalls

Project Costs

	$ 000's	Per Unit
Land		
Purchase Price	$1,440	$32,000
Additional Land Costs	$72	$1,600
Land Carrying Costs	$141	$3,136
SUBTOTAL	**$1,653**	**$36,736**
Construction & Fringe		
Hard Construction Costs	$4,773	$106,058
Parking	$437	$9,719
Architect. & Engineer.	$339	$7,525
Site Improvements	$261	$5,808
Const. Contingency	$260	$5,789
Municipal Fees	$13	$289
Development Interest	$30	$662
SUBTOTAL	**$6,113**	**$135,851**
Sales & Marketing		
Sales Commissions	$324	$7,200
Marketing & Advertising	$113	$2,500
SUBTOTAL	**$437**	**$9,700**
TOTAL PROJECT COSTS	**$8,203**	**$182,287**

Required Price/Rent Calculations

Required Return on Investment	**12%**	
Required Average Sale Price	**$204,162**	Unit

per acre) and still provide at least one parking space per unit. There may be an opportunity to design additional surface parking, either in front of each unit, on a street or in communal parking lot. A key consideration regarding the market feasibility for this type of development project is the potential demand generated by proximity to the transit corridor. There are clearly a number of cost-competitive housing options in this area. In order to entice existing or new residents to a new development in the Southeast Corridor, the availability of enhanced public transit and associated mixed use development as an amenity will have to be emphasized. The ability to reduce car ownership may also assist with affordability if efficient public transit can be utilized.

Conclusions Regarding Development Analysis

The above proforma analysis demonstrates the required sales price for a new infill townhouse development. When assessing this development proforma, it is important to note it reflects new building costs which generally exceed market affordability for many area residents. In the Southeast Corridor, for example, the income levels (and corresponding homeownership affordability levels) and stock of single-detached housing available for resale places a considerable constraint on market demand.

Notably, the average price of existing homes in the Corridor is well below pricing required for most forms of new housing development. The average single detached house price in the Southeast Corridor area was just $127,400, based upon year-to-date September data from the Houston Association of Realtors. Based upon proforma results and market analysis of comparable properties, new townhouses require a sales price in the range of $200,000 and upwards (depending upon unit sizes), which far exceeds the cost of a larger, single-detached house on a relatively sizeable lot.

With a median household income of roughly $31,200 across the Southeast Corridor, the affordable house price, at the median, is roughly $121,500, and the affordable monthly housing rent is $830 – far below the scale of prices or rents required to justify new construction. The affordability model incorporates a 6% interest rate, 30 year amortization, 20% down payment, and a calculation of monthly principal, interest and taxes, with the assumption that 32% of gross monthly income can be dedicated to housing costs.

Of course, some new construction has and will continue to take place in this Corridor, catering to a subset of the existing and potential new residents that can afford and are seeking the lifestyle associated with transit oriented development, but this appears to be only a smaller niche market at present.

The general inequities between economic feasibility and market pricing for higher density forms of housing suggest the following:

- Transit oriented development along the Southeast Corridor is likely to be incremental. Substantial and broad market demand for transit oriented development will not appear overnight, even with new rapid transit along this Corridor.
- New rapid transit along the Corridor will likely increase demand, but higher density forms of housing (and subsequently commercial space demand) is likely to remain a niche (hopefully a growing niche) market that appeals to users that have accepted (and can afford) a more urban housing lifestyle.
- In order to facilitate faster development of the medium and higher density development along this Corridor, considerable "assistance" might have to be considered – perhaps in the form of financial subsidies for development or ongoing occupancy costs and reduced parking costs.
- Lastly, although it is not explicitly examined in the proforma here, the availability of quality public schooling is clearly an important criterion within the City for attracting families to higher density forms of housing.

C2.4

Infrastructure Overview

Based on the research of the existing Southeast Corridor Infrastructure it appears that water mains for over half of the length of the Corridor are at the end of their life spans. Sanitary sewer lines for at least a third of the alignment are also past their predicted life spans.

The Southeast Corridor is residential in nature for a large part of its length and redevelopment will most probably continue to be residential. The size of the lines appears to be sufficient to accommodate additional density.

