



SR 693 (Pasadena Avenue) Corridor Study

From Shore Drive South to 66th Street

Financial Project Number: 435910-1-22-01 | Pinellas County, Florida



FINAL CORRIDOR ALTERNATIVES & STRATEGIES REPORT

DECEMBER, 2019

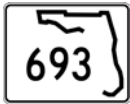


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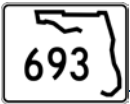
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EXECUTIVE SUMMARY

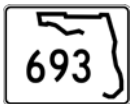
The intent of this report is to develop potential strategies for implementation to the alternatives developed in the Final Traffic Technical Memorandum. This includes short term safety and operational improvements, mid-term mobility options, and future ideas to help guide the character of Pasadena Avenue. As a result, the following strategies are recommended for consideration for the Pasadena Avenue Corridor:

1. Implement short term safety and operational improvements from 1st Avenue South to 66th Street under the upcoming resurfacing project FPID 440254-1. This should include reviewing the availability of Highway Safety Funds.
2. Implement short term and operational improvements from Shore Drive/Matthews Road to Park Street under a push button type contract such as Design Build Push Button Contract (FPID 254677-1). This should include reviewing the availability of Highway Safety Funds.
3. Implement mid-term mobility options that are consistent with the future Central Avenue Bus Rapid Transit (BRT) as provided in the Build Alternative with BRT (4-Lane) with a focus on sidewalk improvements from Shore Drive/Matthews Road to Park Street in order to provide a wide 10-ft sidewalk that addresses current ADA issues.
4. Utilize innovative intersection design concepts to guide future vehicular traffic improvements at the intersection of Pasadena Avenue at Sunset Drive/Gulfport Boulevard which includes evaluating a Displaced Left Turn in combination with a Median U-turn.
5. Consider the following when Bridge #150054L and #150137R are scheduled for replacement:
 - a. Realignment of the roadway to remove the two-stage vehicular crossing at Shore Drive/Matthews Road
 - b. The addition of a pedestrian underpass connecting Bay Island Condo's to the Fred Held Pasadena Habitat Park.
 - c. The addition of a pedestrian underpass connecting the Palms of Pasadena Medical complex to the Barbara Gilberg Habitat Park.

Figure 1-1 illustrates the project location. The corridor is located in Pinellas County, Florida, 3.5 miles west of US 19 and 1.5 miles east of SR 699 (Gulf Boulevard).

Figure 1-1: Project Location Map





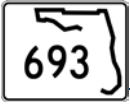
Section 1.0 INTRODUCTION AND VISION

The Florida Department of Transportation (FDOT), District Seven, is conducting a corridor study along SR 693 (Pasadena Avenue) from Shore Drive/Matthews Road to 66th Street South in Pinellas County, a distance of approximately 1.659 miles. Pasadena Avenue is a north-south roadway that traverses through the City of South Pasadena and City of Saint Petersburg. The corridor itself is an evacuation route and viewed as a gateway from the central business district and outlying areas of the City of St. Petersburg to the northern end of the St. Pete Beach communities.

1.1 VISION (PUBLIC INPUT)

The following gives a general outline of key public meetings and stakeholder meetings that helped shape and develop the corridor's vision:

- Corridor Study Kick-off Meeting: On June 7, 2017, FDOT conducted a Corridor Study Kick-Off Meeting for elected officials and agency representatives within the Pasadena Avenue study limits. The main intent was to engage key stakeholders and to develop a Project Advisory Group (PAG) to help guide the project's vision.
- Project Advisory Group Meeting #1: On July 26, 2019, FDOT conducted its first Project Advisory Group (PAG) meeting made up of local officials from South Pasadena, City of Saint Petersburg, Pinellas Suncoast Transit Authority (PSTA), Forward Pinellas, and other local residents. An interactive workshop was given to the PAG to help develop issues and items for consideration on a large aerial board. See **Appendix (A)** for comment board.
- Public Visioning Workshop: On October 24, 2017, a Public Corridor Visioning Workshop was held at the South Pasadena City Hall. The meeting included an overview of existing condition and allows the public to provide comments via comment sheets, surveys, and aerial board. See **Appendix (B)** for comment board.
- Project Advisory Group Meeting #2: On July 31, 2018, a second Project Advisory Group meeting was held to discuss the result of the surveys and comment from the previous Public Corridor Visioning meeting. The survey results for the area of importance is as follows.
 - 46% Safety
 - 21% Congestion
 - 20% Intersctions
- In addition to discussion of the survey results and comments from Public Corridor Visioning Meeting, PSTA provided an update on the future PSTA Central Avenue Bus Rapid Transit (BRT) which selected Pasadena Avenue as its preferred route from Central Avenue to the Beaches on Gulf Boulevard.
- On May 1, 2018 the City of South Pasadena provided a memorandum to FDOT voicing their concerns with any proposed Bus Rapid Transit (BRT), removal of travel lanes, and narrowing of travel lanes.



1.2 VISION STATEMENT

Based on our research of the existing conditions, previous studies and public engagement our team has developed a Corridor Vision that promotes:

- Safety for Today
- Mobility for Tomorrow
- Innovation for the Future.

SECTION 2.0 SAFETY FOR TODAY

2.1 CRASH DATA

A safety evaluation was completed under the Traffic Technical Memorandum dated July 22, 2019 using crash data from 2012 to 2016. The evaluation separated the corridor into three distinct segments based on corridor classification and number of lanes.

- Segment 1: Shore Drive/Matthews Road to Park Street
 - 6-Lane Urban Minor Arterial
- Segment 2: Park Street to Central Avenue
 - 6-Lane Urban Principal Arterial
- Segment 3: Central Avenue to 66th Street
 - 4-Lane Urban Principal Arterial

The Traffic Technical Memorandum identified that all three corridors had a crash rate higher than the statewide average with Segment 3 having the highest severity rate. It was also identified that the intersection of Central Avenue had the highest crash and severity rate of all the intersections located on the corridor. Given that Central Avenue is the break point for Segment 2 and 3, we adjusted the crash rate to include the crashes from Central Avenue into Segment 3 versus Segment 2 as completed in the Traffic Technical Memorandum. The adjusted crash rate from this change is shown in **Table 2-1**. In doing so, we found that by including the intersection of Central Avenue to Segment 3 that Segment 3 has a crash rate five times higher than the statewide average. We also found that by removing the intersection of Central Avenue from Segment 2, that Segment 2 has a crash rate slightly lower than the statewide average. As a result, we have developed a plan and strategy to address the crash issues for the two segments with a crash rate greater than the statewide average with a priority given to Segment 3.

Table 2-1: Adjusted Crash Rates

Segment ID	Segment	Statewide Crash Rate	Crash Rate	Adjusted Crash Rate
1	Shore Drive/Matthews Road to Park Street	4.066	6.206	6.206
2	Park Street to Central Avenue	4.066	7.693	3.341
3	Central Avenue to 66th Street	*3.125	7.257	17.880

*Segment 3 is a 4-lane section versus a 6-lane section hence the lower Statewide Crash Rate.

Figure 2-1: Segment Location Map



2.2 SEGMENT 3 – CENTRAL AVENUE TO 66TH STREET

The following safety and operational issues were identified within Segment 3:

- High amount of left turn crashes from westbound and eastbound left turns from Central Avenue onto Pasadena Avenue (17 total).
- 15 northbound left turn crashes from Pasadena Avenue onto Pinellas Way North due to Traffic Spillback (i.e., good Samaritan crash).
- 11 left turn crashes from westbound 1st Avenue North onto Pasadena Avenue. Part of this issue is due to the inability to make a safe two stage crossing due to a narrow median.
- 26 Lane Departure crashes at the intersection of 66th Street due to observed excessive traveling speeds and sharp horizontal curvature.

The following safety improvements have been identified within Segment 3 and can be found in **Appendix F**.

- The addition of dual left turns for westbound and eastbound Central Avenue including upgrading the existing signal system with new mast arms. Not only does the dual left turn lanes help improve traffic flow at this intersection, but it also changes the signal operation from a protected/permissive phase for the left turn lanes to a protected only phase. The change in the signal operation to a protected mode only will have a 99 percent crash reduction factor for the problematic left turn crashes according to Table 14-23 of the Highway Safety Manual.
- The proposed improvements call for closing the median at Pinellas Way North along with adding additional signage. Left turn movements are relocated to 1st Avenue North where they can perform a U-turn for reasonable access to Pinellas Way North. This in combination with shortening the existing southbound right turn lane removes the issue with the traffic spillback. From a safety perspective, a crash reduction factor of 64 percent was utilized according to Table 14-20 since left turn lanes are being prohibited at Pinellas Way North.
- In order to address the two-stage vehicular crossing at 1st Avenue North, the proposed improvements eliminate the extremely low volume continuous northbound right turn lane on Pasadena from Central Avenue to 66th Street. In doing so, an increased median width is proposed allowing for room to effectively perform this two-stage maneuver safely. A crash reduction factor was not assigned to this improvement, but it is expected to have a positive safety impact on the corridor.
- From a speed management perspective, the proposed removal of the northbound right turn lane and shortening the southbound right turn lane on Pasadena Avenue allows for additional room within the roadway footprint to incorporate slight horizontal deflection (i.e., chicanes) on both the northbound and southbound approaches to the intersection of 66th Street. In addition, the additional space allows for flattening the existing horizontal curve. A crash reduction factor was not assigned for these improvements, but both improvements are expected to help address the roadway departure crash issue at this intersection due to excessive speeds negotiating the sharp horizontal curve.
- Other improvements considered in this alternative includes providing a dedicated crosswalk at 66th Street, removing the low volume geometrically constrained southbound/northbound left turns on Central



Avenue to 1st Avenue South to help promote efficient traffic flow at the two closely spaced signalized intersections of Central Avenue and 1st Avenue South, and relocating the existing edge of roadway pavement further away from residential housing creating a more walkable and livable situation to a handful of residents living adjacent to the corridor.

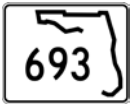
2.3 SEGMENT 1 – SHORE DRIVE/MATTHEWS ROAD TO PARK STREET

The following safety and operational issues were identified within Segment 1:

- Excessive crossing delay at the existing north crosswalk at the signalized intersection of Shore Drive/Matthews Road.
- Missing pedestrian crosswalks at the signalized intersection of Huffman Way.
- Missing pedestrian crosswalk at the signalized intersection of Majestic Way.
- Poor Access Management that includes a non-restrictive median from 14th Avenue South to the entrance of Causeway Village and a non-restrictive median at Hibiscus Avenue, lack of physical concrete separators on multiple intersection approaches, insufficient turn lane storage especially at the southbound left turn lane to Sunset Drive/Gulfport Boulevard, and the accommodation of left turn lanes into key traffic generators such as the Ted Peters Famous Smoked Fish Restaurant.
- Poor lane geometry/alignment for the eastbound and westbound through lanes at Park Street.

The following safety improvements have been identified within Segment 1 and can be found in **Appendix F**.

- Upgrade the signal timings at Shore Drive/Matthews Road to help reduce the excessive pedestrian delay. A crash reduction factor was not assigned at this location, but it shall be noted that in 2018 that a pedestrian was fatally injured trying to cross Pasadena Avenue at this location.
- Incorporate crosswalks on the missing legs of Huffman Way and Majestic Way. A crash reduction factor was not assigned at this location, but it shall be noted in 2011 that a pedestrian was fatally injured trying to cross Pasadena Avenue just a few hundred feet north of the missing crosswalk at Huffman Way.
- Improve the existing Access Management as shown in **Appendix F** Short Term Concept Plans.
 - A crash reduction of 36 percent (Table 14-25 of the Highway Safety Manual) was assigned with removing the direct left with a right turn/U-turn combination for 12 angle crashes associated with the access management improvements.
 - A crash reduction factor of 64 percent (Table 14-20 of the Highway Safety Manual) was assigned with adding no U-turn/left turn signage for left turn crashes for 6 left turn crashes.
 - A crash reduction factor of 39 percent (Crash Modification Factor (CMF) ID: 3034 Install Raised Median) was assigned for 6 crashes that occurred with the area of the existing two-left turn lane from 14th Avenue South to the entrance to Causeway Village.
- Repurpose the travel lane on the westbound/eastbound approaches on Park Street to improve the alignment of the through lanes. A crash reduction factor was assigned to this improvement, but it is expected to have a positive safety impact on the corridor.



2.4 SEGMENT 2 – PARK STREET TO CENTRAL AVENUE

Due to the lower crash rate and additional cost with the recommendations (i.e., Access Management) within the limits of Segment 2 as identified in the Traffic Technical Memorandum, no safety improvements were proposed with a formal cost estimate or Benefit to Cost Ratio. However, the following multi-modal items are recommended for consideration:

- The addition of a dedicated mid-block crossing at the intersection of Bougainvillea Avenue to create pedestrian crossing spaced at a minimum of a 0.25 mile.
- Provide an alternative bike lane from Park Street connecting to the Pinellas Trial.

2.5 SAFETY IMPLEMENTATION STRATEGY:

Segment 3: As a standalone project, the improvements for Segment 3 will come with a high price tag due to the additional asphalt (mill and resurface) that would be required for the alignment work from Central Avenue to 66th Street. As a result, it is recommended that these improvements be implanted under a future resurfacing project. Currently, FPID 440254-1 is scheduled for design in Fiscal Year 2020. In order to capture additional funding, it is recommended to evaluate the use of Highway Safety Funds. An engineer’s estimate and safety benefit to cost ratio can be found in **Appendix E** and **Appendix H**. Furthermore, it has been identified that a project with City of Saint Petersburg on Central Avenue could look to add some of the improvements within the intersection’s limits of Central Avenue and Pasadena Avenue. As a result, a revised cost estimate and concept plan can be found in **Appendix Q** and **Appendix R**.

Segment 1: Given that the most recent resurfacing project was recently completed in 2018, it is recommended that the improvements called for in Segment 1 to be accomplished under a traffic operations task such as Design Build Push Button (FPID 254677-1). An engineer’s estimate and safety benefit to cost ratio can be found in **Appendix D** and **Appendix G**.

Segment 2: Considerations should be given in the upcoming FPID 440254-1 project for the implementation of a designated mid-block crosswalk at Bougainvillea Avenue and bike connectivity to the Pinellas Trial. No formal cost estimate was completed for these items.

Table 2-2: Segment Cost and Benefit/Cost Summary

Segment ID	Segment	Improvement Cost	Benefit to Cost Ratio
1	Shore Drive/Matthews Road to Park Street	\$985,085.51	4.77
2	Park Street to Central Avenue	N/A	
3	Central Avenue to 66th Street	1,452,159.02	5.64



SECTION 3.0 MOBILITY FOR TOMORROW

The Traffic Technical Memorandum dated July 22, 2019 evaluated two No-Build Alternatives and three Build Alternatives. The no-build alternatives included the existing 6-lane section and an additional No-Build Alternative that assumes the existing outside travel is to be converted to a Business Access Transit (BAT) lane under the current Central Avenue Bus Rapid Transit (BRT) project. The three build alternatives include:

- Build Alternative (6-Lane) – refer to **Appendix L** for Typical Sections and Concept Plans
- Build Alternative with BRT (4-Lane) – refer to **Appendix M** for Typical Sections and Concept Plans
- Build Alternative Road Diet (4-Lane) – refer to **Appendix N** for Typical Sections and Concept Plans

3.1 BUILD ALTERNATIVE (6-LANE)

The Build Alternative (6-Lane) maintains the existing roadway geometry of six travel lanes. Due to right-of-way constraints, the incorporation of dedicated bike lanes was not included within the roadway footprint. However, the alternative does propose two 10-ft inside lanes and a 11-ft outside lane for the accommodation of large vehicles for freight and/or transit (i.e., buses). Within Segment 1, the reduced lane widths allow for the existing curb line to be reset to the inside approximately 3-ft allowing for a 10-ft wide sidewalk. A similar approach is used for both Segments 2 and 3 except additional widening is required in the median in order to facilitate 10-ft wide sidewalks. One of the biggest benefits of the wider sidewalk is that it gives an opportunity to bring the existing driveways into compliance with American Disabilities Act (ADA) especially within Segment 1. The one drawback to this alternative is that within Segments 2 and 3, the implementation of a wide sidewalk will require substantial utility relocations for the existing overhead power lines.

3.2 BUILD ALTERNATIVE WITH BRT (4-LANE)

The Build Alternative with BRT (4-Lane) is like the previous Build Alternative (6-Lane) except the outside lane is converted to a BAT lane to accommodate the Central Avenue BRT. This alternative includes lane widths of two 10-ft inside lanes and an 11-ft outside BAT lane to accommodate the buses from the BRT. Dedicated bike lanes were not included due to right-of-way constraints, but the proposed BAT lanes allow for a shared bus/bike lane. The reduction of lane width along with some median widening in Segments 2 and 3 allows for the incorporation of a 10-ft wide sidewalk. As discussed in the previous section, the wide 10-ft sidewalk will provide a substantial benefit by bringing the existing driveways into compliance to ADA requirements. This is especially important in Segment 1. Incorporating the wide 10-ft sidewalk in Segments 2 and 3 will be a challenge due to the existing overhead power lines that will require relocation.

3.3 BUILD ALTERNATIVE ROAD DIET (4-LANE)

Based on evaluating the No-Build (6-Lane) Alternative, it was determined that the only intersection performing under capacity in the 2020 Design Year is the intersection of Gulfport Boulevard/Sunset Drive. One of the needs at this intersection is the addition of a dedicated northbound right turn lane and additional dedicated

southbound left turn lanes. As a result, the Build Alternative Road Diet (4-Lane) modifies the existing geometry from a six-lane section to a four-lane section. By eliminating a travel lane in each direction, it allows for the inclusion of a dedicated northbound right turn lane and the addition of dual southbound left turn lanes at the intersection of Gulfport Boulevard/Sunset Drive without increasing the footprint of the existing roadway. In addition, it allows for the inclusion of dedicated bike lanes while maintain the existing footprint of the roadway.

3.4 MOBILITY IMPLEMENTATION STRATEGY:

Table 4-1 provides a cost summary for each build alternative assuming only the short-term improvements at Gulfport Boulevard/Sunset Drive in order to avoid any right-of-way impacts. Of the three alternatives, the Build Alternative Road Diet (4-Lanes) is the most cost effective. In addition, this alternative provides immediate traffic operations benefits to the intersection of Gulfport Boulevard/Sunset Drive. Furthermore, it is the only alternative that provides dedicated bike lanes. However, this alternative is considered incompatible with the future Central Avenue BRT improvements and should not be considered as an alternative moving forward unless there is a change in the proposed BRT route.

Table 3-1: Alternative Cost Summary

Alternative	Design Cost	Construction Cost	Utility Relocation Cost	Total Cost
Build Alternative (6-Lane)	\$750,000	\$5,557,353.27	\$700,000	\$7,007,353.27
Build Alternative with BRT (4-Lane)	\$750,000	\$6,835,144.34	\$700,000	\$8,285,144.34
Build Alternative Road Diet (4-Lane)	\$750,000	\$4,169,659.78	\$0	\$4,919,659.78

Since the Build Alternative Road Diet (4-Lane) is non compatible with the future Central Avenue BRT project, it is recommended that the Build Alternative with BRT (4-Lane) to be considered as the preferred alternative. From an implementation standpoint, this alternative comes at a high cost that also includes utility impacts within Segments 2 and 3. Since the biggest improvements associated with this alternative occur in Segment 1 (ADA compliant Driveways and Access Management) assuming that the safety problems in Segment 3 are addressed in the future resurfacing project, a revised cost estimate was completed focusing on Segment 1. This revised estimate also removed the pattern pavement associated with the red colored pavement for the transit lanes.

Table 3-2: Revised Cost Summary for Build Alternative with BRT (4-Lane)

Alternative	Design Cost	Construction Cost	Utility Relocation Cost	Total Cost
Build Alternative with BRT (4-Lane)	\$400,000	\$2,504,376.37	\$0	\$2,904,376.37

Table 3-3: Alternatives Matrix

Alternative	Design Year	Arterial Performance				Intersections Operating at LOS > D																Multi-Modal			Comments							
		Arterial Level of Service (NB Middy - Northbound (NB) & Southbound (SB))		Arterial Level of Service PM - Northbound (NB) & Southbound (SB)		Shore Drive/Mathews Rd		Huffman Way		Majestic Way		Gulfport Blvd/Sunset Dr		Park Street		1st Avenue South		Central Avenue		66th Street		Designated Bike Lane	Wide Sidewalk (10-ft)	Provisions for Express Transit								
		NB	SB	NB	SB	MID	PM	MID	PM	MID	PM	MID	PM	MID	PM	MID	PM	MID	PM	MID	PM											
No Build	6-Lane	2020	D	D	D	E	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X					
		2030	E	E	D	E	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓					✓	✓		
		2040	F	E	E	E	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓					✓	✓		
	6-Lane BRT	2020	E	D	D	E	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	✓		Assumes both existing outside lanes of the existing 6-lane roadway will be converted to a Business Access Transit (BAT) Lane by PSTA.			
		2030	E	E	D	E	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓						✓	✓	
		2040	F	E	E	E	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓						✓	✓	
Build	6-Lane	2020	D	D	D	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	X	See next Page for a list of intersection improvements associated with this alternative.				
		2030	D	D	D	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓	
		2040	D	D	D	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓	
	6-Lane BRT	2020	D	D	D	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓		Outside lanes are proposed as a Business Access Transit (BAT) Lane. See next Page for a list of intersection improvements associated with this alternative.			
		2030	D	D	D	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓	
		2040	D	D	D	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓	
	4-Lane Road Diet	2020	D	E	D	E	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X			Alternative is not compatible with the proposed BAT Lanes proposed by the BRT. Alternative does not include additional intersection improvements as provided for the 6-Lane and 6-Lane BRT Build Alternatives.		
		2030	E	D	D	E	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓							✓	✓
		2040	E	E	D	F	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓							✓	✓

BRT - Bus Rapid Transit
PSTA - Pinellas Suncoast Transit Authority

Section 4.0 IDEAS FOR THE FUTURE

In order to help guide future studies and design on the corridor, our team looked at additional long-term improvements at the intersection of Gulfport Drive/Sunset Drive and the improvements the existing bridges at Bridge No. 1500054L and No. 1050137R.

4.1 THE INTERSECTION OF GULFPORT DRIVE/SUNSET DRIVE

The intersection of Gulfport Boulevard/Sunset Drive will require substantial right-of-way in order for the intersection to function at an acceptable Level of Service in the 2040 Design Year for all Build Alternatives. As a result, our team evaluated a Displaced Left Turn in conjunction with a Median U-Turn Intersection. Traffic Operations were evaluated for design year 2040 volumes only for this alternative. Results for intersection operation analysis and comparison with other alternatives (without BRT) can be found in **Table 4-1** for midday peak hour and PM peak hour. A concept plan for the intersection that includes short-term, mid-term, long-term, and Displace Left Turn/Median U-turn can be found an **Appendix O**.

