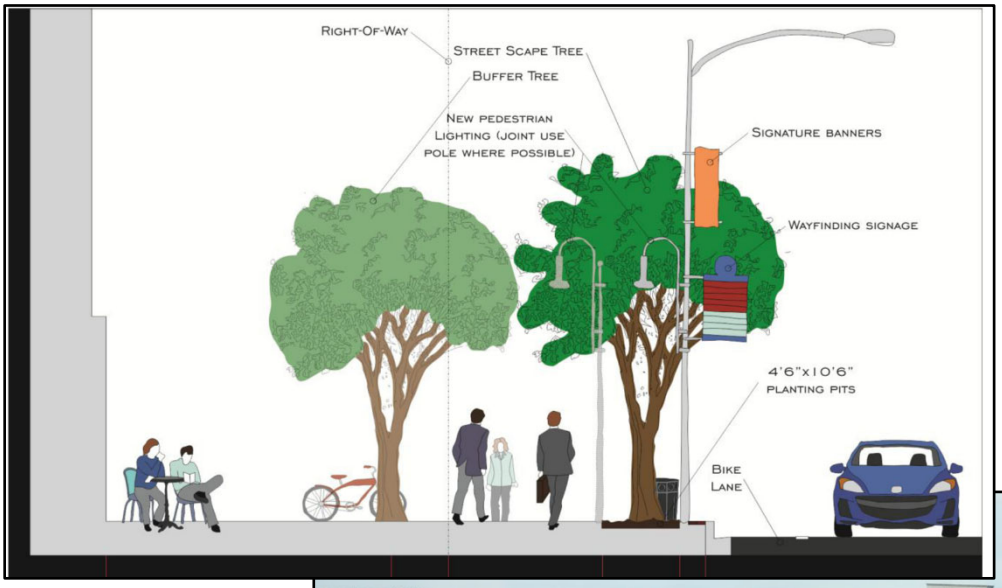
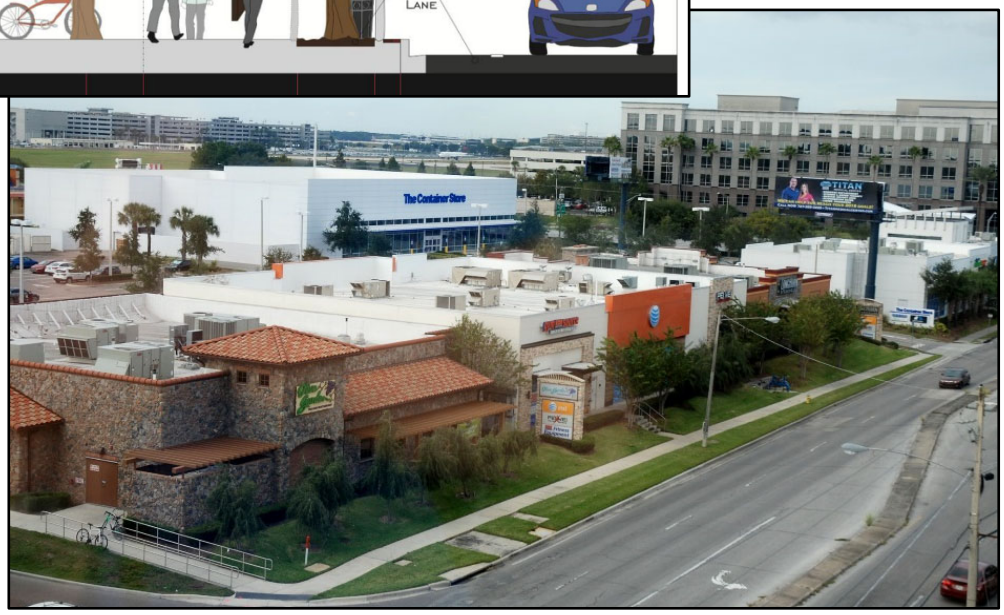
Final Preliminary Engineering Report
West Shore Boulevard Complete Streets
Project Development and Environment Study (PD&E)
December 2020





Hillsborough County Florida
EST. 1834
SM

Professional Engineer Certification

I hereby certify that I am a Registered Professional Engineer in the State of Florida practicing with RS&H, Inc., a Florida Corporation authorized under Section 471.023, Florida Statues, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes, Certification of Authorization (CA) No.2294, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluation, findings, opinions, conclusions, and technical advice hereby reported for:

Project: West Shore Complete Streets PD&E Study

CIP: 69641000

Contract Number: C-9U56

Location: Hillsborough County

Client: Hillsborough County

This preliminary engineering report contains detailed engineering information that fulfills the purpose and need for the Hillsborough County Project Development and Environment (PD&E) Study (CIP No.: 69641000). I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering and planning as applied through professional judgment experience.

Name: Michael J. Coleman, PE

Signature:

P.E. Number: 40084

Date: 1/4/21

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1 Project Summary

Hillsborough County is conducting a Project Development and Environment (PD&E) study to evaluate complete streets improvements for West Shore Boulevard between West Kennedy Boulevard/SR 60 and West Boy Scout Boulevard as shown in **Figure 1-1**. During the PD&E Study, the project team evaluated potential impacts, both positive and negative, to the natural, social, cultural, and physical environment to determine which, if any, of the proposed alternatives meet the project need.

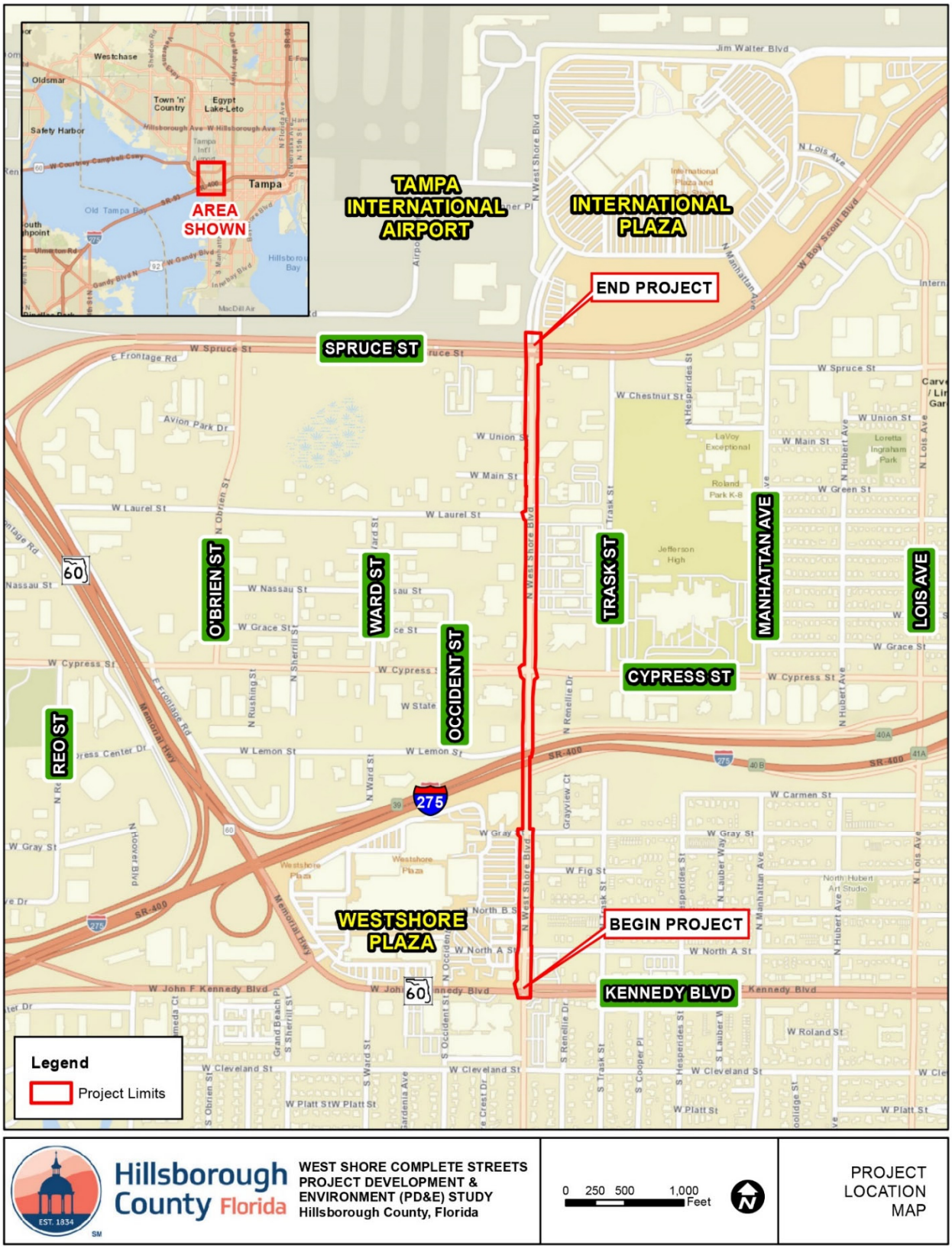
1.1 Project Description

County Road (CR) 587, known as West Shore Boulevard, serves as one of the primary north-south thoroughfares for the West Shore Business District. Originally developed in the 1960s as an automobile-oriented thoroughfare, West Shore Boulevard retains a suburban-oriented design with inadequate accommodations for pedestrians and other non-automobile modes of travel. The vision for the future West Shore Boulevard is to transform the corridor to accommodate multiple modes of travel through a "Grand Boulevard" concept. The concept entails Complete Street treatments that meet the needs of all users and modes. These treatments include shared use paths, pedestrian amenities including street furniture and pedestrian lighting, improved aesthetics including landscaping with shade trees, improved crossing opportunities for pedestrians, and traffic calming measures including narrower lanes, a lower design speed, and reduced vehicular capacity south of Gray Street. This combination of improvements to the transportation infrastructure combined with future redevelopment of properties along the corridor will ultimately transform West Shore Boulevard into a dynamic urban street.

This vision for West Shore Boulevard was incorporated in the overall Westshore District Public Realm Master Plan (the Plan) that was funded by the Westshore Alliance, the City of Tampa, and Hillsborough County. The Plan was completed by the University of South Florida School of Architecture and Community Design in 2013. After the completion of the Plan, the City of Tampa amended the land development code to incorporate new streetscape standards for West Shore Boulevard as a priority pedestrian street. In 2014, the City of Tampa also conducted a Complete Street Feasibility Study to advance the vision for West Shore Boulevard, and in 2015, the County followed with a baseline right-of-way (ROW) map for the corridor.

The West Shore Complete Streets PD&E Study's limits include West Shore Boulevard between West Kennedy Boulevard and West Boy Scout Boulevard, a distance of approximately one mile. West Shore Boulevard is a six-lane, divided roadway from West Kennedy Boulevard to the I-275 (SR 93) overpass, and a four-lane divided roadway from I-275 (SR 93) to the project's terminus at West Boy Scout Boulevard. The study's traffic analysis includes an evaluation of the effects on local traffic of the extensions of Trask, Occident and Reo Streets underneath I-275 (SR 93) as part of the Florida Department of Transportation (FDOT) District 7 I-275 (SR 93) reconstruction project currently funded for construction in 2024. West Shore Boulevard currently has five-foot sidewalks on both sides of the roadway, but no bicycle lanes within the corridor. The proposed improvements would enhance the roadway corridor's multimodal mobility and safety.

Figure 1-1: Project Location Map



1.2 Purpose and Need

The purpose of this project is to develop transportation improvements consistent with the Grand Boulevard concept as described in Section 1.1. These improvements will create an enhanced roadway corridor that provides a safe, comfortable, and attractive environment for all users that is supported by the community and key project stakeholders. These improvements will also support the economic development goals for the West Shore Boulevard area by encouraging shoppers to walk to the businesses and restaurants along West Shore Boulevard while providing social areas for congregating and dining outside in an enhanced pedestrian environment. This environment will require a combination of transportation improvements such as shared use paths and pedestrian amenities including street furniture and pedestrian lighting, improved aesthetics including landscaping with shade trees, improved crossing opportunities for pedestrians, bicycle facilities, micromobility device accommodations, enhanced transit facilities, and traffic calming measures including narrower lanes, a lower design speed, and reduced vehicular capacity south of Gray Street. This combination of improvements will slow vehicular traffic to create a safe and comfortable pedestrian-oriented urban setting featuring improved access to businesses by foot traffic (micromobility).

1.3 Description of the Preferred Alternative

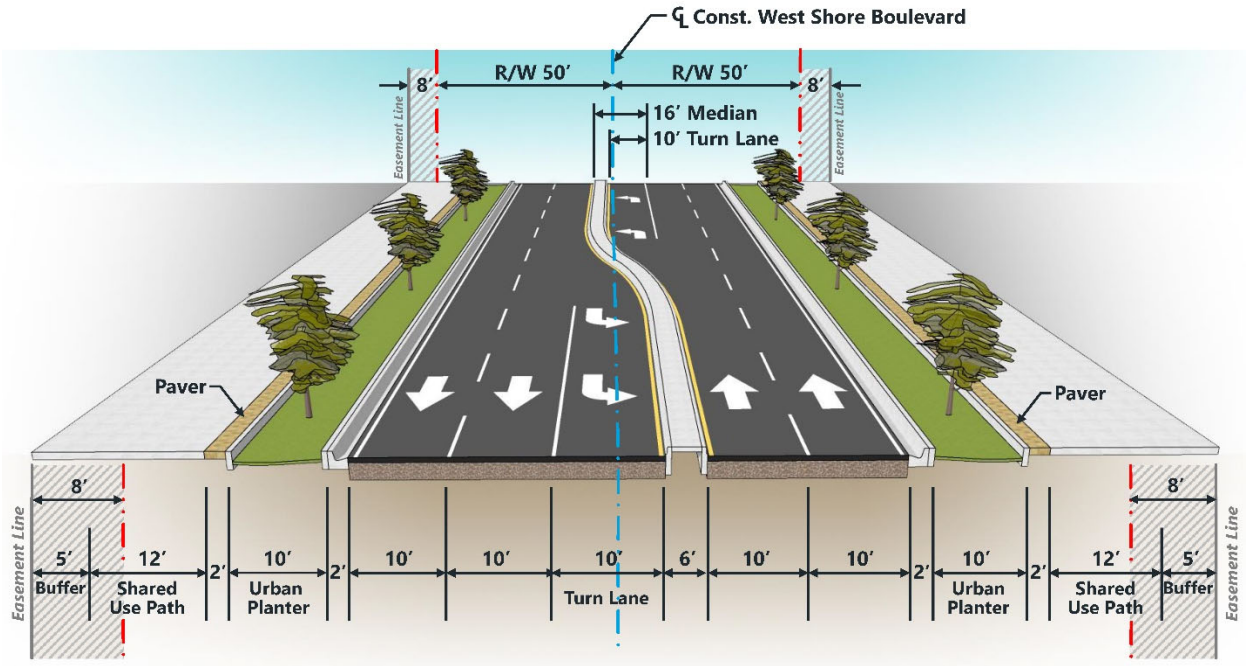
After reviewing the engineering and environmental factors, as well as public comments, the Preferred Alternative is the Build Alternative, which includes enhanced compete streets features and aesthetic improvements.

Figure 1-2 shows the typical section Looking north from West Kennedy Boulevard to West Gray Street. It includes two 10-foot lanes in each direction, separated by a 16-foot median which includes a 10-foot left turn lane and a six-foot raised concrete traffic separator. It includes a reduction in through lanes from six to four from West Kennedy Boulevard to West Gray Street. This represents a one- to two-foot reduction in lane widths, and the removal of one through travel lane in each direction. Curb and gutter is proposed to direct runoff to drainage inlets. A 10-foot urban planter is included outside the curb and gutter on both sides. A 12-foot shared use path is proposed on each side to accommodate bicyclists and pedestrians. A five-foot buffer is included outside the shared use path. The overall existing ROW width is 100-feet. An eight-foot easement is required on each side. It is expected that the easements will be donated by property owners rather than being acquired via eminent domain.

Nearly all property owners have expressed unqualified support for the project and have indicated willingness to consider granting a ten-foot easement across the entire frontage of their property in exchange for regulatory relief from the requirements of existing improvements such as setbacks and parking ratios along with mitigation for impacts such as sign relocations. This is a reasonable expectation consistent with similar complete streets projects around the country and is discussed in detail in Section 7 – Recommended Alternative. Ideally the easement discussions should continue without interruption even as the design phase of this project is currently suspended and be finalized during the design phase. The Westshore Alliance, as the project champion representing the property owners of the West Shore Business District, plays a key role in these easement negotiations and the eventual operations and maintenance of the improvements.

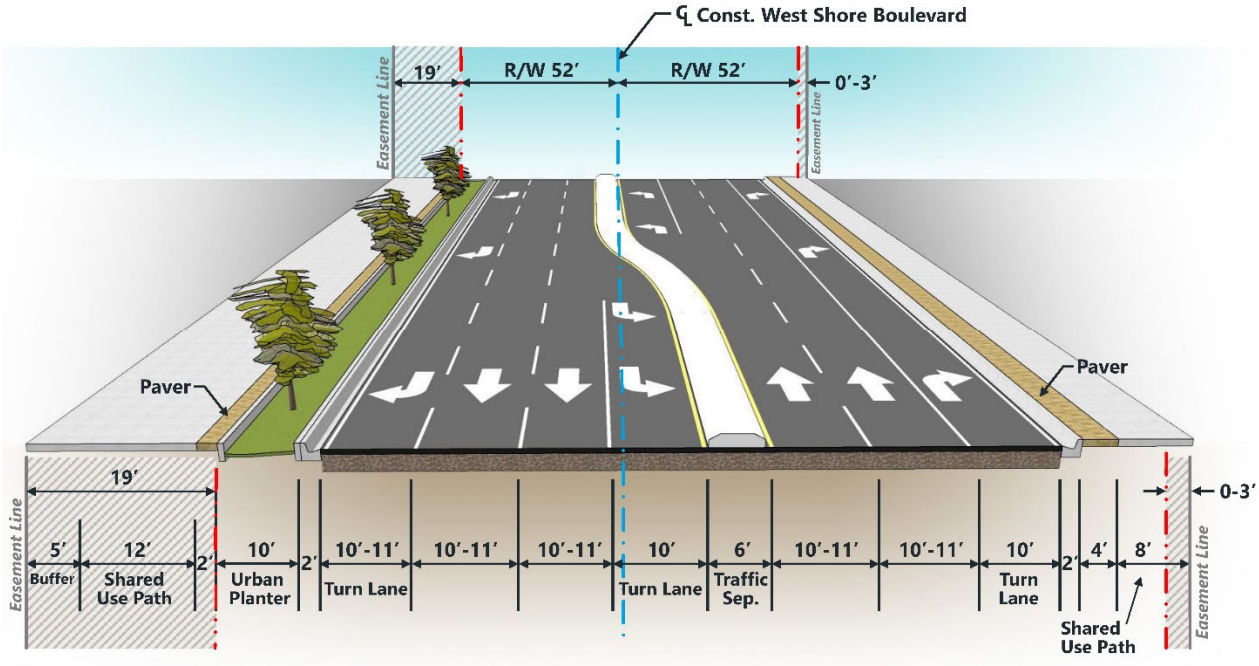
The project can be implemented in phases depending upon funding availability and the willingness of property owners to grant easements. A likely first phase, which could be considered a "demonstration project", would be segment 3 from West Cypress Street to West Spruce Street.

Figure 1-2: Recommended Typical Section Looking North from W. Kennedy Blvd. to W. Gray Street



The recommended typical section from West Gray Street to I-275 (SR 93), shown in **Figure 1-3**, shows two 10- to 11-foot northbound lanes and two 10- to 11-foot southbound lanes, separated by a 16-foot median which includes a 10-foot left turn lane and a six-foot raised concrete traffic separator. This represents between a two-foot decrease to a one-foot increase in lane widths. Curb and gutter is proposed to direct runoff to drainage inlets. An eight-foot shared use path is proposed on the east side, separated from the curb by a four-foot paver buffer strip. A 12-foot shared use path is proposed on the west side, separated from the curb by a 10-foot urban planter and a two-foot paver buffer strip. The overall existing ROW width is 104 feet. An easement, zero to three feet wide, is required on the east side, while a 19-foot easement is required on the west side. It is expected that the easements will be donated by property owners rather than being acquired via eminent domain.

Figure 1-3: Recommended Typical Section Looking North from W. Gray Street to I-275 (SR 93)



The recommended typical section beneath I-275 (SR 93), shown in **Figure 1-4**, shows two 11-foot northbound lanes and two 11-foot southbound lanes. This represents a one-foot reduction in lane widths. There is also a new 11-foot southbound right turn lane, and two 11-foot southbound left turn lanes providing ramp access (one more than existing), separated from a single 11-foot northbound left turn lane by a five-foot raised concrete traffic separator. This represents one-foot reduction in the through lane width, and an additional southbound left turn lane and an additional southbound right turn lane. Curb and gutter is proposed to direct runoff to drainage inlets. Shared use paths, 12-feet wide, are separated from the curb and gutter by a four-foot paver buffer strip. The segment of West Shore Boulevard within limited access ROW beneath I-275 will be constructed by FDOT as part of the I-275 reconstruction project.

The recommended typical section between I-275 (SR 93) and West Cypress Street, shown in **Figure 1-5**, shows two 10- to 11-foot northbound lanes and two 10- to 11-foot southbound lanes. This represents a zero- to two-foot reduction in most lane widths, and up to a one-foot increase in the inside northbound through lane width. There are also two 9.5- to 10-foot proposed northbound left turn lanes. There is no raised concrete traffic separator proposed. Curb and gutter is proposed to direct runoff to drainage inlets. An eight-foot shared use path is proposed on the east side, separated from the curb by a four-foot paver buffer strip. A 12-foot shared use path is proposed on the west side, separated from the curb by a 10-foot urban planter and a two-foot paver buffer strip. There is also a five-foot buffer proposed outside both shared use paths. The overall existing ROW varies as shown. An easement, 6.5 to 9 feet wide, is required on the east side, while a 24-foot easement is required on the west side. It is expected that the easements will be donated by property owners rather than being acquired via eminent domain.

Figure 1-4: Recommended Typical Section Looking North Beneath I-275 (SR 93)

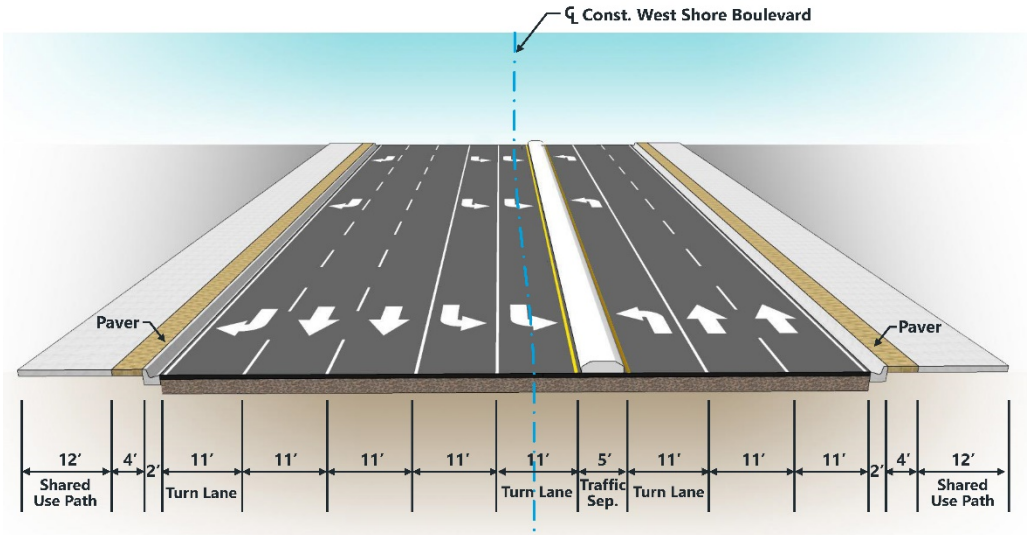
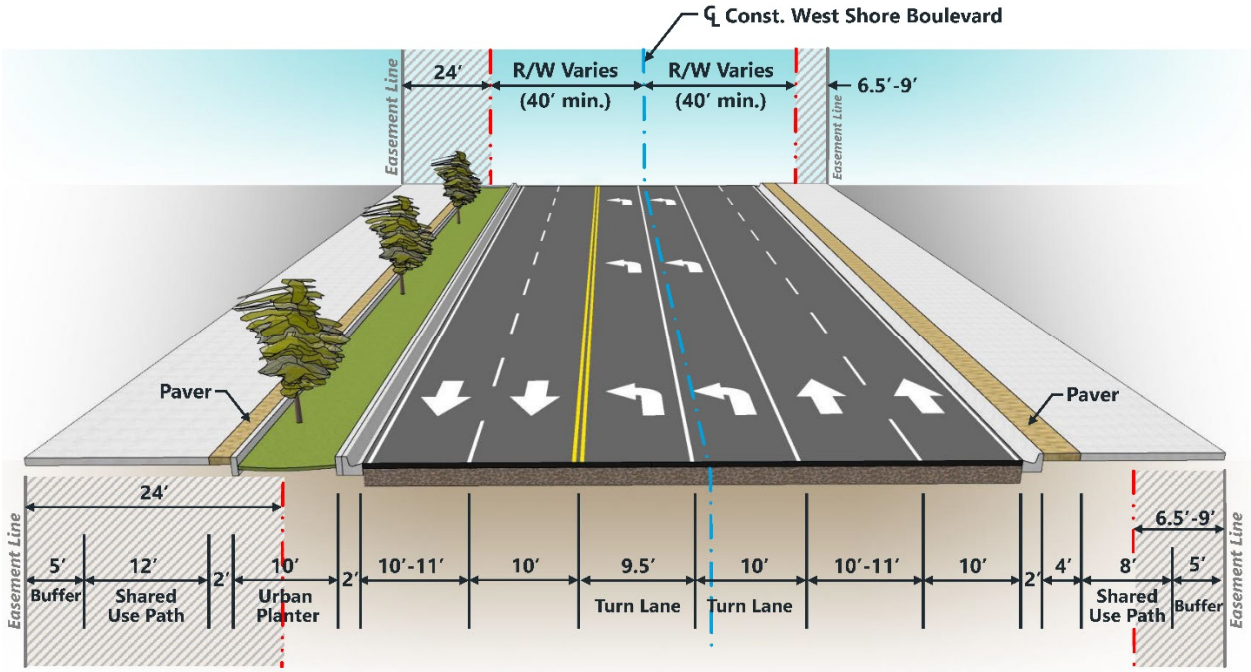
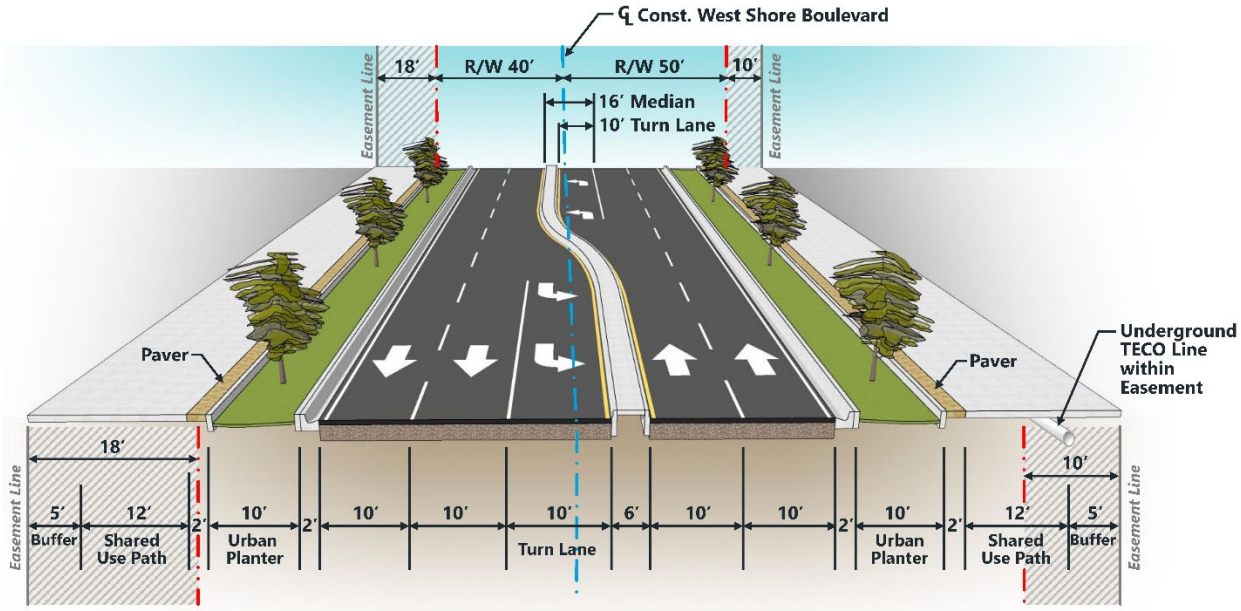


Figure 1-5: Recommended Typical Section Looking North between I-275 (SR 93) and W. Cypress Street



The recommended typical section between West Cypress Street and West Boy Scout Boulevard, shown in **Figure 1-6**, shows two 10-foot northbound lanes and two 10-foot southbound lanes, separated by a 10-foot left turn lane and a six-foot raised concrete traffic separator. This represents a two-foot reduction in lane widths. Curb and gutter is proposed to direct runoff to drainage inlets. A 12-foot shared use path is proposed on both sides to accommodate bicyclists and pedestrians, separated from the curb by 10-foot urban planter. There is also a five-foot buffer proposed outside the shared use path on both sides. The overall existing ROW is 90 feet. An easement, 10 feet wide, is required on the east side, while an 18-foot easement is required on the west side. It is expected that the easements will be donated by property owners rather than being acquired via eminent domain.

Figure 1-6: Recommended Typical Section Looking North between W. Cypress Street and W. Boy Scout Boulevard



Conceptual Design Plans are included in **Appendix A**. The Evaluation Matrix for the Preferred Alternative is shown in **Table 1-1**.

Table 1-1: Recommended Alternative Evaluation Matrix

EVALUATION CRITERIA	NO-BUILD ALTERNATIVE	BUILD ALTERNATIVE
Meets Purpose and Need	No	Yes
Reduction in lanes south of W. Gray Street	No	Reduce 6 to 4 lanes
SOCIAL ENVIRONMENT		
Number of Parcels Impacted by Easements	0	33
Easements Required (acres)	0	2.161
Number of Relocations	0	0
Bicycle and Pedestrian Facility Improvements	None	Enhanced
CULTURAL ENVIRONMENT		
Parks Impacted	0	0
Historic and Archaeological Sites Impacted	0	0
Other Community Facilities Impacted	0	0
NATURAL ENVIRONMENT		
Wetlands Impacts (acres)	0	0
Floodplain Impacts (acre-feet)	0	0.50
Threatened and Endangered Species Impacted	None	None
PHYSICAL ENVIRONMENT		
Potential Contamination Sites (Medium Risk)	0	1
Potential Contamination Sites (High Risk)	0	4
Utility Impacts	No	Yes
PROJECT COSTS (2020 Dollars)		
Construction	$0	$11,643,000
Preliminary Engineering (10%)	$0	$1,164,000
Construction Engineering Inspection (10%)	$0	$1,164,000
Utility Relocation	$0	$1,845,000
Right-of-Way	$0	$0
Permitting & Mitigation	$0	$0
Total Project Cost	**$0**	**$15,816,000**

2 Existing Conditions

The proposed improvements will follow the existing alignment of West Shore Boulevard between West Kennedy Boulevard and West Boy Scout Boulevard. This section summarizes the evaluation of the existing alignment.

2.1 Westshore District

The Tampa Comprehensive Plan Vision Map describes the Westshore District as an area that stretches from Hillsborough Avenue to the north, Himes Avenue to the east, West Kennedy Boulevard to the south, and Tampa Bay to the west. The Westshore Overlay District corresponds to the Westshore District as described within the Tampa Comprehensive Plan but does not include the area known as Rocky Point and other areas west of Eisenhower Boulevard and its imaginary, southerly extension to Tampa Bay.

2.2 Functional Classification

West Shore Boulevard is classified by Hillsborough County as a collector roadway. The posted speed limit is 30 mph from south of West Kennedy Boulevard to 450 feet north of West Kennedy Boulevard, where it changes to 45 mph for the remainder of the project. West Shore Boulevard and Cypress Street are classified by the Westshore Overlay District as Priority Pedestrian Streets, which have certain design standards. West Kennedy Boulevard is classified as a principal arterial, with a posted speed limit of 45 mph, and West Boy Scout Boulevard is classified as a collector with a posted speed limit of 50 mph. Cypress Street is classified as a collector with a posted speed limit of 40 mph.

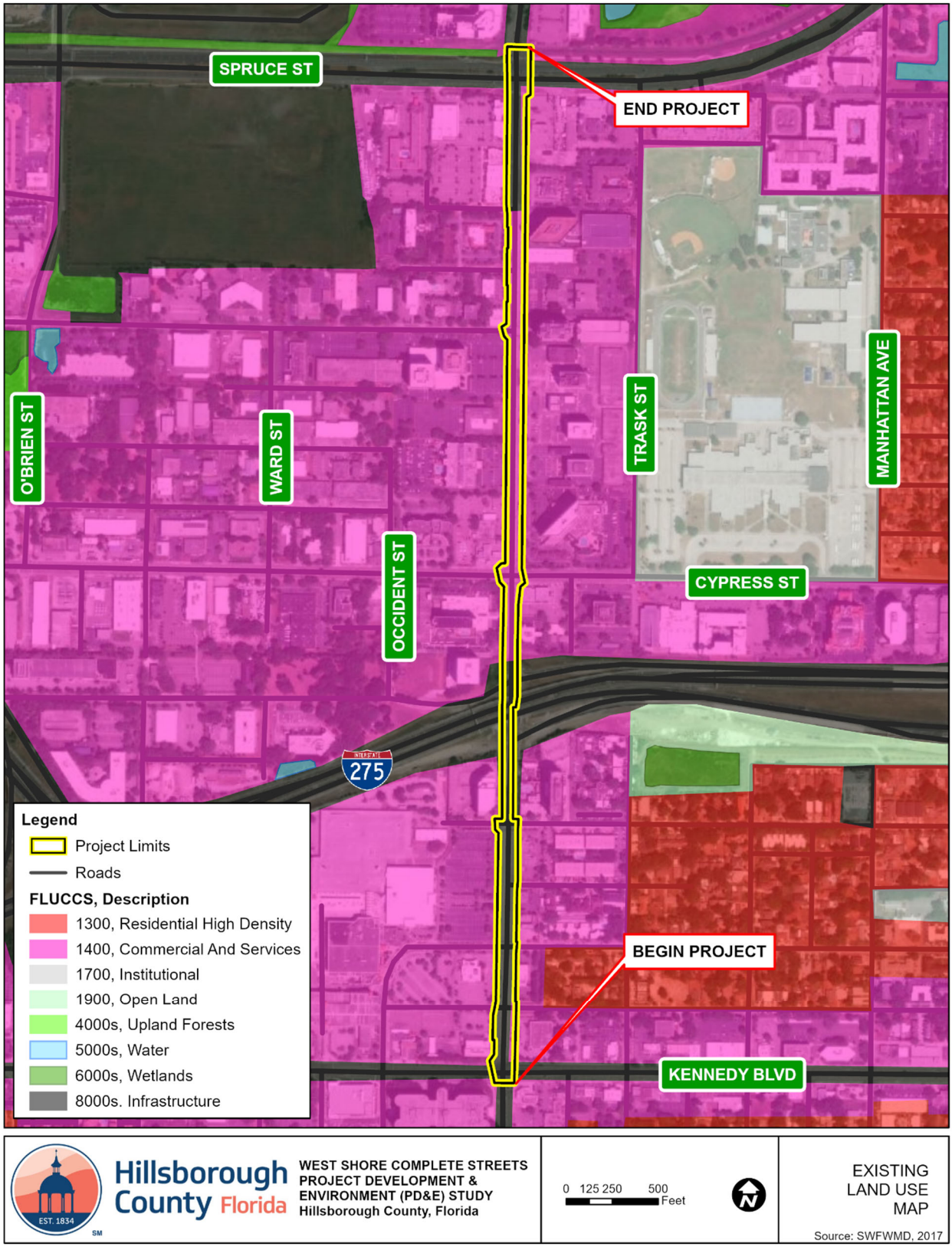
2.3 Land Use

The existing Florida Land Use, Cover and Forms Classification System (FLUCCS) land use map shown in **Figure 2-1** indicates the project is entirely within Commercial and Services land cover.

The Westshore Business District, a Development of Regional Impact, stretches from Hillsborough Avenue to the north, Himes Avenue to the east, West Kennedy Boulevard to the south, and Tampa Bay to the west. The District is the largest office business district in Florida, with more than 11 million square feet of commercial office space, 4,000 businesses with nearly 100,000 employees, 32 hotels containing approximately 7,000 rooms, 4.79 million square feet of retail space including 2 major shopping malls (International Plaza and Westshore Plaza), St. Joseph's Hospital; Raymond James Stadium and Steinbrenner (Legends) Field; Tampa International Airport, more than 200 restaurants; abundant entertainment, and several residential areas. The District had an employment base of 70,889 in 2010 that is expected to exceed 100,000 by 2040. The Westshore Business District is approximately 6 square miles.

The District's residential base is home to Lincoln Gardens, Carver City, Westshore Palms and North Bon Aire neighborhoods, which were built after World War II and have a variety of housing types. Westshore Palms and North Bon Aire are older single-family detached, condominium, town home and apartment developments while Lincoln Gardens and Carver City are primarily neighborhoods with single-family detached homes.

Figure 2-1: Existing Land Use Map



Overall housing in the Westshore area had renter occupancy close to 60% in 2010. There has been a significant increase in higher density residential development over the last few years, creating more of a live/work environment. That trend should continue, based on the higher density land uses in the general areas proximate to the employment areas. By 2040, the Westshore District is projected to have a residential population exceeding 36,000.

On the east side of the Airport, is Drew Park, formerly an Army airfield during WWII that eventually became an area suitable for industrial uses. It is also home to Hillsborough Community College. Drew Park does have redevelopment potential, which has been recognized by the City, as it has been designated a community redevelopment area. The redevelopment of the road network, particularly Lois Avenue, will help with the economic revitalization of the area.

Figure 2-2 shows the future land use map from the Hillsborough Planning Commission, indicating the project is entirely within the Regional Mixed-Use category. The project is not expected to change the land use in the corridor.

The City of Tampa's Adopted 2040 Comprehensive Plan indicates West Shore Boulevard is constrained to four lanes north of I-275 (SR 93). Land Use Policy 1.1.6 in the City of Tampa's Imagine 2040 Comprehensive plan encourages transit-oriented, pedestrian-friendly mixed-use development with attractive and multifunctional corridors through Community Planning efforts in the Westshore Business District. Land Use Policy 9.9.4 encourages creating, preserving, and providing amenities in the Westshore District that will provide services for a great urban living space.

2.4 Typical Sections

As shown in **Figure 2-3**, West Shore Boulevard is a six-lane divided typical section from West Kennedy Boulevard to West Gray Street, with 11- to 12-foot travel lanes, a 15-foot wide median which includes an 11-foot turn lane and a four-foot raised concrete traffic separator, and five-foot sidewalks adjacent to the curb and gutter, all within 100-feet of ROW.

As shown in **Figure 2-4**, from West Gray Street to I-275 (SR 93), southbound West Shore Boulevard has two 10-foot and one 12-foot lane. In the northbound direction, there are two 10.5-foot through lanes and one 10.5-foot right turn lane. The median width is 18.5 feet, which includes a 10.5-foot northbound left turn lane and an eight-foot raised concrete traffic separator. The sidewalks are five feet wide, separated from the curb and gutter, all within 104 feet of ROW.

As shown in **Figure 2-5**, West Shore Boulevard beneath the I-275 (SR 93) bridges has two 12-foot through lanes and one 10.5- to 11-foot left-turn lane in each direction, separated by an 18-foot raised median. There is a 10-foot sidewalk in the southbound direction and a five-foot sidewalk in the northbound direction, separated from the curb and gutter.

As shown in **Figure 2-6**, West Shore Boulevard from I-275 (SR 93) to West Cypress Street has two through lanes in each direction and two northbound left turn lanes, all with varying widths. There is a five-foot sidewalk in the southbound direction, and a six-foot sidewalk in the northbound direction, both adjacent to the curb and gutter. The ROW width is 80 feet.

Figure 2-2: Future Land Use Map

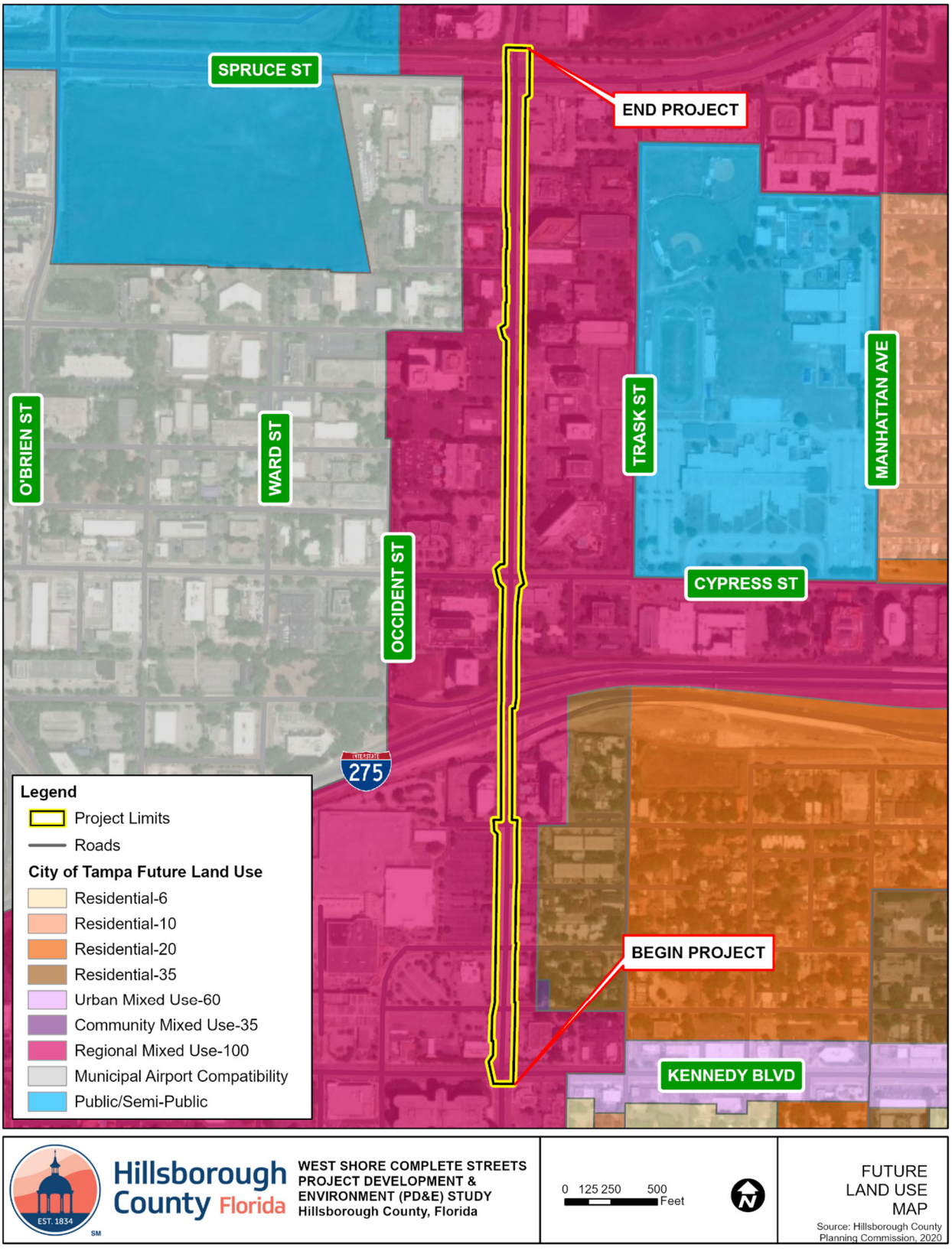


Figure 2-3: Existing Typical Section from W. Kennedy Boulevard to W. Gray Street

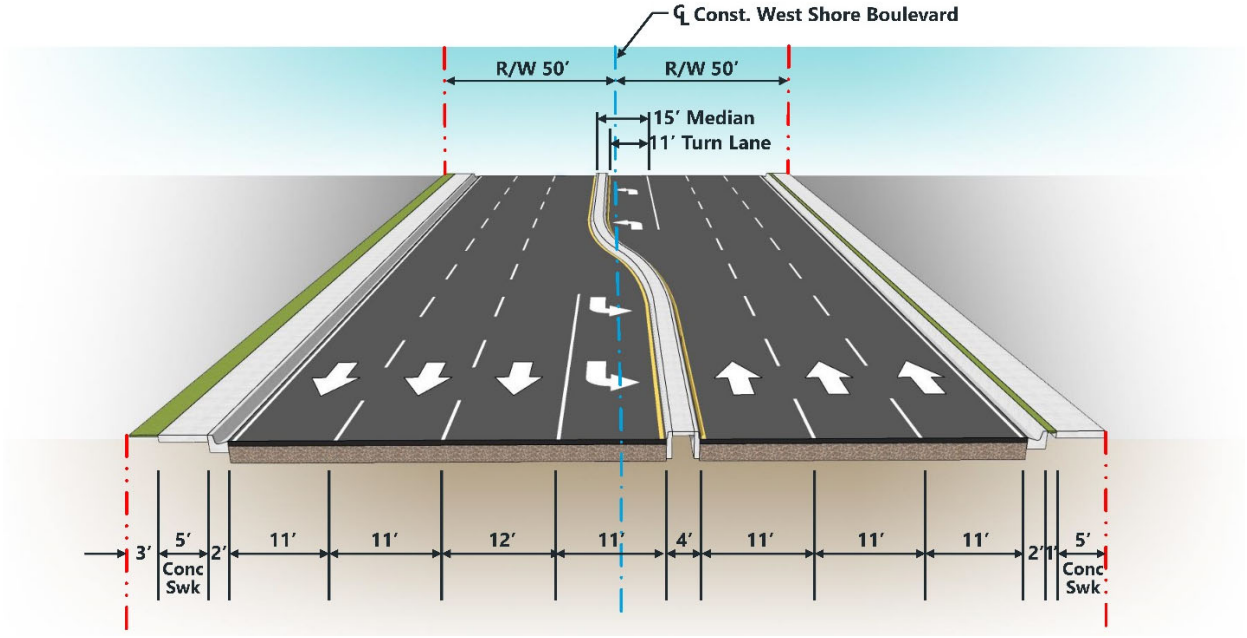


Figure 2-4: Existing Typical Section Looking North from W. Gray Street to South of I-275 (SR 93)

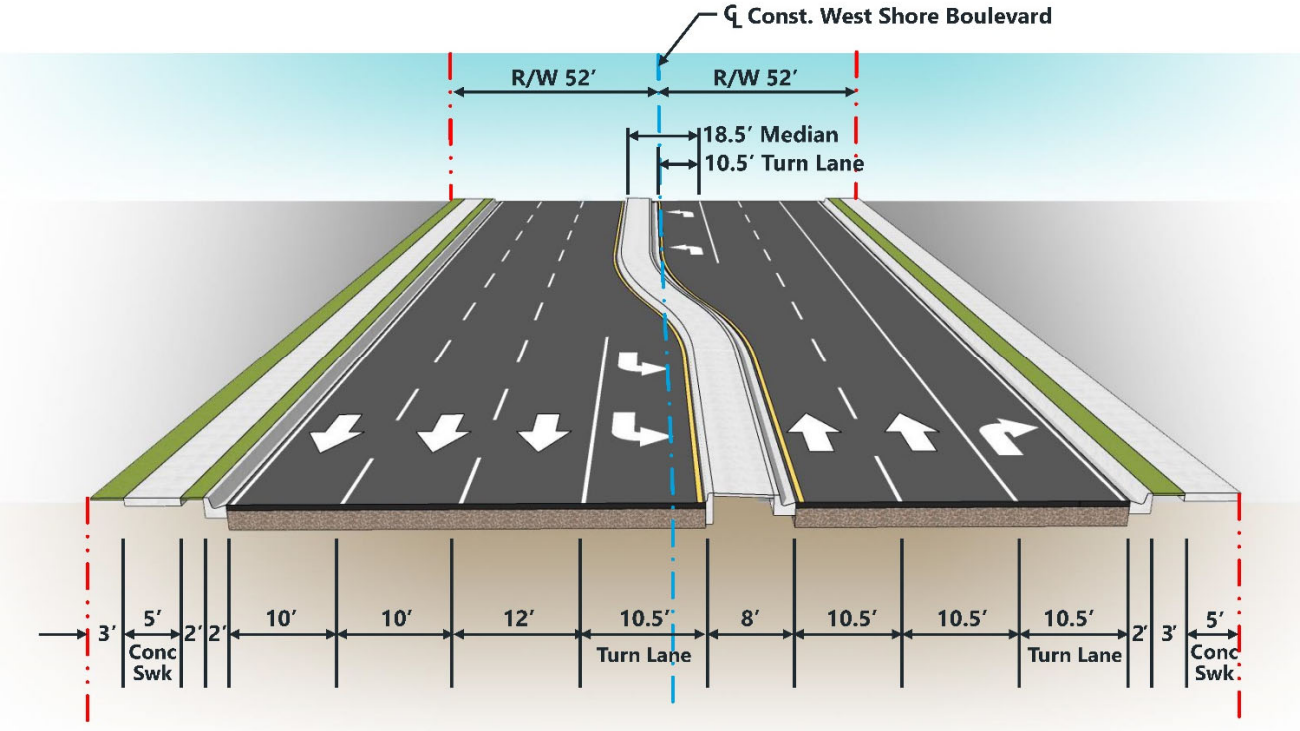


Figure 2-5: Existing Typical Section Beneath I-275 (SR 93) Bridges

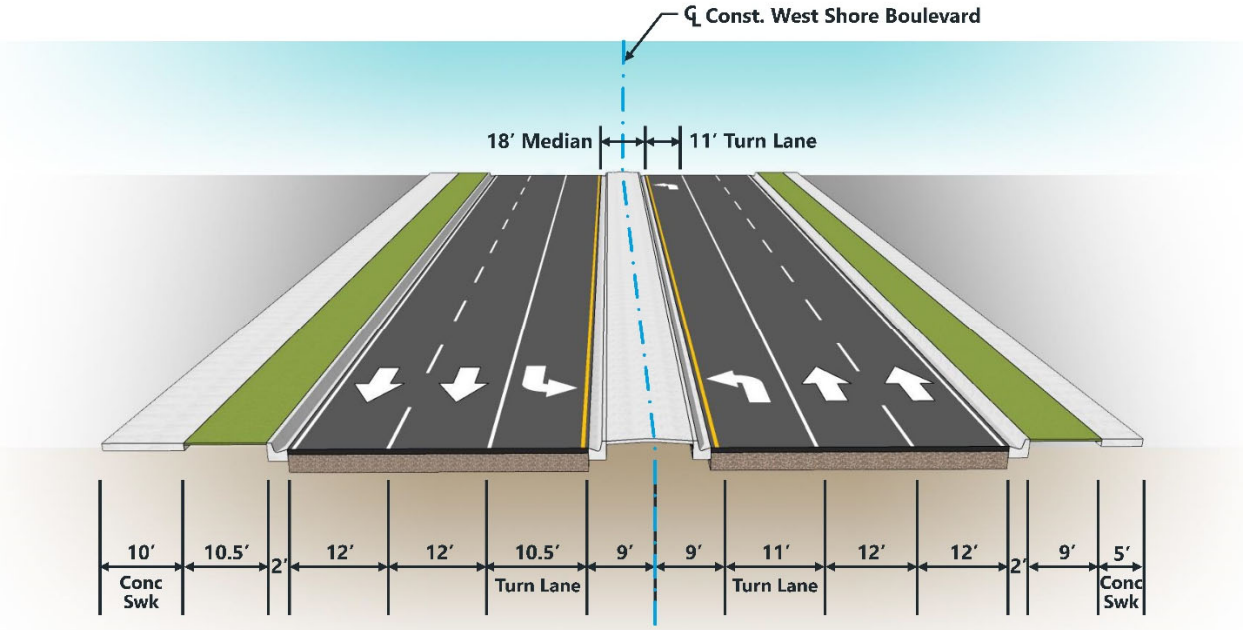
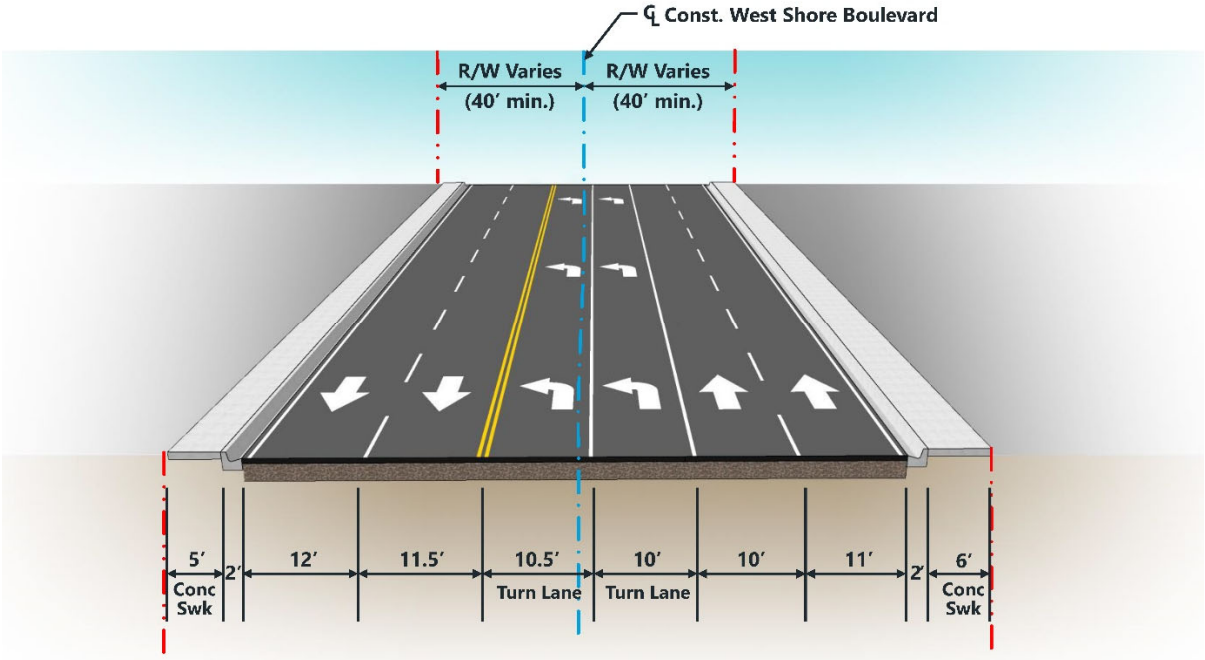
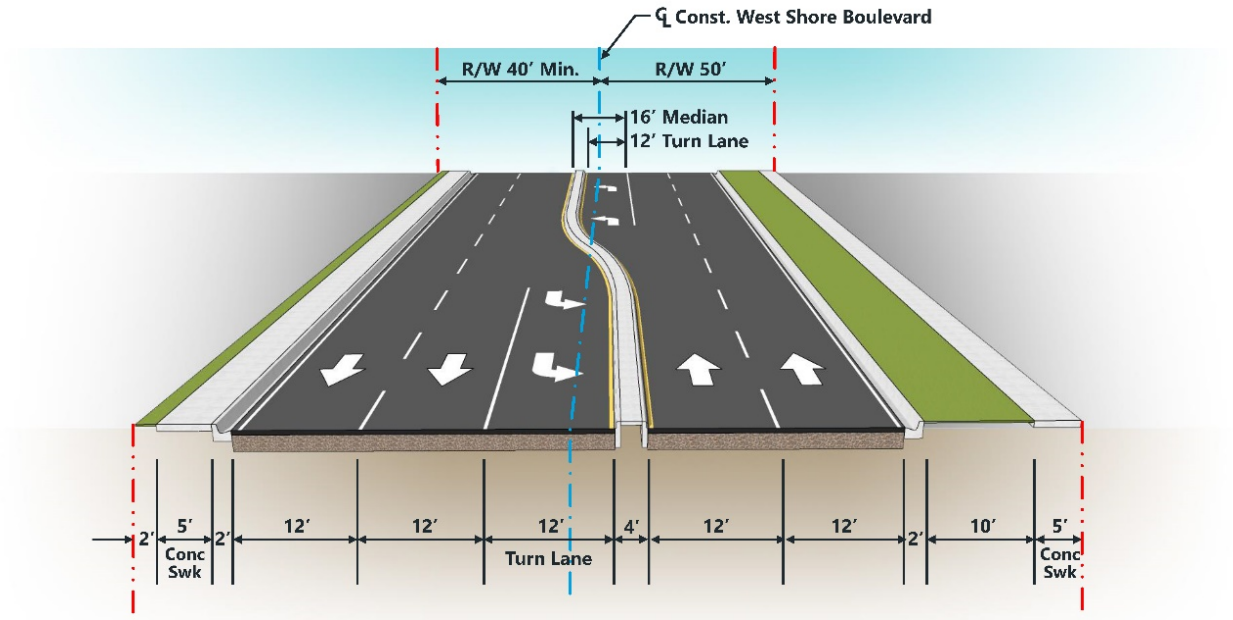


Figure 2-6: Existing Typical Section Looking North from I-275 (SR 93) to W. Cypress Street



As shown in **Figure 2-7,** West Shore Boulevard is a four-lane divided typical section from West Cypress Street to West Boy Scout Boulevard, with 12-foot travel lanes, a 16-foot wide median which includes a 12-foot left turn lane and a four-foot raised concrete traffic separator, and 5-foot sidewalks, all within 90-feet of ROW.

Figure 2-7: Existing Typical Section – Looking North from W. Cypress Street to W. Boy Scout Blvd.



2.5 Horizontal Alignment

The horizontal alignment of West Shore Boulevard within the study area is relatively straight, with one deflection point and one curve as shown in **Table 2-1**.

Table 2-1: Horizontal Alignment

PI Station	Bearing Ahead	PC Station	PT Station	Curve Radius (feet)	Curve Length (feet)	Superelevation
400+00.00	N 0° 49' 15" E	-	-	-	-	Normal Crown
427+01.71	N 0° 33' 27" E	-	-	-	-	Normal Crown
452+70.58	N 1° 00' 18" E	451+82.31	453+58.86	22,918.32	176.55	Normal Crown

2.6 Vertical Alignment

West Shore Boulevard is relatively flat through the study area, ranging in elevation from 6.09 feet to 13.28 feet (NAVD 1988).

2.7 Right-of-Way

A ROW survey was prepared for the study area. The approximate existing ROW within the project limits is summarized in **Table 2-2**. The stations listed are along the baseline of construction, and can be referenced in the Conceptual Design Plans in **Appendix A**.

Table 2-2: Existing Right-of-Way

Station Range	Left Offset	Right Offset
400+80.00- 403+06.00	64	50
403+86.00-415+41.00	50	50
414+48.00-415+42.00	70	0
415+41.00-416+91.00	52	52
416+91.00-422+54.00	VARIES	VARIES
422+54.00-423+18.00	50	
422+54.00-422+86.00		40.5
422+86.00-423+39.00		50
423+39.00-426+41.00		40.67
423+18.00-426+22.00	39	
427+52.50-446+64.50	40	
427+52.50-453+19.00	50	50

2.8 Pedestrian and Bicycle Facilities

There are five-foot or six-foot sidewalks on either side of West Shore Boulevard, but there are no bike lanes or paved shoulders suitable for bicycles. In some areas the sidewalks are wider, extending to the back of curb. Under the I-275 (SR 93) bridges, the sidewalk is 10-feet wide on the west side. West Kennedy Boulevard has six-foot sidewalks on both sides behind the curb, but no bike lanes. West Boy Scout Boulevard has five-foot or six-foot sidewalks and five-foot designated bike lanes in each direction. The sidewalk in the north west quadrant of the West Cypress Street intersection, adjacent to the signal/light pole, is less than five feet wide. Crosswalks and pedestrian signals are provided at the signalized intersections, although in three locations, the crosswalk does not line up with the sidewalk ADA ramp:

- Southeast quadrant of the West Kennedy Boulevard intersection
- Northeast quadrant of the West Kennedy Boulevard intersection
- Northwest quadrant of the West Gray Street intersection

No mid-block crosswalks exist.

2.9 Transit Facilities

Transit service in the study area is provided by Hillsborough Area Regional Transit Authority (HART), which provides local and express bus routes throughout Hillsborough County. There are 14 bus stops along West Shore Boulevard. Routes 15, 30, 32, 45 serve the project area, including the Westshore Plaza Transfer Center, International Mall, MacDonald Transfer Center, and the Social Security Administration. Route information is provided in **Table 2-3**. In addition to these designated stops, the HARTFlex and HARTPlus (Paratransit) provides van service throughout Hillsborough County.

Table 2-3: HART Bus Route Information

Route	Roadways Served	Weekday Hours Headways	Weekend Hours Headways
15	Columbus Drive, West Boy Scout Boulevard, West Shore Boulevard	5:00 AM – 10:00 PM 30 minutes	6:00 AM – 10:00 PM 60 minutes
30	West Kennedy Boulevard, West Shore Boulevard, Cypress Street	4:35 AM – 12:15 AM 30 minutes	6:35 AM-11:45 PM 30 minutes
32	Columbus Drive, West Boy Scout Boulevard	5:00 AM – 12:00 AM 30 minutes	6:15 AM – 11:00 PM 60 minutes
45	Cypress Street, West Shore Boulevard	5:00 AM – 10:00 PM 30 minutes	6:00 AM – 10:00 PM 60 minutes
Flex	Cypress Street	8:00 AM – 5:00 PM Varies	8:00 AM – 5:00 PM Varies

2.10 Drainage

The West Shore Boulevard project corridor spans from West Kennedy Boulevard to West Boy Scout Boulevard. The drainage watershed for the corridor lies within the Old Tampa Bay Watershed in the Hillsborough-Anclote River Basin. The project corridor is located within two drainage sub-basins: Lemon Street Canal and Direct Runoff to Tampa Bay. **Figure 2-8** depicts the drainage sub-basins for the project corridor; data collected from the City of Tampa GIS portal. The existing terrain within the project corridor and accompanying drainage areas is predominately flat with little topographic relief. The USGS Quadrangle Map, **Figure 2-9**, depicts contours and the land use type within the project study area.

Figure 2-8: Basin Boundary Map

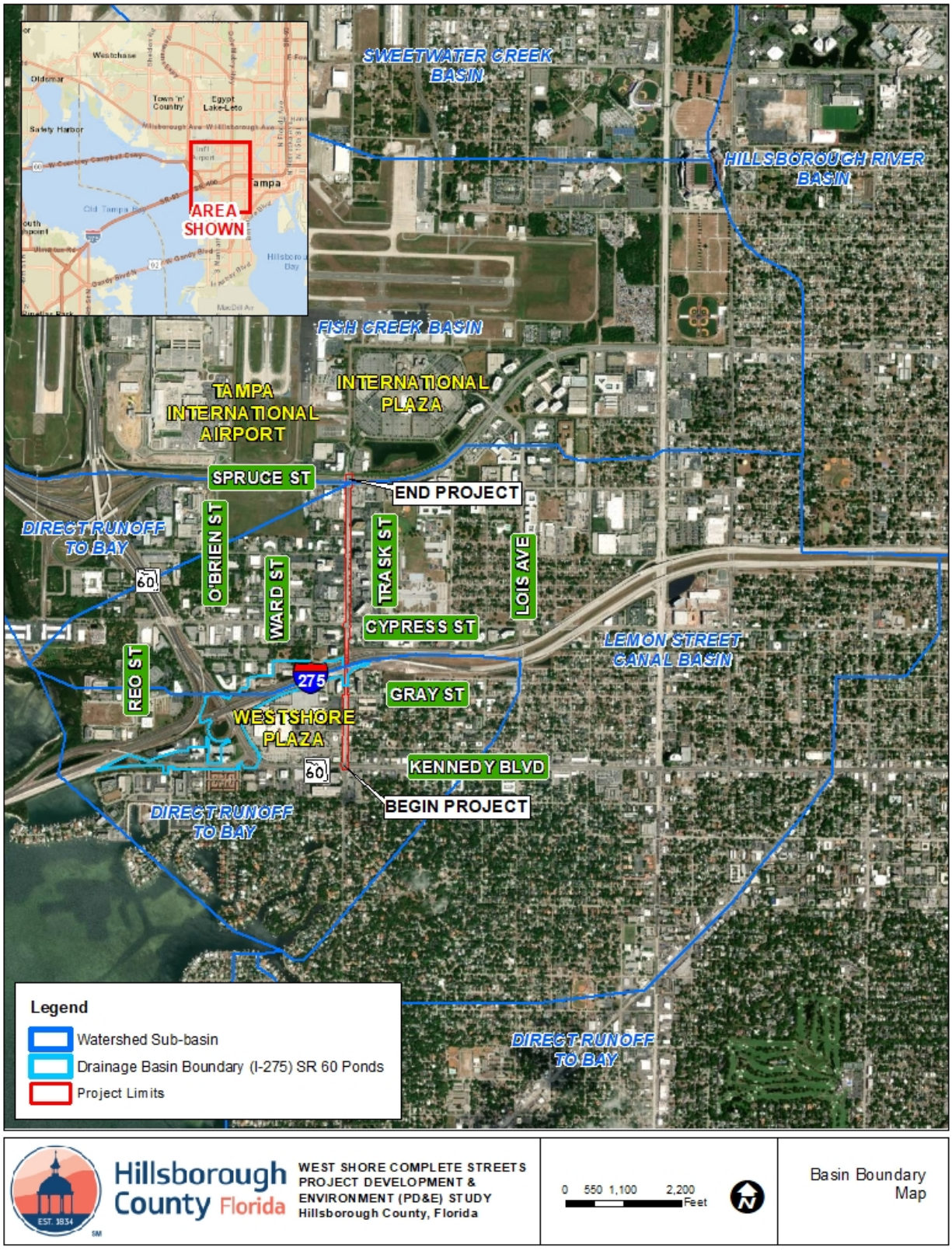
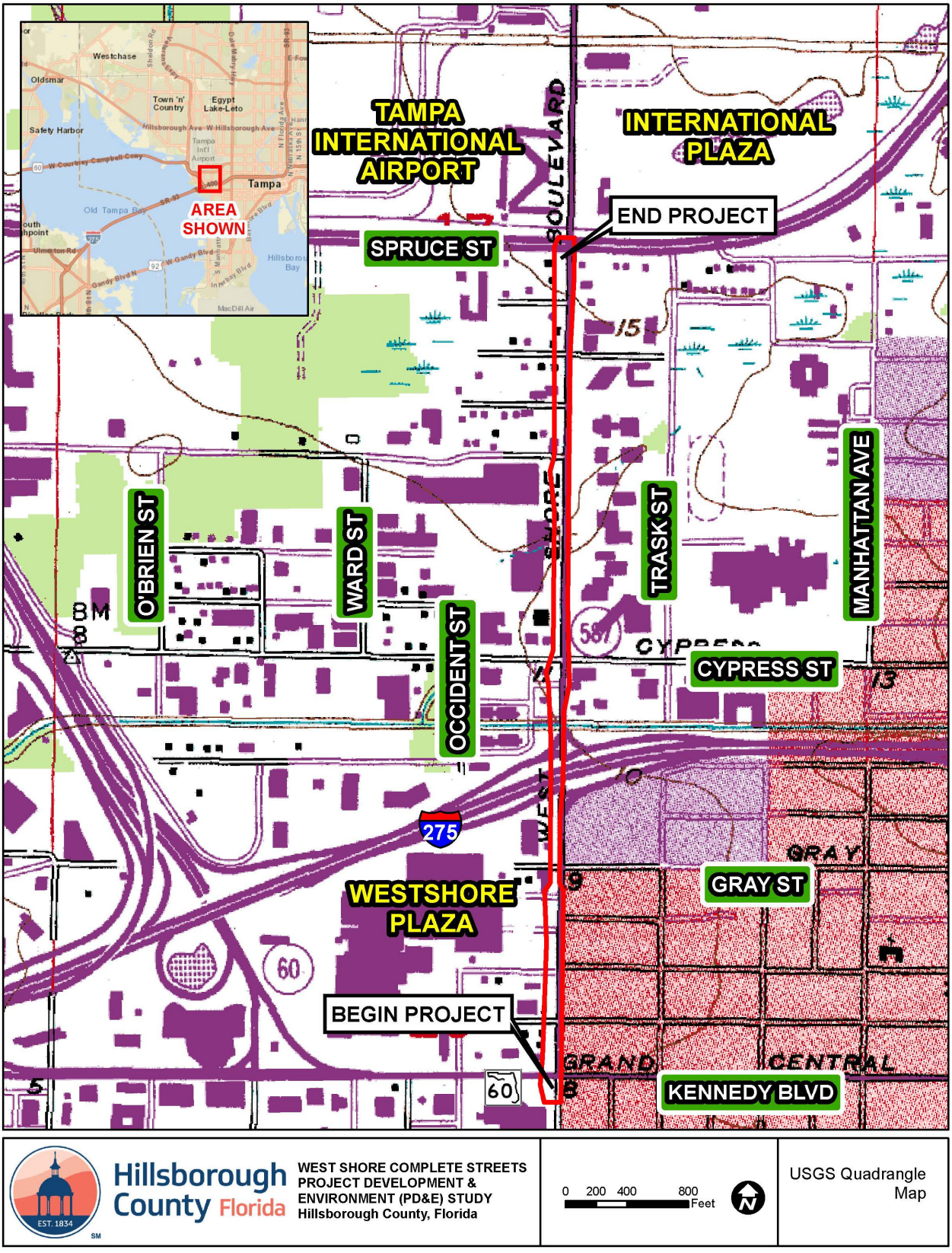


Figure 2-9: USGS Quadrangle Map



The collection system for West Shore Boulevard is broken into three segments via three outfalls, as shown in **Figure 2-10**. The outfalls are as follows:

- Tampa Bay direct discharge via Azeele Street (Segment 1)
- I-275 outfall (Segment 2)
- Lemon Street Canal (Segment 3)

Segment 1, located from West Gray Street to Kennedy Boulevard, discharges into a larger trunkline system which outfalls directly into Tampa Bay near the intersection of South Shore Crest Drive and West Azeele Street. The main trunkline runs along West Cleveland Street from east to west before it turns south between South Shore Crest Drive and South Occident Street. **Figure 2-11** shows the locations where the photos were taken, with the arrow indicating direction. **Figure 2-12** depicts a photo of the outfall west of Shorecrest Drive.

The Segment 2 collection system located along the portion of West Shore Boulevard between West Gray Street and just north of I-275 discharges into a pond located within the Florida Department of Transportation ROW located west of West Shore Boulevard in the SR 60 interchange. See ERP No. 785453 for further information.

Segment 3, located from just north of the intersection of I-275 and West Shore Boulevard to West Boy Scout Boulevard, discharges to the Lemon Street Canal. The Lemon Street Canal flows from east to west and drains directly into Tampa Bay; this canal begins at the intersection of North Himes Avenue and West Lemon Street. The canal runs along the north side of Lemon Street crosses under I-275 just east of N Lois Avenue. The canal continues west along the northern ROW line of the I-275 corridor where it crosses West Shore Boulevard and continues along the north side of Lemon Street once again, where the canal ultimately discharges into Tampa Bay; approximately 1.10-miles downstream of West Shore Boulevard. Over the years, sections of the Lemon Street Canal have been replaced by concrete box culverts and pipes to maintain capacity and facilitate building and roadway infrastructure within the West Shore District. The Lemon Street Canal has signs of erosion and sedimentation along the canal, affecting the conveyance capacity. **Figure 2-13** and **Figure 2-14** depict the last roadway crossing before entering Tampa Bay. **Figure 2-15** depicts the canal entering Tampa Bay.

There is an existing single-cell box culvert located under West Shore Boulevard approximately 200 feet north of the I-275 (SR 93) off ramp at Lemon Street. The opening measures 12 feet by six feet. (see **Figure 2-16**).

2.10.1 Permitting

Upon review of the Southwest Florida Water Management District, SWFWMD, website, no existing Environmental Resource Permits (ERP) have been issued for West Shore Boulevard which require treatment and attenuation of the existing pavement. Additionally, Tampa Bay is not classified as Outstanding Florida Waters by the Florida Department of Environmental Protection.

Figure 2-10: Outfall Location Map

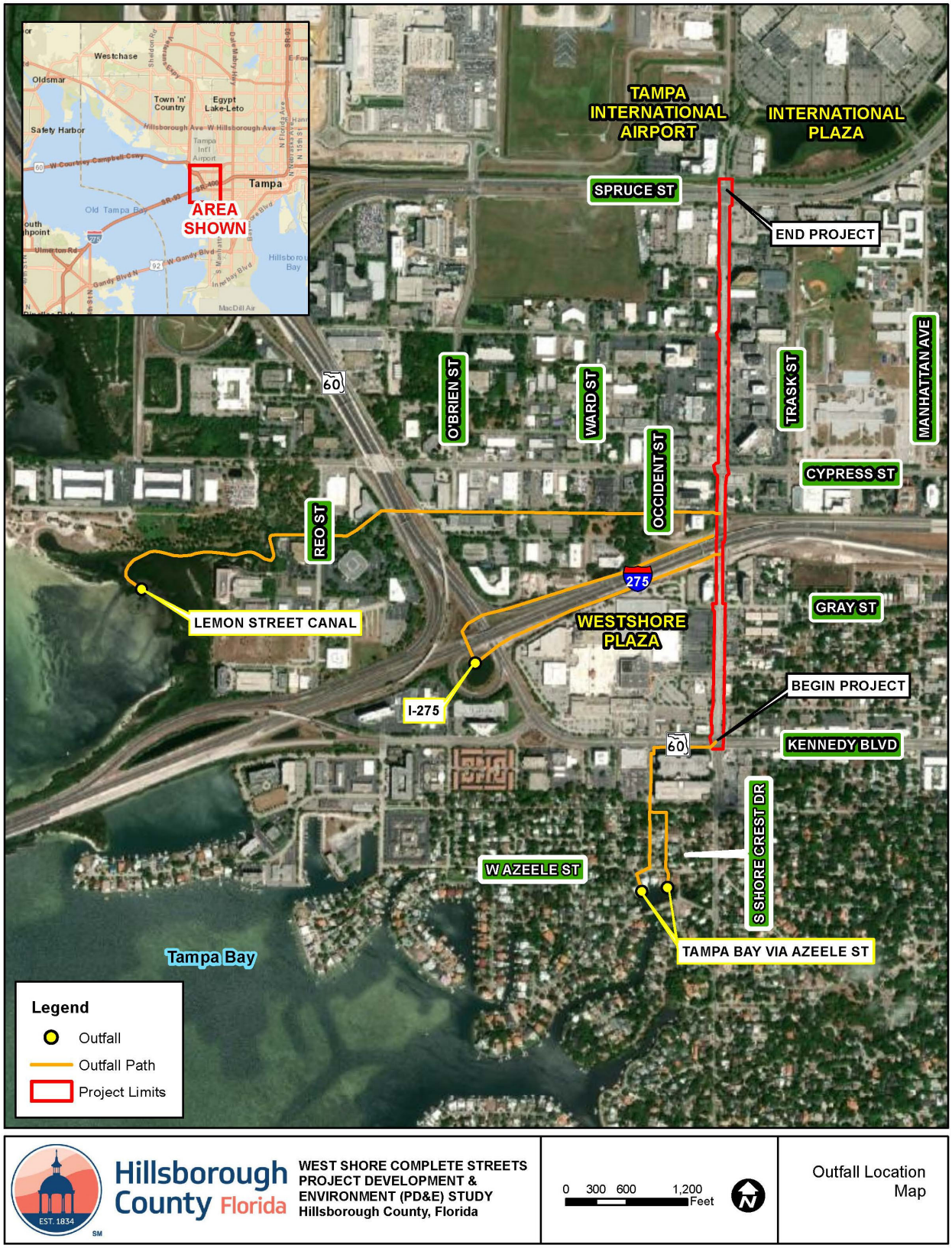


Figure 2-11: Photo Location Map

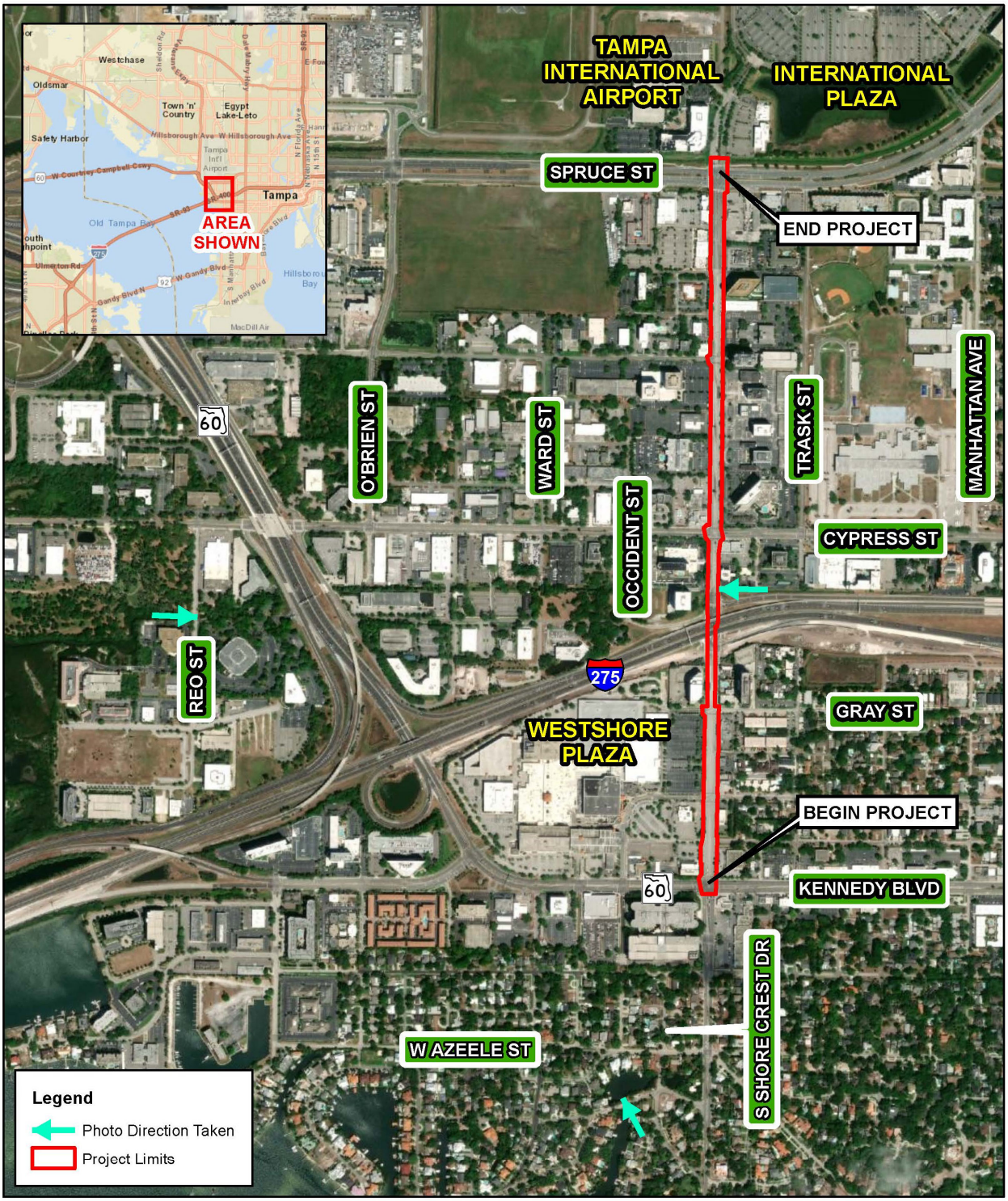


Figure 2-12: Outfall West of Shorecrest Drive (Source: Google Earth)

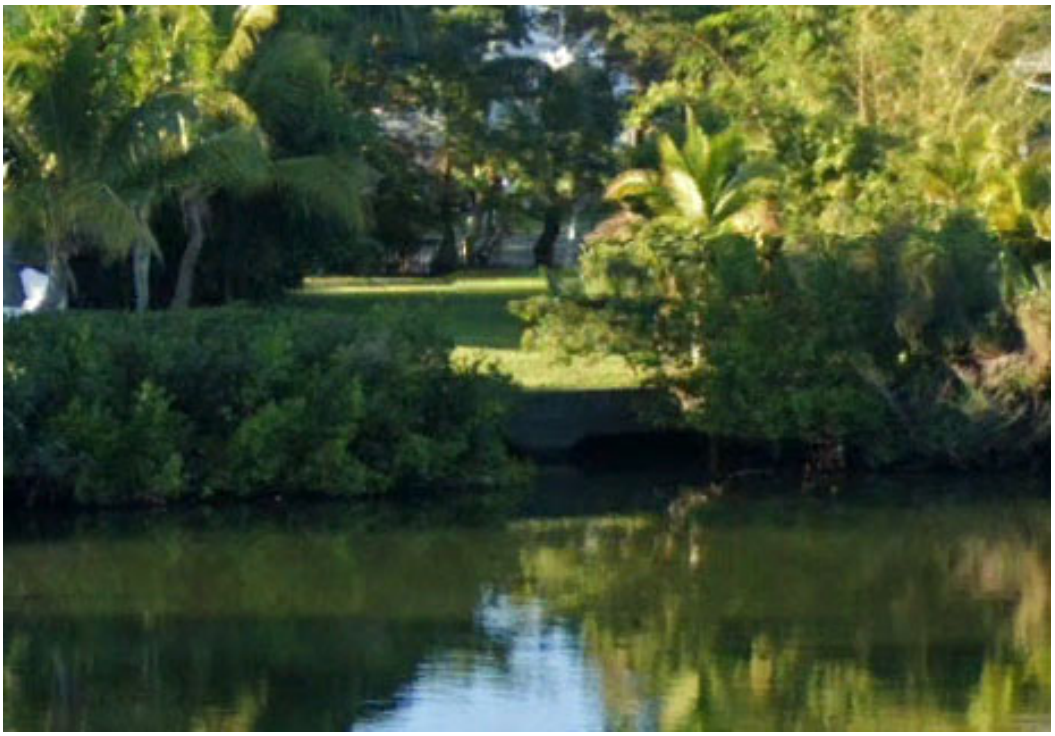


Figure 2-13: Cross Drain at North Reo Street Adjacent to Outfall (Source: Google Earth)

Figure 2-14: Aerial of Outfall Adjacent to North Reo Street (Source: Google Earth)

Figure 2-15: North Reo Street to Outfall into Tampa Bay (Source: Google Earth)

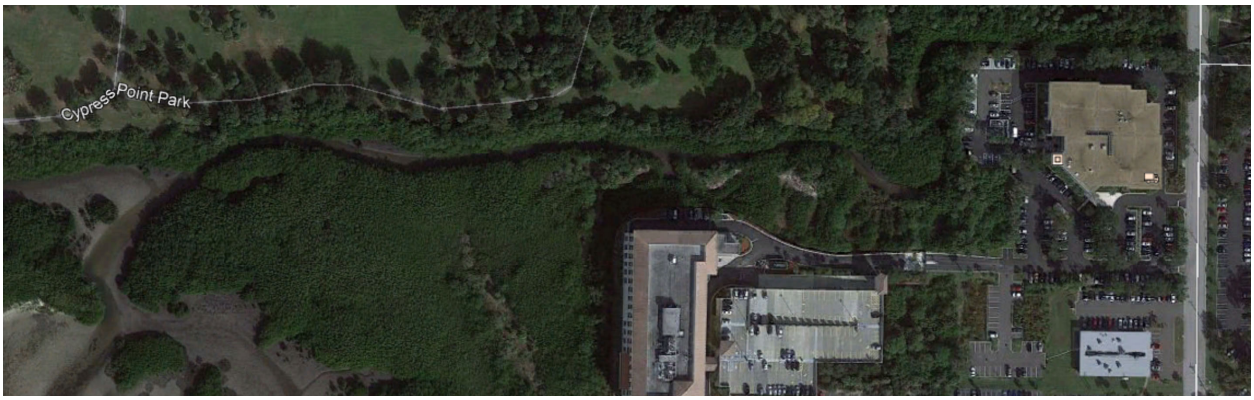


Figure 2-16: Lemon Street Box Culvert

2.10.2 Floodplain

Portions of the West Shore Boulevard corridor are located within the AE flood zone (Panel 12057C0334H 08/28/2008) with a Base Flood Elevation of 9.00-ft NAVD88. **Figure 2-17** depicts the Federal Emergency Management Agency (FEMA) Flood Map.