As in the North and East Corridors, redevelopment will occur in specific locations in the short term but most redevelopment will occur incrementally over a long period of time. This provides the opportunity to replace and upgrade the infrastructure as the areas change. However, where existing infrastructure has exceeded its predicted life span, consideration should be given to replacing it as transit is constructed. In other areas, the City will assess the capacity and condition of the infrastructure as development occurs.

It is hoped that a standard for lighting the streets and the pedestrian realm will be implemented throughout all of the Corridors as the lines are being built.

C2.5

Pedestrian Oriented Cross Sections

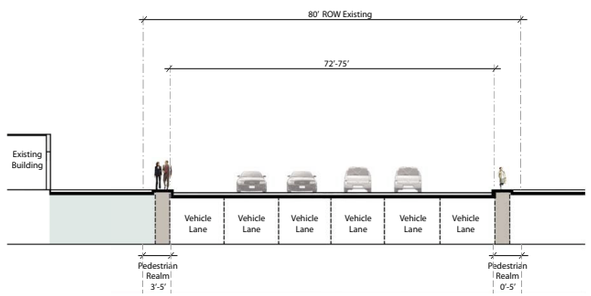
To better understand the urban design impact of the new transit on the existing streetscapes, sections have been developed through various locations along the Southeast Corridor illustrating the existing condition of the street from the face of buildings on each side. A section showing the new streetscape has been constructed as a comparison.

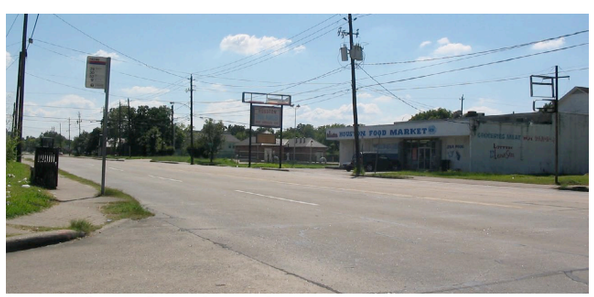
The sections have been selected to indicate typical conditions on the "transit street" to show the impact of the LRT. Additionally, sections have been developed to illustrate the existing and proposed improved conditions of important connecting streets.

C2.5.1
Pedestrian Character Transit Street

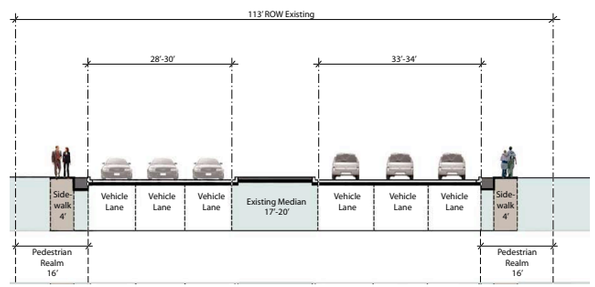
The portion of the Transit Street used to illustrate typical conditions is Scott Street at Anita Street. The existing street condition is illustrated in the photo of the street. It is an 80 ft right of way that accommodates six lanes of traffic. The buildings at either side are low scaled and set well back from the curb of the street. For the most part, the sidewalks are not continuous. The proposed section illustrates the impact of the LRT down the centre of the street in its own right-of-way. The full street right-of-way is expanded to 100 ft to accommodate transit. The pedestrian realm will be continuous and buildings will be sited close to the street to create a pedestrian scaled street.

The second Transit Street condition is taken on Martin Luther King Boulevard (MLK) at Courtelyou Street. The existing street is 113' in width and provides space for 3 lanes of traffic in each direction with a central planted median. The existing sidewalks are narrow. The proposed street has been expanded to 115' and has space for the new LRT at the center of the street with 4' planted medians on each side. Three lanes of traffic are found in each direction with the pedestrian realm developed on each side with buildings located at its edge.