Table 4-1: Alternatives of Gulfport Blvd / Sunset Dr – Intersection Operational Analysis (2040)

Alternative	Approach	Gulfport Blvd / Sunset Dr				Improvement(s)
		Midday		PM		
		Delay	LOS	Delay	LOS	
No Build (6-Lane) (from Table 7-1)	EB	63	E	64	E	Existing geometry
	WB	87	F	72	E	
	NB	290	F	144	F	
	SB	34	C	41	D	
	Overall	148	F	87	F	
Build (6-Lane) (from Table 7-5)	EB	63	E	64	E	1. Add a NB through lane and convert shared right-turn/thru lane to dedicated right turn lane 2. Convert SB single left-turn lane to triple left-turn lanes with protected phase 3. Convert NB single left-turn lane to dual left-turn lanes
	WB	87	F	72	E	
	NB	52	D	49	D	
	SB	40	D	45	D	
	Overall	55	D	52	D	
Displaced Left Turn/Median U-Turn	EB	16	B	22	C	1. Relocate SB left-turns to cross NB lanes 400 ft north with signal 2. Eliminate SB left-turn phase for the main intersection
	WB	15	B	17	B	
	NB	28	C	18	B	
	SB	19	B	18	B	
	Overall	21	C	19	B	



4.2 BRIDGE REALIGNMENT (BRIDGE NO. 150054L & NO. 150137R)

The existing bridge alignments for Bridge No. 150054L and Bridge No. 150137R has an undesirable alignment that creates an excessive wide median at the signalized intersection at Shore Drive/Matthews Road. Not only does this create an issue with excessive long crossing distances for pedestrian crossing Pasadena, but it also creates an undesirable signal phasing operation that requires a special signal operation plan with a two-stage vehicular crossing. As shown in **Appendix P**, the conceptual bridge realignment removes the excessive wide median at the intersection of Shore Drive/Matthews Road this improving the operations of both vehicles and pedestrians at the intersection. In addition, it provides the following additional benefits:

- The addition of a pedestrian underpass connecting Bay Island Condo's to the Fred Held Pasadena Habitat Park.
- The addition of a pedestrian underpass connecting the Palms of Pasadena Medical complex to the Barbara Gilberg Habitat Park.

4.3 STRATEGIES FOR TOMORROW

It is recommended that the Displaced Left Turn/Median U-Turn Gulfport Boulevard/Sunset Drive be considered for a future Project Development and Environmental Study not only from a Level of Service perspective but also from an environmental and right-of-way impact perspective. **Table 4-2** provides a preliminary evaluation matrix demonstrating that reduced impacts the Displace Left Turn/Median U-turn intersection will have.

For the bridge realignments concepts for Bridge No. 150054L and Bridge No. 150137R, it recommended that the concepts should be used as a guideline on any future bridge replacement once these bridges end their service life.

Table 4-2: Evaluation Matrix for Intersection Improvements at Gulfport Boulevard/Sunset Drive

<i>Evaluation Criteria</i>	<i>Mid-Term Alternative</i>	<i>Long-Term Alternative</i>	<i>Innovative Alternative</i>
<i>Business Impacts</i>			
<i>Number of business impacts</i>	10	13	4
<i>Residential Impacts</i>			
<i>Number of residential impacts</i>	0	0	0
<i>Environmental Effects</i>			
<i>Archaeological/Historical sites (potential)</i>	None	None	None
<i>Public parks, recreation areas, or wildlife refuges</i>	None	None	None
<i>Noise (potential)</i>	TBD	TBD	TBD
<i>Wetland (acres)</i>	None	None	None
<i>Floodplains (acre feet)</i>	See Note 2	See Note 2	See Note 2
<i>Threatened and endangered species (potential)</i>	None	None	None
<i>Contamination sites (potential)</i>	1	1	2
<i>Traffic Operations</i>			
<i>2040 Level of Service (AM) PM</i>			
<i>Right-of-Way Needs</i>			
<i>Right-of-Way to be acquired for roadway improvements (acres)</i>	0.5	1.0	0.3
<i>Right-of-Way to be acquired for stormwater facilities (acres)</i>	See Note 1	See Note 1	See Note 1
<i>Right-of-Way to be acquired for floodplain compensation (acres)</i>	See Note 2	See Note 2	See Note 2
<i>Estimated Total Project Costs (2019 Cost)</i>			
<i>Design</i>	\$600,000	\$700,000	\$900,000
<i>Mitigation Cost</i>	\$0	\$0	\$0
<i>Right-of-Way cost for roadway</i>	TBD	TBD	TBD
<i>Right-of-Way cost for stormwater and floodplain sites</i>	\$0	\$0	\$0
<i>Total Right-of-way Cost</i>	TBD	TBD	TBD
<i>Total Construction Cost</i>	\$1,474,049	\$1,889,445	\$1,697,609
<i>Construction Engineering and Inspection²</i>	\$400,000	\$500,000	\$500,000
<i>Preliminary Estimate of Total Project Cost (2019 Cost)</i>	TBD	TBD	TBD

1. Turn Lane Improvements are anticipated to be exempt from Water Quality treatment is not required.
2. Project is located in a floodplain. However, floodplain is in a coastal zone eliminating attenuation requirements



APPENDIX A – Comment Board PAG Meeting #1

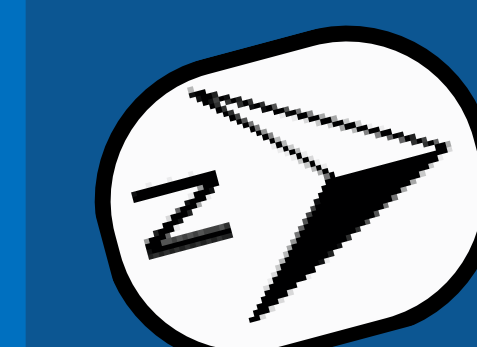


SR 693 (Pasadena Avenue) Corridor Study

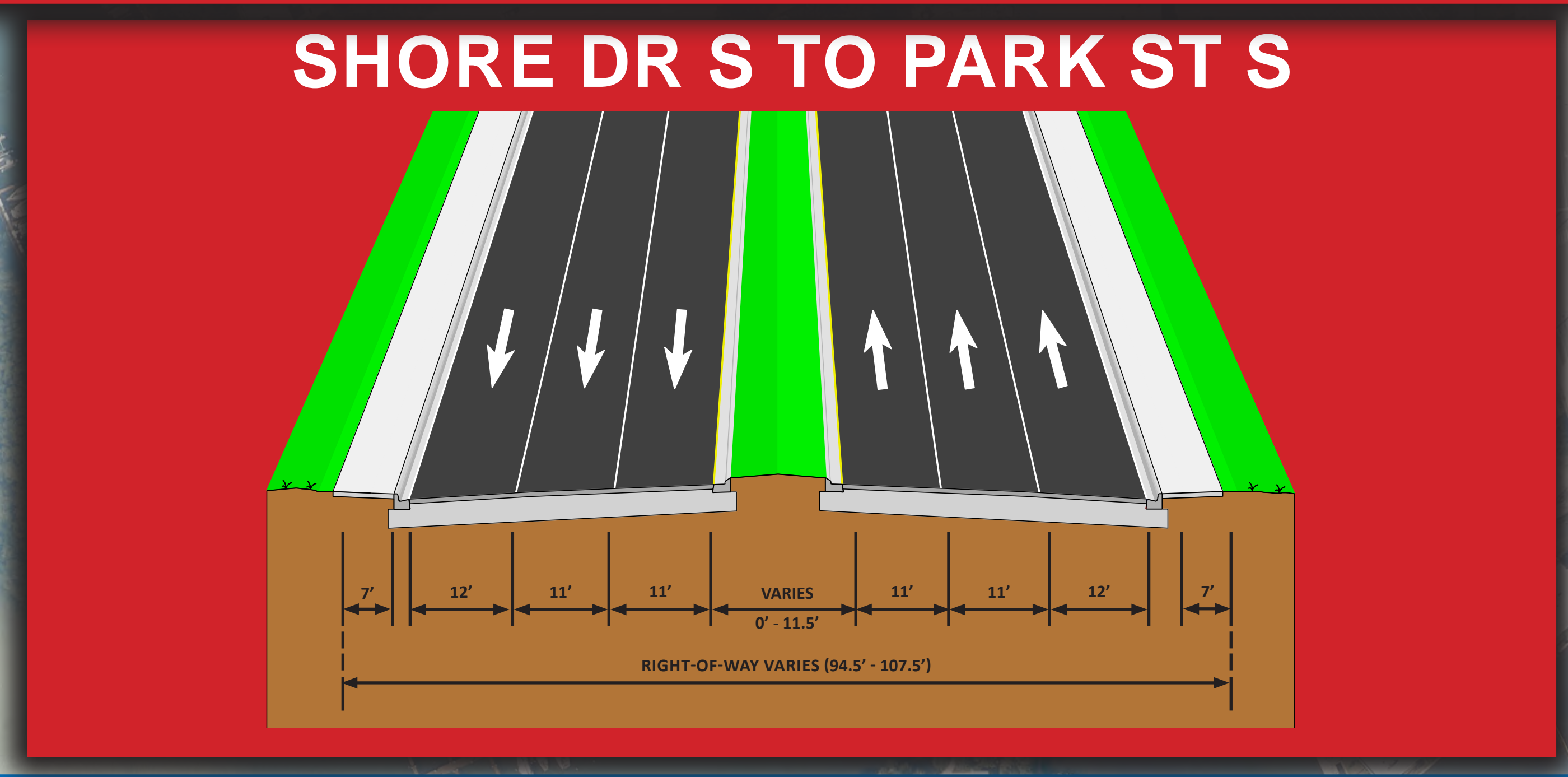
From Shore Drive South to 66th Street

Work Program Item (WPI) Number: 435910-1 | Pinellas County

CITY OF SOUTH PASADENA | CITY OF ST. PETERSBURG



SEGMENT 1 SHORE DR S TO PARK ST S



SEGMENT 2A PARK ST S TO CENTRAL AVE



SEGMENT 2B CENTRAL AVE TO 66TH ST N





APPENDIX B – Comment Board from Public Visioning Workshop



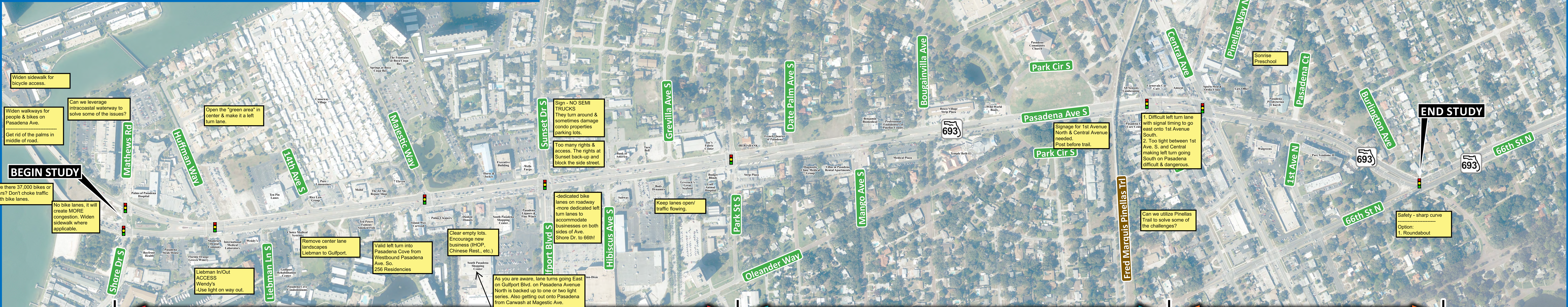
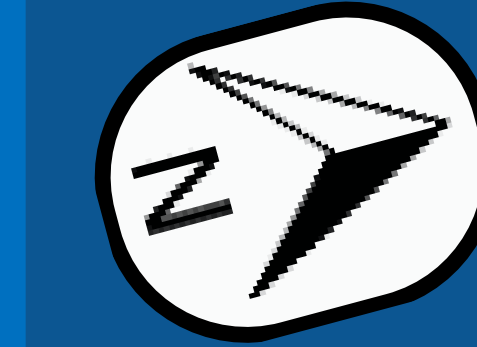
SR 693 (Pasadena Avenue) Corridor Study

From Shore Drive South to 66th Street

Work Program Item (WPI) Number: 435910-1 | Pinellas County

CITY OF SOUTH PASADENA

CITY OF ST. PETERSBURG



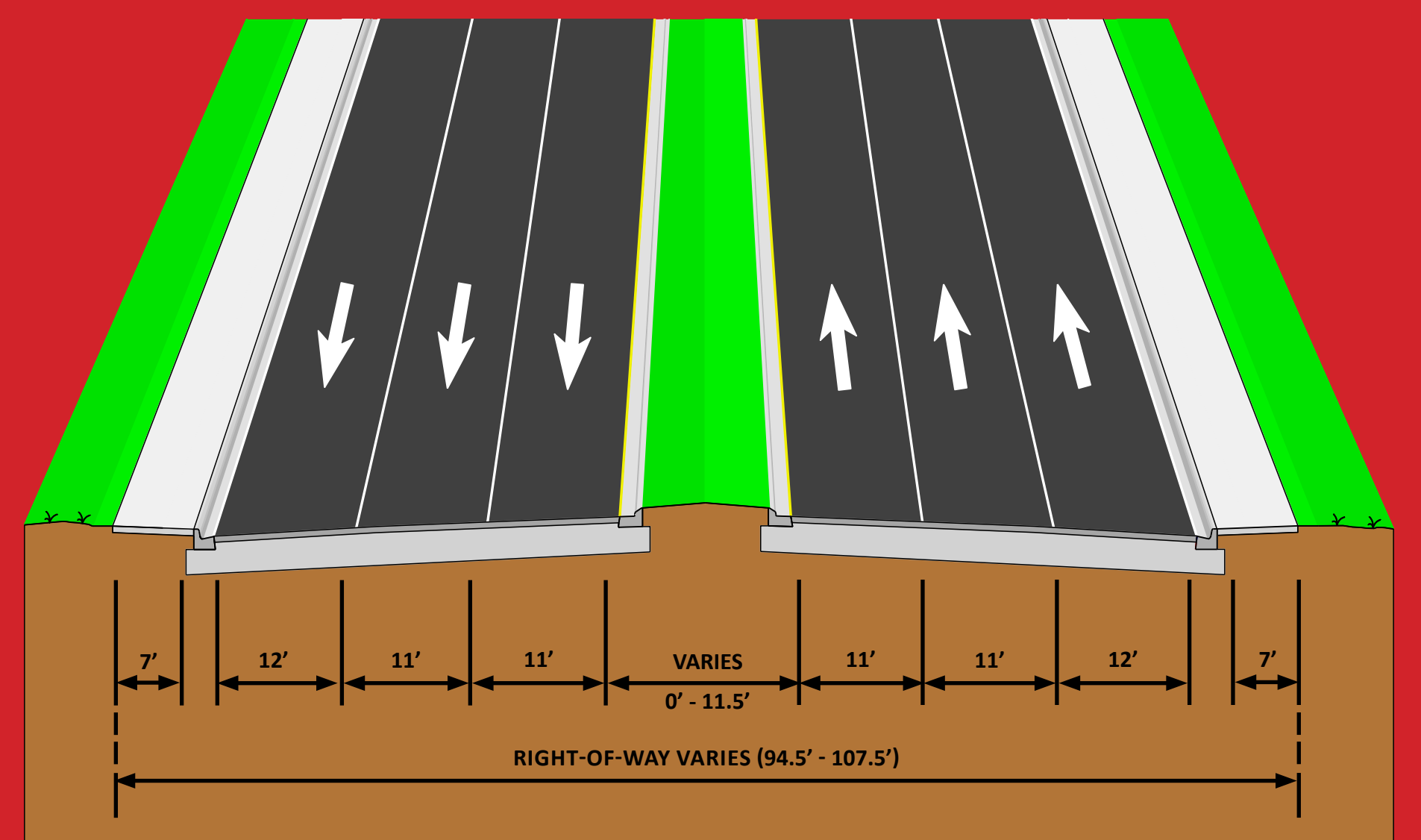
- Widen sidewalk for bicycle access.
- Can we leverage intracoastal waterway to solve some of the issues?
- Widen walkways for people & bikes on Pasadena Ave.
- Get rid of the palms in middle of road.
- Are there 37,000 bikes or cars? Don't choke traffic with bike lanes.
- No bike lanes, it will create MORE congestion. Widen sidewalk where applicable.

BEGIN STUDY

END STUDY

SEGMENT 1

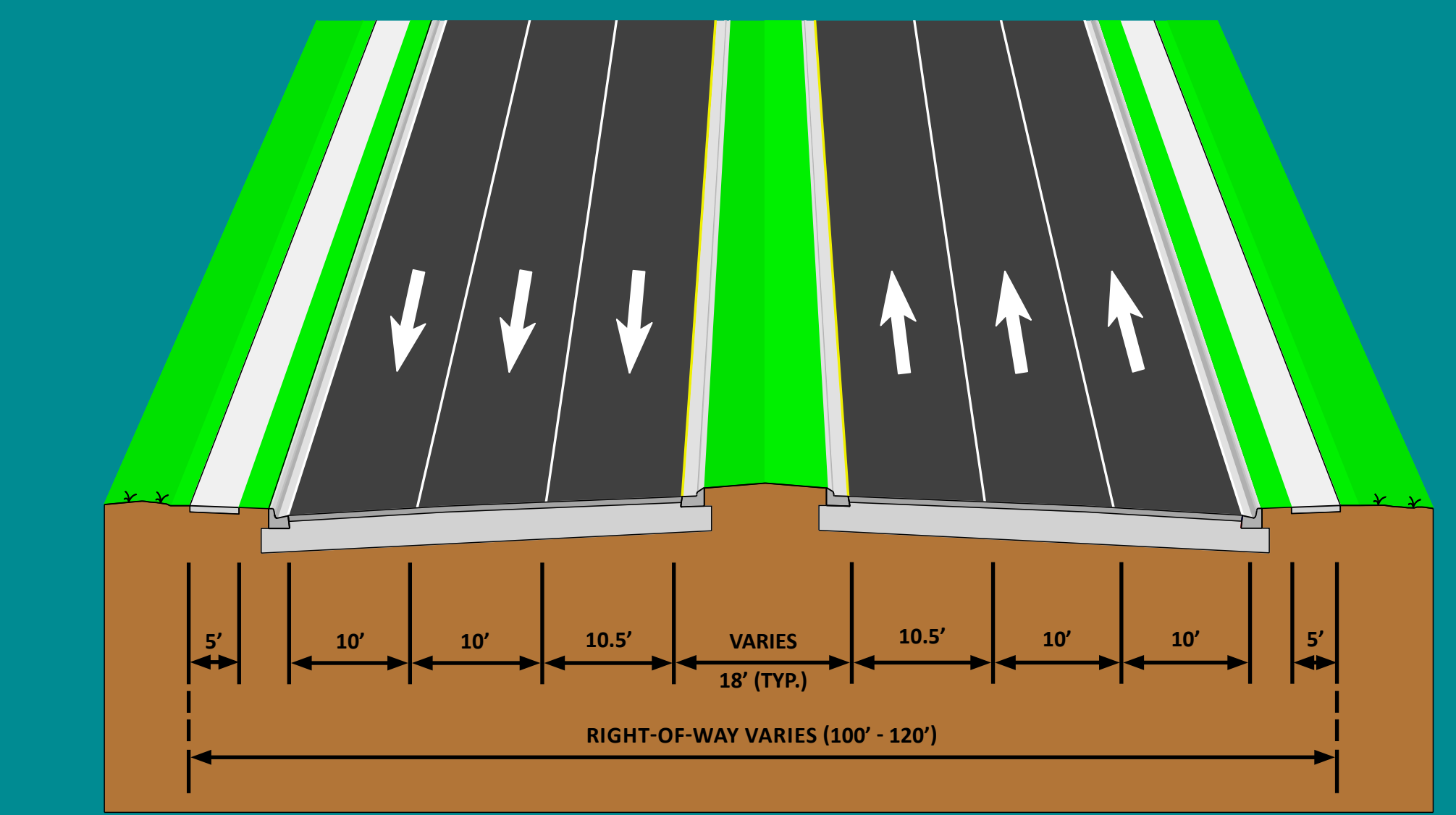
SHORE DR S TO PARK ST S



EXISTING CONDITIONS

SEGMENT 2A

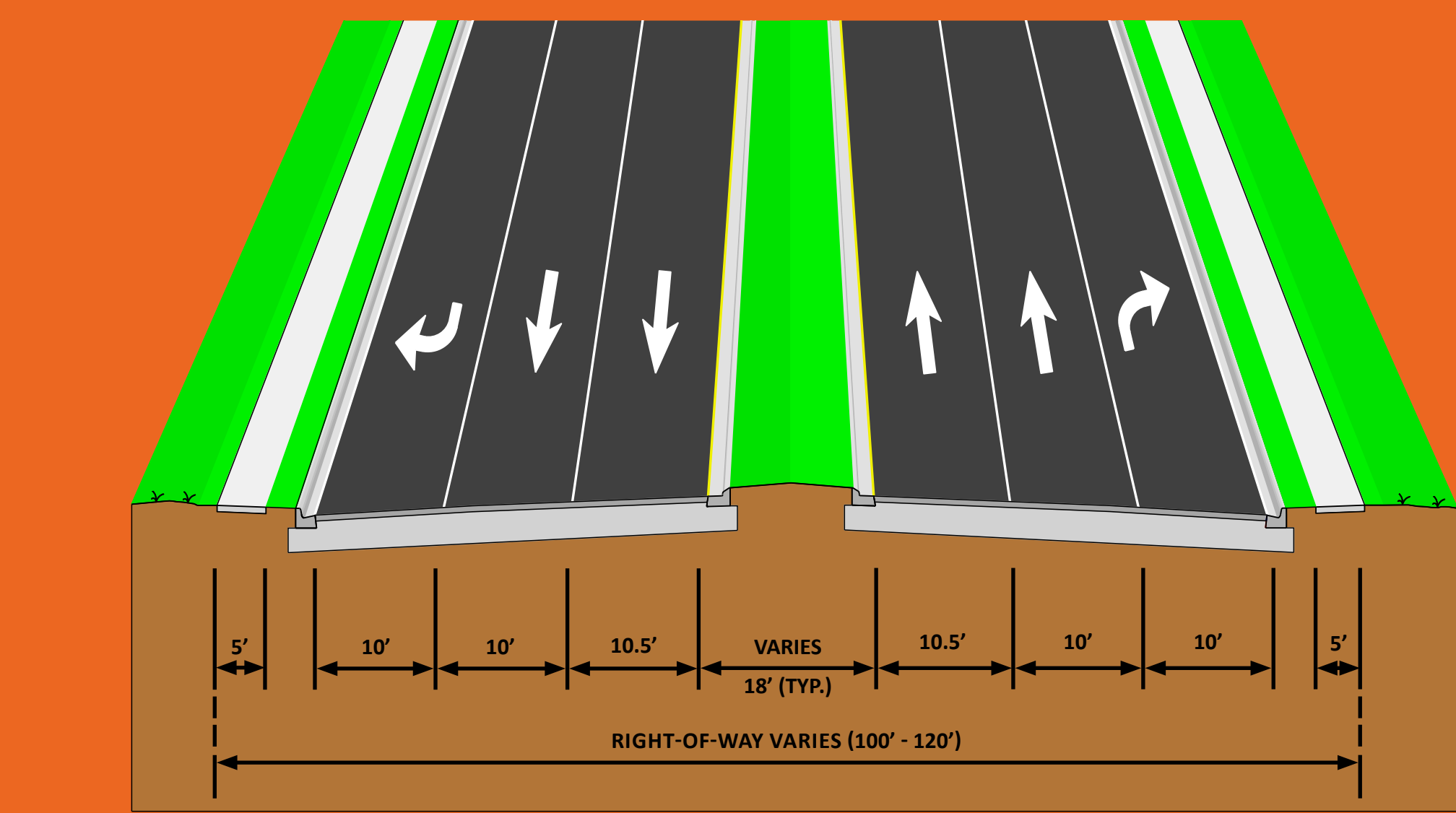
PARK ST S TO CENTRAL AVE



EXISTING CONDITIONS

SEGMENT 2B

CENTRAL AVE TO 66TH ST N



EXISTING CONDITIONS

Sign - NO SEMI TRUCKS
They turn around & sometimes damage condo properties parking lots.