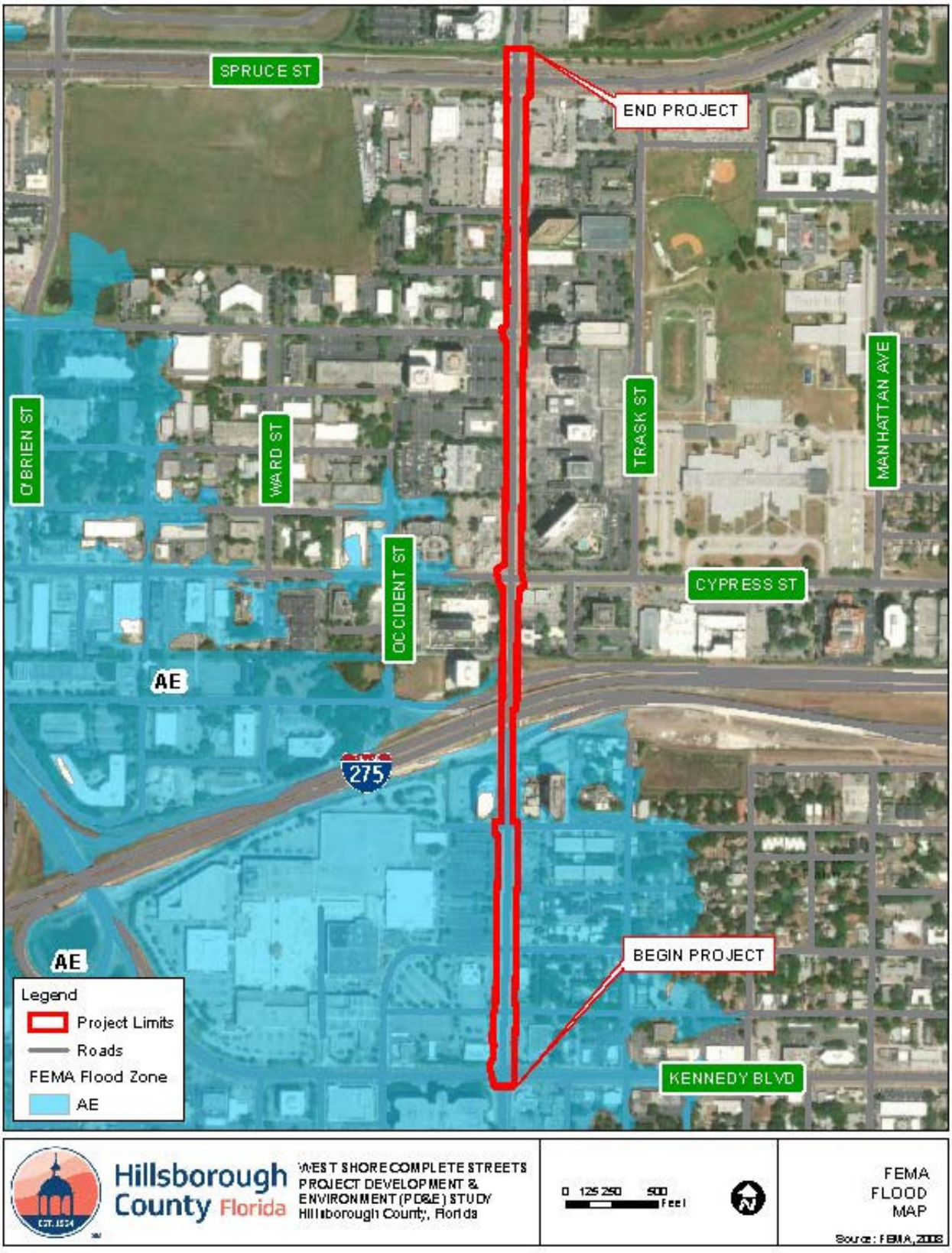
2.10.3 Reported Flooding

SNC-Lavalin (Atkins) has identified areas of nuisance flooding along the project corridor in a report titled, *Cypress/Memorial Area Drainage Study Update* commissioned by the City of Tampa and completed October 2018. This report identifies the existing hydrologic and hydraulic conditions of the Lemon Street Canal and includes recommendations to alleviate flooding along the canal by various canal improvements, including a bypass system to reduce the strain on the existing system**.** See the Drainage section in the Recommended Alternatives for additional information regarding the locations of nuisance flooding and potential solutions.

2.11 Geotechnical Data

The topographic survey map published by the United States Geological Survey (USGS) was reviewed for ground surface features at the proposed project location as shown in the USGS Vicinity Map. Based on this review, natural ground surface elevations at the project site are approximately +5 to +15 feet. The USDA Soil Survey and USGS Quadrangle Maps are included in **Appendix B**.

Figure 2-17: FEMA Flood Map



A review of the USDA Natural Resources Conservation Service (NRCS) soil survey for Hillsborough County indicates that the soils at the project site consist of Urban Land, 0 to 2 percent slopes (56). Urban Land (56) comprises of up to 85 percent impervious surfaces such as asphalt and concrete. Urban land (56) surfaces are covered by streets, parking lots, buildings, and other structures. Most areas classified as Urban land (56) are artificially drained by sewer systems, gutters, and other man-made drainage systems. Annual precipitation as well as depth to seasonal high water table in naturally drained areas are not reported by the USDA on soils consisting of Urban Land. The United States Department of Agriculture (USDA) Soil Survey is included in **Appendix B**.

The existing subgrade soils along the project alignment consist primarily of Select Soils (A-3/A-2-4) to a depth of 5 feet. Plastic Soils (A-2-7), and organic soils (A-8) should also be expected and were encountered in some areas along the alignment. The groundwater table was encountered at a depth of 4 ft in one boring location along the alignment. It was not encountered in the remaining boring locations. We anticipate the seasonal high-water table along the alignment at depths between approximately 3.5 to 5.0 feet below the existing ground surface. Based on this estimate, the existing pavement meets minimum base clearance of 18 inches throughout the project.

2.12 Pavement Conditions

The existing pavement conditions along the alignment appear to be generally poor with single and block cracking, rutting and patches observed. Pavement cores performed along the alignment encountered an asphalt layer approximately 3.5 to 6.5 inches in thickness underlain by a limerock base approximately 3 to 16 inches in thickness.

Pavement markings are faded or worn in several locations. Hillsborough County's Road Resurfacing and Reconstruction Program is based on the Army Corps of Engineers' Pavement Management System. This system evaluates every road in the County once every three years to rank its pavement condition based on evaluated defects. Once the roads are ranked, the program coordinators decide which repair best suits the defects on the given road. Staff then produces a list of needed resurfacing projects and matches it to the existing budget levels for the given year to complete the final resurfacing schedule.

2.13 Intersections and Signalization

There are eight signalized intersections along the project:

- West Kennedy Boulevard
- West North B Street
- West Gray Street
- I-275 (SR 93) northbound on-ramp
- I-275 (SR 93) southbound off-ramp
- West Cypress Street
- West Laurel Street
- West Spruce Street

Access between West Shore Boulevard and I-275 (SR 93) is provided with a half diamond interchange providing signalized access to I-275 (SR 93) via a northbound on-ramp and a southbound off-ramp. Most signal poles are located in front of or behind the sidewalk, although some are within the sidewalk. One, in the southwest quadrant of the West Kennedy Boulevard intersection, which also includes a streetlight, is located within the sidewalk. One, in the southwest quadrant of the West Gray Street

intersection, which also includes a streetlight, is located within the Americans with Disabilities (ADA) sidewalk ramp. One, in the northeast quadrant of the West Laurel Street intersection, is located within the sidewalk. Pedestrian signals are provided at the signalized intersections. **Figure 2-18** illustrates the existing signal locations and lane configurations.

2.14 Lighting

Conventional street lighting is provided along both sides of West Shore Boulevard from West Kennedy Boulevard as stand-alone concrete light poles and attached to utility and signal poles, alternating sides at approximately 185 foot minimum spacing. Most of the stand-alone light poles are located behind or in front of the sidewalk. Two light poles are located within the sidewalk; one on the east side of West Shore Boulevard adjacent to Walgreens north of the West Kennedy Boulevard intersection, and one at the Westshore Plaza Entrance just north of the West North B Street signalized intersection. A signal pole in the southwest quadrant of the West Gray Street intersection, that also includes a light fixture, is located within the ADA sidewalk ramp. Another signal pole in the southwest quadrant of the West Kennedy Boulevard intersection, which also includes a streetlight, is located within the sidewalk. Street lighting is maintained by Hillsborough County.

Figure 2-18: Existing Signal Locations and Lane Configurations

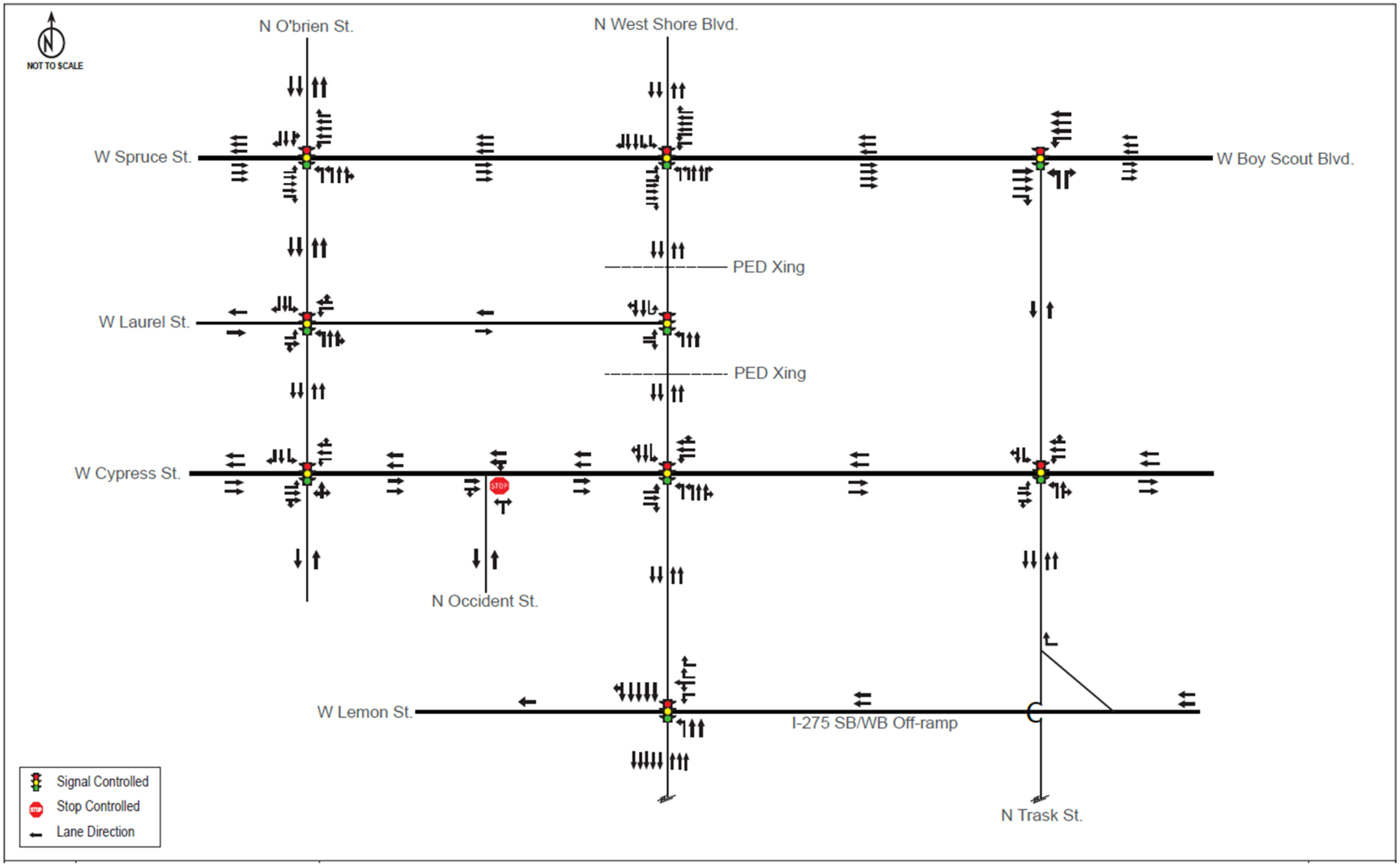
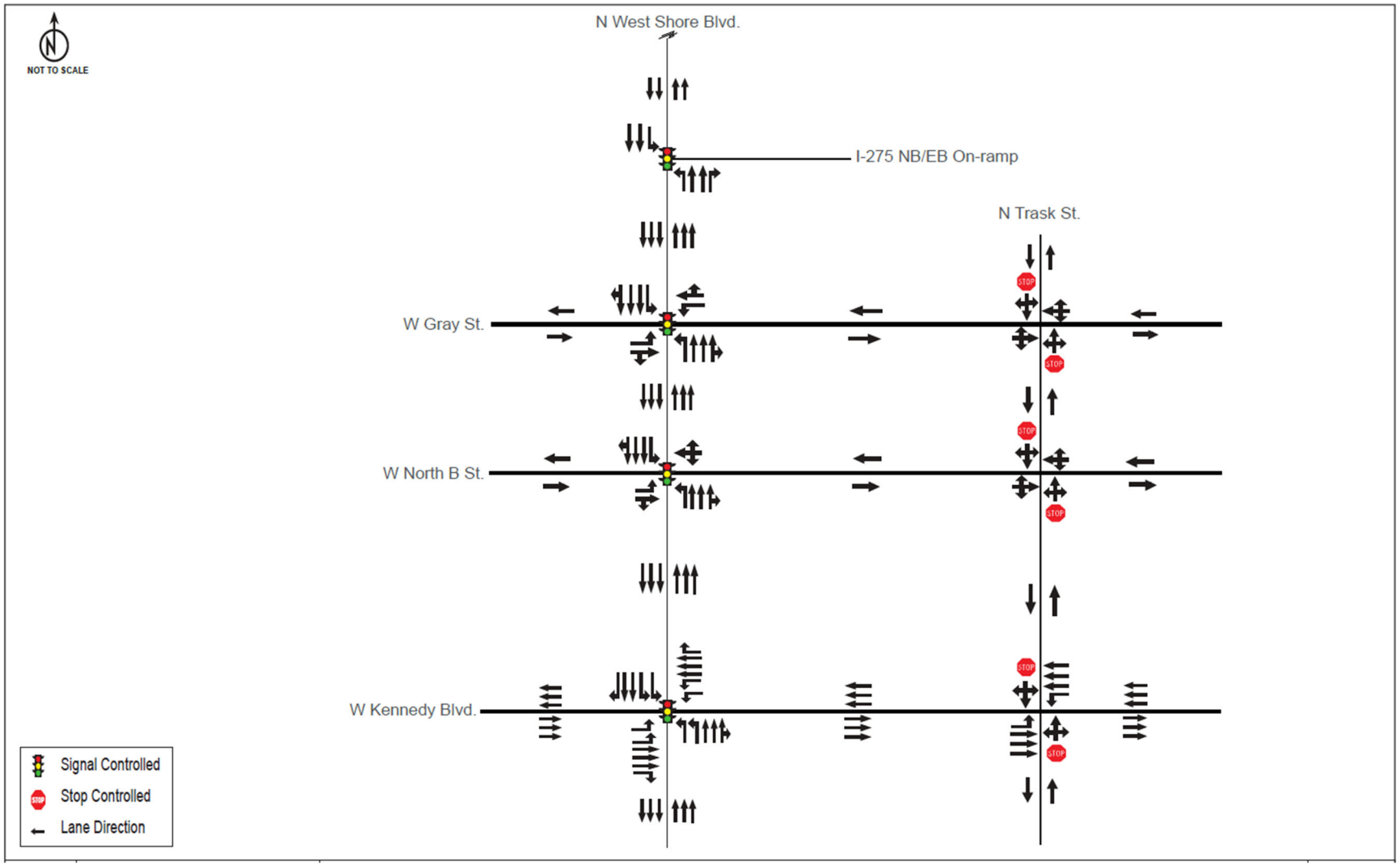


Figure 2-18 (Continued): Existing Signal Locations and Lane Configurations



2.15 Utilities

Utility Agencies/Owners (UAO) and their existing facilities within the study area are summarized in **Table 2-4**. More information, including maps from the UAOs is included in the project file.

Table 2-4: Utilities

UTILITY OWNER	FACILITIES WITHIN PROJECT LIMITS	STREET LOCATION
AT&T of Florida	3-1.25" Metro High-Density Polyethylene (HDPE) Duct	South side of W. Kennedy Blvd.
	2-1.25" Metro HDPE Duct	North side of W. Kennedy Blvd. ties into 3-1.25" duct system on West Shore Blvd.
	3-1.25" Metro HDPE Duct	The east side of West Shore Blvd. between W. Cypress St. and W. Spruce St./W. Boy Scout Blvd.
	3-1.25" Metro HDPE Duct	Turns east onto north side of W. Cypress St.
	3-1.25" Metro HDPE Duct	Two Crossings West Shore Blvd. on both sides of W. Laurel St.
	3-1.25" Metro HDPE Duct	Crossing W. Spruce St./W. Boy Scout Blvd. east side then turn to service Corporate Center One
	3-1.25" Metro HDPE Duct	Crosses from east side of West Shore Blvd. to south side of W. Spruce St./W. Boy Scout Blvd.
CenturyLink/ Level 3	1 conduit with 1 Fiber Optic Cable (FOC)	Along West Shore Blvd. from W. Kennedy Blvd. to W. Spruce St. / W. Boy Scout Blvd.
	Large Manhole system with 8-way conduits	Large Manhole system with 8-conduits along the east side of West Shore Blvd. *Note* – at W. Cypress St. Centurylink has a large underground interceptor system that ties into the 11-way on the west side of West Shore
	Large manhole 11-way system	On the west side of West Shore Blvd. from W. Cypress St. to W. Spruce St./W. Boy Scout Blvd. and turns east down W. Spruce St./W. Boy Scout Blvd. At this intersection CenturyLink has a large network of conduits and servicing the local businesses.
Charter/Spectrum	**Overhead:** Overhead Television (OTV)/ Overhead fiber optic cable (OFOC) **Underground:** 2-2" conduits 2-2" conduits	Service drop to building south of N. B St. The majority is OTV/OFOC Aerial crossings at N. B St., W. Cypress St., W. Laurel St., and W. Spruce St./W. Boy Scout Blvd. On W. Gray St. On Laurel St.
City of Tampa Wastewater	10" Vitreous Clay Pipe (VCP) gravity sanitary	Crossing West Shore Blvd. at North A St.
	16" Ductile Iron Pipe (DIP) Force Main (FM)	Crossing West Shore Blvd. at W. North B St. going into the Westshore Mall

Table 2-4 (Continued): Utilities

UTILITY OWNER	FACILITIES WITHIN PROJECT LIMITS	STREET LOCATION
City of Tampa Wastewater (Cont.)	4" DIP FM	Comes down the north side of W. Gray St. and turns north on the east side of West Shore Blvd. and stops at the Waffle House
	8" Vitreous Clay Pipe (VCP) SAN gravity becomes a 10" VCP SAN	In the middle of the northbound through lanes up to W. Cypress St. where it becomes a 10" VCP, then crosses to the east side of West Shore Blvd. and under the sidewalk to 1,500 feet south of W. Spruce St., then crosses into the median and runs north to south side of W. Spruce St./W. Boy Scout Blvd intersection
	6" Cast Iron Pipe (CIP) Force Main (FM)	Crossing into the center of the intersection of West Shore Blvd. and W. Spruce St./W. Boy Scout Blvd. and ties to private system
City of Tampa Water	2- 8" CIP water mains (WM)	2- 8" CIP water mains at W. Kennedy Blvd.
	12" enamel water main with pieces being DIP	On the east side of West Shore Blvd.
	12" WM	Crosses West Shore Blvd. at W. North B St.
	6" enamel WM	Crosses West Shore Blvd. at W. Gray St.
	8" WM	Crosses West Shore Blvd. approximately 100 feet north of W. Gray St.
	8" WM and 3" WM	Crosses West Shore Blvd. on both sides of W. Cypress St.
	8" DIP and a 2" Enamel	Crosses West Shore Blvd. at intersection of W. Laurel St.
	2" Out of Service WM and 2" WM in service	Both crosses west at Main St.
	2" WM enamel	Crosses West Shore Blvd. at Union St.
	8" DIP and a 16" WM	Crosses West Shore at W. Spruce St./W. Boy Scout Blvd.
	8" Enamel WM	On the west side of West Shore Blvd. from Westshore Mall entrance to N. B St.
	8" WM Enamel	On the west side of West Shore Blvd. from W. Cypress St. to W. Laurel St.
	6" Enamel WM	On west side of West Shore Blvd. from W. Chestnut St. (north of Main St.) to W. Spruce St. /W. Boy Scout Blvd.
Crown Castle	Buried FOC	On the east side of West Shore Blvd. from W. Kennedy Blvd. and turns down the north side of W. Cypress St.
	Buried FOC	Crossing of West Shore Blvd. just north of W. Kennedy Blvd.
	Buried FOC	Crossing of West Shore Blvd. just south of W. Cypress St.

Table 2-4 (Continued): Utilities

UTILITY OWNER	FACILITIES WITHIN PROJECT LIMITS	STREET LOCATIONS
Crown Castle (Cont.)	Buried FOC	Crossing of West Shore Blvd. at the Ramada Inn
	Buried FOC	Crossing of West Shore Blvd. just south of Laurel St.
	Buried FOC	On the west side of West Shore Blvd. from W. Cypress St. to north of W. Laurel St. and turns off project
FiberLight, LLC	2" - 1.25" PVC Buried FOC	On the north side of W. Boy Scout Blvd. and West Shore Blvd.
Frontier	6-4" conduit duct bank FOC	On the east side of West Shore Blvd. north of W. Gray St. to north of W. Cypress St. and ties into a 14-4" conduits at the manhole turning east off the project
	18-4" conduit duct bank FOC	From W. Cypress St. to approximately 100 feet north of W. Cypress St. and dead ends.
	4-4" conduits duct bank becomes a 5-4" duct bank	2500 feet south of W. Laurel St. up to Spruce St.
	2-4" conduit duct bank	Crossing West Shore Blvd. to west side at Fig St.
	5-4" conduit duct bank	Crossing West Shore Blvd. north of W. Gray St.
	14-4" conduit duct bank	Crossing West Shore Blvd. just north of W. Cypress St.
	2- 12-4" conduit duct banks	Crossing West Shore Blvd. on the south side of Spruce/Spruce/Boy scout
	9-4" conduit duct bank	West side of West Shore Blvd. from W. Kennedy to W. Spruce St. /W. Boy Scout Blvd.
TECO	Overhead Electric (OE) 13 KV power	Overhead system on the east side of West Shore Blvd. with several aerial crossings to serve business
TECO Peoples Gas	2" GM out of service	Crossing West Shore at North A St.
	2" GM Out of service 2" GM active	Crossing west shore just south of W. North B St.
	¾" Polyethylene Gas main (PE GM)	Crossing west shore at W Gray St. serving the mall
	3" CS GM	Crossing west shore at W. Cypress St.
	4" GM with tie in of 1.25" GMs	From W. Spruce St. /W. Boy Scout Blvd. down the west side of West Shore Blvd., crosses to the east side of west shore to serve the West Shore Center
Uniti	3-1.25" conduits	On the east side of West Shore from W. Cypress St. to W. Spruce St. /W. Boy Scout Blvd., then crossing West Shore Blvd. on the south side of W. Spruce St. /W. Boy Scout Blvd.
	3-1.25" conduits	Crossing West Shore Blvd. at W. Cypress St.

Table 2-4 (Continued): Utilities

UTILITY OWNER	FACILITIES WITHIN PROJECT LIMITS	STREET LOCATIONS
Verizon Business/MCI	3-1.25" conduits	On the east side of West Shore Blvd. from W. Kennedy Blvd. to the Embassy Suites
	3-1.25" conduits	On the east side of West Shore Blvd. from west of W. Cypress St. to W. Spruce St. /W. Boy Scout Blvd.
	17-1.25" HDPE duct bank	On the east side of West Shore Blvd. from W. Kennedy Blvd. to W. Spruce St./ W. Boy Scout Blvd.
	3-1.25" conduits	Crossing West Shore Blvd. at W. Kennedy Blvd.
	3-1.25" conduits	Crossing West Shore Blvd. at W. North A St.
	3-1.25" conduits	Crossing West Shore Blvd. at North of W. Gray St.
	3-1.25" conduits	Crossing West Shore Blvd. at W. Cypress St.
	3-1.25" conduits	Crossing West Shore Blvd. at W. Laurel St.
	3-1.25" conduits	Crossing West Shore Blvd. at W. Spruce St./ W. Boy Scout Blvd.
	3-1.25" conduits	On the west side of West Shore Blvd. from W. Kennedy to W. Cypress St.

2.16 Bridges

A bridge (Bridge No. 100117) carries I-275 (SR 93) over West Shore Boulevard. The FDOT District 7 reconstruction project for I-275 (SR 93), currently funded for construction in 2024, includes reconstruction of these bridges.

There are no bridge class culverts located within the project corridor.

3 Traffic

A *Project Traffic Analysis Report* was prepared and is summarized below.

3.1 Existing Traffic Conditions

Annual growth rates, axle factors and peak season conversion factors were applied to raw counts to reflect 2019 peak season peak hour traffic conditions. Manual adjustments were made to the major movements to balance the traffic volumes throughout the roadway network. **Figure 3-1** depicts the final balanced 2019 peak season peak hour vehicular traffic volumes as well as available AADTs. **Figure 3-2** depicts the raw pedestrian and bicycle counts during the peak hours.

3.2 Travel Demand Future Traffic Forecasts

Model forecasts were developed for the 2025 opening year using the TBRPM v8.2 2021 E+C (existing geometry plus committed highway network) and 2030 SE Data as a base. The 2021 E+C network was further reviewed and revised to include key proposed network improvements and new roadway connections in the study area as listed below:

- Extend N Trask St and N Occident Streets under Interstate 275
- Widen N O'Brien St from two to four lanes from Cypress St to Boy Scout Boulevard

No changes to West Shore Boulevard between West Kennedy Boulevard and Spruce Street were coded into the 2021 E+C model. The subarea validation coding adjustments were then applied to the E+C highway network. The updated E+C network was run with the 2030 SE Data included with the TBRPM (since only 2010, 2030 and 2040 SE Datasets are included with the model). A growth rate was applied to the resulting AADT volumes to factor the traffic back to 2025.

The 2030 and 2040 AADT volumes for the Build and No-Build Alternatives were generated from the TBRPM8.2 travel demand model. For the No-Build Alternative, the opening year (2025) AADT volumes were reduced from year 2030 AADTs assuming an annual growth rate of 1.5%, as derived from historical AADT counts along West Shore Boulevard. Adjustments were made to ensure that 2030 AADTs are higher than Existing and lower than 2040 AADTs. AADT volumes for three future years are listed in **Table 3-1** and **Table 3-2**, below. For the Build Alternative, no geometric improvements along West Shore Boulevard are anticipated to be implemented by the open year 2025; therefore, only the design year 2040 conditions were evaluated and AADTs are contained in **Table 3-3** and **Table 3-4**. AADTs for the Build and No-Build Alternatives are contained in **Figure 3-3** and **Figure 3-4**.

Figure 3-1: 2019 Existing AM (PM) Peak Hour Volumes

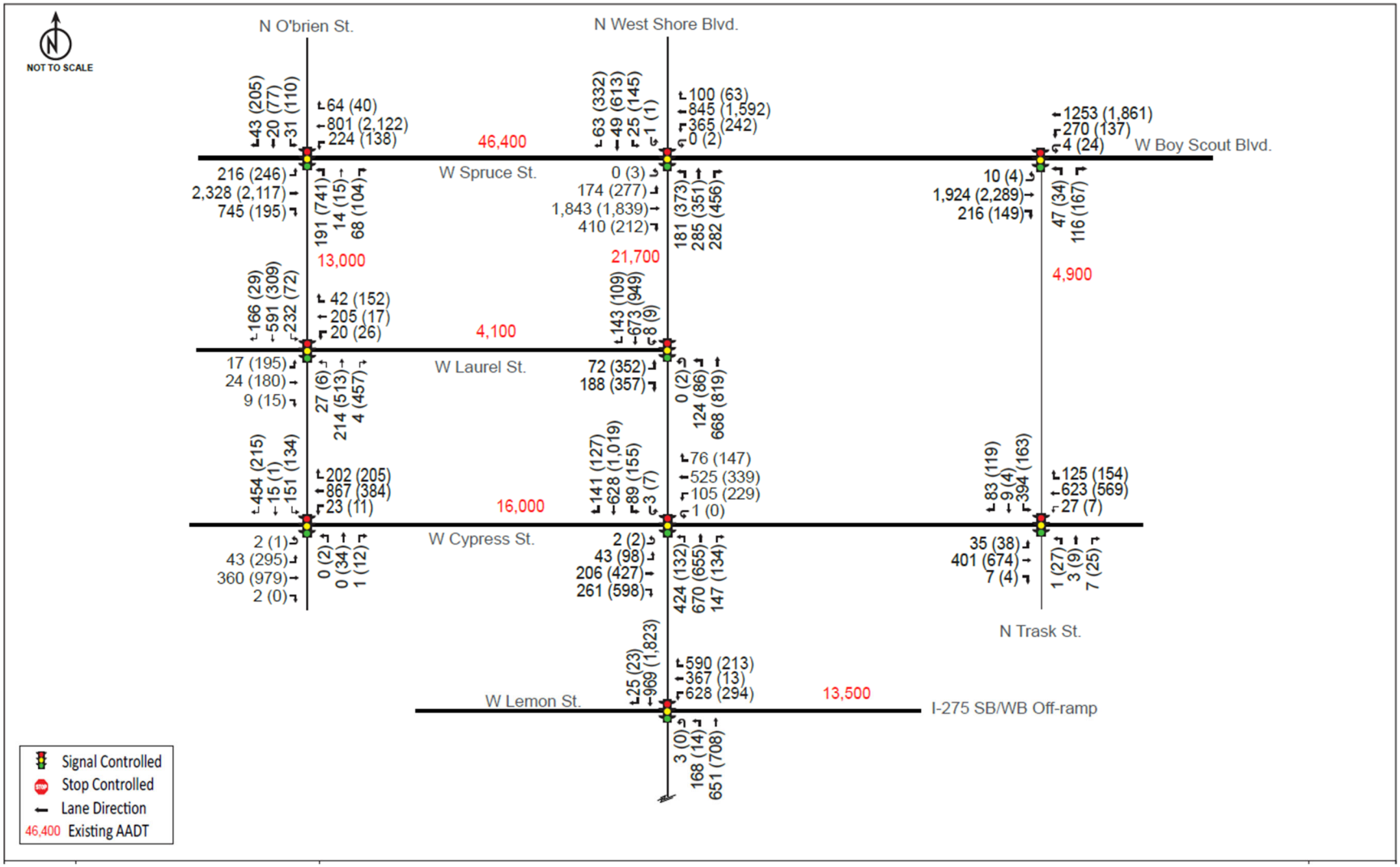


Figure 3-1 (Continued): 2019 Existing AM (PM) Peak Hour Volumes

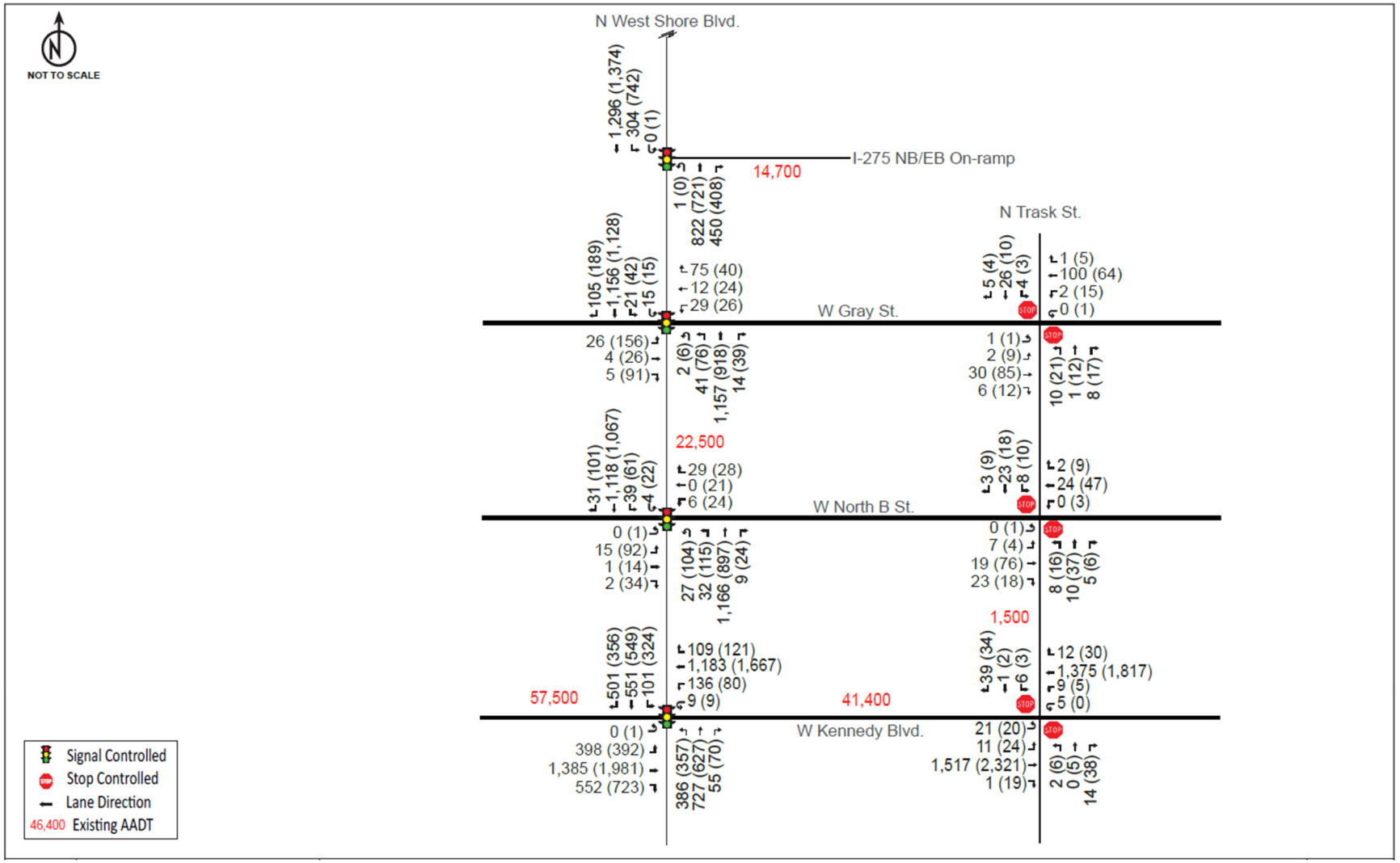


Figure 3-2: 2019 Existing AM (PM) Pedestrian & Bicycle Counts

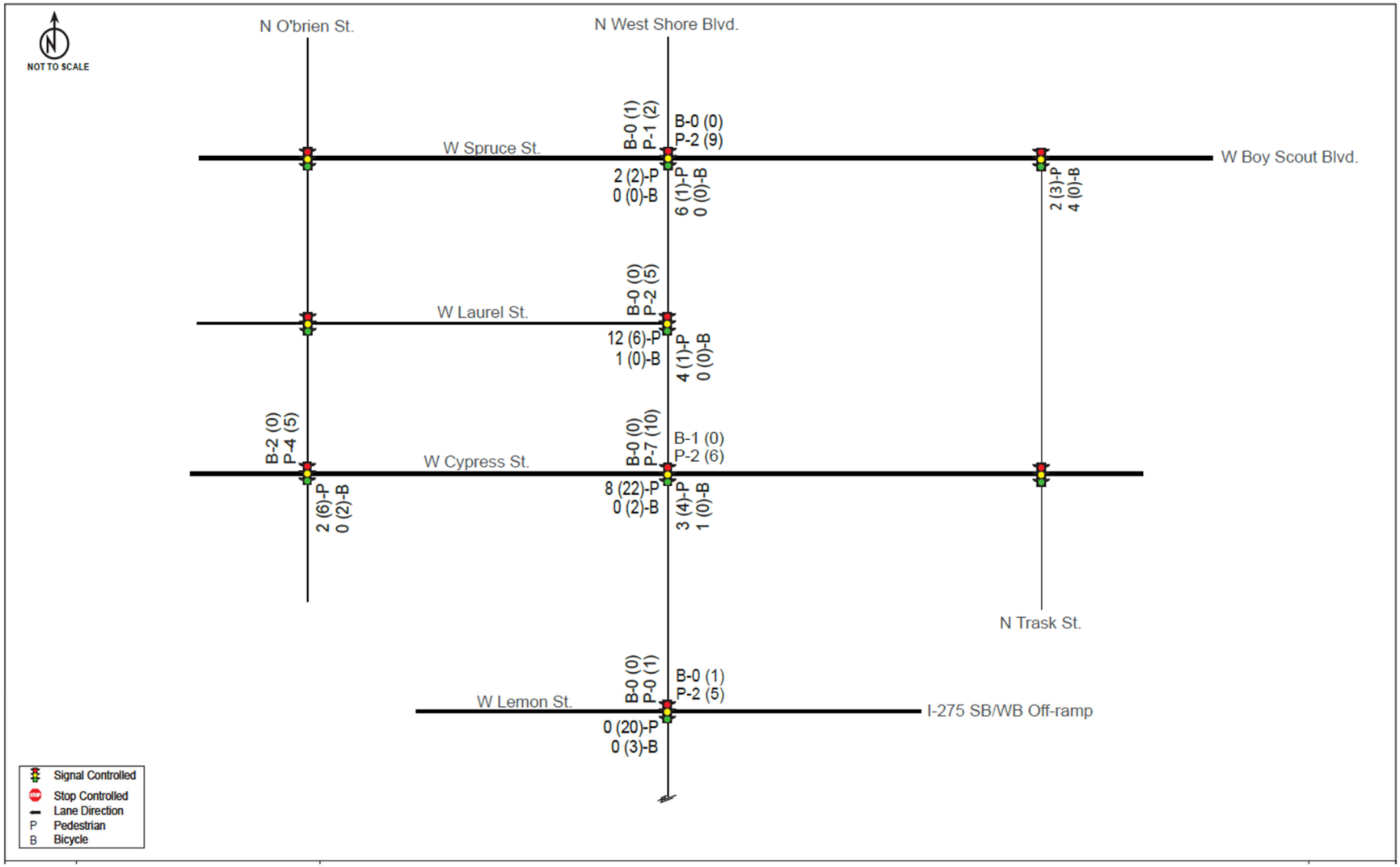


Figure 3-2 (Continued): 2019 Existing AM (PM) Pedestrian & Bicycle Counts

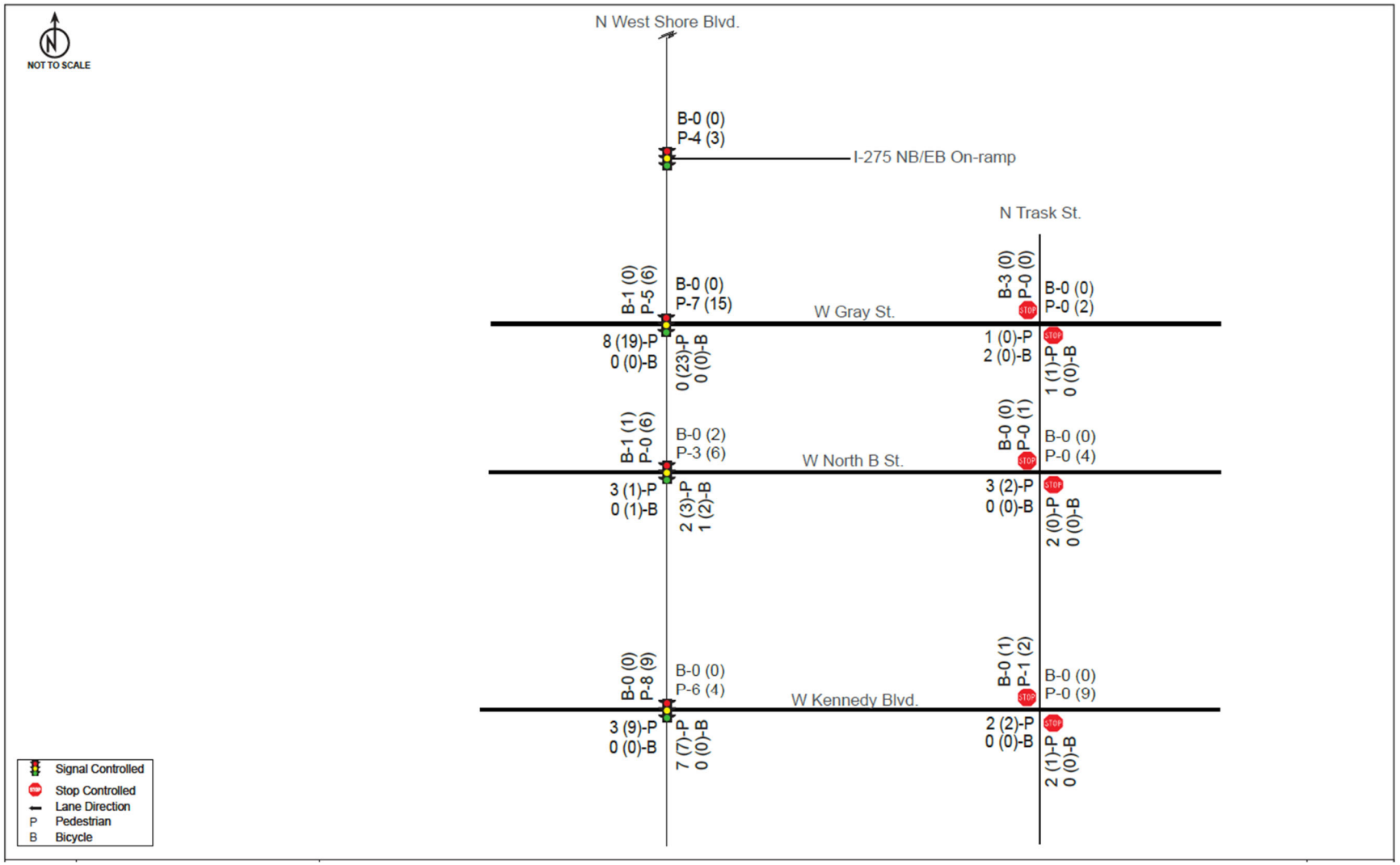


Table 3-1: East/West Roadways AADT Volumes – No-Build Alternative

Roadway	From	To	Year 2040	Year 2030	Year 2025
W. Spruce Street	West of N. O'Brien Street	N. O'Brien Street	64,500	61,400	57,000
	N. O'Brien Street	West Shore Boulevard	63,200	60,100	61,500
	West Shore Boulevard	N. Trask Street	56,900	54,100	53,200
	N. Trask Street	East of N. Trask Street	59,700	56,800	51,600
W. Laurel Street	N. O'Brien Street	West Shore Boulevard	12,800	12,600	11,700
W. Cypress Street	West of N. O'Brien Street	N. O'Brien Street	25,800	24,700	23,000
	N. O'Brien Street	Occident Street	21,800	20,700	21,100
	Occident Street	West Shore Boulevard	23,200	22,100	23,000
	West Shore Boulevard	N. Trask Street	27,500	25,200	23,400
	N. Trask Street	East of N. Trask Street	23,300	22,200	20,600
I-275 Southbound Off-Ramp	West Shore Boulevard	N. Trask Street	15,400	14,700	13,600
	N. Trask Street	East of N. Trask Street	31,300	25,400	23,600
I-275 Northbound On-Ramp	West Shore Boulevard	N. Trask Street	17,300	16,100	15,400
	N. Trask Street	East of N. Trask Street	31,700	24,600	22,800
W. Gray Street	West Shore Boulevard	N. Trask Street	6,700	2,100	1,900
W. Kennedy Boulevard	West of West Shore Boulevard	West Shore Boulevard	71,600	68,100	67,900
	West Shore Boulevard	N. Trask Street	42,900	42,200	41,800
	N. Trask Street	East of N. Trask Street	49,800	47,400	44,000

Table 3-2: North/South Roadways AADT Volumes - No-Build Alternative

Roadway	From	To	Year 2040	Year 2030	Year 2025
N. O'Brien Street	W. Spruce Street	W. Laurel Street	25,300	24,100	24,700
	W. Laurel Street	W. Cypress Street	22,700	18,000	16,700
Occident Street	W. Cypress Street	South of W. Cypress Street	7,000	4,700	4,400
West Shore Boulevard	W. Spruce Street	W. Laurel Street	24,900	23,400	22,600
	W. Laurel Street	W. Cypress Street	36,900	35,000	32,500
	W. Cypress Street	I-275 SB Off-Ramp	33,400	31,800	32,300
	I-275 SB Off-Ramp	I-275 NB On-Ramp	40,700	33,400	31,000
	I-275 NB On-Ramp	W. Gray Street	40,900	35,200	32,600
	W. Gray Street	W. North B Street	33,400	33,100	30,800
	W. North B Street	W. Kennedy Boulevard	30,700	29,200	30,500
	Kennedy Boulevard	South of W. Kennedy Boulevard	33,400	31,800	31,400
N. Trask Street	W. Spruce Street	W. Cypress Street	18,800	18,700	17,400
	W. Cypress Street	I-275 SB Off-Ramp	30,000	19,200	17,800
	I-275 SB Off-Ramp	I-275 NB On-Ramp	18,200	17,300	17,200
	I-275 NB On-Ramp	W. Gray Street	15,000	12,400	11,500
	W. Gray Street	W. Kennedy Boulevard	12,900	7,800	7,200

Table 3-3: East/West Roadways Annual Average Daily Traffic Volumes - Build Alternative (Road Diet)

Roadway	From	To	Year 2040
W. Spruce Street	West of N. O'Brien Street	N. O'Brien Street	64,700
	N. O'Brien Street	West Shore Boulevard	63,500
	West Shore Boulevard	N. Trask Street	56,800
	N. Trask Street	East of N. Trask Street	59,700
W. Laurel Street	N. O'Brien Street	West Shore Boulevard	12,700
W. Cypress Street	West of N O'Brien Street	N. O'Brien Street	25,600
	N. O'Brien Street	Occident Street	21,900
	Occident Street	West Shore Boulevard	23,100
	West Shore Boulevard	N. Trask Street	27,000
	N. Trask Street	East of N Trask Street	23,200
I-275 Southbound Off-Ramp	West Shore Boulevard	N. Trask Street	15,000
	N. Trask Street	East of N. Trask Street	31,300
I-275 Northbound On-Ramp	West Shore Boulevard	N. Trask Street	17,000
	N. Trask Street	East of N. Trask Street	31,300
W. Gray Street	West Shore Boulevard	N. Trask Street	7,600
W. Kennedy Boulevard	West of West Shore Boulevard	West Shore Boulevard	71,900
	West Shore Boulevard	N. Trask Street	43,900
	N. Trask Street	East of N. Trask Street	50,700

Table 3-4: North/South Roadways Annual Average Daily Traffic Volumes - Build Alternative (Road Diet)

Table 3-4**Roadway**	**From**	**To**	**Year 2040**
N. O'Brien Street	W. Spruce Street	W. Laurel Street	25,000
	W. Laurel Street	W. Cypress Street	22,600
Occident Street	W. Cypress Street	South of W. Cypress Street	7,300
West Shore Boulevard	W. Spruce Street	W. Laurel Street	25,000
	W. Laurel Street	W. Cypress Street	36,900
	W. Cypress Street	I-275 SB Off-Ramp	33,000
	I-275 SB Off-Ramp	I-275 NB On-Ramp	38,700
	I-275 NB On-Ramp	W. Gray Street	38,200
	W. Gray Street	W. North B Street	29,200
	W. North B Street	W. Kennedy Boulevard	26,800
	W. Kennedy Boulevard	South of W. Kennedy Boulevard	33,300
N. Trask Street	W. Spruce Street	W. Cypress Street	18,700
	W. Cypress Street	I-275 SB Off-Ramp	30,000
	I-275 SB Off-Ramp	I-275 NB On-Ramp	19,100
	I-275 NB On-Ramp	W. Gray Street	15,800
	W. Gray Street	W. Kennedy Boulevard	14,800

Figure 3-3: Opening Year (2025) No-Build AADT Volumes

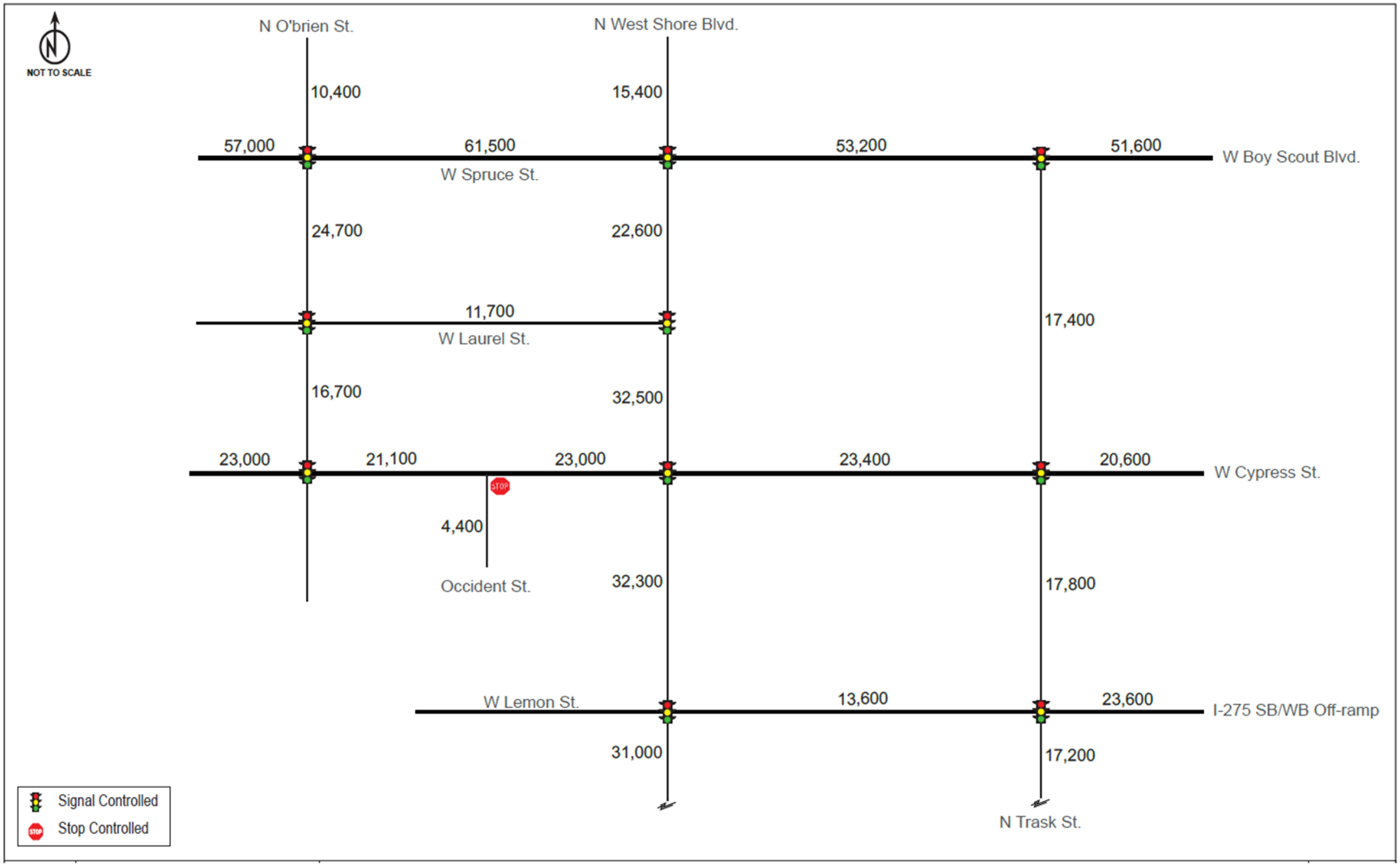


Figure 3-3 (Continued): Opening Year (2025) No-Build AADT Volumes

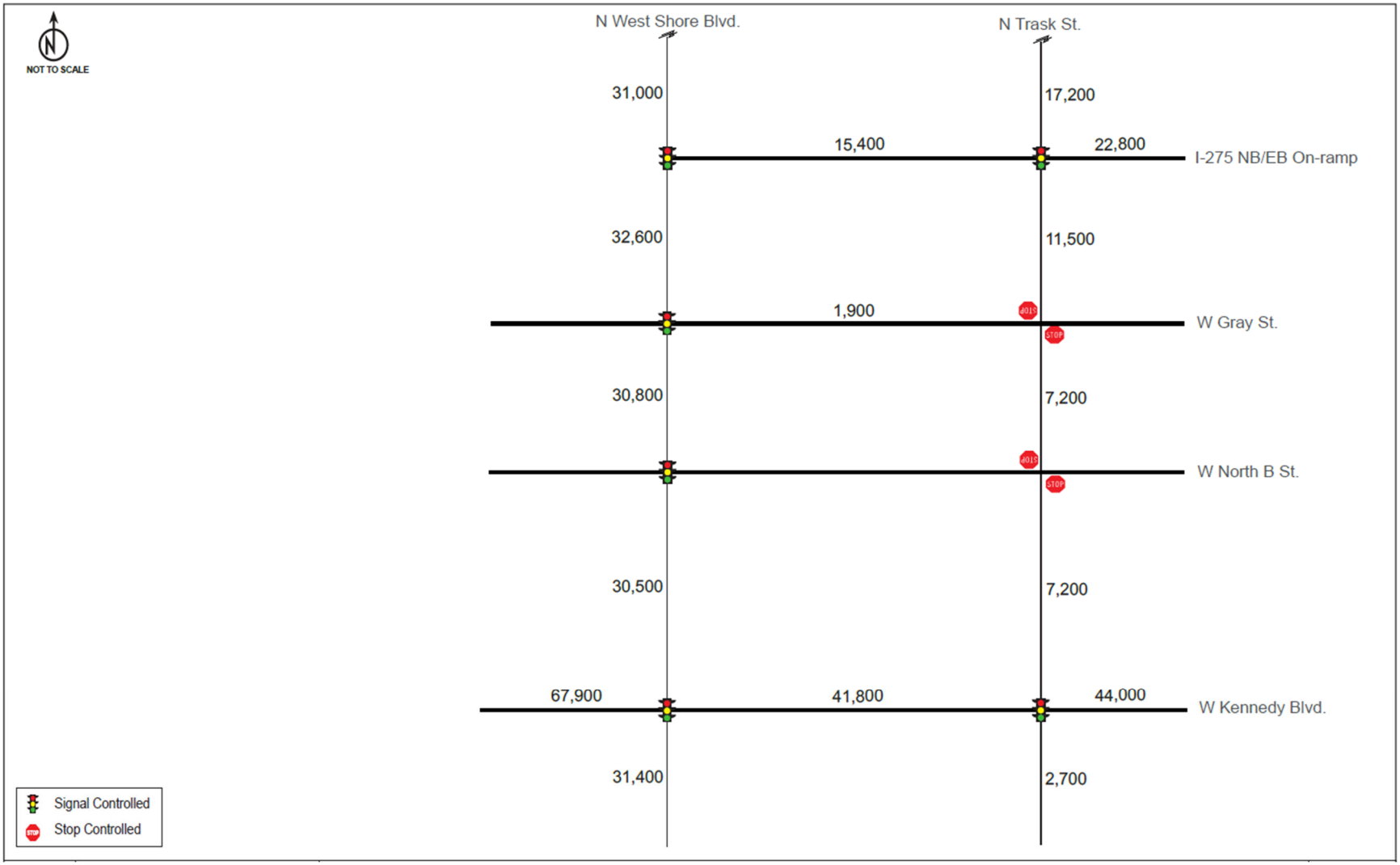


Figure 3-4: Design Year (2040) No-Build Vs. Build AADT Volumes

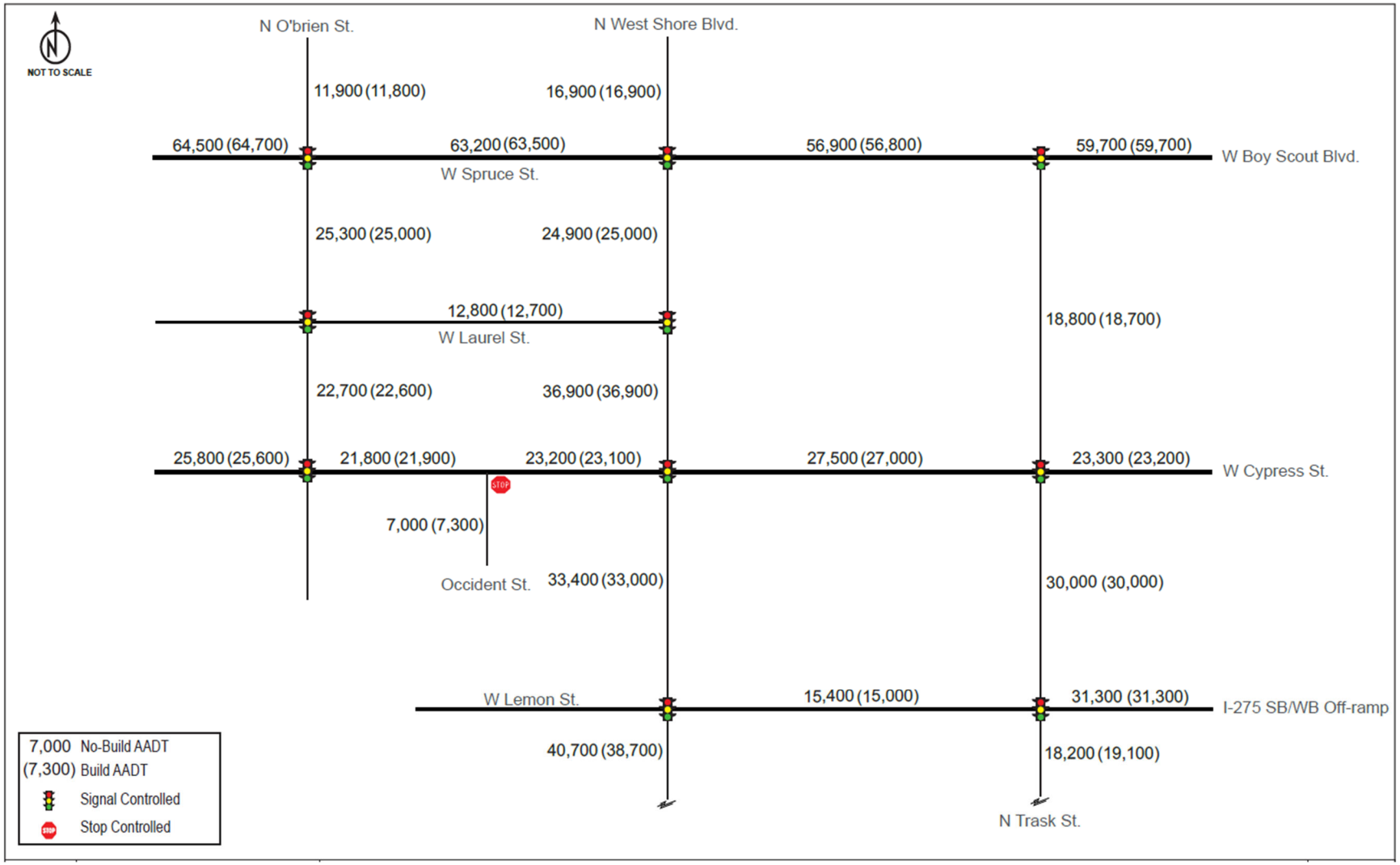
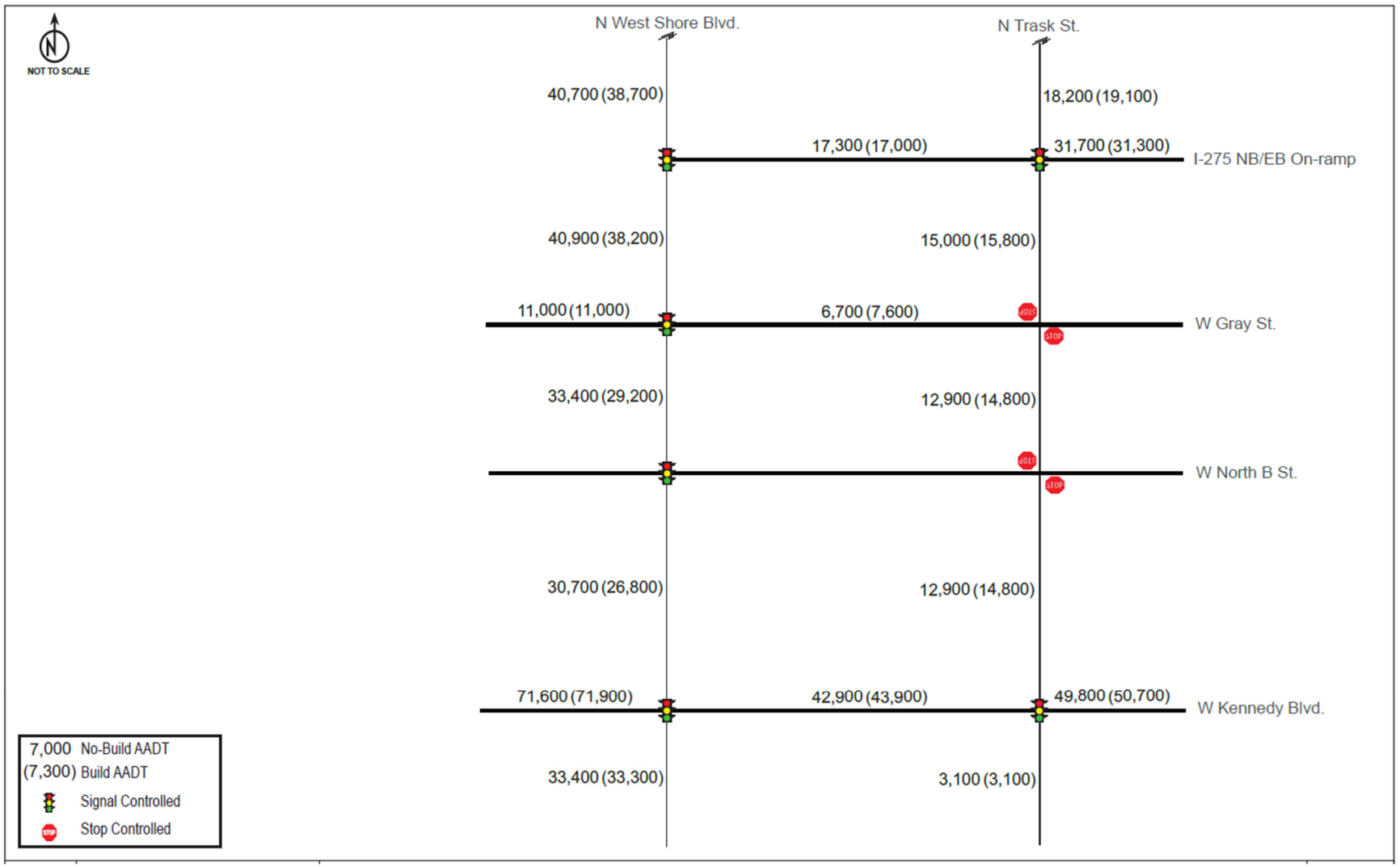


Figure 3-4 (Continued): Design Year (2040) No-Build Vs. Build AADT Volumes



The existing K and D factors were used to develop future approach volumes. The K factor is the proportion of daily traffic occurring in the peak hour. The D factor is the proportion of traffic in the design hour traveling in the peak direction. The traffic factors used for future design hour traffic volumes are provided in **Table 3-5**.

Table 3-5: K and D Traffic Factors

Roadway	K (%)	D (%)
West Shore Boulevard	7.7	57.7
W. Kennedy Boulevard	7.7	52.0
W. Spruce Street	7.7	58.0
I-275 (SR 93) Ramps	7.7	61.2
All other	7.7	63.5

Approach volumes were then distributed through the intersections using the 2019 turning movement splits. Manual adjustments were made as necessary to balance the traffic volumes throughout the roadway network. The 2025 and 2040 peak hour turning movement volumes are shown on **Figure 3-5**, **Figure 3-6**, and **Figure 3-7.**

Figure 3-5: Opening Year (2025) No-Build AM (PM) Peak Hour Volumes

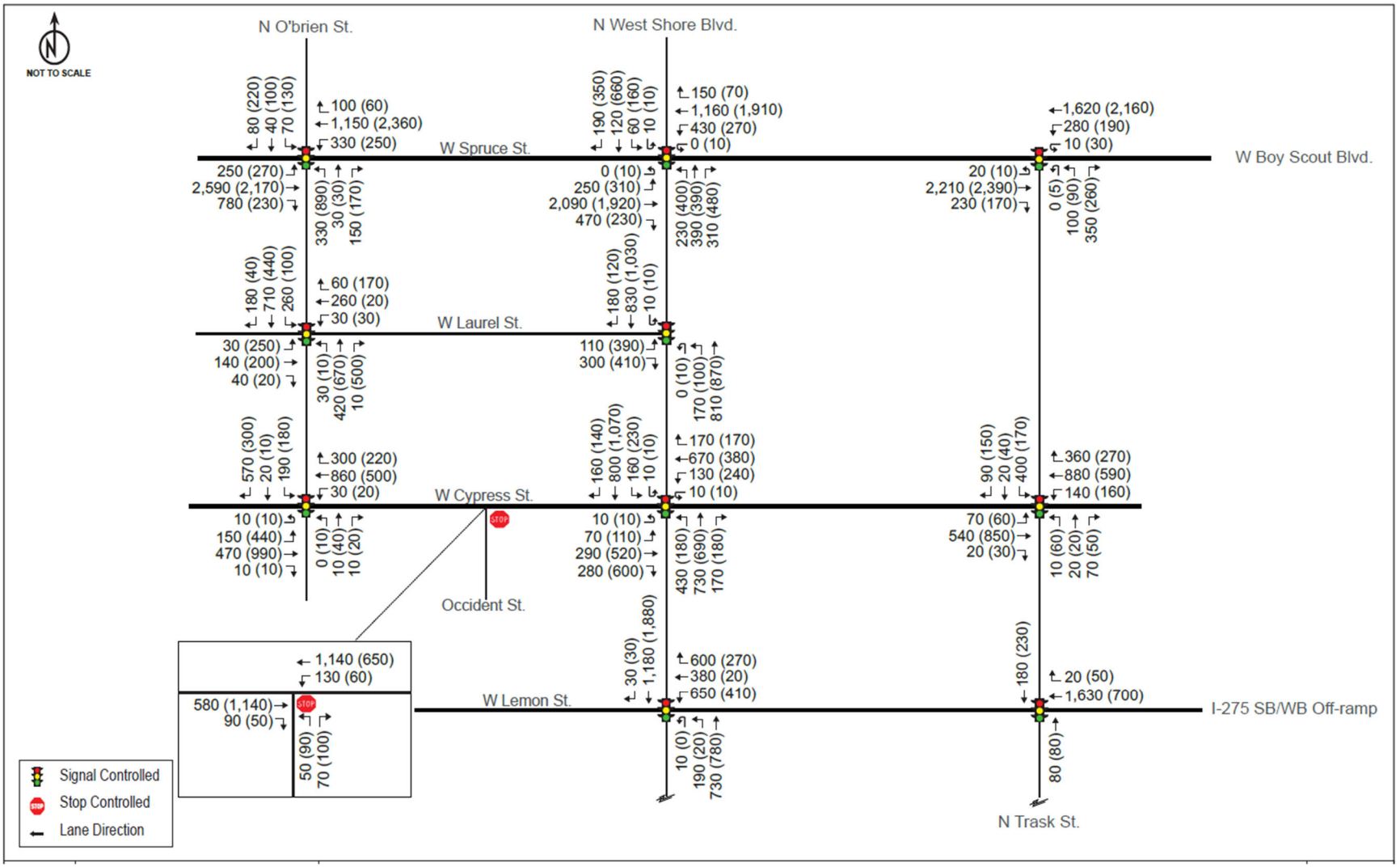


Figure 3-5 (Continued): Opening Year (2025) No-Build AM (PM) Peak Hour Volumes

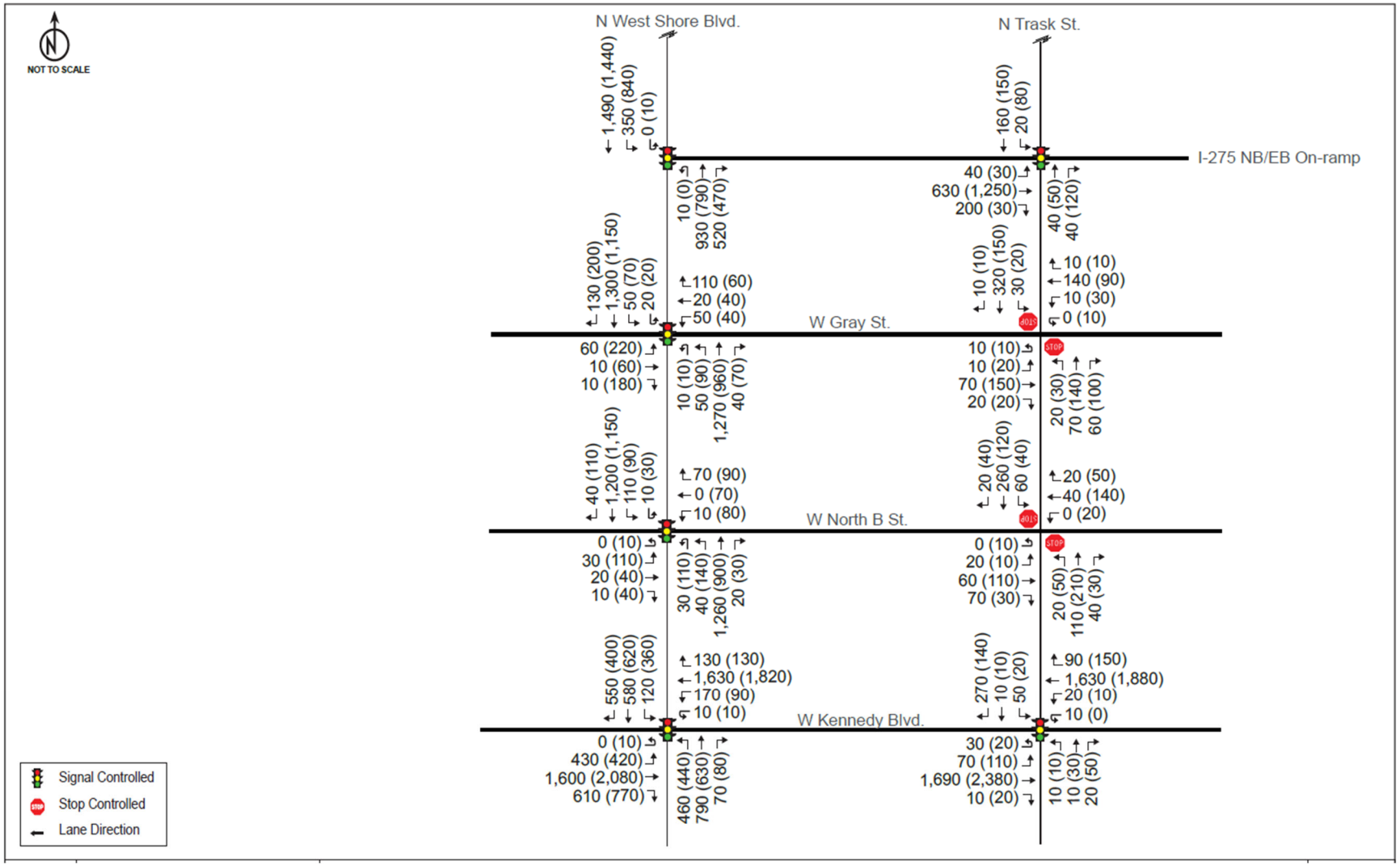


Figure 3-6: Design Year (2040) No-Build AM (PM) Peak Hour Volumes

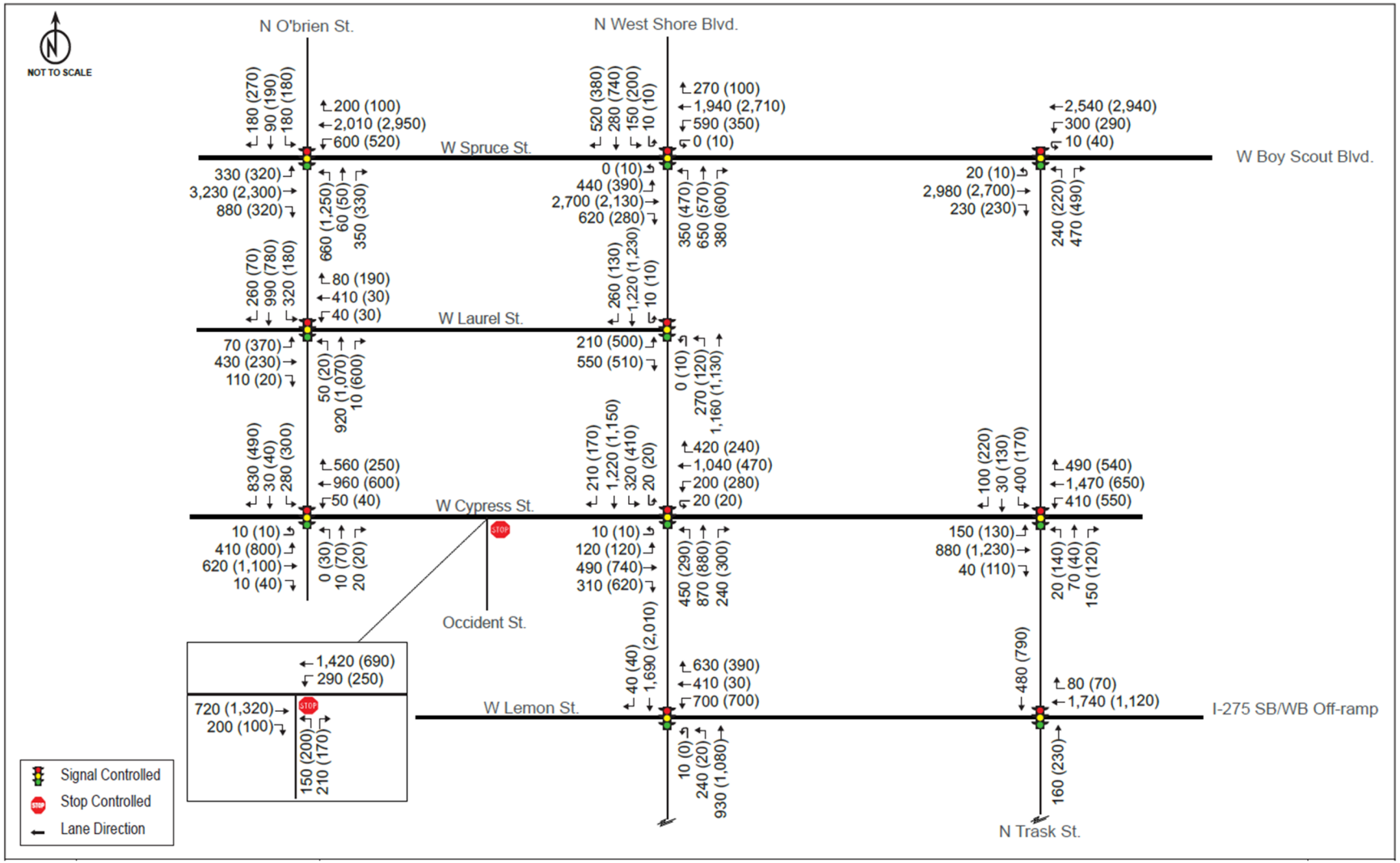


Figure 3-6 (Continued): Design Year (2040) No-Build AM (PM) Peak Hour Volumes

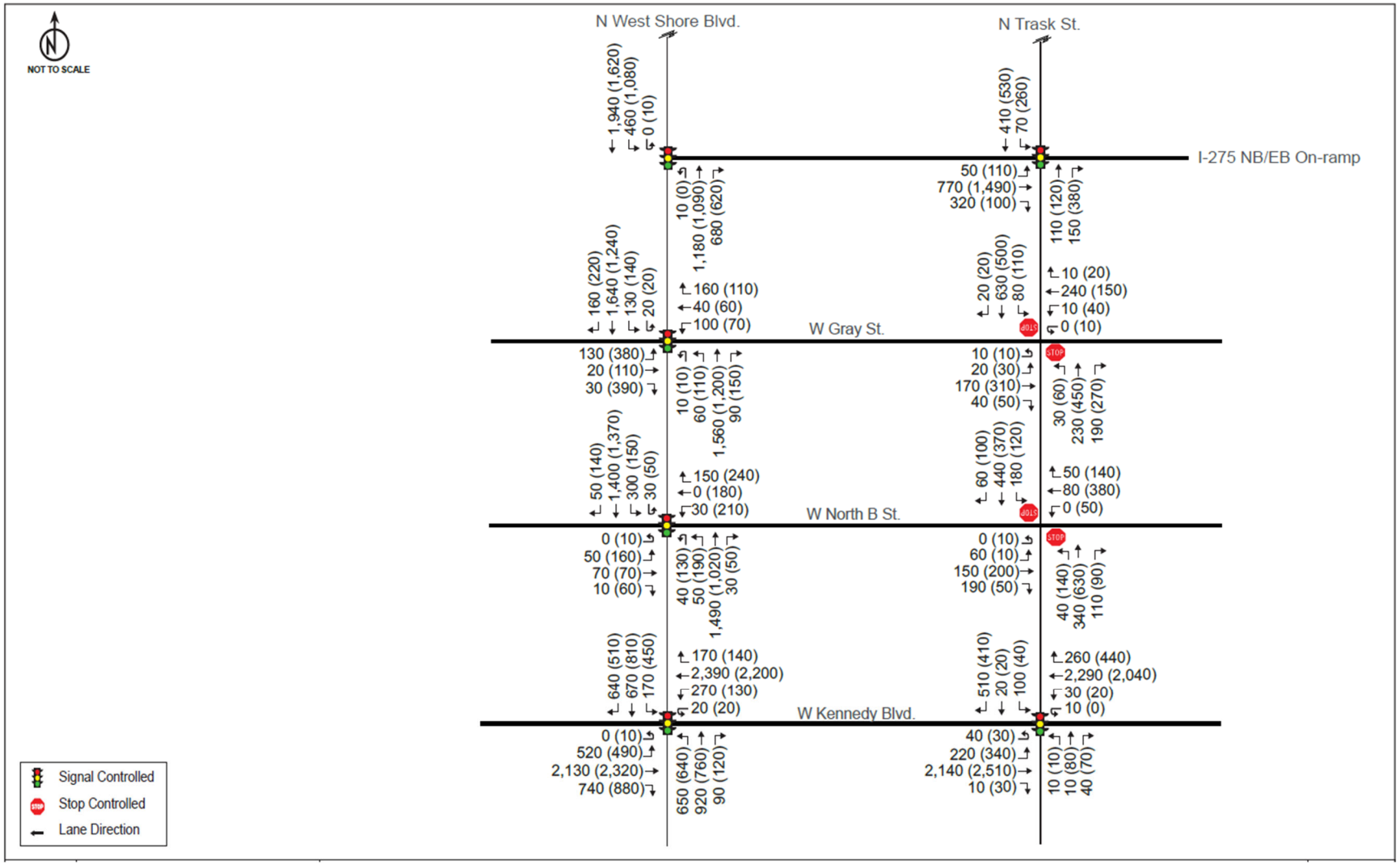


Figure 3-7: Design Year (2040) Build Alternative AM (PM) Peak Hour Volumes

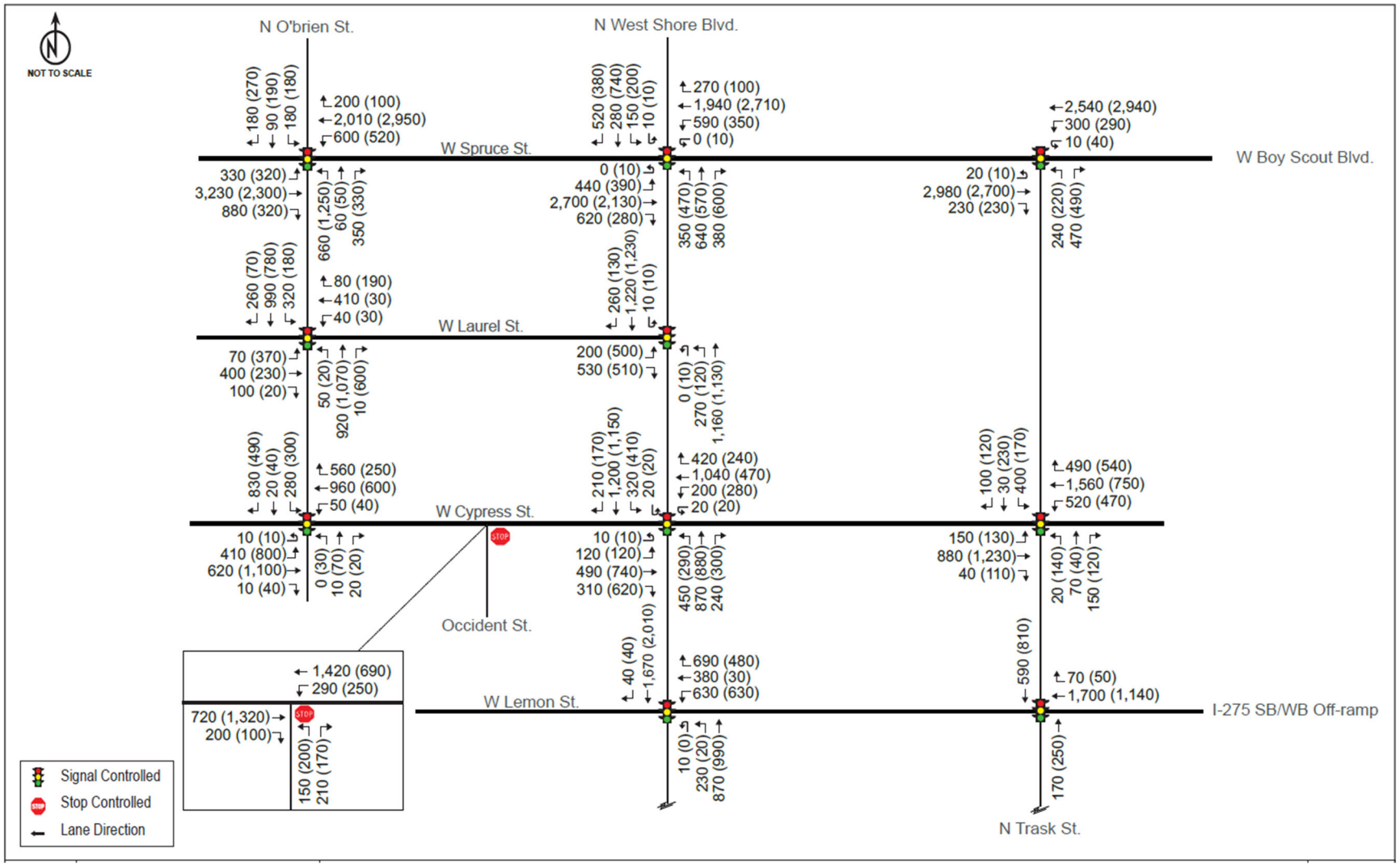
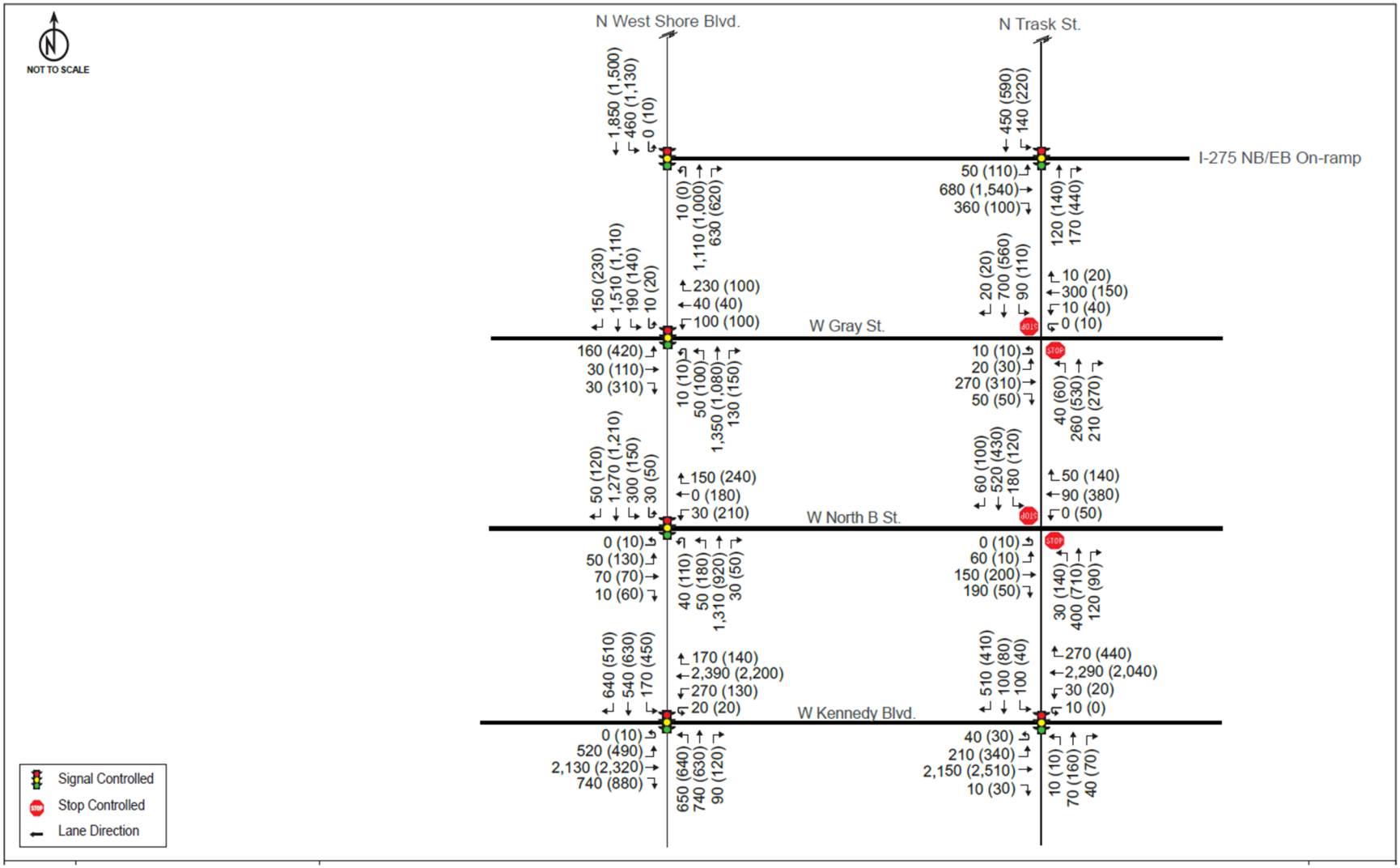


Figure 3-7 (Continued): Design Year (2040) Build Alternative AM (PM) Peak Hour Volumes



3.3 Traffic Operations Analysis

3.3.1 Opening Year (2025) Traffic Operations

The lane geometry along West Shore Boulevard for the opening year (2025) is anticipated to remain unchanged from existing conditions. Measures of effectiveness, including delay, LOS, and maximum queue lengths derived from the Vissim simulation are reported in **Table 3-6** and **Table 3-7** for the peak (2nd) hour under the opening year (2025) conditions. As displayed in **Table 3-6**, during the AM peak hours all the major intersections with West Shore Boulevard are anticipated to operate at LOS F.