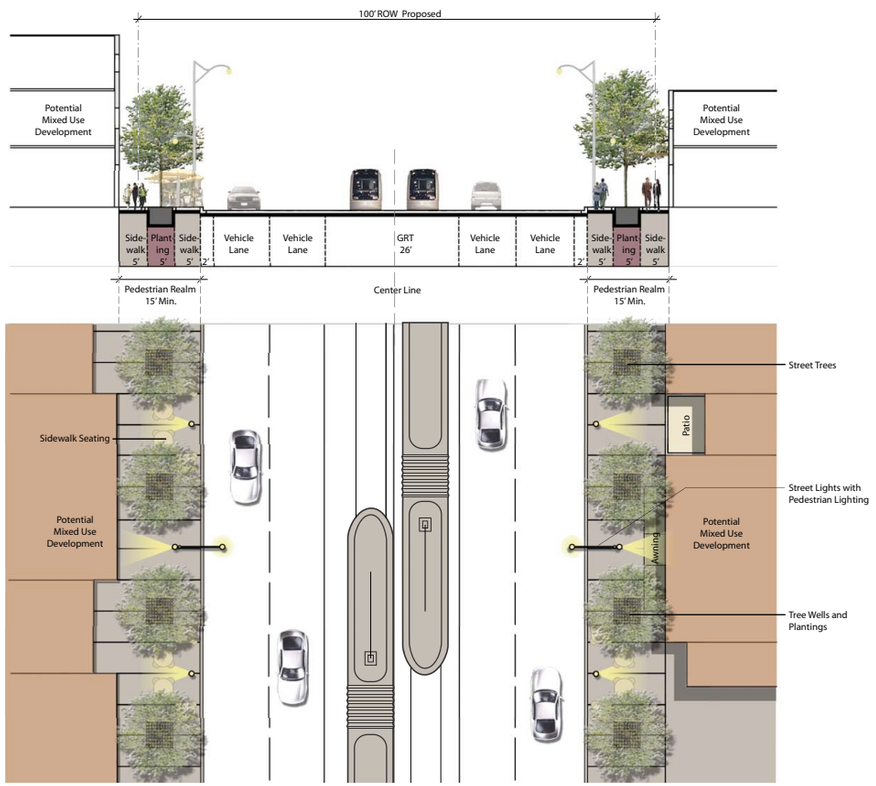
Southeast Corridor Existing Section- Scott t. at Anita St.



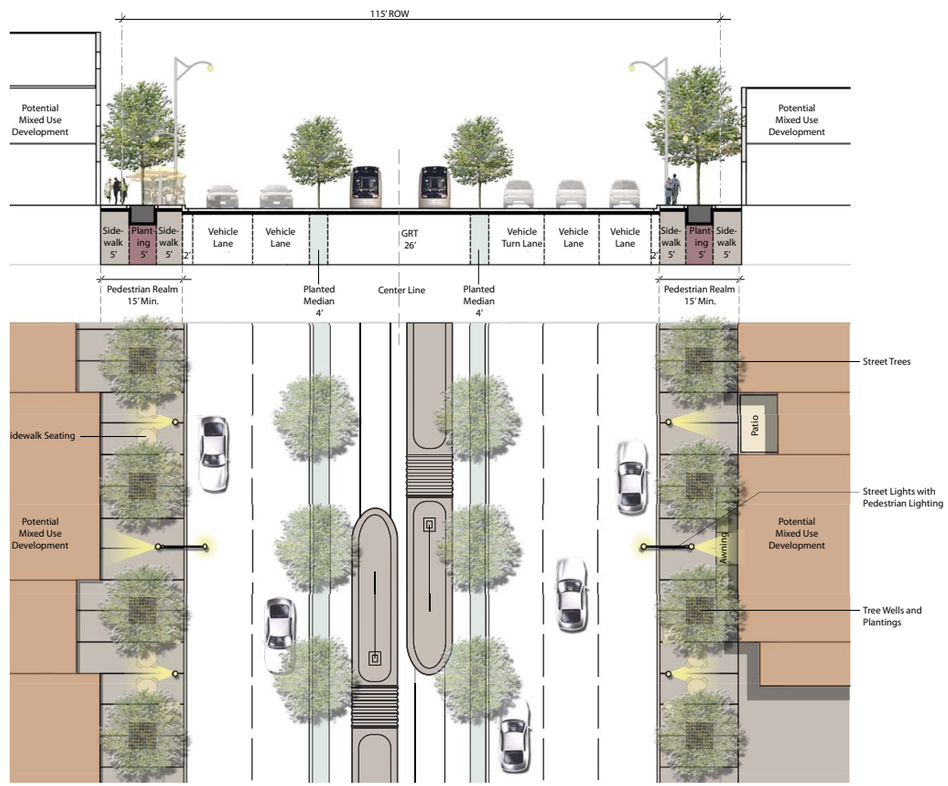
Southeast Corridor Existing Section-Martin Luther King Blvd at Cortelyou St.