Too many rights & access. The rights at Sunset back-up and block the side street.

-dedicated bike lanes on roadway
-more dedicated left turn lanes to accommodate businesses on both sides of Ave. Shore Dr. to 66th!

Keep lanes open/ traffic flowing.

Signage for 1st Avenue North & Central Avenue needed.
Post before trail.

1. Difficult left turn lane with signal timing to go east onto 1st Avenue South.
2. Too tight between 1st Ave. S. and Central making left turn going South on Pasadena difficult & dangerous.

Can we utilize Pinellas Trail to solve some of the challenges?

Safety - sharp curve
Option:
1. Roundabout

Open the "green area" in center & make it a left turn lane.

Remove center lane landscapes Liebman to Gulfport.

Valid left turn into Pasadena Cove from Westbound Pasadena Ave. So. 256 Residences

Clear empty lots. Encourage new business (HOP, Chinese Rest., etc.)

As you are aware, lane turns going East on Gulfport Blvd. on Pasadena Avenue North is backed up to one or two light series. Also getting out onto Pasadena from Carwash at Magestic Ave.

Palms Cleaners



APPENDIX C – Letter from City of South Pasadena



City of South Pasadena

7047 SUNSET DRIVE SOUTH
SOUTH PASADENA, FLORIDA 33707
PH: (727) 347-4171 FAX: (727) 345-0518
WWW.MYSOUTHPASADENA.COM

May 1, 2018

Mr. Bob Esposito
Government Affairs Liaison
Florida Department of Transportation
11201 McKinley Drive
Tampa, FL 33612-6456

Dear Mr. Esposito,

For many years, the growth of Tampa Bay has created both exciting opportunities and unique challenges. While population increases and business development have provided economic stimulation, they have also tested the area's resources and infrastructure. One specific issue garnering significant attention has been transportation. While the City of South Pasadena supports the ongoing regional effort to invest in multimodal transportation systems, the Commission would like to express its concern over the potential impediment of traffic on Pasadena Avenue. It is the Commission's understanding that there are projects being considered that include transit mechanisms such as Bus Rapid Transit (BRT), Business Access & Transit Lanes (BAT lanes), the removal of lanes, or the narrowing of lanes that could negatively affect the flow of traffic within the City. The Commission is against the implementation of any changes that would create congestion or further burden local roadways.

It is the hope of the Commission that transit improvements can be designed and implemented without any hindrance to local traffic. The Commission respectfully requests that proposed plans affecting the community be thoroughly vetted and presented to the City and its residents prior to being finalized. The City appreciates your time and attention to this matter.

Mr. Bob Esposito

Page 2

May 1, 2018

If you have any questions or comments, please do not hesitate to contact the Commission at 727-347-4171 or via email at cityhall@mysouthpasadena.com.

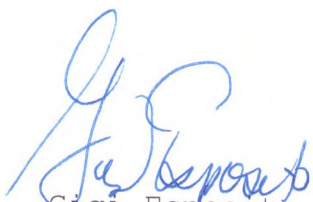
Sincerely,



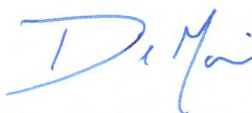
Max V. Elson
Mayor



Arthur Penny
Vice Mayor



Gigi Esposito
Commissioner



David Magenheimer
Commissioner



Gail Neidinger
Commissioner



APPENDIX D – Short Term Cost Estimate (Segment 1)

ENGINEER'S ESTIMATE
FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 7

FINANCIAL PROJECT ID # :	435910-1-22-01
PROJECT DESCRIPTION:	SR 693/Pasadena Ave. Corridor Study from Shore Dr. South to 66th St., Pinellas County - DBPB IV Unit Cost (Improvements from Shore Drive to Gulfport)
PAY ITEM SPEC YEAR:	January 2019
SUBMITTAL TYPE:	PD&E Estimate
COUNTY:	Pinellas
DATE:	January 29, 2019
ENGINEERING CONSULTANT FIRM:	ICON CONSULTANT GROUP INC.
CONTACT NAME:	DANIEL CARNLEY P.E.
PHONE NUMBER:	(813) 962-8689
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	1 of 1

COMPONENT GROUPS

100 - STRUCTURES	<i>NOT USED</i>	
200 - ROADWAY		\$536,284.18
300 - SIGNING & PAVEMENT MARKINGS		\$88,964.30
400 - LIGHTING	<i>NOT USED</i>	
500 - SIGNALIZATION		\$42,063.20
550 - ITS	<i>NOT USED</i>	
600 - LANDSCAPE / PERIPHERALS	<i>NOT USED</i>	
700 - UTILITIES	<i>NOT USED</i>	
800 - ARCHITECTURAL	<i>NOT USED</i>	
900 - MASS TRANSIT	<i>NOT USED</i>	
1000 - INVALID & OTHER ITEMS	<i>NOT USED</i>	
COMPONENT SUB-TOTAL		\$667,311.69
(102-1) MOT (Maintenance of Traffic)	10%	\$66,731.17
SUB-TOTAL		\$734,042.86
(101-1) MOB (Mobilization)	10%	\$73,404.29
SUB-TOTAL		\$807,447.14
Design	20%	\$161,489.43
SUB-TOTAL		\$968,936.57
Constructability Review	2%	\$16,148.94
PROJECT GRAND TOTAL		\$985,085.51

NOTES:

ENGINEER'S ESTIMATE

FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 7

FINANCIAL PROJECT ID:	435910-1-22-01
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	

200-Roadway

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
0101 1	MOBILIZATION		10%	See Summary Sheet	
0102 1	MAINTENANCE OF TRAFFIC		10%	See Summary Sheet	
0999 25		LS	1	\$16,148.94	
0102 3	COMMERCIAL MATERIAL FOR TEMPORARY DRIVEWAY MAINTENANCE	CY	50.00	\$252.00	\$12,600.00
0102 14	TRAFFIC CONTROL OFFICER	HR	40	\$57.35	\$2,294.00
0102 60	WORK ZONE SIGN	ED	19065	\$2.00	\$38,130.00
0102 74 1	CHANNELIZING DEVICE- TYPES I, II, DI, VP, DRUM, OR LCD	ED	15500	\$0.16	\$2,480.00
0102 74 2	CHANNELIZING DEVICE, TYPE III, 6'	ED	2480	\$0.29	\$719.20
0102 74 7	CHANNELIZING DEVICE- PEDESTRIAN LCD (LONGITUDINAL CHANNELI	LF	100	\$15.00	\$1,500.00
0102 99	PORTABLE CHANGEABLE MESSAGE SIGN, TEMPORARY	ED	620	\$13.73	\$8,512.60
0102104	TEMPORARY SIGNALIZATION AND MAINTENANCE, INTERSECTION	ED	180	\$103.02	\$18,543.60
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTIO	ED	180	\$71.19	\$12,814.20
0110 2 1	CLEARING & GRUBBING (PUSH BUTTON CONTRACT)	AC	1	\$11,471.45	\$11,471.45
0110 4 10	REMOVAL OF EXISTING CONCRETE	SY	450	\$35.67	\$16,051.50
0120 1	REGULAR EXCAVATION	CY	40	\$27.62	\$1,104.80
0120 6	EMBANKMENT	CY	40	\$57.21	\$2,288.40
0162 1 11	PREPARED SOIL LAYER, FINISH SOIL LAYER, 6"	SY	600		
0285715	OPTIONAL BASE, BASE GROUP 15	SY	505	\$140.00	\$70,707.00
0327 70 1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	SY	4253	\$5.10	\$21,687.75
0334 1 13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	TN	112	\$180.00	\$20,223.00
0337 7 82	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-9.5, PG 76-22	TN	403	\$195.00	\$78,624.00
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	91	\$37.00	\$3,379.95
0520 2 4	CONCRETE CURB, TYPE D	LF	1361	\$25.00	\$34,020.00
0520 70	CONCRETE TRAFFIC SEPARATOR, SPECIAL- VARIABLE WIDTH	SY	824	\$150.00	\$123,637.50
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	61	\$90.00	\$5,481.00
0523 1 3	PATTERNED PAVEMENT, VEHICULAR AREAS- GREEN BIKE LANE	SY	108	\$300.00	\$32,445.00
0527 2	DETECTABLE WARNINGS	SF	63	\$40.00	\$2,520.00
0570 1 2	PERFORMANCE TURF, SOD	SY	630	\$9.60	\$6,048.00
0710 11101	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6"	GM	0.284	\$1,487.20	\$422.36
0710 11123	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID FOR CRC	LF	324	\$1.14	\$369.36
0710 11125	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID FOR STC	LF	447	\$2.29	\$1,023.63
0710 11141	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, 2-4 DOTTED GU	GM	0.120	\$2,860.00	\$343.20
0710 11160	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE OR S	EA	20	\$145.60	\$2,912.00
0710 11170	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS	EA	22	\$54.60	\$1,201.20
0710 11201	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6"	GM	1.030	\$2,028.00	\$2,088.84
0710 11241	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, 2-4 DOTTED C	GM	0.800	\$800.80	\$640.64
200-Roadway				COMPONENT TOTAL	
				\$536,284.18	



APPENDIX E – Short Term Cost Estimate (Segment 3)

ENGINEER'S ESTIMATE
FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 7

FINANCIAL PROJECT ID # :	435910-1-22-01
PROJECT DESCRIPTION:	SR 693/Pasadena Ave. Corridor Study from Shore Dr. South to 66th St., Pinellas County
PAY ITEM SPEC YEAR:	January 2019
SUBMITTAL TYPE:	PD&E Estimate
COUNTY:	Pinellas
DATE:	January 29, 2019
ENGINEERING CONSULTANT FIRM:	ICON CONSULTANT GROUP INC.
CONTACT NAME:	DANIEL CARNLEY P.E.
PHONE NUMBER:	(813) 962-8689
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	1 of 1

COMPONENT GROUPS

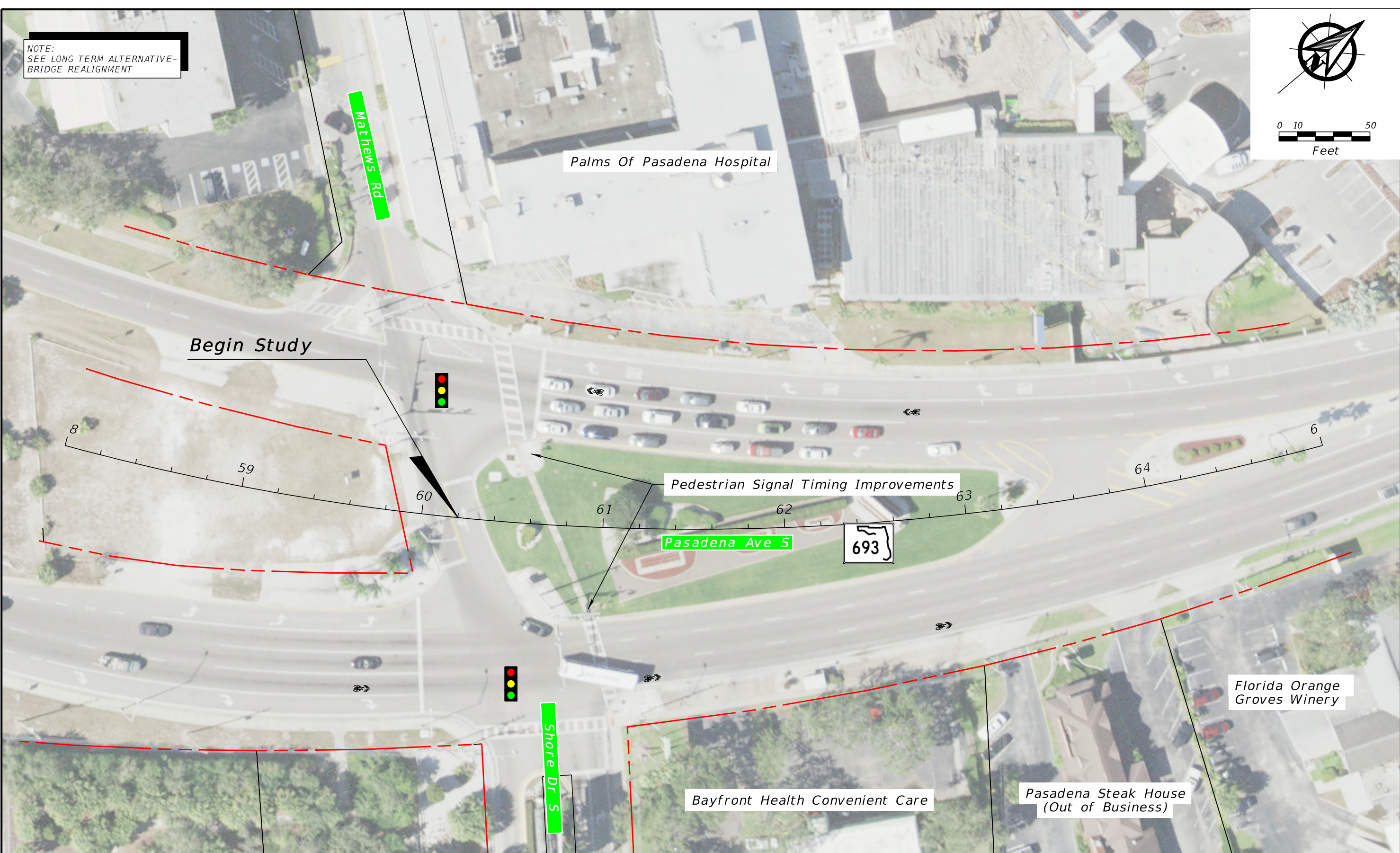
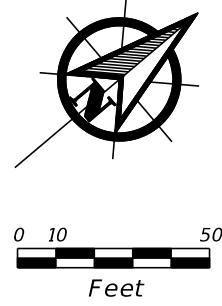
100 - STRUCTURES	<i>NOT USED</i>	
200 - ROADWAY		\$671,852.64
300 - SIGNING & PAVEMENT MARKINGS		\$101,248.44
400 - LIGHTING	<i>NOT USED</i>	
500 - SIGNALIZATION		\$234,559.01
550 - ITS	<i>NOT USED</i>	
600 - LANDSCAPE / PERIPHERALS	<i>NOT USED</i>	
700 - UTILITIES	<i>NOT USED</i>	
800 - ARCHITECTURAL	<i>NOT USED</i>	
900 - MASS TRANSIT	<i>NOT USED</i>	
1000 - INVALID & OTHER ITEMS	<i>NOT USED</i>	
COMPONENT SUB-TOTAL		\$1,007,660.09
(102-1) MOT (Maintenance of Traffic)	10%	\$100,766.01
SUB-TOTAL		\$1,108,426.10
(101-1) MOB (Mobilization)	10%	\$110,842.61
SUB-TOTAL		\$1,219,268.71
PU (Project Unknowns)	15%	\$182,890.31
SUB-TOTAL		\$1,402,159.02
(999-25) Initial Contingency (Do Not Bid)		\$50,000.00
PROJECT GRAND TOTAL		\$1,452,159.02

NOTES:



APPENDIX F – Short Term Concept Plans (Segment 1 & 3)

NOTE:
SEE LONG TERM ALTERNATIVE-
BRIDGE REALIGNMENT



Short Term Safety Improvements Alternative

	Baseline of Construction	Pavement Widening
	Existing Right-of-Way	Milling & Overlay
	Proposed Right-of-Way	Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

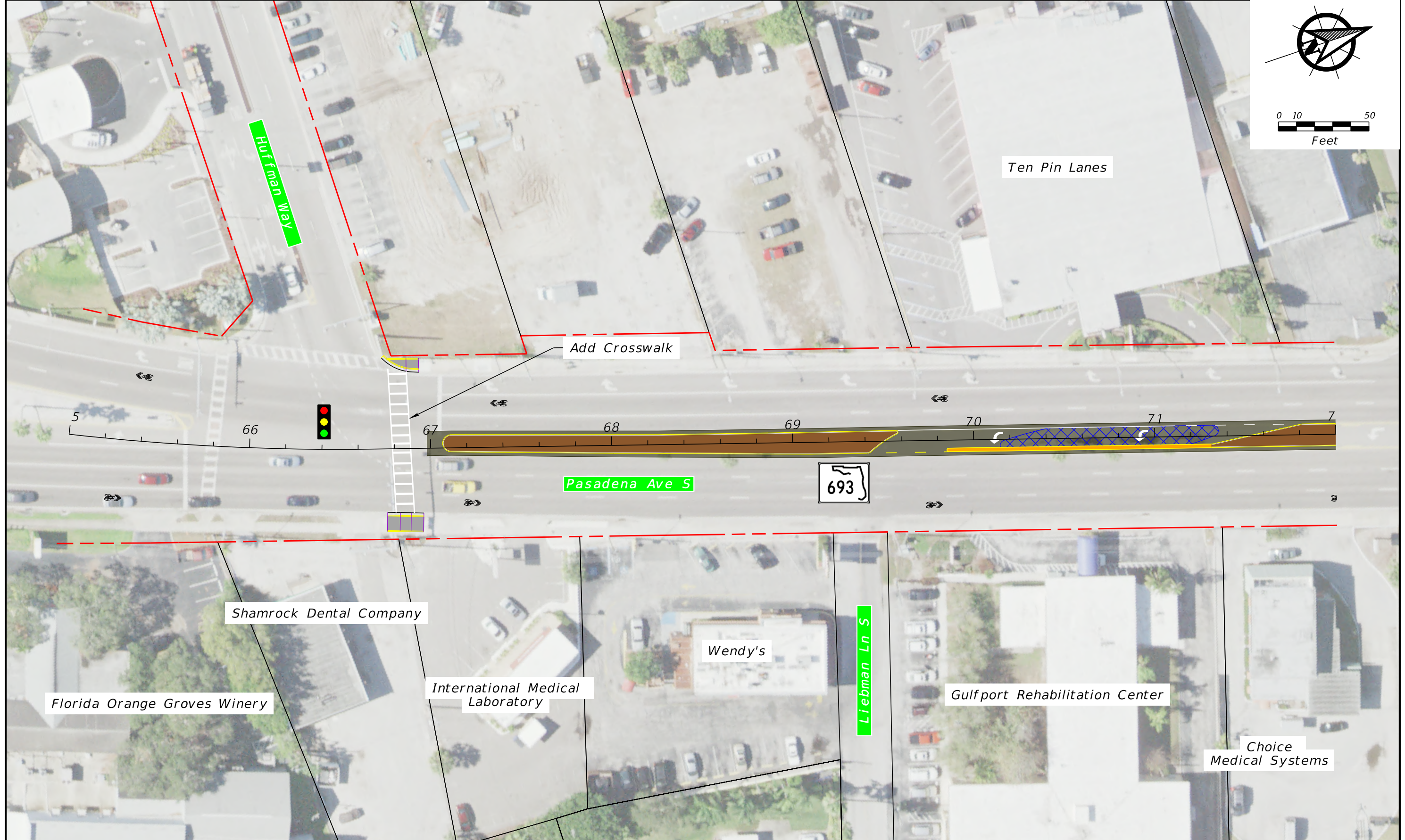
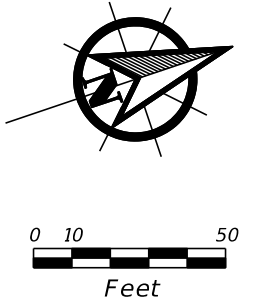
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SHEET NO.