Table 3-6: Opening Year (2025) AM Peak Vissim Intersection Performance

Intersection	Movement	AM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ Spruce St.	**Overall**	**5850**	**133**	**F**	
	SBLT	60	103	F	109
	SBTH	120	77	E	136
	SBRT	190	8	A	72
	NBLT	230	166	F	203
	NBTH	390	127	F	296
	NBRT	310	99	F	202
	EBLT	250	202	F	242
	EBTH	2090	195	F	5085
	EBRT	470	200	F	4408
	WBLT	430	101	F	503
	WBTH	1160	41	D	521
	WBRT	150	7	A	83
West Shore Blvd. @ W. Laurel St.	**Overall**	**2400**	**165**	**F**	
	SBTH	830	155	F	1166
	SBRT	180	138	F	1170
	NBLT	170	104	F	248
	NBTH	810	86	F	238
	EBLT	110	372	F	3795
	EBRT	300	384	F	3799
West Shore Blvd. @ W. Cypress St.	**Overall**	**4060**	**156**	**F**	
	SBLT	160	257	F	1124
	SBTH	800	275	F	1362
	SBRT	160	276	F	1373
	NBLT	430	148	F	416
	NBTH	730	112	F	408
	NBRT	170	92	F	423
	EBLT	70	84	F	151
	EBTH	290	89	F	528
	EBRT	280	41	D	539
	WBLT	130	137	F	220
	WBTH	670	125	F	1484
	WBRT	170	128	F	1486

Table 3-6 (Continued): Opening Year (2025) AM Peak Vissim Intersection Performance

Intersection	Movement	AM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ I-275 SB Off-Ramp	**Overall**	**3760**	**147**	**F**	
	SBTH	1180	66	E	285
	SBRT	30	85	F	291
	NBLT	190	209	F	280
	NBTH	730	164	F	280
	WBLT	650	207	F	2548
	WBTH	380	215	F	2548
	WBRT	600	160	F	2547
West Shore Blvd. @ I-275 NB On-Ramp	**Overall**	**3290**	**95**	**F**	
	SBLT	350	32	C	213
	SBTH	1490	44	D	213
	NBRT	520	166	F	213
	NBTH	930	160	F	338
West Shore Blvd. @ W. Gray St.	**Overall**	**3100**	**98**	**F**	
	SBLT	50	86	F	61
	SBTH	1300	54	D	358
	SBRT	130	27	C	361
	NBLT	50	164	F	48
	NBTH	1270	177	F	131
	NBRT	40	212	F	132
	EBLT	60	76	E	157
	EBTH	10	98	F	63
	EBRT	10	14	B	68
	WBLT	50	65	E	243
	WBTH	20	131	F	239
	WBRT	110	41	D	226

Table 3-6 (Continued): Opening Year (2025) AM Peak Vissim Intersection Performance

Intersection	Movement	AM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ North B St.	**Overall**	**2840**	**100**	**F**	
	SBLT	110	46	D	76
	SBTH	1200	44	D	282
	SBRT	40	92	F	285
	NBUT	30	178	F	43
	NBLT	40	203	F	43
	NBTH	1260	189	F	70
	NBRT	20	200	F	71
	EBLT	30	70	E	90
	EBTH	20	123	F	84
	EBRT	10	17	B	98
	WBLT	10	114	F	142
	WBTH	0			142
	WBRT	70	76	E	147
West Shore Blvd. @ W. Kennedy Blvd.	**Overall**	**7140**	**236**	**F**	
	SBLT	120	133	F	149
	SBTH	580	93	F	635
	SBRT	550	63	E	638
	NBLT	460	788	F	2135
	NBTH	790	454	F	2133
	NBRT	70	445	F	2139
	EBLT	430	838	F	1934
	EBTH	1600	399	F	1933
	EBRT	610	321	F	1956
	WBLT	170	144	F	226
	WBTH	1630	54	D	1049
	WBRT	130	56	E	50

Table 3-7: Opening Year (2025) PM Peak Vissim Intersection Performance

Intersection	Movement	PM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ Spruce St.	**Overall**	**7150**	**250**	**F**	
	SBLT	160	1014	F	1567
	SBTH	660	323	F	1573
	SBRT	350	235	F	581
	NBLT	400	237	F	384
	NBTH	390	220	F	279
	NBRT	480	204	F	480
	EBLT	310	303	F	351
	EBTH	1920	237	F	1500
	EBRT	230	211	F	225
	WBLT	270	265	F	1137
	WBTH	1910	192	F	2343
	WBRT	70	169	F	34
West Shore Blvd. @ W. Laurel St.	**Overall**	**2920**	**183**	**F**	
	SBTH	1030	128	F	796
	SBRT	120	142	F	800
	NBLT	100	167	F	325
	NBTH	870	130	F	455
	EBLT	390	323	F	659
	EBRT	410	318	F	186
West Shore Blvd. @ W. Cypress St.	**Overall**	**4510**	**321**	**F**	
	SBLT	230	196	F	341
	SBTH	1070	202	F	935
	SBRT	140	191	F	964
	NBLT	180	121	F	232
	NBTH	690	79	E	570
	NBRT	180	115	F	612
	EBLT	110	304	F	206
	EBTH	520	311	F	1120
	EBRT	600	292	F	1131
	WBLT	240	1267	F	5011
	WBTH	380	708	F	2080
	WBRT	170	699	F	2111

Table 3-7 (Continued): Opening Year (2025) PM Peak Vissim Intersection Performance

Intersection	Movement	PM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ I-275 SB Off-Ramp	**Overall**	**3410**	**155**	**F**	
	SBTH	1880	229	F	589
	SBRT	30	203	F	594
	NBLT	20	200	F	201
	NBTH	780	53	D	201
	WBLT	410	87	F	493
	WBTH	20	92	F	493
	WBRT	270	39	D	492
West Shore Blvd. @ I-275 NB On-Ramp	**Overall**	**3540**	**129**	**F**	
	SBLT	840	228	**F**	283
	SBTH	1440	158	**F**	283
	NBRT	470	7	**A**	283
	NBTH	790	45	**D**	416
West Shore Blvd. @ W. Gray St.	**Overall**	**3140**	**120**	**F**	
	SBLT	70	244	**F**	78
	SBTH	1150	166	**F**	473
	SBRT	200	147	**F**	481
	NBLT	90	54	**D**	141
	NBTH	960	48	**D**	453
	NBRT	70	57	**E**	453
	EBLT	220	172	**F**	692
	EBTH	60	177	**F**	688
	EBRT	180	126	**F**	694
	WBLT	40	67	**E**	235
	WBTH	40	183	**F**	194
	WBRT	60	62	**E**	198

Table 3-7 (Continued): Opening Year (2025) PM Peak Vissim Intersection Performance

Intersection	Movement	PM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ North B St.	**Overall**	**2960**	**107**	**F**	
	SBLT	90	149	**F**	121
	SBTH	1150	134	**F**	493
	SBRT	110	160	**F**	497
	NBUT	110	136	**F**	601
	NBLT	140	79	**E**	601
	NBTH	900	73	**E**	619
	NBRT	30	142	**F**	620
	EBLT	110	64	**E**	266
	EBTH	40	69	**E**	171
	EBRT	40	40	**D**	185
	WBLT	80	120	**F**	420
	WBTH	70	0	**A**	420
	WBRT	90	165	**F**	426
West Shore Blvd. @ W. Kennedy Blvd.	**Overall**	**7840**	**173**	**F**	
	SBLT	360	150	**F**	406
	SBTH	620	196	**F**	595
	SBRT	400	135	**F**	599
	NBLT	440	258	**F**	1757
	NBTH	630	105	**F**	1752
	NBRT	80	86	**F**	1758
	EBLT	420	242	**F**	1049
	EBTH	2080	192	**F**	1906
	EBRT	770	128	**F**	1925
	WBLT	90	319	**F**	136
	WBTH	1820	161	**F**	3902
	WBRT	130	135	**F**	68

3.3.2 Design Year (2040) Traffic Operations

For the Build design year (2040) conditions, it is anticipated that the following roadway improvements would be in place:

- Extend N Trask Street and N Occident Streets under Interstate 275
- Widen N O'Brien Street from two to four lanes from Cypress Street to Boy Scout Boulevard
- Improvements to Reo Street from Cypress Street to Kennedy Boulevard.

West Shore Boulevard is proposed to narrow down from three lanes to two lanes in each direction from West Gray Street to West Kennedy Boulevard. Also, according to the latest FDOT's I-275 plan, a second right-turn will be added on the I-275 southbound off-ramp to West Shore Boulevard. A second southbound left-turn lane will be added to West Shore Boulevard at the intersection with the I-275 northbound on-ramp. According to pedestrian counts performed during February 2018, two locations (south of Laurel Street and north of Laurel Street) can be potential locations for proposed mid-block pedestrian crossings. The assumed lane geometry for the design year (2040) conditions as well as potential locations for mid-block pedestrian crossings are illustrated in **Figure 3-8**.

Measures of effectiveness, including delay, levels of service, and maximum queue lengths derived from the Vissim simulation are reported in **Table 3-8** and **Table 3-9** for the design year (2040) conditions.

As displayed in **Table 3-8** and **Table 3-9**, during the AM and PM peak hours, all the major intersections are anticipated to operate at LOS F. Note that the second southbound left-turn lane at the intersection with the I-275 northbound on-ramp improves southbound traffic along West Shore Boulevard substantially. Based on the Vissim simulation, Trask Street and O'Brien Street are also anticipated to experience considerable traffic congestion, in particular at the intersections of West Spruce Street at Trask Street, West Spruce Street at O'Brien Street, and West Kennedy Boulevard at Trask Street. A portion of unmet demand along West Shore Boulevard may also need to use Trask Street and O'Brien Street to go to its destinations. It is suggested that a follow-up traffic study be performed for Trask Street and O'Brien Street to determine the needed turn lanes at those intersections.

3.4 Safety Considerations

3.4.1 Crash Analysis

Historical crash data for West Shore Boulevard from West Kennedy Boulevard to West Boy Scout Boulevard/W. Spruce Street was provided by Hillsborough County. The historical crash data provided extends from January 2014 to September 2019, about five and three-quarter years of data. A total of 609 crash occurred along the project corridor with nine involving a pedestrian or cyclist and five resulting in incapacitating injuries. **Table 3-10** provides a summary of crashes by type, **Table 3-11** provides a summary of crashes by injury severity, and **Table 3-12** provides a summary of the economic loss to society based on the 2019 FDOT Design Manual KABCO Crash Costs (Table 122.6.2).

More information on the crashes can be found in the *Project Traffic Analysis Report*.

Figure 3-8: Design Year (2040) Build Alternative Geometry and Laneage

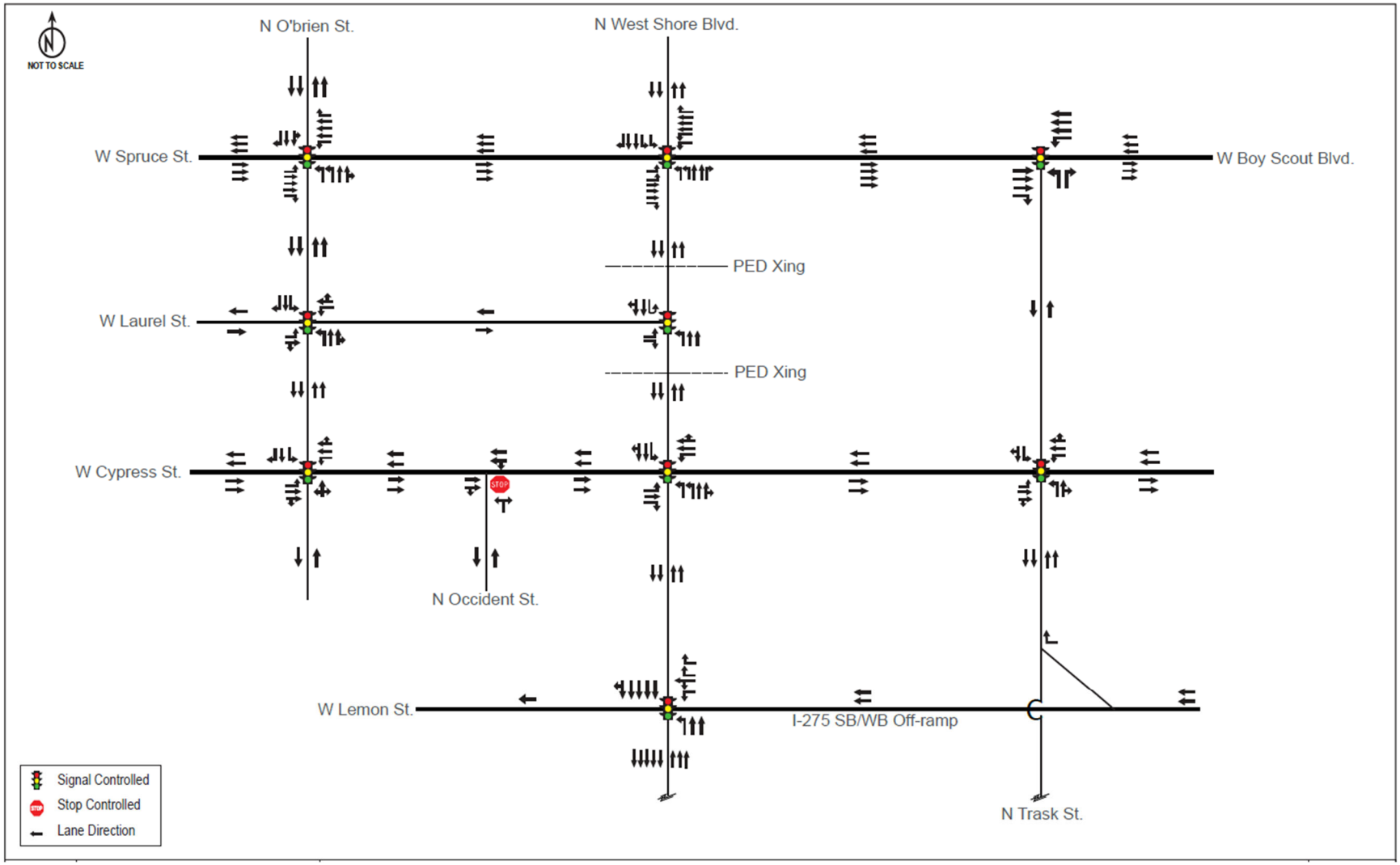


Figure 3-8 (Continued): Design Year (2040) Build Alternative Geometry and Laneage

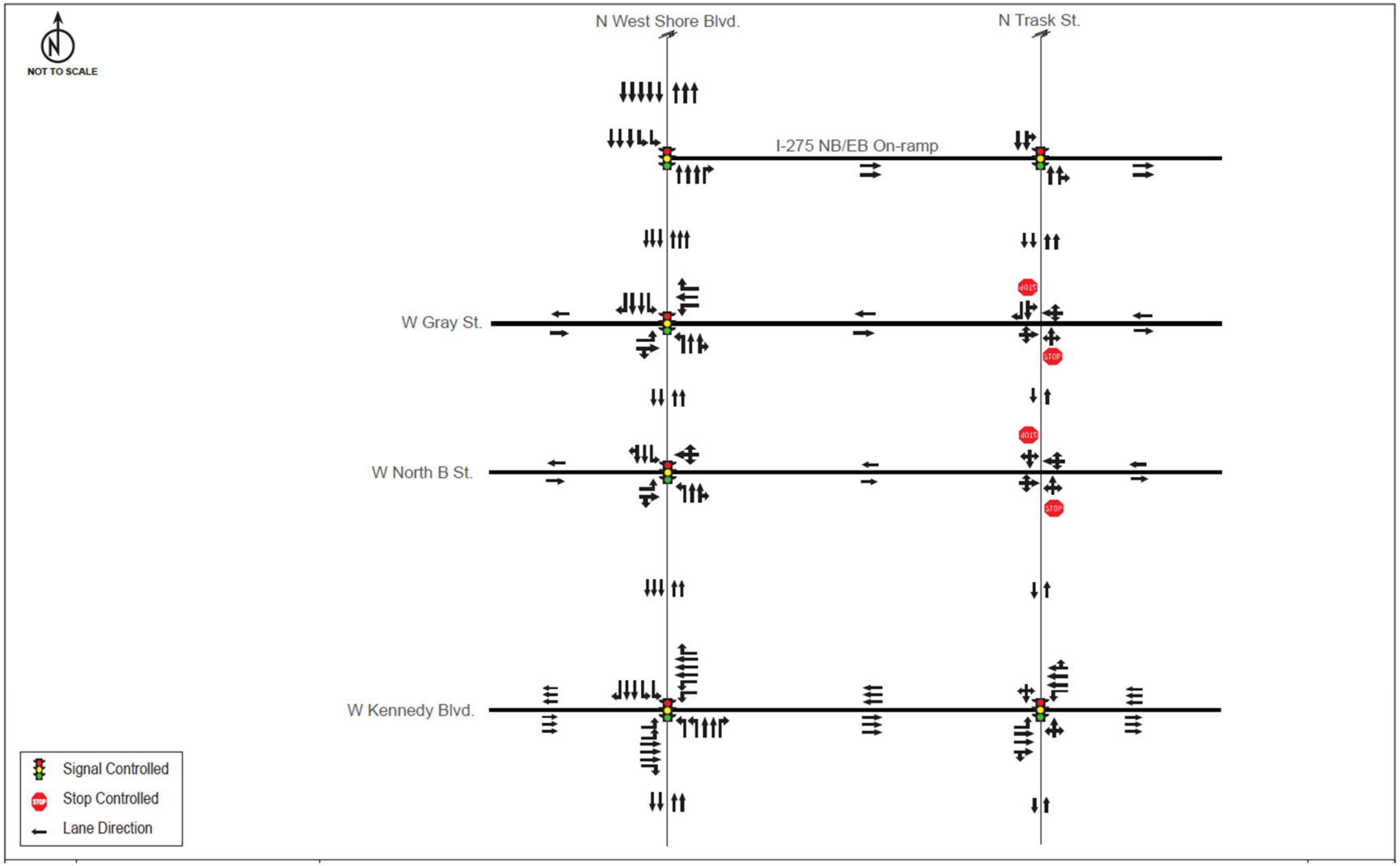


Table 3-8: Design Year (2040) AM Peak Vissim Intersection Performance

Intersection	Movement	AM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ W. Spruce St.	**Overall**	**8880**	**240**	**F**	
	SBLT	150	96	F	195
	SBTH	280	61	E	261
	SBRT	520	31	C	598
	NBLT	350	227	F	269
	NBTH	640	193	F	340
	NBRT	380	177	F	253
	EBLT	440	369	F	276
	EBTH	2700	381	F	4916
	EBRT	620	364	F	4930
	WBLT	590	162	F	2230
	WBTH	1940	138	F	2278
	WBRT	270	105	F	221
West Shore Blvd. @ W. Laurel St.	**Overall**	**3650**	**167**	**F**	
	SBTH	1220	115	F	776
	SBRT	260	119	F	780
	NBLT	270	181	F	222
	NBTH	1160	168	F	225
	EBLT	210	282	F	1827
	EBRT	530	255	F	1849
West Shore Blvd. @ W. Cypress St.	**Overall**	**5870**	**221**	**F**	
	SBLT	320	156	F	595
	SBTH	1200	150	F	1134
	SBRT	210	145	F	1145
	NBLT	450	164	F	539
	NBTH	870	115	F	665
	NBRT	240	110	F	681
	EBLT	120	198	F	418
	EBTH	490	210	F	1206
	EBRT	310	225	F	1216
	WBLT	200	450	F	134
	WBTH	1040	379	F	463
	WBRT	420	379	F	464

Table 3-8 (Continued): Design Year (2040) AM Peak Vissim Intersection Performance

Intersection	Movement	AM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ I-275 Ramps	**Overall**	**4110**	**168**	**F**	
	SBTH	1040	57	E	620
	SBRT	40	195	F	630
	SBLT	460	248	F	620
	NBTH	870	188	F	307
	WBLT	630	246	F	2710
	WBTH	380	243	F	2710
	WBRT	690	142	F	2705
West Shore Blvd. @ W. Gray St.	**Overall**	**3960**	**129**	**F**	
	SBLT	190	90	F	239
	SBTH	1510	73	E	0
	SBRT	150	65	E	76
	NBLT	50	180	F	44
	NBTH	1350	209	F	267
	NBRT	130	213	F	268
	EBLT	150	88	F	418
	EBTH	30	76	E	151
	EBRT	30	36	D	155
	WBLT	100	104	F	777
	WBTH	40	118	F	774
	WBRT	230	93	F	751

Table 3-8 (Continued): Design Year (2040) AM Peak Vissim Intersection Performance

Intersection	Movement	AM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ North B St.	**Overall**	**3360**	**146**	**F**	
	SBLT	300	81	F	305
	SBTH	1270	76	E	527
	SBRT	50	106	F	530
	NBUT	40	234	F	41
	NBLT	50	258	F	41
	NBTH	1310	225	F	139
	NBRT	30	267	F	140
	EBLT	50	101	F	111
	EBTH	70	72	E	173
	EBRT	10	40	D	196
	WBLT	30	175	F	245
	WBTH	0	0	A	245
	WBRT	150	166	F	251
West Shore Blvd. @ W. Kennedy Blvd.	**Overall**	**9050**	**295**	**F**	
	SBLT	170	228	F	237
	SBTH	540	138	F	570
	SBRT	640	97	F	571
	NBLT	650	719	F	2137
	NBTH	740	540	F	2135
	NBRT	90	492	F	2144
	EBLT	520	597	F	1931
	EBTH	2130	381	F	1922
	EBRT	740	276	F	1922
	WBLT	270	177	F	275
	WBTH	2390	81	F	954
	WBRT	170	81	F	70

Table 3-9: Design Year (2040) PM Peak Vissim Intersection Performance

Intersection	Movement	PM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ W. Spruce St.	**Overall**	**8920**	**345**	**F**	
	SBLT	200	547	F	210
	SBTH	740	600	F	1568
	SBRT	380	474	F	1339
	NBLT	470	349	F	429
	NBTH	570	304	F	419
	NBRT	600	290	F	452
	EBLT	390	331	F	380
	EBTH	2130	324	F	4452
	EBRT	280	551	F	4231
	WBLT	350	344	F	378
	WBTH	2710	264	F	2344
	WBRT	100	214	F	81
West Shore Blvd. @ W. Laurel St.	**Overall**	**3620**	**336**	**F**	
	SBTH	1230	357	F	1479
	SBRT	130	331	F	1483
	NBLT	120	288	F	361
	NBTH	1130	234	F	511
	EBLT	500	430	F	2231
	EBRT	510	434	F	2337
West Shore Blvd. @ W. Cypress St.	**Overall**	**5670**	**346**	**F**	
	SBLT	410	403	F	1343
	SBTH	1150	370	F	1353
	SBRT	170	320	F	1382
	NBLT	290	235	F	284
	NBTH	880	194	F	1023
	NBRT	300	185	F	1064
	EBLT	120	342	F	170
	EBTH	740	361	F	1073
	EBRT	620	381	F	1084
	WBLT	280	525	F	518
	WBTH	470	463	F	346
	WBRT	240	458	F	377

Table 3-9 (Continued): Design Year (2040) PM Peak Vissim Intersection Performance

Intersection	Movement	PM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ I-275 Ramps	**Overall**	**4170**	**247**	**F**	
	SBTH	870	299	F	623
	SBRT	40	246	F	630
	SBLT	1130	329	F	623
	NBTH	990	314	F	443
	WBLT	630	101	F	947
	WBTH	30	130	F	947
	WBRT	480	21	C	940
West Shore Blvd. @ W. Gray St.	**Overall**	**3890**	**262**	**F**	
	SBLT	140	308	F	790
	SBTH	1110	192	F	823
	SBRT	230	138	F	71
	NBLT	100	307	F	205
	NBTH	1080	243	F	521
	NBRT	150	242	F	521
	EBLT	420	450	F	691
	EBTH	110	444	F	688
	EBRT	310	414	F	690
	WBLT	100	153	F	156
	WBTH	40	194	F	255
	WBRT	100	139	F	258

Table 3-9 (Continued): Design Year (2040) PM Peak Vissim Intersection Performance

Intersection	Movement	PM Volume (VPH)	Delay (Seconds)	Level of Service	Max Queue Length (Feet)
West Shore Blvd. @ North B St.	**Overall**	**3630**	**264**	**F**	
	SBLT	150	269	F	340
	SBTH	1210	209	F	684
	SBRT	120	223	F	687
	NBUT	110	384	F	683
	NBLT	180	375	F	683
	NBTH	920	300	F	671
	NBRT	50	329	F	671
	EBLT	130	7	A	101
	EBTH	70	74	E	258
	EBRT	60	35	D	286
	WBLT	210	356	F	5345
	WBTH	180	358	F	5345
	WBRT	240	363	F	5351
West Shore Blvd. @ W. Kennedy Blvd.	**Overall**	**9140**	**328**	**F**	
	SBLT	450	259	F	401
	SBTH	630	231	F	239
	SBRT	510	181	F	243
	NBLT	640	879	F	2140
	NBTH	630	676	F	1732
	NBRT	120	621	F	1738
	EBLT	490	284	F	1894
	EBTH	2320	232	F	1916
	EBRT	880	201	F	1935
	WBLT	130	345	F	134
	WBTH	2200	288	F	5724
	WBRT	140	330	F	116

More information on the crashes can be found in the *Project Traffic Analysis Report*.

Table 3-10: Crash Types

Crash Type	2014	2015	2016	2017	2018	2019	Grand Total
Angle	15	12	26	33	27	14	127
Bike	1	1	0	1	0	0	3
Head On	1	1	3	4	2	0	11
Hit Fixed Object	3	4	6	5	6	0	24
Left Turn	10	5	3	13	14	3	48
Pedestrian	1	0	1	1	1	2	6
Rear End	26	38	31	72	83	24	274
Right Turn	0	0	0	2	3	0	5
Run Off Road	1	0	0	0	0	0	1
Sideswipe	5	10	9	28	31	10	93
Single Vehicle	1	0	0	0	1	0	2
Unknown	1	1	0	1	0	0	3
U-Turn	1	0	3	2	4	2	12
Grand Total	**66**	**72**	**82**	**162**	**172**	**55**	**609**

Table 3-11: Crash Severities

Severity	2014	2015	2016	2017	2018	2019	Grand Total
Fatal	0	0	0	0	0	0	0
Incapacitating	1	0	0	2	2	0	5
Non-Incapacitating	12	13	10	13	12	6	66
Possible	18	20	25	26	18	4	111
None	35	39	47	121	140	45	427
Grand Total	**66**	**72**	**82**	**162**	**172**	**55**	**609**

Table 3-12: Economic Loss to Society

Severity	2014	2015	2016	2017	2018	2019	Grand Total
Fatal (K)	$0	$0	$0	$0	$0	$0	**$0**
Severe Injury (A)	$872,612	$0	$0	$1,745,224	$1,745,224	$0	**$4,363,060**
Moderate Injury (B)	$2,088,216	$2,262,234	$1,740,180	$2,262,234	$2,088,216	$1,044,108	**$11,485,188**
Minor Injury (C)	$1,911,870	$2,124,300	$2,655,375	$2,761,590	$1,911,870	$424,860	**$11,789,865**
Property Damage Only (O)	$269,500	$300,300	$361,900	$931,700	$1,078,000	$346,500	**$3,287,900**
Grand Total	**$5,142,198**	**$4,686,834**	**$4,757,455**	**$7,700,748**	**$6,823,310**	**$1,815,468**	**$30,926,013**

3.4.2 Roadway Safety Audit

A Roadway Safety Audit (RSA) was conducted for West Shore Boulevard within the project limits. An RSA is a formal safety examination of an existing facility or future roadway plan or project, which is conducted by an independent, experienced, multidisciplinary team. RSAs are a cost-effective method to proactively identify factors affecting safety and make suggestions on strategies and facilities to improve bike/pedestrian safety and support a truly multimodal street network for all types of facilities.

For purposes of this RSA, West Shore Boulevard was divided into two segments, with Segment #1 covering West Kennedy Boulevard to West Cypress Street and Segment #2 covering West Cypress Street to West Boy Scout Boulevard/West Spruce Street. On October 17, 2019, two teams comprised of individuals from City of Tampa, Hillsborough County and the Consultant team were assigned a segment each to observe throughout the day. In general, it is suggested that reflective back plates should be added to all signals along the West Shore Boulevard corridor. Also, pavement quality and visibility of pavement markings need to be improved.

A summary of the observations of and suggestions/strategies for improving safety for all modes of transportation for individual sites is reported in **Table 3-13**. Photos depicting findings in the roadway safety audit are contained in Appendix G of the *Project Traffic Analysis Report*.

3.4.3 Safety Findings

Based on an analysis of the historical crash data as well as the information collected as part of the RSA, some project safety needs can be identified with the existing roadway that should be examined further when evaluating future alternatives.

During the RSA, a common observance of multiple individuals was the disregard for pedestrian and cyclist activity from drivers. Many pulled out of businesses without looking for sidewalk activity and even more did not yield to pedestrians already within a crosswalk. Four of the nine reported pedestrian/cyclist crashes can be attributed to one of these two causes. Providing more visibility of pedestrians and cyclists can help lower the frequency of these types of crashes.

Another observance during the RSA was about 350 feet south of the intersection of West Shore Boulevard and West Boy Scout Boulevard/West Spruce Street. The driveway to the 1800 block of businesses on the western side of West Shore Boulevard has pavement marking a right-turn only exit yet no physical obstruction restricts drivers from making a left turn onto northbound West Shore Boulevard. One of the five incapacitating injury crashes occurred at this location because southbound drivers in the outside lane stopped to allow an eastbound vehicle to make that illegal left turn and was subsequently T-boned from a southbound driver in the inside lane. Closing off the median would prevent drivers from making the left-turn but rerouting those drivers would have to be a consideration as well.

Replacing pavement markings along the corridor will help driver awareness of lane designations, crosswalks, medians, and turn lane arrows. The incapacitating crash occurring at West Union Street and West Shore Boulevard may be attributed to this as the vehicle at fault failed to maintain their appropriate lane, and rear ended a vehicle waiting to make a left turn.

Table 3-13: Safety Audit Findings & Suggestions

Location Type	Location Description	Observation Issue Type	Observation Description
Major Roadway Segment #1	West Shore Blvd. – W. Kennedy Blvd. to W. Cypress St.	Maintenance	Vehicle sightlines are to be maintained or improved in some areas if landscaping along either side of West Shore Blvd is to be changed
		Maintenance	Ensure new pavement markings be resilient to constant vehicle wear-and-tear
		Design	Wider storage areas and crosswalks should be considered to encourage pedestrians and cyclists to use crosswalks instead of mid-block crossings
Intersection	West Shore Blvd. and W. Kennedy Blvd.	Design	Ensure that curb ramps line up with crosswalks
		Design	Consider reflective back plates on signal heads
		Design	Westbound right turning traffic has poor visibility dur to elevated ground on eastern sidewalk of West Shore Blvd
		Safety	Northbound right turning traffic observed not yielding to pedestrians in crosswalk
Minor Roadway Segment	West Shore Blvd. – W. Kennedy Blvd. to W. North A St.	Design	Light pole located within the sidewalk on both the eastern and western sidewalk along West Shore Blvd
		Design	Steep grade along eastern sidewalk; may need gravity wall if considering widening sidewalk
		Maintenance	Ensure new pavement markings be resilient to constant vehicle wear-and-tear; currently difficult to see lane divisions
		Maintenance/Design	Median dividing northbound and southbound traffic is difficult to see; needs to be made more visible
Intersection	West Shore Blvd. and W. North B St.	Design	Plants and elevation in the southeast corner of intersection make for poor visibility for northbound right turning traffic
Intersection	West Shore Blvd. and W. Gray St.	Design	Ensure that curb ramps line up with crosswalks
		Design	No truncated domes (detectable warning surface) at curb ramps
Minor Roadway Segment	West Shore Blvd – W. Gray St. to I-275	Maintenance	Palm tree hanging over eastern sidewalk
Intersection	West Shore Blvd. and I-275 EB On-Ramp	Maintenance	I-275 shield street sign blocking the pedestrian cross signal in the southeast corner of intersection
		Design/Safety	Northbound right turning traffic observed not yielding to pedestrians in crosswalk; consider elevating crosswalk to a future refuge island
Intersection	West Shore Blvd. and I-275 WB Off-Ramp	Design	Consider signalizing the crosswalk on the westbound approach; would also need to signalize the currently yield-controlled westbound right turn movement
Minor Roadway Segment	West Shore Blvd. – I-275 WB Off-Ramp to W. Cypress St.	Design	Power pole impedes on the eastern sidewalk of West Shore Blvd

Table 3-13 (Continued): Safety Audit Findings & Suggestions

Location Type	Location Description	Observation Issue Type	Observation Description
Major Roadway Segment #2	West Shore Blvd – W. Cypress St. to W. Boy Scout Blvd. / W. Spruce St.	Design/Safety	The distance between signalized intersections exceeds ¼ mile and pedestrians are likely to cross mid-block; Pedestrian safety study was recommended for consideration of mid-block crossings
		Design	Sidewalk widths along either side of West Shore Blvd are very narrow and many crosswalks lack ADA compliant cross slopes and connections
		Design	Much of sidewalk along eastern side of West Shore Blvd is damaged
		Design	Widening the sidewalk should be considered in final design to encourage cyclists and pedestrians to use sidewalk
		Design/Safety	Sidewalk space around corners is limited; difficult for those in wheelchairs
		Design	Crosswalks have angular breaks to avoid drainage inlets; needs to be redesigned
		Safety	Right-turning vehicles rarely are yielding to pedestrians in the crosswalk
		Maintenance	Overgrown foliage along the segment (along the sidewalks and median) needs to be trimmed back to the right-of-way to provide better sight distance for drivers
		Maintenance	Grates for drainage inlets have openings and partial breaks that need to be replaced; severe hazard for vehicle tires
		Design	Minimal street lighting at intersections with no lighting in between
		Safety	With and existing posted speed of 45 mph, this corridor is set-up to move traffic quickly and not accommodate a "complete streets" arrangement
		Safety	Drivers currently have limited sight distance, and most seem unaware of pedestrian crossings during the day; nighttime crossings are more than likely even more difficult to spot
		Design/Safety	Wider than normal driveway entrance/exits from businesses; Many drivers entering/leaving in driveways do not look for pedestrians in sidewalk
		Maintenance/Design	Visible utility and cable lines, damaged concrete poles, markings, and debris along the east side of corridor
		Maintenance/Design	Utility covers are located directly on sidewalks in some locations, with some not being level
		Design/Safety	Transit bus facilities are inconsistently spaced
		Maintenance/Design	Street pavement, curb and gutter are in poor conditions
	Intersection: West Shore Blvd and W. Cypress St.	Design	No truncated domes (detectable warning surface) at curb ramps
		Design	Ensure that curb ramps line up with crosswalks
		Design/Safety	Sidewalk width is less than 5 feet in the northwest corner
		Design/Safety	Ped push buttons only one per pole with no street designation identified
		Maintenance/Safety	Eastbound right turn lane is pavement marked with a right turn arrow only and pavement striped channelized with a 5-section head signal. If a through movement is permitted the pavement marking should show through/right turn arrows and the striping removed. If no through movement is allowed cross over the intersection, the signal should be right turn arrows only and a raised concrete island for right turn channelization should be considered. This would provide additional safety to northbound right turning vehicles who do not expect for vehicles to go through the intersection eastbound.
		Maintenance/Design	Crosswalk on westbound approach is angled with the concrete median nose impeding into the crosswalk
	Intersection: West Shore Blvd and W. Laurel St.	Design/Safety	Large concrete pole blocks sight of pedestrian at south crosswalk. Right turns on red should be prohibited due to obstruction of sight distance
		Design/Safety	Only one ped signal push button to cross West Shore Blvd, no push button to cross W Laurel Street
		Design	No truncated domes (detectable warning surface) at curb ramps
		Design	Signal span wire clearance looks to be approximately 15 feet, minimum standard is 17.5 feet
		Maintenance	Ensure new pavement markings be resilient to constant vehicle wear-and-tear
		Design/Safety	Southwest of intersection, the sidewalk has a drop off approximately 10 inches, where a pedestrian guardrail should be considered
	Intersection: West Shore Blvd and W. Boy Scout Blvd. / W. Spruce St.	Maintenance/Design	Crosswalk on northbound approach is angled
		Design	Signal span wire clearance looks to be approximately 15 feet, minimum standard is 17.5 feet
		Design/Safety	Minimal lighting, consideration of upgrading to 12-point lighting (2 at each corner and one for each median
		Safety	Guidewires near sidewalk transition to crosswalk may be a tripping hazard; northeast corner
		Maintenance/Design	Pavement markings from the eastbound parking lot exit indicate that it is a right-turn only lane, yet nothing physically restricts drivers from making a left turn. It is a source of many crashes.

Various improvements can be made along the corridor to address common observances during the RSA. Items such as reflective back plates on all signal heads as well as ensuring the standard 17.5 feet vertical clearance of span wires. Sidewalks should be made with an appropriate width to accommodate those with disabilities and crosswalks should align with curb ramps.

A Highway Safety Manual (HSM) Predictive method safety analysis will be performed to estimate the safety performance of future alternatives, once future alternatives are decided.

4 Design Controls and Criteria

Table 4-1 shows the roadway design criteria used for West Shore Boulevard Build Alternatives.

Table 4-1: Roadway Design Criteria

Design Element	Design Standard	Source
Functional Classification	Collector	Hillsborough County Comprehensive Plan
Design Speed	35 mph	FDOT Design Manual (FDM) Table 201.5.1 (Urban General)
Rate of Superelevation	0.05 (maximum)	FDM Section 210.9
Lane Width	10 feet	FDM Table 210.2.1
Median Width	15.5 feet	FDM Table 210.3.1
Sidewalk Width	6-feet (minimum) 6-12 feet	FDM Table 222.1.1 Westshore Overlay District Development Standards
Shared-Use Path Width	12 feet (standard) 10 feet (with limited ROW) 8 feet minimum (if constrained)	FDM, Section 224.4
Bicycle Lane Width	5 feet minimum 7 feet (buffered)	FDM, Section 223.2.1.1
Minimum Curve Radius	332 feet	FDM Table 210.8.2
Length of Horizontal Curve	525 feet (400 foot minimum)	FDM Table 210.8.1
Maximum Deflection without Curve	2° 00’ 00”	FDM Section 210.8.1
Stopping Sight Distance (Flat Grade)	250 feet	FDM Table 210.11.1
Minimum Profile Grade	0.30%	FDM Section 210.10.1.1
Maximum Profile Grade	7%	FDM Table 210.10.1
Minimum Length of Vertical Curve	105 feet	FDM Table 210.10.4
Crest Vertical Curve (K- Value)	29	FDM Table 210.10.3
Sag Vertical Curve (K- Value)	49	FDM Table 210.10.3
Maximum Change in Grade without Vertical Curve	0.90%	FDM Table 210.10.2
Minimum Distance Between VPI’s on Curbed Roadways	250 feet	FDM Section 210.10.1.1
Border Width	12 feet	FDM Table 210.7.1
Clear Zone Width	6 feet	FDM Table 215.2.1

5 Alternatives Analysis

5.1 No Build Alternative

The No Build alternative would not provide any improvements to West Shore Boulevard, except those that may already be programmed. This would require no Design, ROW, or Construction phases, have no cost, and would result in no inconvenience to drivers or pedestrians due to construction. It would be inconsistent with the Westshore District Public Realm Master Plan and the City of Tampa's land development code which was amended to incorporate new streetscape standards for West Shore Boulevard as a priority pedestrian street. In 2014, the City of Tampa also conducted a Complete Street Feasibility Study to advance the vision for West Shore Boulevard, and in 2015, the County followed with a ROW map for the corridor.

Advantages

- No disruption to existing land uses from construction activities
- No ROW acquisition or relocations
- No impedance to traffic flow during construction
- No expenditure of funds for engineering design or construction
- No impacts to the adjacent natural, physical, human, and social environments

Disadvantages

- No improvements to safety or aesthetics
- Not compatible with the area's long-range plans and project purpose and need
- Reduced economic viability and mobility due to substandard bicycle and pedestrian amenities
- Increase in maintenance costs due to roadway deterioration
- Most study intersections are anticipated to operate at LOS F during the AM and PM peak hours

The No-Build Alternative will remain a viable alternative throughout the study.

5.2 Build Alternative

The goal of the West Shore Complete Streets PD&E Study is to transform West Shore Boulevard using a "Grand Boulevard" concept to remake this auto-oriented roadway into a priority pedestrian street complete with shared use paths, shade trees, pedestrian amenities, upgraded lighting, and landscaping consistent with the City of Tampa's Westshore Overlay District. The study team first developed a broad range of potential build alternatives in the form of typical sections to evaluate and share with stakeholders for their input. In order to develop these proposed typical sections to accomplish this goal, the project limits were divided into three segments (see **Figure 5-1**). Segment 1 extends from West Kennedy Boulevard to West Gray Street, Segment 2 extends from West Gray Street to West Cypress Street, and Segment 3 extends from West Cypress Street to West Spruce Street/West Boy Scout Boulevard. Segment 1 (Kennedy Boulevard to Gray Street) is a six-lane section located adjacent to Westshore Mall, which is planned for redevelopment according to development standards of the

Figure 5-1: Project Segments Map

Westshore Overlay District making West Shore Boulevard a priority pedestrian corridor at least on the west side of the road. Segment 1 also has more available ROW and therefore easier implementation of improvements.

5.2.1 Development of Alternatives

The project team used multiple interviews with key stakeholders including the Westshore Alliance, City of Tampa, FDOT D7 and many property owners along the corridor to establish the following design criteria used in the development and evaluation of the build alternative typical sections:

- Proposed design speed is 35 mph
- Minimum through lane width is 10 feet
- Minimum turn lane width is 10 feet
- Minimum sidewalk width is 6 feet
- Minimum 5-foot "door-swing" buffer/space between ped/bike ways and buildings
- Minimum 10-foot easement on private property (as opposed to public ROW) required for TECO utilities to be relocated underground
- Urban planting areas are minimum 5 feet (desirable 10 feet) wide with a 2-foot buffer adjacent to the pedestrian/bike ways
- Maintain minimum two through lanes of traffic in each direction
- Easements likely easier to implement on the east side than the west side
- Existing curb lines can be moved in, particularly to minimize easement widths
- Must be consistent with the intent of the Westshore Overlay District

5.2.2 Evaluation Criteria

The West Shore Complete Streets PD&E Study's goal of transforming West Shore Boulevard using a "Grand Boulevard" concept was combined with stakeholder input, including property owners along the corridor and residents in surrounding neighborhoods. **Stakeholder input prioritized slower traffic in the corridor, a comfortable pedestrian environment, underground utilities, and pedestrian/bicycle connectivity to the surrounding neighborhoods.** This input guided the development of the following list of evaluation criteria used to develop and screen the alternative build typical sections:

- Accommodates pedestrian traffic
- Provides shade for pedestrians
- Creates comfortable walking area
- Creates social space for seating/dining/standing
- Accommodates bicycling and micromobility
- Generates aesthetic value
- Supports sustainability/water quality/drainage
- Cost
- Easement requirements

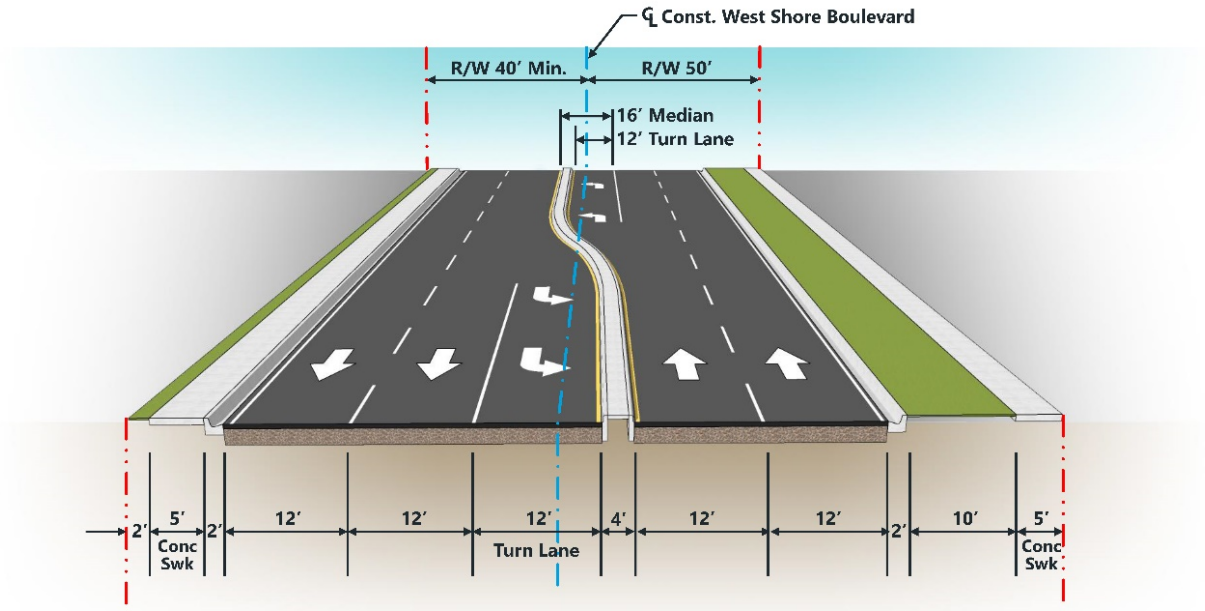
5.2.3 Existing Typical Section

As shown in **Figure 5-2**, Segment 3's existing typical section includes four, 12-foot travel lanes separated by a median with a left turn lane and five-foot sidewalks on both sides of the roadway. The existing

typical section fits within 90-feet of County-owned ROW with 50 feet from the centerline on the east side of the roadway and 40 feet from the centerline on the west side of the roadway.

When assessing the existing typical section with the evaluation criteria listed, the roadway does not provide sufficient accommodation for pedestrians or bicyclists. The sidewalk widths are too narrow, and too close to the travel lanes. The existing typical section does not provide sufficient opportunities for pedestrian-oriented amenities like shade trees or other enhanced landscaping, street furniture, and separation from the roadway for pedestrians consistent with the Westshore Overlay District. This typical section does not address the current drainage/water quality issues along the corridor.

Figure 5-2: Existing Typical Section – West Shore Boulevard Segment 3



5.2.4 Proposed Alternative Typical Sections

Recognizing that the initial outreach to property owners and the surrounding neighborhoods will continue throughout the life of the project, the project team began development of alternative typical sections based upon the design criteria described above, precedent corridor studies and initial input from stakeholders and consideration of the evaluation criteria outlined above. The project team performed an initial fatal flaw review of twenty-three potential typical sections ranging from very minimal improvements with no mainline ROW impacts or easement requirements to extensive improvements that accommodate the Westshore Overlay District desirable typical section on both sides of West Shore Boulevard.

Of the 23 initially screened typical sections, thirteen were recommended for additional consideration, nine were recommended to be eliminated, and the existing typical section was retained for consideration through the end of this study as the No-Build Alternative. *Alternative Typical Section Initial Screening Memorandum* (April 7, 2020) included in **Appendix C** summarizes the process by which these alternative typical sections were screened and the reasoning for retaining or dropping each one.

5.2.5 Typical Section Evaluation

An evaluation of the thirteen retained typical sections and the No-Build existing typical section was conducted using the process outlined in the *Alternative Typical Section Initial Screening Memorandum* (updated April 27, 2020) included in **Appendix C** which includes Evaluation Criteria and a scoring spreadsheet summarizing results. This Memorandum includes a description of the thirteen typical sections recommended for additional consideration, along with their scores. **These are grouped according to their ROW/easement requirements (no easement required, easement required on one side of the road, and easements required on both sides of the road).**

The scoring used in this evaluation reflects consistency with the Westshore Overlay District as well as key attributes desired by stakeholders such as shade, wide pedestrian areas for congregating and outside seating/dining, landscaping and aesthetics, bicycle accommodations and connectivity, traffic calming, improved stormwater management and prioritizing the pedestrian environment over high speed traffic flow. Typical sections that best met these attributes scored highest, and those that accomplished this on both sides of West Shore Boulevard rated better than those doing so on only one side. Conversely, easements required on both sides of the road scored lower than no easements or easements on only one side, as did the need to move curbs which reflects increased construction cost/complexity.

The best performing typical section for the group with an easement on one side was Typical Section 13, including its A through F variations, with scores ranging from 31 to 33. The best performing typical section for the group with easements on both sides was Typical Section 12, both A and B variations, with scores of 39. Typical section 2 was the only option that requires no easements and its score of 14 was only slightly better than the existing (No-Build) score of 11.

The project team then further refined the best performing Typical Section 12 and added a third variation (12C), which differed slightly from 12A and 12 B by: narrowing all travel lanes from 12 feet to 10 feet, moving both curbs in, and widening both urban planters from 6 feet (12A) and 8 feet (12B) to 10 feet. With a score of 37, Typical Section 12C was judged to be the best performing overall alternative. The 2 point lower score (37 v. 39 as compared to 12A and 12B) was due to the added cost/complexity of moving both curbs in, but results in greater pedestrian and bicycle separation from travel lanes by virtue of the wider urban planter and potentially greater traffic calming via the 10-foot travel lanes.

Ultimate and Interim configurations for Typical Section 12C are shown in **Appendix C**.

Recommended Typical Section 12C includes a lane reassignment (six lanes to four lanes) component in Segment 1 from West Kennedy Boulevard to West Gray Street to obtain a four-lane divided urban typical section. The existing four travel lanes will be maintained from West Gray Street to West Boy Scout Boulevard throughout Segments 2 and 3. The reassignment of one outside travel lane northbound and southbound on West Shore Boulevard within these limits freed up an additional 22 feet to be used for pedestrian and bicycle accommodations, substantially reducing the need for easements in this area.

Before deciding to implement this lane reassignment as part of Recommended Alternative 12C the project team completed a detailed travel demand and microsimulation (VISSUM) traffic analysis (Road

Diet Analysis Memorandum, June 17, 2020) included in **Appendix C** which reached the following conclusions:

- Travel demand along West Shore Boulevard is anticipated to be slightly lower in the 2040 Design Year for the four-lane divided Road Diet scenario than the existing six-lane divided scenario due to trip diversion.
- The VISSIM analysis indicates that the West Shore Boulevard corridor is capacity constrained, with an unmet demand in the six-lane divided scenario (AM=36%; PM =32%) as well as the four-lane divided road diet scenario (AM = 37%; PM = 34%).
- Implementing the Lane Reassignment scenario is expected to shift about 4,000 trips per day from West Shore Boulevard to parallel routes in the 2040 design year with about 1,900 of these trips moving to Trask Street.
- Levels of Service for the four-lane divided Road Diet scenario are anticipated to be slightly lower than the six-lane divided scenario in a few instances between West Gray Street and West Kennedy Boulevard due to the lane reduction, however, this impact is small.
- The lane reduction from six-lane divided to four-lane divided from West Kennedy Boulevard to West Gray Street will not critically affect the traffic operations along the corridor and is viable as part of the Complete Streets plan for West Shore Boulevard.

The purpose of this project is to transform West Shore Boulevard into a "Grand Boulevard" concept with shared use paths, shade trees, pedestrian amenities, upgraded lighting and aesthetics, and landscaping while prioritizing pedestrians over automobile traffic. All of the public outreach efforts with the Westshore Alliance, City of Tampa, stakeholders and individual property owners have led to a common vision which can be summarized as "provide shade and more space for pedestrians while slowing traffic down."

Based on the project's purpose and need, the vision of the stakeholders and the traffic analyses summarized here, the team recommended implementing the six-lane divided to four-lane divided Lane Reassignment concept for West Shore Boulevard between West Kennedy Boulevard and West Gray Street after the I-275 reconstruction project by FDOT D7 has completed the extension of Trask, Occident and Reo Streets under I-275.

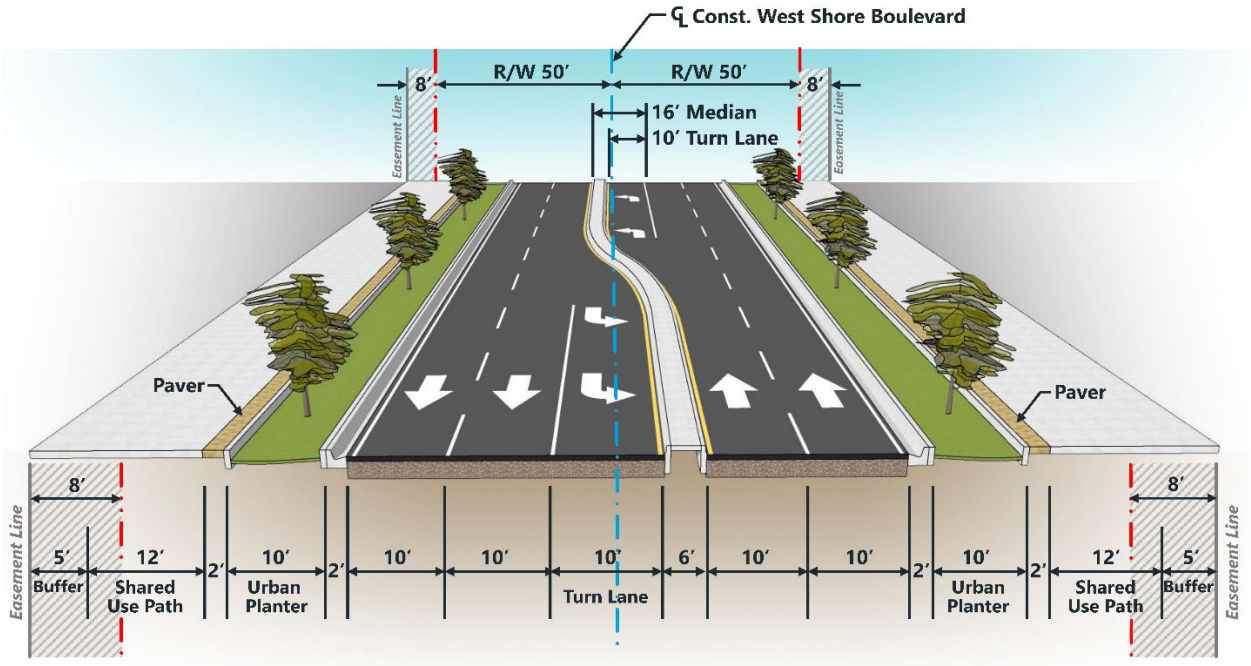
Therefore, one Build Alternative was developed from West Kennedy Boulevard to West Boy Scout Boulevard. The Build Alternative includes a lane diet from West Kennedy Boulevard to West Gray Street to obtain a four-lane divided urban typical section. Four lanes will be maintained from West Gray Street to West Boy Scout Boulevard. Additional details on the build alternative is presented in the following sections, and Conceptual Design Plans in **Appendix A**.

5.2.6 Proposed Typical Sections

The proposed typical section from West Kennedy Boulevard to West Gray Street, shown in **Figure 5-3**, includes two 10-foot lanes in each direction, separated by a 16-foot median which includes a 10-foot left turn lane and a six-foot raised concrete traffic separator. This represents a one- to two-foot reduction in lane widths, and the removal of one lane in each direction. Curb and gutter is proposed to direct runoff

to drainage inlets. A 10-foot urban planter is included outside the curb and gutter on both sides. A 12-foot shared use path is proposed on each side to accommodate bicyclists and pedestrians. Transit stops for all typical sections will be provided at the back of curb, across the urban planter, to connect the roadway to the shared use path. A five-foot buffer is included outside the shared use path on both sides. The overall existing ROW width is 100-feet. It is expected that the easements will be donated by property owners rather than acquired via eminent domain.

Figure 5-3: Proposed Typical Section Looking North from W. Kennedy Boulevard to W. Gray Street



The proposed typical section from West Gray Street to I-275 (SR 93), shown in **Figure 5-4,** shows two 10- to 11-foot northbound lanes and two 10- to 11-foot southbound lanes, separated by a 16-foot median which includes a 10-foot left turn lane and a six-foot raised concrete traffic separator. This represents between a two-foot decrease to a one-foot increase in lane widths. Curb and gutter is proposed to direct runoff to drainage inlets. An eight-foot shared use path is proposed on the east side, separated from the curb by a four-foot paver buffer strip. A 12-foot shared use path is proposed on the west side, separated from the curb by a 10-foot urban planter and a two-foot paver buffer strip. The overall existing ROW width is 104 feet. An easement, zero to three feet wide, is required on the east side, while a 19-foot easement is required on the west side. It is expected that the easements will be donated by property owners.

The proposed typical section beneath I-275 (SR 93), shown in **Figure 5-5,** shows two 11-foot northbound lanes and two 11-foot southbound lanes. This represents a one-foot reduction to a half-foot increase in lane widths. There is also a new 11-foot southbound right turn lane, and two 11-foot southbound left turn lanes providing ramp access (one more than existing), separated from a single 11-foot northbound left turn lane by a five-foot raised concrete traffic separator. This represents one-foot reduction in the through lane with, and an additional southbound left turn lane and an additional southbound right turn

lane. Curb and gutter is proposed to direct runoff to drainage inlets. Shared use paths, 12-feet wide, are separated from the curb and gutter by a four-foot paver buffer strip on the east side, and a two-foot paver buffer strip on the west side. The west side also includes a 10-foot urban planter between the travel lanes and the 2-foot paver buffer strip.

Figure 5-4: Proposed Typical Section Looking North from W. Gray Street to I-275 (SR 93)

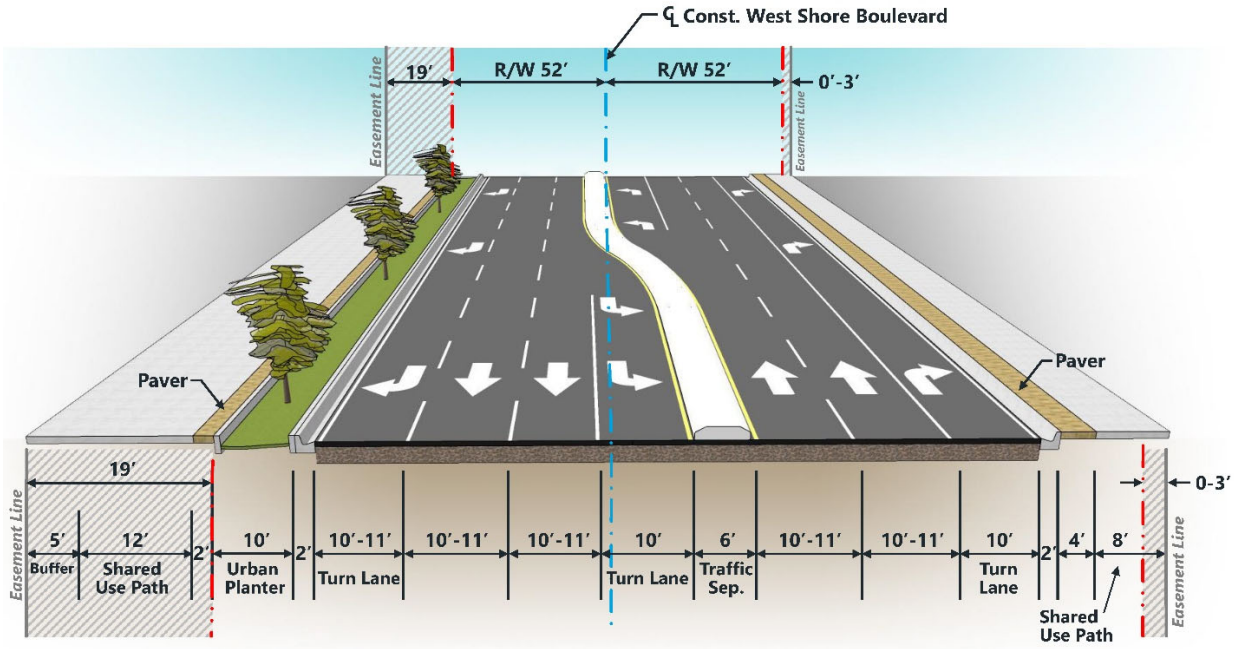
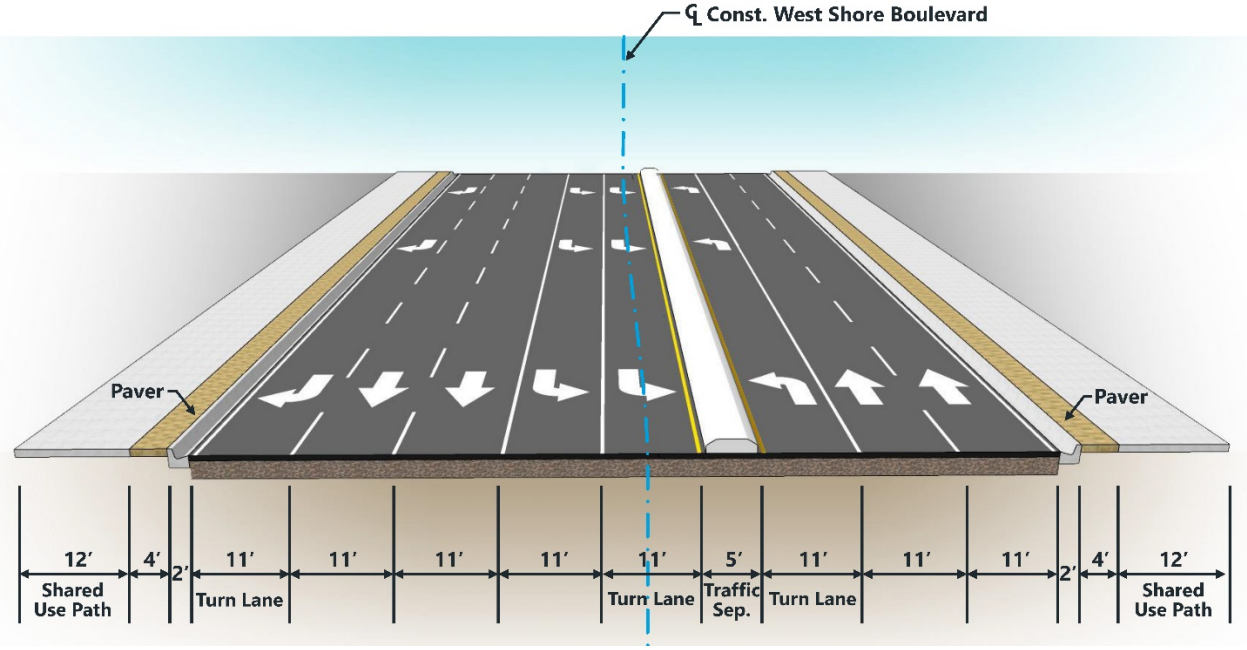
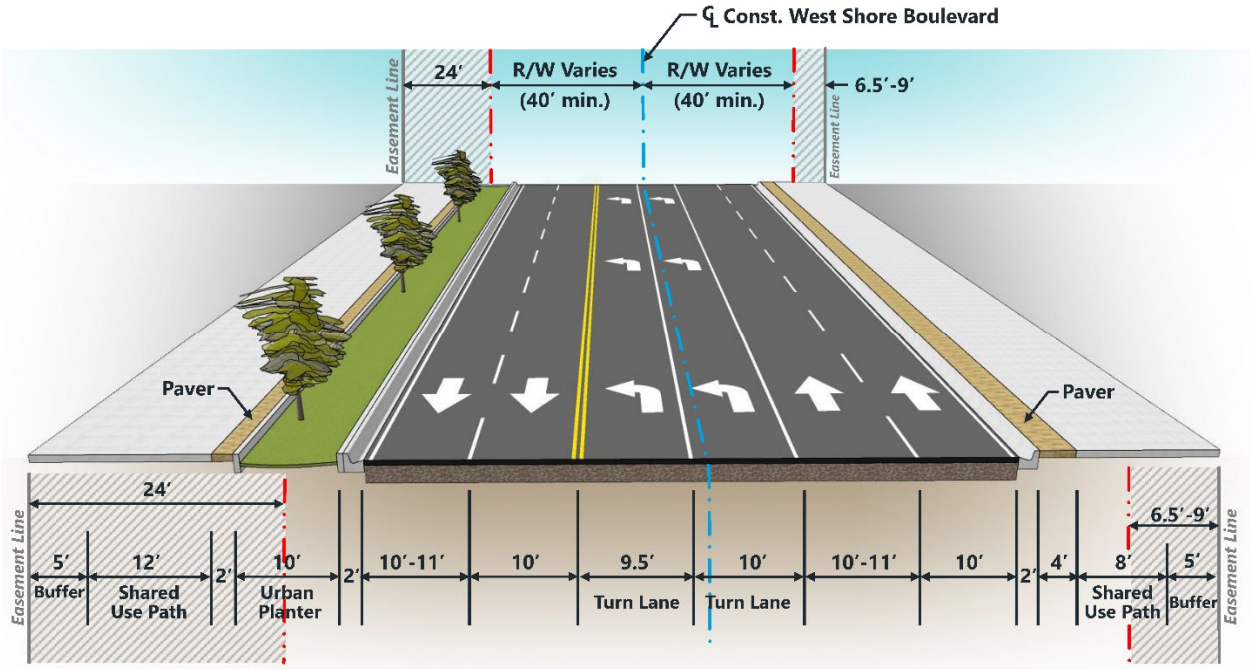


Figure 5-5: Proposed Typical Section Looking North beneath I-275 (SR 93)



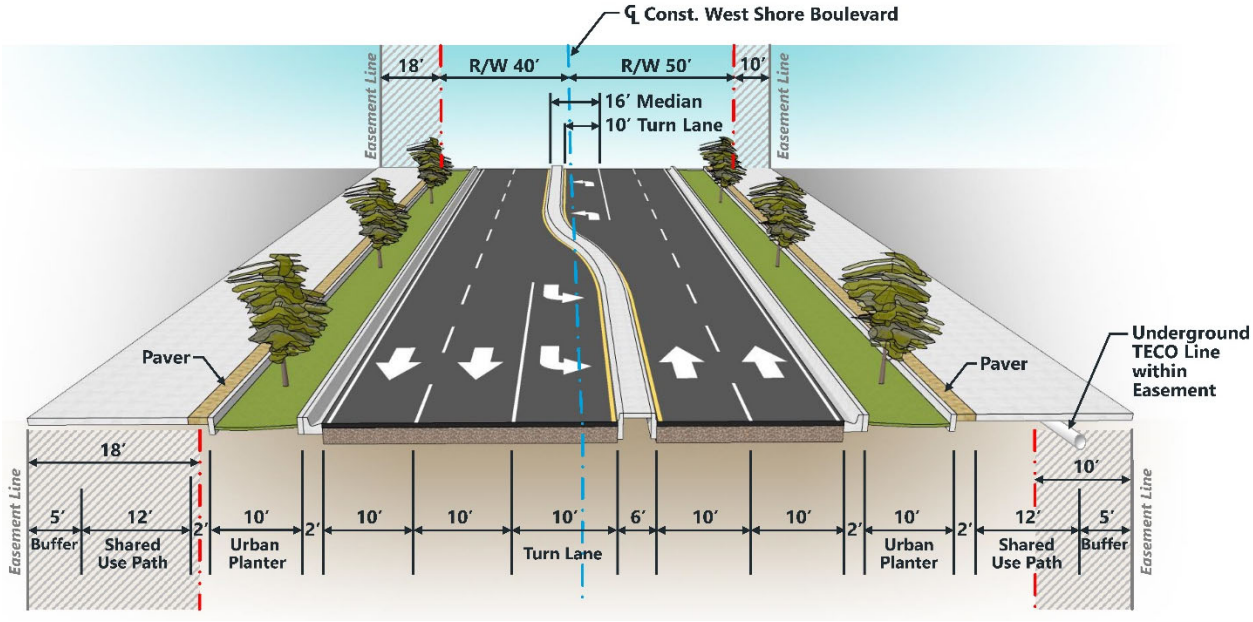
The proposed typical section between I-275 (SR 93) and West Cypress Street, shown in **Figure 5-6**, shows two 10- to 11-foot northbound lanes and two 10- to 11-foot southbound lanes. This represents a zero- to two-foot reduction in most lane widths, and up to a one-foot increase in the inside northbound through lane width. There are also two 9.5- to 10-foot proposed northbound left turn lanes. There is no raised concrete traffic separator proposed. Curb and gutter is proposed to direct runoff to drainage inlets. An eight-foot shared use path is proposed on the east side, separated from the curb by a four-foot paver buffer strip. A 12-foot shared use path is proposed on the west side, separated from the curb by a 10-foot urban planter and a two-foot paver buffer strip. There is also a five-foot buffer proposed outside both shared use paths. Transit stops will be provided at the back of curb, across the urban planter, to connect the roadway to the shared use path. The overall existing ROW varies as shown. An easement, 6.5 to 9 feet wide, is required on the east side, while a 24-foot easement is required on the west side. It is expected that the easements will be donated by property owners rather than acquired via eminent domain.

Figure 5-6: Proposed Typical Section Looking North between I-275 (SR 93) and W. Cypress Street



The proposed typical section between West Cypress Street and West Boy Scout Boulevard, shown in **Figure 5-7,** shows two 10-foot northbound lanes and two 10-foot southbound lanes, separated by a 10-foot left turn lane and a six-foot raised concrete traffic separator. This represents a two-foot reduction in lane widths. Curb and gutter is proposed to direct runoff to drainage inlets. A 12-foot shared use path is proposed on both sides to accommodate bicyclists and pedestrians, separated from the curb by 10-foot urban planter. There is also a five-foot buffer proposed outside the shared use path on both sides. The overall existing ROW is 90 feet. An easement, 10 feet wide, is required on the east side, while an 18-foot easement is required on the west side. It is expected that the easements will be donated by property owners rather than acquired via eminent domain.

Figure 5-7: Proposed Typical Section Looking North between W. Cypress Street and W. Boy Scout Boulevard



5.3 Alternative Evaluation

The build alternative was evaluated with respect to the No Build alternative, to compare the costs, benefits, and impacts associated with each. The following sections compare the alternatives' business impacts, ROW requirements, environmental impacts, operational impacts, impacts to existing structures, drainage requirements, and cost. The results of these comparisons are summarized in an evaluation matrix shown in **Table 5-1**.

5.3.1 Business Impacts

There are no business relocations required with the Build Alternative. Parcel impacts, summarized in **Table 5-2**, include parking spaces, signs, flagpoles, concrete planters, driveways (but no driveway closures are proposed), and landscaping.

5.3.2 Right-of-Way Impacts

No new ROW is proposed for acquisition. However, as shown on the Conceptual Design Plans in **Appendix A**, there are easements that are proposed for donation by the property owners, as listed in **Table 5-2**. A total of 2.161 acres of easements is needed.

5.3.3 Environmental Impacts

The Build Alternative has a low environmental impact to archaeological, historical, potential 4(f) sites, wetlands, threatened and endangered species, and contaminated sites.

Table 5-1: Evaluation Matrix

EVALUATION CRITERIA	NO-BUILD ALTERNATIVE	BUILD ALTERNATIVE
Meets Purpose and Need	No	Yes
Reduction in lanes south of W. Gray Street	No	Reduce 6 to 4 lanes
SOCIAL ENVIRONMENT		
Number of Parcels Impacted by Easements	0	33
Easements Required (acres)	0	2.161
Number of Relocations	0	0
Bicycle and Pedestrian Facility Improvements	None	Enhanced
CULTURAL ENVIRONMENT		
Parks Impacted	0	0
Historic and Archaeological Sites Impacted	0	0
Other Community Facilities Impacted	0	0
NATURAL ENVIRONMENT		
Wetlands Impacts (acres)	0	0
Floodplain Impacts (acre-feet)	0	0.50
Threatened and Endangered Species Impacted	None	None
PHYSICAL ENVIRONMENT		
Potential Contamination Sites (Medium Risk)	0	1
Potential Contamination Sites (High Risk)	0	4
Utility Impacts	No	Yes
PROJECT COSTS (2020 Dollars)		
Construction	$0	$11,643,000
Preliminary Engineering (10%)	$0	$1,164,000
Construction Engineering Inspection (10%)	$0	$1,164,000
Utility Relocation	$0	$1,845,000
Right-of-Way	$0	$0
Permitting & Mitigation	$0	$0
Total Project Cost	**$0**	**$15,816,000**

Table 5-2: Easements Proposed for Donation

West Side Parcels	Current Use	Area Required (ac)	East Side Parcels	Current Use	Area Required (ac)
113055.0000	6 parking spaces, landscaping and portion of existing bank building	0.110	113073.0000	Landscaping, 1 yard light, 1 sign	0.055
112652.0000	11 parking spaces, landscaping	0.094	113074.0000	2 parking spaces, landscaping, 1 large sign, 1 small sign	0.058
113088.0000	8 parking spaces, landscaping	0.060	113093.0000	landscaping, 1 sign, 2 paved driveways	0.031
112652.0000	37 parking spaces, landscaping	0.128	113094.0000	Landscaping, 1 sign	0.027
112897.0000	Fountain, landscaping portion of Office Building	0.092	113100.0000	Landscaping, 2 paved driveways, 4 concrete planters, 1 flagpole	0.058
113023.0000	9 parking spaces, landscaping, 3 flag poles, 1 yard light	0.194	112895.0000	Landscaping, 1 concrete driveway	0.003
113022.0000	5 parking spaces, landscaping, 1 sign		113009.0000	Landscaping	0.029
112139.0000	1 parking space, landscaping, 2 yard lights	0.025	113008.0000	Landscaping,	0.026
112144.0000	5 parking spaces, 1 large sign, landscaping	0.020	112138.0000	33 parking spaces, 1 large sign, landscaping	0.103
112142.0000	10 parking spaces, 1 large sign, 1 yard light, landscaping	0.026	112135.0000	70 parking spaces, landscaping, 1 large sign	0.179
112141.0000	17 parking spaces, 2 large signs, 4 yard lights, landscaping	0.055	112050.0000	17 parking spaces, landscaping, 4 yard lights, large sign	0.182
112140.0100	13 parking spaces, 1 large sign, landscaping	0.037	112132.0000	Landscaping, Office Tower	0.034
112140.0200	8 parking spaces, 1 large sign, landscaping	0.030	112131.0000	Paved Drive Isle	0.052
112140.0000	20 parking spaces, landscaping	0.034	112129.0000	Landscaping	0.034
112120.0000	12 parking spaces, 1 large sign, landscaping	0.049	112127.0000	Landscaping, 3 flag poles, sign	0.046
112116.0100	21 parking spaces, 2 large signs, landscaping	0.050	112052.0000	16 parking spaces, landscaping, sign	0.068
112074.0000	Landscaping, sign	0.096			
112082.0000	Landscaping	0.076			

5.3.4 Operational Impacts

A *Project Traffic Analysis Report* was prepared and is summarized in **Section 3**. Under the No-Build Alternative, most study intersections are anticipated to operate at LOS F during the AM and PM peak hours.

The Build Alternative will have operational impacts. Design year 2025 and 2040 traffic operations were addressed in Section 3.3 of this report. With the narrowing of the lanes, reduction in number of lanes south of West Gray Street, and reduction in Design Speed, traffic speeds are expected to decrease. However, in the design year 2040, Trask and Reo Streets will be extended under I-275 (SR 93), and North O'Brien Street will be widened from two to four lanes from West Cypress Street to West Boy Scout Boulevard adding more north/south lanes in the study area. This is expected to enhance mobility in the area and relieve West Shore Boulevard. The addition of mid-block crosswalks may also increase vehicle travel times.

5.3.5 Structures

Within the 1-mile study corridor, there is one 12-foot by six-foot box culvert carrying the Lemon Street Canal under West Shore Boulevard approximately 200 feet north of the I-275 (SR 93) off ramp at Lemon Street.

A bridge (Bridge No. 100117) carries I-275 (SR 93) over West Shore Boulevard. The FDOT District 7 reconstruction project for I-275 (SR 93), currently funded for construction in 2024, includes reconstruction of these bridges.

5.3.6 Geotechnical Considerations

Based on the Geotechnical Technical Memorandum prepared for this study and a general review of the published data, the following are some general geotechnical considerations for use in selecting the Recommended Alternative.