Pedestrian Character Transit Street, Offset Station Platforms

Southeast



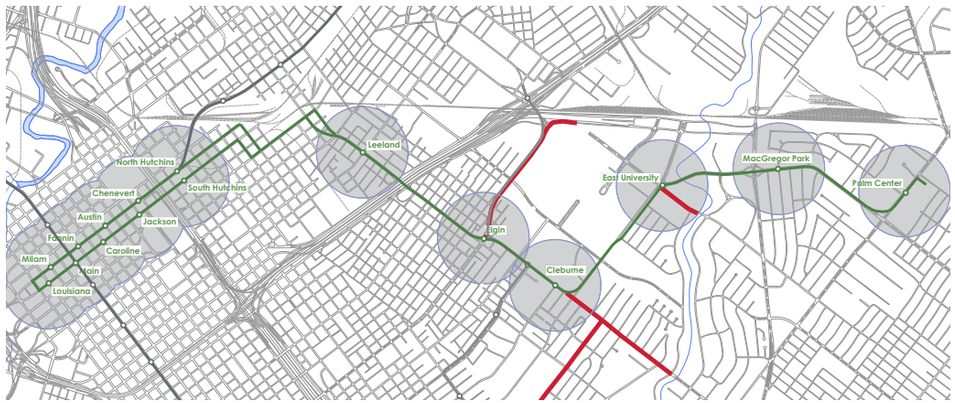
Southeast Corridor Proposed Section- Scott t. at Anita St.



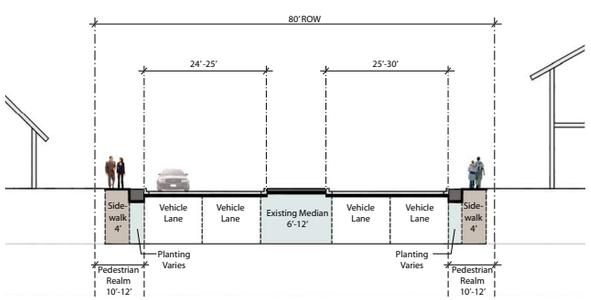
Southeast Corridor Proposed Section - Martin Luther King Blvd. at Cortelyou St.

C2.5.2
Pedestrian Character Major Thoroughfare

Major Thoroughfare right-of-ways are typically 80 to 100 feet, and include 48 feet of pavement divided by a median of 14 to 32 feet. Rarely has a connected sidewalk system been provided. Mayor Thoroughfares that intersect with the Transit Street have been identified as Pedestrian Character Major Thoroughfares because they have the potential to provide a crucial connection from area focal points neighborhoods and schools to Transit Stations. A continuous and connected sidewalk system been provided. A prototype street cross section indicates the following:



Pedestrian Character Major Thoroughfares

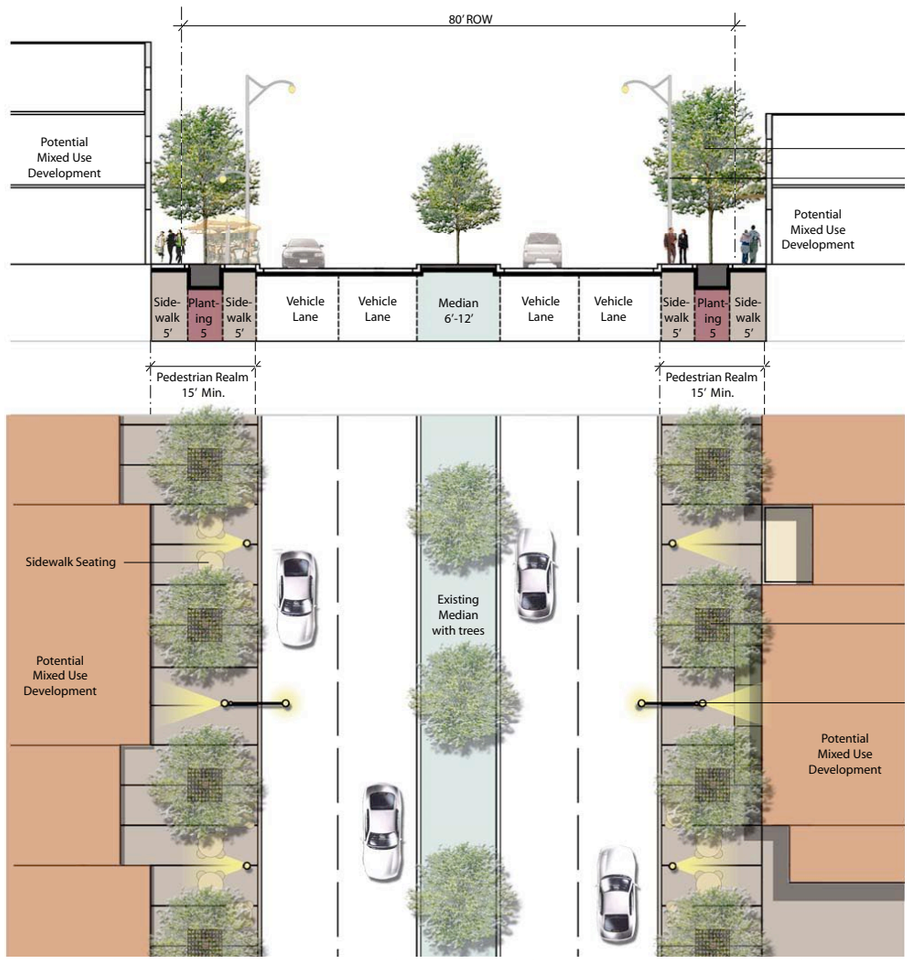



Southeast Corridor Existing Conditions - Scott St.