1



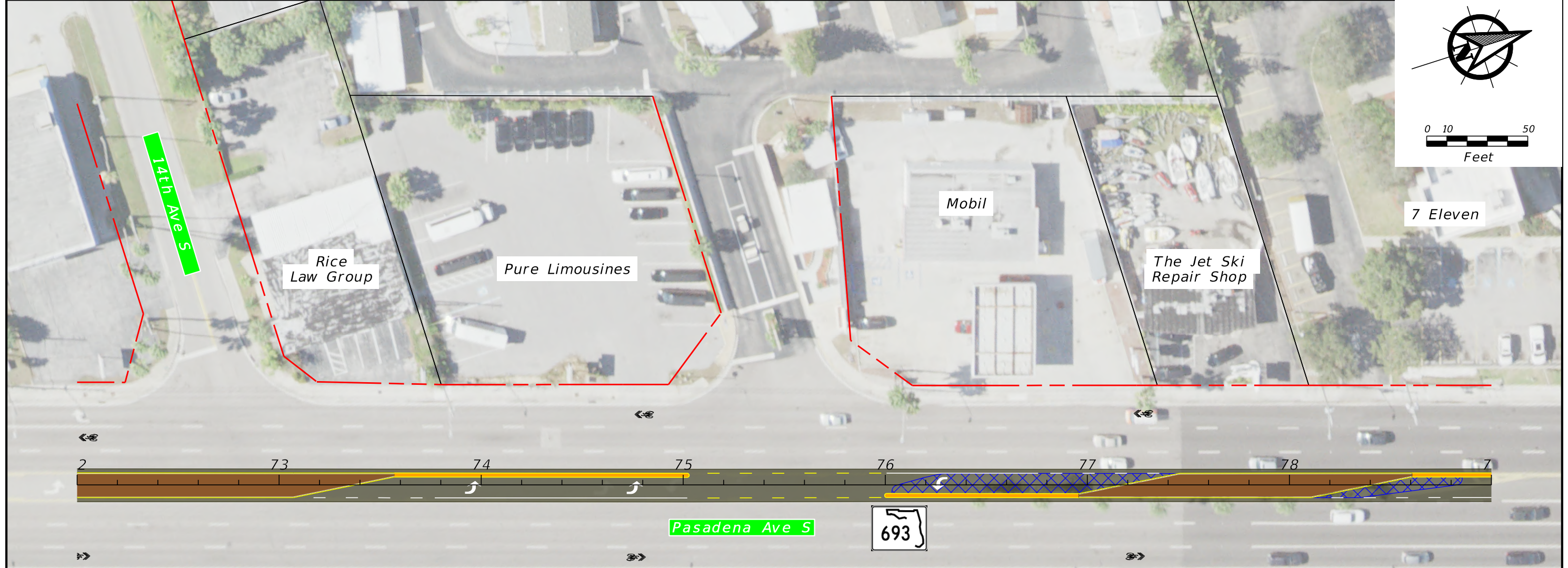
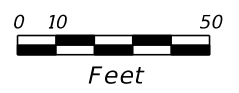
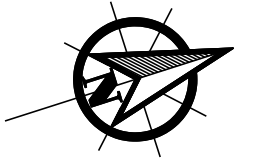
SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction	Pavement Widening	Sod/Landscaping
	Existing Right-of-Way	Milling & Overlay	Traffic Signal
	Proposed Right-of-Way	Sidewalk	Sharrow Installed Under FPID: 434806-1-52-01

SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SR 693 (Pasadena Avenue) Corridor Study


Short Term Safety Improvements Alternative

- 100
- Baseline of Construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Pavement Widening
- Milling & Overlay
- Sidewalk

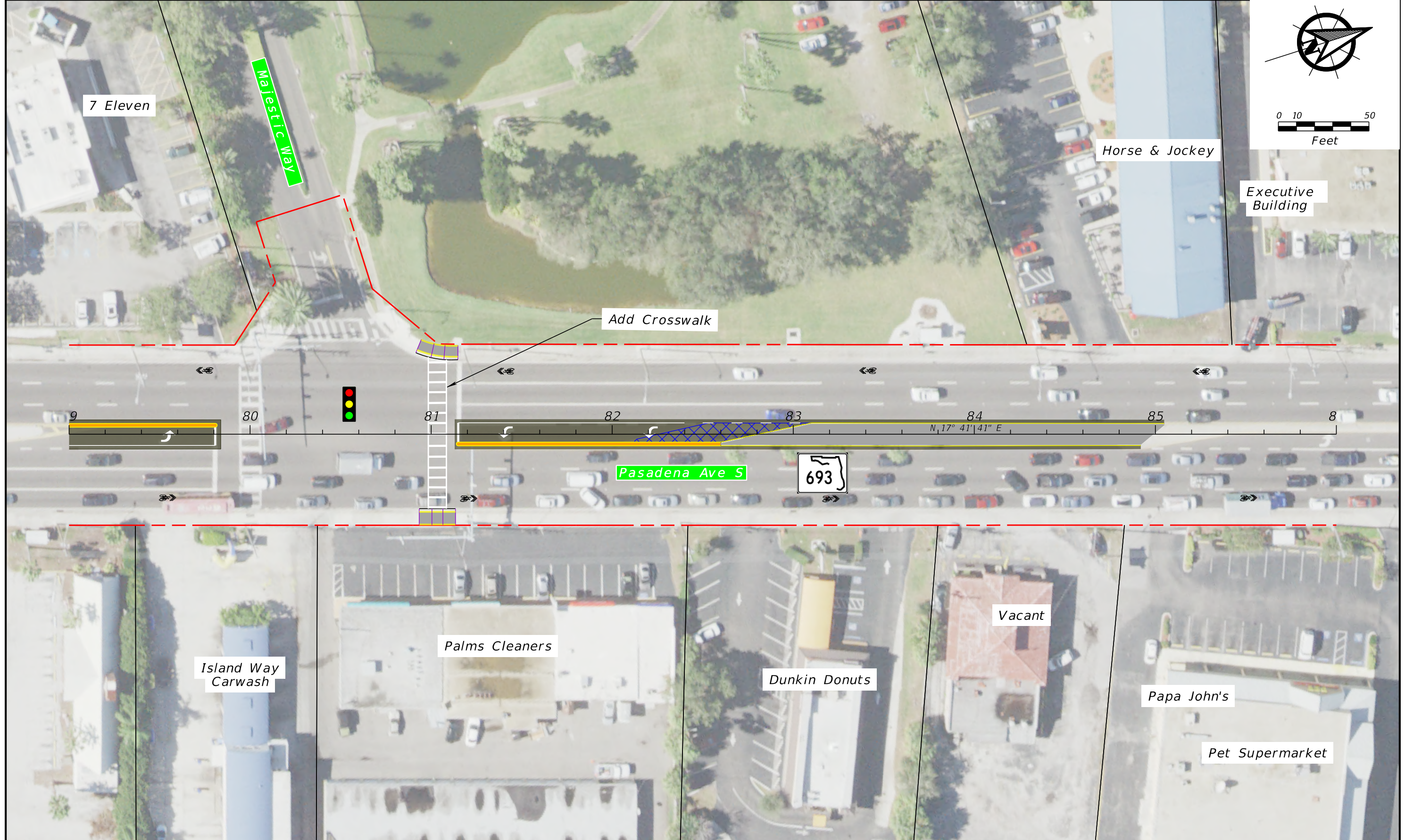
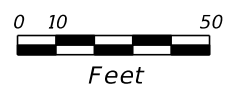
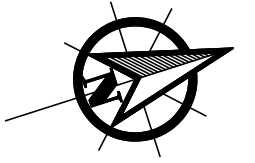
- Legend:**
- Sod/Landscaping
 - Traffic Signal
 - Sharrow Installed Under FPID: 434806-1-52-01

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.
3



SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:	
	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

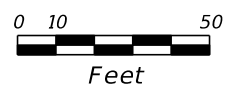
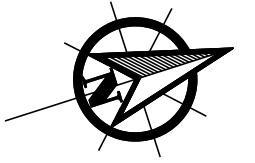
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

4



NOTE:
SEE LONG TERM ALTERNATIVE-
GULFPORT BLVD./SUNSET DR.
INTERSECTION IMPROVEMENTS

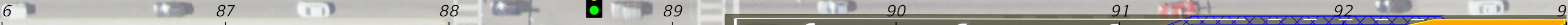
Executive Building

Wells Fargo

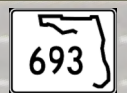
Sunset Dr S

Publix

Hibiscus Ave S



Pasadena Ave S



Pasadena Liquors & Fine Wines

Gulfport Blvd S

Shell

Sun Country Cleaners

Hibiscus Ave S

SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:	
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

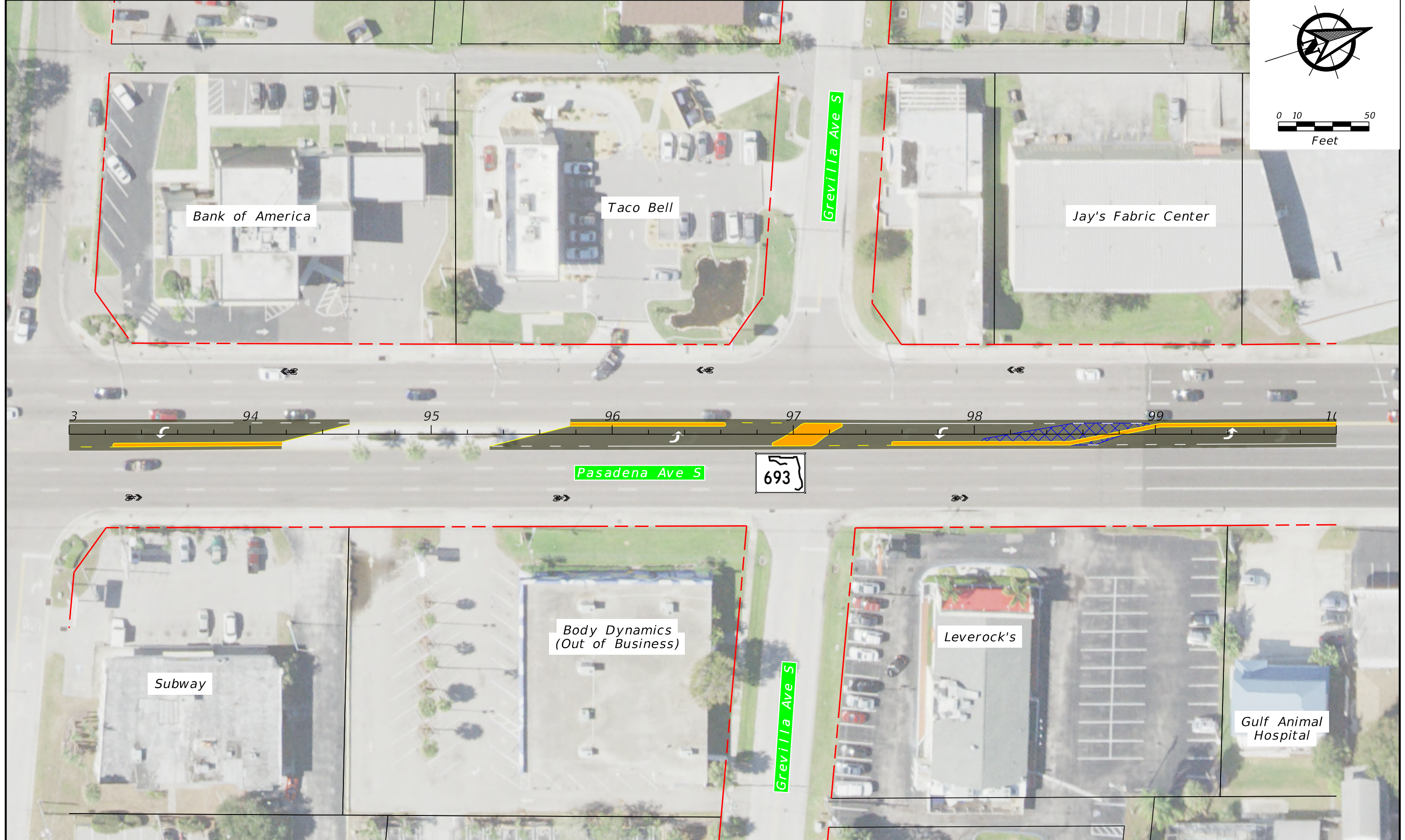
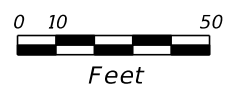
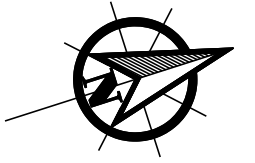
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SHEET NO.

5



SR 693 (Pasadena Avenue) Corridor Study

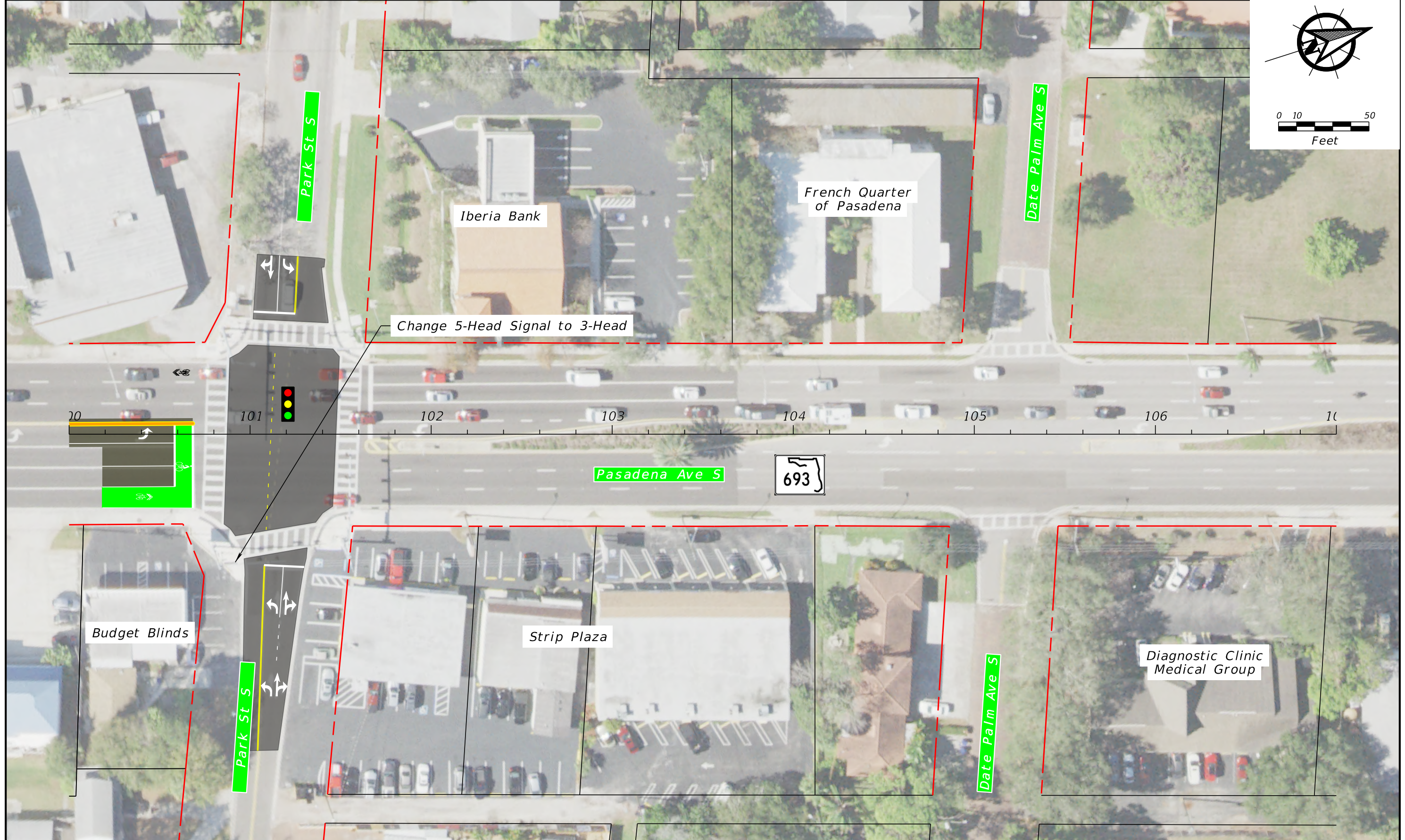
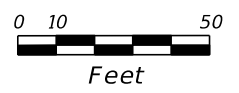
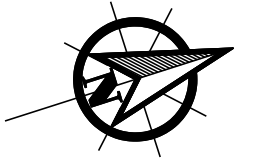
Short Term Safety Improvements Alternative

	Baseline of Construction	Pavement Widening
	Existing Right-of-Way	Milling & Overlay
	Proposed Right-of-Way	Sidewalk

Legend:	
	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

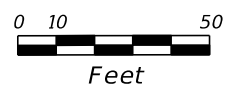
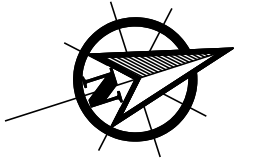
Legend:	
	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1

SHEET NO.

7



Mango Ave S

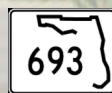
Benjamin Biomedical

Professional Endodontics

No Improvements Proposed

107 108 109 110 111 112 113 114

Pasadena Ave S



Mango Ave S

Villas in Pasadena

Medical Plaza

SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

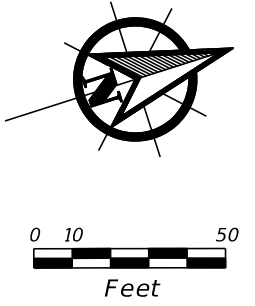
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

8



No Improvements Proposed

Pasadena Ave S



Temple Beth-El

Oleander Way S

SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

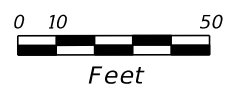
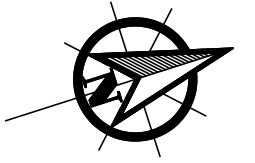
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

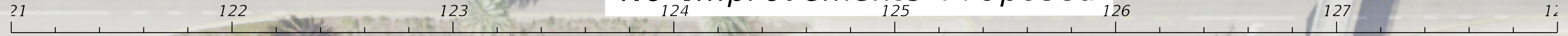
9



Land Owned by City of St. Pete

All Seasons Landscaping

No Improvements Proposed



Pasadena Ave S



Land Owned by City of St. Pete

Park Cir S

Pinellas Trail

Pasadena Car Care Center

SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:	
	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

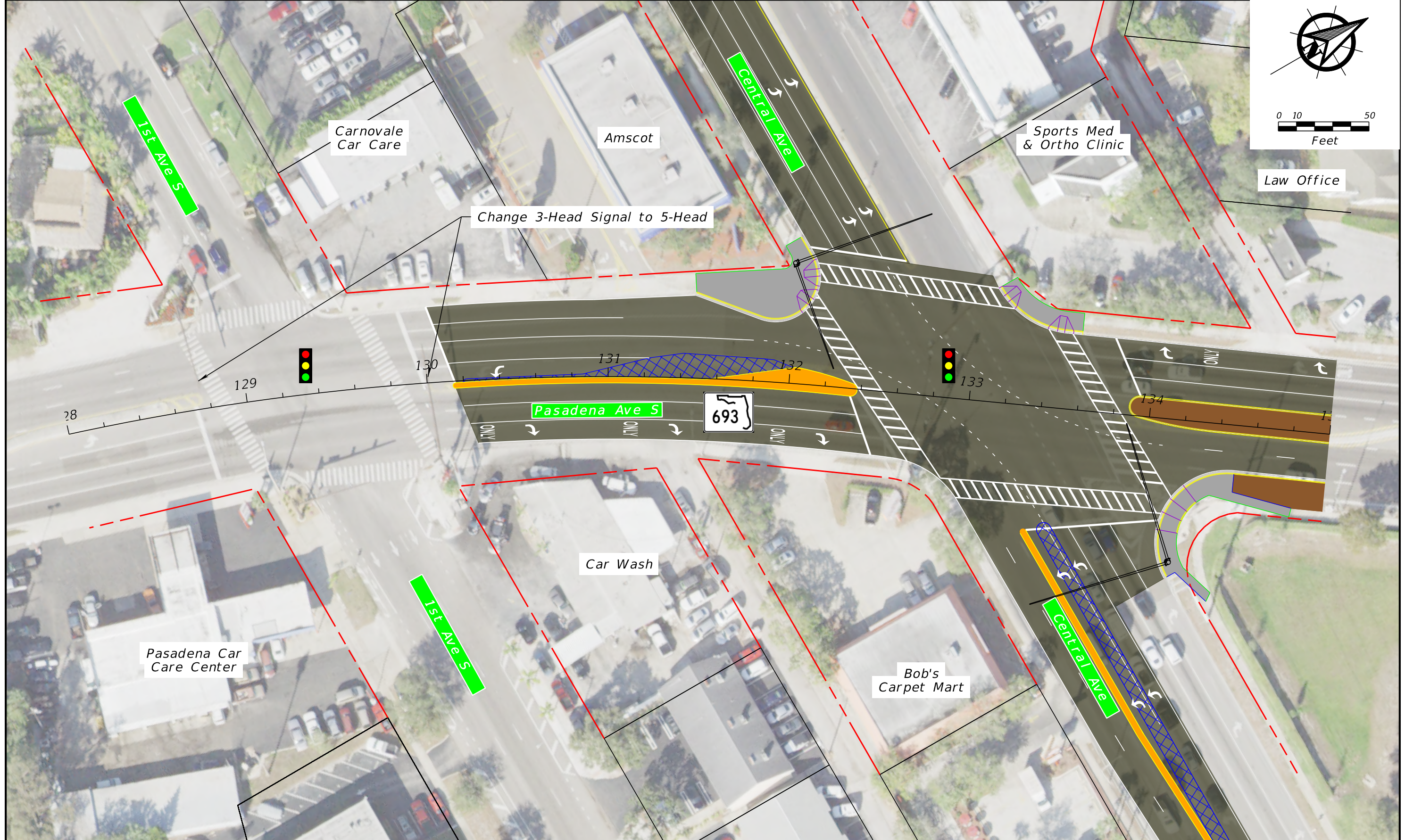
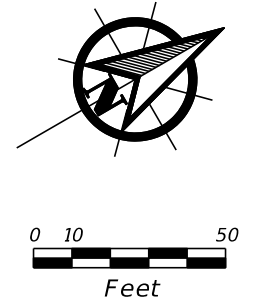
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

10



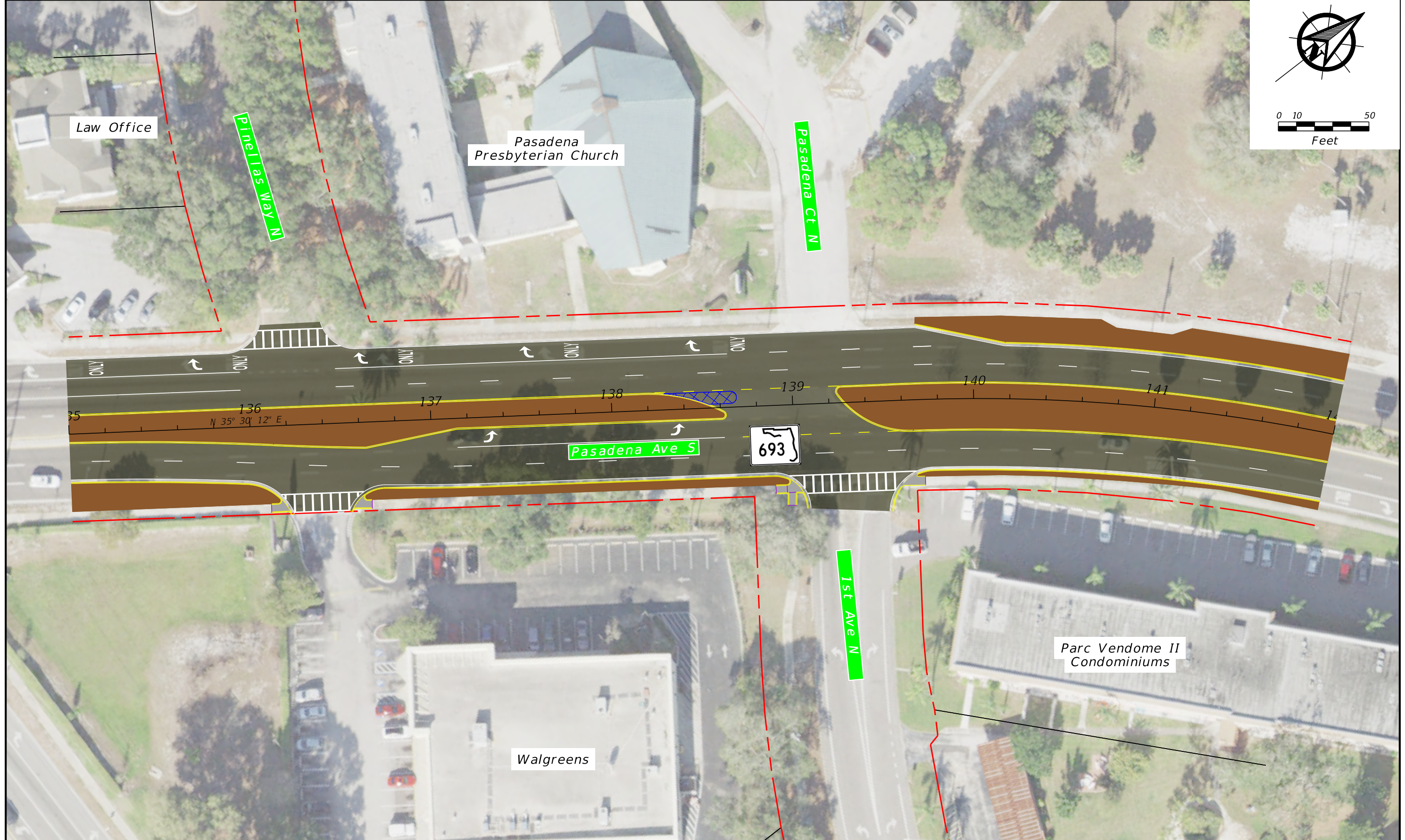
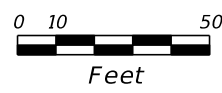
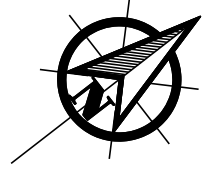
SR 693 (Pasadena Avenue) Corridor Study **Short Term Safety Improvements Alternative**