The seasonal high-water table depths were estimated at an approximate depth between 3.5 to 5.0 feet below existing ground surface. Based on this estimate, the proposed pavement must maintain a minimum base clearance of 18 inches. Fluctuations in groundwater levels should be expected due to seasonal climatic changes, construction activity, rainfall variations, surface water runoff, and other site-specific factors. Since groundwater level variations are anticipated, design drawings and specifications should accommodate such possibilities and construction planning should be based on the assumption that variations will occur.

Existing commercial structures are located along both sides of the West Shore Boulevard project corridor. Any pavement compaction for the proposed roadway improvements will require existing structures shown on the project plans or within a distance of 75 feet from the roadway construction activity to be surveyed and monitored in accordance with Section 108 of the FDOT's Standard Specifications for Road and Bridge Construction. Mitigation of potential deformations due to roadway and asphalt compaction operations may include the use of static compaction instead of vibratory compaction in areas of vibration-sensitive structures, including some properties leased for medical

practice. A summary of settlement and vibration monitoring recommendations are provided in the Appendix B of the Geotechnical Technical Memorandum.

5.3.7 Costs

Overall estimated total costs for the Build Alternative, as shown in **Table 5-1**, are $15.816M. Preliminary Engineering and Construction Engineering Inspection (CEI) costs were calculated as 10% of the construction cost. ROW costs are zero, since no ROW is proposed for acquisition, with easements proposed for donation by the property owners. Utility relocation costs are based on estimate lengths of utilities to be relocated. Construction costs include Mobilization and Maintenance of Traffic costs, as well as an initial contingency of $150,000. The Engineers Estimates used to determine the construction costs are provided in **Appendix D**.

6 Public Involvement and Project Coordination

A *Public Involvement Plan* (PIP) (September 2019) was developed for this project to outline a strategy for providing information to and receiving input from concerned citizens, private groups, and government agencies. This section summarizes the results of the public outreach efforts conducted as part of this study. A *Comments and Coordin*ation Report will be prepared separately to fully document public involvement and coordination activities.

6.1 Property Owner Meetings

The study team met with property owners and representatives of developments along West Shore Boulevard within the project limits, including:

- Westshore Mall Development
- Highwoods Properties
- Franklin Street Development (formerly Austin Center, now West Shore City Center)
- Lane Properties
- American Automobile Association (AAA)
- Fog Kennedy Limited (Walgreens)
- BW Westshore LLC (Blue Cross Blue Shield)
- HSW Associates (Chipotle)
- USAmeribank (Valley Bank)
- Alfred Austin S Trustee (Marriott)
- Saber Corner LLC (Olive Garden, ATT, Container Store, etc.)
- Westshore Hotel Group LLC (Ramada)
- RSTAR Properties LLC (Carl's Van Rental)

The purpose of these meetings was to brief property owners on the purpose of the project, to understand development or redevelopment plans for each property, and to solicit input on each property owner's vision for the corridor. Generally, property owners were supportive of the project, and sufficient shade was their primary concern. Other concerns included sufficient landscaping, pedestrian and bicycle safety and connectivity, traffic calming, business visibility, improved signal timing, and curb management for delivery of people (by ridesharing companies) and goods.

6.2 Homeowner's Association Meetings

The study team met with several neighborhood association representatives along West Shore Boulevard within the area surrounding the project limits, including:

- Carver City/Lincoln Gardens Civic Association on February 18th and March 5th, 2020
- Beach Park Homeowners Association on February 20th, 2020
- Swann Estates Neighborhood Association on February 24th, 2020
- North Bon Air Neighborhood Association on February 26th, 2020
- West Shore Palms Homeowners Association on September 3, 2020

The purpose of these meetings was to brief properties owners on the purpose of the project, to understand their concerns, and to solicit their input on the project. The homeowner's association representatives were concerned about network connectivity, improving walkability and connecting their neighborhoods to West Shore Boulevard, bicycle connections to West Shore Boulevard, safety, drainage, and potential traffic impacts.

6.3 Public Open House Meeting

A Public Open House Meeting was held on September 30, 2020.

6.4 Project Coordination

Several coordination meetings were held during the development of the Recommended Alternative. These coordination meetings were held with local governments with jurisdiction or projects planned or underway in the corridor, such as FDOT D7, the Hillsborough MPO, the City of Tampa, TECO. Coordination meetings were also held with property owners within the corridor. Project Coordination Meeting Notes are in **Appendix E**.

6.4.1 Florida Department of Transportation, District 7

Coordination meetings were held with FDOT D7 and its consultant regarding the I-275 design project (TBNext) and its interaction with West Shore Boulevard. The purpose of these meetings were to ensure FDOT accounted for the ROW needs of West Shore Boulevard under I-275, and for the project team to understand the impact of the I-275 improvements, including new roadway punch throughs under I-275 for Reo Street, Occident Street, and Trask Street in the vicinity of West Shore Boulevard. Coordination meetings with FDOT District 7 were held on August 26th, October 21st, and December 12th, 2019.

6.4.2 City of Tampa

West Shore Boulevard is within the city limits of the City of Tampa, and the City of Tampa's land development code shapes development and redevelopment standards for properties along West Shore Boulevard. The City's land development code includes the Westshore Overlay District. The purpose of the overlay district is to allow for the application of specific regulations to this distinct geographic area. The Westshore District warrants special consideration due to its unique situation. It is designed to encourage property development that will maintain the unique characteristics of the area. Representatives from the City of Tampa were present at the FDOT coordination meetings on August 26, 2019, and the project team held a coordination meeting with the City of Tampa on October 21, 2019. The purpose of these meetings was to brief the City of Tampa on the study's progress to date, to coordinate with the City on any easements along West Shore Boulevard, and to receive input on the proposed typical sections being evaluated as part of the project.

6.4.3 Westshore Alliance

The Westshore Alliance is a membership-based organization of business and community leaders recognized as the voice of Tampa's Westshore District, and the driving force being the West Shore Complete Streets project. In addition to attending the project teams meetings with FDOT, briefings or coordination meetings with the Westshore Alliance were held on November 16th and December 10th, 2019, and March 11th and August 12th, 2020. The purpose of these meetings was to brief the Westshore

Alliance on the study's progress to date, and to solicit input on the proposed typical sections being evaluated as part of the study.

6.4.4 Hillsborough Metropolitan Planning Organization (MPO)

West Shore Boulevard is within the jurisdiction of the Hillsborough MPO, which prioritizes transportation infrastructure funding according to its long-range transportation plan. The project team coordinated with the Hillsborough MPO at a meeting on February 18, 2020. The purpose of this meeting was to brief the MPO on the study's progress to date, and to solicit input from the MPO on facilities that should be included in any proposed typical sections.

6.4.5 TECO Coordination Meeting

On November 20, 2019, a coordination meeting was held with TECO to discuss overhead utilities and lighting along the corridor. Attendees included representatives from Hillsborough County, TECO, TECO Lighting, and study team consultants. Hillsborough County, the City of Tampa, the West Shore Alliance, and FDOT are partnering for this project so that all parties agree with the look and design of the corridor. The attendees discussed the goal of providing, through coming redevelopment, a safe, walkable, and aesthetically pleasing area for the residents, business employees, and patrons that travel along West Shore Boulevard. Part of this aesthetic goal is to relocate utilities to easements or ROW donated by property owners or some other agreeable design and move existing overhead TECO facilities underground as much as possible. Having easements donated would minimize costs. A 10-foot wide easement was discussed. Hillsborough County has worked with TECO on other projects, and will develop a budget, and continue coordination as the project moves forward.

Lighting is an important factor. The project team inquired if TECO has a lighting program that could help achieve the goal of adding decorative pedestrian lighting, and perhaps have TECO install and maintain them. The lighting may be in the ROW or the easement depending on the design. However, TECO does not have such a program as they are limited with the types of lighting styles and does not typically operate pedestrian lighting. They can, however, provide a service point for Hillsborough County and/or the City of Tampa and FDOT to connect to.

TECO cannot provide electrical hookups to businesses another way, from Trask Street or another street, but could place some facilities underground within easements provided for equipment which cannot be placed within the ROW. Currently the system is a "feeder" system, meaning it is a heavy-duty system and not a typical overhead design. This feeder system is larger gauge wire, and the design is different and more complex. Some overhead facilities cannot be placed underground. Costs and requirements for minimum easement size were discussed, considering the desire to plant shade trees. Facilities needed for future growth in the corridor also needs to be considered. Coordination with TECO will continue as the study progresses through the PD&E and Design phases.

6.4.6 Property Owners

Several meetings were held with individual business and property owners, including Westshore Mall, Walgreens, Florida Blue, Citgo and Shell gas stations, Chipotle, Valley Bank, Marriot Hotel, Franklin Street Development, Highwood Properties, the Container Store plaza (Longhorn Steakhouse, Bank

United, Sleep Number, AT&T, Pei Wei, Olive Garden), Towers at Westshore, Republic Bank, Ramada and Holiday Inn, Carl's Van Rental, AAA). Project overview presentations were provided. Items discussed included proposed typical sections; concerns about existing trees, signage, water hook-ups, and other improvements in the easement areas; business access and visibility; bicycle and pedestrian facilities, scooter accommodations, mid-block crosswalks; bus shelters; signalization and lighting; zoning variances for floor area ratio and parking spaces; vehicle speeds; drainage improvements; future business expansion, redevelopment, and renovation plans; maintenance responsibilities of the proposed easements, legal costs of donating the easements, and timeline; accommodations for ride-share services (Uber, Lyft, etc.); support for shade trees; preservation of existing large oak trees; support for burying TECO powerlines; the lane reduction; questions about restaurants having sidewalk seating; and the desire to see specific property impacts.

6.4.7 Homeowner and Civic Associations

Several meetings were held with homeowner and civic associations, including Carver City/Lincoln Gardens Civic Association, Beach Park Homeowners Association, Swann Estates Neighborhood Association, North Bon Air Neighborhood Association, and West Shore Palms Homeowners Association. Project overview presentations were provided. In general, these groups support the project goals. Items discussed included a suggestion for a pedestrian overpass at Westshore Mall, support for proposed bicycle and pedestrian amenities and shade trees, pedestrian safety at the west Kennedy Boulevard intersection, concern that the project may attract many more bicyclists and scooters that could lead to safety issues, support for making the corridor more economically viable and active, timeline for construction and the need for lane closures during construction, ways to communicate with the homeowners, the FDOT interstate reconstruction project, concerns that Midtown development may cause more congestion, visibility of pedestrian crosswalk signals, suggestion for a regional approach to bicycle and pedestrian connectivity in the Westshore area, question about reconnecting the Clark Avenue right turn lane immediately off of West Cypress Street, traffic concerns related to lack of local street connectivity, drainage improvements, single family zoning, improved bicycle and pedestrian connectivity from neighborhoods to the West Shore corridor, and opposition to anything that impedes traffic from leaving the area.

7 Recommended Alternative

After reviewing the engineering and environmental factors presented in the Alternatives Evaluation Matrix in **Table 5-1**, the Build Alternative was selected as the Recommended Alternative since it effectively provides the user benefits described in the purpose and need section while minimizing impacts.

7.1 Description

The Recommended Alternative includes the reconstruction of West Shore Boulevard to accommodate Complete Street treatments that meet the needs of all users and modes. These treatments include shared use paths, pedestrian amenities including street furniture and pedestrian lighting, improved aesthetics including landscaping with shade trees, improved crossing opportunities for pedestrians, and traffic calming measures including narrower lanes, a lower design speed, and reduced vehicular capacity south of Gray Street. This combination of improvements to the transportation infrastructure combined with future gradual redevelopment of properties along the corridor will ultimately transform West Shore Boulevard into a dynamic urban street. Some lane widths would be decreased and others slightly increased. Shared use paths, from eight- to 12-feet wide, are proposed to accommodate bicyclists and pedestrians. Transit will continue to serve this corridor; therefore, the planters will be interrupted with intermittent transit stops that will be ADA compliant. Overhead utilities will be buried underground within easements as much as possible. No ROW is proposed for acquisition, however; easements are proposed for donation by property owners. Some loss of parking spaces, signs, flagpoles, concrete planters, driveways, and landscaping is anticipated from adjacent parcels, but no residential or businesses relocations are anticipated. No new stormwater ponds or floodplain compensation sites are proposed.

The Recommended Alternative is shown on the Conceptual Design Plans in **Appendix A**.
The Evaluation Matrix for the Recommended Alternative is shown in **Table 7-1**.

7.2 Typical Sections

The Recommended Typical Sections are included in **Section 5** of this report, in Figures 5-1 through 5-5.

7.3 Horizontal & Vertical Alignment

The horizontal and vertical alignment will generally follow the existing alignment, as summarized in **Section 2.5** and **Section 2.6**.

7.4 Design Exceptions and Variations

No design exceptions or variations are currently anticipated for the Recommended Alternative.

7.5 Design Traffic Volumes

A *Project Traffic Analysis Report* (October 2020) was prepared and is summarized in **Section 3**. Under the No-Build Alternative, most study intersections are anticipated to operate at LOS F during the AM and PM peak hours.

Table 7-1: Recommended Alternative Evaluation Matrix

EVALUATION CRITERIA	NO-BUILD ALTERNATIVE	BUILD ALTERNATIVE
Meets Purpose and Need	No	Yes
Reduction in lanes south of W. Gray Street	No	Reduce 6 to 4 lanes
SOCIAL ENVIRONMENT		
Number of Parcels Impacted by Easements	0	33
Easements Required (acres)	0	2.161
Number of Relocations	0	0
Bicycle and Pedestrian Facility Improvements	None	Enhanced
CULTURAL ENVIRONMENT		
Parks Impacted	0	0
Historic and Archaeological Sites Impacted	0	0
Other Community Facilities Impacted	0	0
NATURAL ENVIRONMENT		
Wetlands Impacts (acres)	0	0
Floodplain Impacts (acre-feet)	0	0.50
Threatened and Endangered Species Impacted	None	None
PHYSICAL ENVIRONMENT		
Potential Contamination Sites (Medium Risk)	0	1
Potential Contamination Sites (High Risk)	0	4
Utility Impacts	No	Yes
PROJECT COSTS (2020 Dollars)		
Construction	$0	$11,643,000
Preliminary Engineering (10%)	$0	$1,164,000
Construction Engineering Inspection (10%)	$0	$1,164,000
Utility Relocation	$0	$1,845,000
Right-of-Way	$0	$0
Permitting & Mitigation	$0	$0
Total Project Cost	**$0**	**$15,816,000**

7.6 Pedestrian and Bicycle Facilities

Pedestrian and bicycle facilities will be enhanced with the implementation of the Recommended Alternative. The Recommended Alternative includes concrete shared use paths, eight to 12-feet wide, to accommodate bicyclists and pedestrians. Opportunities for enhanced midblock pedestrian crosswalks should be considered during design. Potential locations for two midblock crossings are shown in **Figure 3-8** Design Year (2040) Build Alternative Design Traffic. Final selection of crossing locations should be concurrent with the design phase to allow crossing locations to be finalized more proximate to the construction date to ensure the crossings serve pedestrian attractors and generators present at that time.

7.7 Safety

The Recommended Alternative will result in improved safety, especially for pedestrians and bicyclists, with shared use paths and additional crosswalks to accommodate bicyclists and pedestrians. Reduced vehicular speeds are also anticipated to result in improved safety for vehicles.

A quantitative safety analysis was conducted following the procedures provided in the Highway Safety Manual (HSM) published by the American Association of State and Highway Transportation Officials (AASHTO). Appropriate to the conditions of the study corridor, the procedures outlined in HSM Part C – Predictive Method, Chapter 12 (Urban and Suburban Arterials) was utilized. In addition, due to the availability of historical crash data, the Empirical Bayes (EB) method was employed.

Per the specifications in the HSM, the study corridor was divided into segments and intersections based on the characteristics of the corridor and the availability of traffic volumes. The corridor was divided as follows:

- Intersection 1 - SR 60 (West Kennedy Boulevard)
- Segment 1 - From SR 60 (West Kennedy Boulevard to West North B St.
- Intersection 2 – West North B Street
- Segment 2 – From West North B Street to West Gray Street
- Intersection 3 – West Gray Street
- Segment 3 – From West Gray Street to Northbound I-275 Ramp Terminal
- Intersection 4 – Northbound I-275 Ramp Terminal
- Segment 4 – Between I-275 Ramps
- Intersection 5 – Southbound I-275 Ramp Terminal
- Segment 5 – Southbound I-275 Ramp Terminal to Cypress Street
- Intersection 6 – Cypress Street
- Segment 6 – From Cypress Street to Laurel Street
- Intersection 7 – Laurel Street
- Segment 7 – Laurel Street to Spruce Street/West Boy Scout Boulevard
- Intersection 8 - Spruce Street/West Boy Scout Boulevard

The HSM Part C provides a predictive method for estimating expected average crash frequencies at individual sites. This method relies on safety performance functions (SPF) that estimate predicted average crash frequency as a function of traffic volume and roadway characteristics (e.g., number of lanes, median type, intersection control, number of approach legs). To support the use of the HSM predictive methods, FHWA has developed a freely available software program called the Interactive Highway Safety Design Model (*IHSDM*), which was used to evaluate all of the study segments and all but two study intersections.

Two of the study intersections are interchange ramp terminal intersections. The southbound I-275 off-ramp to West Shore Boulevard intersection and the northbound I-275 on-ramp from West Shore Boulevard intersection were both evaluated using FHWA's Enhanced Interchange Safety Analysis Tool

(*ISATe*), which is used to implement the predictive methods found in Part C of the HSM for interchanges, including freeway segments, ramps, and ramp terminal intersections. While historical crash data was not used in conjunction with the *ISATe* analysis, the results of the analysis were compared with historical data for reasonableness.

Both the *IHSDM* and *ISATe* provide predicted annual number of crashes for a future period, which has been defined for this study as twenty years spanning from 2020 to 2040. The following steps were taken for each analysis type to calculate the expected cost of crashes for the No-Build and Build scenarios.

IHSDM Analysis

1) Calculate site specific crash prediction ($N_{expected}$) for all study segments and intersections
2) Apply HSM Crash Distribution for Florida for similar facility types (Urban and suburban arterials – 4-lane divided) to calculate expected number of each crash type (KABCO) annually for 20-year study period for each segment and intersection
3) Apply standard KABCO costs to calculate expected cost value of all crashes for the 20-year study period for each segment and intersection (includes a 4% rate of return/inflation rate)
4) Calculate total expected crash costs for all segments and intersections

ISATe Analysis

1) Calculate predicted annual number of each crash type (KABCO) for the 20-year study period for each ramp terminal intersection
2) Apply standard KABCO costs to calculate expected cost value of all crashes for the 20-year study period for each segment and intersection
3) Calculate total expected crash costs for ramp terminal intersections

The expected crash costs calculated following the implementation of the HSM predictive method are listed in **Table 7-2**. The Build Alternative is expected to result in a cost savings of over $607,000 (2020 dollars).

Table 7-2: Predicted Crash Costs and Safety Benefit

	No-Build	Build
Segment 1	$ 2,993,982.33	$ 3,197,930.52
Segment 2	$ 3,740,226.43	$ 3,719,022.62
Segment 3	$ 2,249,961.01	$ 2,065,380.41
Segment 4	$ 1,676,000.23	$ 1,620,552.05
Segment 5	$ 5,008,367.96	$ 4,911,268.25
Segment 6	$ 12,687,157.07	$ 12,806,684.20
Segment 7	$ 9,745,190.75	$ 9,487,895.97
SUBTOTAL	$ 38,100,885.79	$ 37,808,734.01
Intersection 1	$ 42,886,967.39	$ 42,880,682.67
Intersection 2	$ 15,545,010.35	$ 15,505,648.35
Intersection 3	$ 14,356,879.82	$ 14,187,046.58

Intersection 4	$	10,953,338.79	$	10,950,464.87
Intersection 5	$	39,047,609.45	$	39,025,339.77
Intersection 6	$	31,301,679.23	$	31,192,538.01
Intersection 7	$	8,116,002.03	$	8,170,999.73
Intersection 8	$	27,819,287.43	$	27,798,673.36
SUBTOTAL	$	190,026,774.49	$	189,711,393.33
TOTAL	$	228,127,660.27	$	227,520,127.34
20 Year Crash Cost Benefit			**$**	**607,532.93**

7.8 Economic Development

West Shore Boulevard was originally developed in the 1960s as an automobile-oriented thoroughfare and has retained a suburban-oriented design with inadequate accommodations for pedestrians and other non-automobile modes of travel. The Recommended Alternative implements a "Grand Boulevard" concept for West Shore Boulevard through a combination of upgrades to the transportation infrastructure and corridor environment. This combination of improvements to the transportation infrastructure combined with the future gradual redevelopment of properties along the corridor will ultimately transform West Shore Boulevard into a dynamic urban street.

Since the project is expected to lower speeds on West Shore Boulevard, some automobile traffic is anticipated to shift to adjacent parallel corridors, including Occident Street, Reo Street, and Trask Street. These traffic shifts are not expected to create a significant change in overall vehicular LOS on these roadways. Additional information on potential traffic impacts can be found in the Traffic Section.

This corridor transformation into a dynamic urban street is anticipated to make West Shore Boulevard a more desirable place to live, work, and play. Property values along West Shore Boulevard, along with the County's tax base for the area, are expected to increase, and property owners may justify increased lease rates for commercial space within the corridor. Residential properties within walking distance of the corridor's improved pedestrian facilities are expected to benefit from increased property values as well. Businesses are expected to benefit from increased foot traffic from the upgraded pedestrian environment and may need less parking as customers begin arriving on foot or bicycle rather than in a car. The proposed improvements are expected to provide and economic development benefit to the Westshore District.

7.9 Right-of-Way Needs and Relocation

The Recommended Alternative requires a total of 2.161 acres of easements to be donated by 33 adjacent property owners. No business or residential relocations are required, however; easements are proposed for donation by property owners rather than via eminent domain. **Table 5-2** summarizes ROW impacts. Some loss of parking spaces, signs, flagpoles, concrete planters, driveways, and landscaping is anticipated from adjacent parcels.

Nearly all property owners the project team met with have expressed unqualified support for the project and have indicated willingness to consider granting a ten-foot easement across the entire

frontage of their property. Several are so eager for this project to move forward that they have already asked for the easement document for their review.

In all cases the property owners will require regulatory relief from the requirements of existing improvements within the area of the easement and mitigation for impacts such as sign relocations. This is a reasonable expectation consistent with similar complete streets projects around the country and a position that the project team has anticipated since the beginning of the PD&E project. Ideally this activity – the promulgating of local governmental provisions providing regulatory relief from any displaced improvements – should continue without interruption even as the design phase of this project is currently suspended.

At a minimum, the following incentive actions should be initiated now by the City of Tampa as part of their codes and ordinances that would apply to the *properties granting the easements* include:

- Considerably increased interior landscaping credits and bonuses
- Parking ratio relief
- Signage setback reduction to zero feet from the ROW line (for lower level replacement signs)
- Increased signage area allowance [for pedestrian-scaled building tenant identification]
- Accommodation of properties' frontage stormwater quality within the ROW (the planned urban planters)
- Outdoor dining area (expansion) exemptions from parking requirements, etc.

Many property owners have noted the necessity of these items in order to grant an easement encumbering their property. The development of these incentives should be in context and harmony with the City of Tampa Westshore Overlay district. Their development should be undertaken by the Westshore Alliance, who as the champion for this project represent the interests of the Westshore business district, and then be incorporated by the City of Tampa within its regulatory code. This process will likely take a year or more, hence the team's recommendation to continue with these discussions even as the design phase is on hold.

There are two types of easements anticipated. The first involves those properties whose easement will accommodate the undergrounding of the (presently) overhead TECO powerline and companion telecommunication lines. This will be for those properties on the east side of West Shore Boulevard and north of West Cypress Street. The second easement type would not include TECO service, but would accommodate the pedestrian way and other amenities shown in the Preferred Alternative concept plans in Appendix A. Both easement types will be nearly identical, and all easements must have the same language and convey identical rights, responsibilities, benefits, and obligations amongst the parties (see **Appendix F** for sample easement agreements). All easements will be without compensation for use of the Grantor's property.

Through these easements, property owners will be ceding much control of their property and encumbering the use of the frontage of their property. They will want in the easement language the roles, responsibilities, performance, and schedule of actions by the other parties who will be part of

making West Shore Boulevard a complete, and dynamic urban street. These roles and responsibilities include:

Westshore Alliance – through their municipal service unit will be providing administration, maintenance, and operation of the shared use path, landscape, hardscape, streetscape, and the pedestrian-scaled and any streetscape enhancement lighting of the corridor, both in the ROW and the easement areas.

Hillsborough County – will provide for the design, construction plans, construction funding and management of the construction – both within the existing ROW and the easement areas. The County will, following completion, maintain operations within the ROW and will be the primary interface with FDOT at West Shore Boulevard's intersection with state facilities.

City of Tampa – provides any needed legal non-conformities, variances, provisions/conditions on rezonings for the Grantors' property that fulfill the intent of the complete street and fills in any gaps lacking in the Westshore Overlay District or Sign Ordinance at the time of easement creation.

TECO – will provide for the transition of the overhead powerlines to underground configuration. They will spearhead any additional easements for transformers for individual parcel service. They will provide for maintenance of electric service to the parcels.

7.10 Utility Impacts

Existing utilities are listed in Section 2.15 of this report. Part of the aesthetic goal of the project is to relocate utilities to easements or ROW donated by property owners or some other agreeable design and move existing overhead facilities underground as much as possible. Having 10-foot wide easements donated would minimize costs. Hillsborough County has worked with TECO on other projects, and will develop a budget, and continue coordination as the project moves forward. Other overhead utilities (phone, cable, etc.) will be considered for placement underground as well. A meeting with TECO was held on November 20, 2019, and the meeting minutes are included in **Appendix G**. The estimate to bury overhead electric distribution and transmission lines is $1.5 million. Existing street lighting is maintained by Hillsborough County. New aesthetic lighting is proposed; therefore, the existing lighting would be impacted. New lighting would be provided by, and maintained by Hillsborough County, with TECO providing the power feeds.

7.11 Drainage

The proposed improvements to the West Shore Boulevard corridor will require the relocation and upsizing of the existing drainage system to accommodate the new typical section and help alleviate the nuisance flooding in the area. The following outlines each of the segments along the corridor and describes how the recommended typical section will impact the existing drainage and how the drainage system can be improved to accomplish the goals of the proposed improvements.

7.11.1 Segment 1

The portion of West Shore Boulevard located between West Kennedy Boulevard and West Gray Street does not experience nuisance flooding. However, it should be noted that flooding complaints have been

received for portions of the storm sewer system located upstream within the adjacent neighborhood to the east. Regarding the neighborhood flooding, both West Gray Street and West Fig Street between North Trask Street and North Hesperides Street have exhibited flooding at the location of the grate and curb inlets, respectively, along the roadway. At this time, it is not believed that improvements to the system along West Shore Boulevard will improve the flooding issues at these locations. The rationale for this conclusion is because none of the inlets or junctions between West Shore Boulevard and the affected areas have been identified as having flooding issues, therefore it is believed it is a localized issue and maintenance of the system in the flooding area should be considered.

Adjustments to the existing drainage system are anticipated as part of the proposed improvements. These adjustments include relocating inlet locations to match the new curb and gutter locations. Storm sewer pipes will be required to meet the criteria set forth in the most current design manual. This may require the system to be upsized in the vicinity of the project corridor.

7.11.2 Segment 2

The drainage system associated with West Shore Boulevard between just north of West Gray St and I-275 does not experience any issues; no changes to the outfall are anticipated as part of the West Shore Boulevard improvements. The outfall for this system was changed with the I-275 improvements that were completed in 2015. Please note, with the current improvements to I-275 associated with the Howard Franklin Bridge to east of Lois Avenue, the outfall system for these structures may be reconfigured.

7.11.3 Segment 3

The portion of West Shore Boulevard between I-275 and West Boy Scout Boulevard experiences flooding for various reasons given the location. The area near the I-275 off ramp experiences flooding due to the Lemon Street Canal overtopping its banks and encroaching into the intersection. The SNC-Lavalin technical memorandum, *Cypress/Memorial Drainage Area Study,* October 2018 studied the Lemon Street Canal and recommended creating a bypass system to help reduce flows and lower stages within the existing canal to reduce flooding. **Figure 7-1** shows a flood complaints figure from the SNC-Lavalin technical memorandum covering the West Shore project area. Additionally, **Figure 7-2** shows the

Figure 7-1: Flood Complaints Figure from The SNC-Lavalin Technical Memorandum

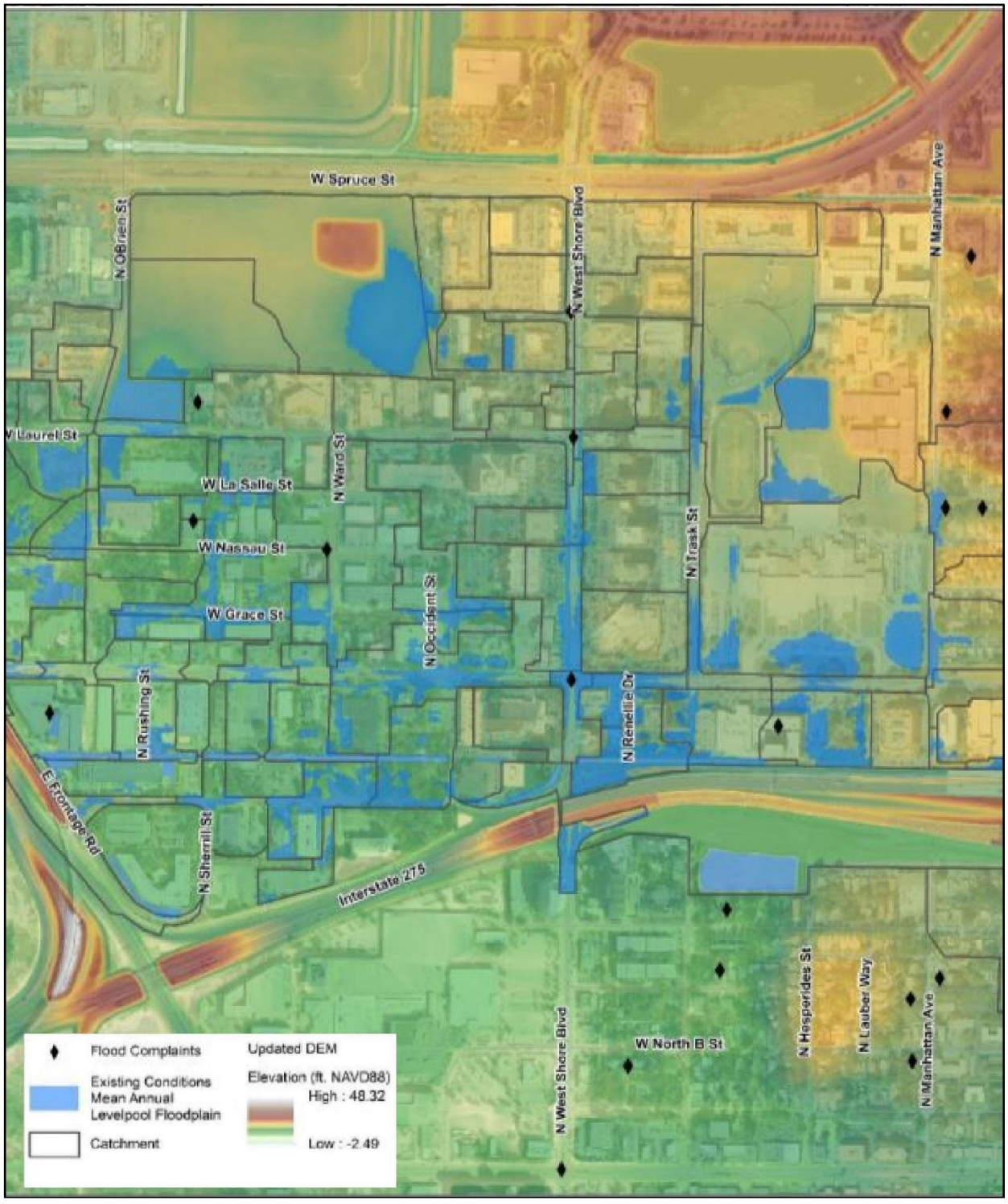
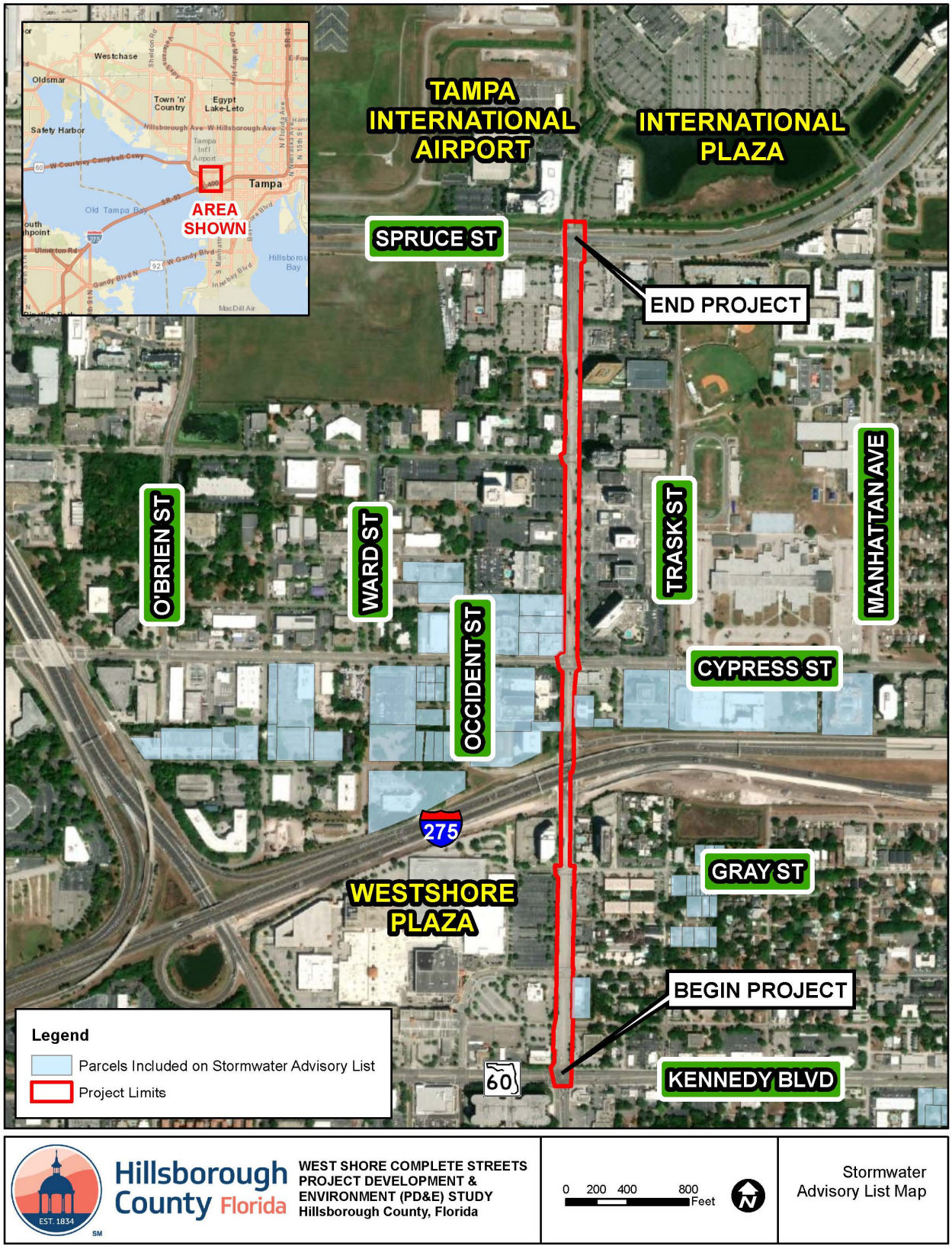


Figure 7-2: Stormwater Advisory List Map



stormwater advisory list for flooding concerns near the project area. The stormwater advisory data was collected from the City of Tampa's Geographic Information System, GIS, portal. The portions of West Shore Boulevard located north of West Cypress Street experiences flooding due to the high tailwater conditions associated with the Lemon Street Canal and an existing storm sewer system that is undersized. Existing hydraulic grade line calculations have been provided in the *Stormwater Management Facility Report*. To eliminate the nuisance flooding along this portion of the corridor the Lemon Street Canal outfall must be improved to lower stages and the existing storm sewer system must be upsized. Since the Lemon Street Canal improvements are outside the scope of the West Shore Boulevard improvements, the following options are available to reduce the flooding along this segment.

1. Upsize the existing storm sewer system along West Shore Boulevard and discharge to the existing outfall.
2. Upsize the existing storm sewer system along West Shore Boulevard and discharge to the Lemon Street Canal on the west side of N Occident Street (the HGL within the Lemon Street Canal at this location is lower than the existing outfall location).
3. Upsize the existing storm sewer system along West Shore Boulevard and discharge to a proposed detention facility located at the intersection of W State Street and N Occident Street.

7.11.4 Cross Culverts

There is one box culvert cross drain that runs through the project, it is located at station 422+68.19 and is associated with the Lemon Street Canal. The Lemon Street Canal flows from east to west through the project and is the outfall for the storm sewer system north of I-275. This culvert is a single-cell culvert with an opening measuring 12 feet by six feet. This culvert will be extended approximately 13.5 feet to the east to accommodate the proposed roadway typical section. The culvert extension will match the existing openings to maintain the historic hydraulic flow of the Lemon Street Canal. Temporary critical shoring might be required to complete construction on the culvert extension.

The SNC-Lavalin technical memorandum, *Cypress/Memorial Drainage Area Study,* October 2018 considered the implications of widening this culvert to alleviate flooding upstream of West Shore Boulevard. Though upsizing the culvert did reduce elevations within the Lemon Street Canal upstream of the project corridor, elevations downstream of the project corridor increased and induced flooding. Therefore, it is not recommended to upsize this cross culvert until other improvements are made to the Lemon Street Canal drainage system to increase the capacity of the system.

7.11.5 Utilities

Impacts are anticipated to the existing utilities associated with the proposed drainage improvements for this project. During the design phase, all efforts should be made to minimize impacts to the existing utilities.

7.11.6 Treatment and Attenuation

Southwest Florida Water Management District, SWFWMD, will require attenuation and water quality treatment for the proposed improvements. An increase in impervious area is anticipated due to the widening of the existing sidewalk and the additional border width associated with this project. **Table 7-3**

below depicts the anticipated amount of impervious associated with each segment of the corridor and the required treatment volume. Please note the proposed border width was assumed to be 100% impervious.

Table 7-3: New Impervious Surface Area and Treatment Area

	Segment 1	Segment 3
New Impervious Area (ac)	0.31	0.68

Two design options have been considered to provide the required treatment and attenuation for this project. For the dry retention, the bioretention swales and pond were assumed to be lined, due to possibly high-water table. Treatment calculations for this project have been provided in the *Stormwater Management Facility Report*. Additional analysis of this site is provided in the *Conceptual Drainage Design Report*.

Option 1 involves utilizing the proposed 10-foot wide urban planters along the corridor of the project. Using bioretention within the urban planters to treat stormwater runoff from the project. Ditch bottom inlets can be placed within the urban planters to provide the required treatment volume and attenuation within the urban planters.

Option 2 uses proposed off-site ponds to provide the required treatment and attenuation for the project. There are two proposed ponds for this option, one for Segment 1 and one for Segment 3. **Figure 7-3** shows the potential pond site locations. **Table 7-4** identifies the required treatment volumes for the two options.

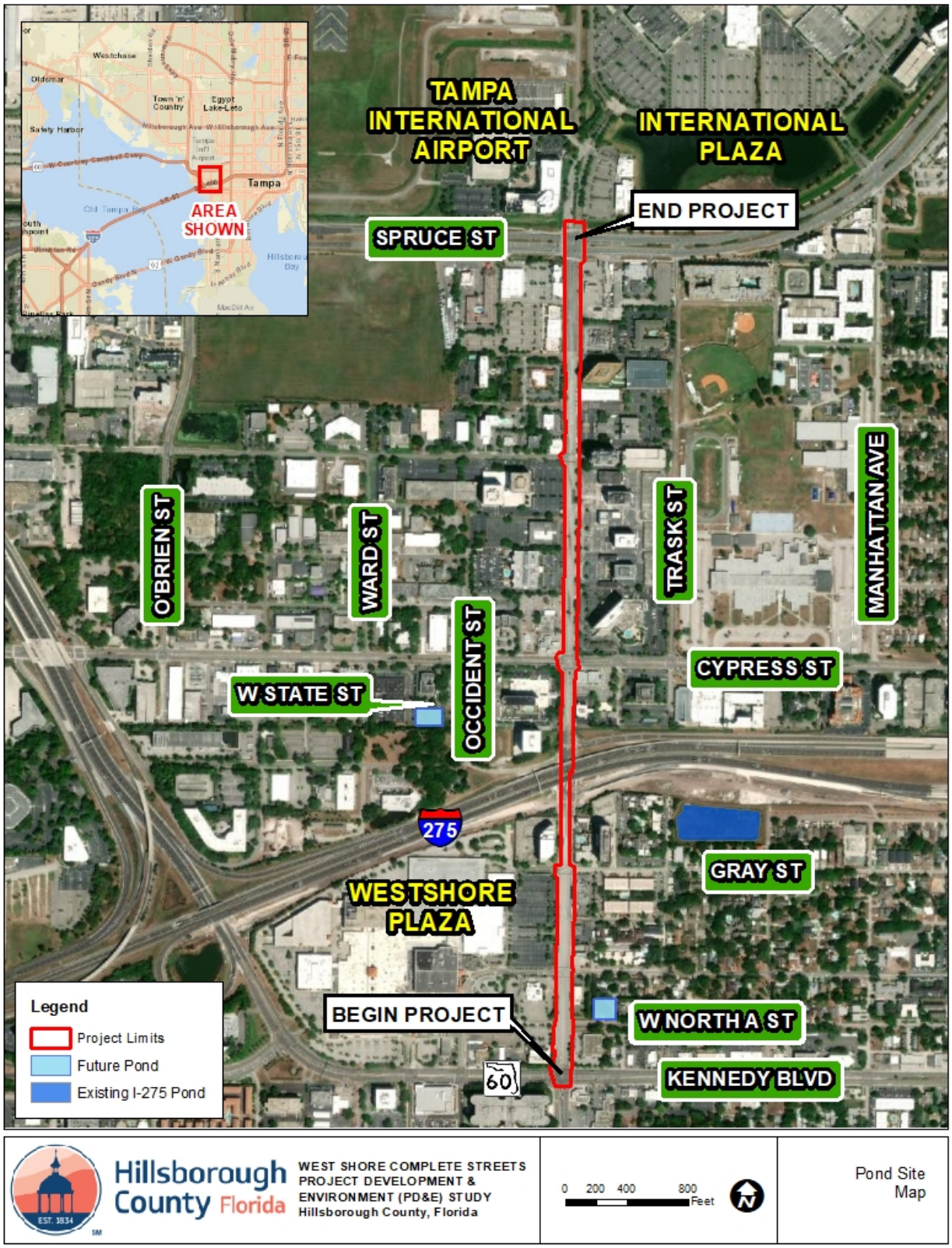
A combination of the two options may be necessary. Utilizing the area provided by the urban planters along the project as bioretention and a detention pond to help improve the storm sewer system, as mentioned earlier in this report. All options should be further examined during the design phase for this project.

Table 7-4: Required Treatment Volumes

	Segment 1	Segment 3
Detention w/ effluent filtration		
Required Treatment Volume (ac-ft)	0.013	0.028
Required Attenuation Volume (ac-ft)	0.43	0.91
Wet detention		
Treatment Volume Required (ac-ft)	0.026	0.057
Required Attenuation Volume (ac-ft)	0.37	0.58
Total Storage Volume (ac-ft)	0.40	0.64

Florida's NPDES stormwater program requires a Generic Permit for stormwater discharges from construction activities that disturb more than five acres.

Figure 7-3: Pond Site Map



7.11.7 Floodplain

Portions of the West Shore Boulevard corridor are located within the AE flood zone (Panel 12057C0334H 08/28/2008) with a Base Flood Elevation of 9.00-ft NAVD88. Floodplain encroachment is anticipated for the proposed improvements due to the reduction of the travel lane widths, which effectively fills in a portion of the roadway located below the base flood elevation. **Table 7-5** below depicts the anticipated fill volumes associated with the improvements.

Table 7-5: Floodplain Encroachment and Sizing of Compensation Sites

Option	Volume Encroachment (acre-ft)	Area Required to Accommodate Encroachment Volume (acres)
FP-1	0.50	0.50

The floodplain encroachment volume is anticipated to be minimal for this project. The project corridor is located within close proximity of Tampa Bay, therefore the floodplain associated with Segment 1 is controlled by the water elevation in the bay. Consequently, floodplain encroachment compensation may not be required for this project and should be evaluated further during the design process. It may be possible to provide compensation within the offsite stormwater management facilities, but details would have to be confirmed with the water management district. Additional analysis is provided in the *Location Hydraulics Report (LHR)*.

7.12 Lighting

Conventional lighting will be upgraded along the project for a more aesthetic appearance and to add focus to the shared use paths.

7.13 Special Features (noise barriers, retaining walls, etc.)

Three special features are proposed with the Preferred Alternative:

- A proposed gravity wall with handrail in the northwest quadrant of the I-275 (SR 93) interchange at West Lemon Street
- A retaining wall with handrail in the southwest quadrant at West Boy Scout Boulevard, and
- The 10-foot wide landscaped urban planters along much of the project

7.14 Access Management

There is no change to access management with the Recommended Alternative. All existing median openings and side road connections will be maintained in the proposed condition.

7.15 Aesthetics, Landscaping, and Functionality

The Recommended Alternative includes enhancements to landscaping, hardscape, and lighting. Shared use paths, urban planters with landscaping and shade trees, pavers, improved lighting, and moving

overhead utilities to underground are all planned enhancements. The aesthetics of the corridor will be further evaluated during the design phase.

The functionality and aesthetics of the emergent best typical section are intertwined. This section outlines the aspects of the pedestrian environment's functionality along with the proposed landscape, hardscape, and overall streetscape elements. These in concert meet the following project objectives:

- Accommodates future pedestrian traffic
- Provides effective shade for pedestrians
- Creates comfortable walking area
- Creates social space for seating/dining/conversations
- Accommodates bicycling and micromobility
- Generates consistent aesthetic value
- Advances sustainability and improves water quality and drainage
- Property owner participation via voluntary easements
- Enhance transit amenities

7.15.1 Overview of Functionality

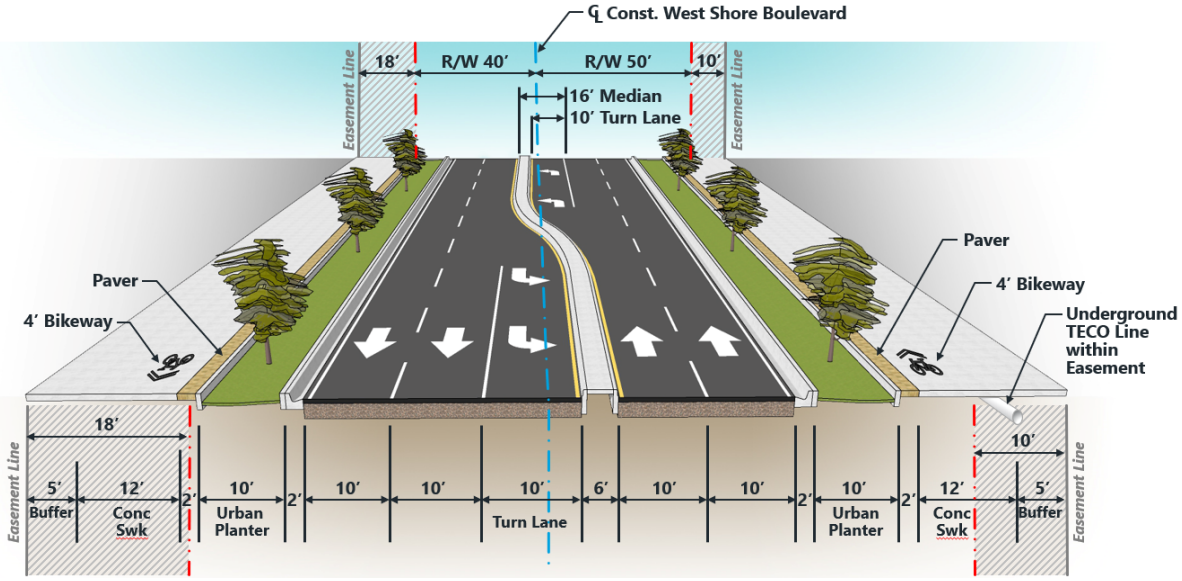
The feedback received from the stakeholders helped guide the development of the typical sections, and more importantly, the development of the elements of the emergent best typical section. The stakeholders' ideas that influence elements of the typical section include:

- Adding shade is critical
- Large shade trees needed
- Shaded walkway
- Safe pedestrian crossing locations
- Slow traffic speeds
- More shade is needed
- Create an inviting environment for people to walk
- Create a better walking experience for our tenants' employees
- Shade is the key to success
- More pedestrian-active street
- Less concrete more landscaping
- A more socially active street scene
- Preserve/accommodate visibility of building/property signs
- Calm the traffic
- Address stormwater problems
- Vastly Improve the pedestrian environment
- More employees would bicycle to work if provision was made
- Please connect our Front Door to the Pedestrianway
- Curb management (for people departure and delivery)
- Outdoor cafes are needed
- Outdoor seating along calmed street
- Design the streetscape to enable the office buildings to have viable ground floor retail

The West Shore Boulevard cross section that is the most optimal, the Recommended Typical Section, is shown in **Figure 7-4**. This cross section provides a combined 14-foot shared use path that also accommodates bicyclists (and micromobility devices users – e.g., scooters) in the area adjoining the urban planter zone. Pedestrians have the entire use of a 14-foot walkway. Rightward and adjoining the two-foot decorative edge pavers, bicyclists (and micromobility users) have a four-foot space with a smooth riding surface. The remaining eight feet of the 12-foot shared use path is for pedestrians and has transverse decorative, textured paver bands placed at regular intervals along the length of the walkway. These transverse bands will discourage wheeled users from encroaching into the pedestrian space. A rendering of the functionality is shown in **Figure 7-5**.

An additional five feet of space between the shared use path and the building setback line provides lateral space preserving pedestrian flow and accommodating buildings' opening doors, pedestrians' "window shopping", additional space for streetscape elements, or access transition for the direct connections to properties' building entrances. The five foot "property buffer" may be of the same surface material as the shared use path, or it may be landscaped or streetscaped per special unique provisions [known as "Exhibit "B"] in each property's uniform Joint Use Easement Agreement.

Figure 7-4: Recommended Typical Section



7.15.2 Proximity of Nonmotorized Users to Roadway Traffic

In the recommended typical section, all nonmotorized users - pedestrians, bicyclists and micromobility device users - are well separated from traffic by a 10-foot urban planter. This lateral separation, or buffering will provide substantial comfort and safety for all.

Figure 7-5: Rendering of Recommended Typical Section

7.15.3 Pedestrian Crossing Safety

The urban planter is envisioned to have an elevation noticeably lower than the surrounding curb and the shared use paths. This aspect of the urban planter provides an important safety benefit: it serves to limit pedestrians' direct access to the roadway except at driveways, intersections, or designated mid-block crossings. This increases pedestrian safety and minimizes interruptions to traffic flow. Where possible, this configuration will allow an urban planter accommodation for stormwater quality treatment during and after brief storm events.

7.15.4 Separation Among Nonmotorized Users

There is no distinct separation between pedestrians and bicyclists in the recommended typical section as the design is for a flexible use of the wide shared use path. The separation of users is encouraged by the differing surface textures and signs. Most bicyclists will use the roadway side of the shared use path, traveling in the same direction as cars in the roadway. Pedestrians have full use of the entire shared use path. When there are the occasional bicyclists, pedestrians will tend to be walking laterally further from the roadway, nearer to the buildings. This type of flexible cross section has been found to work well when there are low to moderate volumes of bicyclists. If pedestrian use is high and bicycle use is only occasional, this arrangement allows for pedestrians to seamlessly use the bicycle space as additional walkway width. If there is a high bicycle demand when pedestrian volume is high, conflicts on the combined facility will increase; a number of the bicyclists may choose to use the road rather than ride on a pedestrian-crowded facility.

7.15.5 Operation at Driveways

The combined pathway of the recommended typical section will intersect driveways at the shared use path level. This arrangement means the entire facility is at a continuous level for both pedestrians and bicyclists at midblock locations. The driveway ramps will be completely out of the pathway. This will provide a more pleasant walking and riding experience for nonmotorized users than having to negotiate elevation changes at driveways. An example of this is shown in **Figure 7-6**. This design importantly communicates to motorists traversing driveways that they are crossing an area requiring their alertness (and attention to yielding – per Florida statutes).

Figure 7-6: Driveway Crossing at Sidewalk Grade – Cultural Trail, Indianapolis, IN

It is expected that some bicyclists may not be traveling at pedestrian speeds. Therefore for the implementation within West Shore Boulevard corridor, the portion of the shared use path approaching driveways will pinch down coincident with increased frequency of the lateral paver bands, providing a visual "rumble strip" effect, slowing bicyclists down as they approach driveway crossings, as shown in **Figure 7-7**. This design approach consolidates the non-motorized travel into a single unified flow at a common crossing point for simplified yielding operations by motorists at driveways.

7.15.6 Operations at Intersections

At intersections, the bicyclists and micromobility users will cross side streets at a location also set back from the travel lanes. This will require bicyclists (and micromobility users) be informed of their responsibility to yield to crossing pedestrians. The design will use geometry and pavement markings/treatments to encourage slow bicycling speeds and inform bicyclists that they are entering a mixing zone with pedestrians moving in multiple directions. Bicyclists crossing the roadway at intersections will do so in expanded crosswalks. At signalized intersections, bicyclists will be controlled

by the pedestrian signals. **Figure 7-8** illustrates how this configuration works along the Cultural Trail in Indianapolis, Indiana.

Figure 7-7: Driveway Crossings

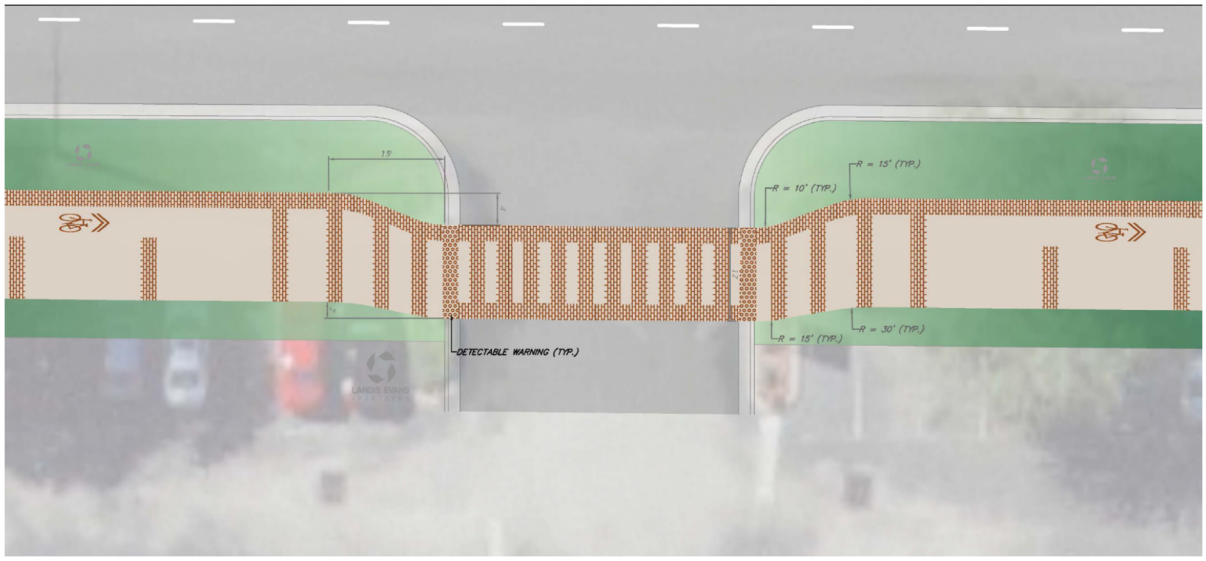


Figure 7-8: Widened Crosswalk with Designated Bicycle Space

7.15.7 Function and Design of the Urban Planter

The urban planter provides the sustaining environment for the elements which are central in achieving the majority (shown below in bold font) of the project's objectives:

- Accommodates future pedestrian traffic
- **Provides effective shade for pedestrians**
- **Creates comfortable walking area**
- **Creates social space for seating/dining/conversations**
- Accommodates bicycling and micromobility
- **Generates consistent aesthetic value**
- **Advances sustainability and improves water quality and drainage**
- Property owners' participation via voluntary easements
- Enhances transit amenities to be coordinated during the design phase

The elements include mostly landscaping features such as the shade-providing canopy trees, and the aesthetic shrubbery and ground cover all of which work in concert to create a welcoming pedestrian environment. Also integral within the urban planter is pedestrian-scaled lighting. This element extends the functional daily value of the project into evening time, temporally extending the benefits of the investment value of both the capital and operation/ maintenance by more than 150%.

7.15.8 Planting Materials

Figure 7-9 below illustrates the conceptual planting design (with 2020 installment costs) for a 100 lineal foot segment. It includes canopy trees, shrubs, perennials, and low ground cover. **Table 7-6** outlines the planting palate options. The canopy trees should be eight to 10-inch diameter at breast height (DBH) at installation to provide effective shade.

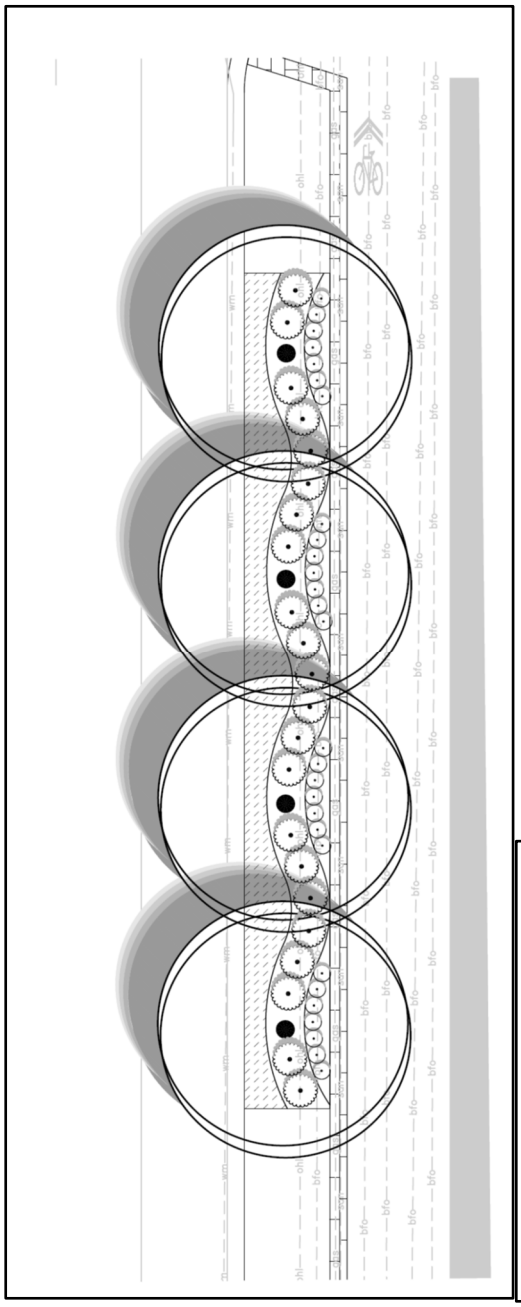
7.15.9 Pavers as Important Functional, Safety, and Aesthetic Elements

Precedent studies, plans, and regulations for the West Shore Boulevard corridor either envision or stipulate the use of pavers for functional, thematic, or aesthetic reasons. This project respectfully incorporates that precedent, proscribing the use of paver banding in three important functions: 1) as a linear safety element (a shoulder) between the shared use path and the urban planter, 2) as visual demarcation (e.g., the lateral banding) of the lateral zone for pedestrians, and 3) the shared use path operational speed management at driveways and intersections, and finally, but perhaps the most important function, 4) the visually "tight" banding of pavers at the driveway and side street crosswalks that will increase the conspicuity of the shared use path and enhance drivers' yielding behavior.

7.15.10 Aspects of the Joint Use Easement and Adjoining Properties

As voluntary easement donations from the fronting properties are needed to provide the entire cross-section real estate to enable the necessary landscape, hardscape, and other streetscape elements, the City of Tampa regulatory provisions must be put in place in advance of design to enable the creation of

Figure 7-9: Conceptual Planting Design



CONCEPT PLANT SCHEDULE OPT1

LARGE SHADE TREE	4	$7,500/ea	$30,000
-			
COMPACT SHRUB 1	22	$45/ea	$990
-			
PERENNIAL	28	$10/ea	$280
-			
LOW GROUNDCOVER	375 sf	$4/sq.ft.	$1,500
-			
		TOTAL: $32,770	

Table 7-6: Planting Palate Options

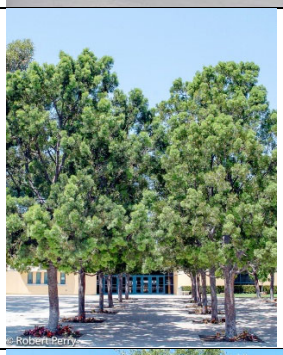
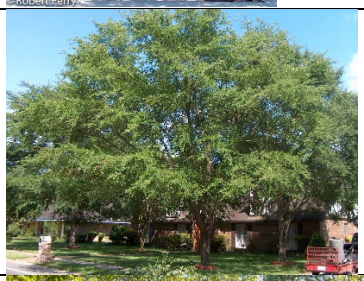
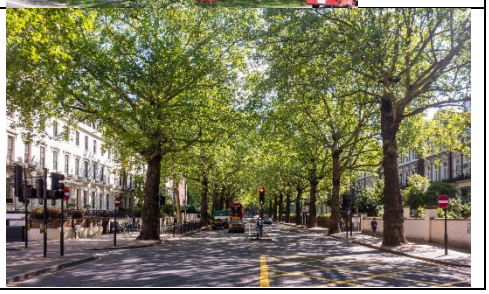
Category	Name	Description	Image
Canopy Trees	*Quercus virginiana*, **Live Oak**	40’ on center (o.c.), 10” DBH	
	Podocarpus gracilior, **Weeping Podocarpus**	20’ o.c.	
	Ulmus alata, **Winged Elm**	25’ o.c.	
	Plantanus occidentalis, **Sycamore**	40’ o.c.	

Table 7-6: Planting Palate Options (Continued)

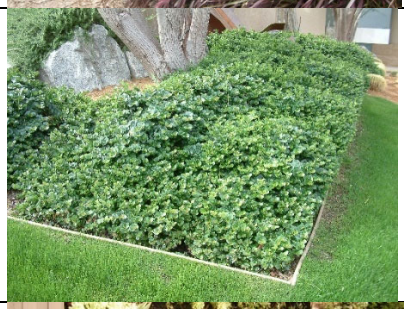
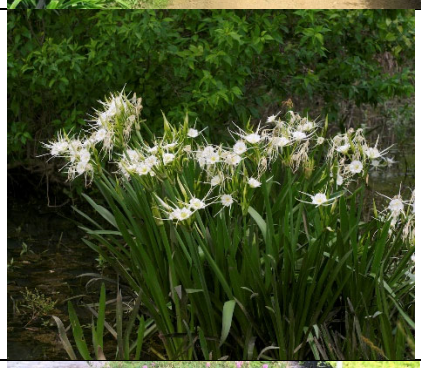
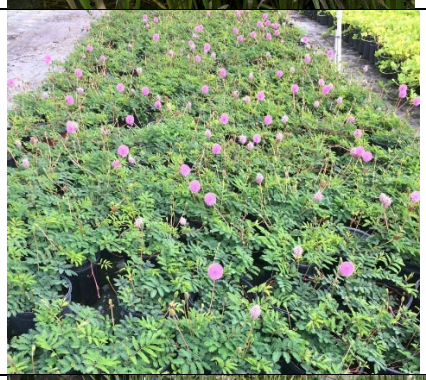
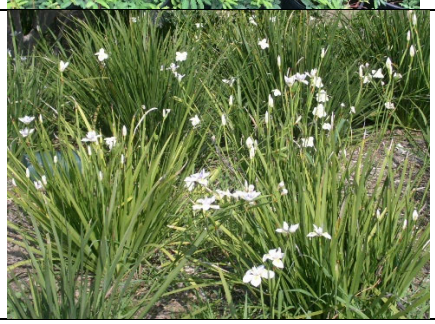
Category	Name	Image
Shrubs and Ornamentals	*Rhaphiolepsis india,* ***Indian Hawthorne***	
	Zamia pumila, ***Coontie***	
	Pennisetum setaceum "Rubrum", ***Purple Fountain Grass***	
	Carissa macrocarpa "Emerald Blanket", ***Dwarf Natal Palm***	
	Agave spp., ***Spineless Agaves***	

Table 7-6: Planting Palate Options (Continued)

Category	Name	Image
Groundcovers	Agapanthus spp., **Agapanthus**	
	Hymenocallis, **Spider Lily**	
	Mimosa strigillosa, **Sunshine Mimosa**	
	Dietes vegeta, **African Iris**	

the emergent typical section and to accommodate the necessary elements. The regulatory relief actions for include:

- Parking ratio relief
- Signage setback reduction (for lower level replacement signs)
- Increased signage area allowance for pedestrian-scaled building tenant identification
- Increased interior landscaping credits and bonuses
- Accommodation of frontage stormwater quality
- Outdoor dining area (expansion) exemptions

7.15.11 Summary

A rendering of the Concept Plan with the above elements and meeting the aforementioned goals and objectives is illustrated in **Figure 7-10**. The vision for this typical section is an urban planter that provides drainage, is easily maintained, and is aesthetically pleasing, with trees that provide shade but do not block visibility to the businesses along the corridor and ground cover vegetation that is vibrant and inviting. The pedestrian way will accommodate heavy pedestrian traffic and provide a feeling of safety in its width and buffering from the roadway. It will even accommodate the occasional bicyclists in a safe, and established area within the larger pedestrianway. The property buffer will provide room for signage, business access and entrances and other transition and property connectivity providing for a vibrant business and social district.

Figure 7-10: Rendering of Concept Plan

7.16 Traffic Control Plan

A detailed traffic control plan will be prepared with the final design plans. During construction, it may be necessary to temporarily restrict access to the existing lanes in each direction. Coordination with the

planned widening of the I-275 (SR 93) mainline and ramps may be required. Through the Supplemental Environmental Impact Study (SEIS) process, FDOT has identified the Locally Preferred Alternative (LPA) for I-275 (SR 93) that will be submitted to the Federal Highway Administration (FHWA) for approval. The LPA includes the full reconstruction of the Westshore Area Interchange that will include tolled managed lanes. Tolled managed lanes will also be added along I-275 (SR 93) connecting the Howard Frankland Bridge and the Westshore area to downtown Tampa.

7.17 Costs Estimates

Cost estimates include preliminary engineering costs, ROW costs, and construction costs associated with the Preferred Alternative as shown in **Table 7-7**. Preliminary Engineering (Final Design) and Construction Engineering Inspection (CEI) costs are calculated at 10% of the construction costs.

Table 7-7: Preferred Alternative Cost Estimate

Cost Component	Preferred Alternative
Construction	$11,643,000
Preliminary Engineering	$1,164,000
Construction Engineering Inspection	$1,164,000
Utility Relocation	$1,845,000
Right-of-Way	$0
Mitigation	$0
TOTAL COST	$15,816,000

7.18 Recycling of Salvageable Materials

The opportunity for the contractor to recycle any salvageable materials is encouraged by Hillsborough County. Such materials may include old asphaltic concrete pavement, base material, drainage structures, curb and gutter, and sidewalks. The existing pavement may be milled for recycling during the construction of the project. Any other salvageable materials would be identified during the design phase of the project. If these materials should be removed from the construction site, it is to be done as specified in the current FDOT *Standard Specifications for Road and Bridge Construction*.

7.19 User Benefits

The Preferred Alternative will enhance safety by providing a safe place for pedestrians and bicyclists to travel the corridor. Additional and enhanced crosswalks will facilitate the safe crossing of West Shore Boulevard by bicyclists and pedestrians. Enhanced lighting will improve safety for all users. These enhanced features and improved aesthetics will make the corridor more enjoyable for all users.

7.20 Future Land Use

As shown in **Figure 7-11**: Future Land Use the City of Tampa Adopted 2040 Comprehensive Plan (Imagine 2040) Future Land Use Map includes entirely Regional Mixed-Use adjacent to West Shore Boulevard, including the Westshore Plaza, International Mall, hotels, commercial uses, and office space. The Recommended Alternative is not expected to have any negative impact on land use and is consistent with the future land use goals.

7.21 Environmental Impacts

7.21.1 Wetlands

The project area was evaluated for wetlands and surface waters in accordance with Florida Administrative Code (FAC) 62.302.400 and the United States Army Corp of Engineers (USACE) 1987 Wetland Delineation Manual. Project scientists identified no wetlands within the Preferred Alternative; therefore, no impacts to wetlands are anticipated. The Lemon Street Ditch is a surface water located in the northeast quadrant of West Shore Boulevard and I-275 (SR 93) and runs east to west. This surface water flows westward through a series of open cut ditches, box culverts, and natural channels before discharging into Tampa Bay. The Lemon Street Ditch culvert under West Shore Boulevard is anticipated to be expanded, which may result in minor impacts to this surface water.

7.21.2 Threatened and Endangered Species

The Preferred Alternative is not expected to adversely affect any federally or state listed species. The West Shore Boulevard Complete Streets Project is within an urbanized area of predominantly commercial use. No suitable habitat for listed species was identified within or adjacent to the Preferred Alternative.

7.21.3 Water Permits

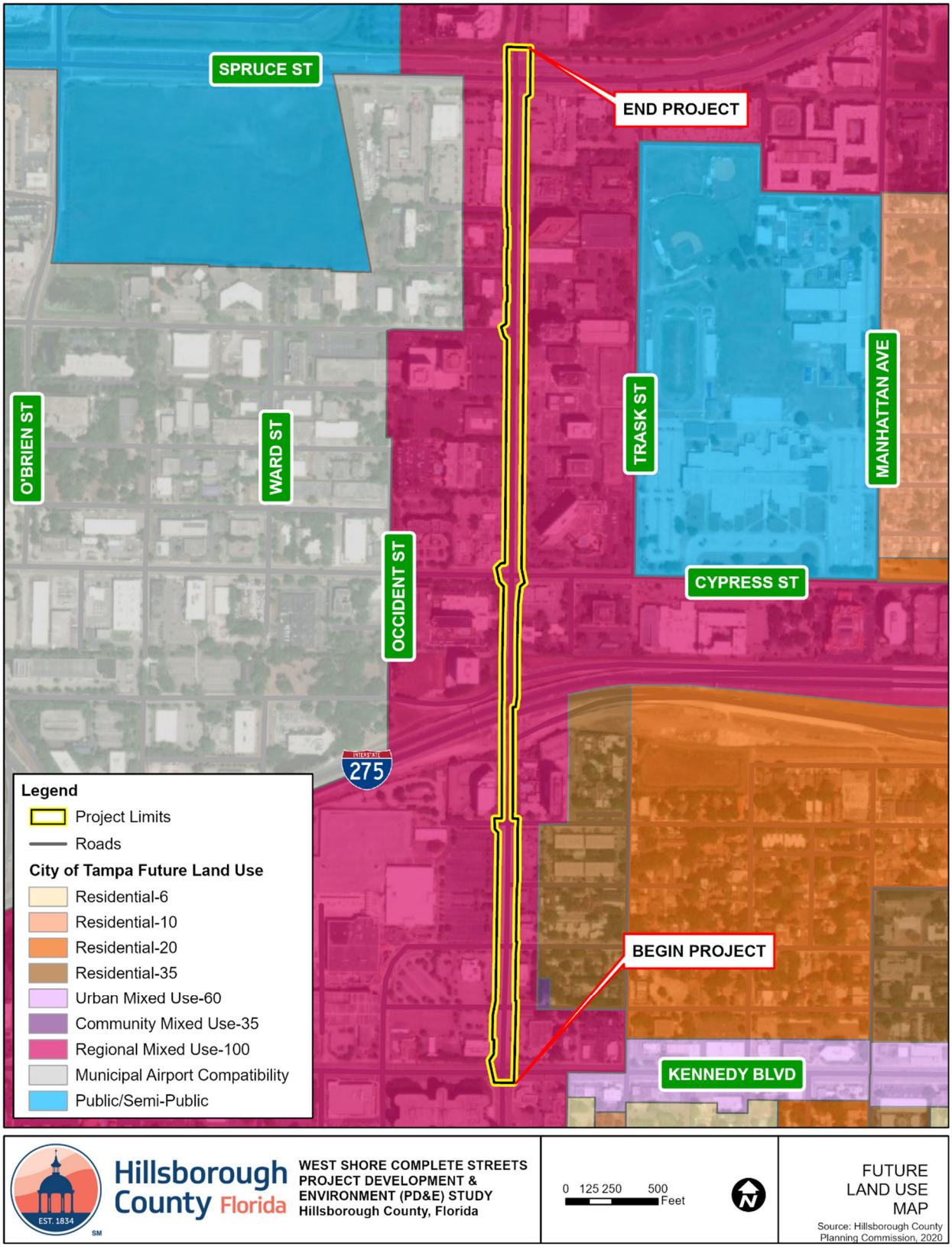
No new stormwater ponds or floodplain compensation sites are proposed. The proposed extension to the culvert at West Shore Boulevard, north of I-275 (SR 93) is anticipated to result in minor impacts to the Lemon Street Ditch. The state agency involved in the permitting process for the West Shore Boulevard Complete Streets project would be the SWFWMD. Permits would be required for all dredge and fill work in, on, or over wetlands or other surface waters (Chapter 62-330.020 FAC). The local agency which will require permits for the proposed improvements is the Environmental Protection Commission of Hillsborough County (EPCHC). The EPCHC would require permits for all construction activities occurring in wetlands or other surface waters. Federal agencies which may require permits for the proposed improvements are the USACE and U.S. Environmental Protection Agency (USEPA). The USACE would be involved in permitting dredge and fill activities in the waters of the United States.

7.22 Contamination

A Level I *Contamination Screening Evaluation Report* (CSER) was prepared for the Preferred Alternative in accordance with FDOT's *PD&E Manual, Part 2, Chapter 20*. Desktop research was performed to identify potential contamination sites defined by the following distances from the ROW that have the potential to impact the Preferred Alternatives or adjacent properties:

- All contamination sites within 500 feet
- Non-landfill solid waste sites within 1000 feet
- Solid waste landfills, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or National Priorities List (NPL) sites within ½ mile

Figure 7-11: Future Land Use



Resources included historical aerial photographs, FDEP Map Direct Website, FDEP OCULUS Document Management System, DEP Enterprise Information Portal, topographic maps, soil surveys, and other information provided by the Florida Department of Environmental Protection. A site reconnaissance was also performed to confirm the desktop research and to identify previously unknown potential contamination sites. Thirty-four (34) sites were identified within the search distance of the Preferred Alternative that may present contamination involvement to the project. Of these sites, twenty-nine (29) were ranked low risk, one (1) ranked as a medium risk, and four (4) were ranked as having a high risk.

These sites are shown in **Figure 7-12**, and summarized in **Table 7-8**.

7.23 Cultural Resources

A Cultural Resource Assessment Survey (CRAS) was conducted to locate and identify any archaeological sites and historic resources within the project Area of Potential Effects (APE) and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). As defined in 36 CFR Part § 800.16(d), the APE is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." All improvements will be constructed within existing public ROW or within easements provided by adjacent property owners that abut West Shore Boulevard. No ROW acquisition is envisioned. Based on the project type and location of the proposed work, the archaeological APE is limited to the existing West Shore Boulevard ROW and the historic APE is defined as the archaeological APE and immediately adjacent parcels to take into account potential indirect effects such as visual and access.

This CRAS was initiated in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended by Public Law 89-665; the Archaeological and Historic Preservation Act, as amended by Public Law 93-291; Executive Order 11593; and Chapter 267, Florida Statutes (FS). All work was carried out in conformity with Part 2, Chapter 8 ("Archaeological and Historical Resources") of the FDOT's PD&E Manual (FDOT 2020), and the Florida Division of Historical Resources' (FDHR) standards contained in the Cultural Resource Management Standards and Operational Manual (FDHR 2003), as well as with the provisions contained in the Chapter 1A-46, Florida Administrative Code (FAC). Principal Investigators meet the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture.

Figure 7-12: Potential Contamination Sites within the Study Area

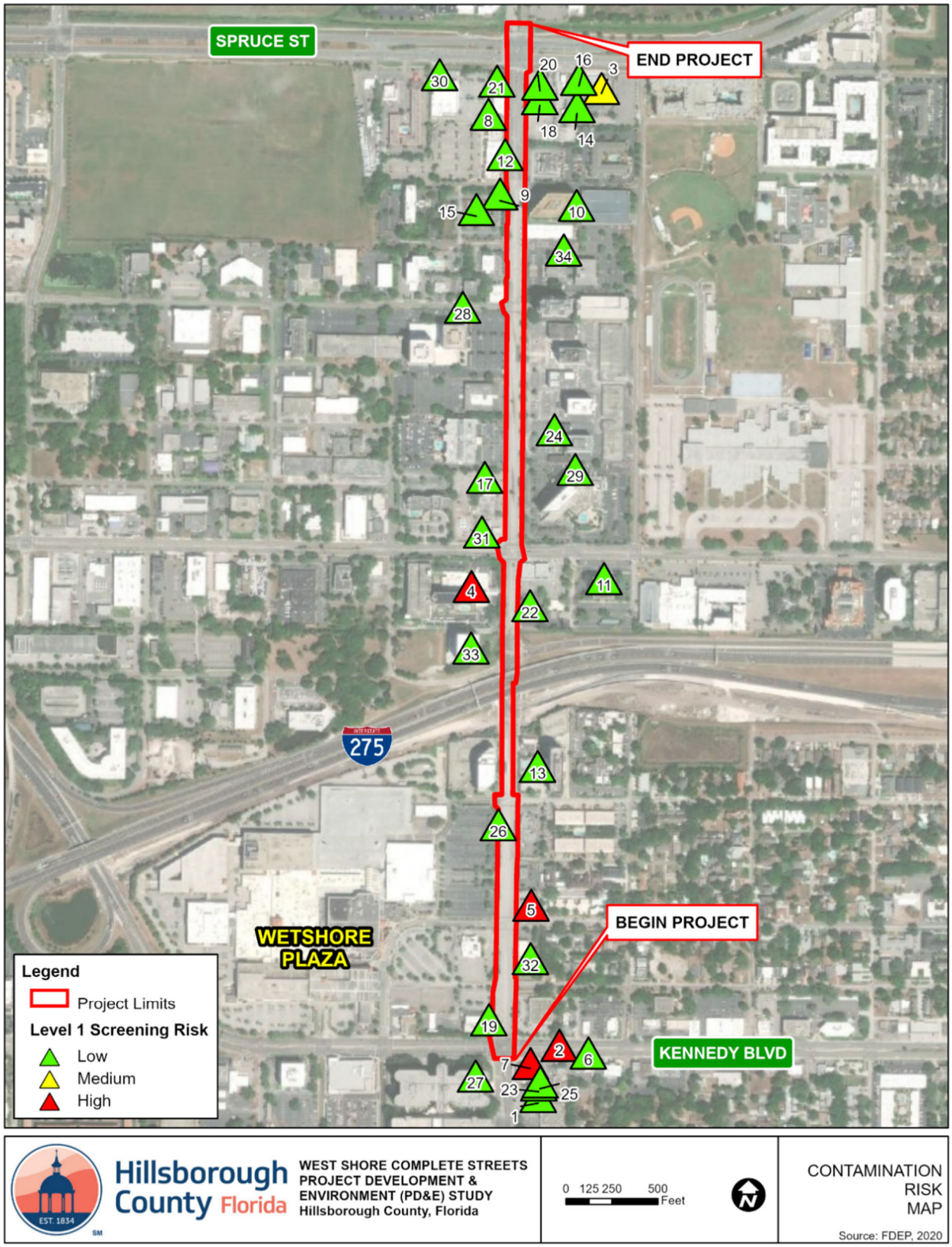


Table 7-8: Potential Contamination Sites by Risk Rating

Map ID	Site Name	Address	Risk Ranking
1	Regal Dry Cleaning	120 Shore Pkwy.	Low
2	Texaco Station	4671 W. Kennedy Blvd.	High
3	Westshore Commons LLC	4606 W. Boy Scout Blvd.	Medium
4	Holiday Inn Crown Plaza	710 N. Westshore Blvd.	High
5	Citgo-westshore	301 N. Westshore Blvd.	High
6	Nelsons One Hour Martinizing	122 Shore Pkwy.	Low
7	Metro Market At Kennedy	4650 W. Kennedy Blvd.	High
8	Intercontinental Rent A Car	1820 N. Westshore Blvd.	Low
9	Superior Car Rental	1700 N. Westshore Blvd.	Low
10	Paragon Group Inc	1715 N. Westshore Blvd.	Low
11	Westshore Squares	4600 W. Cypress S.t	Low
12	Auto Host	1810 N. Westshore Blvd.	Low
13	Embassy Hotel	555 Westshore Blvd.	Low
14	Thrifty Car Rental	1965 N. Westshore Blvd.	Low
15	Superior Car Rental	1720 N. Westshore Blvd.	Low
16	General Rent A Car	4622 Boy Scout Blvd.	Low
17	Budget Rent A Car	1110 N. West Shore Blvd.	Low
18	Thrifty Rent A Car	1965 N. Westshore Blvd.	Low
19	Chevron #48100-Hackworth	4801 W. Kennedy Blvd.	Low
20	Ajax Rent A Car	1902 N. Westshore Blvd.	Low
21	Dollar Rent A Car Fl	1902 N. Westshore Blvd.	Low
22	Chevron #48084	701 N. Westshore Blvd.	Low
23	Nelsons One Hour Martinizing	122 S. Westshore Blvd.	Low
24	Personal Touch Cleaners	1111 Westshore Blvd #1014	Low
25	Regal Dry Cleaning & Laundry (Formerly)	120 Westshore Blvd. S.	Low
26	Former Dollar Rent A Car	440 N. Westshore Blvd.	Low
27	Urban Center	4830 W. Kennedy Blvd.	Low
28	The Towers @ Westshore (Former Austin Center West)	1410 N. Westshore Blvd.	Low
29	Tampa Marriott Westshore Hotel	1001 N. Westshore Blvd.	Low
30	Dollar Rent A Car	4720 W. Spruce St.	Low
31	Shell-Mansour	1002 N. Westshore Blvd.	Low
32	Circle K #2709803	201 N. West Shore Blvd.	Low
33	Amscot Corp	600 N. Westshore Blvd.	Low
34	AAA Auto Club South	1515 N. West Shore Blvd.	Low

Background research, including a review of the Florida Master Site File (FMSF), indicated that one archaeological site is located within the project APE. Archaeological site 8HI00323, shown in **Figure 7-13,** was recorded as a prehistoric camp site and the State Historic Preservation Officer (SHPO) determined that there was insufficient information to determine the NRHP-eligibility of the site. Nonetheless, there appeared little likelihood that intact portions of the site remain with the APE. This area was completely

covered with asphalt and concrete, and limited testing was conducted within the site where possible. Thirty-one shovel tests were placed at roughly 100-meter (m) intervals along both sides of the ROW, including three within the boundaries of 8HI00323, as shown in **Figure 7-13**. All evidenced disturbance to a depth of a meter. As a result of these investigations, no archaeological sites were discovered and no evidence of 8HI00323 was found.