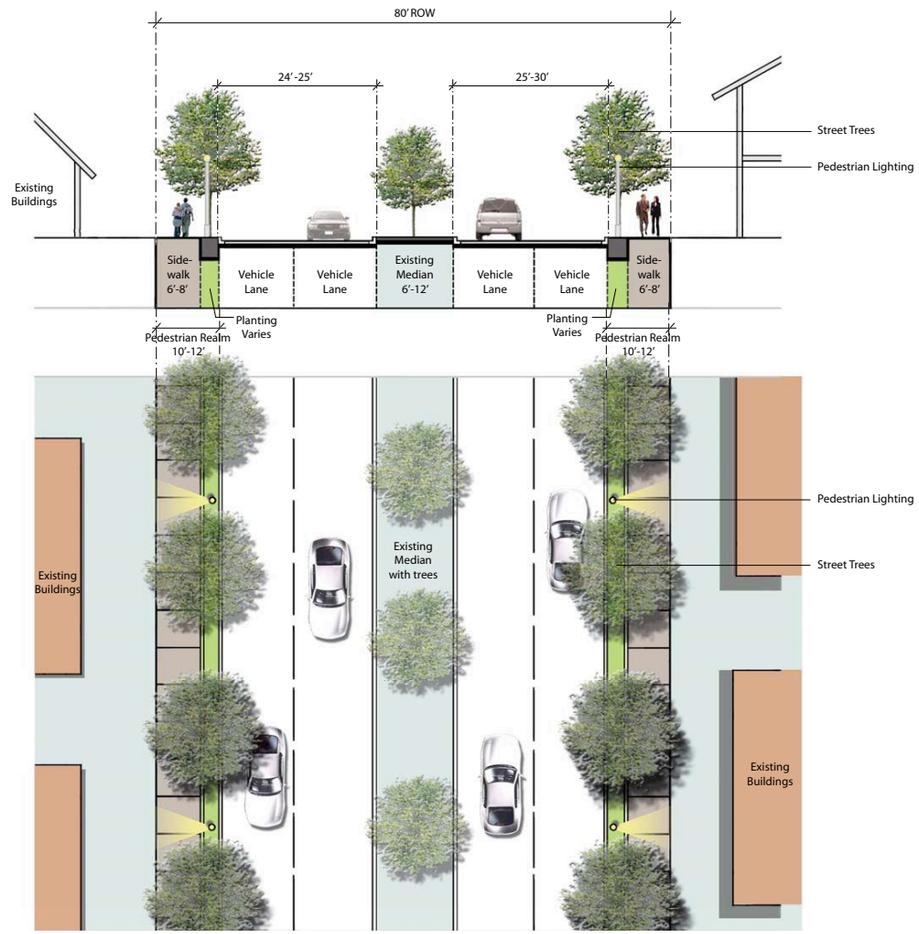

Southeast Corridor Existing Conditions - Scott St.

Pedestrian Character Major Thoroughfare, Commercial and Residential Areas

Southeast



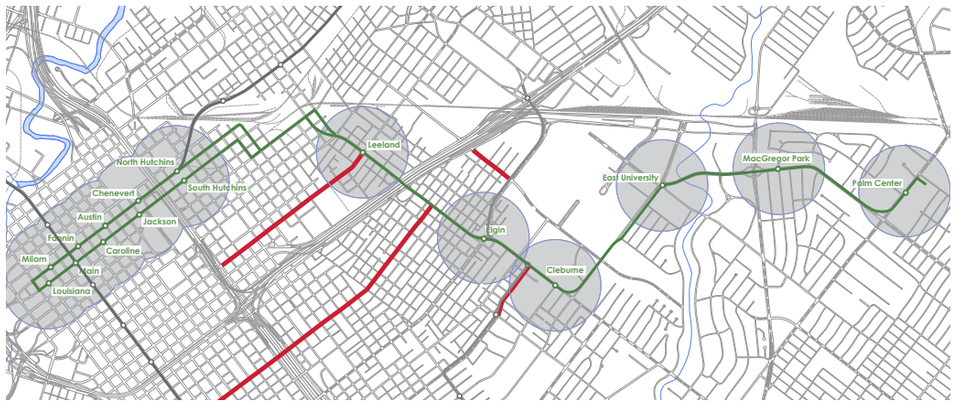
Southeast Corridor- Major Toroughfare Proposed Section- Scott St. (Only in designated redevelopment areas.)



Southeast Corridor- Major Toroughfare Proposed Section- Scott St.

C2.5.3
Pedestrian Character Major Collector

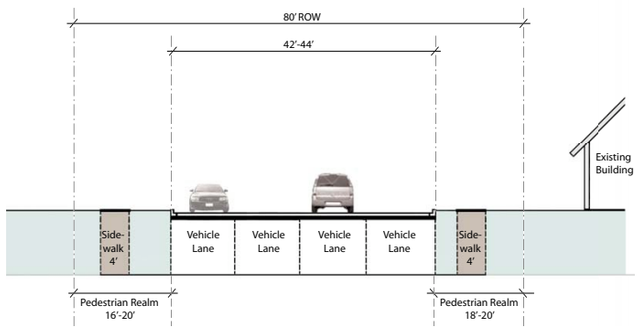
Major Collectors range from 60 - 80 feet, and include 44 feet of pavement, and ditches on both sides. Rarely is a continuous and connected sidewalk system provided. Canal Street has been identified as a Pedestrian Character Major Collector because it is an important parallel street to the Harrisburg Transit Line and edge to neighborhoods. A prototype street cross section indicates the condition:



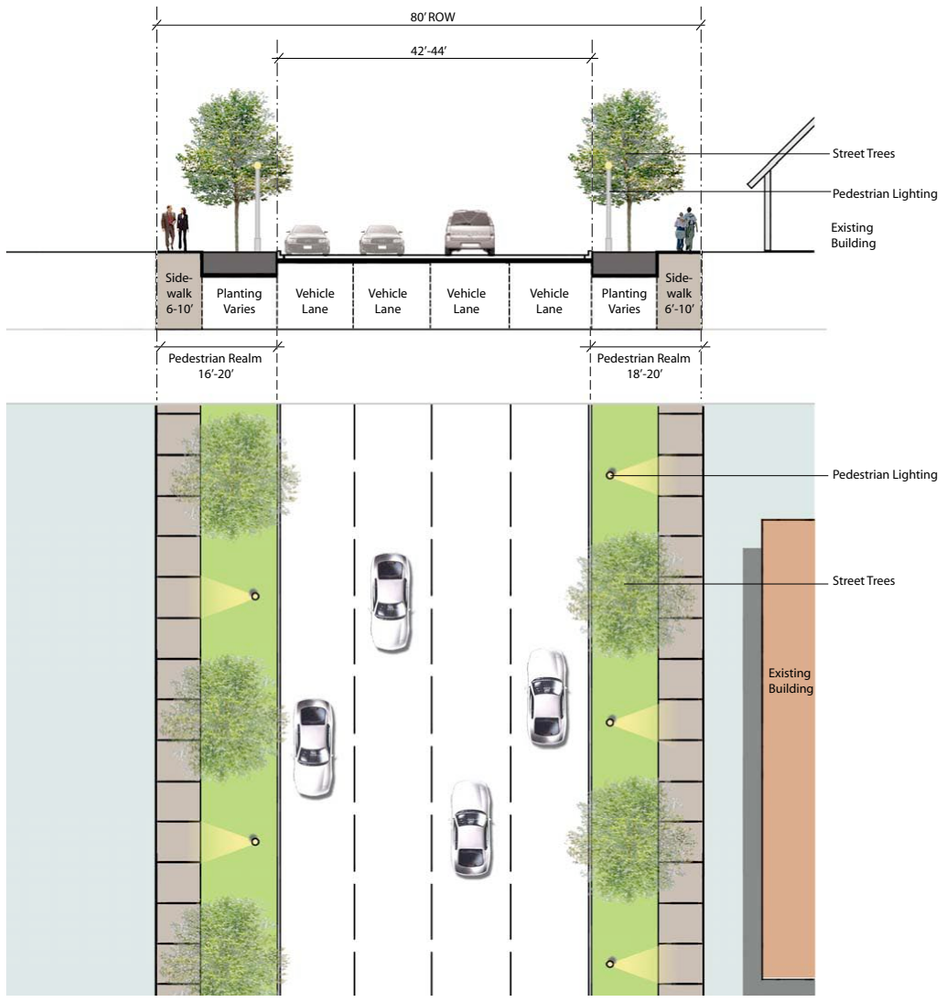
Pedestrian Character Major Collector

Pedestrian Character Major Collector

Southeast



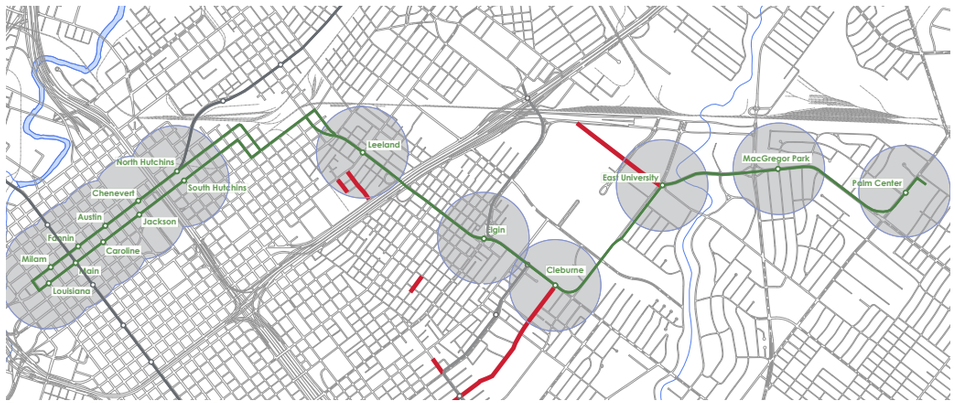
Southeast Corridor Existing Section- Mc Gowen St.



Southeast Corridor Proposed Section- Mc Gowen St.