100	Baseline of Construction		Pavement Widening		Sod/Landscaping
	Existing Right-of-Way		Milling & Overlay		Traffic Signal
	Proposed Right-of-Way		Sidewalk		Sharrow Installed Under FPID: 434806-1-52-01

SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1

SHEET NO. 11



SR 693 (Pasadena Avenue) Corridor Study


Short Term Safety Improvements Alternative

- Baseline of Construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Pavement Widening
- Milling & Overlay
- Sidewalk

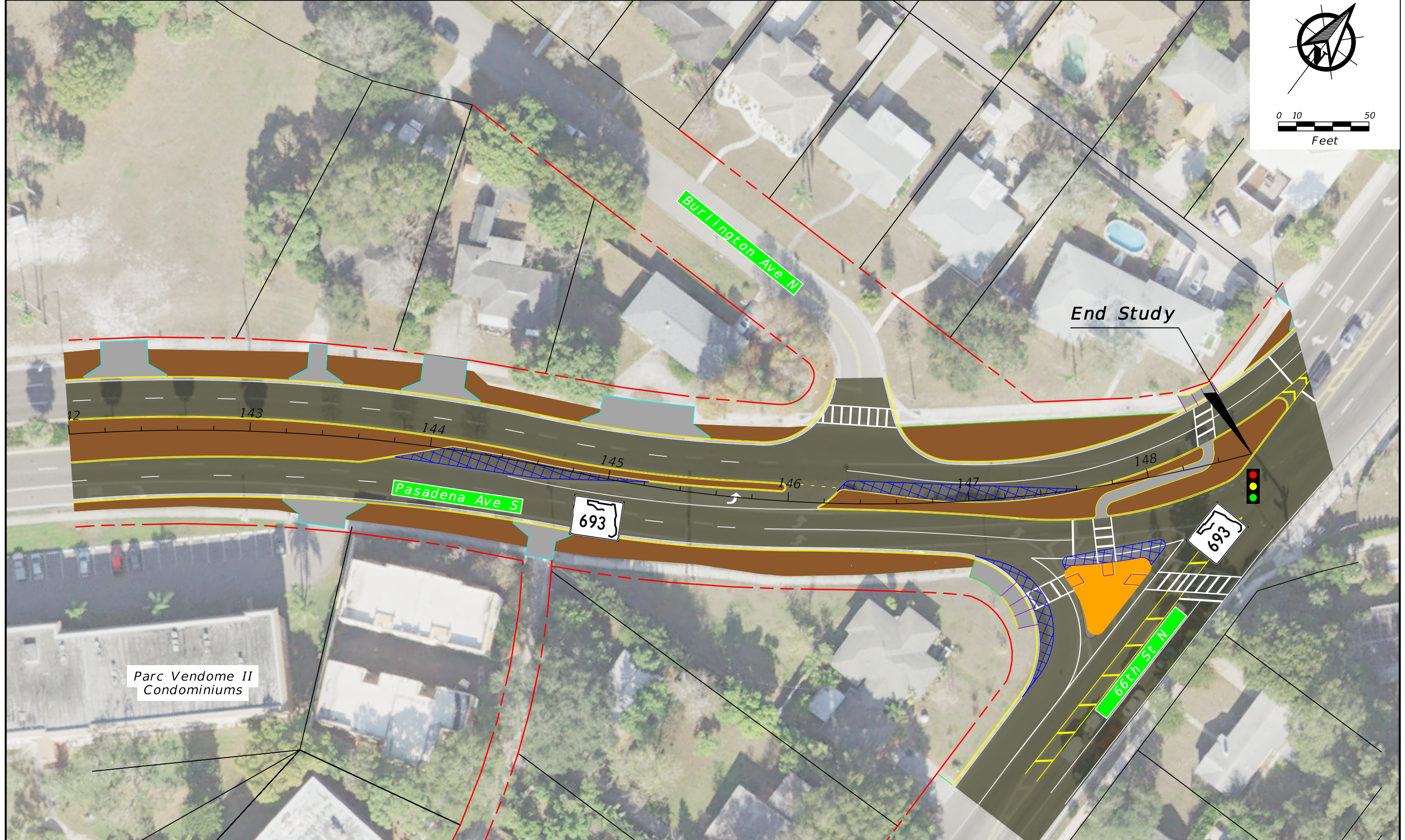
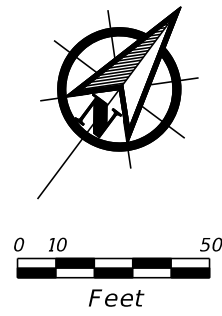
- Legend:**
- Sod/Landscaping
 - Traffic Signal
 - Sharrow Installed Under FPID: 434806-1-52-01

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.
12



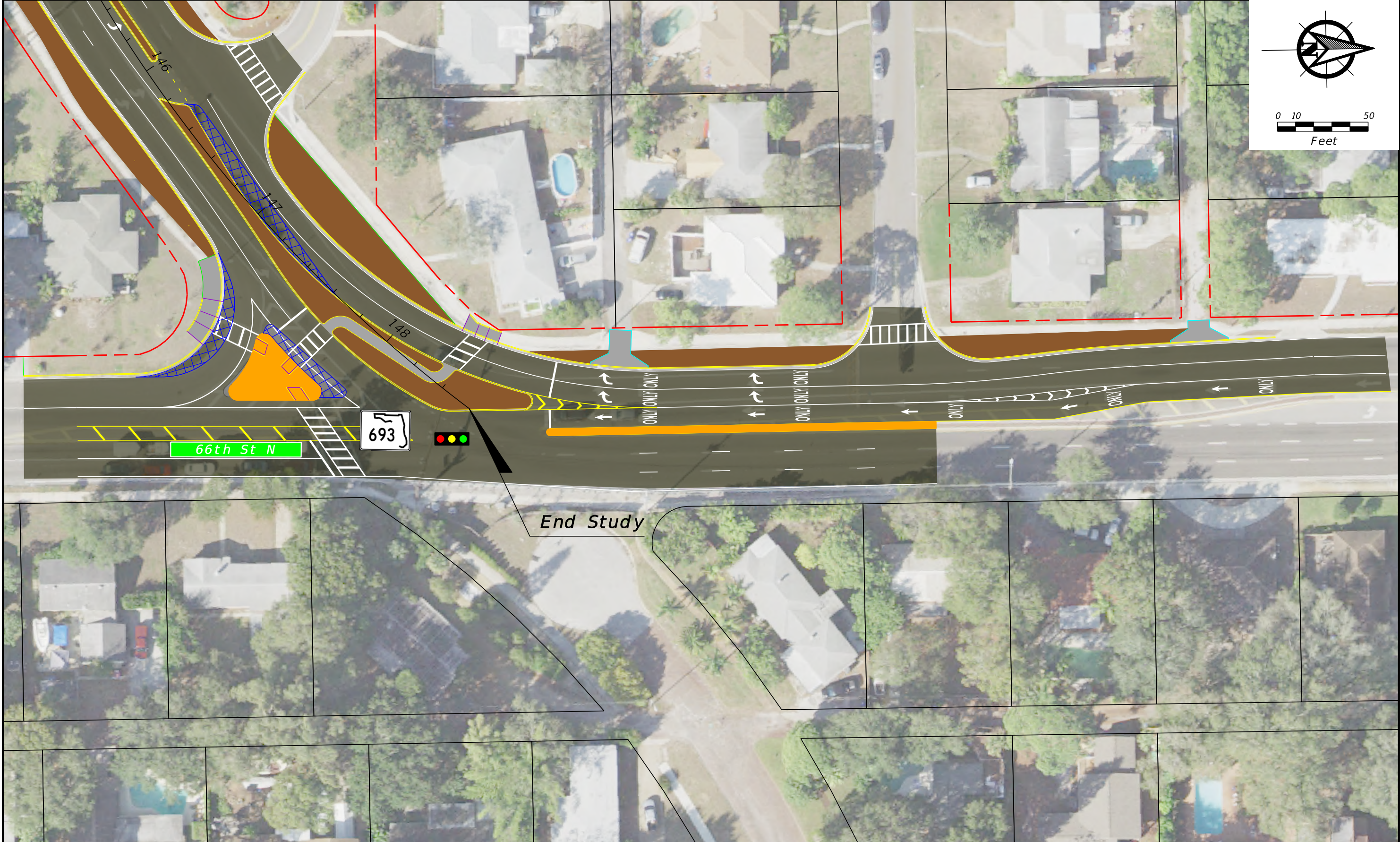
SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

<p>100</p> <p>Baseline of Construction</p> <p>Existing Right-of-Way</p> <p>Proposed Right-of-Way</p>	<p>Pavement Widening</p> <p>Milling & Overlay</p> <p>Sidewalk</p>	<p>Legend:</p> <p>Sod/Landscaping</p> <p>Traffic Signal</p> <p>Sharrow Installed Under FPID: 434806-1-52-01</p>
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SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

- 100
- Baseline of Construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Pavement Widening
- Milling & Overlay
- Sidewalk

- Legend:**
- Sod/Landscaping
 - Traffic Signal
 - Sharrow Installed Under FPID: 434806-1-52-01

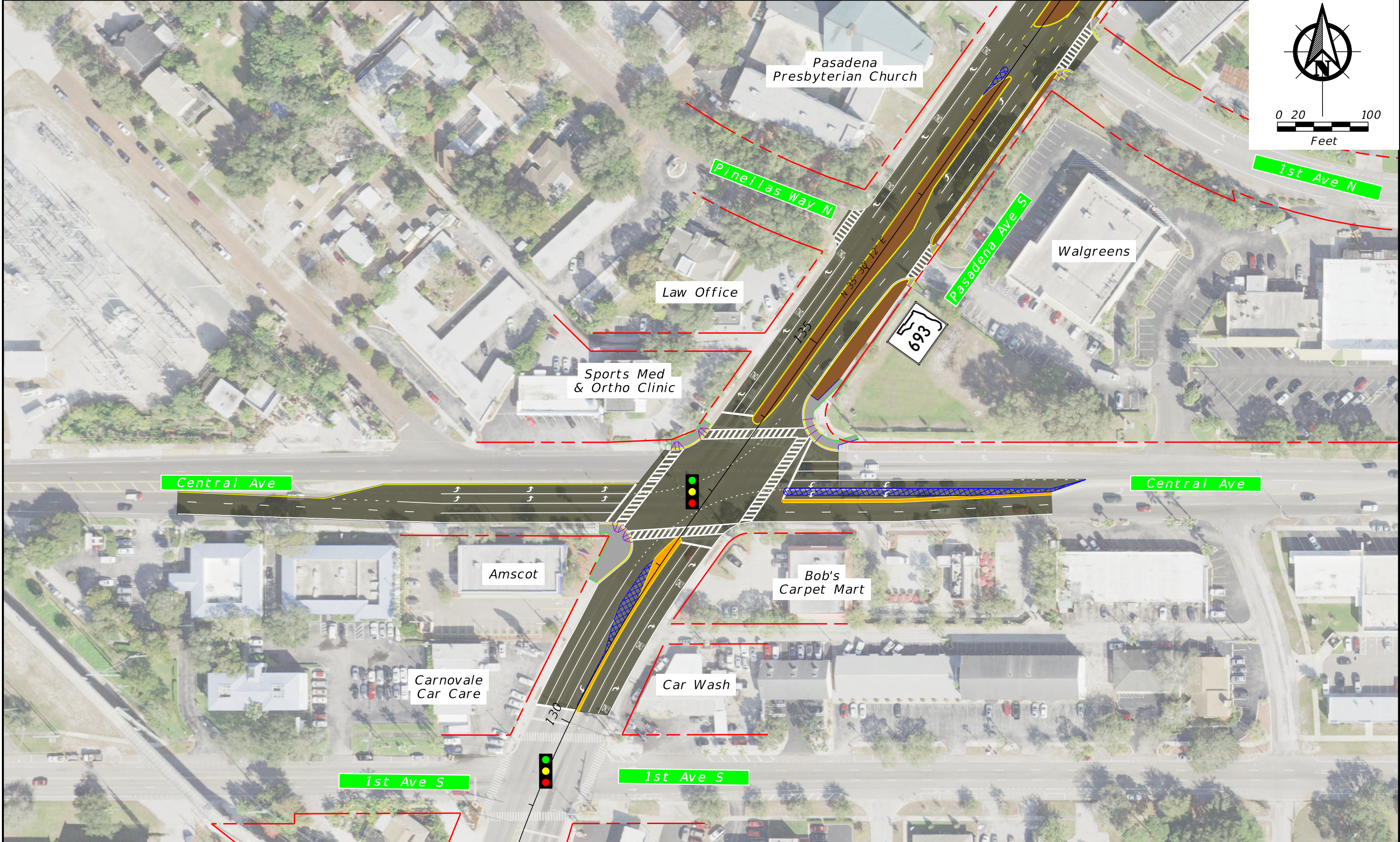
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County
 Work Program Segment: NO. 435910-1



SHEET NO.

14



SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County
 Work Program Segment: NO. 435910-1



SHEET NO.

15



APPENDIX G – Benefit to Cost Ratio (Segment 1)

Benefit-Cost Analysis

District: **Seven** County: **15 - Pinellas** Date Prepared: **02/06/19**
 Location: **SR 693 (Pasadena Avenue) from Shore Drive to Park Street**
 Section : _____ Beg. Milepost : _____ End Milepost : _____
 Rdway Type: **6+ Lanes Urban Divided**



ANNUAL COST OF IMPROVEMENTS

Type	Cost	Service Life	Capital Recovery		Total
			Factor		
ROW		100	0.0408	\$	-
P.E.C.E.I.		15	0.0899	\$	-
Structure		75	0.0425	\$	-
Roadway	\$ 985,085.51	20	0.0736	\$	72,502.29
Drainage		20	0.0736	\$	-
Signal		20	0.0736	\$	-
Other		20	0.0736	\$	-
Sub-Total	\$ 985,085.51			\$	72,502.29
Annual Cost =					\$ 72,502.29

Total number of crashes = _____
 # of correctable crashes, (#1) = 12
 # of correctable crashes, (#2) = 6
 # of correctable crashes, (#3) = 6
 # of years of crash data, YD = 5
 PC/YD = 2.40
 PC/YD = 2.50
 PC/YD = 1.20
 Crash reduction factor, CRF = 36.00%
 Crash reduction factor, CRF = 64.00%
 Crash reduction factor, CRF = 39.00%
 CRF x (PC/YD) = 2.93
 Cost per crash, CPC = \$117,867.00
 Benefit = \$345,586

(#1) Primary crash reduction factor (%): 36
 Table 14-25 HSM (Angle)
 (#2) Primary crash reduction factor (%): 64
 Table 14-20 HSM (Left Turn)
 (#3) Primary crash reduction factor (%): 39
 CMF ID: 3034 Install Raised Median

BENEFIT/COST RATIO

$$\frac{\text{Benefit}}{\text{Cost}} = \frac{\$345,586.04}{\$72,502.29} = 4.77$$



Prepared by:

Daniel Carnley



APPENDIX H – Benefit to Cost Ratio (Segment 3)

Benefit-Cost Analysis

District: **Seven** County: **15 - Pinellas** Date Prepared: **02/06/19**

Location: **SR 693 (Pasadena Avenue) from 1st Avenue South to 66th Street**

Section : _____ Beg. Milepost : _____ End Milepost : _____
 Rdway Type: **6+ Lanes Urban Divided**



ANNUAL COST OF IMPROVEMENTS

Type	Cost	Service Life	Capital Recovery Factor	Total
ROW		100	0.0408	\$ -
P.E.C.E.I.	\$ 250,000.00	15	0.0899	\$ 22,475.00
Structure		75	0.0425	\$ -
Roadway	\$ 1,452,159.02	20	0.0736	\$ 106,878.90
Drainage		20	0.0736	\$ -
Signal		20	0.0736	\$ -
Other		20	0.0736	\$ -
Sub-Total	\$ 1,702,159.02			\$ 129,353.90
Annual Cost =				\$ 129,353.90

Total number of crashes = _____
 # of correctable crashes, (#1) = 17
 # of correctable crashes, (#2) = 15
 # of correctable crashes, (#3) = 0
 # of years of crash data, YD = 5
 PC/YD = 3.40
 PC/YD = 4.41
 PC/YD = 0.00
 Crash reduction factor, CRF = 99.00%
 Crash reduction factor, CRF = 64.00%
 Crash reduction factor, CRF = 0.00%
 CRF x (PC/YD) = 6.19
 Cost per crash, CPC = \$117,867.00
 Benefit = \$729,541

(#1) Primary crash reduction factor (%): **99**
 Table 14-23 HSM (Left Turn)
 (#2) Primary crash reduction factor (%): **64**
 Table 14-20 HSM (Left Turn)
 (#3) Primary crash reduction factor (%): _____

BENEFIT/COST RATIO

$$\frac{\text{Benefit}}{\text{Cost}} = \frac{\$729,541.26}{\$129,353.90} = \mathbf{5.64}$$



Prepared by:

Daniel Carnley



APPENDIX I – Mid-Term Cost Estimate (Build Alternative 6-Lane)

ENGINEER'S ESTIMATE
FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 7

FINANCIAL PROJECT ID # :	435910-1-22-01
PROJECT DESCRIPTION:	SR 693/Pasadena Ave. Corridor Study from Shore Dr. South to 66th St., Pinellas County
PAY ITEM SPEC YEAR:	January 2019
SUBMITTAL TYPE:	PD&E Estimate
COUNTY:	Pinellas
DATE:	January 29, 2019
ENGINEERING CONSULTANT FIRM:	ICON CONSULTANT GROUP INC.
CONTACT NAME:	DANIEL CARNLEY P.E.
PHONE NUMBER:	(813) 962-8689
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	1 of 1

COMPONENT GROUPS

100 - STRUCTURES	<i>NOT USED</i>	
200 - ROADWAY		\$3,284,596.47
300 - SIGNING & PAVEMENT MARKINGS		\$438,698.11
400 - LIGHTING	<i>NOT USED</i>	
500 - SIGNALIZATION		\$234,559.01
550 - ITS	<i>NOT USED</i>	
600 - LANDSCAPE / PERIPHERALS	<i>NOT USED</i>	
700 - UTILITIES	<i>NOT USED</i>	
800 - ARCHITECTURAL	<i>NOT USED</i>	
900 - MASS TRANSIT	<i>NOT USED</i>	
1000 - INVALID & OTHER ITEMS	<i>NOT USED</i>	
COMPONENT SUB-TOTAL		\$3,957,853.59
(102-1) MOT (Maintenance of Traffic)	10%	\$395,785.36
SUB-TOTAL		\$4,353,638.95
(101-1) MOB (Mobilization)	10%	\$435,363.89
SUB-TOTAL		\$4,789,002.84
PU (Project Unknowns)	15%	\$718,350.43
SUB-TOTAL		\$5,507,353.27
(999-25) Initial Contingency (Do Not Bid)		\$50,000.00
PROJECT GRAND TOTAL		\$5,557,353.27

NOTES:



APPENDIX J – Mid-Term Cost Estimate (Build Alternative with BRT 4-Lane)

ENGINEER'S ESTIMATE
FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 7

FINANCIAL PROJECT ID # :	435910-1-22-01
PROJECT DESCRIPTION:	SR 693/Pasadena Ave. Corridor Study from Shore Dr. South to 66th St., Pinellas County
PAY ITEM SPEC YEAR:	January 2019
SUBMITTAL TYPE:	PD&E Estimate
COUNTY:	Pinellas
DATE:	January 29, 2019
ENGINEERING CONSULTANT FIRM:	ICON CONSULTANT GROUP INC.
CONTACT NAME:	DANIEL CARNLEY P.E.
PHONE NUMBER:	(813) 962-8689
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	1 of 1

COMPONENT GROUPS

100 - STRUCTURES	<i>NOT USED</i>	
200 - ROADWAY		\$4,202,879.67
300 - SIGNING & PAVEMENT MARKINGS		\$438,698.11
400 - LIGHTING	<i>NOT USED</i>	
500 - SIGNALIZATION		\$234,559.01
550 - ITS	<i>NOT USED</i>	
600 - LANDSCAPE / PERIPHERALS	<i>NOT USED</i>	
700 - UTILITIES	<i>NOT USED</i>	
800 - ARCHITECTURAL	<i>NOT USED</i>	
900 - MASS TRANSIT	<i>NOT USED</i>	
1000 - INVALID & OTHER ITEMS	<i>NOT USED</i>	
COMPONENT SUB-TOTAL		\$4,876,136.79
(102-1) MOT (Maintenance of Traffic)	10%	\$487,613.68
SUB-TOTAL		\$5,363,750.47
(101-1) MOB (Mobilization)	10%	\$536,375.05
SUB-TOTAL		\$5,900,125.51
PU (Project Unknowns)	15%	\$885,018.83
SUB-TOTAL		\$6,785,144.34
(999-25) Initial Contingency (Do Not Bid)		\$50,000.00
PROJECT GRAND TOTAL		\$6,835,144.34

NOTES:



APPENDIX K – Mid-Term Cost Estimate (Build Alternative Road Diet 4-Lane)

ENGINEER'S ESTIMATE
FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 7

FINANCIAL PROJECT ID # :	435910-1-22-01
PROJECT DESCRIPTION:	SR 693/Pasadena Ave. Corridor Study from Shore Dr. South to 66th St., Pinellas County
PAY ITEM SPEC YEAR:	January 2019
SUBMITTAL TYPE:	PD&E Estimate
COUNTY:	Pinellas
DATE:	January 29, 2019
ENGINEERING CONSULTANT FIRM:	ICON CONSULTANT GROUP INC.
CONTACT NAME:	DANIEL CARNLEY P.E.
PHONE NUMBER:	(813) 962-8689
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	1 of 1