Historical/architectural background research including a review of the FMSF and the NRHP, indicated that one historic resource (8HI12222) was previously recorded within the APE, shown in **Figure 7-13**. This resource is a circa (ca.) 1966 Modern style commercial building located at 4720 West Cypress Street and was determined ineligible for listing in the NRHP by the SHPO in 2014. A review of relevant historic United States Geographical Survey (USGS) quadrangle maps, historic aerial photographs, and the Hillsborough County property appraiser's website data revealed the potential for 17 new historic resources, constructed in or prior to 1974, within the APE (Henriquez 2020).

Historical/architectural field survey resulted in the identification and evaluation of 17 historic resources (8HI15028 – 8HI15044) within the APE. These include nine Masonry Vernacular style (8HI15029 – 8HI15035, 8HI15042, 8HI15044), six Mid-Century Modern style (8HI15036 – 8HI15040, 8HI15043), and one Brutalist style (8HI15041) building constructed between ca. 1955 and ca. 1974, as well as one linear resource, West Shore Boulevard (8HI15028). Overall, the newly identified historic resources have been altered, lack sufficient architectural or engineering features, and are not significant embodiments of a type, period, or method of construction. In addition, background research did not reveal any historic associations with significant persons and/or events. Thus, the resources do not appear eligible for listing in the NRHP, either individually or as a part of a historic district.

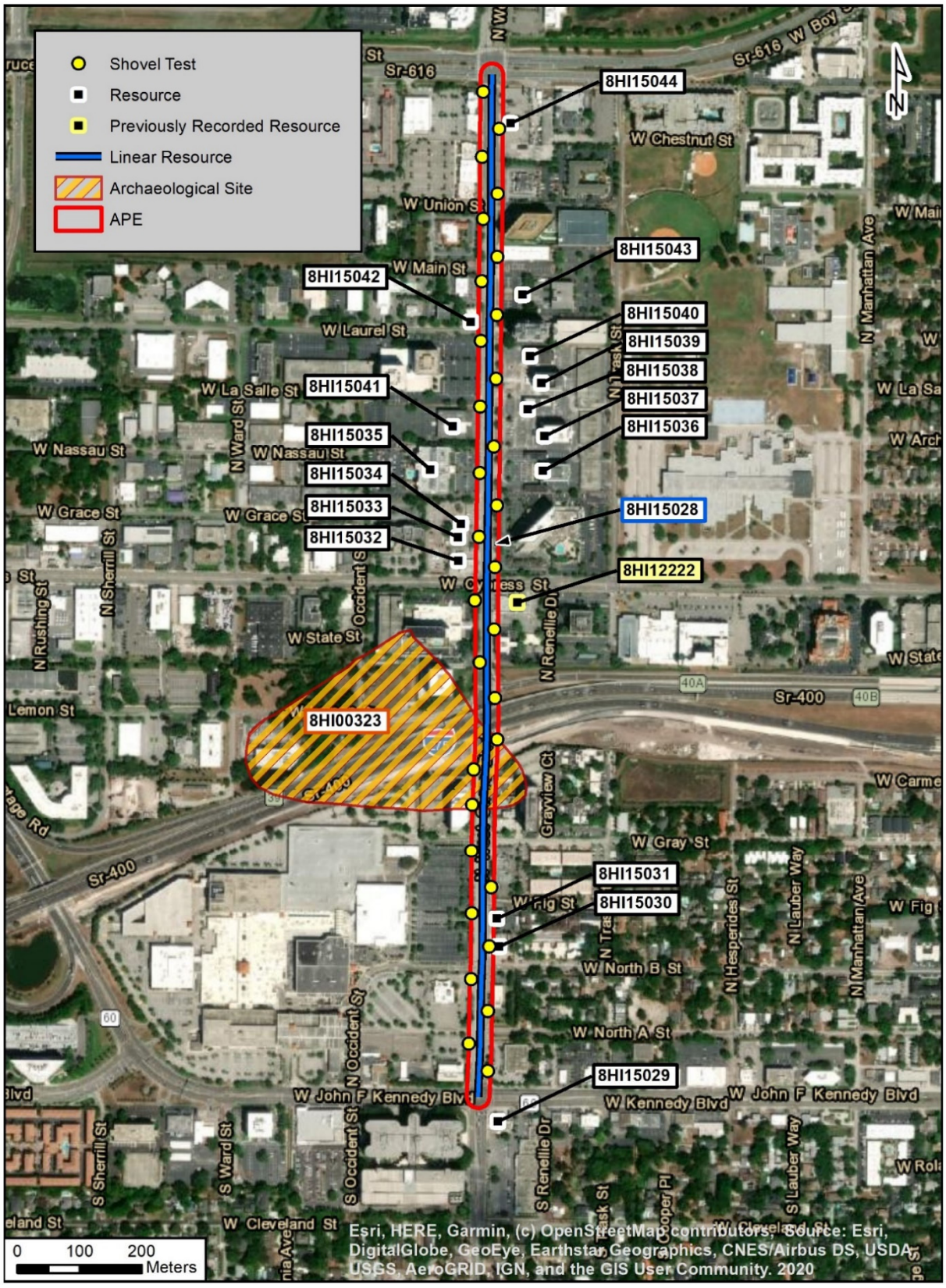
Based on the background research and survey results, including the excavation of 31 shovel tests, no archaeological sites or historic resources that are listed, eligible for listing, or that appear potentially eligible for listing in the NRHP were located within the APE. Therefore, the proposed undertaking is expected to have no involvement with cultural resources.

Coordination with the SHPO indicated that SHPO will not provide a determination of effects until permitting agencies are identified for the project. This is anticipated during the design phase. A letter dated October 8, 2020 from SHPO is provided in an appendix of the CRAS.

7.24 Noise

Land uses along West Shore Boulevard include commercial establishments, hotels, restaurants, and multi-story office buildings. Except for outdoor eating spaces and the hotel pools, these land uses are not defined by the FDOT *PD&E Manual* as noise sensitive uses. In most cases, the outdoor eating spaces and the hotel pools are set back from the roadway such that noise barriers would not provide the needed benefit, or would not have sufficient use to meet the criteria for a noise barrier. The Embassy Suites outdoor pool, south of I-275 (SR 93) on the east side of West Shore Boulevard, is already

Figure 7-13: Shovel Tests and Cultural Resources



protected by an eight- to 12-foot privacy wall. Changing the alignment to reduce noise levels at these locations is not feasible.

There are three types of projects when it comes to traffic noise:

1. Type I Projects - A highway construction project (new location or physical alteration of existing highway) which substantially changes horizontal and vertical alignment, profile or adds number of through lanes.
2. Type II Projects - A federal, federal-aid, or state funded highway project for noise abatement on an existing highway. Type II projects are commonly referred to as retrofit projects and are allowed (but not mandatory) under 23 CFR Part 772. Florida does not have a Type II Program.
3. Type III Projects - A project that does not meet the classifications of a Type I or Type II. Type III projects do not require a noise analysis.

According to the FDOT *PD&E Manual*, this project is Type III Project. No federal, federal-aid, or state funding is anticipated, no new through or auxiliary lanes are being added, and there is no substantial change in horizontal or vertical alignment. Some examples of Type III projects include:

- Construction of bicycle and pedestrian lanes, paths, and facilities,
- Activities included in the FDOT highway safety plan under 23 U.S.C § 402, provided those activities do not contain elements of Type I projects,
- Landscaping (including the removal of existing vegetation by FDOT within FDOT ROW),
- Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur,
- Deployment of electronics, photonics, communications, or information processing used singly or in combination, or as components of a fully integrated system, to improve the efficiency or safety of a surface transportation system or to enhance security or passenger convenience,
- Modernization of a highway by surfacing, restoration, rehabilitation, or reconstruction, provided the project does not contain elements of Type I projects, or
- Placement of overhead gantries on a highway to collect tolls electronically that do not disrupt existing traffic patterns.

Type III projects do not require a noise analysis or consideration of abatement measures. Therefore, a detailed noise analysis was not performed or warranted for this project. To facilitate compatible land use development, noise contours identifying the extent of traffic noise impacts have been developed and presented in a Noise Study Report (October 2020). The Noise Study Report also describes the project improvements and further explains that this is a Type III project that does not warrant a traffic noise analysis.

7.25 Air Quality

An *Air Quality Technical Memorandum* was prepared and is summarized here. The project is located in an area that is designated attainment for criteria air pollutants: ozone/nitrogen dioxide/particulate matter (2.5 microns in size and 10 microns in size)/sulfur dioxide/carbon monoxide/lead. The project

alternatives were subjected to a carbon monoxide (CO) screening model that makes various conservative worst-case assumptions related to site conditions, meteorology, and traffic. The FDOT's screening model, CO Florida 2004 (released September 7, 2004) uses the latest United States Environmental Protection Agency approved software (MOBILE6 and CAL3QHC) to produce estimates of one-hour and eight-hour CO concentrations at default air quality receptor locations. The one-hour and eight-hour estimates can be directly compared to the one- and eight-hour National Ambient Air Quality Standards (NAAQS) for CO that are 35 parts per million (ppm) and 9 ppm, respectively. This project passed the screening model.

Construction-phase air quality impacts will be short-term and will primarily be in the form of emissions from diesel-powered construction equipment and dust from construction activities. Air pollution associated with the creation of airborne particles will be effectively controlled through the use of watering or the application of other controlled materials in accordance with FDOT's Standard Specifications for Road and Bridge Construction as directed by the County.

7.26 Design and Construction Phasing

The first segment likely to be constructed will be the segment from West Gray Street to West Cypress Street, since this segment will be constructed as part of FDOT's I-275 (SR 93) reconstruction project (Tampa Bay Next) currently funded for construction in 2024.

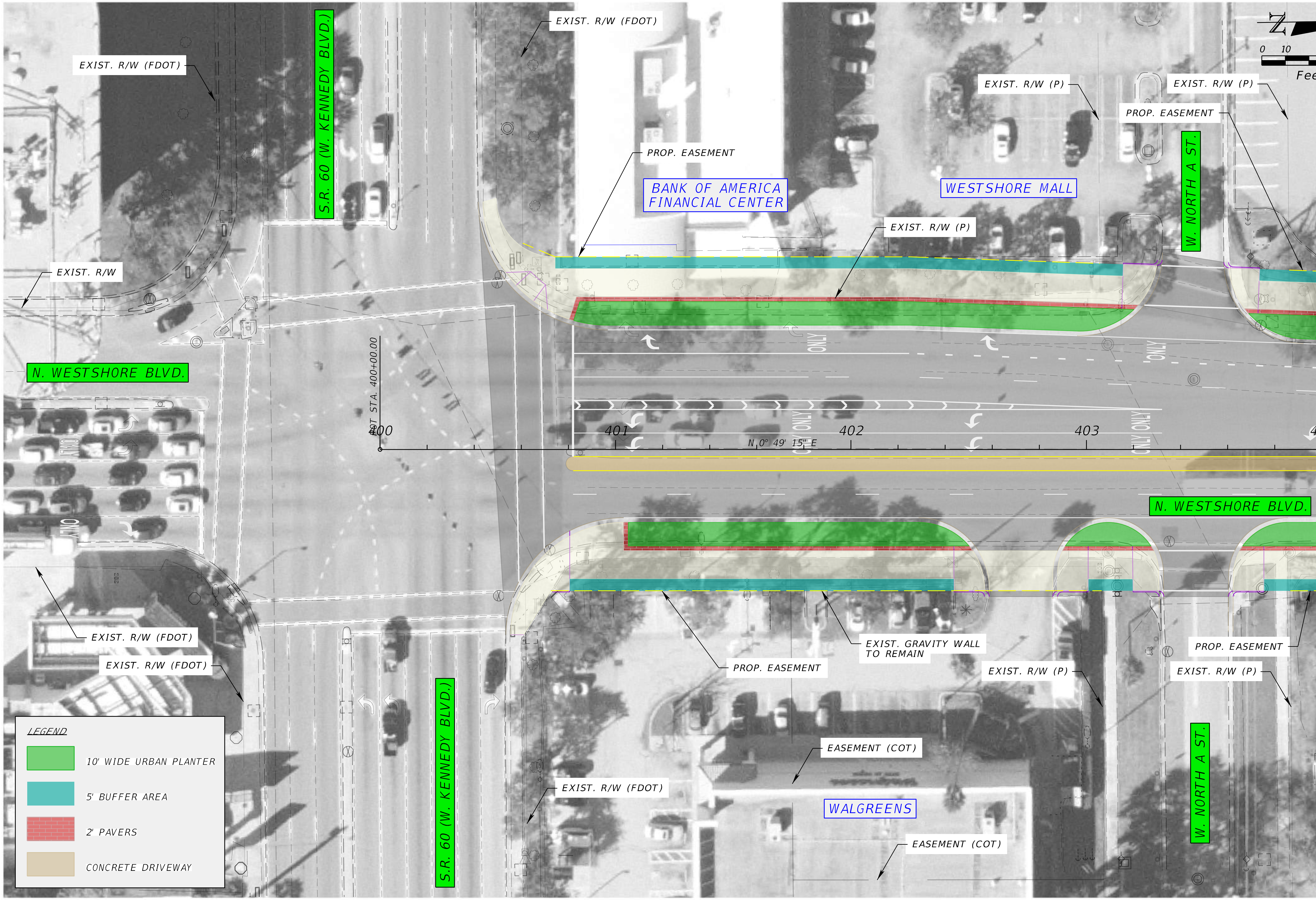
The remaining two segments, north and south of I-275 (SR 93), are not currently programmed for Final Design or Construction phases. They could be constructed at the same time or separately, depending on funding and whether the required easements are donated by property owners to Hillsborough County. However, some of the property owners within Segment 3 from West Cypress Street to West Boy Scout Boulevard, especially on the east side, are motivated to grant easements required for the improvements. They have expressed interest in having the overhead utilities buried to improve aesthetics. In addition, the Westshore Alliance has suggested that a demonstration project is desired for this area, where redevelopment has started in some places, such as the Container Store and AAA, that facilitate the planned improvements.

The segment from West Kennedy Boulevard to West Gray Street can proceed once Reo and Trask Streets are extended under I-275 (SR 93), the Final Design phase is funded, and all required easements have been granted to Hillsborough County.

8 List of Technical Reports

1. *Alternative Typical Section Initial Screening Memoranda*
2. *Public Involvement Plan*
3. *Natural Resources Evaluation*
4. *Location Hydraulics Report*
5. *Conceptual Drainage Design Report*
6. *Cultural Resource Assessment Survey*
7. *Project Traffic Analysis Report*
8. *Contamination Screening Evaluation Report*
9. *Air Quality Technical Memorandum*
10. *Noise Study Report*
11. *Comments and Coordination Report*
12. *Geotechnical Technical Memorandum*
13. *Cypress/Memorial Drainage Area Study*

APPENDIX A
Conceptual Design Plans



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999

Hillsborough County Florida

CAPITAL PROGRAMS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
PROP. ULTIMATE CONCEPT TYPICAL SECTION - 12C	69641000	

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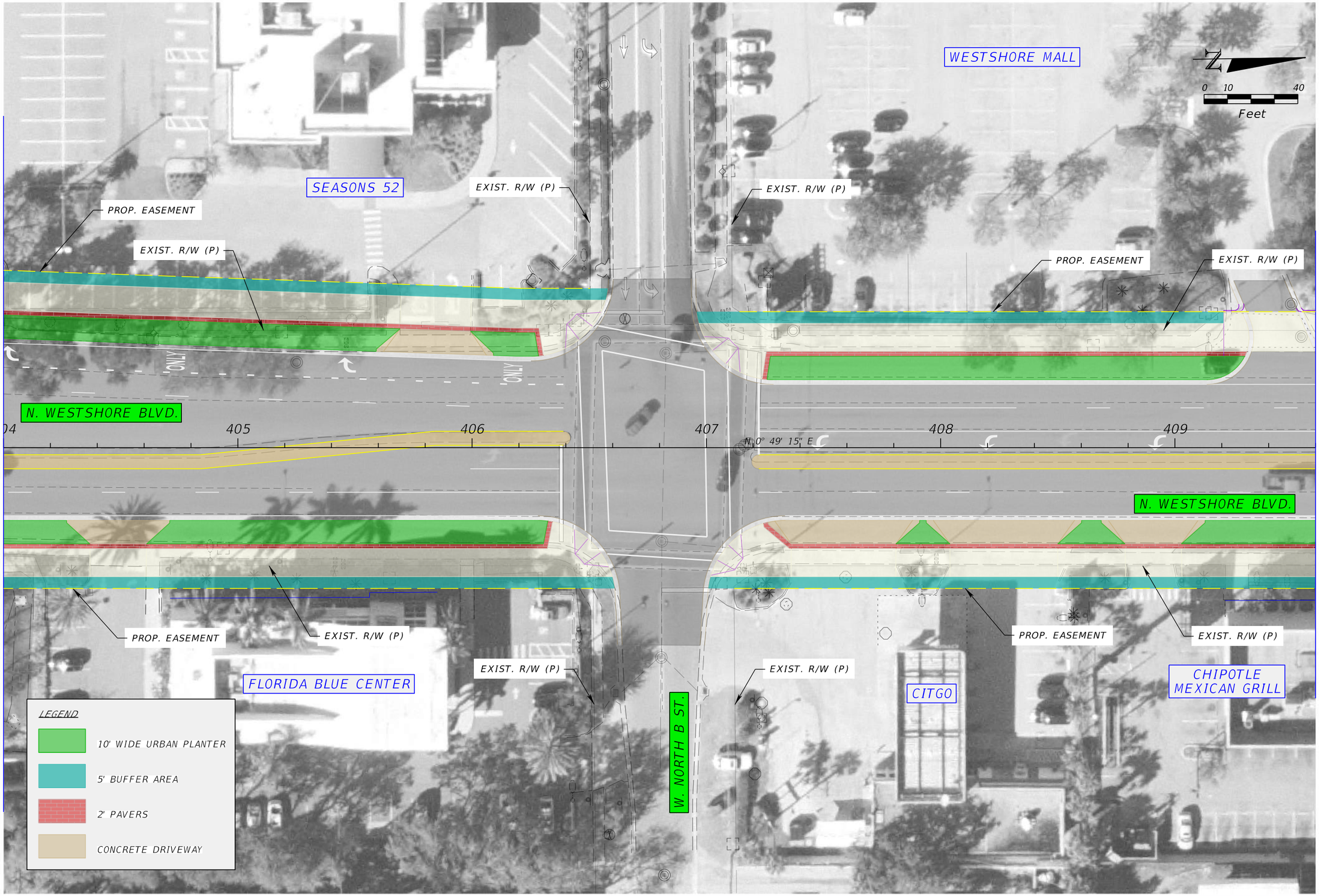

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Hillsborough County Florida

CAPITAL PROGRAMS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
PROP. ULTIMATE CONCEPT TYPICAL SECTION - 12C	69641000	

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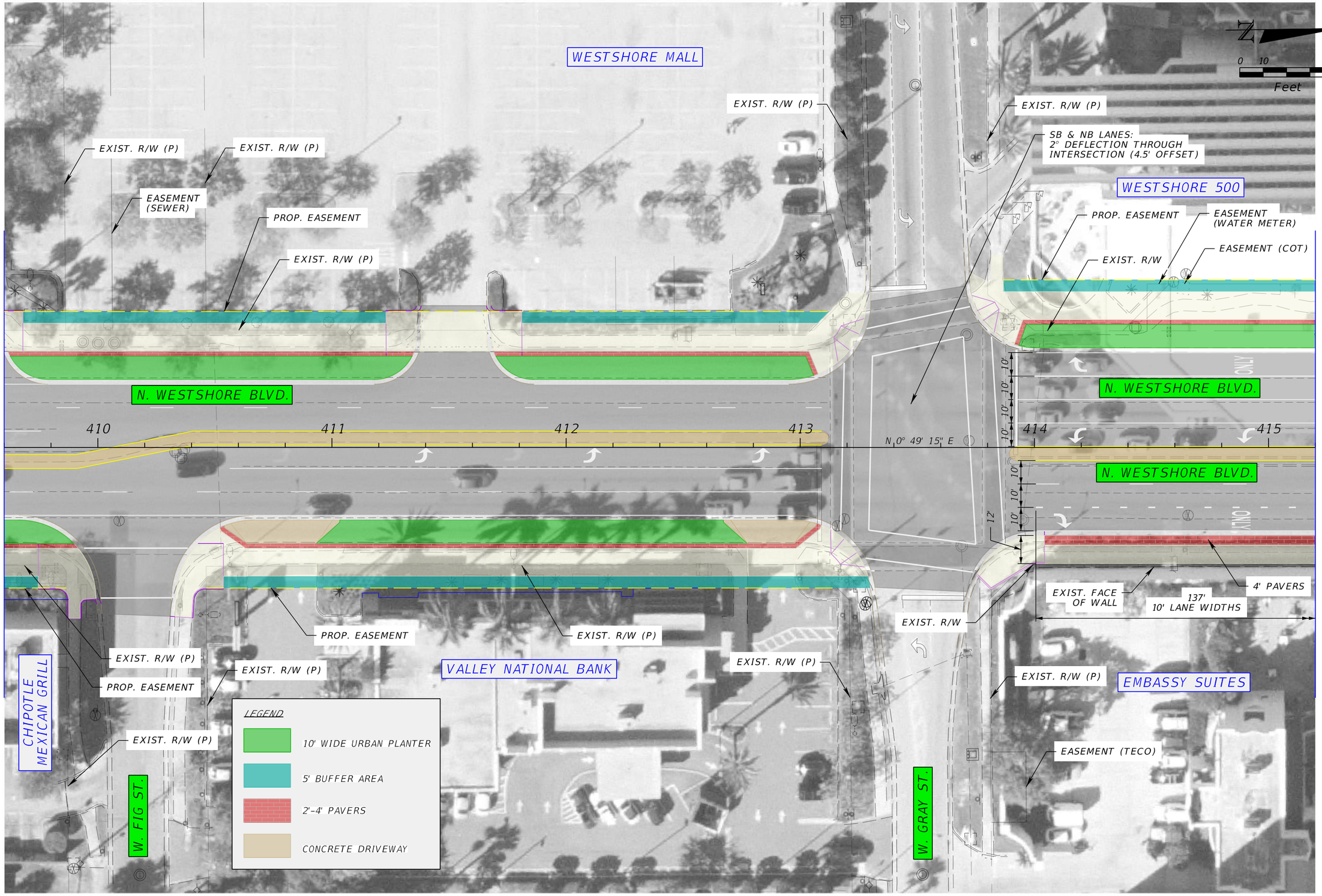

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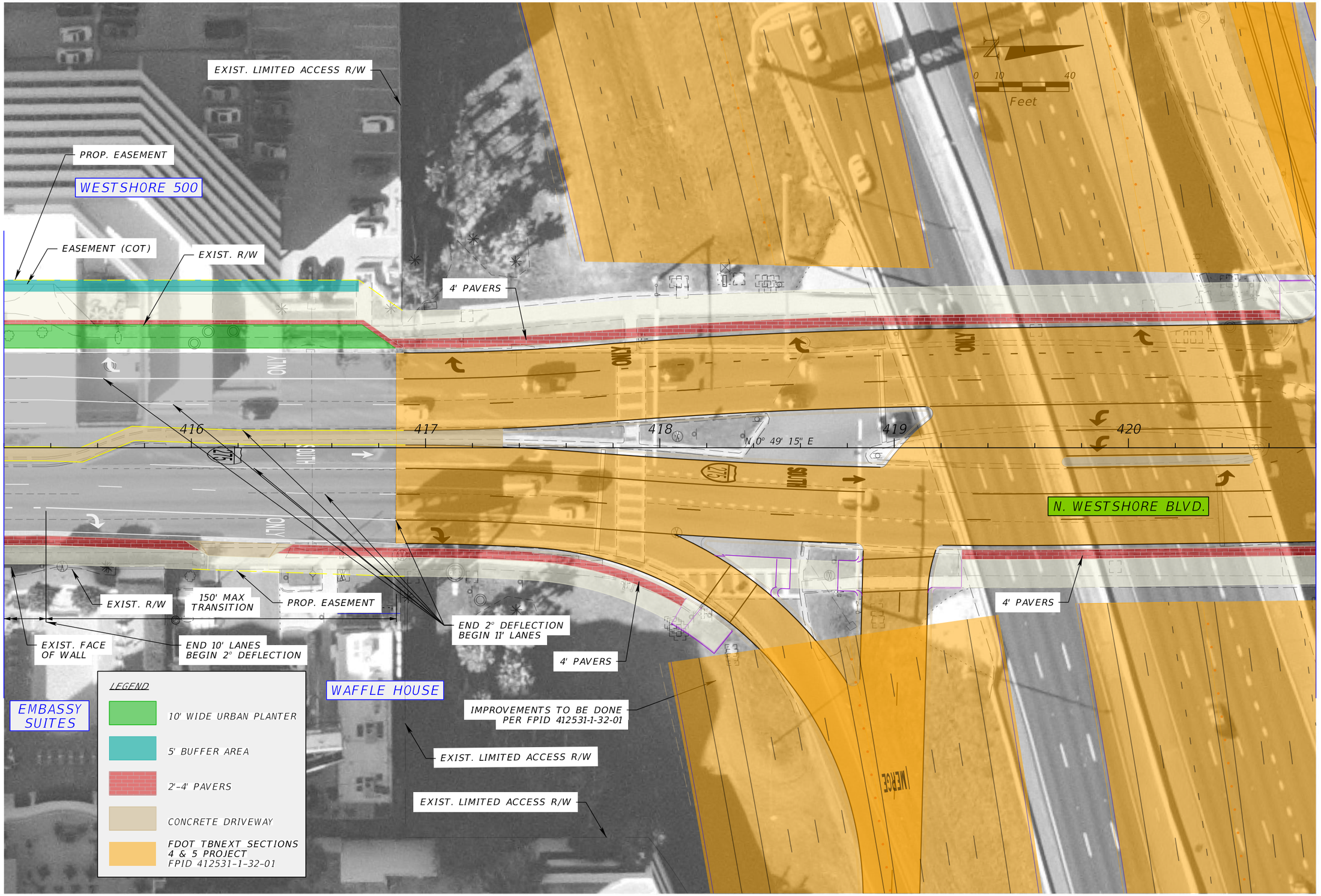

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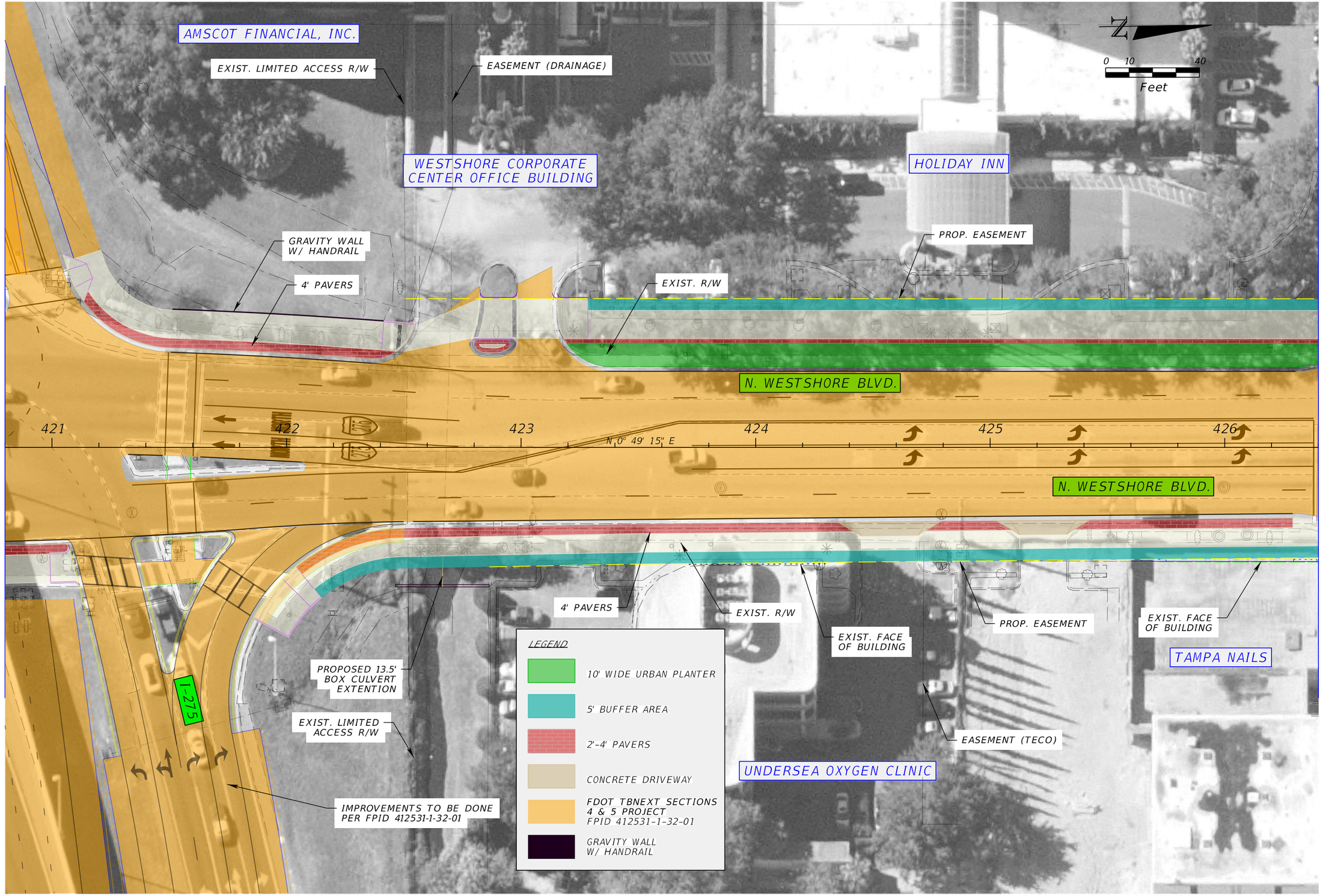
PROP. ULTIMATE CONCEPT
TYPICAL SECTION - 12C

CIP NO. 69641000

SHT. NO.



MATCHLINE STA. 420+80.00

MATCHLINE STA. 426+40.00

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999

Hillsborough County Florida

CAPITAL PROGRAMS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS

PROP. ULTIMATE CONCEPT
TYPICAL SECTION - 12C

CIP NO.	SHT. NO.
69641000	

MATCHLINE STA. 426+40.00

MATCHLINE STA. 432.00.00

W. CYPRESS ST.

EXIST. R/W (ORB 19188)

EXIST. R/W (P)

SUBWAY

SHELL

THEE DOLLHOUSE

CARL'S VAN RENTAL

PROP. EASEMENT

EXIST. R/W (FDOT)

EXIST. R/W (DB 575)

EASEMENT (COT)

STA. 427+01.71

N. WESTSHORE BLVD.

427 428 429 430 431

N 0° 33' 27" E

N. WESTSHORE BLVD.

0 10 40

Feet

EXIST. R/W (ORB 6131)

PROP. EASEMENT

EXIST. R/W (DB 575)

EXIST. R/W (ORB 3195)

W. CYPRESS ST.

MARRIOT

LEGEND

- 10' WIDE URBAN PLANTER
- 5' BUFFER AREA
- 2' PAVERS
- CONCRETE DRIVEWAY
- POTENTIAL AREA FOR A DESIGNATED PEDESTRIAN CROSSING
- FDOT TBNEXT SECTIONS 4 & 5 PROJECT FPID 412531-1-32-01

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999

Hillsborough County Florida

CAPITAL PROGRAMS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS

PROP. ULTIMATE CONCEPT TYPICAL SECTION - 12C

CIP NO. 69641000

SHT. NO.

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RAMADA BY WYNDHAM

CENTER FOR TECHNOLOGY TRAINING

THE TOWERS AT WESTSHORE

N

0 10 40

Feet

EASEMENT (GENERAL TELEPHONE)

PROP. EASEMENT

EASEMENT (GENERAL TELEPHONE)

EXIST. R/W (BD 575)

EXIST. R/W (FDOT)

N. WESTSHORE BLVD.

32 433 434 435 436 437

N 0° 33' 27" E

N. WESTSHORE BLVD.

MATCHLINE STA. 432.00.00

MATCHLINE STA. 437.60.00

PROP. EASEMENT

EXIST. R/W (DB 575)

EASEMENT (DRAINAGE)

LEGEND

10' WIDE URBAN PLANTER

5' BUFFER AREA

2" PAVERS

CONCRETE DRIVEWAY

POTENTIAL AREA FOR A DESIGNATED PEDESTRIAN CROSSING

WESTSHORE CITY CENTER (F.N.A. AUSTIN CENTER)

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999

Hillsborough County Florida

CAPITAL PROGRAMS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
PROP. ULTIMATE CONCEPT TYPICAL SECTION - 12C	69641000	

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MATCHLINE STA. 437.60.00

MATCHLINE STA. 443.20.00

EXIST. R/W (ORB 4055)

W. LAUREL ST.

EXIST. R/W (P)

THE TOWERS AT WESTSHORE

STARBUCKS

PUREPOINT FINANCIAL

BLICK ART MATERIALS

PROP. EASEMENT

EXIST. R/W (FDOT)

EXIST. R/W (BD 575)

EXIST. R/W (DB 575)

N. WESTSHORE BLVD.

POT STA. 440+30.29

438 439 440 441 442 443

N 0° 33' 27" E

N 0° 33' 27" E

0 10 40

Feet

PROP. EASEMENT

TOWER PLACE

EXIST. R/W (DB 575)

AAA WESTSHORE CAR CARE PLUS

EASEMENT (TECO)

EASEMENT (COT)

WESTSHORE CITY CENTER (F.N.A. AUSTIN CENTER)

LEGEND

10' WIDE URBAN PLANTER

5' BUFFER AREA

2" PAVERS

CONCRETE DRIVEWAY

POTENTIAL AREA FOR A DESIGNATED PEDESTRIAN CROSSING

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999

Hillsborough County Florida

CAPITAL PROGRAMS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS

PROP. ULTIMATE CONCEPT
TYPICAL SECTION - 12C

CIP NO. 69641000

SHT. NO.

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MATCHLINE STA. 443.20.00

MATCHLINE STA. 448.80.00

EXIST. R/W (P)

PROP. EASEMENT

W. MAIN ST.

EXIST. R/W (P)

N. HYATT PLACE

RUTH'S CHRIS STEAK HOUSE

EXIST. R/W (P)

W. UNION ST.

OLIVE GARDEN ITALIAN RESTAURANT

AT&T STORE

N

0 10 40

Feet

EXIST. R/W (ORB 21676 AND ORB 21974)

PROP. EASEMENT

EXIST. R/W (DB 575)

PROP. EASEMENT

EXIST. R/W (FDOT)

EXIST. R/W (DB 575)

N. WESTSHORE BLVD.

444 445 446 447 448

N 0° 33' 27" E

N. WESTSHORE BLVD.

EXIST. R/W (DB 575)

EXIST. R/W (DB 575)

AAA WESTSHORE CAR CARE PLUS

WESTSHORE CENTER

PROP. EASEMENT

W. UNION ST.

PROP. EASEMENT

EASEMENT (COT)

EASEMENT (SEWER)

THE PENTHOUSE CLUB

LEGEND

- 10' WIDE URBAN PLANTER
- 5' BUFFER AREA
- 2' PAVERS
- CONCRETE DRIVEWAY
- POTENTIAL AREA FOR A DESIGNATED PEDESTRIAN CROSSING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999

Hillsborough County Florida

CAPITAL PROGRAMS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS

PROP. ULTIMATE CONCEPT
TYPICAL SECTION - 12C

CIP NO. 69641000

SHT. NO.

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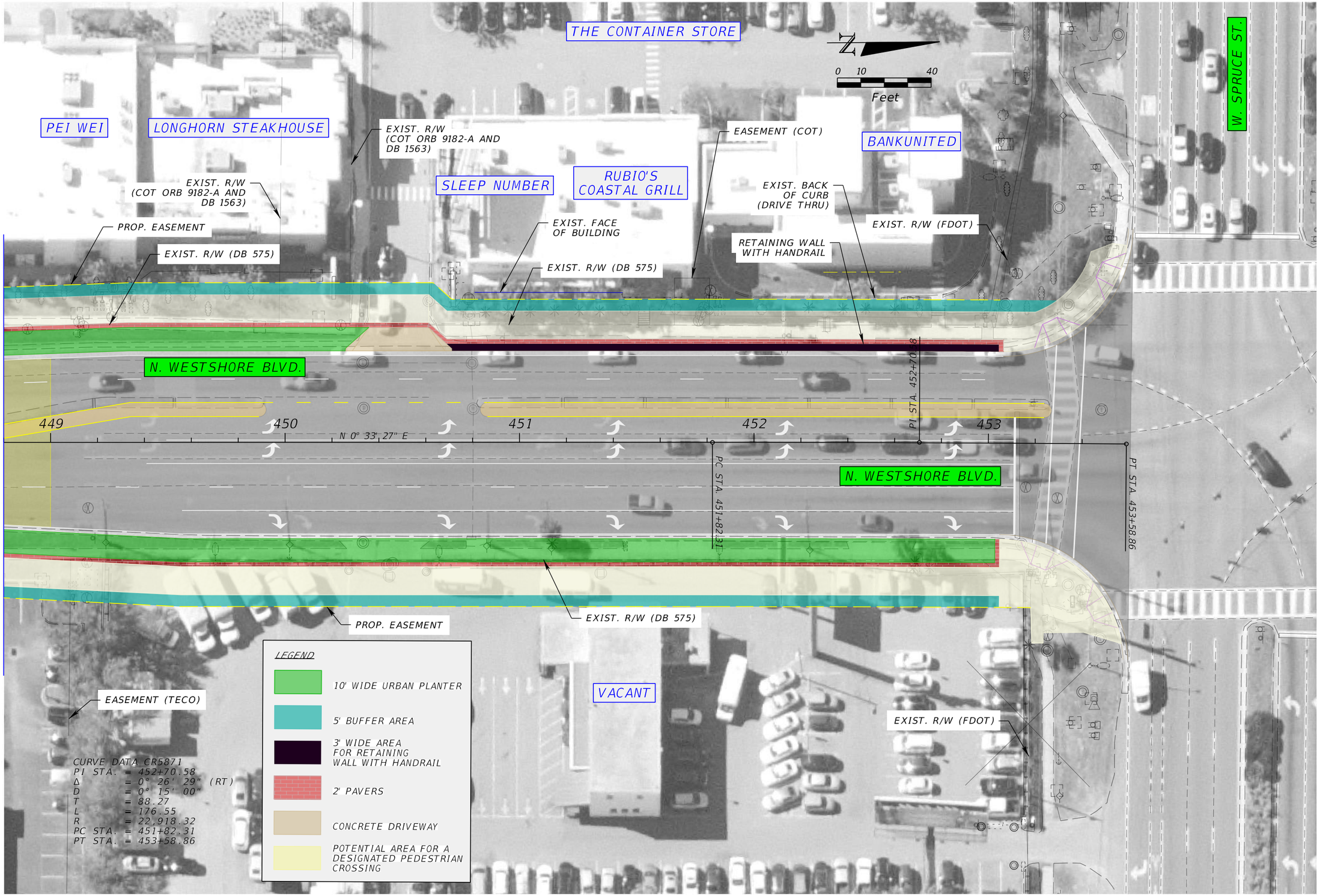

LEGEND

- 10' WIDE URBAN PLANTER
- 5' BUFFER AREA
- 3' WIDE AREA FOR RETAINING WALL WITH HANDRAIL
- 2' PAVERS
- CONCRETE DRIVEWAY
- POTENTIAL AREA FOR A DESIGNATED PEDESTRIAN CROSSING

CURVE DATA CR5871
PI STA. = 452+70.58
Δ = 0° 26' 29" (RT)
D = 0° 15' 00"
T = 88.27
L = 176.55
R = 22,918.32
PC STA. = 451+82.31
PT STA. = 453+58.86

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999

Hillsborough County Florida

CAPITAL PROGRAMS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS

PROP. ULTIMATE CONCEPT
TYPICAL SECTION - 12C

CIP NO.	SHT. NO.
69641000	

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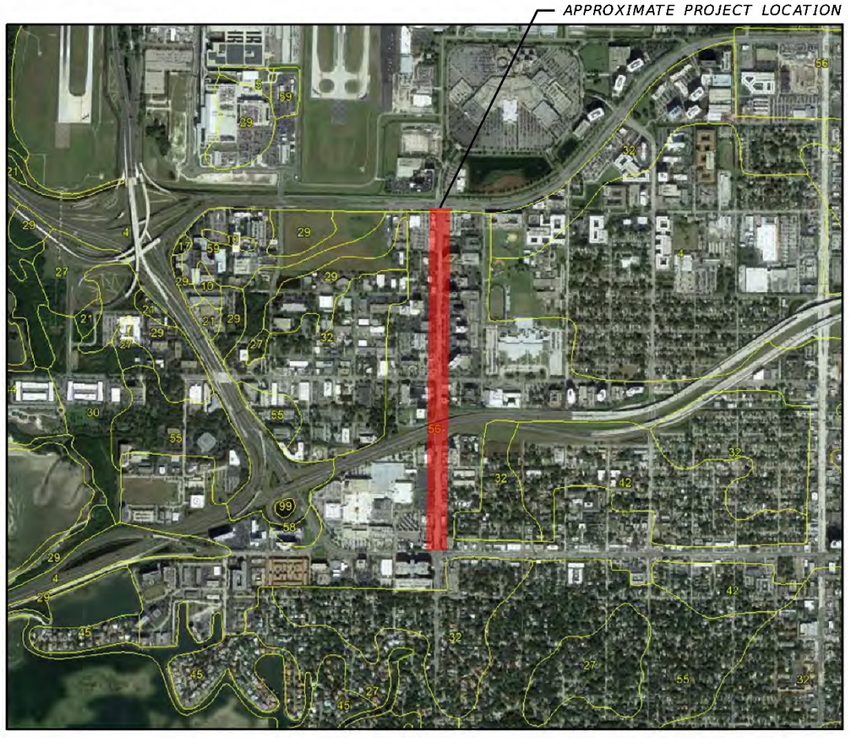
APPENDIX B
USDA Soil Survey and USGS Quadrangle Maps

USDA SOIL SURVEY MAP



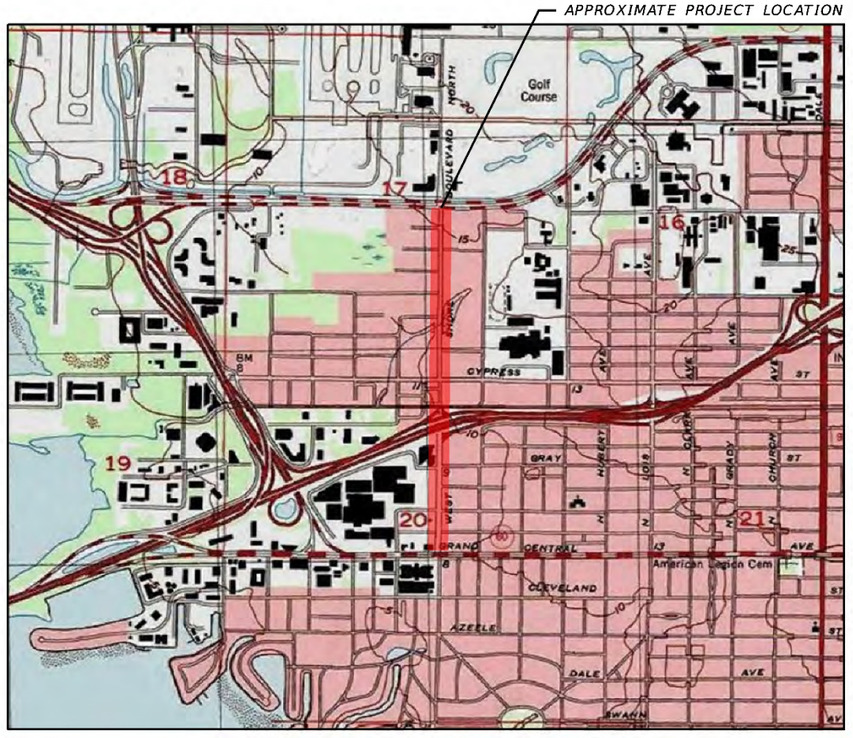
REFERENCE: USDA SOIL SURVEY OF HILLSBOROUGH COUNTY, FLORIDA

TOWNSHIP: 29 S
RANGE: 18 E
SECTION: 17 & 20

0 500 2000
Feet

N

USGS TOPOGRAPHIC MAP



REFERENCE: "GANDY BRIDGE, FLORIDA" USGS QUADRANGLE MAP

TOWNSHIP: 29 S
RANGE: 18 E
SECTION: 17 & 20

0 500 2000
Feet

N

REVISIONS						
DATE	DESCRIPTION	DATE	DESCRIPTION	KIRK M. EASTMAN, P.E. P.E. LICENSE NUMBER 50733 AREHNA ENGINEERING, INC. 5012 W. LEMON STREET TAMPA, FL 33609 CERTIFICATE OF AUTHORIZATION: 28410	PUBLIC WORKS DEPARTMENT TECHNICAL SERVICES DIVISION 601 E. KENNEDY BLVD. TAMPA, FLORIDA 33602	WESTSHORE BLVD COMPLETE STREETS USDA & USGS VICINITY MAPS	CIP NO. 69641000	SHT. NO.

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U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
The National Map
US Topo
GANDY BRIDGE QUADRANGLE
FLORIDA
7.5-MINUTE SERIES
T28S R17E
T28S R18E
T29S R17E
T29S R18E
T30S R17E
T30S R18E
TAMPA
ST. PETERSBURG
GULF OF MEXICO
Howard Frankland Bridge
HILLSBOROUGH CO.
PINELLAS CO.
Gandy Bridge
Rocky Point
Drew Park
Tampa International Airport
Ballast Point
Ybor Channel
Hillsborough Bay
Old Tampa Bay
Tampa Bay
Rattlesnake
Interbay Peninsula
Produced by the United States Geological Survey
SCALE 1:24 000
CONTOUR INTERVAL 5 FEET
GANDY BRIDGE, FL
2018

APPENDIX C
Typical Section Evaluation Memoranda

Road Diet Analysis Memorandum

Date: June 17, 2020

Project: West Shore Boulevard Complete Streets
PD&E Study
Hillsborough County

Project No.(s): CIP No. 69641000
AEP: 1040075000

Purpose: **West Shore Complete Streets PD&E Study – Traffic Analysis of Potential 6LD to 4LD Road Diet from Kennedy Boulevard to Gray Street**

The goal of the West Shore Complete Streets PD&E Study is to transform West Shore Boulevard using a "Grand Boulevard" concept to remake this auto-oriented roadway into a priority pedestrian street complete with wide sidewalks, shade trees, pedestrian amenities, upgraded lighting, and landscaping consistent with the City of Tampa's Westshore Overlay District. In order to develop proposed typical sections to accomplish this transformation goal, the project limits were divided into three segments (see **Attachment 1**) for the purpose of this project. Segment 1 extends from Kennedy Boulevard to Gray Street, Segment 2 extends from Gray Street to Cypress Street, and Segment 3 extends from Cypress Street to Spruce Street. Segment 1 (Kennedy Boulevard to Gray Street) is a 6-lane section located adjacent to Westshore Mall, which is planned for redevelopment according to development standards of the Westshore Overlay District, which accomplishes the goal of making West Shore Boulevard a priority pedestrian corridor at least on the west side of the road. There is also the possibility of repurposing the outside through lanes NB and SB in Segment 1 for these improvements, which will free up 22 additional feet (through lanes in Segment 1 are 11 feet wide) and reduce the need for easements.

The purpose of this analysis is to determine if implementing the six-lane divided (6LD) to four-lane divided (4LD) road diet in Segment 1 negatively affects traffic operations for the design year 2040 and if so, to what extent.

TRAFFIC MODELING APPROACH

The project team used the current FDOT D7 TBRPM model (same model used for D7's I-275 improvements and the West Shore Complete Streets PD&E traffic analyses) and performed a sub-area validation incorporating the following refinements to ensure accurate replication of existing conditions and future demand:

- Included currently programmed I-275 capacity and access improvements including the additional on/off ramps to and from the east at Trask Street.
- Incorporated the extensions underneath I-275 of Trask, Occident and Reo Streets.

- Incorporated new future land use and roadway network improvements for Westshore Mall as provided by Mall developers as part of their rezoning request with the City of Tampa.
- Refined traffic analysis zones (TAZ), trip generation, trip distribution, centroid connectors and internal capture rates to reflect new land uses and site plan for West Shore Mall.
- Developed AADT volumes using this model for existing 2020 and future 2040 for both 6LD and 4LD Road Diet scenarios.

The following table summarizes these results.

Table 1. West Shore Blvd. AADTs

	From	To	Existing 2020	Year 2040	
				6LD	Road Diet to 4LD
West Shore Blvd.	W. Spruce St.	W.Laurel St.	21,700	23,700	23,900
	W.Laurel St.	W. Cypress St.		36,900	36,900
	W. Cypress St.	I-275 SB Off-Ramp		33,400	33,000
	I-275 SB Off-Ramp	I-275 NB On-Ramp		40,700	38,700
	I-275 NB On-Ramp	W. Gray St.		40,900	38,200
	W. Gray St.	W. North B St.	22,500	33,400	29,200
	W. North B St.	Kennedy Blvd.		30,700	26,800
	Kennedy Blvd.	S. of Kennedy Blvd.		33,400	33,300

As shown in the above table, approximately 4,000 daily trips will be shifted away from West Shore Boulevard due to the lane reduction between West Gray Street and Kennedy Boulevard under the Road Diet Alternative in the 2040 design year. According to the TBRPM model output, the destination of these 4,000 daily trips are listed in Table below:

Table 2.
Traffic Re-distribution from West Shore Blvd.
to Parallel roads under Road Diet condition

Destination	Daily Trips
Trask St.	1,900
Lois Ave.	1,000
Dale Mabry Highway	500
W Kennedy Blvd. via SR 60	300
Occident St.	300
Total	**4,000**

TRAFFIC EVALUATION RESULTS

Levels of service (LOS) and volume to capacity (V/C) ratios were calculated according to Table of the, Generalized Peak Hour Directional Volumes for Florida's Urbanized Area, ***2013 Quality/Level of Service Handbook*** and are summarized in Tables 3 through 6.

Table 3
Year 2040 Peak Hour Levels of Service
West Shore Blvd. Southbound AM Existing 6LD vs. (Road Diet to 4LD)

From	To	Lanes per Dir.	LOS	v/C
North of Spruce St.	W. Spruce St.	2(2)	C(C)	0.84(0.84)
W. Spruce St.	W.Laurel St.	2(2)	D(D)	0.55(0.56)
W.Laurel St.	W. Cypress St.	2(2)	D(D)	0.82(0.82)
W. Cypress St.	I-275 SB Off-Ramp	2(2)	D(D)	0.74(0.73)
I-275 SB Off-Ramp	I-275 NB On-Ramp	3(2)	D(D)	0.8(0.76)
I-275 NB On-Ramp	W. Gray St.	3(3)	D(D)	0.8(0.75)
W. Gray St.	W. North B St.	3(2)	D(D)	0.65(0.89)
W. North B St.	Kennedy Blvd.	3(2)	D(D)	0.6(0.81)
Kennedy Blvd.	S. of Kennedy Blvd.	3(2)	D(E)	0.65(0.97)

Table 4
Year 2040 Levels of Service
West Shore Blvd. Northbound Peak Hour AM Existing 6LD vs. (Road Diet to 4LD)

From	To	Lanes per Dir.	LOS	v/C
North of Spruce St.	W. Spruce St.	2(2)	D(D)	0.51(0.51)
W. Spruce St.	W.Laurel St.	2(2)	D(D)	0.76(0.76)
W.Laurel St.	W. Cypress St.	2(2)	F(F)	OVER(OVER)
W. Cypress St.	I-275 SB Off-Ramp	2(2)	E(E)	0.97(0.96)
I-275 SB Off-Ramp	I-275 NB On-Ramp	3(2)	D(D)	0.58(0.56)
I-275 NB On-Ramp	W. Gray St.	3(3)	D(D)	0.59(0.55)
W. Gray St.	W. North B St.	3(2)	D(D)	0.48(0.65)
W. North B St.	Kennedy Blvd.	3(2)	C(D)	0.46(0.59)
Kennedy Blvd.	S. of Kennedy Blvd.	3(2)	D(D)	0.48(0.74)

Table 5
Year 2040 Peak Hour Levels of Service
West Shore Blvd. Southbound PM Existing 6LD vs. (Road Diet to 4LD)

From	To	Lanes per Dir.	LOS	v/C
North of Spruce St.	W. Spruce St.	2(2)	D(D)	0.51(0.51)
W. Spruce St.	W.Laurel St.	2(2)	D(D)	0.76(0.76)
W.Laurel St.	W. Cypress St.	2(2)	F(F)	OVER(OVER)
W. Cypress St.	I-275 SB Off-Ramp	2(2)	E(E)	0.97(0.96)
I-275 SB Off-Ramp	I-275 NB On-Ramp	3(2)	D(D)	0.58(0.56)
I-275 NB On-Ramp	W. Gray St.	3(3)	D(D)	0.59(0.55)
W. Gray St.	W. North B St.	3(2)	D(D)	0.48(0.65)
W. North B St.	Kennedy Blvd.	3(2)	C(D)	0.47(0.59)
Kennedy Blvd.	S. of Kennedy Blvd.	3(2)	D(D)	0.48(0.74)

Table 6
Year 2040 Peak Hour Levels of Service
West Shore Blvd. Northbound PM Existing 6LD vs. (Road Diet to 4LD)

From	To	Lanes per Dir.	LOS	v/C
North of Spruce St.	W. Spruce St.	2(2)	C(C)	0.44(0.44)
W. Spruce St.	W.Laurel St.	2(2)	D(D)	0.55(0.56)
W.Laurel St.	W. Cypress St.	2(2)	D(D)	0.82(0.82)
W. Cypress St.	I-275 SB Off-Ramp	2(2)	D(D)	0.74(0.73)
I-275 SB Off-Ramp	I-275 NB On-Ramp	3(2)	D(D)	0.80(0.76)
I-275 NB On-Ramp	W. Gray St.	3(3)	D(D)	0.80(0.75)
W. Gray St.	W. North B St.	3(2)	D(D)	0.65(0.89)
W. North B St.	Kennedy Blvd.	3(2)	D(D)	0.60(0.81)
Kennedy Blvd.	S. of Kennedy Blvd.	3(2)	D(E)	0.65(0.97)

This analysis indicates minimal LOS impact of the 6LD to 4LD road diet to the overall West Shore Boulevard corridor in the 2040 design year with a slight degradation of LOS occurring in only two locations as follows:

- From south of Kennedy Boulevard to Kennedy Boulevard from LOS D to E in the SB direction during the AM peak and in the NB direction during the PM peak.
- From Kennedy Boulevard to North B Street from LOS C to D in the NB direction during the AM peak and in the SB direction during the PM peak.

Next, the team performed a VISSIM microsimulation analysis of the project area within a network defined by Kennedy Boulevard to the south, Spruce Street to the north, Trask Street to the east, and O'Brien Street to the west. This analysis models the operations of the roadway network in real time within these limits and simulates the interactions of traffic signals, queue lengths, lane changes and other factors that influence the ability of the system to move vehicles while responding to demand. A key finding of the VISSIM analysis is that the West Shore corridor is capacity constrained, meaning there is unmet demand in the 6LD scenario (AM=36%; PM =32%) as well as the 4LD road diet scenario (AM = 37%; PM = 34%). In practical terms this means that more traffic is attempting to use the West Shore Boulevard corridor than can be processed through the connected roadway network that feeds West Shore and the traffic signals within the West Shore corridor.

The results of the VISSIM microsimulation analysis is summarized in Table 7 below.

Table 7
Year 2040 VISSIM Microsimulation Analysis

	6-Lane Option		4-Lane Option	
Intersection	**AM (PM) Delay**	**AM (PM) Level of Service**	**AM (PM) Delay**	**AM (PM) Level of Service**
West Shore Blvd @ Spruce St	341(199)	F(F)	341(201)	F(F)
West Shore Blvd @ W Laurel St	296(87)	F(F)	297(86)	E(F)
West Shore Blvd @ W Cypress St	163(177)	F(F)	162(175)	F(F)
West Shore Blvd @ I-275 SB Off-Ramp	100(120)	F(F)	86(119)	F(F)
West Shore Blvd @ W Kennedy Blvd	324(220)	F(F)	262(228)	F(F)

This VISSIM microsimulation analysis indicates no adverse LOS impact of the 6LD to 4LD road diet to the overall West Shore Boulevard corridor in the 2040 design year.

SUMMARY OF FINDINGS

Following is a summary of the team findings based on the static V/C and LOS analysis summarized in Tables 3 through 6 and the VISSIM microsimulation analysis summarized in Table 7:

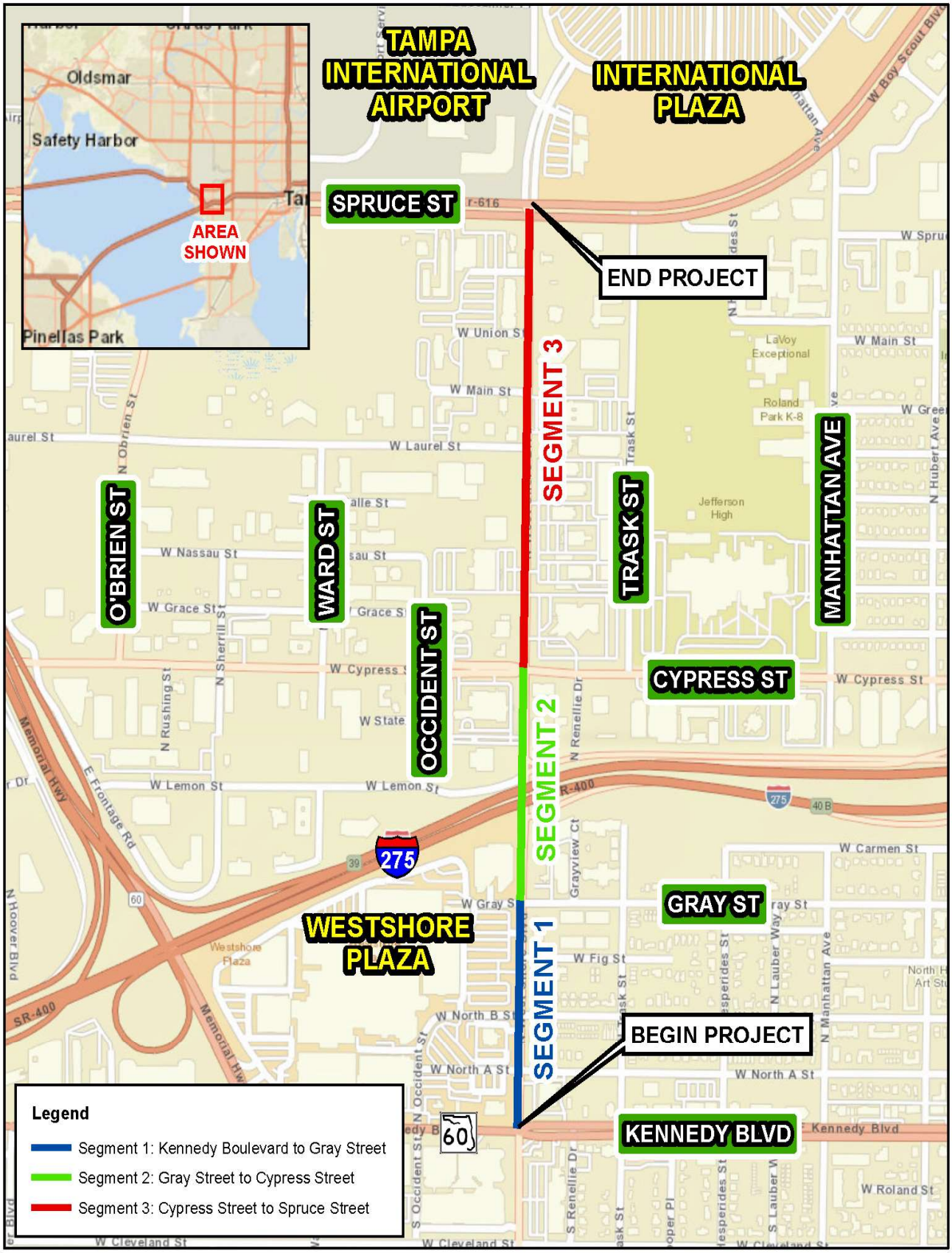
- Travel demand along West Shore Boulevard is anticipated to be slightly lower in the 2040 design year for the 4LD Road Diet scenario than the existing 6LD scenario due to trip diversion.
- The VISSIM analysis indicates that the West Shore Boulevard corridor is capacity constrained, with an unmet demand in the 6LD scenario (AM=36%; PM =32%) as well as the 4LD road diet scenario (AM = 37%; PM = 34%).
- Implementing the Road Diet scenario is expected to shift about 4,000 trips per day from West Shore Boulevard to parallel routes in the 2040 design year with about 1,900 trips moving to Trask Street.
- Levels of Service for the 4LD Road Diet scenario are anticipated to be slightly lower than the 6LD scenario in a few instances between Gray Street and Kennedy Boulevard due to the lane reduction, however, this impact is small.
- The lane reduction from 6LD to 4LD from Kennedy Boulevard to Gray Street will not critically affect the traffic operations along the corridor and is viable as part of the Complete Streets plan for West Shore Boulevard.

RECOMMENDATIONS

The purpose of this project is to transform West Shore Boulevard into a "Grand Boulevard" concept with wide sidewalks, shade trees, pedestrian amenities, upgraded lighting and aesthetics, and landscaping while prioritizing pedestrians over automobile traffic. All of the public outreach efforts with the Westshore Alliance, City of Tampa, stakeholders and individual property owners have led to a common vision which can be summarized as "provide shade and more space for pedestrians while slowing traffic down."

Based on the project's purpose and need, the vision of the stakeholders and the traffic analyses summarized here, the team recommends implementing the 6LD to 4LD Road Diet concept for West Shore Boulevard between Kennedy Boulevard and Gray Street after the I-275 reconstruction project has completed the extension of Trask, Occident and Reo Streets under I-275.

ATTACHMENT 1 – PROJECT SEGMENT MAP



Hillsborough County Florida

WEST SHORE COMPLETE STREETS PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY
Hillsborough County, Florida

0 200 400 800 Feet

PROJECT SEGMENTS MAP

Alternative Typical Section Initial Screening Memorandum

Date: April 27, 2020

Project: West Shore Boulevard Complete Streets
PD&E Study
Hillsborough County

Project No.(s): CIP No. 69641000
AEP: 1040075000

Purpose: **West Shore Complete Streets PD&E Study – Initial Alternatives Review and Screening (Updated)**

The goal of the Westshore Complete Streets PD&E Study is to transform Westshore Boulevard using a "Grand Boulevard" concept to remake this auto-oriented roadway into a priority pedestrian street complete with wide sidewalks, shade trees, pedestrian amenities, upgraded lighting, and landscaping consistent with the City of Tampa's Westshore Overlay District. In order to develop proposed typical sections to accomplish this transformation goal, the project limits were divided into three segments (see **Attachment 1**). Segment 1 extends from Kennedy Boulevard to Gray Street, Segment 2 extends from Gray Street to Cypress Street, and Segment 3 extends from Cypress Street to Spruce Street. Segment 1 (Kennedy Boulevard to Gray Street) is a 6-lane section located adjacent to Westshore Mall, which is planned for redevelopment according to development standards of the Westshore Overlay District making Westshore Boulevard a priority pedestrian corridor at least on the west side of the road. Segment 1 also has more available ROW and therefore easier implementation of improvements.

ASSUMPTIONS

The project team used multiple interviews with key stakeholders to establish the following design assumptions used in the development and evaluation of the typical sections:

- Proposed design speed is 35 mph
- Minimum through lane width is 10'
- Minimum turn lane width is 10'
- Minimum sidewalk width is 6'
- Minimum 5' "door-swing" space between ped/bike ways and buildings
- Minimum 10' easement required for TECO utilities to be relocated underground
- Bioswales/planting areas are minimum 5' (desirable 10') wide with a 2' buffer
- Maintain minimum 2 through lanes of traffic in each direction
- Easements likely easier to implement on the east side than the west side

- Existing curb lines can be moved in, particularly to minimize easement widths
- Must be consistent with the intent of the Westshore Overlay District

EVALUATION CRITERIA

The Westshore Complete Streets PD&E Study's goal of transforming Westshore Boulevard using a "Grand Boulevard" concept was combined with stakeholder input, including property owners along the corridor and residents in surrounding neighborhoods. **Stakeholder input prioritized slower traffic in the corridor, a comfortable pedestrian environment, underground utilities, and pedestrian/bicycle connectivity to the surrounding neighborhoods.** This input guided the development of the following list of evaluation criteria used to develop and screen the alternative typical sections:

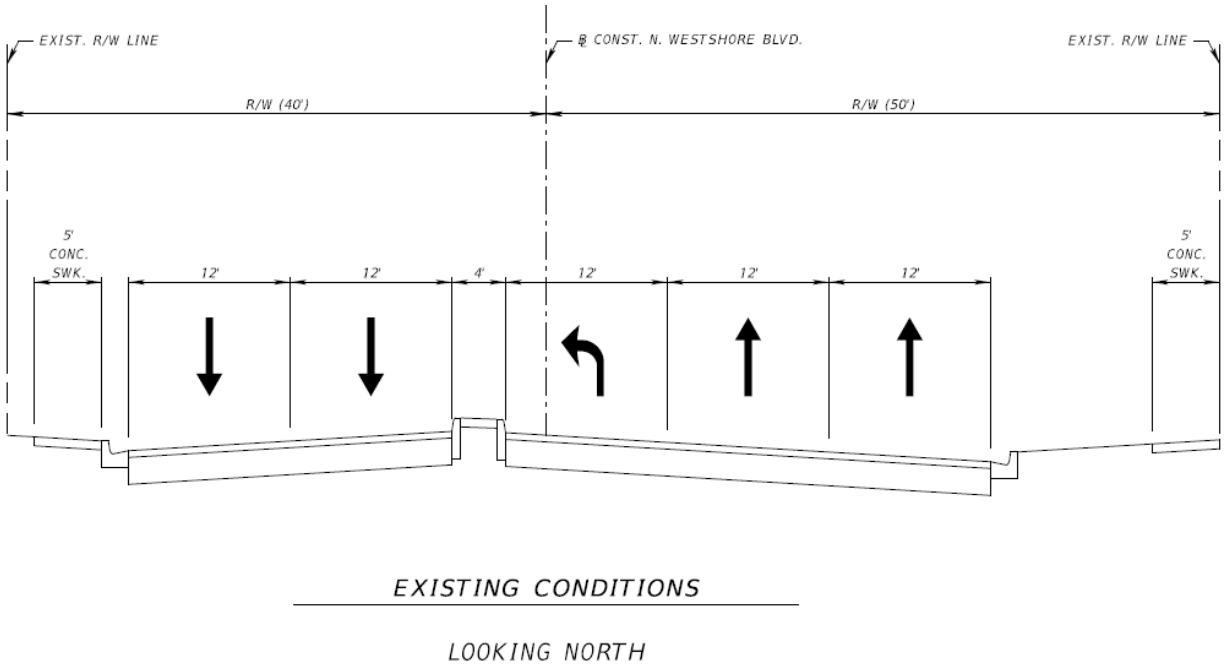
- Accommodates pedestrian traffic
- Provides shade for pedestrians
- Creates comfortable walking area
- Creates social space for seating/dining/standing
- Accommodates bicycling and micromobility
- Generates aesthetic value
- Supports sustainability/water quality/drainage
- Cost
- Easement requirements

EXISTING TYPICAL SECTION

As shown in **Figure 1**, Segment 3's existing typical section includes four, 12-foot travel lanes separated by a median with a left turn lane and 5-foot sidewalks on either side of the roadway. The existing typical section fits within 90-feet of County-owned right-of-way with 50 feet from the centerline on the east side of the roadway and 40 feet from the centerline on the west side of the roadway.

When assessing the existing typical section (shown below) with the evaluation criteria listed, the existing typical section does not provide sufficient accommodation for pedestrians or bicyclists. The sidewalk widths are too narrow, and too close to the travel lanes. The existing typical section does not provide sufficient opportunities for pedestrian-oriented amenities like shade trees or other enhanced landscaping, street furniture, and separation from the roadway for pedestrians consistent with the Westshore Overlay District. This typical section does not address the current drainage/water quality issues along the corridor.

Figure 1: Existing Typical Section - Westshore Boulevard Segment 1



PROPOSED ALTERNATIVE TYPICAL SECTIONS

Recognizing that the initial outreach to property owners and the surrounding neighborhoods is still underway, the project team began development of typical sections based upon the design assumptions described above, precedent corridor studies and initial input from stakeholders and consideration of the evaluation criteria outlined in this memorandum. The project team has performed an initial fatal flaw review of twenty-three (23) potential typical sections ranging from very minimal improvements with no mainline right-of-way (ROW) impacts to extensive improvements that accommodate the Westshore Overlay District desirable typical section on both sides of West Shore Boulevard.

Of the 23 initially screened typical sections, thirteen (13) are recommended for additional consideration, nine (9) are recommended to be eliminated, and the existing typical section will be retained for consideration through the end of this study as the "no-build" option.

TYPICAL SECTION EVALUATION

A preliminary evaluation of the thirteen (13) retained typical sections and the no build existing typical section was conducted using the evaluation criteria outlined in the Evaluation Criteria section of this memo, and the results are summarized in the attached scoring spreadsheet (see **Attachment 2**). This spreadsheet includes a description of the thirteen (13) typical sections recommended for additional consideration, along with their scores. **These are grouped**

according to their ROW requirements (no ROW required, easement required on one side of the road, and easements required on both sides of the road).

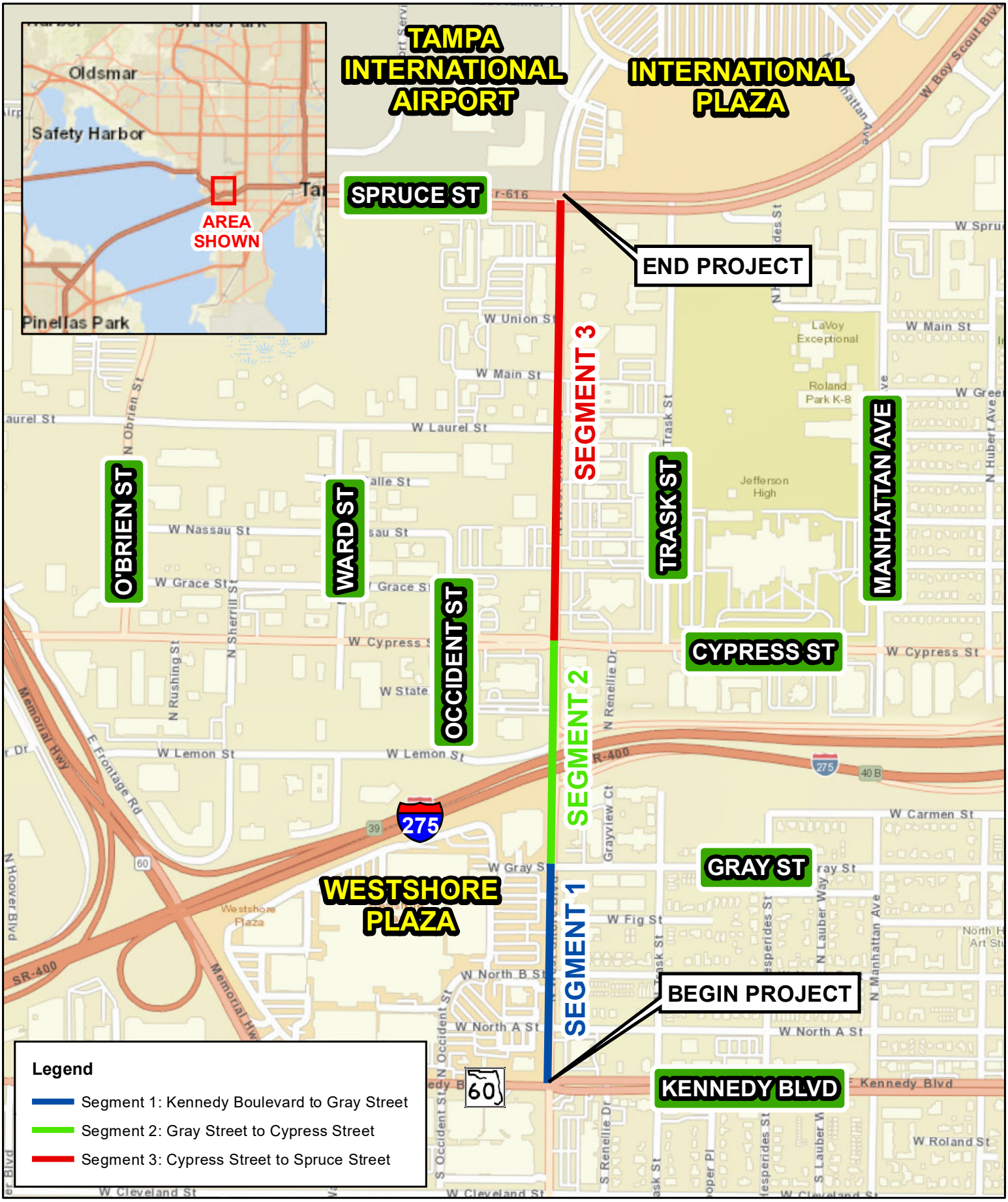
The scoring used in this evaluation reflects consistency with the Westshore Overlay District as well as key attributes desired by stakeholders such as shade, wide pedestrian areas for congregating and outside seating/dining, landscaping and aesthetics, bicycle accommodations and connectivity, traffic calming, improved stormwater management and prioritizing the pedestrian environment over high speed traffic flow. Typical sections that best met these attributes scored highest, and those that accomplished this on both sides of West Shore Boulevard rated better than those doing so on only one side. Conversely, easements required on both sides of the road scored lower than no easements or easements on only one side, as did the need to move curbs which reflects increased construction cost/complexity.

The best performing typical section for the group with an easement on one side is Typical Section 13, including its A through F variations, with scores ranging from 31 to 33. The best performing typical section for the group with easements on both sides is Typical Section 12, both A and B variations, with scores of 39. Typical section 2 is the only option that requires no easements and its score of 14 is only slightly better than the existing (No-build) score of 11.

The project team then further refined the best performing Typical Section 12 and added a third variation (12C), which differs slightly from 12A and 12 B by: narrowing all travel lanes from 12' to 10', moving both curbs in, and widening both bioswales from 6' (12A) and 8' (12B) to 10'. With a score of 37, Typical Section 12C is judged to be the best overall alternative for further review with key stakeholders. The 2 point lower score (37 v. 39 as compared to 12A and 12B) is due to the added cost/complexity of moving both curbs in, but results in greater pedestrian and bicycle separation from travel lanes by virtue of the wider bioswales and potentially greater traffic calming via the 10' travel lanes.

Ultimate and Interim configurations for Typical Section 12C are shown in **Attachment 3**.