C2.5.4
Pedestrian Character Local Street

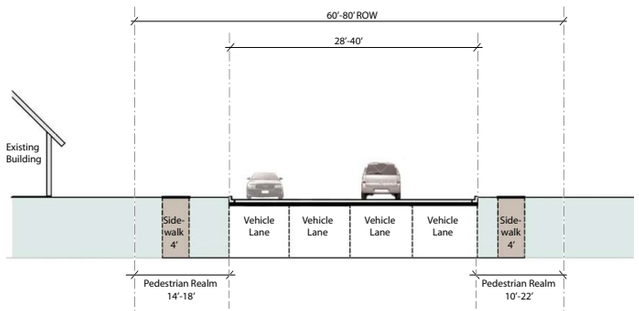
Local street right-of-ways are typically 60 feet, and include 22 feet of pavement. Some local streets have ditches on both sides. Rarely are sidewalks provided. Some local streets that intersect with the Transit Lines have been identified as Pedestrian Character Local Streets because they have the potential to provide a crucial connection between the transit stations and a local pedestrian traffic generator, such as a school, recreation center, public park or place of worship. A prototype street cross section for a Pedestrian Character Local Street with and without a ditch indicates the following:



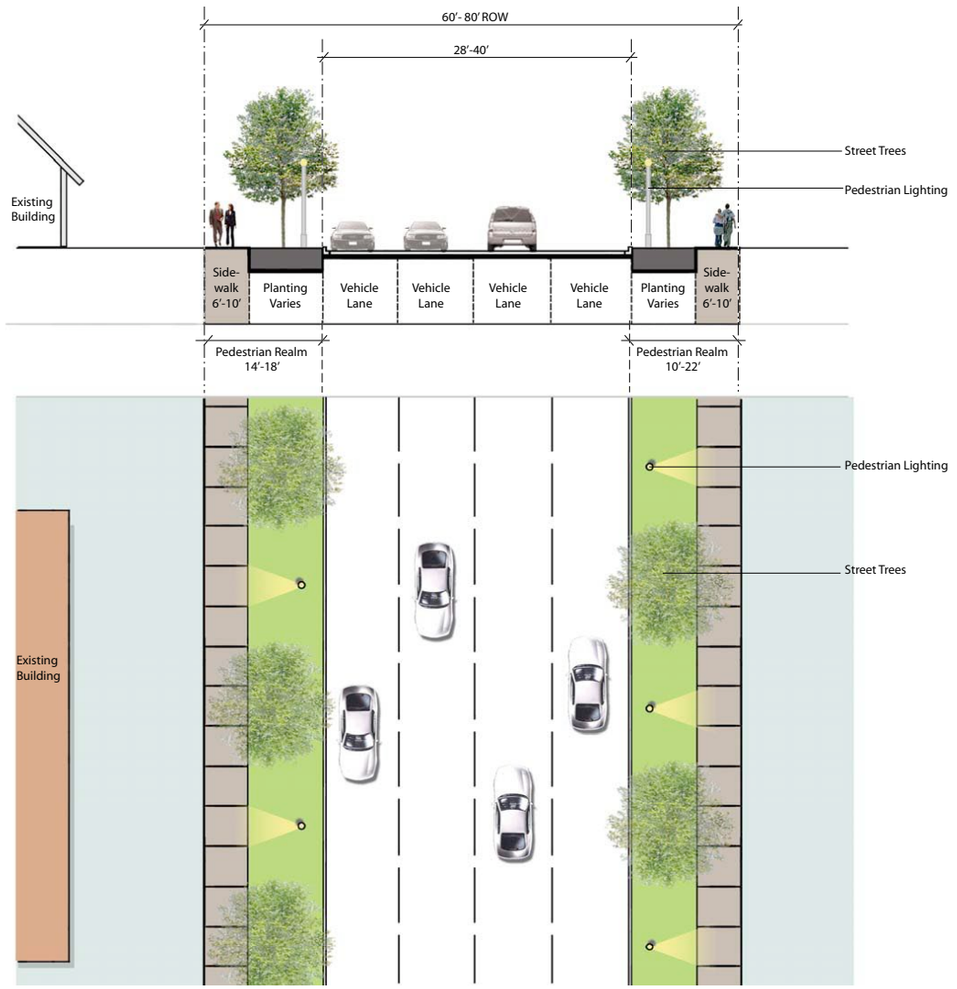
Pedestrian Character Local Street

Pedestrian Character Local Street Cross Section/Plan

Southeast



Souheast Corridor Proposed Section - Cleburne St. without curb



Souheast Corridor Proposed Section - Cleburne St. with curb