COMPONENT GROUPS

100 - STRUCTURES	<i>NOT USED</i>	
200 - ROADWAY		\$2,331,758.92
300 - SIGNING & PAVEMENT MARKINGS		\$394,271.21
400 - LIGHTING	<i>NOT USED</i>	
500 - SIGNALIZATION		\$234,559.01
550 - ITS	<i>NOT USED</i>	
600 - LANDSCAPE / PERIPHERALS	<i>NOT USED</i>	
700 - UTILITIES	<i>NOT USED</i>	
800 - ARCHITECTURAL	<i>NOT USED</i>	
900 - MASS TRANSIT	<i>NOT USED</i>	
1000 - INVALID & OTHER ITEMS	<i>NOT USED</i>	
COMPONENT SUB-TOTAL		\$2,960,589.14
(102-1) MOT (Maintenance of Traffic)	10%	\$296,058.91
SUB-TOTAL		\$3,256,648.05
(101-1) MOB (Mobilization)	10%	\$325,664.81
SUB-TOTAL		\$3,582,312.86
PU (Project Unknowns)	15%	\$537,346.93
SUB-TOTAL		\$4,119,659.78
(999-25) Initial Contingency (Do Not Bid)		\$50,000.00
PROJECT GRAND TOTAL		\$4,169,659.78

NOTES:



APPENDIX L – Mid-Term Typical Section and Concept Plans (Build Alternative 6- Lane)

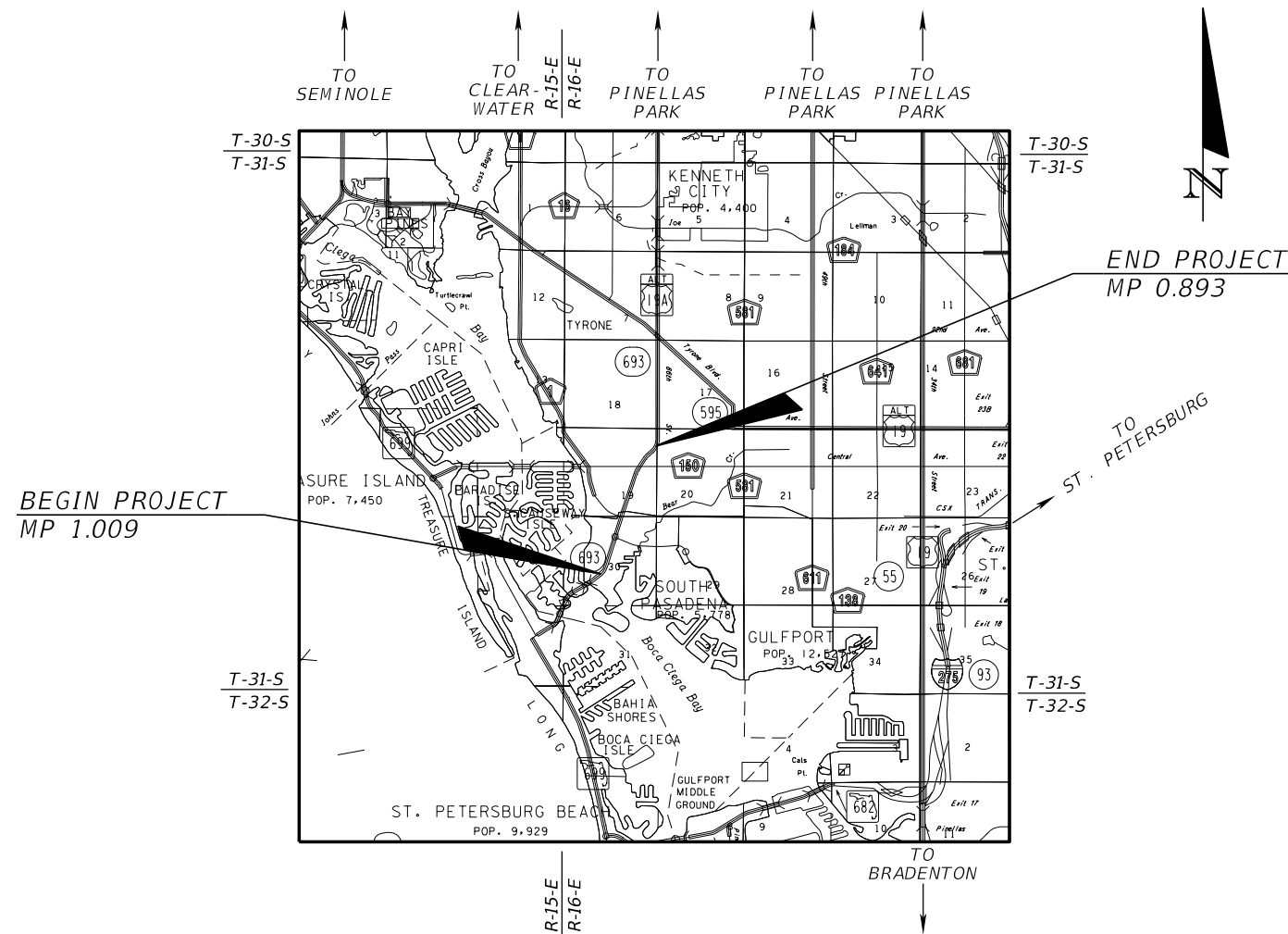
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION PACKAGE

FINANCIAL PROJECT ID 435910-1-22-01

PINELLAS COUNTY (15111 & 15230)

STATE ROAD NO. 693



TYPICAL SECTION PACKAGE

SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
2	TYPICAL SECTION NO. 1
3	TYPICAL SECTION NO. 2
4	TYPICAL SECTION NO. 3

APPROVED BY:

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.

1

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- (X) MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

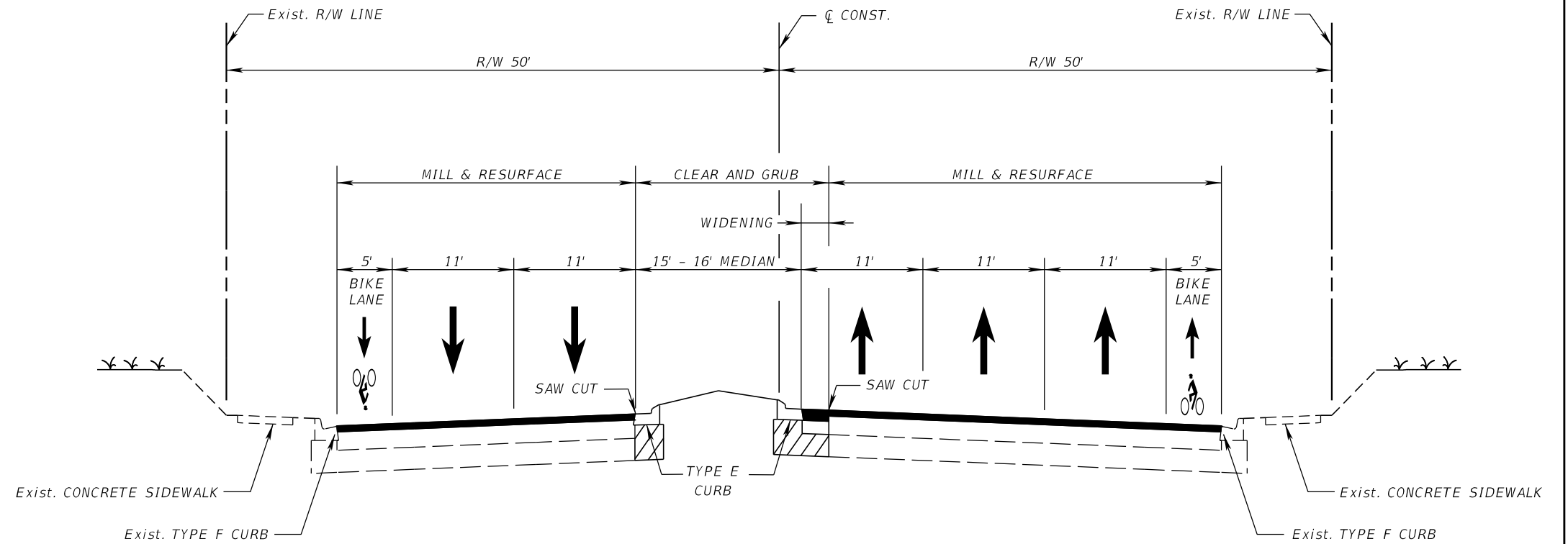
- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 1



SR 693 (PASADENA AVENUE)
 MP 1.009 TO MP 1.536
 EQUATION: MP 1.755 = MP 0.000
 MP 0.248 TO MP 0.600

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 37,000
 ESTIMATED OPENING YEAR = 2020 AADT = 37,500
 ESTIMATED DESIGN YEAR = 2040 AADT = 40,000
 K = 9% D = 52% T = 3% (24 HOUR)
 DESIGN HOUR T = 1.5%
 DESIGN SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	2

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

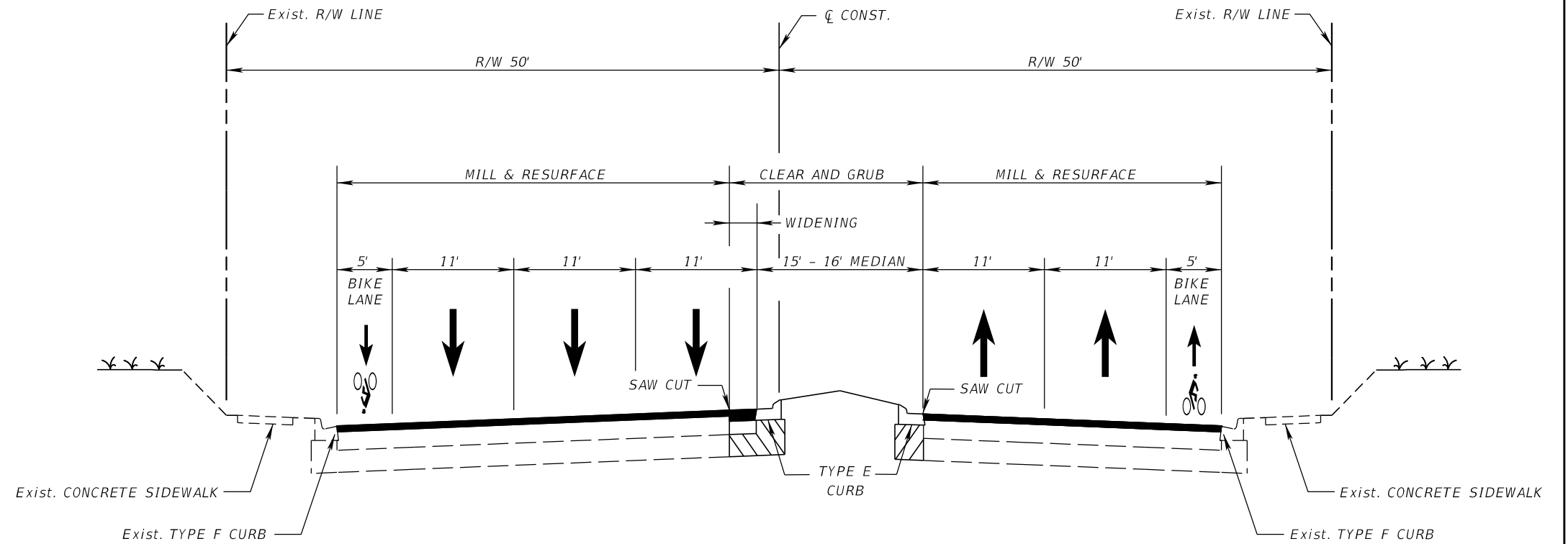
- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 2



SR 693 (PASADENA AVENUE)
 MP 1.536 TO MP 0.248
 EQUATION: MP 1.755 = MP 0.000

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 29,500
 ESTIMATED OPENING YEAR = 2020 AADT = 30,000
 ESTIMATED DESIGN YEAR = 2040 AADT = 32,500
 K = 9% D = 52% T = 3% (24 HOUR)
 DESIGN HOUR T = 1.5%
 DESIGN SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	3

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

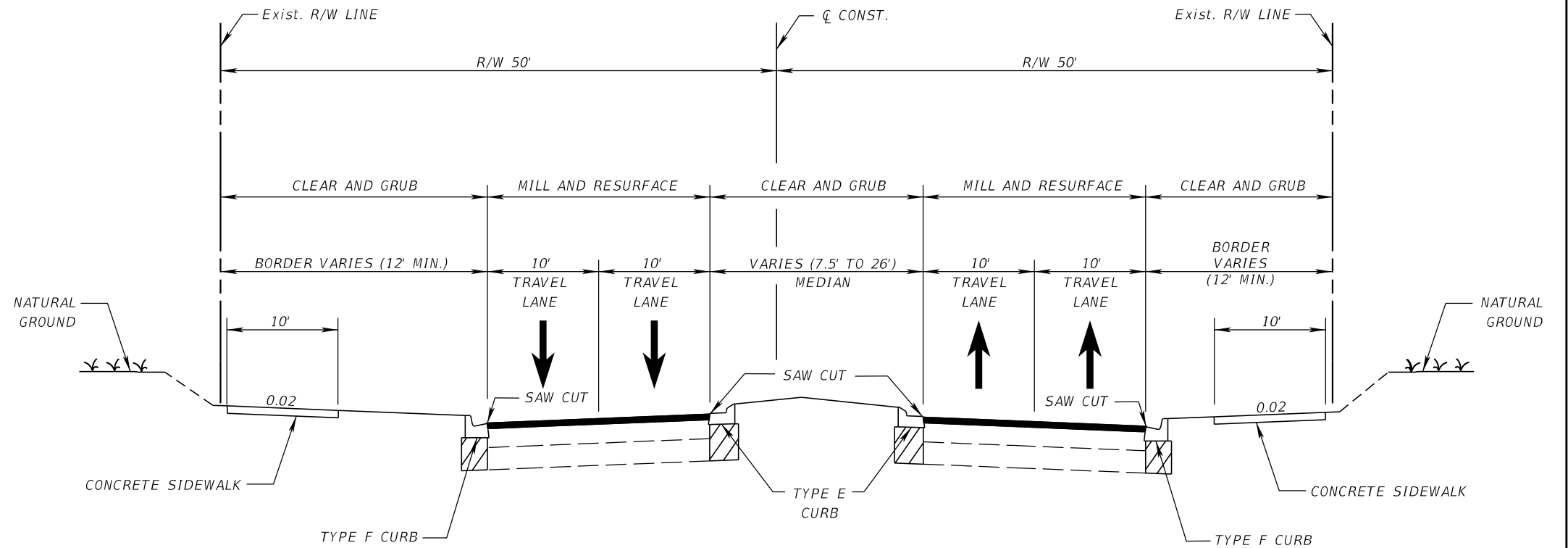
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

LANE WIDTH
 MEDIAN WIDTH
 BIKE LANE

TYPICAL SECTION No. 3



SR 693 (PASADENA AVENUE)
MP 0.600 TO MP 0.863

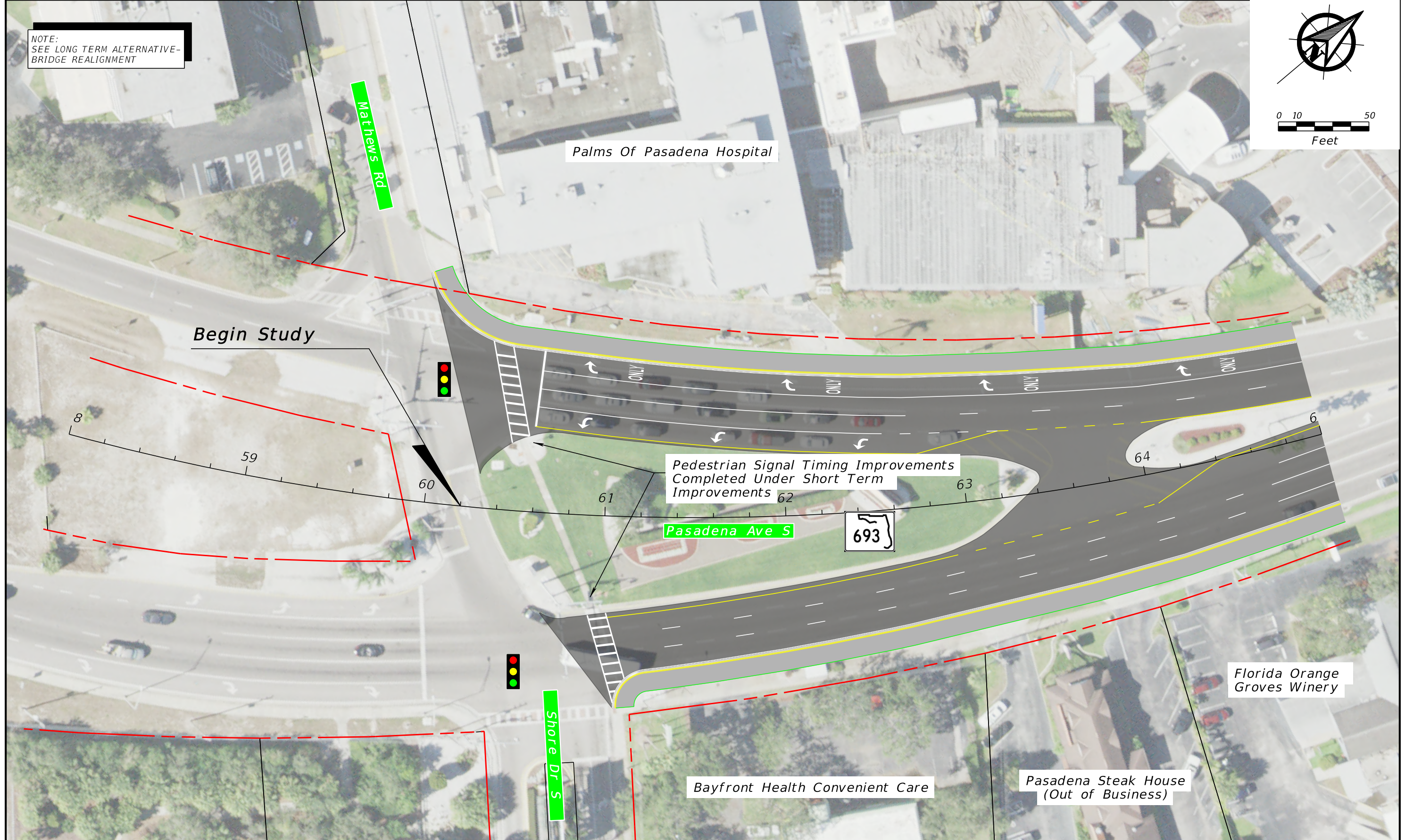
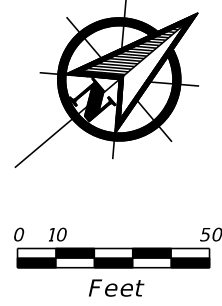
NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 28,500
 ESTIMATED OPENING YEAR = 2020 AADT = 29,000
 ESTIMATED DESIGN YEAR = 2040 AADT = 32,000
 K = 9% D = 52% T = 3% (24 HOUR)
 DESIGN HOUR T = 1.5%
 DESIGN SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	4

NOTE:
SEE LONG TERM ALTERNATIVE-
BRIDGE REALIGNMENT



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)

	Baseline of Construction	Pavement Widening
	Existing Right-of-Way	Milling & Overlay
	Proposed Right-of-Way	Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal

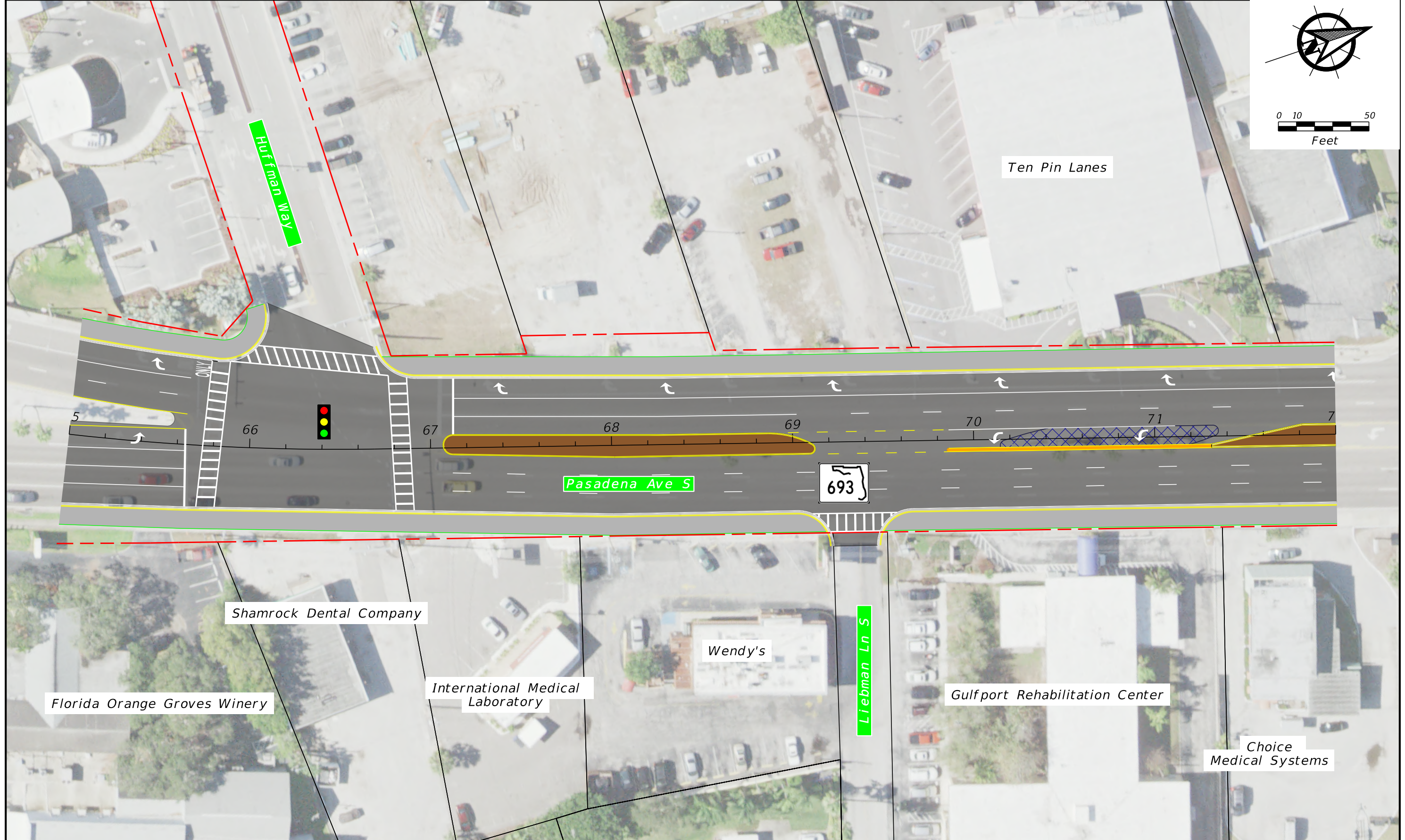
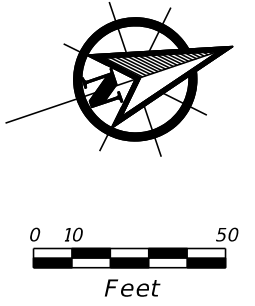
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SHEET NO.