ATTACHMENT 1 – PROJECT SEGMENTATION MAP



Hillsborough County Florida

WEST SHORE COMPLETE STREETS PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY
Hillsborough County, Florida

0 200 400 800 Feet

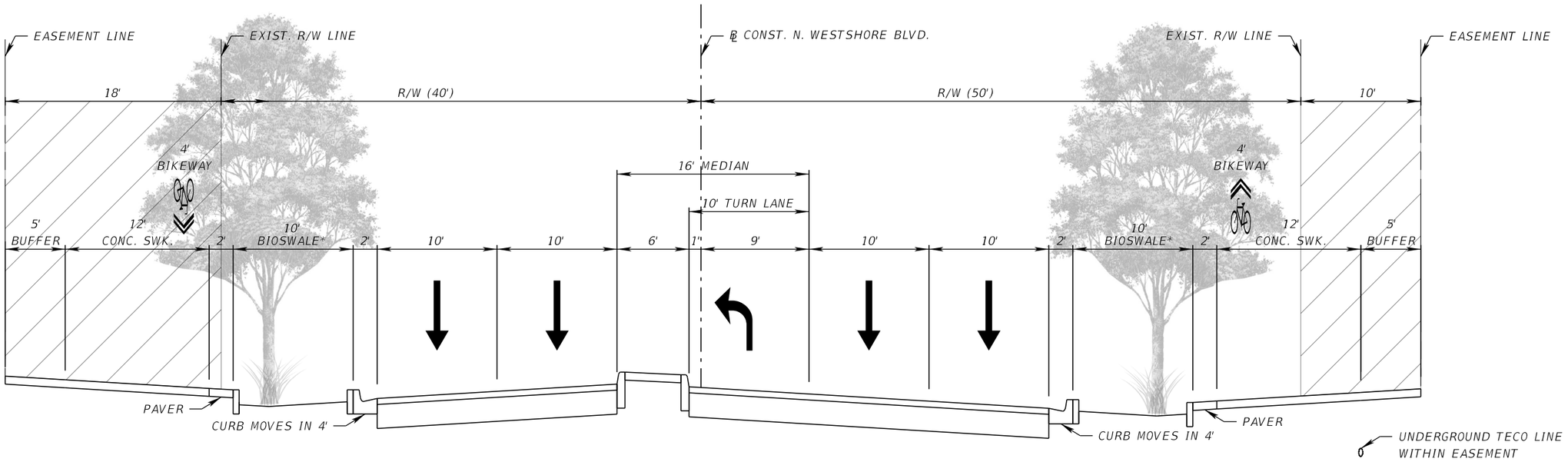
PROJECT SEGMENTS MAP

ATTACHMENT 2 – SCORING SPREADSHEET

Westshore Complete Streets PD&E Study
Retained Typical Sections Evaluation Matrix - April 2020

TYPICAL SECTION	DESCRIPTION	REASONING	EVALUATION CRITERIA									TOTAL
			ACCOMMODATES PEDESTRIAN TRAFFIC	PROVIDES SHADE FOR PEDESTRIANS	CREATES COMFORTABLE WALKING AREA	CREATES SOCIAL SPACE FOR INTERACTION	ACCOMMODATES BICYCLING AND MICROMOBILITY	GENERATES AESTHETIC VALUE	SUPPORTS SUSTAINABILITY, WATER QUALITY, DRAINAGE	COSTS	EASEMENT REQUIREMENTS	
			RATING FACTORS									
			WIDER WALKWAYS	LARGE CANOPY TREES	SEPARATION FROM TRAVEL LANES/ LOWER TRAVEL SPEEDS	SPACE OUTSIDE WALKWAYS	BIKEWAYS	LANDSCAPING, PLANTING PITS, BIOSWALES, TECO UG	BIOSWALES	CAPITAL & MAINT.	NONE, ONE SIDE OR BOTH SIDES	
EXISTING	All through lanes are 12'. 5' sidewalks both sides.	The No-build alternative remains viable throughout the project.	1	0	1	0	1	0	0	5	3	11
2	Reduces all through lanes from 12' to 10". Widens sidewalk on east side to 13' and adds 6' hardscape/landscape area on east side widens sidewalk on west side to 9'. Both curbs move in.	Facilitates pedestrian and limited bicycle accommodations along the corridor, more so on the east side, without requiring additional ROW or easements.	2	1	2	1	2	1	0	2	3	14
6A	Adds 10' easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on east side). On east side, widens sidewalk by 9', adds 6' for hardscape/landscape, and adds 5' buffer for pedestrian flow and safety adjacent to building fronts. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	Accommodates Westshore Overlay District desirable typical section on one side.	3	1	2	3	2	1	0	4	2	18
6D	Reduces all through lanes from 12' to 10'. Adds 10' easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides). Widens sidewalk by 9', adds 6' for hardscape/landscape, and adds 5' pedestrian buffer on east side and widens the median by 8'. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	Accommodates Westshore Overlay District desirable typical section on one side.	3	1	2	3	2	2	0	4	2	19
13A	Adds 8' two-way bikeway, 5' bioswale and 8' wide sidewalk and 5' buffer for pedestrian flow and safety on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 15' easement on east side, accommodates undergrounding of TECO lines in easement, and both curbs remain in place.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	4	4	4	4	4	3	4	2	32
13B	Reduces all through lanes from 12' to 10'. Adds 8' two-way bikeway, 10' bioswale, 5' pedestrain buffer and 8' wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 10' easement on east side. Left curbs remains in place and right curb moves in.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	4	4	4	4	4	3	3	2	31
13C	Reduces all through lanes from 12' to 10'. Adds 8' two-way bikeway, 8' bioswale, 5' pedestrian buffer and 7' wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 12' easement on east side. Adds 5' to median. Accommodates undergrounding of TECO lines in easement. Left curbs remains in place and right curb moves in.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	4	4	4	4	4	3	3	2	31
13D	Reduces all through lanes from 12' to 10'. Adds 8' two-way bikeway, 8' bioswale, 5' pedestrian buffer and 7' wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 15' easement on east side. Adds 8' to median. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	4	4	4	4	4	3	4	2	32
13E	Reduces all through lanes from 12' to 10'. Adds 8' two-way bikeway, 5' bioswale, 5' pedestrian buffer and 8' sidewalk on east side. Adds 5' bioswale on west side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 10' easement on east side. Accommodates undergrounding of TECO lines in easement. Both curbs move in.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	2	4	4	4	5	5	2	2	31
13F	Reduces all through lanes from 12' to 10'. Adds 8' two-way bikeway, 5' bioswale, 5' pedestrian buffer and 8' sidewalk on east side. Adds 5' bioswale to the west side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 10' easement on east side. Adds variable width easement and sidewalk on west side. Accommodates undergrounding of TECO lines in 10' easement. Both curbs move in.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	4	2	4	5	4	5	5	2	2	33
6B	Adds 10' easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides) and 18' easement on west side. Widens sidewalks to 14', adds 6' for hardscape/landscape, and adds 5' pedestrian buffer on both sides. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	Accommodates Westshore Overlay District desirable typical section on both sides.	4	2	4	5	3	3	0	4	1	26
6C	Reduces all through lanes from 12' to 10'. Adds 10' easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides) and 18' easement on west side. Widens sidewalks to 14', adds 6' for hardscape/landscape, and adds 4' lane buffers and 5' pedestrian buffers on both sides. Both curbs remian in place.	Accommodates Westshore Overlay District desirable typical section on both sides and adds buffer between outside travel lanes and shade trees.	4	5	4	5	3	4	0	4	1	30
12A	Reduces all through lanes from 12' to 10'. Adds 4' lane buffers, 4' one-way bikeways, 6' bioswales, 5' pedestrian buffers, and 8' wide sidewalks on both sides. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 10' easement on east side and 18' easement on west side. Both curbs remain in place. Accommodates undergrounding of TECO lines in 10' easement. This typical section would require easements from properties on both sides.	Accommodates pedestrians and bicycles on both sides and is compatible with Westshore Overlay District desirable typical section.	4	5	5	5	5	5	5	4	1	39
12B	Adds 4' one-way bikeways, 5' pedestrian buffers, 8' wide sidewalks and 8' bioswales on both sides to accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 12' easement on east side and 20' easement on west side. Both curbs remain in place. This typical section would require easements from properties on both sides.	Accommodates pedestrians and bicycles on both sides and is compatible with Westshore Overlay District desirable typical section.	4	5	5	5	5	5	5	4	1	39
12C	Reduces all through lanes and median left turn lane from 12' to 10'. Integrates 4' one-way bikeways into 12' shared use walkways on both sides. Adds 5' pedestrian buffers and 10' bioswales on both sides to accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 12' easement on east side and 18' easement on west side. Both curbs move in. Accommodates undergrounding of TECO lines in 10' easement. This typical section would require easements from properties on both sides.	Accommodates pedestrians and bicycles on both sides and is compatible with Westshore Overlay District desirable typical section.	4	5	5	5	5	5	5	2	1	37

ATTACHMENT 3 – TYPICAL SECTION 12C ULTIMATE AND INTERIM



PROPOSED IMPROVEMENT 12C - ULTIMATE

REDUCE LANES TO 10'
ADD 10' EASEMENT ON EAST SIDE
ADD 18' EASEMENT ON WEST SIDE
WIDEN SIDEWALKS TO 8' ON BOTH SIDES
ADD 4' BIKEWAYS ON BOTH SIDES
ADD 10' LANDSCAPED BIOSWALES ON BOTH SIDES
ADD 5' BUFFERS ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

* SHADE TREE OFFSET FROM CENTER OF BIOSWALE TO PROVIDE TREE CANOPY CLEARANCE FROM TRAVEL LANES

PROPOSED EASEMENT

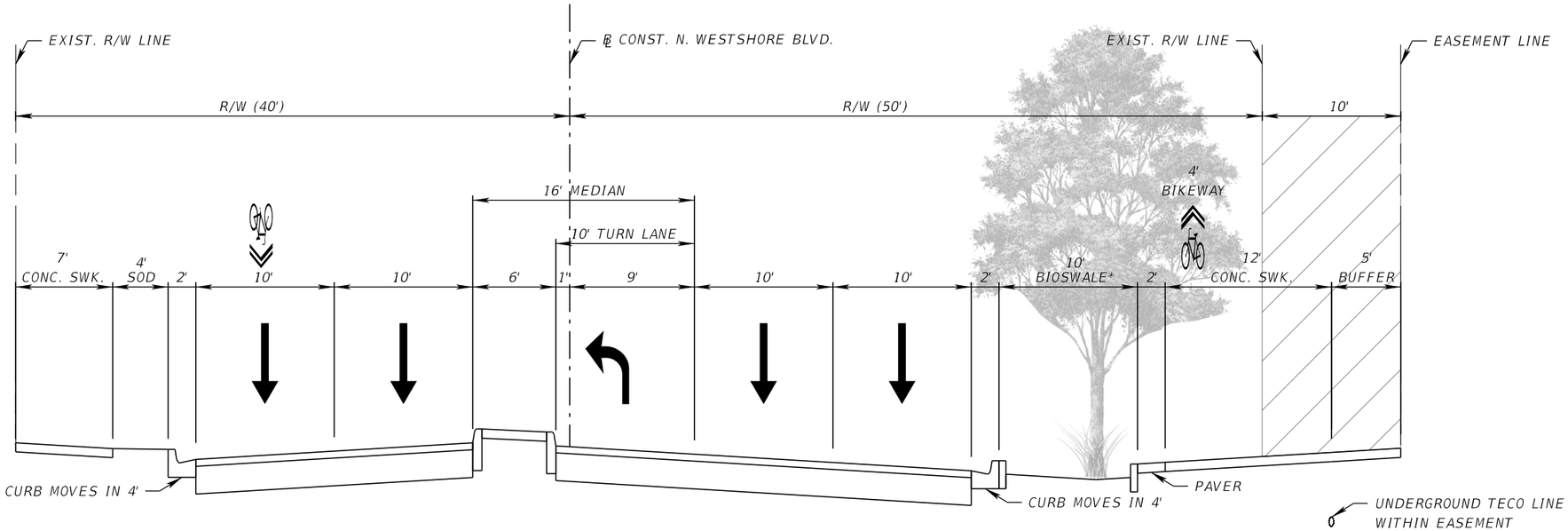
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999
CERTIFICATE OF AUTHORIZATION: 00005620

Hillsborough County Florida

PUBLIC WORKS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (12C - ULTIMATE)	69641000	



PROPOSED IMPROVEMENT 12C - INTERIM

REDUCE LANES TO 10'
ADD 10' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 8' ON EAST SIDE
WIDEN SIDEWALK TO 7' ON WEST SIDE
ADD 4' BIKEWAY ON EAST SIDE
PROVIDE SHARROW IN OUTSIDE SB TRAVEL LANE
ADD 10' LANDSCAPED BIOSWALE ON EAST SIDE
ADD 5' BUFFER ON EAST SIDE

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

* SHADE TREE OFFSET FROM CENTER OF BIOSWALE TO PROVIDE TREE CANOPY CLEARANCE FROM TRAVEL LANES

PROPOSED EASEMENT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
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PUBLIC WORKS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (12C - INTERIM)	69641000	

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Alternative Typical Section Initial Screening Memorandum

Date: April 7, 2020

Project: West Shore Boulevard Complete Streets
PD&E Study
Hillsborough County

Project No.(s): CIP No. 69641000
AEP: 1040075000

Purpose: **West Shore Complete Streets PD&E Study – Initial Alternatives Review and Screening**

The goal of the Westshore Complete Streets PD&E Study is to transform Westshore Boulevard using a "Grand Boulevard" concept to remake this auto-oriented roadway into a priority pedestrian street complete with wide sidewalks, shade trees, pedestrian amenities, upgraded lighting, and landscaping consistent with the City of Tampa's Westshore Overlay District. In order to develop proposed typical sections to accomplish this transformation goal, the project limits were divided into three segments (see **Attachment 1**) for the purpose of this project. Segment 1 extends from Kennedy Boulevard to Gray Street, Segment 2 extends from Gray Street to Cypress Street, and Segment 3 extends from Cypress Street to Spruce Street. Segment 1 (Kennedy Boulevard to Gray Street) is a 6-lane section located adjacent to Westshore Mall, which is planned for redevelopment according to development standards of the Westshore Overlay District (see **Attachment 2**), which accomplishes the goal of making Westshore Boulevard a priority pedestrian corridor at least on the west side of the road. Segment 1 also has more available ROW and therefore easier implementation of improvements. There is also the possibility of repurposing the outside through lanes NB and SB in Segment 1 for these improvements, which will free up 24 additional feet and reduce the need for easements. Segment 2 (Gray Street to Cypress Street) will be reconstructed by FDOT D7 as part of the I-275 construction project. Due to these plans for Segments 1 and 2, the typical section alternatives developed and screened in this memorandum relate to Segment 3 (Cypress Street to Spruce Street).

ASSUMPTIONS

The project team worked with the County to establish the following design assumptions used in the development and evaluation of the typical sections:

- Proposed design speed is 35 mph
- Minimum through lane width is 10'
- Minimum turn lane width is 12'

- Minimum on-street bicycle lane width is 7' (2' buffer, 5' lane)
- Minimum 5' "door-swing" space between ped/bike ways and buildings
- Minimum 10' easement required for TECO utilities to be relocated underground
- Bioswales/planting areas are minimum 5' wide with a 2' buffer (see **Attachment 3**)
- Maintain minimum 2 through lanes of traffic in each direction
- Easements likely easier to implement on the east side than the west side
- Existing curb lines can be moved in
- Must be consistent with the Westshore Overlay District (see **Attachment 2**)
    - 14′-10″ sidewalk (including 1′-4″ brick edging)
    - Street trees at 30′ interval; planted within the public right-of-way
    - Buffer trees at 30′ intervals centered between Street Trees; planted 3′ back of sidewalk in setback area

EVALUATION CRITERIA

The Westshore Complete Streets PD&E Study's goal of transforming Westshore Boulevard using a "Grand Boulevard" concept was combined with stakeholder input, including property owners along the corridor and residents in surrounding neighborhoods. Stakeholder input prioritized slower traffic on the corridor, a comfortable pedestrian environment, underground utilities, and pedestrian/bicycle connectivity to the surrounding neighborhoods. This input guided the development of the following list of evaluation criteria used to develop and screen the alternative typical sections:

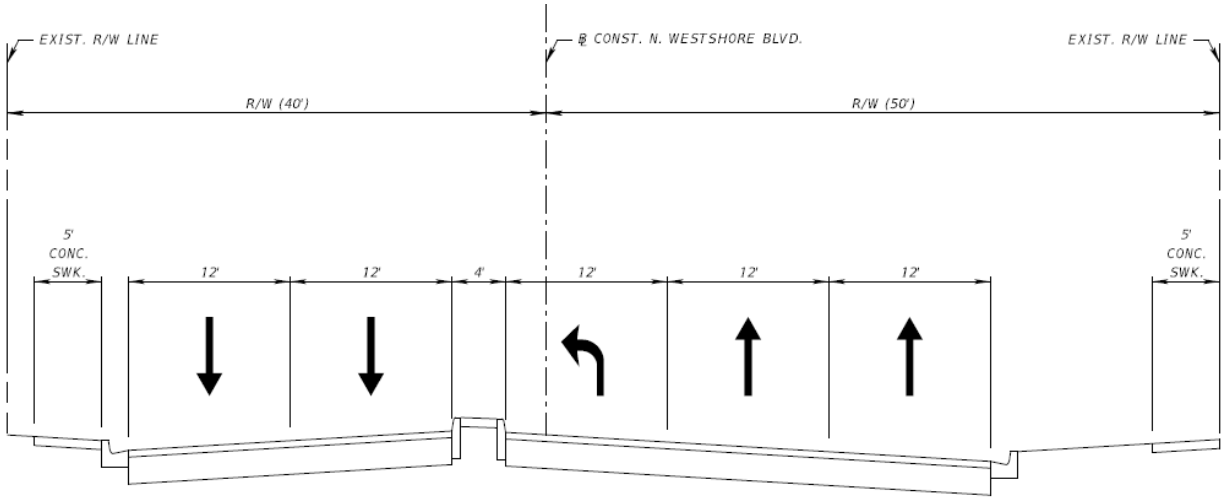
- Accommodates pedestrian traffic
- Provides shade for pedestrians
- Creates comfortable walking area
- Creates social space for seating/dining/standing
- Accommodates bicycling and micromobility
- Generates aesthetic value
- Supports sustainability/water quality/drainage
- Cost
- Easement requirements

EXISTING TYPICAL SECTION

As shown in **Figure 1**, Segment 3's existing typical section includes four, 12-foot travel lanes separated by a median with a left turn lane and 5-foot sidewalks on either side of the roadway. The existing typical section fits within 90-feet of County-owned right-of-way with 50 feet from the centerline on the east side of the roadway and 40 feet from the centerline on the west side of the roadway.

When assessing the existing typical section (shown below) with the evaluation criteria listed, the existing typical section does not provide sufficient accommodation for pedestrians or bicyclists. The sidewalk widths are too narrow, and too close to the travel lanes. The existing typical section does not provide sufficient opportunities for pedestrian-oriented amenities like shade trees or other enhanced landscaping, street furniture, for and separation from the roadway for pedestrians consistent with the Westshore Overlay District. This typical section does not address the current drainage/water quality issues along the corridor.

Figure 1: Existing Typical Section - Westshore Boulevard Segment 1



PROPOSED ALTERNATIVE TYPICAL SECTIONS

Recognizing that the initial outreach to property owners and the surrounding neighborhoods is still underway, the project team began development of typical sections based upon the County's design assumptions, precedent corridor studies and initial input from stakeholders and consideration of the evaluation criteria outlined in this memorandum. It is anticipated that the typical sections may be modified, refined, or there may emerge a few more as the initial

stakeholder process is concluded over the next month or two. The project team has performed an initial fatal flaw review of twenty-three (23) potential typical sections ranging from very minimal improvements with no mainline right-of-way (ROW) impacts to extensive improvements that accommodate the Westshore Overlay District desirable typical section (**Attachment 3**) on both sides of West Shore Boulevard.

Of the 23 initially screened typical sections, thirteen (13) are recommended for additional consideration, nine (9) are recommended to be eliminated, and the existing typical section will be retained for consideration through the end of this study. A table at the beginning of **Attachment 4** includes a description of the thirteen (13) typical sections recommended for additional consideration, along with the reasoning behind the recommendation. Figures for each retained typical section are also included in **Attachment 4**. The recommended typical sections are grouped according to their ROW requirements (no ROW required, easement required on one side of the road, and easements required on both sides of the road). A table at the beginning of **Attachment 5** includes a description of the nine (9) eliminated typical section alternatives and the reasoning behind each elimination. Figures for each of the dropped typical sections are also included in **Attachment 5**.

TYPICAL SECTION EVALUATION

A preliminary evaluation of the thirteen (13) retained typical sections and the no build existing typical section was conducted using the evaluation criteria outlined in the Evaluation Criteria section of this memo, and the results are summarized in **Attachment 6**.

The grouping by ROW/easement requirements of these typical sections is retained throughout this evaluation for consistency. The scoring used in this evaluation reflects consistency with the Westshore Overlay District as well as key attributes desired by stakeholders such as shade, wide pedestrian areas for congregating and outside seating/dining, landscaping and aesthetics, bicycle accommodations and connectivity, traffic calming, improved stormwater management and prioritizing the pedestrian environment over high speed traffic flow.

The ratings factors, which were based on the evaluation criteria, are defined in a table included in **Attachment 6**. Typical sections that best met these attributes scored highest, and those that accomplished this on both sides of West Shore Boulevard rated better than those doing so on only one side. Conversely, easements required on both sides of the road scored lower than no easements or easements on only one side, as did the need to move curbs which reflects increased construction cost/complexity.

The best performing typical section for the group with an easement on one side is Typical Section 13, including its A through F variations, with scores ranging from 31 to 33. The best performing typical section for the group with easements on both sides is Typical Section 12, both A and B variations, with scores of 39. Typical section 2 is the only option that requires no easements and its score of 14 is only slightly better than the existing (No-build) option score of 11.

The County will work with the Westshore Alliance and the City of Tampa to evaluate and narrow this group of retained typical sections down. Once the retained typical sections have been narrowed down to 1-3 preferred alternative typical sections, the consultant will develop corridor concept plans for each alternative to allow for evaluation of ROW/easement impacts and project costs. Once a preferred alternative is selected, the next step is to evaluate improvements that can be applied to any and all typical sections and add these to the concept plans. These improvements could include:

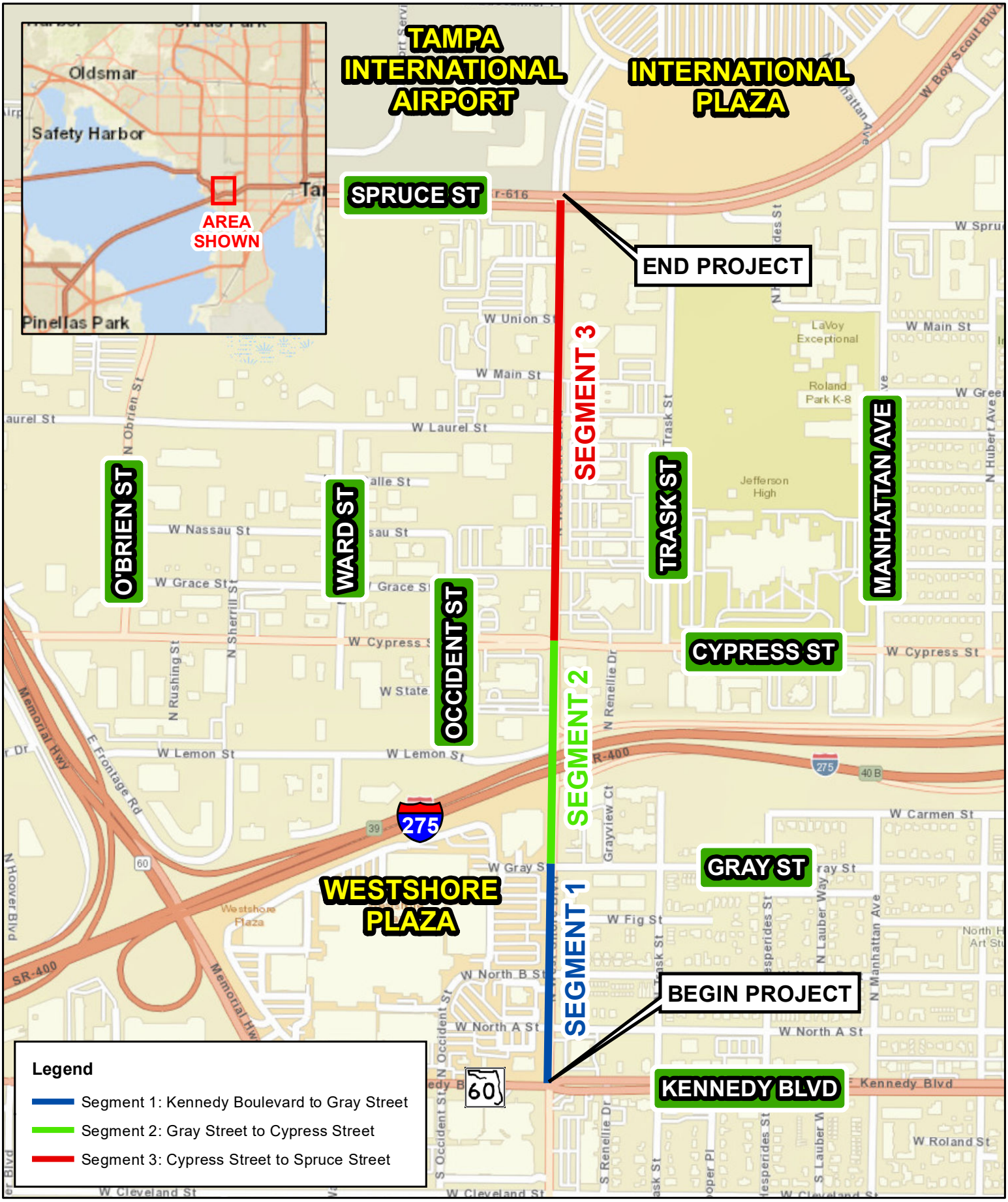
- Pedestrian crossings at Designated Locations and Crosswalks
- Traffic calming
- Curb Management for Transit and RideSharing
- Aesthetic consistency
- Connectivity to Adjacent Properties and Neighborhoods
- Turn lanes at cross streets
- Stormwater Flow and Quality improvements

At this point the preferred alternative concept will be taken to a public meeting to solicit input from the public, stakeholders and all interested parties.

Attachments:

- Attachment 1 – West Shore Complete Streets PD&E Study Project Segments Map
- Attachment 2 – Westshore Overlay District Priority Pedestrian Street Graphic
- Attachment 3 – Sample Bioswale Graphic
- Attachment 4 – Retained Typical Sections
- Attachment 5 – Dropped Typical Sections
- Attachment 6 – Evaluation Matrix of Retained Typical Sections

ATTACHMENT 1 – WESTSHORE COMPLETE STREETS PD&E STUDY PROJECT SEGMENTATION MAP



Hillsborough County Florida

WEST SHORE COMPLETE STREETS PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY
Hillsborough County, Florida

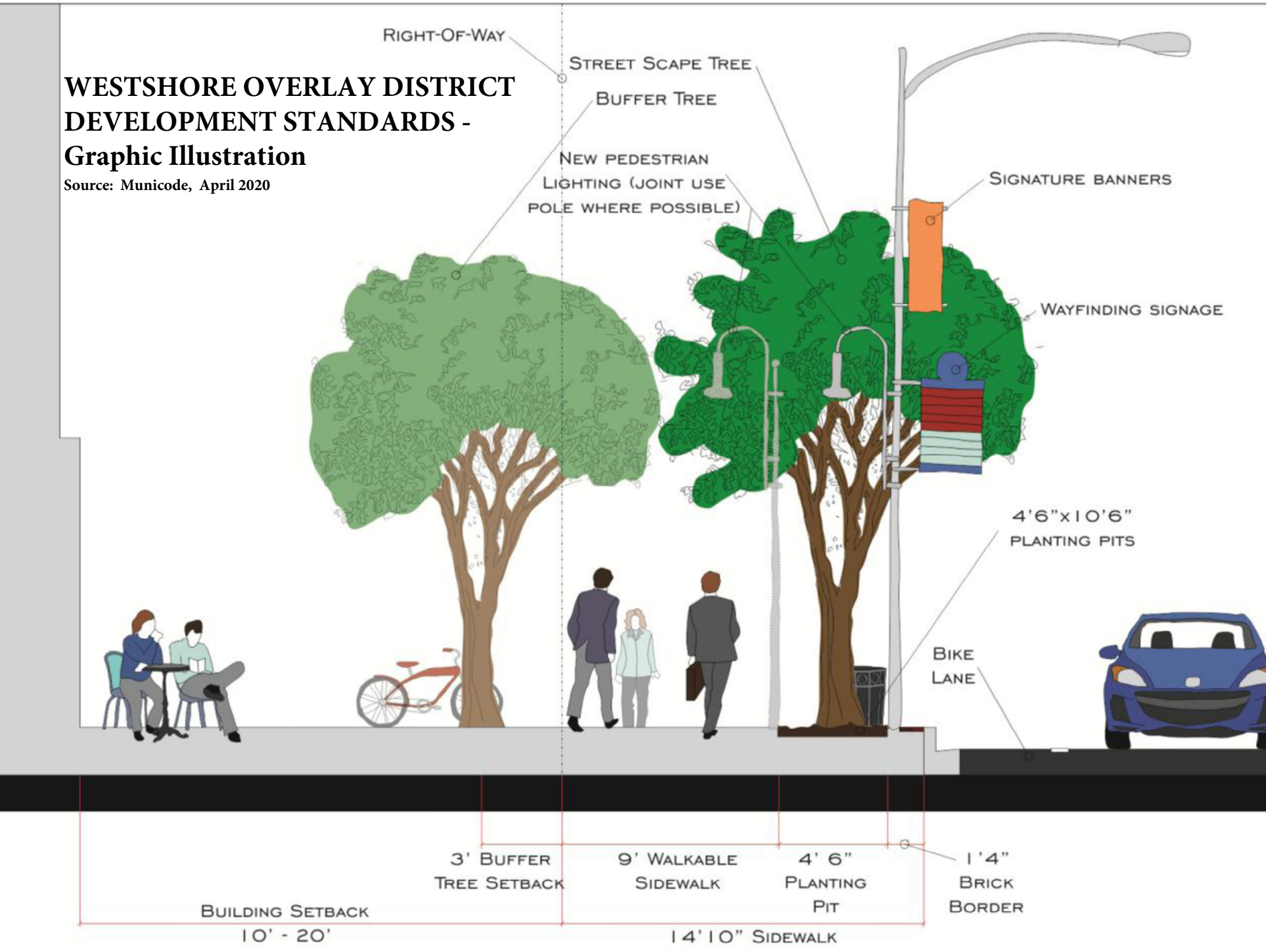
0 200 400 800 Feet

PROJECT SEGMENTS MAP

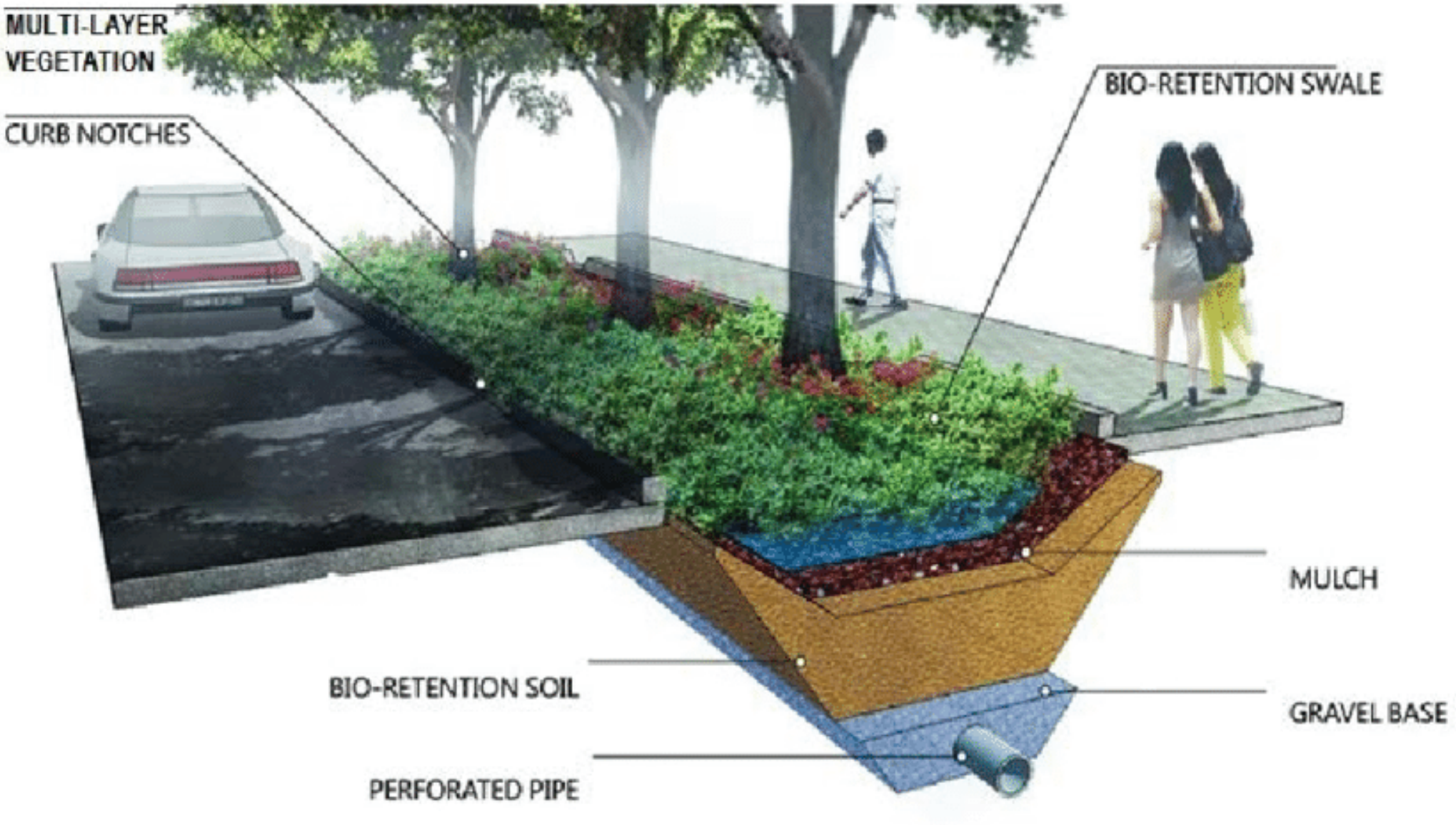
ATTACHMENT 2 – WESTSHORE OVERLAY DISTRICT PRIORITY PEDESTRIAN STREET GRAPHIC

WESTSHORE OVERLAY DISTRICT DEVELOPMENT STANDARDS - Graphic Illustration

Source: Municode, April 2020



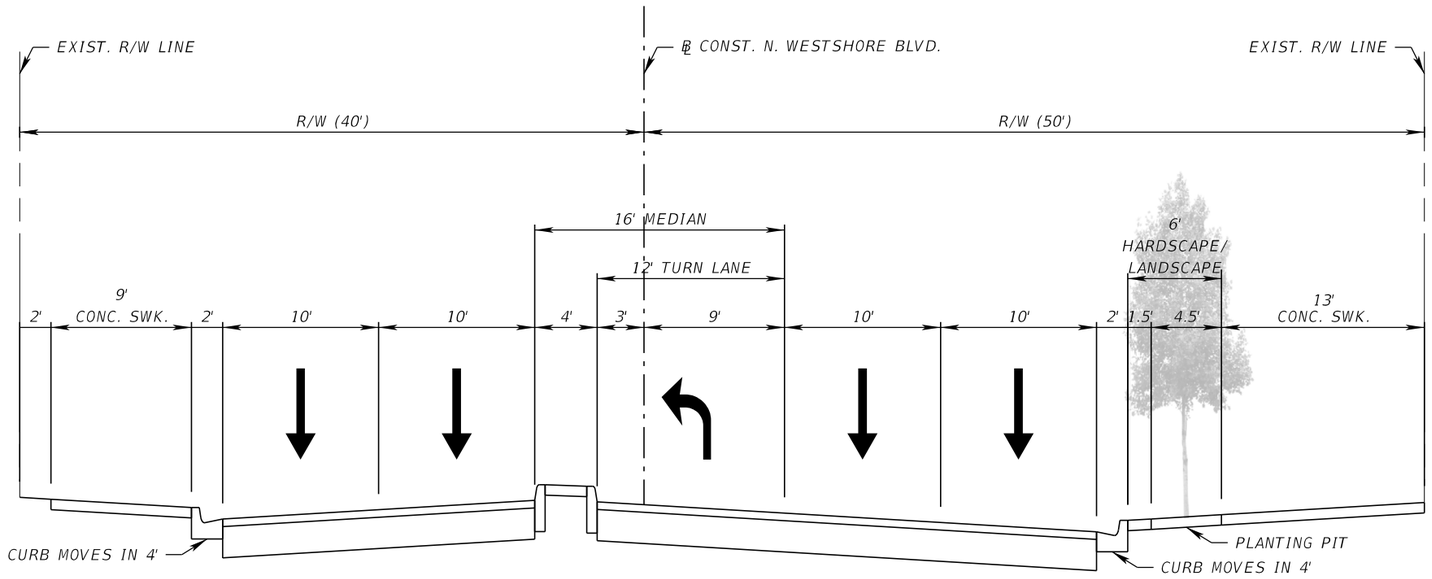
ATTACHMENT 3 - SAMPLE BIOSWALE GRAPHIC


MULTI-LAYER VEGETATION
CURB NOTCHES
BIO-RETENTION SWALE
MULCH
BIO-RETENTION SOIL
GRAVEL BASE
PERFORATED PIPE

ATTACHMENT 4 – RETAINED TYPICAL SECTIONS

Westshore Complete Streets PD&E Study - Retained Typical Sections - April 2020

ROW REQ'D	TYPICAL SECTION	DESCRIPTION	STATUS	REASONING
NO ROW REQ'D	EXISTING	All through lanes are 12'. 5' sidewalks both sides.	RETAIN	The No-build alternative remians viable throughout the project.
	2	Reduces all through lanes from 12' to 10". Widens sidewalk on east side to 13' and adds 6' hardscape/landscape area on east side widens sidewalk on west side to 9'. Both curbs move in.	RETAIN	Facilitates pedestrian and limited bicycle accommodations along the corridor, more so on the east side, without requiring additional ROW or easements.
EASEMENTS REQUIRED ON ONE SIDE	6A	Adds 10’ easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on east side). On east side, widens sidewalk by 9’, adds 6’ for hardscape/landscape, and adds 5’ buffer for pedestrian flow and safety adjacent to building fronts. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	RETAIN	Accommodates Westshore Overlay District desirable typical section on one side.
	6D	Reduces all through lanes from 12’ to 10’. Adds 10’ easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides). Widens sidewalk by 9’, adds 6’ for hardscape/landscape, and adds 5’ pedestrian buffer on east side and widens the median by 8’. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	RETAIN	Accommodates Westshore Overlay District desirable typical section on one side.
	13A	Adds 8’ two-way bikeway, 5’ bioswale and 8’ wide sidewalk and 5’ buffer for pedestrian flow and safety on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 15’ easement on east side, accommodates undergrounding of TECO lines in easement, and both curbs remain in place.	RETAIN	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.
	13B	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 10’ bioswale, 5' pedestrain buffer and 8’ wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 10’ easement on east side. Left curbs remains in place and right curb moves in.	RETAIN	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.
	13C	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 8’ bioswale, 5' pedestrian buffer and 7’ wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 12’ easement on east side. Adds 5’ to median. Accommodates undergrounding of TECO lines in easement. Left curbs remains in place and right curb moves in.	RETAIN	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.
	13D	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 8’ bioswale, 5' pedestrian buffer and 7’ wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 15’ easement on east side. Adds 8’ to median. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	RETAIN	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.
	13E	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 5’ bioswale, 5' pedestrian buffer and 8’ sidewalk on east side. Adds 5’ bioswale on west side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 10’ easement on east side. Accommodates undergrounding of TECO lines in easement. Both curbs move in.	RETAIN	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.
	13F	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 5’ bioswale, 5' pedestrian buffer and 8’ sidewalk on east side. Adds 5’ bioswale to the west side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 10’ easement on east side. Adds variable width easement and sidewalk on west side. Accommodates undergrounding of TECO lines in 10’ easement. Both curbs move in.	RETAIN	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.
EASEMENTS REQUIRED ON BOTH SIDES	6B	Adds 10’ easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides) and 18’ easement on west side. Widens sidewalks to 14’, adds 6’ for hardscape/landscape, and adds 5’ pedestrian buffer on both sides. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	RETAIN	Accommodates Westshore Overlay District desirable typical section on both sides.
	6C	Reduces all through lanes from 12’ to 10’. Adds 10’ easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides) and 18’ easement on west side. Widens sidewalks to 14’, adds 6’ for hardscape/landscape, and adds 4' lane buffers and 5’ pedestrian buffers on both sides. Both curbs remian in place.	RETAIN	o Accommodates Westshore Overlay District desirable typical section on both sides and adds buffer between outside travel lanes and shade trees.
	12A	Reduces all through lanes from 12' to 10'. Adds 4' lane buffers, 4’ one-way bikeways, 6’ bioswales, 5' pedestrian buffers, and 8’ wide sidewalks on both sides. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 10’ easement on east side and 18’ easement on west side. Both curbs remain in place. Accommodates undergrounding of TECO lines in 10’ easement. This typical section would require easements from properties on both sides.	RETAIN	Accommodates pedestrians and bicycles on both sides and is compatible with Westshore Overlay District desirable typical section.
	12B	Adds 4’ one-way bikeways, 5' pedestrian buffers, 8’ wide sidewalks and 8' bioswales on both sides to accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Adds 12’ easement on east side and 20’ easement on west side. Both curbs remain in place. This typical section would require easements from properties on both sides.	RETAIN	Accommodates pedestrians and bicycles on both sides and is compatible with Westshore Overlay District desirable typical section.



PROPOSED IMPROVEMENT 2

REDUCE LANES TO 10'
WIDEN SIDEWALK TO 13' ON EAST SIDE
ADD 6' HARDSCAPE/LANDSCAPE AREA ON EAST SIDE
WIDEN SIDEWALK TO 9' ON WEST SIDE

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

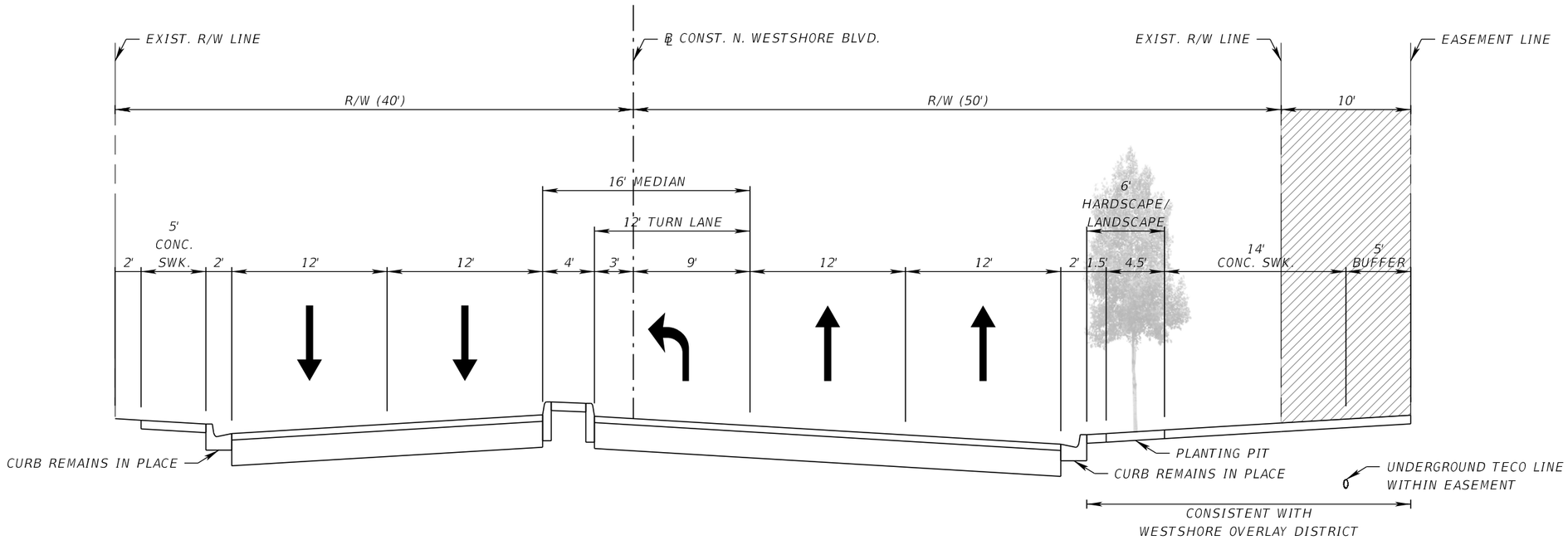
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999
CERTIFICATE OF AUTHORIZATION: 00005620

Hillsborough County Florida

PUBLIC WORKS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (2)	69641000	



PROPOSED IMPROVEMENT 6A

ADD 10' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 14' ON EAST SIDE
ADD 6' HARDSCAPE/LANDSCAPE AREA ON EAST SIDE
ADD 5' BUFFER ON EAST SIDE

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
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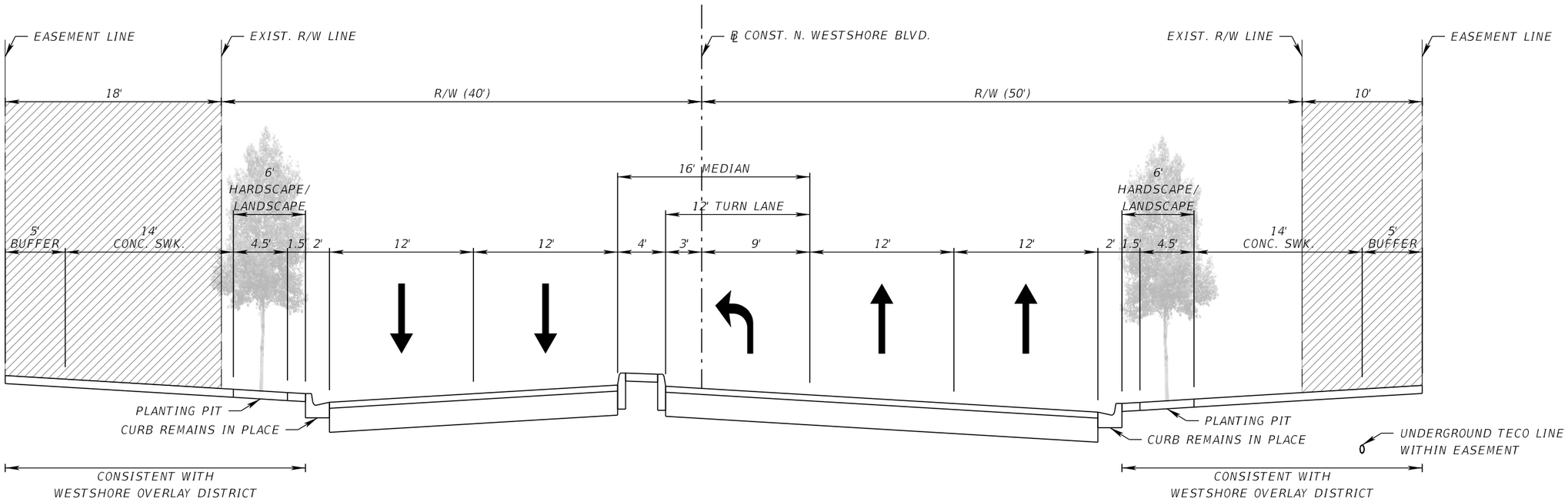
WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (6A)	69641000	



PROPOSED IMPROVEMENT 6B

ADD 10' EASEMENT ON EAST SIDE
ADD 18' EASEMENT ON WEST SIDE
WIDEN SIDEWALKS TO 14' ON BOTH SIDES
ADD 6' HARDSCAPE/LANDSCAPE AREAS ON BOTH SIDES
ADD 5' BUFFERS ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

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WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (6B)	69641000	

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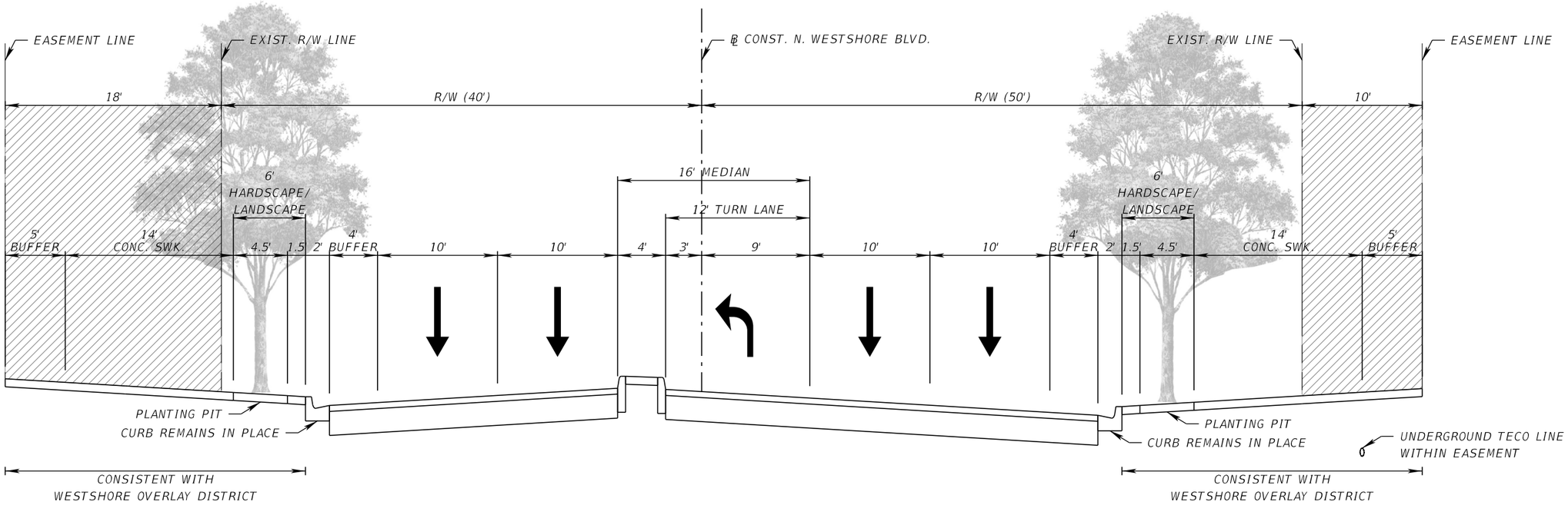

PROPOSED IMPROVEMENT 6C

REDUCE LANES TO 10'
ADD 10' EASEMENT ON EAST SIDE
ADD 18' EASEMENT ON WEST SIDE
ADD 4' LANE BUFFERS ON BOTH SIDES
WIDEN SIDEWALKS TO 14' ON BOTH SIDES
ADD 6' HARDSCAPE/LANDSCAPE AREAS ON BOTH SIDES
ADD 5' SIDEWALK BUFFERS ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

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TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (6C)	69641000	

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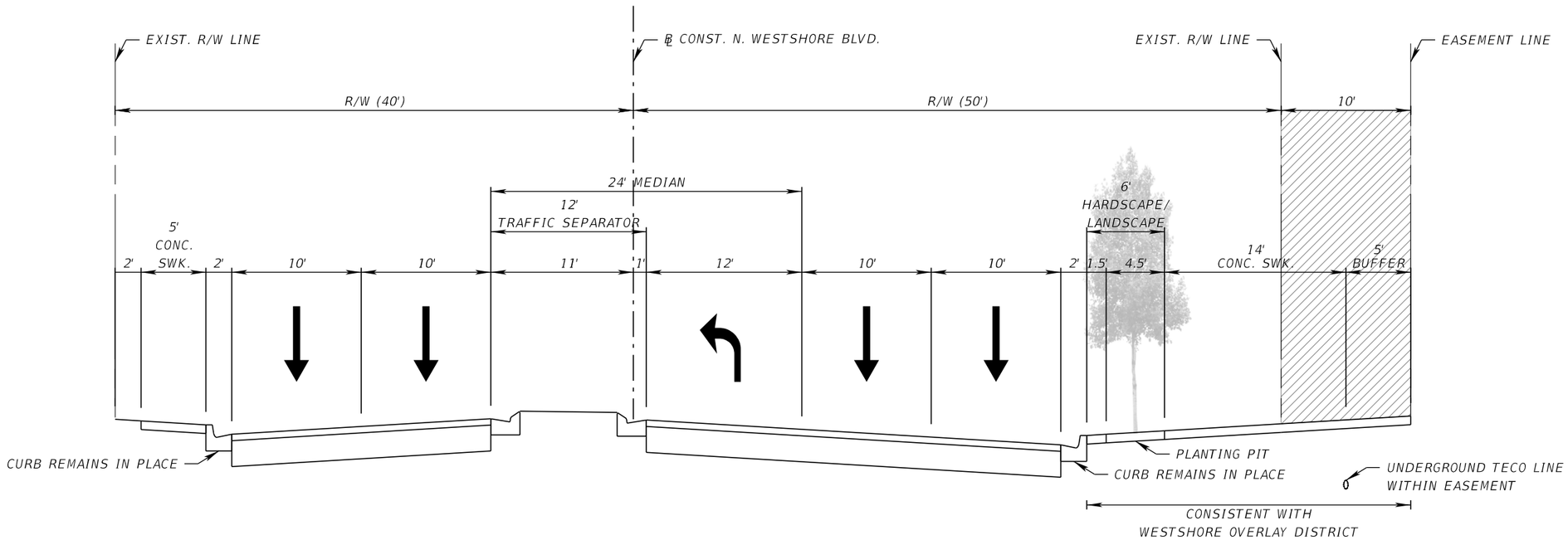

PROPOSED IMPROVEMENT 6D

REDUCE LANES TO 10'
ADD 10' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 14' ON EAST SIDE
ADD 6' HARDSCAPE/LANDSCAPE AREA ON EAST SIDE
ADD 5' BUFFER ON EAST SIDE
WIDEN MEDIAN TO 24' FOR LANDSCAPING

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

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WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
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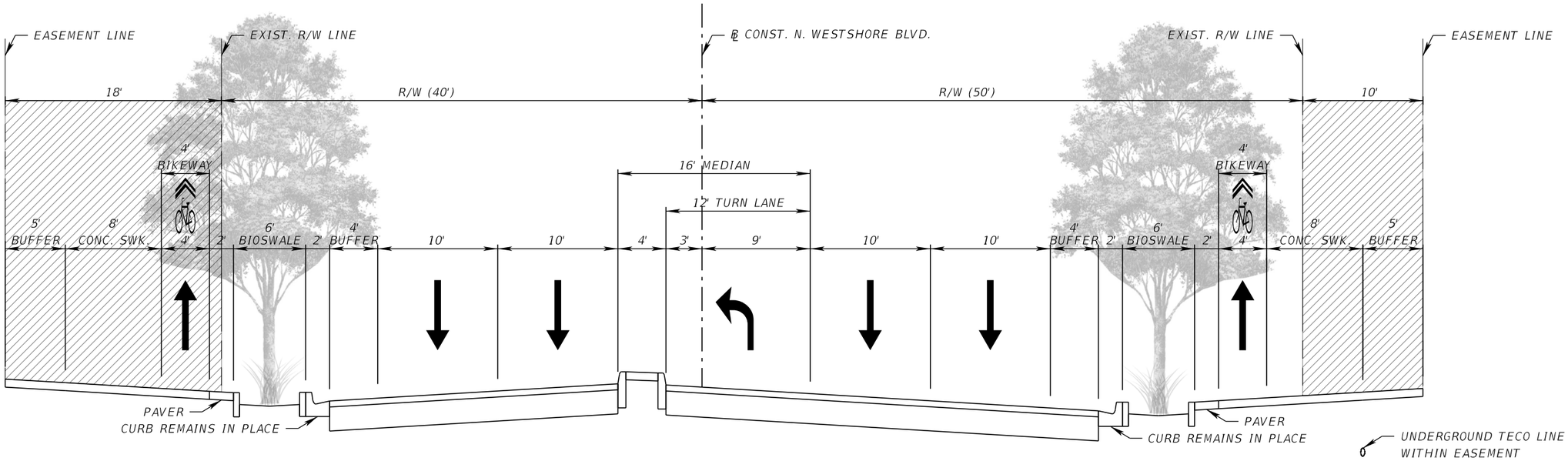

PROPOSED IMPROVEMENT 12A

REDUCE LANES TO 10'
ADD 10' EASEMENT ON EAST SIDE
ADD 18' EASEMENT ON WEST SIDE
ADD 4' LANE BUFFERS ON BOTH SIDES
WIDEN SIDEWALKS TO 8' ON BOTH SIDES
ADD 4' BIKEWAYS ON BOTH SIDES
ADD 6' LANDSCAPED BIOSWALES ON BOTH SIDES
ADD 5' BUFFERS ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

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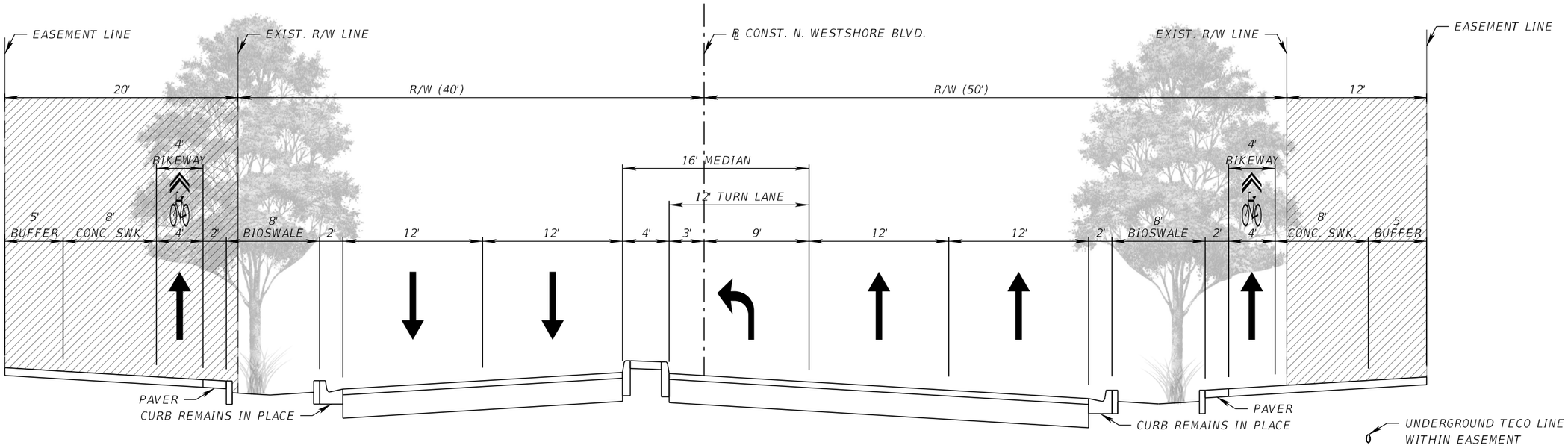
TYPICAL SECTIONS (12A)	69641000	



PROPOSED IMPROVEMENT 12B

ADD 12' EASEMENT ON EAST SIDE
ADD 20' EASEMENT ON WEST SIDE
WIDEN SIDEWALKS TO 8' ON BOTH SIDES
ADD 8' LANDSCAPED BIOSWALES ON BOTH SIDES
ADD 4' BIKEWAYS ON BOTH SIDES
ADD 5' BUFFERS ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
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WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (12B)	69641000	

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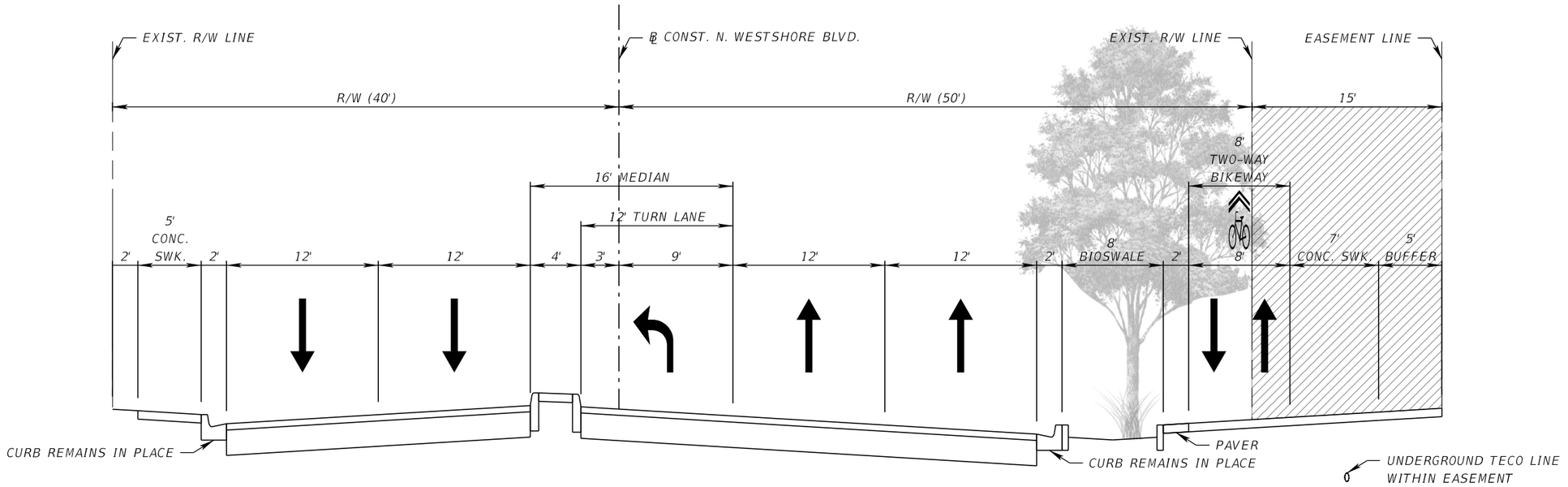

PROPOSED IMPROVEMENTS 13A

ADD 15' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 7' ON EAST SIDE
ADD 8' TWO-WAY BIKEWAY ON EAST SIDE
ADD 8' LANDSCAPED BIOSWALE ON EAST SIDE
ADD 5' BUFFER ON EAST SIDE

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
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TYPICAL SECTIONS (13A)	69641000	

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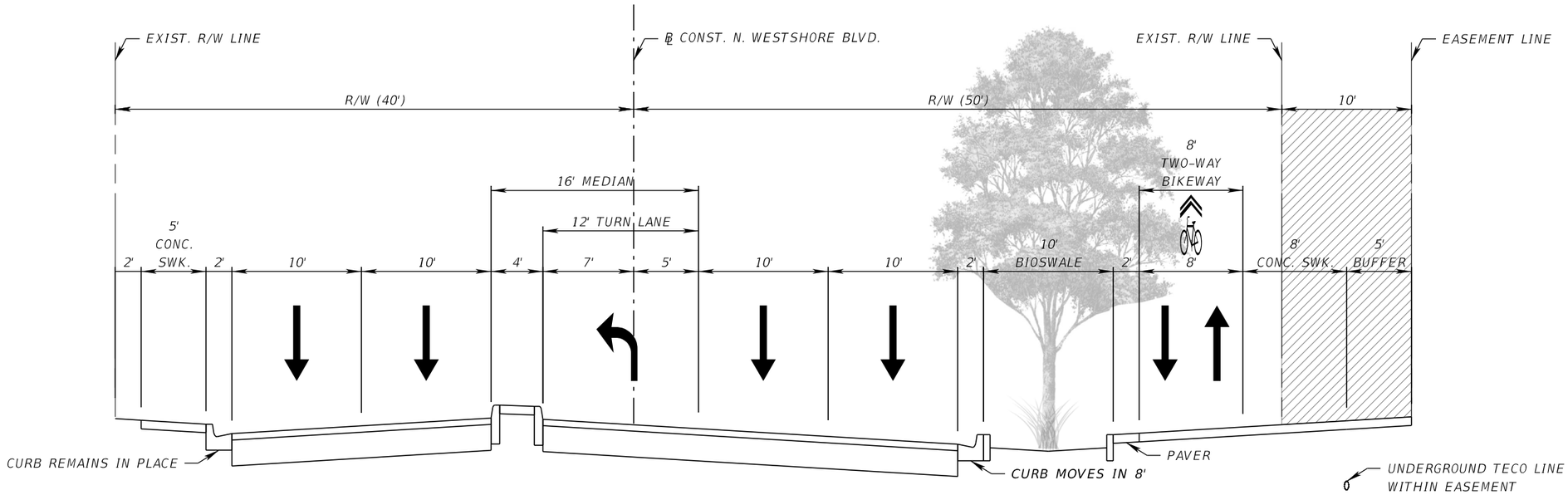

PROPOSED IMPROVEMENTS 13B

REDUCE LANES TO 10'
ADD 10' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 8' ON EAST SIDE
ADD 8' TWO-WAY BIKEWAY ON EAST SIDE
ADD 10' LANDSCAPED BIOSWALE ON EAST SIDE
ADD 5' BUFFER ON EAST SIDE

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
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TYPICAL SECTIONS (13B)	69641000	

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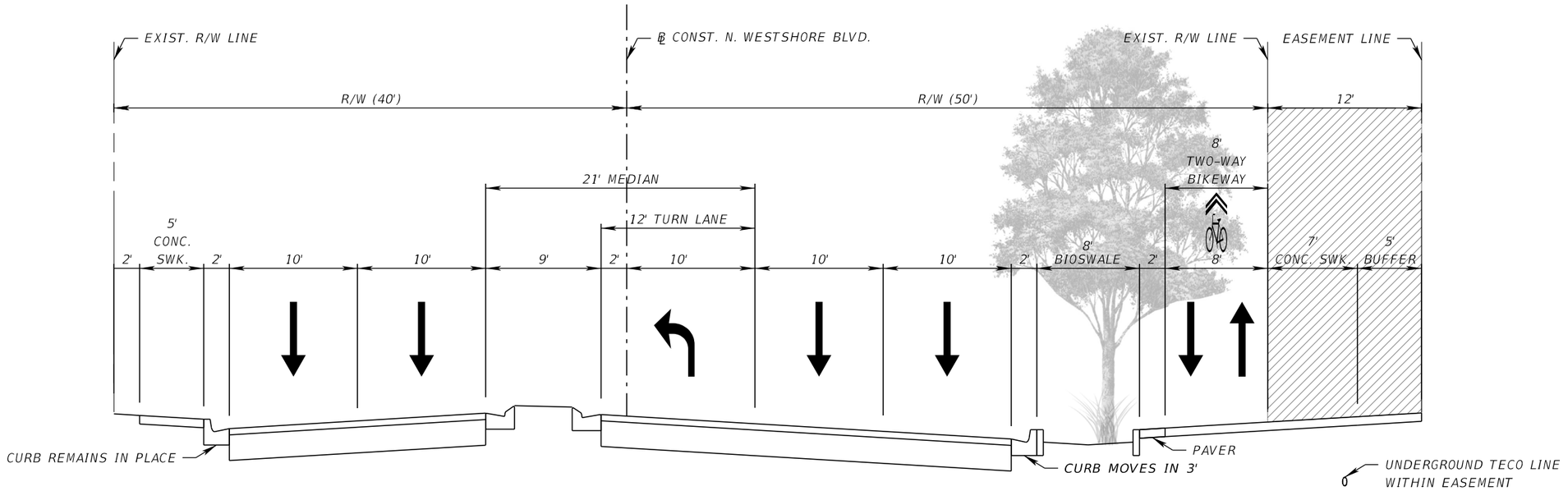

PROPOSED IMPROVEMENTS 13C

REDUCE LANES TO 10'
ADD 12' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 7' ON EAST SIDE
ADD 8' TWO-WAY BIKEWAY ON EAST SIDE
ADD 8' LANDSCAPED BIOSWALE ON EAST SIDE
WIDEN MEDIAN TO 21' FOR LANDSCAPING

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
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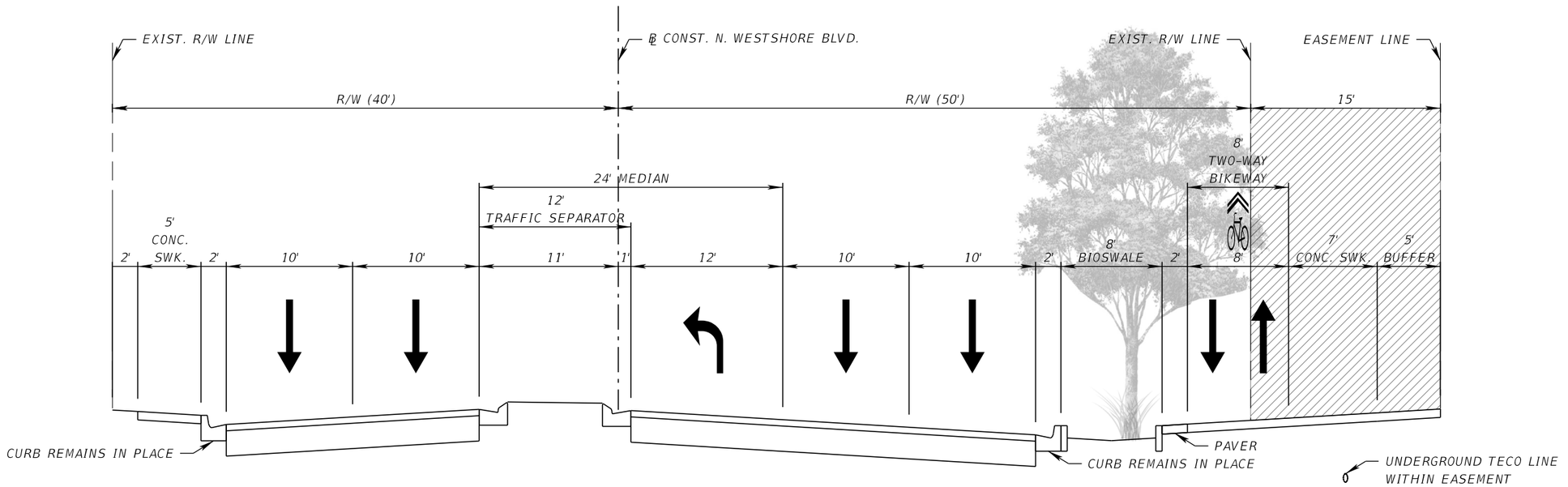
WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (13C)	69641000	



PROPOSED IMPROVEMENTS 13D

REDUCE LANES TO 10'
ADD 15' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 7' ON EAST SIDE
ADD 8' TWO-WAY BIKEWAY ON EAST SIDE
ADD 8' LANDSCAPED BIOSWALE ON EAST SIDE
ADD 5' BUFFER ON EAST SIDE
WIDEN MEDIAN TO 24' FOR LANDSCAPING

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (13D)	69641000	

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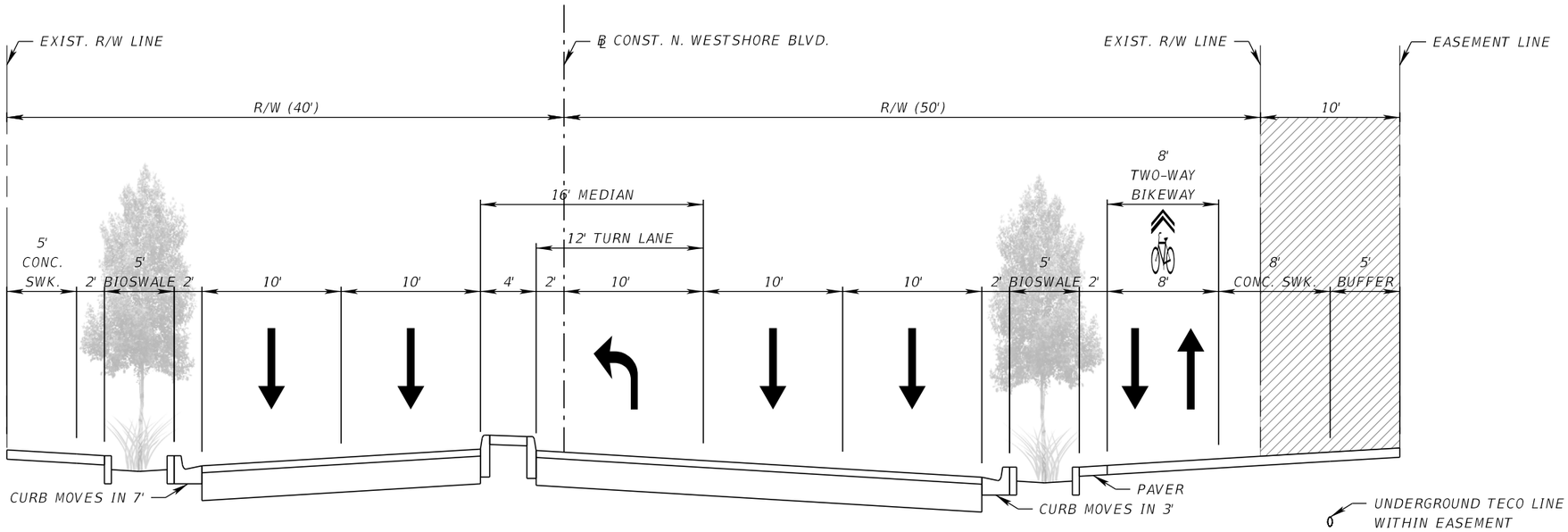

PROPOSED IMPROVEMENTS 13E

REDUCE LANES TO 10'
ADD 10' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 8' ON EAST SIDE
ADD 8' TWO-WAY BIKEWAY ON EAST SIDE
ADD 5' BUFFER ON EAST SIDE
ADD 5' LANDSCAPED BIOSWALES ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (13E)	69641000	

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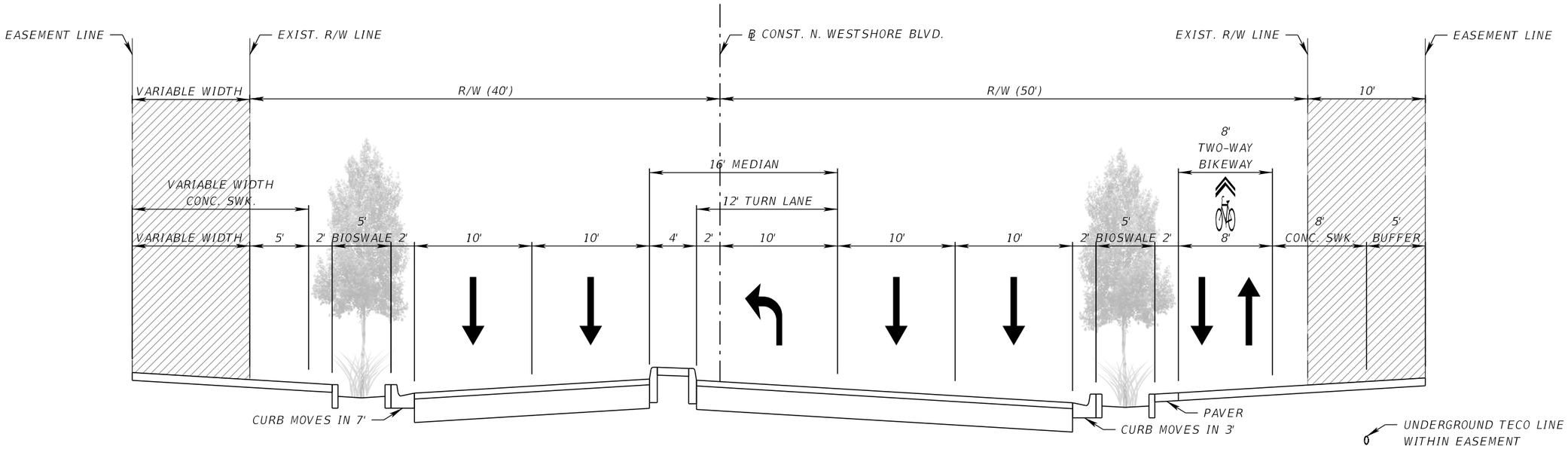

PROPOSED IMPROVEMENTS 13F

REDUCE LANES TO 10'
ADD 10' EASEMENT ON EAST SIDE
ADD VARIABLE WIDTH EASEMENT ON WEST SIDE
WIDEN SIDEWALK TO 8' ON EAST SIDE
ADD 8' TWO-WAY BIKEWAY ON EAST SIDE
ADD 5' BUFFER ON EAST SIDE
WIDEN SIDEWALK TO VARIABLE WIDTH EASEMENT ON WEST SIDE
ADD 5' LANDSCAPED BIOSWALES ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
P.E. LICENSE NUMBER 40084
RS&H, INC.
1715 N. WESTSHORE BOULEVARD, SUITE 600
TAMPA, FL 33607-3999
CERTIFICATE OF AUTHORIZATION: 00005620

Hillsborough County Florida

PUBLIC WORKS DEPARTMENT
TECHNICAL SERVICES DIVISION
601 E. KENNEDY BLVD.
TAMPA, FLORIDA 33602

WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (13F)	69641000	

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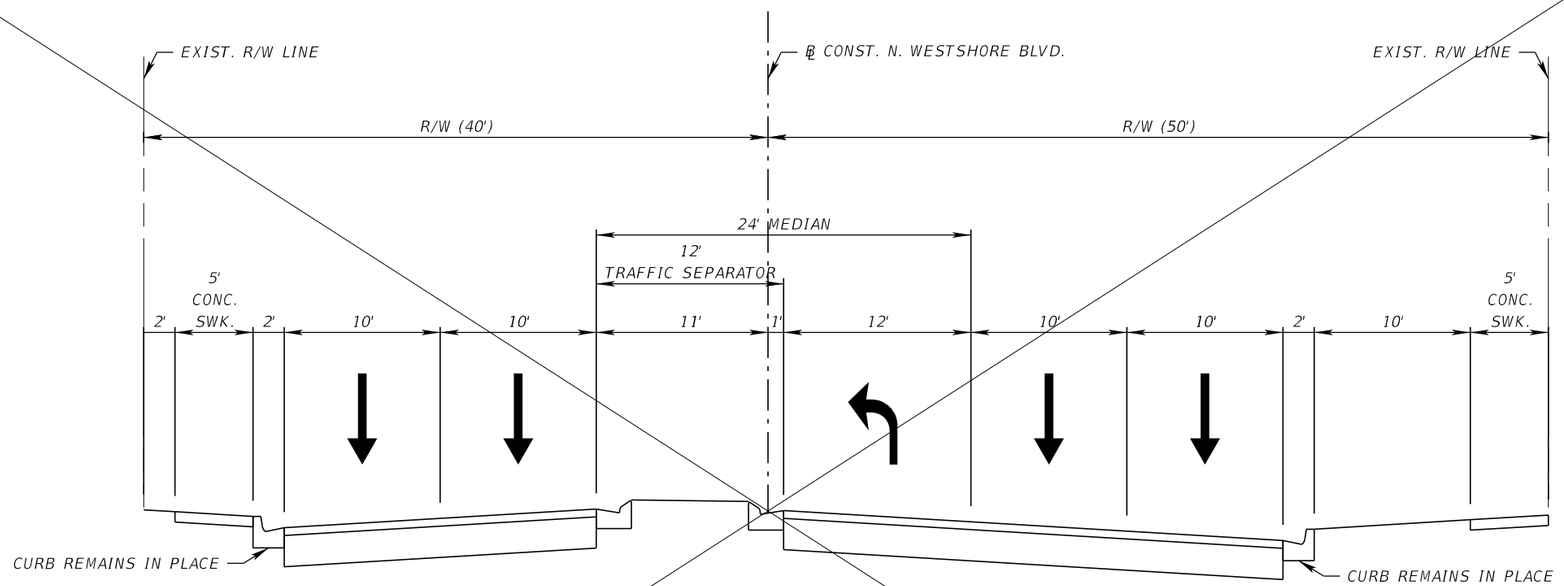
ATTACHMENT 5 – DROPPED TYPICAL SECTIONS

Westshore Complete Streets PD&E Study - Dropped Typical Sections - April 2020

TYPICAL SECTION	DESCRIPTION	STATUS	REASONING
1	Reduces all through lanes from 12' to 10' and widens the median by the resulting 8'. Both curbs remain in place.	DROP	Provides wider median for landscaping but does not improve pedestrian or bicycle accommodations along the corridor. Not consistent with precedent plans such as the Westshore Overlay District and initial input from stakeholders
3	Removes one NB and one SB through lane and adds 7' buffered bicycle lanes both directions along with a 10' wider median. Both curbs remain in place.	DROP	Removing through lanes would increase traffic congestion significantly.
4	Removes one NB and one SB through lane and adds 7' buffered bicycle lanes both directions along with widening sidewalks by 5' on both sides. Both curbs move in.	DROP	Removing through lanes would increase traffic congestion significantly.
5	Removes one NB and one SB through lane and widens the median by 10' along with 7' wider sidewalks on both sides. Both curbs move in.	DROP	Removing through lanes would increase traffic congestion significantly.
7	Adds 12' easement on right side and reduces all through lanes from 12' to 10' and adds 4' bicycle lanes on both sides. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	DROP	Hillsborough County no longer supports 4' bicycle lanes. Design standards require a 7' buffered bike lane for on street bike accommodations.
8	Adds 12' easement on right side and reduces all through lanes from 12' to 10'. Widen sidewalk on side opposite easement by 8'. Accommodates undergrounding of TECO lines in easement. Left curb moves in and right curb (easement side) remains in place.	DROP	This would not fulfill the purpose of the Westshore Overlay District easement nor is it consistent with precedent plans and initial input from stakeholders.
9	Removes one NB and one SB through lane and adds 7' buffered bicycle lanes both directions along with a 12' easement on right side. Widen sidewalk on side opposite easement by 10'. Accommodates undergrounding of TECO lines in easement. Left curb moves in and right curb remains in place.	DROP	Removing through lanes would increase traffic congestion significantly.
10	Removes one NB and one SB through lane and adds 4' one-way bikeways, 5' bioswales and 3' wider sidewalks on both sides. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Both curbs move in.	DROP	Removing through lanes would increase traffic congestion significantly.
11	Removes one NB and one SB through lane and adds 8' two-way bikeway, 5' bioswales and 3' wider sidewalk on right side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution (Attachment 4). Widens median by 4' and sidewalk on side opposite by 7'. Both curbs move in.	DROP	Removing through lanes would increase traffic congestion significantly



PROPOSED IMPROVEMENT 1

REDUCE LANES TO 10'
WIDEN MEDIAN TO 24' FOR LANDSCAPING

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

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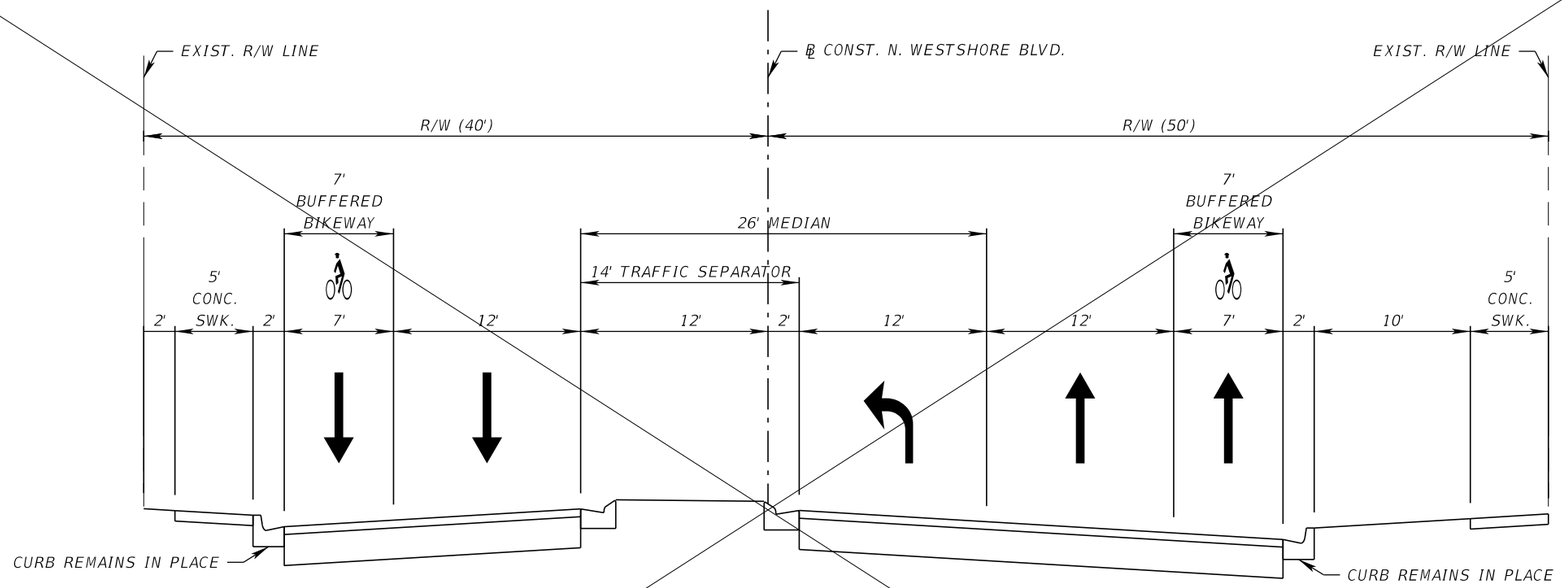
WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (1)	69641000	



PROPOSED IMPROVEMENT 3

REMOVE ONE LANE IN BOTH DIRECTIONS
ADD 7' BUFFERED BIKEWAYS ON BOTH SIDES
WIDEN MEDIAN TO 26' FOR LANDSCAPING

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

REVISIONS			
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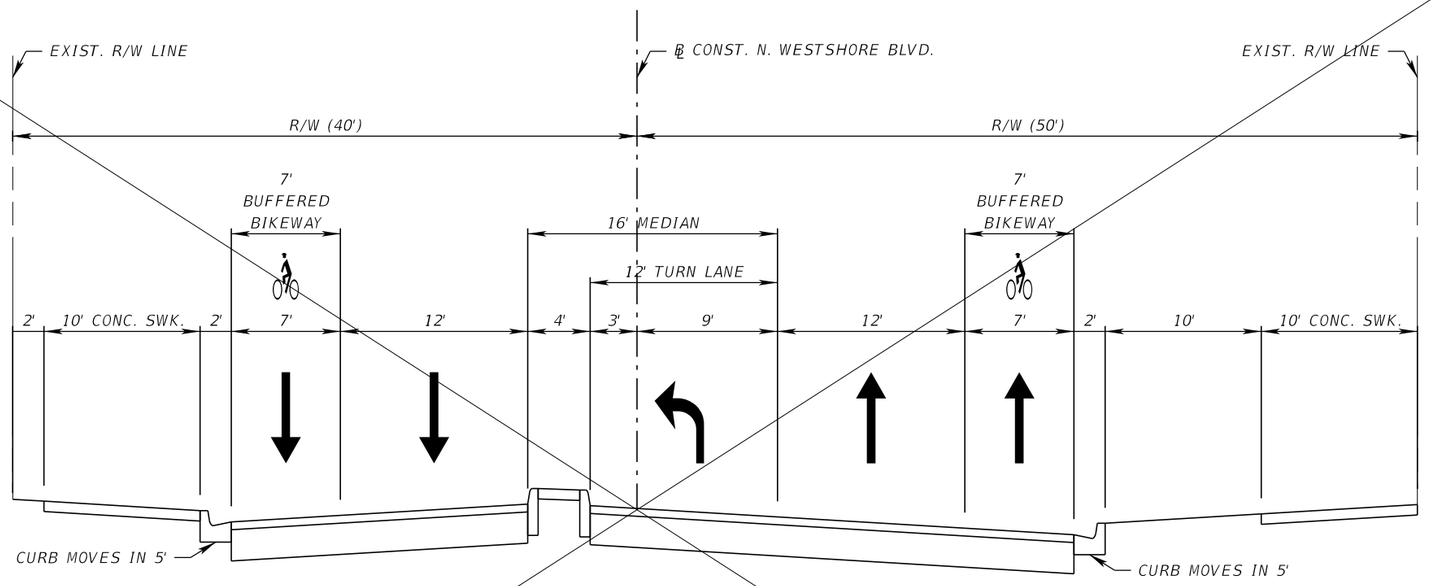
WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (3)	69641000	



PROPOSED IMPROVEMENT 4

REMOVE ONE LANE IN BOTH DIRECTIONS
ADD 7' BUFFERED BIKEWAYS ON BOTH SIDES
WIDEN SIDEWALKS TO 10' ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

REVISIONS			
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WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (4)	69641000	

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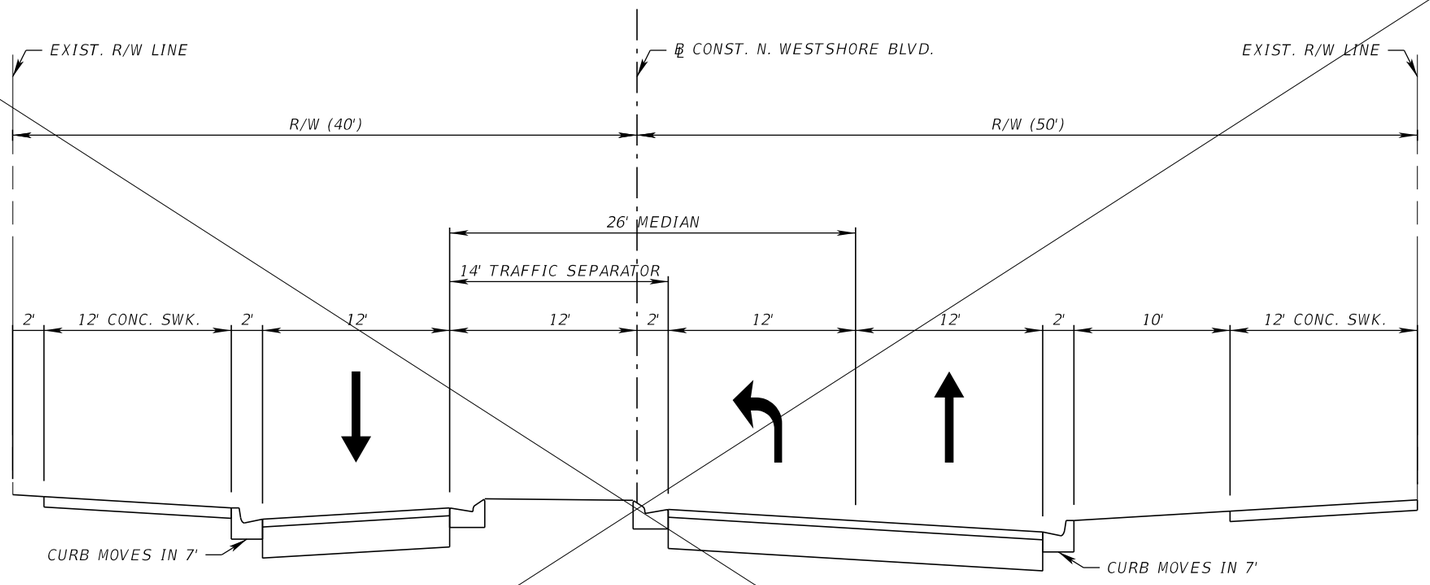

PROPOSED IMPROVEMENT 5

REMOVE ONE LANE IN BOTH DIRECTIONS
WIDEN SIDEWALKS TO 12' ON BOTH SIDES
WIDEN MEDIAN TO 26' FOR LANDSCAPING

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

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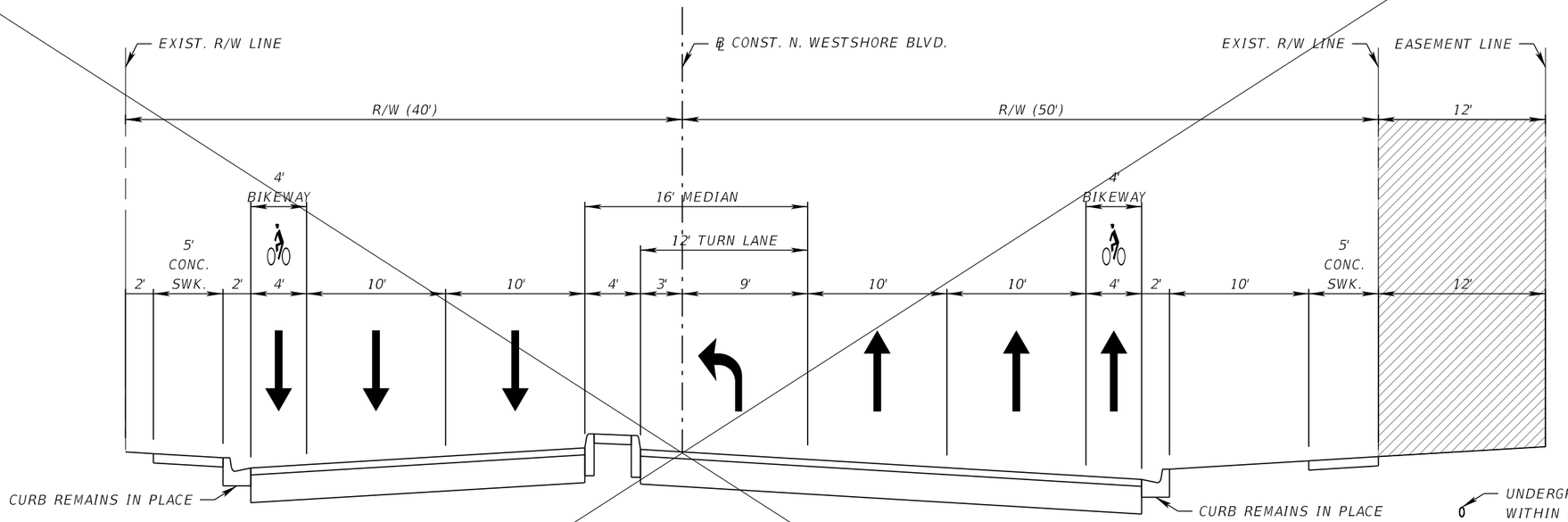
WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (5)	69641000	



PROPOSED IMPROVEMENT 7

REDUCE LANES TO 10'
ADD 12' EASEMENT ON EAST SIDE
ADD 4' BIKEWAYS ON BOTH SIDES

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MICHAEL JAY COLEMAN, P.E.
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WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (7)	69641000	

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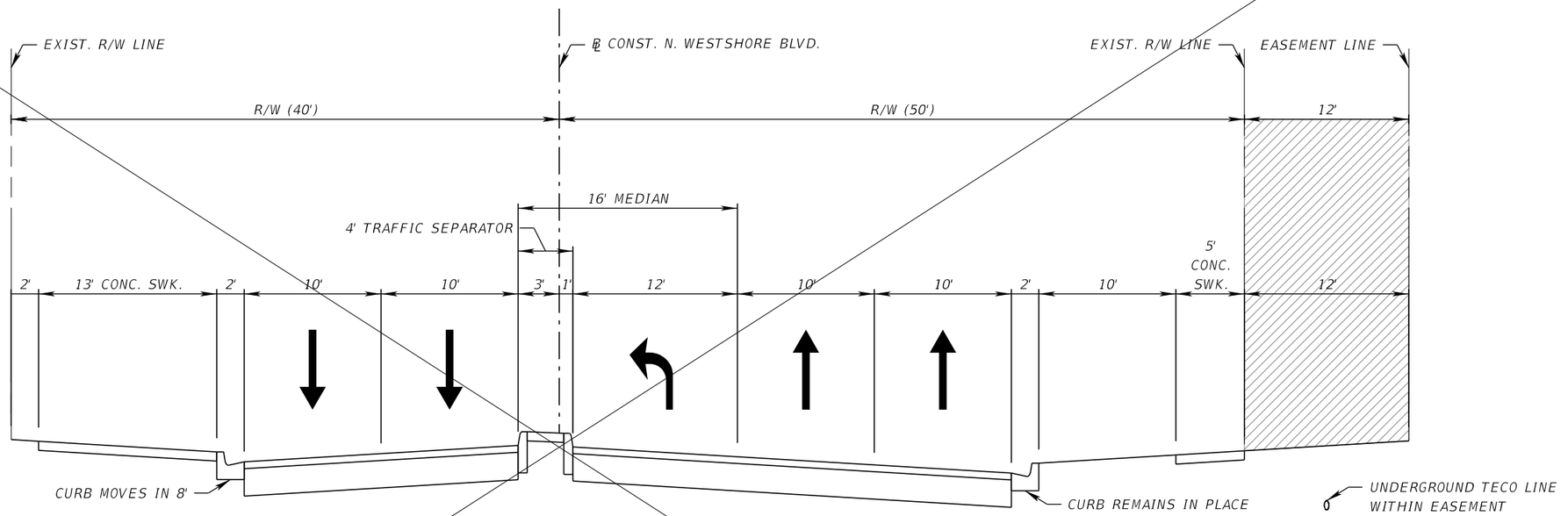

PROPOSED IMPROVEMENT 8

REDUCE LANES TO 10'
ADD 12' EASEMENT ON EAST SIDE
WIDEN SIDEWALK TO 13' ON WEST SIDE

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

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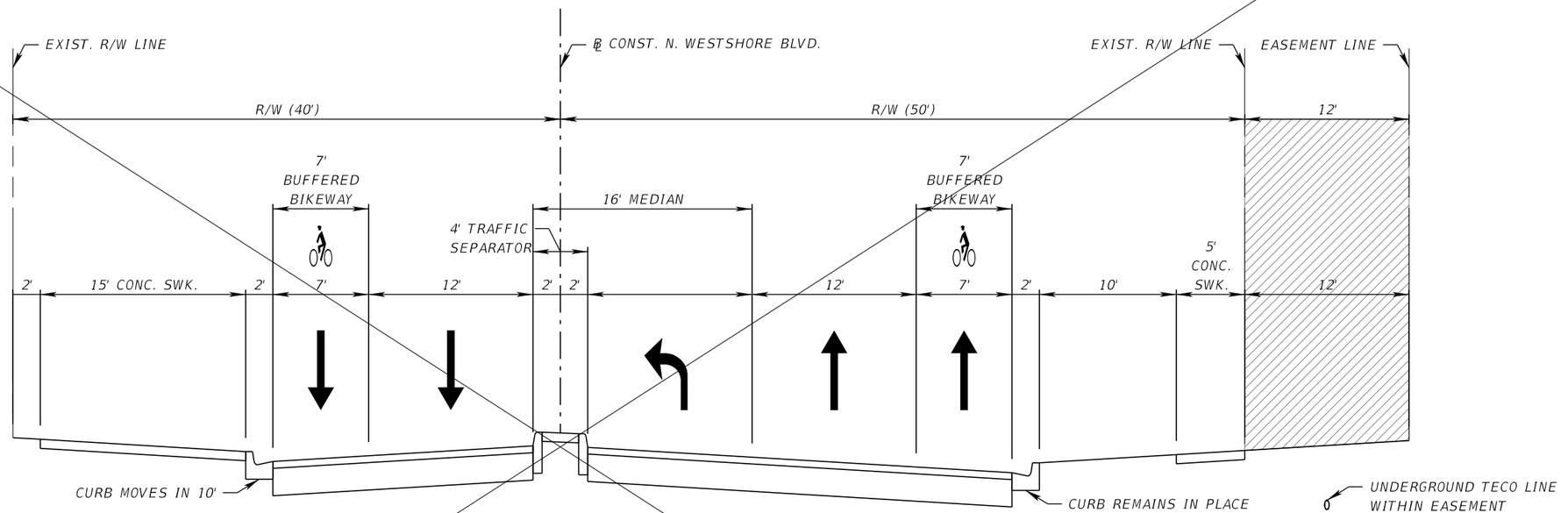
WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (8)	69641000	



PROPOSED IMPROVEMENT 9

REMOVE ONE LANE IN BOTH DIRECTIONS
ADD 12' EASEMENT ON EAST SIDE
ADD 7' BUFFERED BIKEWAYS ON BOTH SIDES
WIDEN SIDEWALK TO 15' ON WEST SIDE

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

PROPOSED EASEMENT

REVISIONS			
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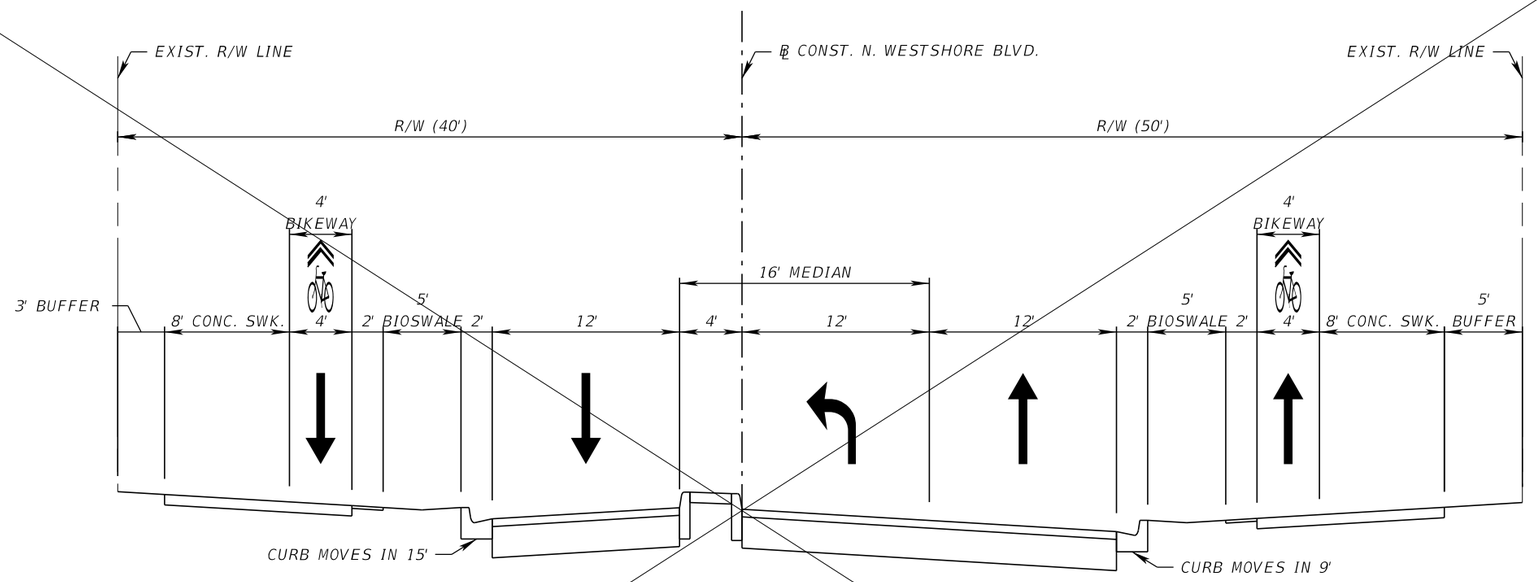
WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (9)	69641000	



PROPOSED IMPROVEMENT 10

REMOVE ONE LANE IN BOTH DIRECTIONS
WIDEN SIDEWALKS TO 8' ON BOTH SIDES
ADD 4' BIKEWAYS ON BOTH SIDES
ADD 5' LANDSCAPED BIOSWALES ON BOTH SIDES
PROVIDE 5' BUFFER ON EAST SIDE
PROVIDE 3' BUFFER ON WEST SIDE

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

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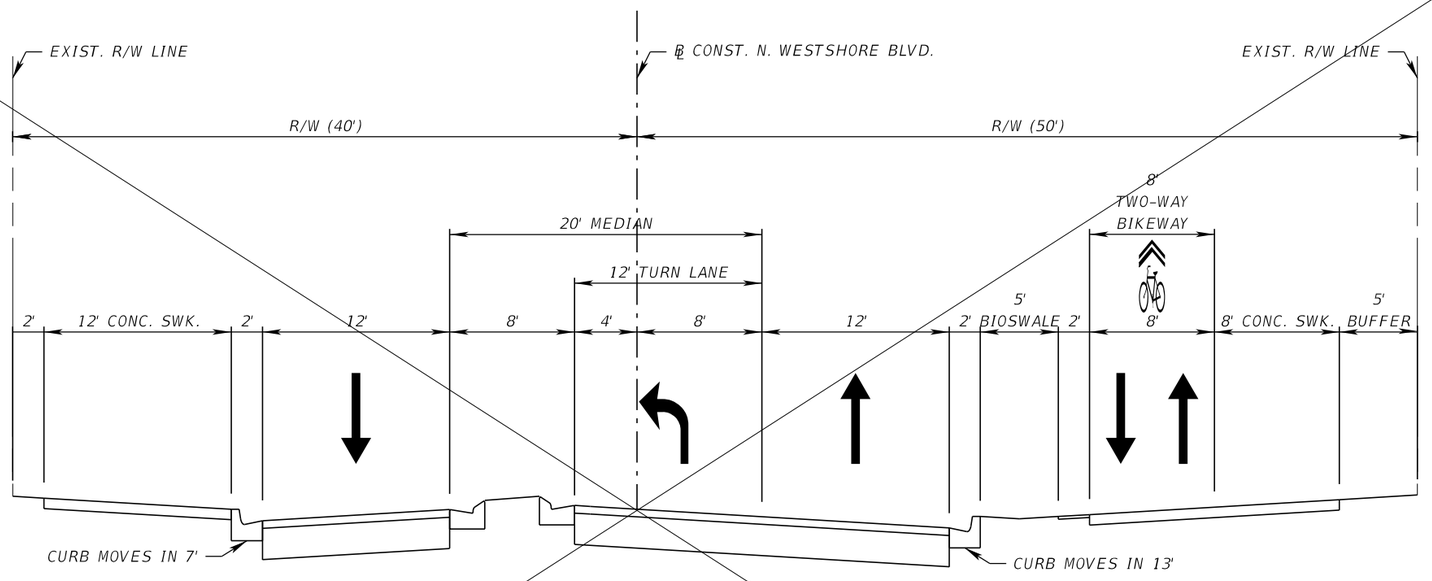
WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (10)	69641000	



PROPOSED IMPROVEMENTS 11

REMOVE ONE LANE IN BOTH DIRECTIONS
WIDEN SIDEWALK TO 8' ON EAST SIDE
ADD 8' TWO-WAY BICYCLE TRACK ON EAST SIDE
ADD 5' LANDSCAPED BIOSWALE ON EAST SIDE
PROVIDE 5' BUFFER ON EAST SIDE
WIDEN SIDEWALK TO 12' ON WEST SIDE
WIDEN MEDIAN TO 20' FOR LANDSCAPING

LOOKING NORTH
BETWEEN W. CYPRESS ST. AND W. BOY SCOUT BLVD.

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WESTSHORE BLVD COMPLETE STREETS	CIP NO.	SHT. NO.
TYPICAL SECTIONS (11)	69641000	

ATTACHMENT 6 – EVALUATION MATRIX OF RETAINED TYPICAL SECTIONS

Westshore Complete Streets PD&E Study
Retained Typical Sections Evaluation Matrix - April 2020

TYPICAL SECTION	DESCRIPTION	REASONING	EVALUATION CRITERIA									TOTAL
			ACCOMMODATES PEDESTRIAN TRAFFIC	PROVIDES SHADE FOR PEDESTRIANS	CREATES COMFORTABLE WALKING AREA	CREATES SOCIAL SPACE FOR INTERACTION	ACCOMMODATES BICYCLING AND MICROMOBILITY	GENERATES AESTHETIC VALUE	SUPPORTS SUSTAINABILITY, WATER QUALITY, DRAINAGE	COSTS	EASEMENT REQUIREMENTS	
			RATING FACTORS									
			WIDER WALKWAYS	LARGE CANOPY TREES	SEPARATION FROM TRAVEL LANES/ LOWER TRAVEL SPEEDS	SPACE OUTSIDE WALKWAYS	BIKEWAYS	LANDSCAPING, PLANTING PITS, BIOSWALES, TECO UG	BIOSWALES	CAPITAL & MAINT.	NONE, ONE SIDE OR BOTH SIDES	
EXISTING	All through lanes are 12'. 5' sidewalks both sides.	The No-build alternative remaIns viable throughout the project.	1	0	1	0	1	0	0	5	3	11
2	Reduces all through lanes from 12' to 10". Widens sidewalk on east side to 13' and adds 6' hardscape/landscape area on east side widens sidewalk on west side to 9'. Both curbs move in.	Facilitates pedestrian and limited bicycle accommodations along the corridor, more so on the east side, without requiring additional ROW or easements.	2	1	2	1	2	1	0	2	3	14
6A	Adds 10’ easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on east side). On east side, widens sidewalk by 9’, adds 6’ for hardscape/landscape, and adds 5’ buffer for pedestrian flow and safety adjacent to building fronts. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	Accommodates Westshore Overlay District desirable typical section on one side.	3	1	2	3	2	1	0	4	2	18
6D	Reduces all through lanes from 12’ to 10’. Adds 10’ easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides). Widens sidewalk by 9’, adds 6’ for hardscape/landscape, and adds 5’ pedestrian buffer on east side and widens the median by 8’. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	Accommodates Westshore Overlay District desirable typical section on one side.	3	1	2	3	2	2	0	4	2	19
13A	Adds 8’ two-way bikeway, 5’ bioswale and 8’ wide sidewalk and 5’ buffer for pedestrian flow and safety on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 15’ easement on east side, accommodates undergrounding of TECO lines in easement, and both curbs remain in place.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	4	4	4	4	4	3	4	2	32
13B	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 10’ bioswale, 5' pedestrain buffer and 8’ wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 10’ easement on east side. Left curbs remains in place and right curb moves in.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	4	4	4	4	4	3	3	2	31
13C	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 8’ bioswale, 5' pedestrian buffer and 7’ wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 12’ easement on east side. Adds 5’ to median. Accommodates undergrounding of TECO lines in easement. Left curbs remains in place and right curb moves in.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	4	4	4	4	4	3	3	2	31
13D	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 8’ bioswale, 5' pedestrian buffer and 7’ wide sidewalk on east side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 15’ easement on east side. Adds 8’ to median. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	4	4	4	4	4	3	4	2	32
13E	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 5’ bioswale, 5' pedestrian buffer and 8’ sidewalk on east side. Adds 5’ bioswale on west side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 10’ easement on east side. Accommodates undergrounding of TECO lines in easement. Both curbs move in.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	3	2	4	4	4	5	5	2	2	31
13F	Reduces all through lanes from 12’ to 10’. Adds 8’ two-way bikeway, 5’ bioswale, 5' pedestrian buffer and 8’ sidewalk on east side. Adds 5’ bioswale to the west side. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 10’ easement on east side. Adds variable width easement and sidewalk on west side. Accommodates undergrounding of TECO lines in 10’ easement. Both curbs move in.	Accommodates Pedestrians and two-way bicycle traffic on one side and pedestrians on opposite side. Compatible with Westshore Overlay District desirable typical section on one side.	4	2	4	5	4	5	5	2	2	33
6B	Adds 10’ easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides) and 18’ easement on west side. Widens sidewalks to 14’, adds 6’ for hardscape/landscape, and adds 5’ pedestrian buffer on both sides. Accommodates undergrounding of TECO lines in easement. Both curbs remain in place.	Accommodates Westshore Overlay District desirable typical section on both sides.	4	2	4	5	3	3	0	4	1	26
6C	Reduces all through lanes from 12’ to 10’. Adds 10’ easement on east side (note: this easement would be consistent with the Overlay District and its 10-foot setback on both sides) and 18’ easement on west side. Widens sidewalks to 14’, adds 6’ for hardscape/landscape, and adds 4' lane buffers and 5’ pedestrian buffers on both sides. Both curbs remian in place.	Accommodates Westshore Overlay District desirable typical section on both sides and adds buffer between outside travel lanes and shade trees.	4	5	4	5	3	4	0	4	1	30
12A	Reduces all through lanes from 12' to 10'. Adds 4' lane buffers, 4’ one-way bikeways, 6’ bioswales, 5' pedestrian buffers, and 8’ wide sidewalks on both sides. Bioswales accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 10’ easement on east side and 18’ easement on west side. Both curbs remain in place. Accommodates undergrounding of TECO lines in 10’ easement. This typical section would require easements from properties on both sides.	Accommodates pedestrians and bicycles on both sides and is compatible with Westshore Overlay District desirable typical section.	4	5	5	5	5	5	5	4	1	39
12B	Adds 4’ one-way bikeways, 5' pedestrian buffers, 8’ wide sidewalks and 8' bioswales on both sides to accommodate landscaping while conveying stormwater and removing debris and pollution. Adds 12’ easement on east side and 20’ easement on west side. Both curbs remain in place. This typical section would require easements from properties on both sides.	Accommodates pedestrians and bicycles on both sides and is compatible with Westshore Overlay District desirable typical section.	4	5	5	5	5	5	5	4	1	39

Westshore Complete Streets PD&E Study - Typical Section Rating Factors - April 2020

EVALUATION CRITERIA	RATING FACTORS
ACCOMMODATES PEDESTRIAN TRAFFIC	**WIDER WALKWAYS** 1 = Existing 2 = Wider SW with no easements 3 = Easement with walkways on one side 4 = Easements with walkways on both sides
PROVIDES SHADE FOR PEDESTRIANS	**LARGE CANOPY TREES** 0 = Existing 1 = Small trees on one side 2 = Small trees on both sides 4 = Larger trees on one side 5 = Larger trees on both sides
CREATES COMFORTABLE WALKING AREA	**SEPARATION FROM TRAVEL LANES/ LOWER TRAVEL SPEEDS** 1 = Existing 2 = Landscaped buffer on one side 4 = Landscape buffer plus bikeways on one side or landscaping on both sides 5 = Landscape buffer plus bikeways on both sides
CREATES SOCIAL SPACE FOR INTERACTION	**SPACE OUTSIDE WALKWAYS** 0 = Existing 1 = Narrow through lanes with no easements 3 = Easment on one side 4 = Canopy trees plus easement on one side 5 = Canopy tress plus easements on both sides
ACCOMMODATES BICYCLING AND MICROMOBILITY	**BIKEWAYS** 1 = Existing 2 = Easement on one side 3 = Easement on both sides 4 = Bikeway on one side 5 = Bikeways on both sides
GENERATES AESTHETIC VALUE	**LANDSCAPING, PLANTING PITS, BIOSWALES, TECO UG** 0 = Existing 1 = Landscaping on one side 2 = Landscaping plus easement on one side 4 = Canopy trees plus easements on one side 5 = Canopy trees plus easements on both sides
SUPPORTS SUSTAINABILITY, WATER QUALITY, DRAINAGE	**BIOSWALES** 0 = No bioswales 3 = Bioswales on one side 5 = Bioswales on both sides
COSTS	**CAPITAL & MAINT.** 5 = No-build 4 = Both curbs remain in place 3 = One curbs moves in 2 = Both curbs move in
CREATES COMFORTABLE WALKING AREA	**NONE, ONE SIDE OR BOTH SIDES** 1 = Easements on both sides 2 = Easements on one sides 3 = No easements

APPENDIX D
Construction Cost Estimate

ENGINEER'S ESTIMATE

HILLSBOROUGH COUNTY CAPITAL PROGRAMS DEPARTMENT

CIP ID # :	69641000
PROJECT DESCRIPTION:	Westshore Blvd. lane diet from West Kennedy Blvd. to West Boy Scout Blvd.
PAY ITEM SPEC YEAR:	July 2020
SUBMITTAL TYPE:	PD&E Estimate
COUNTY:	Hillsborough
DATE:	July 27, 2020
ENGINEERING CONSULTANT FIRM:	RS&H
CONTACT NAME:	Michael Jay Coleman, P.E.
PHONE NUMBER:	(813) 289-5550
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	1 of 7

COMPONENT GROUPS

100 - STRUCTURES	*NOT USED*		
200 - ROADWAY/DRAINAGE			$ 3,102,612.05
300 - SIGNING & PAVEMENT MARKINGS			$465,391.81
400 - LIGHTING			$ 3,642,000.00
500 - SIGNALIZATION	*NOT USED*		
550 - ITS	*NOT USED*		
600 - LANDSCAPE / PERIPHERALS			$ 2,003,000.00
700 - UTILITIES	*NOT USED*		
800 - ARCHITECTURAL	*NOT USED*		
900 - MASS TRANSIT	*NOT USED*		
1000 - INVALID & OTHER ITEMS	*NOT USED*		
COMPONENT SUB-TOTAL			$9,213,003.85
(102-1) MOT (Maintenance of Traffic)		10%	$921,300.39
SUB-TOTAL			$10,134,304.24
(101-1) MOB (Mobilization)		8%	$810,744.34
SUB-TOTAL			$10,945,048.58
PU (Project Unknowns)		5%	$547,252.43
SUB-TOTAL			$11,492,301.01
(999-25) Initial Contingency (Do Not Bid)			$150,000.00
PROJECT GRAND TOTAL			**$11,642,301.01**

NOTES:

Unit Cost from FDOT 12 Month Averages, Area 08 or Statewide Avergae, unlesss otherwise noted.

Cost estimate

	Segment 1	Segment 2	Segment 3	Total	
Roadway	$664,034	$426,246	$1,393,333	$2,483,612	
Signing and Marking	$125,705	$76,237	$263,450	$465,392	
Urban Planter Bioswale	$174,000	$82,000	$363,000	$619,000	
Pedway and Property	$441,000	$404,000	$1,158,000	$2,003,000	
Light/Streetscape	$1,149,000	$386,000	$2,107,000	$3,642,000	
Subtotal	$2,553,739	$1,374,482	$5,284,783	$9,213,004	
MOT	$255,374	$137,448	$528,478	$921,300	
	$2,809,113	$1,511,931	$5,813,261	$10,134,304	
Mobilization	$224,729	$120,954	$465,061	$810,744	
	$3,033,842	$1,632,885	$6,278,322	$10,945,049	
Project Unknowns	$151,692	$81,644	$313,916	$547,252	
	$3,185,534	$1,714,529	$6,592,238	$11,492,301	
Initial Contingency	$50,000	$50,000	$50,000	$150,000	
Subtotal	$3,235,534	$1,764,529	$6,642,238	$11,642,301	
Preliminary Engineering (10%)	$323,553	$176,453	$664,224	$1,164,230	
CEI (10%)	$323,553	$176,453	$664,224	$1,164,230	
Utilities Relocation	$101,000	$16,000	$1,728,000	$1,845,000	
Total	$3,983,641	$2,133,435	$9,698,685	$15,815,761	
	$3,984,000	$2,133,000	$9,699,000	$15,816,000	$15,816,000

ENGINEER'S ESTIMATE

HILLSBOROUGH COUNTY CAPITAL PROGRAMS DEPARTMENT

CIP ID # :	69641000
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	2

Roadway (From West Kennedy Blvd. to West Gray St.)

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
201020-001	MOBILIZATION		8%	See Summary Sheet	
201500-001	MAINTENANCE OF TRAFFIC		10%	See Summary Sheet	
0104 10 3	SEDIMENT BARRIER	LF	2600	$ 2.63	$ 6,838.00
0104 18	INLET PROTECTION SYSTEM	EA	10	$ 107.50	$ 1,075.00
0110 1 1	CLEARING & GRUBBING	AC	1.433	$ 18,391.94	$ 26,346.45
0110 4 10	REMOVAL OF EXISTING CONCRETE	SY	2022	$ 22.61	$ 45,717.42
0120 6	EMBANKMENT	CY	1023	$ 9.61	$ 9,832.47
0160 4	TYPE B STABILIZATION	SY	674	$ 7.51	$ 5,062.27
0327 70 6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	SY	8033	$ 2.26	$ 18,155.33
0337 7 83	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC C, FC-12.5, PG 76-22	TN	663	$ 111.78	$ 74,082.20
0425 1311	INLETS, CURB, TYPE P-1, <10'	EA	10.00	$ 6,398.80	$ 63,988.00
0425 1319	INLETS, CURB TYPE P-1, MODIFY	EA	10.00	$ 1,787.14	$ 17,871.40
0430175118	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	105.50	$ 82.54	$ 8,707.97
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	2600	$ 25.95	$ 67,470.00
0520 5 42	TRAFFIC SEPARATOR CONCRETE- TYPE IV, 6' WIDE	LF	1140	$ 51.25	$ 58,425.00
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	3875.3	$ 63.15	$ 244,722.67
0527 2	DETECTABLE WARNINGS	SF	542.0	$ 29.04	$ 15,739.68
Roadway (From West Kennedy Blvd. to West Gray St.)		**COMPONENT TOTAL**			**$ 664,033.85**

ENGINEER'S ESTIMATE

HILLSBOROUGH COUNTY CAPITAL PROGRAMS DEPARTMENT

FINANCIAL PROJECT ID:	696-4-10-00
FILE VERSION:	EE_11-05_Rev29
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Roadway (From West Gray St. to West Cypress St.)

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
201020-001	MOBILIZATION		8%	See Summary Sheet	
201500-001	MAINTENANCE OF TRAFFIC		10%	See Summary Sheet	
0104 10 3	SEDIMENT BARRIER	LF	1774	$ 2.63	$4,665.62
0104 18	INLET PROTECTION SYSTEM	EA	8	$ 107.50	$860.00
0110 1 1	CLEARING & GRUBBING	AC	0.70	$ 18,391.94	$12,874.36
0110 3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	SF	140	$ 27.04	$3,785.60
0110 4 10	REMOVAL OF EXISTING CONCRETE	SY	690	$ 22.61	$15,598.41
0120 6	EMBANKMENT	CY	56.85	$ 9.61	$546.33
0160 4	TYPE B STABILIZATION	SY	79	$ 7.51	$596.89
0327 70 6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	SY	2391	$ 2.26	$5,403.91
0337 7 83	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC C, FC-12.5, PG 76-22	TN	197.3	$ 111.78	$22,050.84
0400 0 11	CONCRETE CLASS NS, GRAVITY WALL	CY	7.3	$ 518.95	$3,788.34
0400 4 1	CONCRETE CLASS IV, CULVERTS	CY	42.0	$ 1,788.87	$75,132.54
0415 1 1	REINFORCING STEEL- ROADWAY	LB	10500	$ 1.12	$11,760.00
0425 1311	INLETS, CURB, TYPE P-1, <10'	EA	2	$ 6,398.80	$12,797.60
0425 1319	INLETS, CURB TYPE P-1, MODIFY	EA	2	$ 1,787.14	$3,574.28
0430175118	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	10	$ 82.54	$825.40
0515 1 2	PIPE HANDRAIL - GUIDERAIL, ALUMINUM	LF	91	$ 87.99	$8,007.09
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	307	$ 25.95	$7,966.65
0520 5 42	TRAFFIC SEPARATOR CONCRETE- TYPE IV, 6' WIDE	LF	307	$ 51.25	$15,733.75
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	3,390.68	$ 63.15	$214,121.44
0527 2	DETECTABLE WARNINGS	SF	212	$ 29.04	$6,156.48
Roadway (From West Gray St. to West Cypress St.)		**COMPONENT TOTAL**			**$426,245.53**

ENGINEER'S ESTIMATE

HILLSBOROUGH COUNTY CAPITAL PROGRAMS DEPARTMENT

FINANCIAL PROJECT ID:	696-4-10-00
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Roadway (From West Cypress St. to West Boy Scout Blvd.)

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
201020-001	MOBILIZATION		8%	See Summary Sheet	
201500-001	MAINTENANCE OF TRAFFIC		10%	See Summary Sheet	
0104 10 3	SEDIMENT BARRIER	LF	5238	$ 2.63	$13,775.94
0104 18	INLET PROTECTION SYSTEM	EA	14	$ 107.50	$1,505.00
0110 1 1	CLEARING & GRUBBING	AC	2.886	$ 18,391.94	$53,079.14
0110 4 10	REMOVAL OF EXISTING CONCRETE	SY	4074	$ 22.61	$92,113.14
0120 6	EMBANKMENT	CY	776	$ 9.61	$7,457.36
0160 4	TYPE B STABILIZATION	SY	1356	$ 7.51	$10,183.56
0327 70 6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	SY	15129	$ 2.26	$34,191.29
0337 7 83	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC C, FC-12.5, PG 76-22	TN	1248.13	$ 111.78	$139,516.34
0400 0 11	CONCRETE CLASS NS, GRAVITY WALL	CY	52.22	$ 518.95	$27,099.57
0425 1311	INLETS, CURB, TYPE P-1, <10'	EA	13	$ 6,398.80	$83,184.40
0425 1319	INLETS, CURB TYPE P-1, MODIFY	EA	13	$ 1,787.14	$23,232.82
0430175118	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	52	$ 82.54	$4,292.08
0515 1 2	PIPE HANDRAIL - GUIDERAIL, ALUMINUM	LF	235	$ 87.99	$20,677.65
0520 1 7	CONCRETE CURB & GUTTER, TYPE E	LF	1040	$ 21.56	$22,422.40
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	5238	$ 25.95	$135,926.10
0520 5 42	TRAFFIC SEPARATOR CONCRETE- TYPE IV, 6' WIDE	LF	1502	$ 51.25	$76,977.50
0521 72 40	SHOULDER CONCRETE BARRIER, 38" OR 44" HEIGHT	LF	235	$ 316.77	$74,440.95
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	8,787.78	$ 63.15	$554,948.31
0527 2	DETECTABLE WARNINGS	SF	573	$ 29.04	$16,639.92
0570 1 2	PERFORMANCE TURF, SOD	SY	520	$ 3.21	$1,669.20
Roadway (From West Cypress St. to West Boy Scout Blvd.)		**COMPONENT TOTAL**			**$1,393,332.66**

ENGINEER'S ESTIMATE

HILLSBOROUGH COUNTY CAPITAL PROGRAMS DEPARTMENT

CIP ID # :	69641000
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SAPM (From West Kennedy Blvd. to West Boy Scout Blvd.)

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	Crossings	Percentage of Roadway		10%	$ 310,261.20
	Signing and Pavement Markings estimate	Percentage of Roadway		5%	$ 155,130.60
300-Signing & Pavement Markings		**COMPONENT TOTAL**			**$ 465,391.81**

Project: 69641000
Description: West Shore Boulevard Complete Street - Pedestrianway/Landscape/Streetscape
Prepared By Landis Evans + Partners

Description			Total
Segment 1 - W Kennedy Blvd. to W Gray St.			
	Urban Planter/Bioswale	$	174,000.00
	Pedway and Property Buffer	$	441,000.00
	Utilities Relocation	$	101,000.00
	Lighting and Streetscape	$	1,149,000.00
	Segment 1 - Total	$	1,865,000.00
Segment 2 - W Gray St. to W Cypress St.			
	Urban Planter/Bioswale	$	82,000.00
	Pedway and Property Buffer	$	404,000.00
	Utilities Relocation	$	16,000.00
	Lighting and Streetscape	$	386,000.00
	Segment 2 - Total	$	888,000.00
Segment 3 - W Cypress St. to W Spruce St.			
	Urban Planter/Bioswale	$	363,000.00
	Pedway and Property Buffer	$	1,158,000.00
	Utilities Relocation	$	1,728,000.00
	Lighting and Streetscape	$	2,107,000.00
	Segment 3 - Total	$	5,356,000.00
Grand Total		**$**	**8,109,000.00**

Note: This estimate is not yet complete with regard to all adjustments needed internal to properties granting the Joint Use Easement Agreement.

Segment 1
Description: **Urban Planter/Bioswale - W Kennedy Blvd. to W Gray St.**
Prepared By **Landis Evans + Partners**

Total = $174,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
0104 18	SWALE DITCH BOTTOM INLET PROTECTION SYSTEM	10.00	EA	$107.50	$1,075.00	
0120 1	REGULAR EXCAVATION	1,182.60	CY	$8.48	$10,028.45	
0425 15 01	INLETS, DT BOT, TYPE A, <10'	10.00	EA	$3,850.00	$38,500.00	
430 175 118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	80.00	LF	$82.54	$6,603.20	
0400 0 11	GRAVITY RETAINING WALL (with Tree Root Lintels)	129.42	CY	$518.95	$67,162.51	
	AMENDED SOIL	912.50	CY	$56.00	$51,100.00	Price provided by our Landscape Architect.
Subtotal					$174,469.16	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$174,000**	

LANDIS EVANS + PARTNERS

Segment **1**
Description: **Pedway and Property Buffer - W Kennedy Blvd. to W Gray St.**
Prepared By **Landis Evans + Partners**

Total = $441,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	PROPERTIES' IMPROVEMENT MODIFICATIONS	1.00	LS	$90,182.67	$90,182.67	For additional information see individual property tabs ending with S1.
	SIGNS MODIFICATION	1.00	LS	$235,000.00	$235,000.00	For additional information see individual property tabs ending with S1.
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	3,546.70	SY	$63.15	$223,974.11	Included in Roadway Estimate
	BRICK PAVERS	4,512.00	SF	$15.00	$67,680.00	Price based on City of St. Petersburg Projects
0527 2	DETECTABLE WARNINGS	1,505.00	SF	$29.04	$43,705.20	Included in Roadway Estimate
0120 1	REGULAR EXCAVATION	196.30	CY	$8.71	$1,709.77	
	AMENDED SOIL	196.30	CY	$56.00	$10,992.80	Price provided by our Landscape Architect.
	BUFFER PLANTING AREA	7911	SF	$4.00	$31,644.00	Price provided by our Landscape Architect.
	BUFFER AREA IRRIGATION	7911	SF	$0.50	$3,955.50	Price provided by our Landscape Architect.
Subtotal					$441,164.74	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$441,000**	

Segment **1**
Description: **Utilities Relocation - W Kennedy Blvd. to W Gray St.**
Prepared By **Landis Evans + Partners**

Total = $101,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	FIBER OPTIC CABLE, F&I, UNDERGROUND	1509	LF	$3.35	$5,055.15	It is assumed that the relocation will be the responsibility of the UAO.
	FIBER OPTIC CABLE, REMOVE, UNDERGROUND	1509	LF	$0.66	$995.94	It is assumed that the removal will be the responsibility of the UAO.
1050 51208	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER,	578	LF	$139.90	$80,862.20	
1080 21400	UTILITY FIXTURE, VALVE/METER BOX, RELOCATE	7	ea	$1,100.00	$7,700.00	
1644800	FIRE HYDRANT, RELOCATE	2	EA	$6,140.00	$12,280.00	
Subtotal					$100,842.20	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$101,000**	

Segment **1**
Description: **Lighting and Streetscape - W Kennedy Blvd. to W Gray St.**
Prepared By **Landis Evans + Partners**

Total = $1,149,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	Pureform LED Post Top Comfort PPT Contemporary Post	80	EA	$6,000.00	$480,000.00	Price provided by Landscape Architect.
	10` Wide Urban Planter (See Breakdown)	1820	LF			
	Shaded Promenade (85%)	1547	LF	$330.00	$510,510.00	Price provided by our Landscape Architect.
	Gateway Focal Point (5%)	91	LF	$500.00	$45,500.00	Price provided by our Landscape Architect.
	Overhead Restriction (10%)	182	LF	$120.00	$21,840.00	Price provided by our Landscape Architect.
	Up Lighting for Planters	120	EA	$575.00	$69,000.00	Price provided by our Landscape Architect.
	URBAN PLANTER IRRIGATION	16426	SF	$0.70	$11,498.20	Price provided by our Landscape Architect.
	BICYCLE RACK	6.00	EA	$500.00	$3,000.00	Price provided by our Landscape Architect.
0751 37	TRASH RECEPTACLE	8.00	EA	$700.00	$5,600.00	
0751 38 14	BENCH, F&I, STEEL	2.00	EA	$1,228.00	$2,456.00	
Subtotal					$1,149,404.20	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$1,149,000**	

Segment **2**
Description: **Urban Planter/Bioswale - W Gray St. to W Cypress St.**
Prepared By **Landis Evans + Partners**

Total = $82,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
0104 18	SWALE DITCH BOTTOM INLET PROTECTION SYSTEM	8.00	EA	$107.50	$860.00	
0120 1	REGULAR EXCAVATION	430.00	CY	$8.48	$3,646.40	
0425 15 01	INLETS, DT BOT, TYPE A, <10'	8.00	EA	$3,850.00	$30,800.00	
430 175 118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	64.00	LF	$82.54	$5,282.56	
0400 0 11	GRAVITY RETAINING WALL (with Tree Root Lintels)	44.94	CY	$518.95	$23,321.61	
	AMENDED SOIL	322.80	CY	$56.00	$18,076.80	Price provided by our Landscape Architect.
Subtotal					$81,987.37	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$82,000**	

Segment **2**
Description: **Pedway and Property Buffer - W Gray St. to W Cypress St.**
Prepared By **Landis Evans + Partners**

Total = $404,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	PROPERTIES' IMPROVEMENT MODIFICATIONS	1.00	LS	$68,301.26	$68,301.26	For additional information see individual property tabs ending with S2.
	SIGNS MODIFICATION	1.00	LS	$155,000.00	$155,000.00	For additional information see individual property tabs ending with S2.
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	3,324.00	SY	$63.15	$209,910.60	Included in Roadway Estimate
	BRICK PAVERS	11,156.00	SF	$15.00	$167,340.00	Price based on City of St. Petersburg Projects
0527 2	DETECTABLE WARNINGS	212.00	SF	$29.04	$6,156.48	Included in Roadway Estimate
0120 1	REGULAR EXCAVATION	53.23	CY	$8.71	$463.63	
	AMENDED SOIL	53.23	CY	$56.00	$2,980.88	Price provided by our Landscape Architect.
	PROPERTY BUFFER PLANTING AREA	2155	SF	$4.00	$8,620.00	Price provided by our Landscape Architect.
	BUFFER AREA IRRIGATION	2155	SF	$0.50	$1,077.50	Price provided by our Landscape Architect.
Subtotal					$403,783.27	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$404,000**	

Segment **2**
Description: **Utilities Relocation - W Gray St. to W Cypress St.**
Prepared By **Landis Evans + Partners**

Total = $16,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	FIBER OPTIC CABLE, F&I, UNDERGROUND,49-96 FIBERS	705	LF	$3.35	$2,361.75	It is assumed that the relocation will be the responsibility of the UAO.
	FIBER OPTIC CABLE, REMOVE, UNDERGROUND	705	LF	$0.66	$465.30	It is assumed that the removal will be the responsibility of the UAO.
1050 51208	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER,	13	LF	$139.90	$1,818.70	
1080 21400	UTILITY FIXTURE, VALVE/METER BOX, RELOCATE	7	ea	$1,100.00	$7,700.00	
1644800	FIRE HYDRANT, RELOCATE	1	EA	$6,140.00	$6,140.00	
Subtotal					$15,658.70	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$16,000**	

Segment **2**
Description: **Lighting and Streetscape - W Kennedy Blvd. to W Gray St.**
Prepared By **Landis Evans + Partners**

Total = $386,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	Pureform LED Post Top Comfort PPT Contemporary Post	28	EA	$6,000.00	$168,000.00	Price provided by our Landscape Architect.
	10` Wide Urban Planter (See Breakdown)	592	LF			
	Shaded Promenade (85%)	503.2	LF	$330.00	$166,056.00	Price provided by our Landscape Architect.
	Gateway Focal Point (5%)	29.6	LF	$500.00	$14,800.00	Price provided by our Landscape Architect.
	Overhead Restriction (10%)	59.2	LF	$120.00	$7,104.00	Price provided by our Landscape Architect.
	Up Lighting for Planters	38	EA	$575.00	$21,850.00	Price provided by our Landscape Architect.
	URBAN PLANTER IRRIGATION	5811	SF	$0.70	$4,067.70	Price provided by our Landscape Architect.
	BICYCLE RACK	0.00	EA	$500.00	$0.00	Price provided by our Landscape Architect.
0751 37	TRASH RECEPTACLE	3.00	EA	$700.00	$2,100.00	
0751 38 14	BENCH, F&I, STEEL	2.00	EA	$1,228.00	$2,456.00	
Subtotal					$386,433.70	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$386,000**	

Segment 3
Description: **Urban Planter/Bioswale - W Cypress St. to Spruce St.**
Prepared By **Landis Evans + Partners**

Total = $363,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
0104 18	SWALE DITCH BOTTOM INLET PROTECTION SYSTEM	14.00	EA	$107.50	$1,505.00	
0120 1	REGULAR EXCAVATION	2,260.00	CY	$8.48	$19,164.80	
0425 15 01	INLETS, DT BOT, TYPE A, <10'	14.00	EA	$3,850.00	$53,900.00	
430 175 118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	112.00	LF	$82.54	$9,244.48	
0400 0 11	GRAVITY RETAINING WALL (with Tree Root Lintels)	354.70	CY	$518.95	$184,071.57	
	AMENDED SOIL	1,695.10	CY	$56.00	$94,925.60	Price provided by our Landscape Architect.
Subtotal					$362,811.45	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$363,000**	

Segment 3
Description: **Pedway and Property Buffer - W Cypress St. to Spruce St.**
Prepared By **Landis Evans + Partners**

Total = $1,158,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	PROPERTIES' IMPROVEMENT MODIFICATIONS	1.00	LS	$182,812.97	$182,812.97	For additional information see individual property tabs ending with S3.
	SIGNS MODIFICATION	1.00	LS	$540,000.00	$540,000.00	For additional information see individual property tabs ending with S3.
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	8,148.00	SY	$63.15	$514,546.20	Included in Roadway Estimate
	BRICK PAVERS	22,407.00	SF	$15.00	$336,105.00	Price based on City of St. Petersburg Projects
0120 6	EMBANKMENT (Frontage of Saber Center)	553.00	CY	$12.51	$6,918.03	
0400 0 11	GRAVITY RETAINING WALL	52.22	CY	$518.95	$27,099.57	Included in Roadway Estimate
0515 1 2	HANDRAIL	235.00	LF	$87.99	$20,677.65	Included in Roadway Estimate
0527 2	DETECTABLE WARNINGS	573.00	SF	$29.04	$16,639.92	Included in Roadway Estimate
0120 1	REGULAR EXCAVATION	374.00	CY	$8.71	$3,257.54	
	AMENDED SOIL	374.00	CY	$56.00	$20,944.00	Price provided by our Landscape Architect.
	BUFFER AREA PLANTING	15142	SF	$4.00	$60,568.00	Price provided by our Landscape Architect.
	BUFFER AREA IRRIGATION	15142	SF	$0.50	$7,571.00	Price provided by our Landscape Architect.
Subtotal					$1,158,176.54	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$1,158,000**	

Segment 3
Description: **Utilities - W Cypress St. to Spruce St.**
Prepared By **Landis Evans + Partners**

Total = $1,728,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	FIBER OPTIC CABLE, F&I, UNDERGROUND,49-96 FIBERS	4809	LF	$3.35	$16,110.15	It is assumed that the relocation will be the responsibility of the UAO.
	FIBER OPTIC CABLE, REMOVE, UNDERGROUND	4809	LF	$0.66	$3,173.94	It is assumed that the removal will be the responsibility of the UAO.
1050 51208	UTILITY PIPE- DUCTILE IRON/CAST IRON, FURNISH & INSTALL, WATER/SEWER,	1022	LF	$139.90	$142,977.80	
1644800	FIRE HYDRANT, RELOCATE	6	EA	$6,140.00	$36,840.00	
1080 21400	UTILITY FIXTURE, VALVE/METER BOX, RELOCATE	23	ea	$1,100.00	$25,300.00	
	SANITARY SEWER - ROOT PROTECTION	1918	LF	$12.00	$23,016.00	Price provided by Landscape Architect.
	UTILITY PIPE- MEDIUM DENSITY POLYETHYLENE, FURNISH & INSTALL, GAS	165	LF	$46.29	$7,637.85	It is assumed that the relocation will be the responsibility of the UAO.
	ELECTRICAL SERVICE WIRE, RELOCATE	434	LF	$25.16	$10,919.44	It is assumed that the relocation will be the responsibility of the UAO.
	TECO RELOCATION OF OVERHEAD ELECTRIC	1	LS	$1,500,000.00	$1,500,000.00	
Subtotal					$1,728,133.80	
	MOBILIZATION	0%	LS		$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS		$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS		$0.00	
Total					**$1,728,000**	

Segment **3**
Description: **Lighting and Streetscape - W Kennedy Blvd. to W Gray St.**
Prepared By **Landis Evans + Partners**

Total = $2,107,000

	Description	Total Quantity	Unit	Weighted Avg. Unit Price	Total Amount	Notes
	Pureform LED Post Top Comfort PPT Contemporary Post	166	EA	$6,000.00	$996,000.00	Price provided by our Landscape Architect.
	10` Wide Urban Planter (See Breakdown)	3013	LF			
	Shaded Promenade (85%)	2561.05	LF	$330.00	$845,146.50	Price provided by our Landscape Architect.
	Gateway Focal Point (5%)	150.65	LF	$500.00	$75,325.00	Price provided by our Landscape Architect.
	Billboard View Zone Restriction Area (10%)	301.3	LF	$120.00	$36,156.00	Price provided by our Landscape Architect.
	Up Lighting for Planters	200	EA	$575.00	$115,000.00	Price provided by our Landscape Architect.
	URBAN PLANTER IRRIGATION	30513	SF	$0.70	$21,359.10	Price provided by our Landscape Architect.
	BICYCLE RACK	12.00	EA	$500.00	$6,000.00	Price provided by our Landscape Architect.
0751 37	TRASH RECEPTACLE	10.00	EA	$700.00	$7,000.00	
0751 38 14	BENCH, F&I, STEEL	4.00	EA	$1,228.00	$4,912.00	
Subtotal					$2,106,898.60	
	MOBILIZATION	0%	LS	$0.00	$0.00	
	MAINTENANCE OF TRAFFIC	0%	LS	$0.00	$0.00	
	INITIAL CONTINGENCY AMOUNT, DO NOT BID	0%	LS	$0.00	$0.00	
Total					**$2,107,000**	

APPENDIX E
Project Coordination Meeting Notes

West Shore Complete Streets Project Outreach Summaries with Agencies/Business Owners/HOA/Stakeholders - Latest Input September 10, 2020

Agency Meetings	Name	Phone and Emails	Briefing Date/Summary	Outcome/Next Steps
FDOT D7 coordination at FDOT D7 Office. Other attendees included Westshore Alliance and HNTB representing I-275 project.	MaryLou Godfrey, D7's consultant HNTB, Mike Maurino (West Shore Alliance)	Michael Maurino <maurino@westshorealliance.org>; Godfrey, Mary Lou <MaryLou.Godfrey@dot.state.fl.us>	**July 26, 2019:** Tommy Rawls, Matt Bettancourt attended for West Shore Boulevard project. and discussed with FDOT D7 plans for Reo, Trask, and Occident. Mike Maurino (West Shore Alliance), D7, and D7's consultant HNTB representing their I-275 design project, City of Tampa (COT) not able to attend: Tommy's Notes: •Discussed West Shore Span necessary for compete streets project •Timing of FDOT Interchange •Need ROW identification as of fall 2019 •Construction (Design/Build) starts 2023/20234	Tommy's Notes: Action Items: •FDOT will provide Span dimensions to accommodate for West Shore Boulevard CC project, confirm dimensions have been provided by FDOT for project documentation •Meeting included discussion that no additional ROW is needed per FDOT's dimensions, and West Shore PD&E project will confirm this coordination
FDOT D7 coordination at FDOT D7 Office. Other agencies that attended: City of Tampa, Westshore Alliance	MaryLou Godfrey	Michael Maurino <maurino@westshorealliance.org>; Godfrey, Mary Lou <MaryLou.Godfrey@dot.state.fl.us>	**August 26, 2019**, Mike Coleman attended for West Shore PD&E Team: Mike Coleman notes: •I-275 Section 4/5 limits are from Howard Frankland Bridge to Ashley Street. Breakpoint is Lois Ave, 2) EL's terminate in downtown at Ashley St. and Tampa St. •Plan shown today still under review by D7 and FHWA. •City of Tampa says the large public opposition to the eI-275 project is not coming from segment 4/5 area. •Direct Connect EL's to Ashley St. will be a bid option for the D/B project. •Westshore Alliance says a 10' sidewalk is the bare minimum needed. •Reo St. has a 12' shared used path on west side and 6' SW on east side and will be 4 thru lanes per D7 •Kennedy at Reo will be a DDI underneath I-275. •Goal is minimum 10' SW under I-275 bridge with 12' being desirable. •Exact location of LA ROW along Reo is TBD. •At Occident St. D7 wants to provide minimum 4-lane width under I-275 bridge •Roundabout is proposed at Occident St. and Lemon St. just north of I-275. •HART will still need to access Westshore Mall site via Occident ST. under I-275. •D7 says Trask will have 12' SW on SB side (west) and 6' SW on NB side (east). City of Tampa prefers 10' SW's both sides instead. Michael Maurino noted WS Overlay District calls for minimum 10' SW's. •D7 says Trask St. opening under I-275 is constrained to 90.5' based on geometrics and profile considerations. •COT asks D7 to consider different thru lane arrangement north of I-275 from 2 NB to 2 SB thru lanes. •Opening under I-275 at West Shore Blvd. per D7 is 125' .	Continue coordination
FDOT D7 coordination at FDOT D7 Office. Other agencies that attended: City of Tampa	Mary Lou Godfrey, Danni Jorgenson, Frank Heck, Stephen Benson, Mike Todd, Mike Coleman & Tommy Rawls	Godfrey, Mary Lou <MaryLou.Godfrey@dot.state.fl.us>	**June 16, 2020**, Mike Coleman & Tommy Rawls attended for West Shore PD&E Team: General notes : • Tommy & Mike updated the group on the projects current status • FDOT needs to continue to hold span width at 125'; ensure that 16' minimum each side of West Shore Blvd. for multi-use; be sure to tie into proposed cross section • Reviewed the recommended typical section • Will provide traffic summary when available; reviewed that the road diet would go in place with the completion of IFDOT's project. • FDOT expects to finish interchange project in 2030... All team is on board with this. • Tommy shared that 15% plans will be on hold until funding is more secure... don't want to duplicate services. PD&E will be complete by end of October... Open house in September • COT may have median improvements for Super Bowl... Will coordinate with concept plans in August • COT pleased with progress and properly addressing all of the issues • COT & County Landscape Architects will coordinate design of bioswales • Westshore Alliance needs to be sure that they have complete maintenance responsibility for corridor, including bioswales, for concepts/implementation to work	Follow-up meeting set for August 18, at 1:00 pm • Provide traffic study to Westshore Mall, COT & FDOT when ready • Coordinate Super Bowl landscaping with COT when concepts ready
City of Tampa	Stephen Benson and Danni Jorgenson	Danni Jorgenson (danni.jorgenson@tampagov.net);Stephen Benson (Stephen.Benson@tampagov.net);	**October 21, 2019** at RS&H West Shore Team included Tommy Rawls, Mike Coleman, Rick Langlass, Brian Kirkpatrick, Marty Peate, Ron Gregory and Bruce Landis: Tommy's Notes: •COT to monitor zoning/overlay to be sure new development is in compliance, and be sure it fits in with Westshore Complete Streets (WSCS) •COT to monitor parking space requirements throughout process; need to solidify coordination and requirements with property owners •Discussed outreach and coordination with COT •Jimmy Cook can assist with legal issues Mike Coleman Notes: •COT wants Westshore Overlay District update from WS Alliance. •William Port is COT contact for traffic safety. •Stephen and Danni would like to coordinate w/ Hillsborough County •ROW hiatus question west side north of Cypress. •Mike Coleman confirmed that this 10' areas has been used by adjacent property owners for parking since at least the 1970's. •WS Alliance is to discuss with TECO potential undergrounding of power lines along WS. •PD&E team will follow up w/ TECO thru utility coordinator (Harbor - Jeanna Dean). •COT will share with the team typical sections they are planning for Trask, Occident and Reo under I-275.	Follow up from October 21, 2019 meeting with COT •Follow-up with Miray Holmes – COT outreach suggestions – Completed •Melanie Calloway – Send limits, and check with Westshore Mall •Get Westshore Mall Development Plan –Randy/Ron-Completed

	Stephen Benson and Danni Jorgenson	Danni Jorgenson (danni.jorgenson@tampagov.net);Stephen Benson (Stephen.Benson@tampagov.net);	**May 20, 2020** included Tommy Rawls, Mike Coleman, Bruce Landis, Stephen Benson, Danni Jorgenson, Cal Hardie •COT prepared to review/monitor parking space requirements as necessary throughout process •COT understands the need for bike/ped connectivity from the neighborhoods to West Shore Boulevard... They are revising & implementing plans based on priority... Lots to be done •Discussed bikes and bike separation... due to anticipated low volume compared to pedestrians, shared-use is an option... bike volumes do not necessarily warrant full cycle track •Team presented typical section PowerPoint at meeting	
West Shore Alliance	Presentation to Alliance Members at AECOM	Transportation Subcommittee	**November 6, 2019** at AECOM, Mike Coleman, Tommy Rawls and Bruce Landis presented project	Need to discuss ROW when evaluated/complete
West Shore Alliance	Ann Kulig and Michael Maurino	kulig@westshorealliance.org; Michael Maurino <maurino@westshorealliance.org>	**December 10, 2019** at RS&H, Mike Coleman, Tommy Rawls and Bruce Landis December 10, 2019 at RS&H, Mike Coleman, Tommy Rawls and Bruce Landis Mike Coleman Notes: •Ann Kulig notes there is currently a special services district (SSD) for Westshore that is paid into only by commercial properties. •Undergrounding of TECO lines is a benefit to property owners if they provide an easement. •Franklin Street is large property owner. •WS Overlay District should require developers to match whatever this project designates as the preferred alternative. •HART gets a percentage of new 1 cent sales tax and can use this funding in WS corridor. •Important to have irrigation, landscaping, hardscape, aesthetics, etc. in initial construction rather than having to retrofit. •Hope is for WS to become around the clock activity area inviting to pedestrians. •Key property owners to meet with include WS Mall, Highwoods Properties, Franklin St., Austin and to ask for their ideas on optimizing common walkway areas. •Is Trask a suitable location to provide bike accommodations? •Determine common elements that emerge is discussions with property owners. •Bruce noted the Cultural Trail project in Indianapolis is a good example of bike/ped integration. •Kona Grill bike rack is typically full of bikes of restaurant workers. •Bruce notes in his project experience that young workforce wants bike accommodations to work, restaurants, etc., but retail owners do not believe that their customers arrive on bikes. TIA did a survey of bike commuters at some point. •Key things to mention to property owners when the team meets w/ them: Project needs a joint use easement; TECO requires 10' easement to underground lines and it must be on private property. •Project selling points are: Resiliency, environment, flooding improvements, utilities. •Road diet to be considered south of Gray St.	o Assistance with outreach - ongoing o COT – ongoing o Franklin-Austin Property – Done o Highwoods – Done
FDOT D7 Teleconference	MaryLou Godfrey and Frank Heck from HNTB	fheck@HNTB.com	**December 12, 2019** by phone Tommy Rawls, Mike Coleman. Mike Coleman Notes: Current typical section of WS Blvd. under I-275 is unchanged from that presented at 8/26/19 meeting.	Monitor final span & configurations during alternative development
Hillsborough County MPO Liaison to Westshore Alliance	Lisa Silva and Gena Torres	813-273-3774 ext. 329 Lisa Email is silval@plancom.org; torresg@plncom.org	**February 18, 2020** Tommy Rawls, Bob Campbell, and Bruce Landis - Discussion about speed management, and bikeways on or off roadway; discussed results of Fletcher Avenue	1) Obtain/Review results from Fletcher Avenue study, and 2) Ms. Silva requested some briefing for several of the MPO's committees during/after the development or presentation of Alternatives

Businesses and Property Owners	Name	Phone and Emails	Briefing Date/Summary	Outcome/Next Steps
Westshore Mall Development	Randy Coen	randy@coencoconsulting.com	**January 8, 2020,** Mike Coleman, Tommy Rawls, Bruce Landis •Reviewed key items of PD&E study, addressed Capital and O&M funding •Discussed potential undergrounding of TECO lines •Randy noted changing market preference from regional mall to Live-Work-Play-Shop in corridor •Randy noted that there will be an internal street grid rather than the perimeter situation currently used at the existing mall, Sears building will become hotel/office /restaurant •Discussed Mid-Town Development on Dale Mabry, Per Randy, very different from West Shore and is entirely "internally-oriented" •West Shore Mall development oriented towards the outside streets , unlike Mid-Town •West Shore Mall development has acquired the Bank of America site and all buildings in the development will be mixed use •Parking garages will remain in Westshore footprint •Per Randy, West Shore Mall redevelopment meets West Shore Overlay District requirements •Will be able to do outside café seating along West Shore Boulevard •Bike lanes discussed at meeting with Randy. Discussion on inclusion of bike lanes as part of preferred alternative concept. Bike lanes on West Shore Boulevard are a "bad idea." •Bruce Landis noted bikes need to be accommodated on a shared use path rather than on street bike lanes if they are to be in the West Shore corridor. This requires a minimum 8 ft.-10 ft. clear area. Based on West Shore Mall redevelopment plans shown at this meeting another 5 ft. is needed in addition to the clear area currently shown. Randy says this is possible, but not guaranteed. •Randy noted internal streets are to remain private, will accommodate heavy vehicles, and action can be taken to reduce traffic if these streets become too busy. •Bruce asked Randy if the West Shore Mall developers would allow West Shore Alliance to maintain the open space? Randy says likely yes, and they have already had discussions w/ West Shore Alliance on this topic. •Randy also represents Franklin Street (Andrew Wright's company) – we are meeting with them later at later date – Action Item •Randy noted that the needed parking for hotels has decreased dramatically due to market changes (Uber, Lyft, taxi, etc.). He believes they only need one-half (½) to two-thirds (2/3) of one parking space, per room •Tommy noted Stephanie Agliano is the PI/PR person for Hillsborough County •The question was asked "Does West Shore Overlay District specify bus shelter design?" Consensus at the meeting with Randy, Mike and Bruce is probably not to the extent we need it to reflect the concept of the corridor and complete streets.	•Action Items from Meeting 1/8/2020 with Randy Coen •Follow up meeting with Stephanie Agliano for continued outreach for project. Tommy noted Stephanie Agliano is the PI/PR person for Hillsborough County. •Follow up meeting with Franklin Street (Andrew Wright's company) – Randy also represents Franklin Street (Andrew Wright's company). •Review parking requirements for City of Tampa and how changes in parking space requirements may impact overall corridor planning and Complete Streets concept. Is City of Tampa revising parking requirements for redevelopment? Randy noted that the needed parking for hotels has decreased dramatically due to market changes (Uber, Lyft, taxi, etc.). He believes they only need one-half (½) to two-thirds (2/3) of one parking space, per room. He believes they only need one-half (½) to two-thirds (2/3) of one parking space, per room. •Review as a Team, bike lane concepts per all comments collected during outreach. Notes from Jan. 8 meeting: Bruce Landis noted bikes need to be accommodated on a shared use path rather than on street bike lanes if they are to be in the West Shore corridor. This requires a minimum 8 ft.-10 ft. clear area. Based on West Shore Mall redevelopment plans shown at this meeting another 5 ft. is needed in addition to the clear area currently shown. Randy says this is possible, but not guaranteed. •Review bus shelter design per West Shore Overlay District related to project. Provide summary of what is permitted. Per meeting on Jan. 8, The question was asked "Does West Shore Overlay District specify bus shelter design?" Consensus at the meeting with Randy, Mike and Bruce is probably not to the extent we need it to reflect the concept of the corridor and complete streets. •Review relationship of open space per West Shore Alliance Overlay District with integration of a complete streets concept and West Shore Mall development. Bruce asked Randy if the West Shore Mall developers would allow West Shore Alliance to maintain the open space? Randy says likely yes, and they have already had discussions w/ West Shore Alliance on this topic.
	Randy Coen	randy@coencoconsulting.com	**May 20, 2020,** Mike Coleman, Tommy Rawls, Bruce Landis •Bruce presented typical section drafts •Randy likes the direction •Bikes off of roadway - likes shared-use path •Shade focus is excellent •Interested in subarea traffic modeling results •Parking ratios on west side may be key to west side complete streets •Need to start utility review now - going to be key in concepts •Held general engineering discussion on moving the curbs in •Like the interim concept - encourages participation from west side... clear path forward •Updating overlay district now - our research/work should help •Need to meet with COT Natural Resources soon... discuss tree types, root ball needs, root barrier needs, watering & drainage, etc.	
Walgreens	Mitchell Rice	813-766-7006 mitchell@rmcpg.com	**August 11, 2020,** Mitchell Rice, Brandon Eggleston, Bruce Landis, Althea McDavid Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Mitchell applauds the effort and supports the project as a consumer . • He does not want to impede project progress so will cooperate if we can preserve his site enough to impact his business and wallet as little as possible. • Need to consider grades and underground stormwater vaults; retaining walls may be needed. • Agreed that real canopy shade trees are needed. • Asked about potential effects to truck traffic in narrower 10 ft lanes as well as bicyclists. Great project for pedestrians but narrow lanes may result in lane encroachments from large trucks. • Asked how Typical Section 12C will work for Kennedy to I-275. • Asked if there will be additional requirements of property owners aside from setback and frontage development . • Wants to see concept plan to see exactly where his site intersects.	Landis Evans to: Meet with Mitchell again to show concept plan and discuss mitigation plans (as needed)
Florida Blue	Brad Douglas	(813) 874-1700 (ext. 225) bdouglas@brightworkre.com	**August 17, 2020**, Brad Douglas, Bruce Landis, Althea McDavid Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Wanted to know what the renovation plans were for Westshore Plaza mall. • Was a partner on the Blick/Starbucks property; offered to assist with communication. • Asked about preservation of landscaping in front of building which was a major expense during construction . • Asked if we were accommodating each property owner's requests to negotiate an easement. • Asked how Typical Section 12C will be applied to south of the interchange. We discussed the road diet. • Asked why we were not connecting to the residential areas south of Kennedy up to Cleveland. • Willing to help the project in any way he can but wants more specifics on parking and landscape preservation.	Landis Evans to: • Follow up on how we will handle landscaping outside of building. • Follow up on contact with Blick property.

Citgo and Shell	Mansour Brothers (Ghassan and Joseph)	(813) 258-6691 (office) work33607@live.com (secretary email)	**August 27, 2020**, Ghassan and Joseph Mansour, Tommy Rawls, Bruce Landis, Althea McDavid Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Thinks traffic in corridor is too busy for pedestrians to traverse currently. • Thinks project looks fantastic and agrees that it will help business and increase property value. • Thinks that the project may affect their properties in terms of operations; truck movements and fuel station location. • Need time to consult with managers about the project and decide if they would like to entertain an easement.	Landis Evans to: Provide examples of how gas stations were handled in previous complete street projects
Chipotle	HSW Associates: Holly Jean Chipotle: Julia Douglas	Holly Jean (Owner) holly@hswassociates.com 813-962-6959 Julia Douglas (Tenant) julia.douglas @chipotle.com 380 222-7063 (off.) 614 809-8814 (cell)	**August 13, 2020**, Holly Jean, Julia Douglas, Bruce Landis, Althea McDavid Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Wants to improve existing trees but wants advice on how to do this as inexpensively as possible since the project will be removing them. • Asked if the County will pay for all modifications such as an entrance to their patio area. • Asked about the realistic timeline of the project and the easement agreement. Holly is hesitant about signing an easement agreement when the tenant's lease ends in three years and may not be extended. • Asked what the anticipated length of construction would be as that period would affect business. • Wanted to know when the Westshore mall redevelopment would begin. • Willing to donate an easement provided the project does not significantly impact the property and business operations. • Will contact Real Estate Manager to discuss and hold potential on-site review.	Landis Evans to: • Send recording of meeting to Holly and Julia • Follow up on potential on-site meeting • Send a snip of concept plan
Valley Bank	Dean Fogo	727 260 6518 dfogo@valley.com	**August 19, 2020**, Dean Fogo, Bruce Landis, Althea McDavid Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Landscaping in front of building is signature to the building and was expensive to place. They would like it to be preserved. There is also irrigation installed there. • Wanted to know how the easement process works, was wiling to start the process of discussing it with the more senior members of the firm. • Agreed with the idea of trying to keep people out of their cars and on West Shore Blvd. • Commented that he and his colleagues discussed the need for West Shore Blvd to have more life added to it. • Asked about pedestrian lighting which he thinks is important. The landscaping at the bank currently has LED lighting in the landscaping.	Landis Evans to: • Send West Shore renovation plans • Follow up on preservation techniques for landscaping • Send a snip of concept plan
Marriot	Tina Smith (Marriott General Manager) (Owner: Columbia Sussex)	813 287 2555 (office) gm911@columbiasussex.com	**August 13, 2020**, Tina Smith, Bruce Landis, Althea McDavid Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Agreed that West Shore corridor needs connection to retail and entertainment from businesses. Likes the idea of bringing in more business through this project. • Agreed that more shade and crossings are needed. • Commented that current sidewalk and landscaping are ugly with very little maintenance. • Likes the idea of putting the TECO lines underground. • Thinks it is a good idea to slow traffic. She thinks "snowbirds" and teenagers increase speeding in area. • Thinks that establishments such as Shell and Thee Dollhouse would be unlikely to cooperate. Thee Dollhouse patrons often try to park in the Marriott parking lot. • Asked how the project will affect their parking lot. The concept plans showed that it will not. • Asked what kind of investment the property owner would have to make. We mentioned potential corridor-wide maintenance contributions. • Thinks it sounds like a great idea but the senior managers are currently focusing on surviving the pandemic. Advised us to resume the conversation closer to when easement agreements are ready to be signed. Thinks senior managers will be interested in the project.	Follow up meeting to be had with management closer to signing of the easement agreement.

Franklin Street Development	Andrew Wright	813-839-7300 x 0308 Andrew Right's email is andrew.wright@Franklinst.com	**January 22,2020** – Mike Coleman, Tommy Rawls, Bruce Landis, Dallas Evans: Bruce Landis did overview, group discussed PD&E study •Discussed West Shore Alliance O&M role; Hillsborough County providing capital costs •Andrew Wright's comments summarized: •Franklin Street's goals are ped. centric environment, long-term outlook, they are not looking to flip the property •They recognize importance of Trask Street in access and traffic movement •Andrew showed PD&E team (but did not provide copies) of proposed future site plans •Buildings will have walkways that connect across lots out to West Shore Blvd. •Franklin Street Development built the new buildings at the corner of Howard and Morrison •Bruce noted goal of West Shore project is to make WS ROW and adjacent private property ROW seamless •Discussed need for more green space, trees, drainage connections as part of project •Andrew Wright agrees existing sidewalks are not sufficient to increase connectivity and support complete street concepts •Andrew Wright wants a traffic signal at midpoint between Cypress and Laurel streets •Future redevelopment will include a First Watch restaurant and an evening-oriented restaurant •Andrew Wright believes Trask needs to be upgraded significantly due to OTS importance as a parallel route (project team agrees) •Bruce Landis noted need for West Shore Alliance to be management entity for entire corridor rather than leaving this to individual property owners •PD&E team noted we are doing 15% line and grade plans for the preferred alternative once the alternative has been identified •Andrew Wright noted that City of Tampa will need to provide for zoning variances for floor area ratio, parking spaces per/acre, when property owners donate easements for the pedestrian/ grand boulevard accommodations •1/22/20 – Franklin Street Development, Andrew Wright **Discussion per Tommy's Notes and concerns as detailed by Andrew Wright:** •Wants inclusion of public art •Wants Trask interface with project, very important •Prefers corridor tied into spaces for events, e.g. h •Andrew is designing indoor/outdoor event space on his Franklin Street projects •Suggested possibility of one of the West Shore lights at their south entrance •Suggested project include connectivity to transit connection to intermodal station	Action Items: •Design Considerations to be addressed per meeting on Franklin Street Development per Andrew Wright's comments: oImportance of Trask Street in access and traffic movement oAs relates to West Shore, document connectivity between Franklin Street development and West Shore project (at this time PD&E team saw proposed future site plans for Franklin St, but did not secure copies of it oDocument where West Shore project and Franklin Street Buildings will need walkways that connect across lots out to West Shore Blvd., Franklin Street Development built the new buildings at the corner of Howard and Morrison •Identify as part of PD&E where existing sidewalks and news sidewalk connectivity is most critical to create walkability between projects. Andrew Wright agrees existing sidewalks are not sufficient to increase connectivity and support complete street concepts •Design considerations for West Shore : Andrew Wright wants a traffic signal at midpoint between Cypress and Laurel streets •Design considerations for West Shore: Andrew Wright believes Trask needs to be upgraded significantly due to OTS importance as a parallel route (project team agrees) •Coordinate and document City's plans for future zoning variances: Andrew Wright noted that City of Tampa will need to provide for zoning variances for floor area ratio, parking spaces per/acre, when property owners donate easements for the pedestrian/ grand boulevard accommodations. • Action Items: 1/22/20 with Andrew Wright, Franklin Street Development •Team to start looking at traffic light locations for the corridor; should be able to do this now – does one line up on their property? •Start evaluating transit connections; logical connection may be made to intermodal center along Trask, so run transit along Trask; need to create clear access to Trask from West Shore; maybe another easement issue? •Start evaluating transit connection; logical connection may be made to intermodal center along Trask; so run transit along Trask; need to create clear access to Trask from West Shore; maybe another easement issue?
	Andrew Wright	813-839-7300 x 0308 Andrew Right's email is andrew.wright@Franklinst.com	**May 27,2020** – Mike Coleman, Tommy Rawls, Bruce Landis, Dallas Evans, Andrew Wright, Matt Chadwick, Andrew Kunisch, Nick Sanfilippo, Michael Maurino, Kelley Hammond •Overview presentation by Bruce Landis •Likes pedestrian centric - Key especially with restaurants •Can we push more bikes/transit to trask - Bikeways belong on Trask, especially with school on Trask •Likes undergrounding of TECO •Where's the mid-block signal going to be (see his previous notes) - coming in conceptual plan views •Really need parking ratio evaluation - work with City - They have city parking requirements that need to be met - watch overlap of day & night use parking, shouldn't double-up •Bioswales/trees - how many "breaks" do you need in there to get peds in and out - would rather keep this inside property at drop-off •How will underground TECO impact property owner irrigation and other underground utilities running in and out of their property	
	Andrew Wright , Andrew Kunisch (General Manager), Nick Sanfilippo (Property Manager)	813-839-7300 x 0308 Andrew Right's email is andrew.wright@Franklinst.com Andrew Kunisch andrew.kunisch@franklinst.com Nick Sanfilippo nick.sanfilippo@franklinst.com	**August 25, 2020** – Mike Coleman, Tommy Rawls, Bruce Landis, Dallas Evans, Althea McDavid, Andrew Wright, Matt Chadwick, Andrew Kunisch, Nick Sanfilippo, Michael Maurino Landis Evans Notes: •Overview presentation by Bruce Landis with concept plan update • Andrew Wright and associates outlined the state of their business and renovation plans; plan to put restaurants on southern side and work on tree lighting. • Asked if Oak trees will be preserved, thinks this would be prudent. Observed that the proposed design seems to abut parking lot, impacting the trees. • Big fan of burying power lines. • Reiterated desire to have pedestrian/traffic signal in front of property. • Andrew Kunisch thinks pedestrianway will entice major tenant's (nursing school) students and allow them to access options along corridor. • Thinks we should coordinate with ridesharing to encourage bikeway use and help with enforcing separation methods (geofencing) • Suggests we look at additional solutions to potential bike/scooter encroachments; surface material types and texture changes • Andrew Wright is a huge supporter of the project, thinks it will be beneficial to his property and the area. He thinks it is important work. • They will send written comments and feedback on the concept plan presented. Will provide copy of existing and future design plans. • Need to consider preservation of monument sign and curb recently installed. Backflow preventer also to be considered	Landis Evans to: • Follow up on preservation techniques for landscaping and other structures

Highwoods Properties	Highwoods Properties: Dan Woodward, Laurie Alden, Chase Collier, Lisa Cox, Georgina ? (Last Name)		**January 22, 2020**, Mike Coleman, Tommy Rawls, Bruce Landis •Described how we would get to an eventual preferred alternative, and that a future "ask" of them will be forthcoming •Dan wanted to know if this "ask" will be in the form of capital, right of way? Likely be in the form of an easement as County not planning to pursue eminent domain •Explained West Shore PD&E hoping to underground with TECO lines •Highwoods Properties also owns a building on Cypress St. •Highwoods Properties very receptive to overall PD&E. Their main concerns are impacts to physical properties and access •Highwoods Properties noted that trees and tree wells need to be appropriately designed •What is Highwoods looking for out of the project? •Pedestrian access to front door •Mid-block ped. crossings, Connectivity for walking to other locations for lunch, and across West Shore •Improvements SB on West Shore and NB on I-275 to address traffic congestion •Slow down traffic on West Shore; Accommodations for peds, bikes, scooters, etc. •Accommodations for Uber, Lyft, etc. •Liked idea of a "promenade" walkway •Consistency of design between corridors West Shore, Trask, Occident and Reo •Highwoods Properties and group discussed purpose of this. Everyone sees the project "carrot" as funding for the project. The "stick" is the zoning Overlay District requirements. **Discussion Notes from Tommy:** •Likes the "won't see ROW line" concept •In favor of more pedestrian emphasis than auto •Wants clear access to buildings •Wants more shade and design to promote tree survivability •Commented that Main Entrance to West Shore is not used, need more ped activity at West Shore and ability to cross street safely •Wants more "Push Button" activation at all crossings •Wants speeds slowed down from "45 to 35" •Wants more people out of cars, Uber, transit emphasis, not parking lots •Wants project to account for integration of scooters and bikes, •Project should coordinate design with COT •Starting the West Shore overpass work with FDOT…planning phase. SB West Shore to NB I-275 is back-up, looks like adding a turn lane. Confirm improvements.	Follow Up Actions from January 22, 2020 •Continued communication with Highwoods Properties as preferred alternative is developed. Follow-up per Tommy's Notes: •Check modeling results for queues/movement for SB West Shore to NB I-275… be sure it works •Set speed limit for West Shore ASAP as we develop alternatives, e.g. 35; set it and move on •Design alternative should include scooter access/use •Research COT current handling of scooters Downtown Tampa
	Highwoods Properties: Dan Woodward, Laurie Alden, Chase Collier, Lisa Cox, Georgina ? (Last Name) - Westshore Alliance Representatives also attended		**May 21, 2020**, Mike Coleman, Tommy Rawls, Bruce Landis • Highwoods liked the direction of the project • Would like to see impacts for each individual property - coming with plan view concepts • Maintain business sign visibility and meet requirements • Need to explore parking ratios • Likes a symmetrical look to the project - what does it look like if west side does not change • Eventually would like to know what happens with water meter hook-ups and back flow preventers - Case by case basis depending on property characteristics • Certainly would trade automobile space for pedestrian space • Need bicycle/pedestrian separation • Need plan for scooters... They can be a nuisance when dropped wherever • Channelize pedestrians to crossings	Please continue coordination as project progresses - Get input for each property owner as plans develop for their site to see impacts
	Highwoods Properties: Dan Woodward, Chase Collier, Lisa Cox, Georgina Manragh	Lisa Cox Lisa.Cox@highwoods.com Office 813.673.6026 Mobile 813.781.7333	**August 26 2020**, Mike Coleman, Tommy Rawls, Bruce Landis, Dallas Evans, Althea McDavid, Dan Woodward, Chase Collier, Lisa Cox, Georgina Manragh Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Chase asked for reasoning behind concrete vs paver. Tommy suggested Landis Evans to look into paver option which may be more absorbent. • Dan asked how bikeway separation will work on pedestrianway. • Thinks it makes sense to have bikes accommodated on pedestrianway as opposed to in a bike lane. It would be a vast improvement to what they would otherwise have to deal with. • Lisa asked how we plan to accommodate scooters. We discussed their use on the bike path and geofencing. • Lisa and Georgina mentioned that they have a backflow preventer, fire line, and other utilities on the north side that would need to be preserved. • Liked that we provided an estimate of distance from existing to proposed conditions to give them an idea of what will happen. • Stated that utilities is major consideration for them as well as truck accommodations on the loading road. • Traffic signalization needs to stay at intersection. • Dan mentioned this is a prime goal of Westshore Alliance. Their next meeting is Sep. 9th. • Thinks lighting is critical for our goal and appreciates the consideration put into it.	Landis Evans to: • Determine how to access main utilities and relocate utilities being impacted.
Restaurant and Container Store plazas	Michael Klinger	Michael Klinger Klinger@saberfund.com (786) 406-1762	**August 4 2020**, Michael Klinger, Bruce Landis Bruce Landis' Notes: • Thinks project will enhance pedestrian experience and hence increase tenant's customers. • His survey shows 18 to 25-foot offset from easement • He is open to sign reconfiguration. • Development was forced up against 10-foot setback • Breezeways (double entrances) will be needed (on other properties) for redevelopment to accommodate mechanical equipment etc. • Thinks shade trees will block visibility. Thinks we should let buildings provide shade and have narrower trees. • Agrees that connectivity is needed within the corridor and to his tenants.	