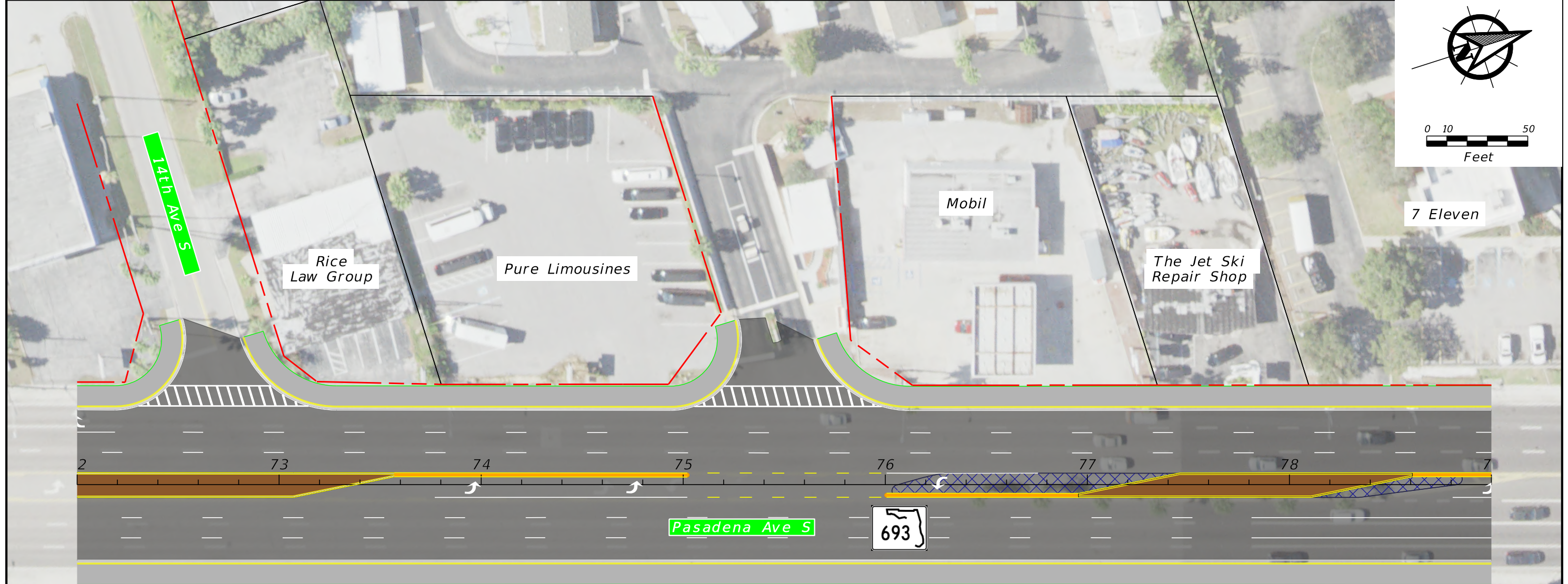
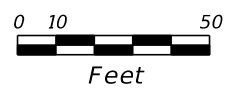
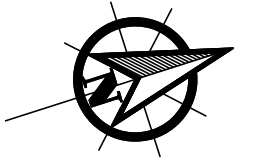
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SR 693 (Pasadena Avenue) Corridor Study **Build Alternative (6-Lane)**

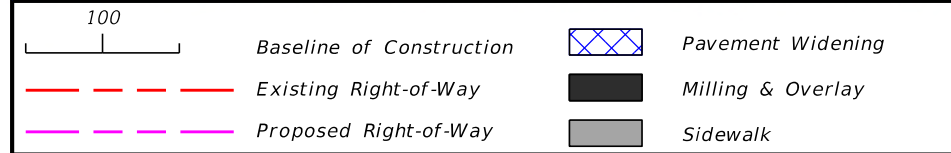
	Baseline of Construction		Pavement Widening		Sod/Landscaping
	Existing Right-of-Way		Milling & Overlay		Traffic Signal
	Proposed Right-of-Way		Sidewalk		

SR 693 (Pasadena Avenue) Corridor Study		
From Shore Drive South to 66th Street		
County: Pinellas County	Work Program Segment: NO. 435910-1	SHEET NO. 2



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)



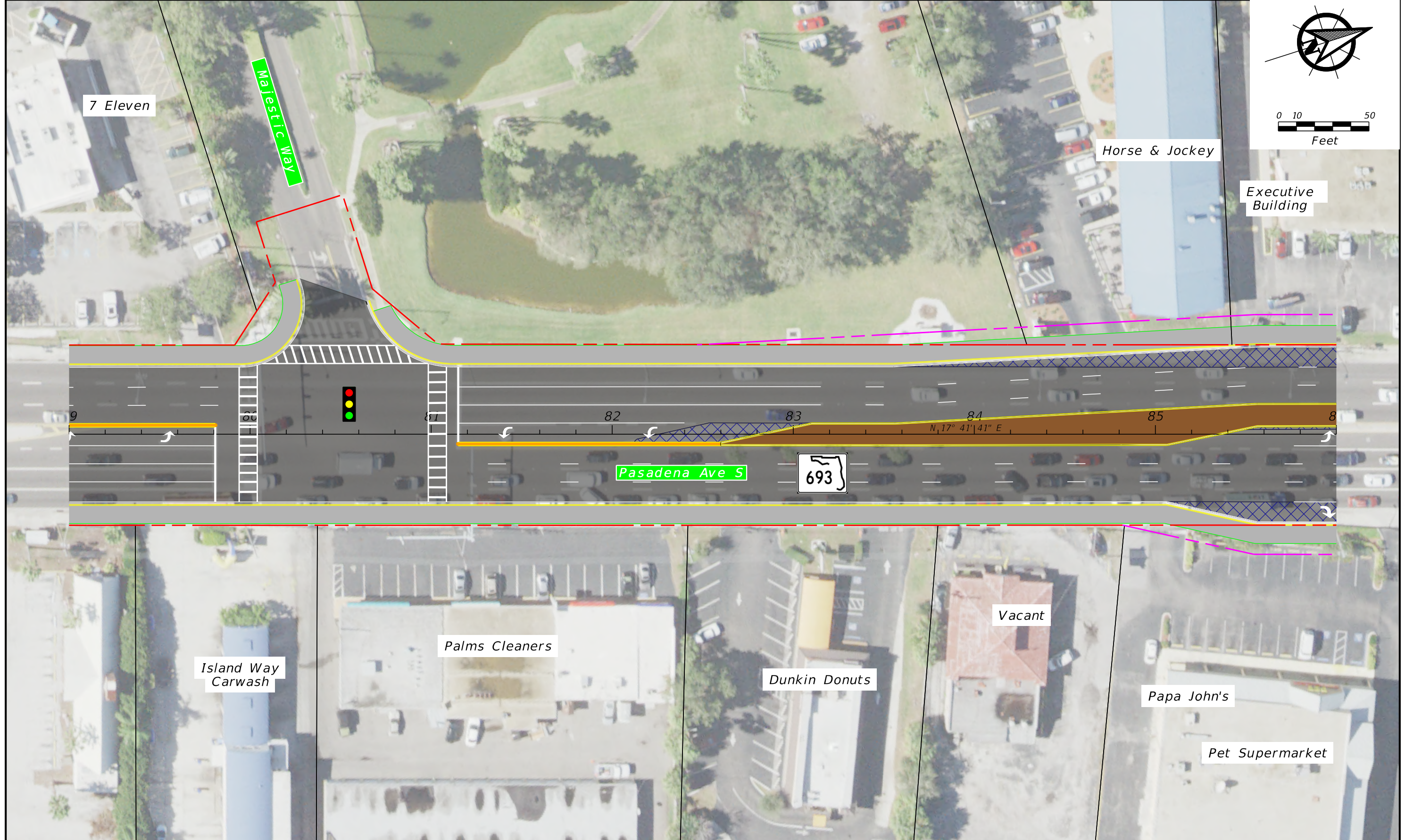
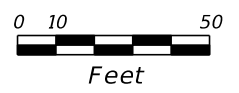
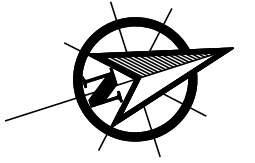
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SHEET NO.

3



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal

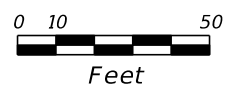
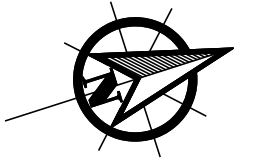
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

4



NOTE:
SEE LONG TERM ALTERNATIVE-
GULFPORT BLVD./SUNSET DR.
INTERSECTION IMPROVEMENTS

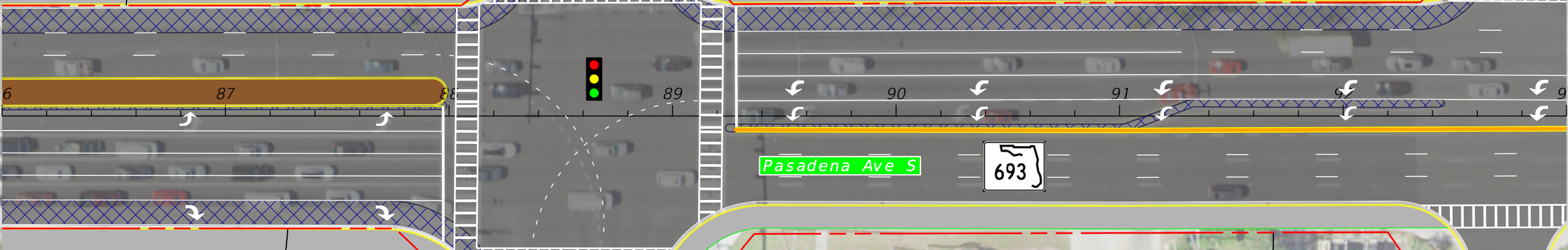
Executive Building

Wells Fargo

Publix

Sunset Dr S

Hibiscus Ave S



Pasadena Liquors & Fine Wines

Shell

Sun Country Cleaners

Gulfport Blvd S

Hibiscus Ave S

SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

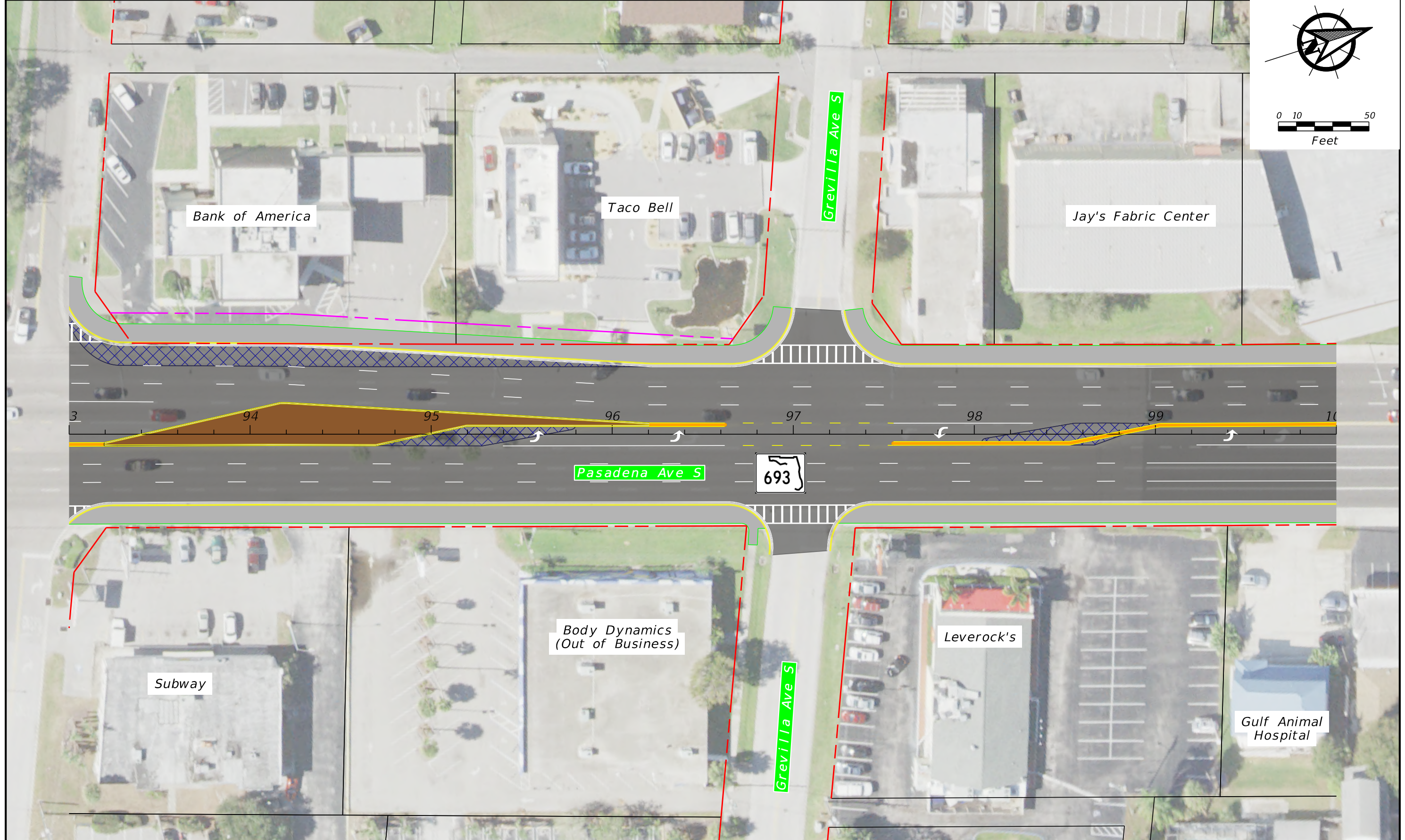
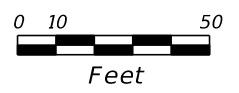
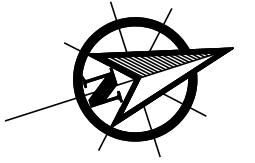
Legend:	
	Sod/Landscaping
	Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.
5



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

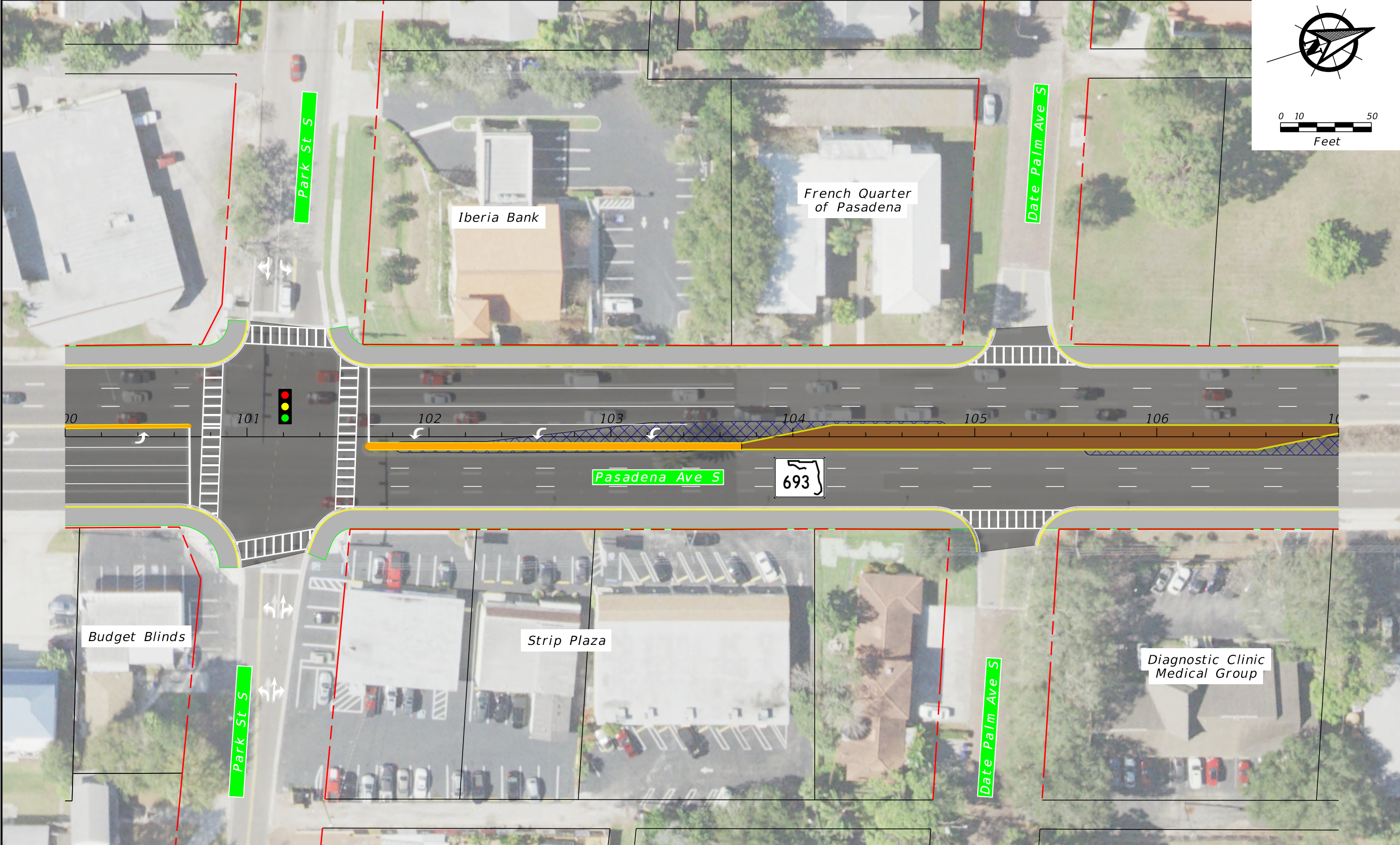
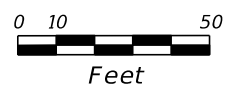
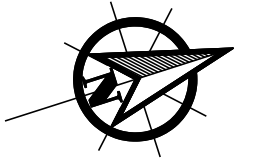
	Sod/Landscaping
	Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1

SHEET NO.

6



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)

- Baseline of Construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Pavement Widening
- Milling & Overlay
- Sidewalk

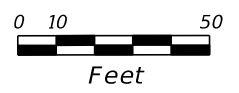
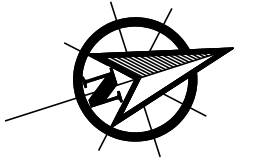
- Legend:**
- Sod/Landscaping
 - Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1

SHEET NO.

7



Mango Ave S

Benjamin Biomedical

Professional Endodontics

Pasadena Ave S



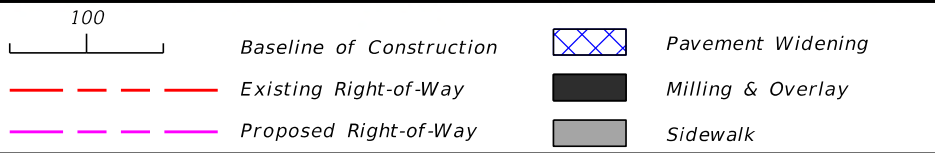
Mango Ave S

Villas in Pasadena

Medical Plaza

SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)



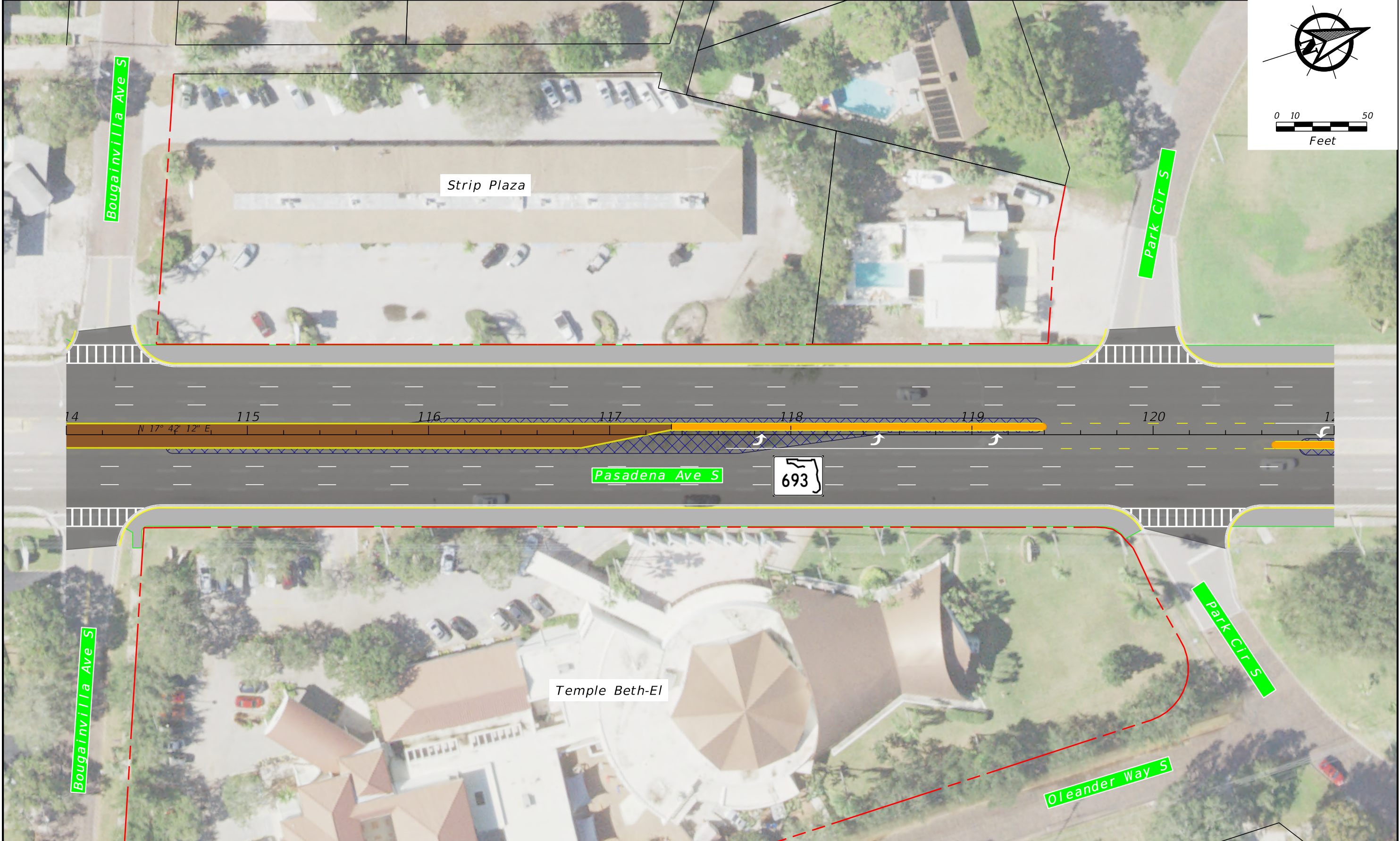
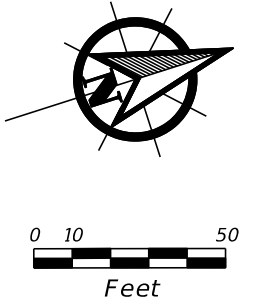
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SHEET NO.