	Michael Klinger	Michael Klinger Klinger@saberfund.com (786) 406-1762	**August 17 2020**, Michael Klinger, Bruce Landis, Althea McDavid Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Michael asked if handrails will be needed on elevated walkway. • Commented that concept looks fine and he wants to be cooperative but there may be some challenges based on terms of lease agreements; two lenders and two types of leases (fee simple and ground). • Will need to get tenants to approve and they will want something in exchange. Suggested giving fronting businesses incentives such as pre-approval (by the City) for patio space/outdoor dining with an exemption for parking etc. • He will have to spend legal dollars to make easement agreement happen. He won't do anything to risk lease termination during the pandemic. • Asked what will happen if property owners deny easement. We discussed Typical Section 12C interim.	Landis Evans to: • Refine concept to show connection and accommodate operation • Discuss with City the exemption requests for patio dining
Towers at Westshore	Diane Brooks (Property Manager)	(813) 289 0909 (office) dbrooks@towersatwestshore.com	**August 20 2020**, Diane Brooks, Bruce Landis, Dallas Evans, Althea McDavid Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Diane was aware of project for years through Westshore Alliance. • Thinks West Shore looks old and needs an uplift. • She walks the corridor a lot through parking lots because sidewalks are right next to cars and uncomfortable to walk on. • Agrees that shade is essential and thinks it provides ambience. Used St Pete pier as example of clean and easily maintained layout. • Liked Typical Section 12C, thinks it is very accommodating to pedestrians and provides shade. Typical Section 2 provides no shade. The existing conditions has too much concrete and provides no shade. • Biggest consideration for property is parking which cannot be compromised, the design currently impacts the front row. Very receptive to restriping if it allows parking levels to be maintained which will motivate owner to grant easement. • Asked about the positions of surrounding property owners. This will also influence property owner decision. • Thinks property owner would agree that the corridor needs improvement but is very attached to parking.	Landis Evans to: • Follow up on restriping possibility
1300 Bldg. (Republic Bank)	Ken Lane, Kenneth Lane, and Ray Plouchern	813-444-0623; Ken Lane contact email is ken.lane@avisonyoung.com	**February 17, 2020,** Bruce Landis, Tommy Rawls, Michael Maurino, and Ann Kulig Tommy's Notes: •Make sure business signs stay visible to public •Need coordinated and solid maintenance program for WSCC •Need to adjust parking for City redevelopments – City's ratios need to change to accommodate future development along the Corridor	Action Items: Lane Properties, Tommy's Notes: •Consider business Input for Sustaining and Improving access to businesses •Make sure business signs stay visible to public •Develop roadway and bikeway maintenance program for WSCC •Document parking for City redevelopments – ratios and changes to future zoning requirements
	Kenneth Lane, Ray Plouchern	Kenneth Lane kennethlane356@gmail.com	**August 24, 2020,** Bruce Landis, Dallas Evans, Althea McDavid, Ken Lane, Ray Plouchern Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Ray commented that most employees live in outlying areas and will drive the corridor. Nearby residential areas will be needed for the pedestrianway to be used. • Ray thinks project is great and West Shore needs improvement but will be difficult to implement without residential/multi use nearby. • Ray walks through parking lots; he "wouldn't be caught dead on the sidewalk". • Ken asked if concept is being applied downtown because there is not a lot of activity there. • Ken had an unpleasant experience with the City that makes him hesitant. It cost him a lot of money. Mentioned that City does not maintain median islands currently. • Ken reluctant to lose front row of parking, a major selling point for potential tenants. • Towers at Westshore visitors overflow into their parking. No one likes to use their parking garage. • Would need to preserve sign. • Ray thinks road improvements will be needed due to how congested the corridor was pre COVID-19. • Ken and associates support the project long term but not excited about how the project coincides with the current layout of the property, thinks it would be a good prospect for 20 years later when Ken's children inherit and possibly redevelop it.	Landis Evans to: • Refine concept to show connection and accommodate operation
Ramada and Holiday Inn	Ben Mallah Jr.	727 433 2671 (dir.) 727 517 2395 (off.) BenMallah@EquityMP.com	**August 6, 2020**, Bruce Landis, Althea McDavid, Ben Mallah Jr., Happy Nook Landis Evans Notes: • Bruce gave overview presentation and showed initial concept plan. • Happy commented that it is not safe to walk on sidewalks but customers have expressed interest in walking to restaurants and the mall. • Roadway seems to have bad drainage; road gets flooded. • Asked if scooters will be using bikeway. • Does not want to lose parking, parking was already strained during peak periods. • Thinks father (Ben Sr. - owner) will agree to easement; he likes to contribute to improvement of areas surrounding his businesses. Ben Jr. is 100% onboard. • Wants to ensure future developments on property will be covered by the project. • Would like to preserve sign; it is one of the largest on corridor and grandfathered in.	

			August 24, 2020, Bruce Landis, Dallas Evans, Althea McDavid, Ben Mallah Sr., Ben Mallah Jr., Happy Nook Landis Evans Notes: • Bruce gave overview presentation and showed updated concept plan. • Ben Sr. thinks corridor needs a park or open outdoor area. • Asked how many property owners were supporting the project. • Mentioned their hotel businesses are hurting financially. • Thinks most people will be unwilling to give up property due to parking ratios, property square footage requirements, etc. • They plan to renovate the ground floor of Ramada to accommodate retail. • As part of easement negotiations for Ramada, they would like reconfigured parking to maintain levels and accommodate retail, funding of driveway entrance to future drive-through. • Mentioned that Holiday Inn has poor entranceway and liked the idea of a connected pedestrianway into the property. Elite member parking on south side will be impacted. • Onboard with project and support it fully provided they can have conditions met and their operations are not hurt.	Landis Evans to: • Refine concept to show connection and accommodate operation
Carl's Van Rental	Andy Scaglione	813-240-1975 - Cell ajstally@aol.com	**August 6, 2020**, Bruce Landis, Tommy Rawls, Althea McDavid, Andy Scaglione Landis Evans Notes: • Bruce gave overview presentation. • Andy asked if this was related to USF concept from a few years ago. • Mentioned Thee Dollhouse will not want to give up their front row of parking. • He is willing to sell property but will not give it away. He needs tangible returns. • Willing to meet again to see a concept plan and rendering, the Typical Section does not help him visualize it well. • Suggested we consider central stormwater basin (vaults).	Follow up meeting to be had to show concept plan and rendering.
AAA	Rick Reinke and Tripp Bruce	813-289-1469; Trip Bruce email contact: tbruce@autoclubgroup.aaa.com	**February 17, 2020** Tommy Rawls, Bruce Landis, Michael Maurino, and Ann Kulig : **AAA Meeting – Tommy's Notes:** •Drainage is key to this area; need to look at moving curb; consider Bio Swale option •Keep AAA Sign/Logo Visible to public •Need mid-block crossings •Hope complete streets helps people leave car for repairs while they eat or shop in corridor •Speed is issue, set design speed A.S.A.P to maintain safe speed along corridor to promote use and safety •Bikeways – going to be on or off road?	Action Items AAA: Tommy's Notes: •Review Fletcher Ave. results for applicability on West Shore •Resolve bikeways as on or off road •Consider future maintenance of corridor and impacts to businesses
	Rick Reinke and Tripp Bruce	813-289-1469; Trip Bruce email contact: tbruce@autoclubgroup.aaa.com	**June 23, 2020** Tommy Rawls, Bruce Landis, Rick Reinke, Tripp Bruce: • Bruce presented results and typical sections • Like pedestrian & bicycle focus • Need car counts to remain the same - business is car care, so don't want to discourage cars • Ensure visibility to business is maintained... Allow for proper monument signage for business • Looks like a large commitment for bicycle space • Love the underground of the power lines • Good to ensure connectivity of pedestrian & bikeways • Be sure to account for impacts on Trask	Action Items AAA: Tommy's Notes: •Review Fletcher Ave. results for applicability on West Shore •Resolve bikeways as on or off road •Consider future maintenance of corridor and impacts to businesses * Review plans specific to their property when available
West Shore Alliance Transportation Committee at AECOM	Ann Kulig and Michael Maurino and Alliance attendees for quarterly update meeting at AECOM	kulig@westshorealliance.org; Michael Maurino <maurino@westshorealliance.org>	**March 11, 2020** at AECOM, Mike Coleman and Tommy Rawls presented update on West Shore project. Reviewed latest on project, everything moving forward, conducted extensive outreach. Mike Coleman Notes: PD&E team will be performing a bike/ped LOS review as part of the study. WS Alliance concerns listed at meeting are included: 1. Prevailing speed along WS. 2. Hillsborough County plans for public outreach to include not just business owners. 3) Need shade trees. 4) changes to land use and redevelopment 5) Potential for reducing parking requirements to help with 10' hiatus problem. 6) Randy Coen is currently working on WS Mater Plan Update for WS Alliance.	Monitor 1 cent sales tax and potential impacts on funding for project
West Shore Alliance Transportation Committee - via Zoom Meeting	Over 30 attendees		**July 8, 2020** via Zoom, Bruce Landis and Tommy Rawls presented update on West Shore project. Reviewed latest on project particularly Typical Sections, everything moving forward, conducted extensive outreach. 1. Everyone generally liked the plans. 2. MPO asked about dedicated bikeways & cycle tracks - outreach proved that this was not preferred in the area. 3) Others stated that they liked the shared-use path, and it will work. 4) Some may ignore the directional bike sharrows. 5) MPO asked about increased residential bike traffic; Westshore Alliance responded that additional residential areas are not approved north of the interstate. 6) MPO asked about dropping a lane... Traffic data & Westshore Alliance property owners generally do not support one lane in each direction.	Continue updating at Transportation Committee Meetings

Homeowners Associations/Other Organizations	Name	Phone and Emails	Briefing Date/Summary	Outcome/Next Steps
Carver City/Lincoln Gardens Civic Association located at 1512 N. Clark Avenue	Patricia Givens, President , Dr. Maurice R. Harvey, Vice President	Patricia Givens, 813-728-8881 and Dr. Maurice R. Harvey, Vice President 813-598-6738. Contact emails are: patriciamason.givens@gmail.com and maurice.harvey@verizon.net	**February 18, 2020** at 2 p.m., Carver City Lincoln Gardens Civic Association. Tommy Rawls and Kasey Cursey with Patricia Givens and Dr. Harvey. •They both live in Carver City and have for many years; had not heard about the project. •In favor of any efforts to make West Shore more walkable and connected to surrounding land uses. •Dr. Harvey walks every day to restaurants and businesses and crosses West Shore frequently; •He noted where sidewalks could be added that lead to West Shore Boulevard from neighborhood; such as RS&H building to cross over to Olive Garden and Starbucks. •Dr. Harvey walks all the way to Cypress Pointe Park •They both want better defined Trail/Sidewalk Path that connects Carver City/Lincoln Gardens to recreation, parks and biking. •Patricia Givens wants better management of traffic in neighborhood with access to West Shore and Cypress. She lives on Hubbard and must time her travel to avoid school times and rush hour.	•Spell out PD&E for all outreach events (County); •Email all community and HOA contacts and confirm they are aware of next community outreach meeting (County); •Evaluate and prepare for questions on how shared use paths, cycle lanes/track may attract so many new riders that safety concerns and crashes go up, especially with electric vehicles causing conflicts and what has been done in other cities to address safety (County/COT); •Group identified cross streets and areas to evaluate for surrounding traffic and issues; there are fundamental traffic problems (signal timing, turning lanes, etc.) along through streets that should be addressed as part of project (e.g. Lois & Spruce) that directly affect the connecting neighborhood streets; comments were made that this problem reaches all the way to Himes & Spruce. Project must show how West Shore improvements do not make through street traffic any worse, or if it helps if at all possible (mainly COT, but County & FDOT too); •Current Pedestrian signals devices (go and count down) are difficult to see by drivers. Evaluate other devices to be used on West Shore to improve signaling all users of roadway that pedestrian have a "walk" signal (All); •Is there any way to reconnect the Clark Ave. right hand turn immediately off of Cypress, after you exit southbound I-275?… some of them liked that direct access to their neighborhood. Be prepared to answer how this may change in the upcoming interchange project (FDOT & COT); •Midtown development may cause more congestion. Prepare to answer questions on City, County and FDOT plans to provide a regional approach to pedestrian, bike, vehicle connectivity throughout the West Shore to Midtown area. Possible provide one map that shows all walk and bike facilities planned for the area once all improvements have been constructed (All); •Proactively show the drainage review and water quality features that we are considering for implementation as public considers improved drainage an important part of project.
Beach Park Homeowners Association, Inc.	Terrence Moore, President, Suggested we also meet with Chris James chris32550@aol.com, another Board member	No cell phone provided. Contact Emails: Terrence Moore <terrence.moore5@verizon.net> and Chris James chris32550@aol.com	**February 20, 2020** at Starbucks: Westshore and Kennedy. Tommy Rawls and Kasey Cursey with Terry Moore. •Terry is new to area, but his wife is long-time Tampanian. •They retired to Beach Park to be near grandkids. •Traffic going north from Beach Park on West Shore is big concern. •Any changes that slows traffic from leaving area, such as reducing capacity on West Shore going north would not be in favor. •Suggested talking to Publix attorney who lives in Beach Park and mediated the Publix site. He has good handle on concerns for area would help us understand neighborhood issues. •Big concern for Publix was increased traffic on side streets to access Publix. No connectivity or sidewalks for those who live in Beach Park. •No safe sidewalks or access to West Shore restaurants and businesses from Beach Park, so residents won't be able to enjoy the revised area without driving to it. •Need to consider how to get folks to this revitalized area. •He bikes with wife to Cypress Pointe park; Avoids intersection of Kennedy and Westshore, uses sides streets east of Westshore then crosses over to sidewalks on Westshore to go to Cypress. •Project should be about getting folks to Boulevard as much as enhancing the corridor. •His HOA Board has met with Mall Developers.	Upcoming meeting requested with Chris James and Margaret Vizzy, other active Board Members. Terry to send possible dates in March.
Swann Estates Neighborhood Association, Inc.	John Amatea	No cell phone provided. Contact Email: John Amatea <johnamatea@gmail.com>	**February 24, 202**0 at 8:30 am. La Segunda Café. Tommy Rawls and Kasey Cursey met with John Amatea. •He lives in Swann Estates with wife and 1 yr. old and baby on the way. •He is an ER doctor in Lakeland and wife owns her own Paleo Food Processing company in Clearwater/Largo. •They moved to Tampa because mid-point between Lakeland and Largo. •They walk to many locations on Dale Mabry, and he walked/crossed Kennedy to get to our meeting. Says connectivity and safety is what they desire. •12 houses on their street, and 6 have new families living there. •They want a safe place to ride bikes and walk. •They would frequent West Shore if safe path to get there. •He does not have issue with traffic because he goes to Lakeland via Lois. Wife plans her route to avoid Howard Frankland in afternoon and on return home uses Courtney Campbell. •He suggested we get together with Emily Hinsdale who lives in his neighborhood; She is founder of Sidewalk Stompers; www.sidewalkstompers.org, 813-849-3226	Requested we follow up with Emily Hinsdale, Sidewalk Stompers. Emily has sent an email on her organization. Kasey has not planned further with meetings with Emily at this time. Will follow up early March.
North Bon Air Neighborhood Association, Inc.	Jim Mosbaugh: , Inc. Blake Building on MacDill just south of Kennedy. Business owner that shares space in old converted home.	No cell phone provided.	**February 26, 2020** from 3 to 4 at his office (Blake Builders HQ BioTectics, LLC, 305 S MacDill Avenue just south of Kennedy). Business owner that shares space in old converted home. •He walks from his house to his work on MacDill just about every day. •He is a good contact for walking issues. Does not bike, but walks all of the time and uses many of the side streets to navigate his walk routine. •He walks to Walgreens at West Shore and Kennedy and spoke of how unsafe the current intersection is for pedestrians. •Right on red a problem a problem at Kennedy/West Shore and drivers to not look for peds. •They just rebuilt their new home on original site in N. Bon Air, there after living on Davis Islands for a few years, and they came back. •His is a native of Tampa, and 2 daughters attend Tampa Prep and he is a rowing coach and knows many of the residents in the area. •Jim is very active in N Bon Air Association, and routinely interacts with City to promote keeping N. Bon Air as a single-family, with a safe neighborhood vibe and not become a gateway for selling out to commercial uses. •He said over 300 single-family homes in area and one of the last neighborhoods in area still zoned for single-family houses, without commercial intrusion. Fighting ClearChannel on use of Digital billboards to keep neighborhood less impacted by lighting. •He did not know of specific plans for mall property, and knows Ann Kulig very well.	No second meeting requested. Will pass on any information and get folks to attend workshop in May.

Second Meeting Conducted: Carver City/Lincoln Gardens Civic Association located at 1512 N. Clark Avenue , Second Follow Up Meeting 6:00 pm at Lincoln Gardens Civic Association.	Patricia Givens, President of HOA and Dr. Maurice R. Harvey, Vice President	Patricia Givens, 813-728-8881 and Dr. Maurice R. Harvey, Vice President 813-598-6738. Contact emails are: patriciamason.givens@gmail.com and maurice.harvey@verizon.net	**March 5, 2020 at 6:30pm** with HOA Board at Carver City/Lincoln Gardens. Tommy and Bruce attended. • Explained PD&E acronym; • Gave examples of treatments that may be applied to West Shore to illustrate concept of complete streets; • Discussed concerns that bicycles in cycle lanes/track attract more new riders to corridor… Some attendees said that when they built these facilities in Atlanta, they drew so much more bicycle traffic that they had troubles with safety and crashes… this also applied to scooters, and they stated that they had to ban them in some areas • Group identified surrounding traffic concerns (signal timing, turning lanes) and issues for through street connectivity (Lois & Spruce) that directly affect the connecting neighborhood streets; comments were made that this problem reaches all the way to Himes & Spruce •Group stated current pedestrian signals devices are difficult to see by drivers and increase safety issues as drivers are not aware when pedestrians have a "walk" signal. Need to improve signal devices to be more visible by all users. •Group asked if there is any way to reconnect the Clark Ave. right hand turn immediately off of Cypress, after you exit southbound I-275? Some of them liked the direct access to their neighborhood. •Group stated concerns that Midtown development may cause more congestion and asked about a regional approach to pedestrian, bike, vehicle connectivity for the West Shore and Midtown areas. •Group asked about drainage and how will be handled with complete street project? Showed a slide with the appropriate examples of bioswale drainage features that may be used.	Maintain ongoing outreach & communication
West Shore Palms HOA	Alan Johnson	No cell provided. Contact email provided: alan@alandevelopment.com	Contacted Alan Johnson, West Shore Palms (across from mall) by email on February 19 and again on Feb 20 requesting a meeting for West Shore Complete Streets. Ron Gregory mentioned they had a local meeting with West Shore Palms on TEIS during first week of March. Mr. Johnson may think we are about same project. Kasey to contact him this week.	Action to set next meeting on hold until C. Virus is passed (March 16 to April 6)
West Shore Palms HOA First Meeting	Alan Johnson	alan@alandevelopment.com	**September 3, 2020** at 7:00pm with Westshore Palms HOA members. Tommy, Bruce, Michael, Ron, Kasey and Althea attended. Landis Evans Notes: • Bruce, Tommy and Michael gave overview presentation followed by a Q&A with the HOA. • HOA members were concerned that a road diet would affect an already congested corridor. • Kathy Belmonte informed us that single family homes were being demolished and replaced with townhomes and multifamily homes, increasing capacity and thus traffic volume. Cars also park along the side of the roadway blocking traffic (due to construction). • Kathy mentioned that most people in the community don't use the interstate to commute. • Alan Johnson thought a pedestrian bridge connecting major features such as the Westshore mall would be a great idea. • Barbara Bird asked if the project would be completed in ten years or begin in ten years and if the road construction will result in lane closures similar to the midtown project. Project slated to be completed in ten years. • Kasey asked the HOA what is the most effect tool for broadcasting meetings; they responded "Nextdoor" website and emails. • Kasey also asked if the HOA would be receptive to a virtual meeting that asked for prior registration; Alan responded that he is not sure members are very competent with	Action Items: • Send Powerpoint to Alan Johnson • Potential reevaluation of road diet
June 29, 2020 Zoom Meeting with HOAs	Attended: Thelma Davis (Lincoln Gardens); Terry Moore, Bruce Snyder, David Peal (Beach Park); Emily Hinsdale (Sidewalk Stompers) ; Bruce Landis, Tommy Rawls and Kasey Cursey	Contacts provided in prior meeting notes.	The HOA participants overall liked the direction of the project and did not have any negative input. Bruce Landis showed the various concepts by Point during the Zoom meeting. Terry Moore (Beach Park HOA President) appreciated that cyclists and peds will have connectivity for the various neighborhoods and was impressed the County took the bike/ped needs seriously as evidenced by the design concepts. Bruce Snyder and David Peal (also Beach Park) commented on the positive direction promoting connectivity and safety in Westshore. Thelma Davis (Lincoln Gardens) was pleased with the safety elements for shared use paths. Emily Hinsdale (Sidewalk Stompers) liked the shared space for bike/ped activity (protected pathways better fit with a high school, middle school, and elementary school only a few blocks away); in favor of shade trees; wants County to turn Westshore Blvd. into a destination for all users; and liked options proposed to develop area into a more economically and physically active connective corridor.	Kasey to follow-up with an email to HOAs members who could not attend June 29 with update on project, including Patricia Givens, Maurice Harvey (Lincoln Gardens); Jim Mosbaugh (North Bon Air); and John Amatea with Swann Estates.

APPENDIX F
Sample Easement Agreements

76 Country Boulevard Pedestrianway Joint Use Easement Agreement

THIS AGREEMENT is made and entered into this 17th day of Dec., 20 13, by and between the CITY OF BRANSON, a municipal corporation located in the State of Missouri, ("City") and _____, (_____ [full name of all property owners] or "Grantor").

Dwight A. Sprague
Linda L. Sprague

WITNESSETH:

WHEREAS, the City has determined that it is beneficial to the current residents, businesses, and tourists and the future economic development of the community to design and construct a pedestrian-oriented walkway along 76 Country Boulevard for the purposes of establishing a safe and inviting area for pedestrians to move between the various businesses and attractions located on 76 Country Boulevard ("76 Country Boulevard Pedestrianway" or "Pedestrianway"); and

WHEREAS, the Pedestrianway shall extend up to five miles, from approximately Shepherd of the Hills Parkway on the west to US 65 on the east; and

WHEREAS, construction of the Pedestrianway shall require the granting of a *minimum* 25-foot wide easement measured from _____ to _____ [identify general location of measurement, e.g., from back-of-curb] along a series of properties with frontage along 76 Country Boulevard; and

WHEREAS, Dwight Sprague Linda Sprague [name of owner] is currently the owner of certain real property located within the 76 Country Boulevard Pedestrianway Project Area in Taney County, Missouri, and within the city limits of Branson, Missouri (D&L. Sprague [name of owner] Property"), as more particularly described in Exhibit A,[1] attached hereto and incorporated herein; and,

WHEREAS, the City and D&L. Sprague [name of owner] agree that it is in their mutual interest for Dwight & Linda Sprague [name of owner] to grant to the City a perpetual easement in, along, and upon a location as generally identified on Exhibit B ("Joint Use Easement") to allow for construction, operation and maintenance of the 76 Country Boulevard Pedestrianway on the D.&L. Sprague [name of owner] Property; and,

WHEREAS, City or its assigns (i.e., a specific purpose Community Improvement District) shall pay the cost(s) for design, construction, specified maintenance, and operation of the 76 Country Boulevard Pedestrianway on Grantor's property. The City shall develop an operational restoration plan implementing provisions outlined in the Exhibit B, *Conceptual Design Plan,* for the Grantor's review and shall pay all reasonable costs, including obtaining any needed variances for developing and implementing such plan. City shall additionally provide specified assistance and financial support for Grantor's sign and other improvement relocations as identified in this Agreement[2]; and,

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[1] Exhibit A shall identify the easement granted for the Pedestrianway from a specific property.

[2] These provisions may need to be changed for later agreements where the City will not be paying to construct the Pedestrianway or relocate signs or some existing improvements.

WHEREAS, the City and Grantor acknowledge that the easement shall remain subject to applicable current and future codes and ordinances as further articulated in sections WAIVER and ADDITIONAL DOCUMENTS.

NOW, THEREFORE, in consideration of the above premises and the covenants hereinafter set forth, the parties hereby agree as follows:

1 DEFINITIONS

Except as otherwise specified in this Agreement, the following terms shall be defined as provided in this section.

AASHTO
The American Association of State Highway and Transportation Officials

ADA
The Americans with Disabilities Act of 1990.

ADAAG
ADA Accessibility Guidelines for Buildings and Facilities.

Chicane
A design feature used to slow and direct automobile or non-motorized traffic.

City
The City of Branson, Missouri, or its assigns (e.g., a Community Improvement District – CID).

Grantor's Premises
The grantor's property exclusive of the Joint Use Easement area.

LOS - Level of Service
Scale that defines the operating conditions on the Pedestrianway.

Pedestrian
Any human, non-motorized, ambulatory user of the Pedestrianway, such as walkers, joggers, runners, bicyclists, tourists, visitors, shoppers, customers, and/or invitees of the Grantor. Pedestrian also includes persons with disabilities using motorized or non-motorized assistive ambulatory devices and/or service animals.

PROWAG
U.S. Access Board's formal set of proposed guidelines for accessible rights-of-way.

ROW
Right of Way

2 GRANT, PURPOSE, AND USE

A. The Grantor hereby conveys to the City a 25-foot wide easement running the length of the Grantor's frontage along Missouri Route 76 for the primary purpose of

constructing, operating and maintaining the 76 Country Boulevard Pedestrianway and adjoining buffers.

B. The primary purpose of the Pedestrianway shall be to provide pedestrians, tourists, visitors, customers, and shoppers, and Grantor's invitees a means of travel, across, through, and accessing to the entirety of the frontage of the grantor's property abutting the Pedestrianway.

C. The Pedestrianway may also be used by the City's employees using motorized devices, subject to the restrictions on speed limit and vehicle type in Section 7.B, for maintenance, safety, security and integrity of the Pedestrianway and the users thereof.

D. Subject to a permit issued by the City and described in Section 7.A, the Pedestrianway may be used for Grantor's limited on-premise shuttle service.

3 DESIGN AND CONSTRUCTION OF PEDESTRIANWAY

A. LENGTH OF PEDESTRIANWAY

It is the City's intent to extend the Pedestrianway, or its functional equivalent, from Grantor's property for an extent of up to five miles, from approximately Shepard of the Hills Parkway on the west to US 65 on the east, if enabled by similar easements from property owners along the Pedestrianway and the negotiation of financing of such Pedestrianway (and each portion thereof) as is acceptable to the City.

B. CONSTRUCTION TIME FRAME

The Parties mutually recognize that the time required for the completion of Construction of the entire anticipated length of the "Pedestrianway" will be extensive and multiple factors will affect the time required for such. However, one of the critical elements affecting the pace of progress will be the cooperative actions of the various owners of property (Grantors) fronting the "Pedestrianway". The expeditious execution of easements by the Grantors so that the project can commence for the combined benefit of all Grantors, is of utmost importance in both starting and completing the project. Owners (Grantors) are, therefore, encouraged to execute and return to the City the required easements at the earliest practicable time. The City will commence construction of a portion of the Pedestrianway within the length described in Section 3.A within five years of the date of this Agreement. If construction is not commenced within the five year period, this Agreement shall be null and void.

Grantor's property shall remain physically undisturbed until commencement of construction of the Pedestrianway on Grantor's property. Access to Grantor's property shall be maintained at all times during construction.

The City will reserve the right and give consideration to prioritizing segments of the "Pedestrianway", with preference to areas containing a large, continuously connected group of Owners (Grantors) which have demonstrated their desire for the proposed improvements by timely executing and delivering the required easements to the City as well as considering lower driveway frequency and property restoration costs.

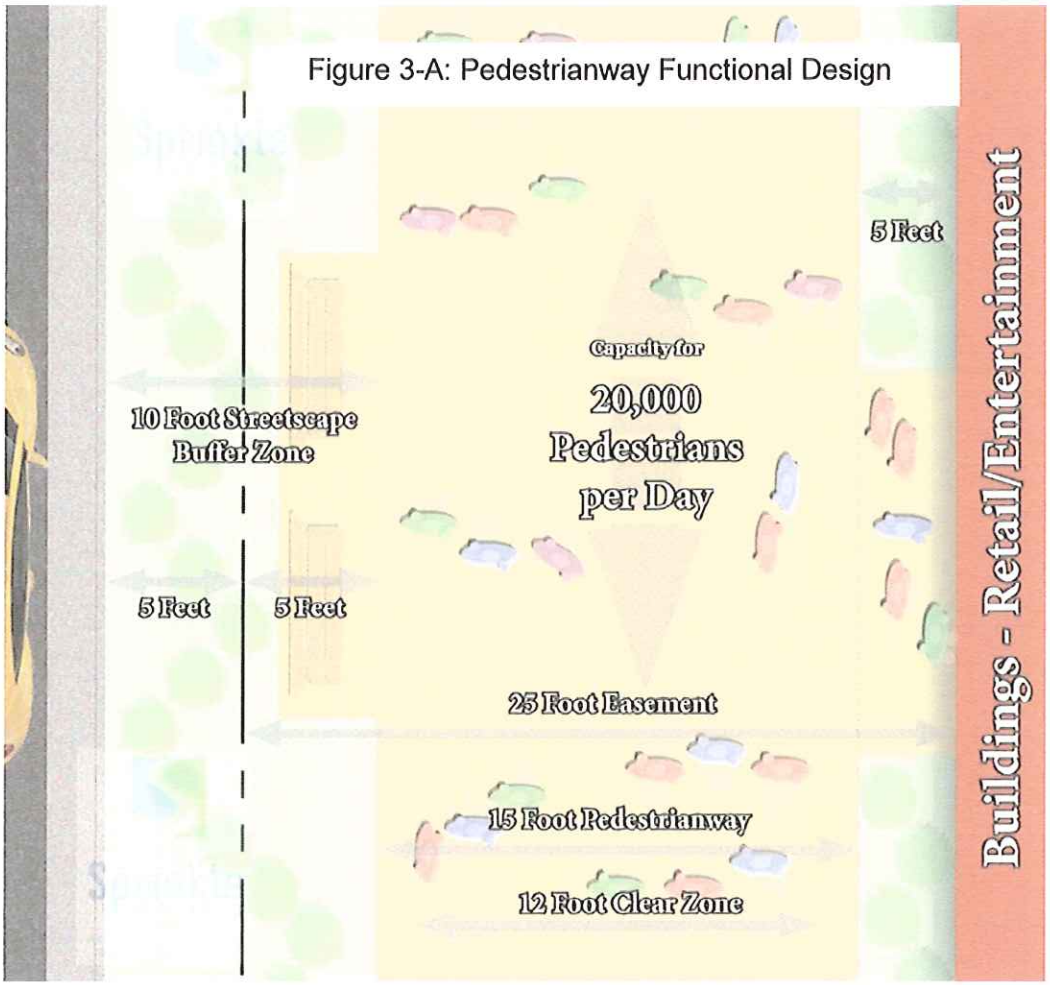

Figure 3-A: Pedestrianway Functional Design

C. DESIGN COMPONENTS

As illustrated in Figure 3-A, the Pedestrianway shall be designed as follows:

1. Pedestrianway

Within the easement, and where the City determines it appropriate, in constrained areas potentially using a portion of the ROW, the City shall construct and maintain the Pedestrianway to a maximum of 15 feet wide, comprised of the following segments:

a. Pedestrian Flow Zone: A 12-foot wide unobstructed pedestrian flow zone that may be reduced to eight feet in width across driveways.

b. Banding Surface: The Pedestrian Flow Zone may have an additional "76 Country Boulevard" banding surface or traversable buffer zone of up to 1 ½ feet in width on both sides.

2. Frontage Zone(s)

A minimum five-foot wide frontage zone, buffering Grantor's premise operations with those of the pedestrian zone, shall be situated between the Pedestrianway to the outside limit of the easement. The frontage zone may be reduced to three feet at driveways.

3. **Surface and Geometry**

All walkway surfaces of the Pedestrianway within the easement shall be firm, stable and slip resistant. The walkway geometry shall be ADA compliant, pursuant to applicable provisions of ADAAG and the (draft) PROWAG. A limited portion of the Pedestrianway surface (see *Conceptual Design Plan* – Exhibit B) may be of a material similar to Grantor's main building exterior entry, provided it meets the above performance parameters and Grantor pays all costs of its construction and maintenance.

4. **Design at Driveways**

a. The City shall ensure that the design and operation of the Pedestrianway and driveway crossings enhances motorists' yielding to pedestrians and minimizes interruptions to the flow of tourists and shoppers.

b. The Pedestrianway's horizontal alignment may chicane at Grantor's driveway(s), narrowing to 8 feet in width through the driveway crossing, placing the Pedestrianway cross-walk a minimum distance of 20 feet from the edge of the 76 Country Boulevard motor vehicle travelway for pedestrian safety and vehicle movement purposes.

c. A distinctive surface pattern of the Pedestrianway/driveway area shall clearly indicate the crosswalk in a way that is consistent throughout the 76 Country Boulevard Pedestrianway for motorists' and pedestrians' expectations and compliance with any applicable Missouri state law, the Uniform Vehicle Code and applicable national design guidelines.

d. The geometry of Grantor's premise improvements shall allow adequate visibility to enable proper yielding.

D. LANDSCAPING, DECORATING, AND MAINTENANCE

1. **City Obligations**

a. The City shall maintain the entire Joint Use Easement and shall provide the following corridor-consistent elements, implementing the intent and provisions of this Agreement, for the purposes of conveyance and convenience of visitors, shoppers, guests, Grantor's invitees, and customers across and through the Joint Use Easement:

1. Hardscaping,
2. Low ground cover (i.e., landscaping such as grass) and irrigation,
3. Lighting,
4. Underground utilities accommodation, and
5. Operational safety components (e.g., signage, striping, cross-walks).

b. The City also may elect to provide the following elements:

1. Street furnishings (e.g., benches, trash receptacles, pedestrian shade provisions, water misters, etc.);
2. Landscaping beyond grass or low ground cover;
3. Corridor thematic components;
4. Public transit stop components;

5. Mid-block crosswalk pedestrian components;
6. Seasonal enhancement, or city-wide event decorations;
7. Visitor wayfinding communication; and
8. Pedestrian-level audio environment "ambiance" provisions.
9. Pet care station facilities and supplies within separate public right-of-way or City owned properties.

The City shall maintain the Joint Use Easement to the same standards as it generally maintains all pedestrian walkways within the City.

2. Grantor Obligations

The Grantor shall not sweep or deposit debris or litter from its premises into the Joint Use Easement. Grantor shall keep that portion of the Joint Use Easement adjoining and in front of Grantor's property in a clean and sanitary condition.

E. OBSTRUCTIONS

The Pedestrianway shall be free of horizontal obstructions within the Joint Use Easement. The Pedestrianway shall also be free of all vertical obstructions for a height of eight feet above ground level unless varied by appeal to and approval by the Board of Alderman.

F. LEVEL OF SERVICE

The Pedestrianway shall have the capability to accommodate 20,000 pedestrians per day at a minimum level of service of "B" and shall: follow, when reasonably possible, applicable sidewalk geometric design standards as outlined in AASHTO's current *Guide to Planning, Design and Operation of Pedestrian Facilities*; maintain Bicycling LOS "C"; be compliant with shared use path geometric design standards as outlined in AASHTO's *Guide to Development of Bicycle Facilities.*

4 GRANTOR CONNECTION TO PEDESTRIANWAY

A. CONSTRUCTION OF CONNECTIONS

1. City Responsibility

The City shall construct all connections within the Joint Use Easement from Grantor's primary building entrance to the Pedestrianway. The Grantor shall be responsible for all portions of construction and maintenance outside of the Joint Use Easement.

2. Grantor Responsibility

All grade transitions of the connections from the Grantor's building entrance(s) to the Pedestrianway shall be the responsibility of the Grantor. With the exception of a maximum longitudinal grade transition of 5 percent within the outermost 5 feet of the easement (i.e., the Frontage zone), grade transitions shall be accomplished outside of the 25 foot easement;

B. MAINTENANCE OF PEDESTRIAN FLOW

1. Grantor Responsibility

Grantor shall have unrestricted physical walkway connections to the Pedestrianway, except that:

a. No buildings' entry doors gates or similar moving entry features of the Grantor's premises shall protrude or encroach more than 3 feet into the 25-foot Joint Use Easement nor shall they or their operation encroach or affect the flow or operations within the Pedestrianway. Primary or secondary uses' structural protrusions or encroachments in the Joint Use Easement are prohibited.

b. All parking, loading or primary or secondary uses or structures shall be subject to a 5 foot buffer from the Pedestrianway.

c. In no case shall operations or conditions of the Grantor's property or premises affect the flow or operations of pedestrians within or through the Pedestrianway.

5 INDEMNIFICATION

City shall hold Grantor harmless from all claims of invitees originating on or within the Joint Use Easement, excepting claims caused or contributed to by: 1) employees or agents of Grantor, 2) permitted motorized users of the easement who are employees or agents of the Grantor, or 3) Grantor's signs and structures that are within, abut or overhang the Joint Use Easement.

6 ACTIVITIES ALONG AND WITHIN THE JOINT USE EASEMENT

A. VENDING, SALES, AND SOLICITATION PROHIBITED

Pedestrians, tourists, visitors, customers, invitees, and others who are entering the Pedestrianway for the purposes of traveling through, shall be able and expected to move at a customary pace, without delay, except to patronize Grantor's premises. No vending, sales, soliciting, peddling, storing, or display of goods, services, or merchandise is permitted within the Joint Use Easement.

B. GRANTOR'S ACTIVITIES

1. Non-Emergency Construction and Maintenance Activities

Grantor's activities on its premises shall not be restricted except that neither operations, activities on, nor conditions of the Grantor's property may interrupt, interfere with, or affect the flow, operations, safety, or convenience of pedestrians into, within, or through the Pedestrianway or Joint Use Easement. Grantor may seek a temporary easement operation permit[3] from the City to conduct the following activities *when they require partial interference* with the Joint Use Easement:

a. Temporary activities of either construction, maintenance, or reconstruction of Grantor's premises; or

b. Brief annual maintenance of signage.

2. On-Premise Shuttle Service

Grantor's limited operation of shuttle vehicles may be allowed with a City-issued on-premise shuttle permit as described in Section 7.A. On-premise shuttle service shall be limited to the following purpose and use:

[3] This will be a new permit that the City will issue for private work done with access from the Joint Use Easement.

a. The service is used to transport passengers solely on and through Grantor's property.

b. Shuttle trips must originate and end on Grantor's premises.

c. Shuttle trips may cross the Pedestrianway but may not stop, except to yield to pedestrians, nor load any additional passengers in the Pedestrianway.

3. Urgent and Emergency Activities

The repair or restoration of failed premise-sustaining utilities lines within the Joint Use Easement and connecting to Grantor's property shall be considered as urgent or emergency activities. However, the City must be notified sufficiently in advance of any urgent or emergency activity that may interrupt pedestrian traffic to enable City to safely re-route pedestrians around such urgent or emergency utility repair and service restoration.

7 REGULATION AND USE OF VEHICLES

A. ON-PREMISE SHUTTLE PERMIT REQUIRED

The City shall establish an on-premise shuttle operation permit process that is designed to review Grantor's on-premise shuttle requests with the purpose of preserving and maintaining the safe and orderly function of pedestrians, tourists, visitors, and shoppers along the extent of the Pedestrianway as well as preventing interruption, interference or negative effects to the flow or operations of pedestrians within or through the Pedestrianway. On-premise shuttles shall be operated in a manner that is consistent with the use of the Pedestrianway by groups of unaccompanied minors as well as senior citizens. The City shall consider the following criteria in determining whether to issue an on-premise shuttle permit:

a. Impact to, and provisions for preservation of the operational standards (especially Section 3.F.) of the Pedestrianway, including the flow, convenience, or operation of the facility and ability to maintain pedestrian level of service;

b. Anticipated number and frequency of shuttles on the Pedestrianway; and

c. Origin and destination facilities for shuttles, but in no case shall shuttles of the Grantor, or any other outside parties, be allowed or permitted to travel the easement to another premises (separate parcels of land).

B. VEHICLE USE

a. All shuttles, bicyclists, and other authorized vehicles within the Pedestrianway shall yield to pedestrians.

b. The maximum operating speed of any vehicle within the Pedestrianway shall be 5 miles per hour.

c. Failure to comply with the standards of this Agreement shall be grounds for immediate removal of vehicles and/or revocation of any on-premise shuttle permits, as determined by the City.

8 SIGNAGE

A. VERTICAL CLEARANCE

Signs shall not protrude or encroach into the Joint Use Easement below 8 feet vertically above ground level or the surface of the Pedestrianway, whichever is appropriate.

B. SIGNAGE ACCOMMODATION

1. Relocation or Preservation of Existing Sign

Grantor may elect to maintain one existing, legally-permitted sign within or proximate to the easement subject to the City's applicable sign regulations. Grantor shall submit a written request to maintain an existing sign to the City within 120 days of execution of this Agreement. The request[4] shall:

a. Describe the sign's specifications (i.e., physical parameters and electrical power needs - dimensions, weight and electrical, etc.), and

b. Identify requested locational changes necessary to maintain the sign in conformance with the requirements of the Joint Use Easement.

2. City Provision of Sign Pedestal

If the City determines that accommodation of the Grantor's sign in its present location, or above proposed relocation does not, or cannot with modifications, enable the easement and Pedestrianway to meet the afore-established functional objectives and operating provisions, the City shall, within 60 days of receiving Grantor's request, at its sole cost, provide the plans for a sign pedestal foundation, column and standard mounting base/bracket and electrical conduit for one sign on Grantor's premises. Following the Grantor's acceptance of said design (within 30 days of receipt), the City shall also provide to Grantor up to $_____ reimbursement for the existing sign's one-time modification to be affixed to the installed pedestal. This reimbursement shall cover the cost of labor and materials. The City shall ensure that aforementioned sign pedestal and appurtenances shall be in place for sign relocation within 60 days.[5]

3. Location of and Design of Sign Pedestal

a. The pedestal shall either straddle the Pedestrianway through a cantilevered and/or multi-columned design, or at the City's prerogative, be a single pedestal located within the center of Pedestrianway, with suitable geometric re-design of Pedestrianway for a pedestal island. The modified sign setback shall be reduced to zero feet along the 76 Highway right-of-way. The sign pedestal shall be located at least ten feet from any driveway or public side street.

b. The pedestal may be encased with a design by the City consistent with that of the Pedestrianway's aesthetic theme of the district, so long as it does not violate level of service and geometric standards for safely and conveniently-functioning Pedestrianway, The sign pedestal may also incorporate a pedestrian shade element, but the shade element shall not protrude, as established within this Agreement into the Pedestrianway, nor be structurally affixed to Grantor's premises.

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[4] The City will create a standard application for this request.

[5] Process and timing will need further development and refinement

c. Any non-copy or non-graphic (e.g., structural) elements of any monument signage within the 25 foot easement shall comply with the *76 Country Boulevard Corridor Master Plan's* aesthetic design themes, as established in the Zoning Overlay District.

The Grantor shall provide a circuit breaker, accessible to the City, for the sign's electric power within the outer 5 feet of the 25 foot easement in the property-side frontage buffer zone. In lieu of above election for signage to remain within the easement, the Grantor may request that the City provide up to $_____ of a one-time reimbursement for the construction and installation of a building-mounted sign on the Grantor's premises. The election must be made by Grantor in writing to the City within one year of the effective date of this Agreement and the reimbursement request shall be submitted to the City within three years of the effective date of this Agreement.

C. MAINTENANCE

Grantor shall maintain the appearance and operation of the sign pursuant to the requirements of the Branson Sign Code.

Grantor shall be solely responsible for the removal of abandoned or destroyed signs. The City may remove any abandoned or destroyed sign which has not been removed by Grantor within _____ days after abandonment or destruction and upon notification as required by the Branson City Code, if any. The City may restore any damage or degradation to a sign within the Pedestrianway that compromises safety (no Grantor notification needed) or the Sign Code aesthetic standards. The cost of aforementioned removal or restoration maintenance shall be charged to, and payable by, the Grantor.

9 BUILDING AWNINGS OR SHADE STRUCTURES

A. Grantor may provide building awnings and/or shade structures within the Joint Use Easement subject to city permit approval.

B. Shades structures are subject to the vertical clearance requirements of Section 8.A and the construction, materials, and maintenance requirements of the Branson Sign Code.

C. If shade structure support elements encroach into the Joint Use Easement, as authorized in the aforementioned permit, they shall be consistent with the 76 Country Boulevard Corridor Master Plan's aesthetic design themes as established in the Zoning Overlay District.

10 UPGRADED WATER MAIN (RESERVED)

reserved

11 WAIVER

Nothing contained in this Agreement shall constitute or be interpreted as a repeal of the ordinances or resolutions of City, nor as a waiver of City's legislative, governmental, or police powers to promote and protect the public health, safety, and welfare.

12 INVALIDITY AND FORCE MAJEURE

The parties hereto agree that if any part, term, portion, or provision of this Agreement is held by a court of competent jurisdiction to be illegal or in conflict with any law of the State of Missouri, the validity of the remaining parts, terms, portions, or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the invalidity.

The failure of performance of the construction obligations and conditions on behalf of City pursuant to this Agreement resulting from acts of God, war, act or incidence of terrorism, civil insurrection or riot shall not be a breach or an event of default of City pursuant to this Agreement.

13 ADDITIONAL DOCUMENTS

The parties agree that each will cooperate with the other in accomplishing the terms, conditions, and provisions of this Agreement, and will execute such additional documents as necessary to carry out the purpose of the parties as set forth in this Agreement.

14 CITY ORDINANCES

Unless otherwise specifically provided herein, any reference to any City ordinance, resolution, or policy is intended to refer to any subsequent amendments or revisions to such ordinance, resolution, or policy, and that such amendments or revisions shall be binding upon Grantor, its successors, heirs and assigns.

15 COMPLETE AGREEMENT

The parties agree that this writing is the complete Agreement between the parties, and that there are no promises, representations or understandings not expressly set forth herein. This Agreement can only be modified in a writing, signed by both parties, and approved by City with the passage of an ordinance approving the modification, addendum or amendment.

16 BINDING EFFECT

Except as specifically stated herein, the parties agree that this Agreement shall be binding upon the parties, their heirs, personal representatives, successors and assigns.

17 APPLICABLE LAW

Any controversy or claim arising under or in relation to this agreement, or any modification of it, shall be brought in the Circuit Court of Taney County, Missouri in accordance with the laws of Missouri and the parties' consent to the exclusive jurisdiction of the Circuit Court of Taney County, State of Missouri, and further consent that any process in need of service outside Missouri, may be served outside Missouri by registered mail or by personal service, as may be permitted by Missouri law.

18 ATTORNEY'S FEES

In the event either party fails to perform any of its obligations under this Agreement or in the event a dispute arises concerning the meaning or interpretation of any provisions of this Agreement, the defaulting party or the party failing to prevail in such dispute, as the case may be, shall pay any and all costs and expenses incurred by the other party in enforcing or establishing its rights hereunder, including without limitation, court costs and reasonable attorney's fees.

19 NOTICES

Any notices required herein shall be sent in the U.S. Mail, either registered or certified, return receipt requested, to the parties at the following addresses and shall be deemed given three days after sent:

CITY: THE CITY OF BRANSON, MISSOURI
City Administrator
110 W. Maddux Street
Branson, MO 65616

GRANTOR: Dwight A. Sprague

9409 Branson Landing Blvd.
Branson, MO 65616

20 APPROVAL BY BOARD OF ALDERMAN

This Agreement shall be in full force and effect upon approval of this Agreement by a majority of the Board of Alderman of the City of Branson, Missouri, which shall be sought at the earliest possible time, but no later than such regular meetings of the Board after the date of execution of this Agreement as may be required for approval by the Board.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

By: Dwight A. Sprague / Linda L Sprague — Owner / owner
Name, Grantor — Title

City of Branson

By: _____
Raeanne Presley, Mayor

Approved as to Form:

Attest: _____
Lisa K Westfall

_____
Leland L. Gannaway

76 Country Boulevard Pedestrianway Joint Use Easement Agreement

THIS AGREEMENT is made and entered into this 14th day of January, 20 14, by and between the CITY OF BRANSON, a municipal corporation located in the State of Missouri, ("City") and NOLAN FOGLE [full names of all property owners] or "Grantor").

WITNESSETH: BABETTE FOGLE

WHEREAS, the City has determined that it is beneficial to the current residents, businesses, and tourists and the future economic development of the community to design and construct a pedestrian-oriented walkway along 76 Country Boulevard for the purposes of establishing a safe and inviting area for pedestrians to move between the various businesses and attractions located on 76 Country Boulevard ("76 Country Boulevard Pedestrianway" or "Pedestrianway"); and

WHEREAS, the Pedestrianway shall extend up to five miles, from approximately Shepherd of the Hills Expressway on the west to US 65 on the east; and

WHEREAS, construction of the Pedestrianway shall require the granting of a *minimum* 25-foot wide easement measured from See exhibit A [identify general location of measurement, e.g., from back-of-curb] along a series of properties with frontage along 76 Country Boulevard; and

WHEREAS, FOGLE [name of owner] is currently the owner of certain real property located within the 76 Country Boulevard Pedestrianway Project Area in Taney County, Missouri, and within the city limits of Branson, Missouri ("FOGLE [name of owner] Property"), as more particularly described in Exhibit A,[1] attached hereto and incorporated herein; and,

WHEREAS, the City and FOGLE [name of owner] agree that it is in their mutual interest for FOGLE [name of owner] to grant to the City a perpetual easement in, along, and upon a location as generally identified on Exhibit B ("Joint Use Easement") to allow for construction, operation and maintenance of the 76 Country Boulevard Pedestrianway on the FOGLE [name of owner] Property; and,

WHEREAS, City or its assigns (i.e., a specific purpose Community Improvement District) shall pay the cost(s) for design, construction, specified maintenance, and operation of the 76 Country Boulevard Pedestrianway on Grantor's property. The City shall develop an operational restoration plan implementing provisions outlined in the Exhibit B, *Conceptual Design Plan,* for the Grantor's review and shall pay all reasonable costs, including obtaining any needed variances for developing and implementing such plan. City shall additionally provide specified assistance and financial support for Grantor's sign and other improvement relocations as identified in this Agreement; and,

WHEREAS, the City and Grantor acknowledge that the easement shall remain subject to applicable current and future codes and ordinances as further articulated in sections WAIVER and ADDITIONAL DOCUMENTS.

[1] Exhibit A shall identify the easement granted for the Pedestrianway from a specific property.

NOW, THEREFORE, in consideration of the above premises and the covenants hereinafter set forth, the parties hereby agree as follows:

1 DEFINITIONS

Except as otherwise specified in this Agreement, the following terms shall be defined as provided in this section.

AASHTO
The American Association of State Highway and Transportation Officials

ADA
The Americans with Disabilities Act of 1990.

ADAAG
ADA Accessibility Guidelines for Buildings and Facilities.

Chicane
A design feature used to slow and direct automobile or non-motorized traffic.

City
The City of Branson, Missouri, or its assigns (e.g., a Community Improvement District – CID).

Grantor's Premises
The grantor's property exclusive of the Joint Use Easement area.

LOS - Level of Service
Scale that defines the operating conditions on the Pedestrianway.

Pedestrian
Any human, non-motorized, ambulatory user of the Pedestrianway, such as walkers, joggers, runners, bicyclists, tourists, visitors, shoppers, customers, and/or invitees of the Grantor. Pedestrian also includes persons with disabilities using motorized or non-motorized assistive ambulatory devices and/or service animals.

PROWAG
U.S. Access Board's formal set of proposed guidelines for accessible rights-of-way.

ROW
Right of Way

2 GRANT, PURPOSE, AND USE

A. The Grantor hereby conveys to the City a minimum 25-foot wide easement running the length of the Grantor's frontage along Missouri Route 76 for the primary purpose of constructing, operating and maintaining the 76 Country Boulevard Pedestrianway and adjoining buffers.

B. The primary purpose of the Pedestrianway shall be to provide pedestrians, tourists, visitors, customers, and shoppers, and Grantor's invitees a means of travel, across,

through, and accessing to the entirety of the frontage of the grantor's property abutting the Pedestrianway.

C. The Pedestrianway may also be used by the City's employees using motorized devices, subject to the restrictions on speed limit and vehicle type in Section 7.B, for maintenance, safety, security and integrity of the Pedestrianway and the users thereof.

D. Subject to a permit issued by the City and described in Section 7.A, the Pedestrianway may be used for Grantor's limited on-premise shuttle service.

3 DESIGN AND CONSTRUCTION OF PEDESTRIANWAY

A. LENGTH OF PEDESTRIANWAY

It is the City's intent to extend the Pedestrianway, or its functional equivalent, from Grantor's property for an extent of up to five miles, from approximately Shepard of the Hills Parkway on the west to US 65 on the east, if enabled by similar easements from property owners along the Pedestrianway and the negotiation of financing of such Pedestrianway (and each portion thereof) as is acceptable to the City.

B. CONSTRUCTION TIME FRAME

The Parties mutually recognize that the time required for the completion of Construction of the entire anticipated length of the "Pedestrianway" will be extensive and multiple factors will affect the time required for such. However, one of the critical elements affecting the pace of progress will be the cooperative actions of the various owners of property (Grantors) fronting the "Pedestrianway". The expeditious execution of easements by the Grantors so that the project can commence for the combined benefit of all Grantors, is of utmost importance in both starting and completing the project. Owners (Grantors) are, therefore, encouraged to execute and return to the City the required easements at the earliest practicable time. The City will commence construction of a portion of the Pedestrianway within the length described in Section 3.A within five years of the date of this Agreement. If construction is not commenced within the five year period, this Agreement shall be null and void.

Grantor's property shall remain physically undisturbed until commencement of construction of the Pedestrianway on Grantor's property. Access to Grantor's property shall be maintained at all times during construction.

The City will reserve the right and give consideration to prioritizing segments of the "Pedestrianway", with preference to areas containing a large, continuously connected group of Owners (Grantors) which have demonstrated their desire for the proposed improvements by timely executing and delivering the required easements to the City as well as considering lower driveway frequency and property restoration costs.

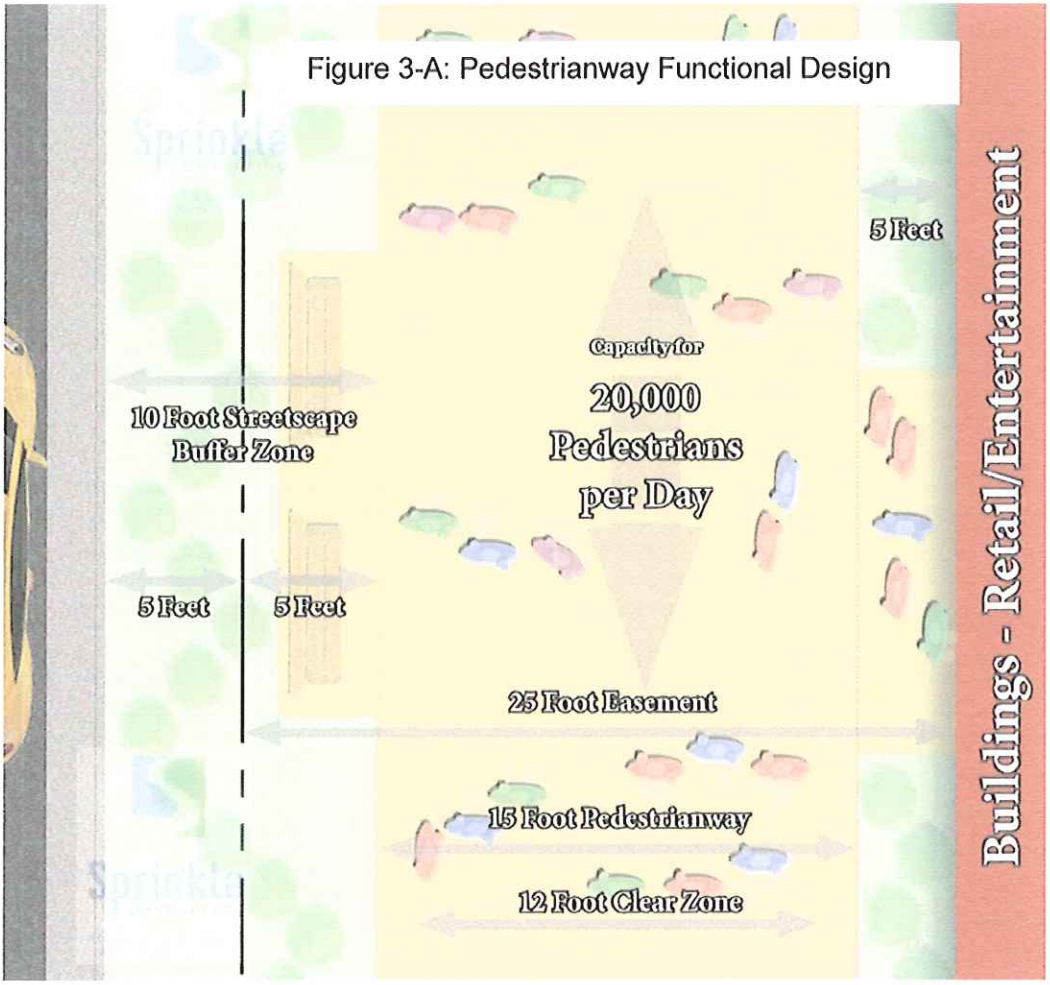

Figure 3-A: Pedestrianway Functional Design

C. DESIGN COMPONENTS

As illustrated in Figure 3-A, the Pedestrianway shall be designed as follows:

1. Pedestrianway

Within the easement, and where the City determines it appropriate, in constrained areas potentially using a portion of the ROW, the City shall construct and maintain the Pedestrianway to a maximum of 15 feet wide, comprised of the following segments:

a. Pedestrian Flow Zone: A 12-foot wide unobstructed pedestrian flow zone that may be reduced to eight feet in width across driveways.

b. Banding Surface: The Pedestrian Flow Zone may have an additional "76 Country Boulevard" banding surface or traversable buffer zone of up to 1 ½ feet in width on both sides.

2. Frontage Zone(s)

A minimum five-foot wide frontage zone, buffering Grantor's premise operations with those of the pedestrian zone, shall be situated between the Pedestrianway to the outside limit of the easement. The frontage zone may be reduced to three feet at driveways.

3. **Surface and Geometry**

All walkway surfaces of the Pedestrianway within the easement shall be firm, stable and slip resistant. The walkway geometry shall be ADA compliant, pursuant to applicable provisions of ADAAG and the (draft) PROWAG. A limited portion of the Pedestrianway surface (see *Conceptual Design Plan* – Exhibit B) may be of a material similar to Grantor's main building exterior entry, provided it meets the above performance parameters and Grantor pays all costs of its construction and maintenance.

4. **Design at Driveways**

a. The City shall ensure that the design and operation of the Pedestrianway and driveway crossings enhances motorists' yielding to pedestrians and minimizes interruptions to the flow of tourists and shoppers.

b. The Pedestrianway's horizontal alignment may chicane at Grantor's driveway(s), narrowing to 8 feet in width through the driveway crossing, placing the Pedestrianway cross-walk a minimum distance of 20 feet from the edge of the 76 Country Boulevard motor vehicle travelway for pedestrian safety and vehicle movement purposes.

c. A distinctive surface pattern of the Pedestrianway/driveway area shall clearly indicate the crosswalk in a way that is consistent throughout the 76 Country Boulevard Pedestrianway for motorists' and pedestrians' expectations and compliance with any applicable Missouri state law, the Uniform Vehicle Code and applicable national design guidelines.

d. The geometry of Grantor's premise improvements shall allow adequate visibility to enable proper yielding.

D. LANDSCAPING, DECORATING, AND MAINTENANCE

1. **City Obligations**

a. The City shall maintain the entire Joint Use Easement and shall provide the following corridor-consistent elements, implementing the intent and provisions of this Agreement, for the purposes of conveyance and convenience of visitors, shoppers, guests, Grantor's invitees, and customers across and through the Joint Use Easement:

1. Hardscaping,
2. Low ground cover (i.e., landscaping such as grass) and irrigation,
3. Lighting,
4. Underground utilities accommodation, and
5. Operational safety components (e.g., signage, striping, cross-walks).

b. The City also may elect to provide the following elements:

1. Street furnishings (e.g., benches, trash receptacles, pedestrian shade provisions, water misters, etc.);
2. Landscaping beyond grass or low ground cover;
3. Corridor thematic components;
4. Public transit stop components;

5. Mid-block crosswalk pedestrian components;
6. Seasonal enhancement, or city-wide event decorations;
7. Visitor wayfinding communication; and
8. Pedestrian-level audio environment "ambiance" provisions.
9. Pet care station facilities and supplies within separate public right-of-way or City owned properties.

The City shall maintain the Joint Use Easement to the same standards as it generally maintains all pedestrian walkways within the City.

2. Grantor Obligations

The Grantor shall not sweep or deposit debris or litter from its premises into the Joint Use Easement. Grantor shall keep that portion of the Joint Use Easement adjoining and in front of Grantor's property in a clean and sanitary condition.

E. OBSTRUCTIONS

The Pedestrianway shall be free of horizontal obstructions within the Joint Use Easement. The Pedestrianway shall also be free of all vertical obstructions for a height of eight feet above ground level unless varied by appeal to and approval by the Board of Alderman.

F. LEVEL OF SERVICE

The Pedestrianway shall have the capability to accommodate 20,000 pedestrians per day at a minimum level of service of "B" and shall: follow, when reasonably possible, applicable sidewalk geometric design standards as outlined in AASHTO's current *Guide to Planning, Design and Operation of Pedestrian Facilities*; maintain Bicycling LOS "C"; be compliant with shared use path geometric design standards as outlined in AASHTO's *Guide to Development of Bicycle Facilities*.

4 GRANTOR CONNECTION TO PEDESTRIANWAY

A. CONSTRUCTION OF CONNECTIONS

1. City Responsibility

The City shall construct all connections within the Joint Use Easement from Grantor's primary building entrance to the Pedestrianway. The Grantor shall be responsible for all portions of construction and maintenance outside of the Joint Use Easement.

2. Grantor Responsibility

All grade transitions of the connections from the Grantor's building entrance(s) to the Pedestrianway shall be the responsibility of the Grantor. With the exception of a maximum longitudinal grade transition of 5 percent within the outermost 5 feet of the easement (i.e., the Frontage zone), grade transitions shall be accomplished outside of the Joint Use Easement;

B. MAINTENANCE OF PEDESTRIAN FLOW

1. Grantor Responsibility

Grantor shall have unrestricted physical walkway connections to the Pedestrianway, except that:

a. No buildings' entry doors gates or similar moving entry features of the Grantor's premises shall protrude or encroach more than 3 feet into the Joint Use Easement nor shall they or their operation encroach or affect the flow or operations within the Pedestrianway. Primary or secondary uses' structural protrusions or encroachments in the Joint Use Easement are prohibited.

b. All parking, loading or primary or secondary uses or structures shall be subject to a 5 foot buffer from the Pedestrianway.

c. In no case shall operations or conditions of the Grantor's property or premises affect the flow or operations of pedestrians within or through the Pedestrianway.

5 INDEMNIFICATION

City shall hold Grantor harmless from all claims of invitees originating on or within the Joint Use Easement, excepting claims caused or contributed to by: 1) employees or agents of Grantor, 2) permitted motorized users of the easement who are employees or agents of the Grantor, or 3) Grantor's signs and structures that are within, abut or overhang the Joint Use Easement.

6 ACTIVITIES ALONG AND WITHIN THE JOINT USE EASEMENT

A. VENDING, SALES, AND SOLICITATION PROHIBITED

Pedestrians, tourists, visitors, customers, invitees, and others who are entering the Pedestrianway for the purposes of traveling through, shall be able and expected to move at a customary pace, without delay, except to patronize Grantor's premises. No vending, sales, soliciting, peddling, storing, or display of goods, services, or merchandise is permitted within the Joint Use Easement.

B. GRANTOR'S ACTIVITIES

1. Non-Emergency Construction and Maintenance Activities

Grantor's activities on its premises shall not be restricted except that neither operations, activities on, nor conditions of the Grantor's property may interrupt, interfere with, or affect the flow, operations, safety, or convenience of pedestrians into, within, or through the Pedestrianway or Joint Use Easement. Grantor may seek a temporary easement operation permit[2] from the City to conduct the following activities *when they require partial interference* with the Joint Use Easement:

a. Temporary activities of either construction, maintenance, or reconstruction of Grantor's premises; or

b. Brief annual maintenance of signage.

2. On-Premise Shuttle Service

Grantor's limited operation of shuttle vehicles may be allowed with a City-issued on-premise shuttle permit as described in Section 7.A. On-premise shuttle service shall be limited to the following purpose and use:

[2] This will be a new permit that the City will issue for private work done with access from the Joint Use Easement.

a. The service is used to transport passengers solely on and through Grantor's property.

b. Shuttle trips must originate and end on Grantor's premises.

c. Shuttle trips may cross the Pedestrianway but may not stop, except to yield to pedestrians, nor load any additional passengers in the Pedestrianway.

3. Urgent and Emergency Activities

The repair or restoration of failed premise-sustaining utilities lines within the Joint Use Easement and connecting to Grantor's property shall be considered as urgent or emergency activities. However, the City must be notified sufficiently in advance of any urgent or emergency activity that may interrupt pedestrian traffic to enable City to safely re-route pedestrians around such urgent or emergency utility repair and service restoration.

7 REGULATION AND USE OF VEHICLES

A. ON-PREMISE SHUTTLE PERMIT REQUIRED

The City shall establish an on-premise shuttle operation permit process that is designed to review Grantor's on-premise shuttle requests with the purpose of preserving and maintaining the safe and orderly function of pedestrians, tourists, visitors, and shoppers along the extent of the Pedestrianway as well as preventing interruption, interference or negative effects to the flow or operations of pedestrians within or through the Pedestrianway. On-premise shuttles shall be operated in a manner that is consistent with the use of the Pedestrianway by groups of unaccompanied minors as well as senior citizens. The City shall consider the following criteria in determining whether to issue an on-premise shuttle permit:

a. Impact to, and provisions for preservation of the operational standards (especially Section 3.F.) of the Pedestrianway, including the flow, convenience, or operation of the facility and ability to maintain pedestrian level of service;

b. Anticipated number and frequency of shuttles on the Pedestrianway; and

c. Origin and destination facilities for shuttles, but in no case shall shuttles of the Grantor, or any other outside parties, be allowed or permitted to travel the easement to another premises (separate parcels of land).

B. VEHICLE USE

a. All shuttles, bicyclists, and other authorized vehicles within the Pedestrianway shall yield to pedestrians.

b. The maximum operating speed of any vehicle within the Pedestrianway shall be 5 miles per hour.

c. Failure to comply with the standards of this Agreement shall be grounds for immediate removal of vehicles and/or revocation of any on-premise shuttle permits, as determined by the City.

8 SIGNAGE

A. VERTICAL CLEARANCE

Signs shall not protrude or encroach into the Joint Use Easement below 8 feet vertically above ground level or the surface of the Pedestrianway, whichever is appropriate.

B. SIGNAGE ACCOMMODATION

1. Relocation or Preservation of Existing Sign

Grantor may elect to maintain one existing, legally-permitted sign within or proximate to the easement subject to the City's applicable sign regulations. Grantor shall submit a written request to maintain an existing sign to the City within 120 days of execution of this Agreement. The request[3] shall:

a. Describe the sign's specifications (i.e., physical parameters and electrical power needs - dimensions, weight and electrical, etc.), and

b. Identify requested locational changes necessary to maintain the sign in conformance with the requirements of the Joint Use Easement.

2. City Provision of Sign Pedestal

If the City determines that accommodation of the Grantor's sign in its present location, or above proposed relocation does not, or cannot with modifications, enable the easement and Pedestrianway to meet the afore-established functional objectives and operating provisions, the City shall, within 60 days of receiving Grantor's request, at its sole cost, provide the plans for a sign pedestal foundation, column and standard mounting base/bracket and electrical conduit for one sign on Grantor's premises. Following the Grantor's acceptance of said design (within 30 days of receipt), the City shall also provide to Grantor up to $ (NF) reimbursement for the existing sign's one-time modification to be affixed to the installed pedestal. This reimbursement shall cover the cost of labor and materials. The City shall ensure that aforementioned sign pedestal and appurtenances shall be in place for sign relocation within 60 days.[4]

3. Location of and Design of Sign Pedestal

a. The pedestal shall either straddle the Pedestrianway through a cantilevered and/or multi-columned design, or at the City's prerogative, be a single pedestal located within the center of Pedestrianway, with suitable geometric re-design of Pedestrianway for a pedestal island. The modified sign setback shall be reduced to zero feet along the 76 Highway right-of-way. The sign pedestal shall be located at least ten feet from any driveway or public side street.

b. The pedestal may be encased with a design by the City consistent with that of the Pedestrianway's aesthetic theme of the district, so long as it does not violate level of service and geometric standards for safely and conveniently-functioning Pedestrianway, The sign pedestal may also incorporate a pedestrian shade element, but the shade element shall not protrude, as established within this Agreement into the Pedestrianway, nor be structurally affixed to Grantor's premises.

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[3] The City will create a standard application for this request.

[4] Process and timing will need further development and refinement

c. Any non-copy or non-graphic (e.g., structural) elements of any monument signage within the Joint Use Easement shall comply with the *76 Country Boulevard Corridor Master Plan's* aesthetic design themes, as established in the Zoning Overlay District.

The Grantor shall provide a circuit breaker, accessible to the City, for the sign's electric power within the outer 5 feet of the Joint Use Easement in the property-side frontage buffer zone. In lieu of above election for signage to remain within the easement, the Grantor may request that the City provide up to $_____ of a one-time reimbursement for the construction and installation of a building-mounted sign on the Grantor's premises. The election must be made by Grantor in writing to the City within one year of the effective date of this Agreement and the reimbursement request shall be submitted to the City within three years of the effective date of this Agreement.

C. MAINTENANCE

Grantor shall maintain the appearance and operation of the sign pursuant to the requirements of the Branson Sign Code.

Grantor shall be solely responsible for the removal of abandoned or destroyed signs. The City may remove any abandoned or destroyed sign which has not been removed by Grantor within MLA days after abandonment or destruction and upon notification as required by the Branson City Code, if any. The City may restore any damage or degradation to a sign within the Pedestrianway that compromises safety (no Grantor notification needed) or the Sign Code aesthetic standards. The cost of aforementioned removal or restoration maintenance shall be charged to, and payable by, the Grantor.

9 BUILDING AWNINGS OR SHADE STRUCTURES

A. Grantor may provide building awnings and/or shade structures within the Joint Use Easement subject to city permit approval.

B. Shades structures are subject to the vertical clearance requirements of Section 8.A and the construction, materials, and maintenance requirements of the Branson Sign Code.

C. If shade structure support elements encroach into the Joint Use Easement, as authorized in the aforementioned permit, they shall be consistent with the 76 Country Boulevard Corridor Master Plan's aesthetic design themes as established in the Zoning Overlay District.

10 UPGRADED WATER MAIN (RESERVED)

Reserved

11 WAIVER

Nothing contained in this Agreement shall constitute or be interpreted as a repeal of the ordinances or resolutions of City, nor as a waiver of City's legislative, governmental, or police powers to promote and protect the public health, safety, and welfare.

12 INVALIDITY AND FORCE MAJEURE

The parties hereto agree that if any part, term, portion, or provision of this Agreement is held by a court of competent jurisdiction to be illegal or in conflict with any law of the State of Missouri, the validity of the remaining parts, terms, portions, or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the invalidity.

The failure of performance of the construction obligations and conditions on behalf of City pursuant to this Agreement resulting from acts of God, war, act or incidence of terrorism, civil insurrection or riot shall not be a breach or an event of default of City pursuant to this Agreement.

13 ADDITIONAL DOCUMENTS

The parties agree that each will cooperate with the other in accomplishing the terms, conditions, and provisions of this Agreement, and will execute such additional documents as necessary to carry out the purpose of the parties as set forth in this Agreement.

14 CITY ORDINANCES

Unless otherwise specifically provided herein, any reference to any City ordinance, resolution, or policy is intended to refer to any subsequent amendments or revisions to such ordinance, resolution, or policy, and that such amendments or revisions shall be binding upon Grantor, its successors, heirs and assigns.

15 COMPLETE AGREEMENT

The parties agree that this writing is the complete Agreement between the parties, and that there are no promises, representations or understandings not expressly set forth herein. This Agreement can only be modified in a writing, signed by both parties, and approved by City with the passage of an ordinance approving the modification, addendum or amendment.

16 BINDING EFFECT

Except as specifically stated herein, the parties agree that this Agreement shall be binding upon the parties, their heirs, personal representatives, successors and assigns.

17 APPLICABLE LAW

Any controversy or claim arising under or in relation to this agreement, or any modification of it, shall be brought in the Circuit Court of Taney County, Missouri in accordance with the laws of Missouri and the parties' consent to the exclusive jurisdiction of the Circuit Court of Taney County, State of Missouri, and further consent that any process in need of service outside Missouri, may be served outside Missouri by registered mail or by personal service, as may be permitted by Missouri law.

18 ATTORNEY'S FEES

In the event either party fails to perform any of its obligations under this Agreement or in the event a dispute arises concerning the meaning or interpretation of any provisions of this Agreement, the defaulting party or the party failing to prevail in such dispute, as the case may be, shall pay any and all costs and expenses incurred by the other party in enforcing or establishing its rights hereunder, including without limitation, court costs and reasonable attorney's fees.

19 NOTICES

Any notices required herein shall be sent in the U.S. Mail, either registered or certified, return receipt requested, to the parties at the following addresses and shall be deemed given three days after sent:

CITY: THE CITY OF BRANSON, MISSOURI
City Administrator
110 W. Maddux Street
Branson, MO 65616

GRANTOR: NOLAN FOGLE
BABETTE FOGLE
119 Stoneridge Dr.
Branson, MO 65616

20 APPROVAL BY BOARD OF ALDERMAN

This Agreement shall be in full force and effect upon approval of this Agreement by a majority of the Board of Alderman of the City of Branson, Missouri, which shall be sought at the earliest possible time, but no later than such regular meetings of the Board after the date of execution of this Agreement as may be required for approval by the Board.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

By: Nolan Fogle — Owner
Name, Grantor — Title

Owner

City of Branson

By: _____
Raeanne Presley, Mayor

Approved as to Form:

Attest: _____
Lisa K Westfall

_____
Leland L. Gannaway

APPENDIX G
TECO Meeting Minutes

HARBOR COORDINATION SOLUTIONS, INC.
2519 N., McMullen Booth Rd
Suite 510, #124
Safety Harbor, FL 34695

Date: **November 20, 2019**

Subject: **Hillsborough County PD&E West Shore Complete Streets – TECO Preliminary Investigation**

Location **RS&H**
1715 N. West Shore Blvd
Suite 600
Tampa, FL 33607

Attendees:

Mike Coleman	RS&H	813-636-2643	michael.coleman@rsandH.com
Tom Rawls	Hillsb. Co	813-270-9742	RawlsT@Hillsboroughcounty.org
Dan Breznay	TECO	813-275-3428	csadmin@tecoenergy.com
Bruce Landis	Landis Evans	813-493-9312	Landis@Landisevans.com
John Turner	TECO	813-630-5245	JLTurner@Tecoenergy.com
Matt Betancourt	RS&H	813-636-2682	matthew.betancourt@rsandh.com
Zack Boyd	TECO Lighting	813-447-1488	zkboyd@tecoenergy.com
Jeanna Dean	HCS	813-781-5787	jdean@Harborcoordination.com

Purpose of the Meeting: (Tom Rawls)

Hillsborough County is the authority for West Shore Blvd and is responsible for road maintenance, but the City of Tampa manages the traffic signals for the most part. There is a Memorandum of Understanding in which the County has wanted to create a Complete Street design on West Shore from Kennedy Blvd to Boy Scout. This has been a desire for the last 30 years and is supported by the Westshore Alliance. At this point in time, there is a real possibility this could happen. It may be a slow process but one that the County is interested in investigating and finding out what that would look like for funding.

The County/City/West Shore Alliance and FDOT are partnering for this endeavor so that all parties agree with the look and design of the corridor. We want a safe, walkable area for all the businesses since there are 100,000 employees that go to lunch and slow down traffic so that they can go to the restaurants and business in safe environment.

The area is changing. Redevelopment is coming and we want to add character for this corridor much like other parts in Florida. This will not be a specific right of way to right of way normal design, but a blended design where perhaps the utilities are placed an easement or some other agreeable design.

We would like to see TECO facilities be placed underground as much as possible.
Lighting is an important factor and we are wanting to know if TECO has a lighting program that could help us achieve our goal. We would want decorative, pedestrian lighting and perhaps have TECO install them and maintain those lights.

Land Use: we would work with the property owners to see if they will donate right of way or easements. This would help in keeping cost down and could help place TECO facilities there, we just need to know what it would take to underground the overhead lines.

In all the alternatives, we want a contingency placed in our cost estimates for TECO to underground those facilities. The County has worked with TECO on other projects for this and we need to set up a budget, get the details worked out so we can move forward. The lighting may be in the right of way or on the easement depending on the design.

The County has contracted with RS&H to do this PD&E study so we can develop some design alternatives with detailed costs estimates and we need TECO's input for that to move forward.

TECO:

A Question was asked if TECO can feed the businesses (ie provide electrical hookups) another way, from Trask or another street. Mr. Turner stated that TECO could not feed the businesses from Trask but could place facilities underground with easements provided for the oil filled equipment, which cannot be placed within the right-of-way.

Mr. Turner explained the following items: (This is for distribution services only)

1. Currently the system out there is a "feeder" system. This means it is a heavy-duty system and it not a typical overhead design. This feeder system is larger gauge wire, and the design is different and more complex.
2. To duplicate the system that is there now you would have a minimum of:
    a. The spot easements require a minimum of a 20'X20' area for the pad mounted cabinet.
    b. You will need a minimum of a 10' easement for the wire as well, but the easement can go down to 5' except where there's equipment. The easement can't be shared with water or sewer
    c. As redevelopment happens, this would impact TECO's system and additional facilities may need to be incorporated, meaning more room.
    d. The conduits for the wire right now would be a 6" and a 4" conduit with 2 feet of separation from the other utilities out there - this is a crowded corridor for utilities.
3. People don't want to walk far in this heat, so shade is an issue, but planting trees and/shrubs near the cabinet is a concern. TECO needs the 20 feet for maintenance activities as well as emergency access if something were to happen. (e.g. Storms etc.)
4. The substation that feeds this area is near Boy Scout/TIA and the other feeder comes down Cypress to service the current overhead facilities. So, this is a large grid to provide enough power for what is there today. As the area develops TECO would need to *add* more facilities. (e.g. cabinets and wire etc.) so we would want you to consider that in your design.
5. Some areas have laterals that come off the feeder, those would need to be incorporated.
6. Underground vaults as a rule of thumb would be approximately $200,000 every 300 feet. (500 feet at the furthest, if it can be designed that way)

7. The lines you see crossing each other in the air cannot do that underground. That adds vaults/cabinets for those crossings, and they stack next to each other, they can't be scattered. (think of Linebaugh between Sheldon and Countryway – it would be the same system)
8. Nothing could be placed on top of this system. Pavers are not acceptable. Landscaping or a building, is not acceptable. Sod would be the best item.
9. The system would be approximately 3 feet deep and would need to be able to get to it if something were to happen. Drainage would be a concern as well as other utilities. – so, a 10-foot easement for the wire would be needed.
10. Spot easements for cabinets on the other side of West Shore would be required as well to service that side of the road.
11. Ballpark estimate to place TECO underground – approximately $1 Million Dollars per mile.

It was suggested that in the design alternatives, a cross section be provided for TECO to show their design with the special conditions it would take to achieve the undergrounding. This would help with a ballpark estimate.

If a 10-foot easement would be created – TECO would take the front half and the back half be the for the other UAOs. TECO requested to review any easement language since it may differ from standard easement language.

A discussion resulted in a good idea for a giant Joint Use easement then divide it up as needed.

It was understood the Transmission facilities would not be impacted.

Lighting:

- Mr. Boyd stated that TECO does not really do what the County is looking for as they are limited with the types of decorative lighting styles. However, TECO does have a program that is funded from the LS2 Tariff, and has been looking for a pilot project to test it out. An agreement could be set up with TECO that allows them to order what decorative lighting you want, TECO installs and maintains it. One downfall is that it would take TECO weeks perhaps a month to come in a fix a light if it were to be damaged or out. Any lighting would need to be placed at least 4' from back of curb.

- Another possibility is TECO provide a service point, RS&H do the lighting design and the County contractor install the lights with a maintaining agency (the City).

- TECO does not do Pedestrian lighting so this would not be considered.

- The street lighting would have to be in the LS1 Tariff since there is an existing agreement with the City of Tampa. Not much in the line of decorative lighting for that one.

- Mr. Boyd pointed out that TECO did not do the River Walk lighting. They provide service and meter it.
- However, TECO did work with the City for mid-town mast arm lighting and that took a lot of time to coordinate.

Mr. Landis explained that visual consistency is important and would most likely design this the conventional way where TECO provides a service drop. But will talk with everyone based on this information and see what they want.

General:

A discussion to alter the zoning in this area to ensure the setback does not allow new development to encroach on the joint use easement.
Jan/Feb is when the Alternatives would be available for TECO and the other UAOs to receive the designs to review.
The limits of the complete streets may be altered, that will be something the County will take into consideration.
Make the East side the electrical corridor – that would be best for everyone.
South of Cypress there is a building on the right of way.
Large trees a concern, perhaps Palm Trees
Traffic analysis will be completed by the end of 2019

Note:

The meeting minutes contained herein represents the author's and reviewers understands the discussions that occurred during the meeting. Any attendee who does not agree with the summary or can offer additional information that should be noted within these minutes, please contact Ms. Jeanna Dean 813-781-5787 or Jdean@Harborcoordination.com no later than 7 days after receipt. If no comments are received it will be understood that the meeting minutes are correct.