8



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal

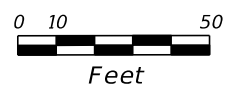
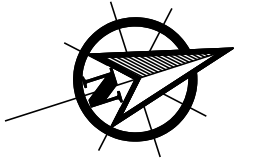
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

9



Land Owned by City of St. Pete

All Seasons Landscaping

Park Cir S

Pinellas Trail

121 122 123 124 125 126 127

Pasadena Ave S



Land Owned by City of St. Pete

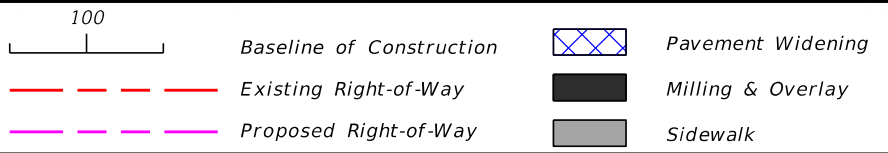
Park Cir S

Pinellas Trail

Pasadena Car Care Center

SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)



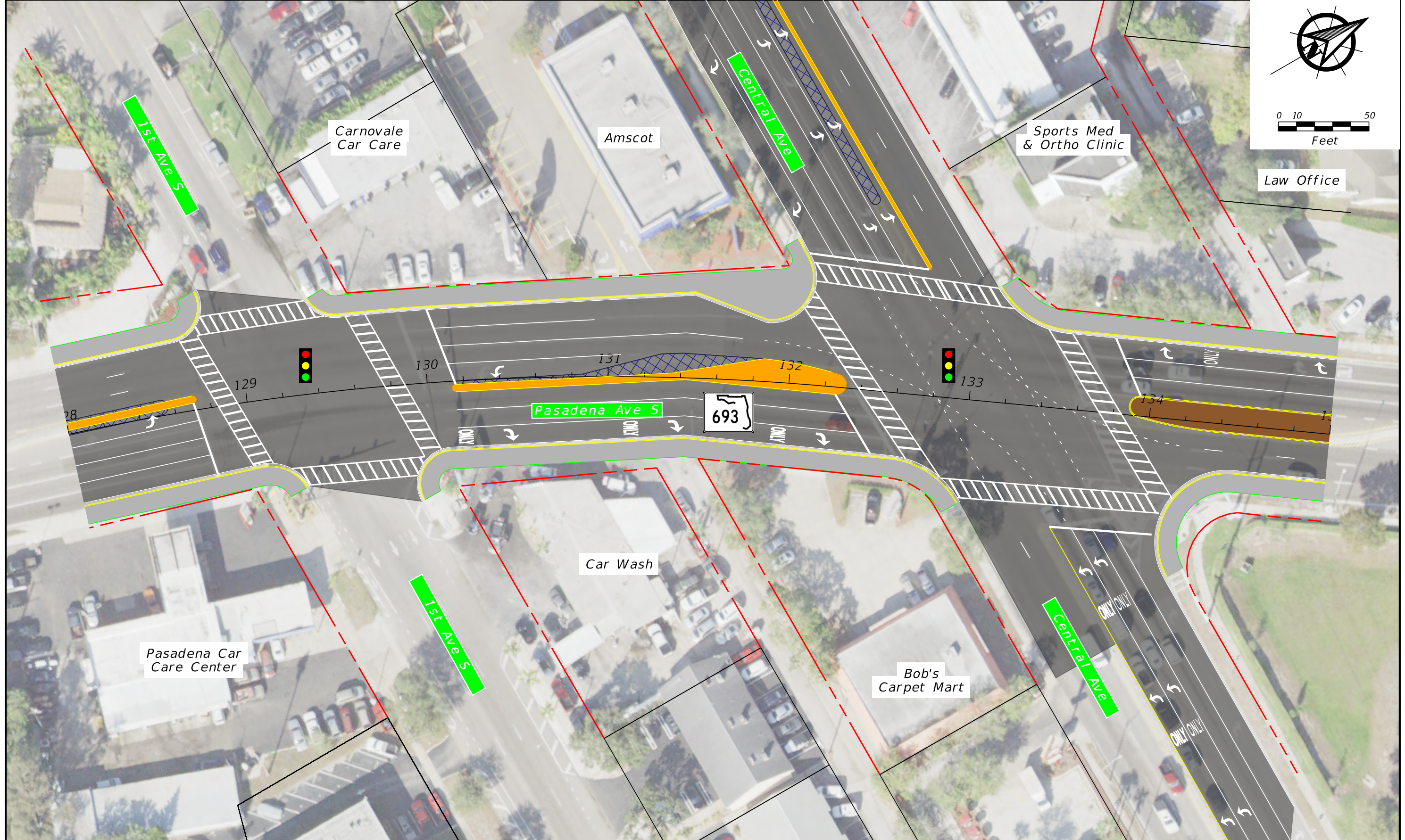
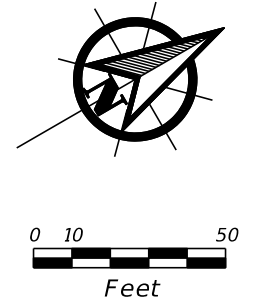
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SHEET NO.

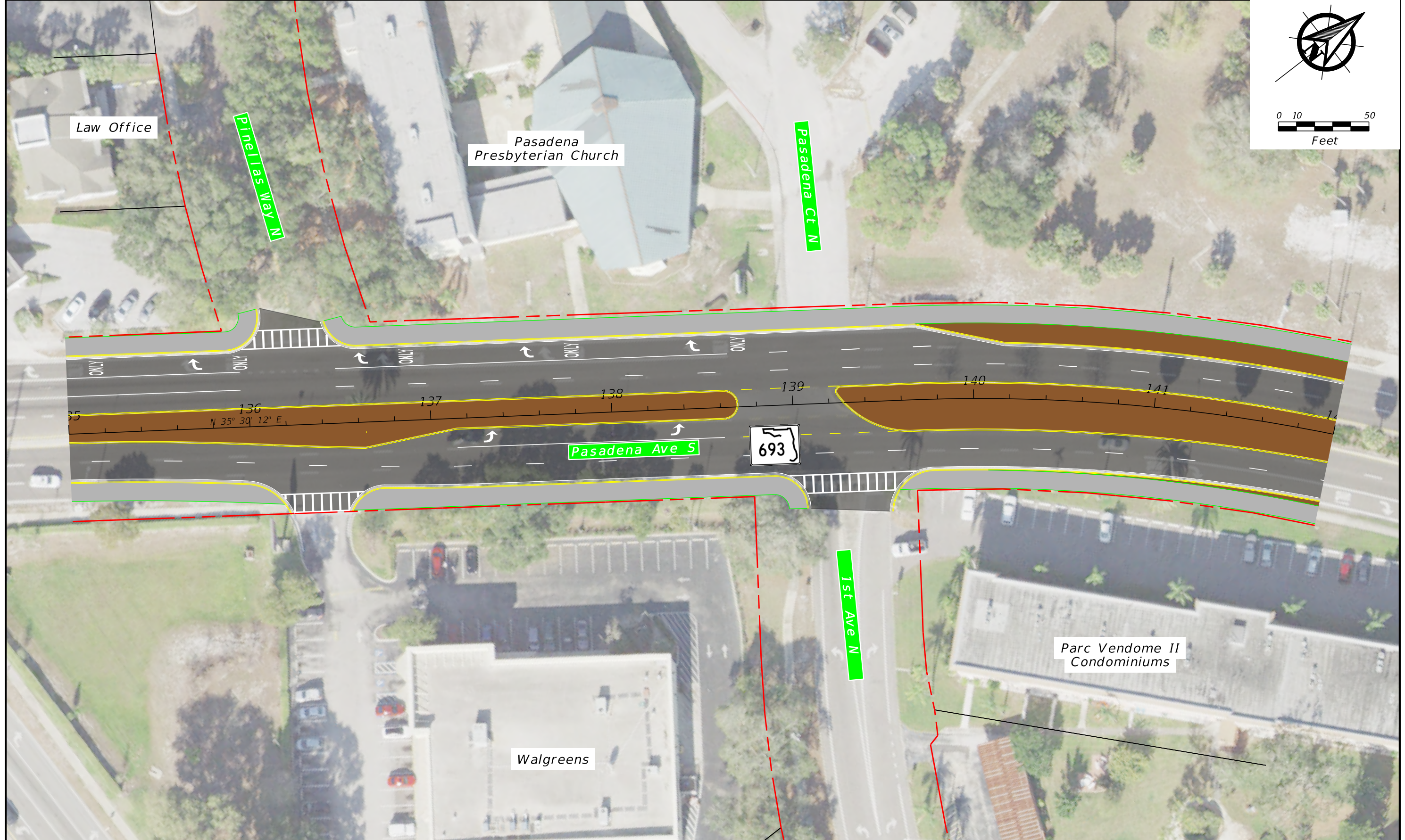
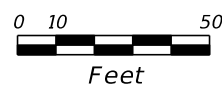
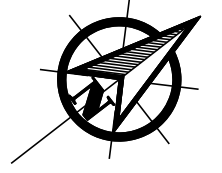
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SR 693 (Pasadena Avenue) Corridor Study **Build Alternative (6-Lane)**

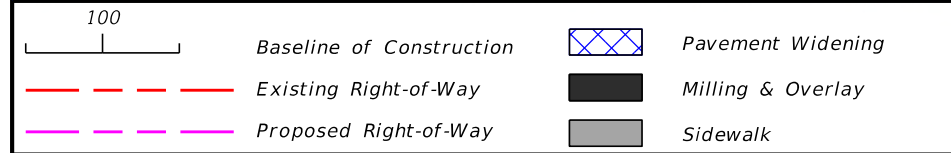
	Baseline of Construction		Pavement Widening		Sod/Landscaping
	Existing Right-of-Way		Milling & Overlay		Traffic Signal
	Proposed Right-of-Way		Sidewalk		

SR 693 (Pasadena Avenue) Corridor Study		
From Shore Drive South to 66th Street		
County: Pinellas County	Work Program Segment: NO. 435910-1	SHEET NO. 11



SR 693 (Pasadena Avenue) Corridor Study

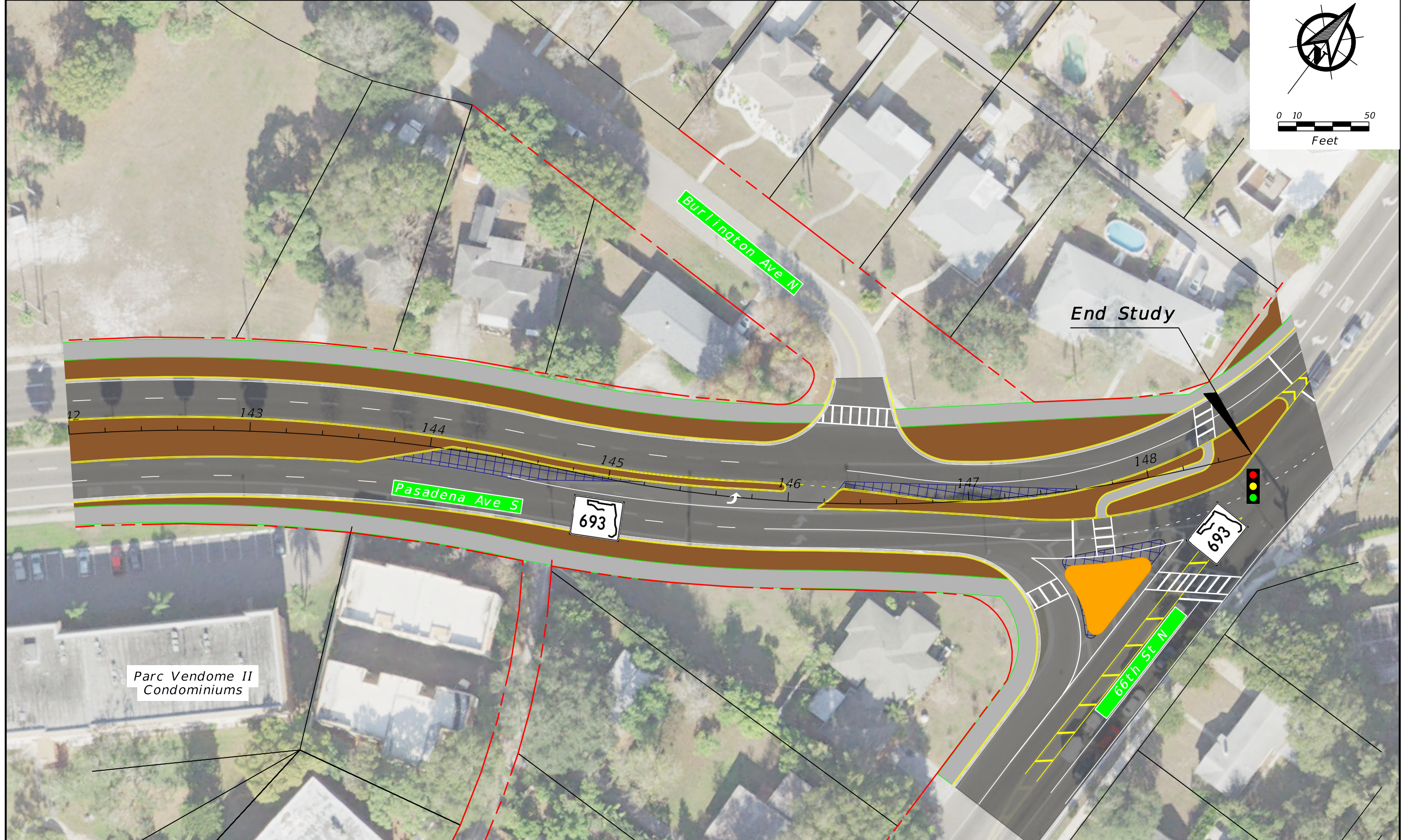
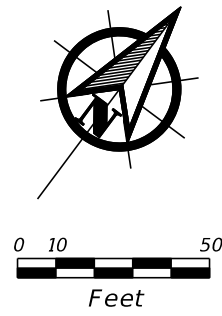
Build Alternative (6-Lane)



SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1

SHEET NO.
12



SR 693 (Pasadena Avenue) Corridor Study


Build Alternative (6-Lane)

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

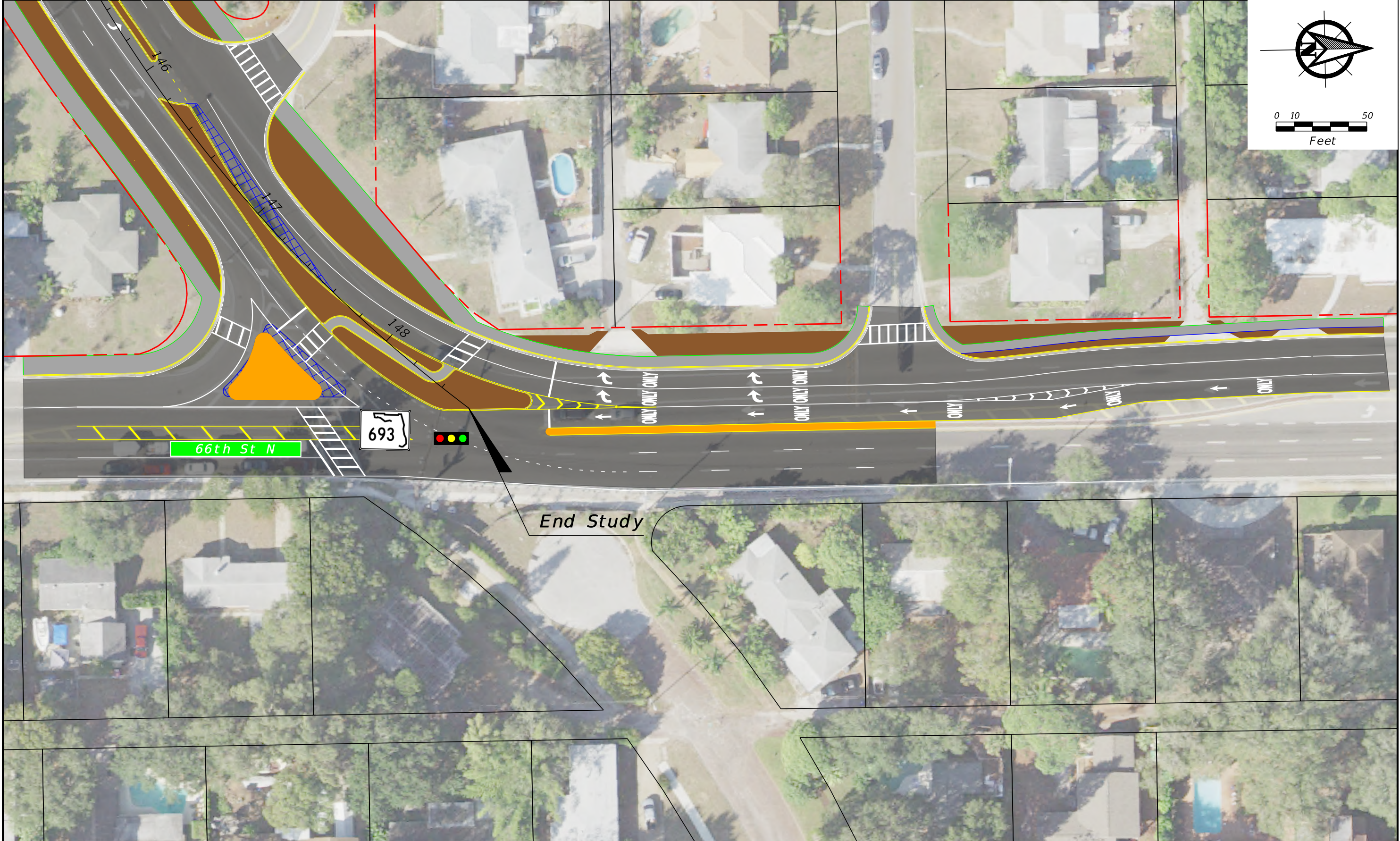
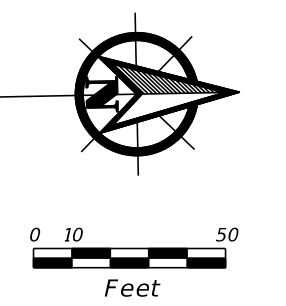
Legend:	
	Sod/Landscaping
	Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.
13



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative (6-Lane)

<p>100</p> <p>Baseline of Construction</p> <p>Existing Right-of-Way</p> <p>Proposed Right-of-Way</p>	<p>Pavement Widening</p> <p>Milling & Overlay</p> <p>Sidewalk</p>	<p>Legend:</p> <p>Sod/Landscaping</p> <p>Traffic Signal</p>
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SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



APPENDIX M – Mid-Term Typical Section and Concept Plans (Build Alternative with BRT 4-Lane)

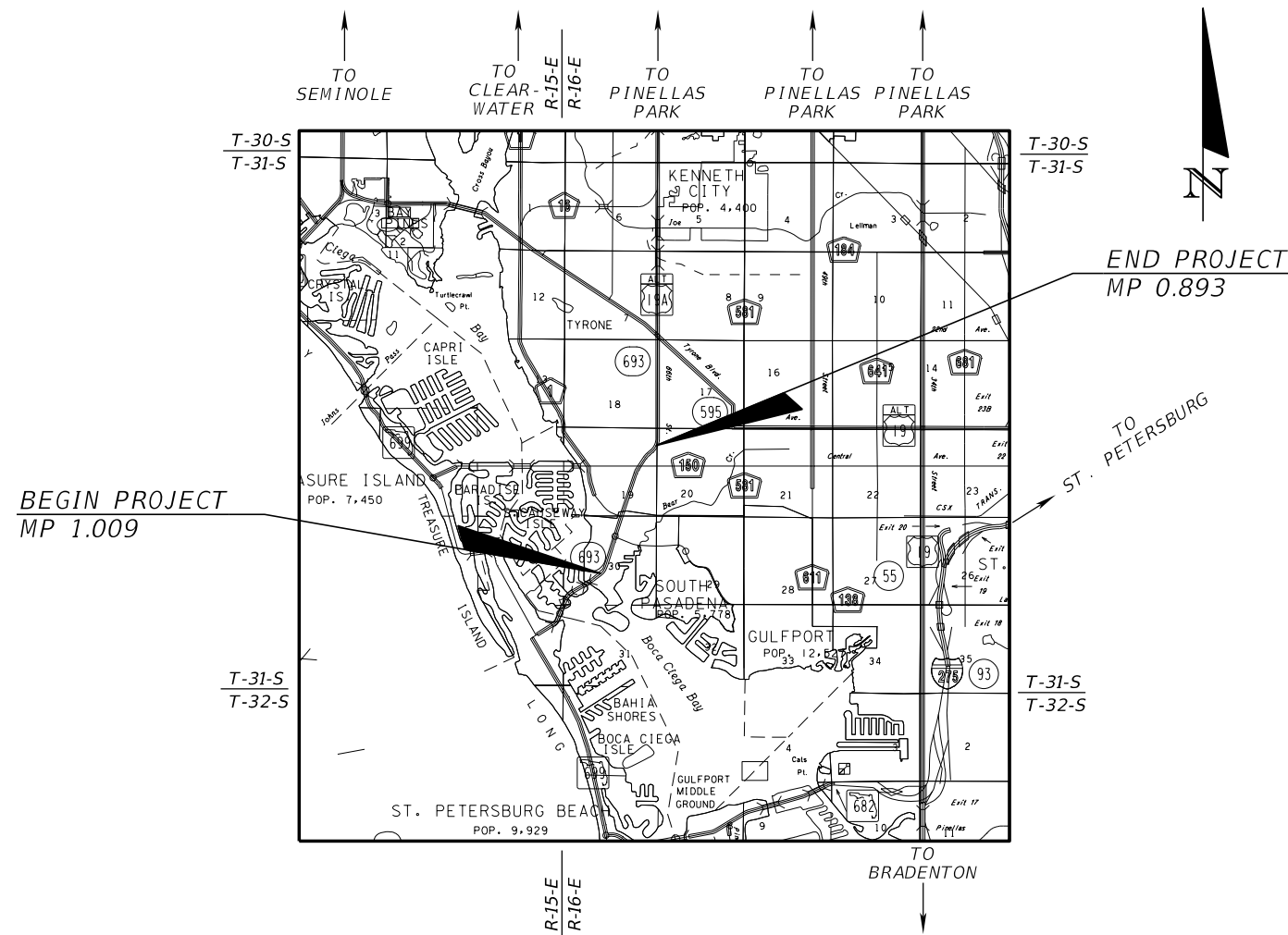
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION PACKAGE

FINANCIAL PROJECT ID 435910-1-22-01

PINELLAS COUNTY (15111 & 15230)

STATE ROAD NO. 693



TYPICAL SECTION PACKAGE

SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
2	TYPICAL SECTION NO. 1
3	TYPICAL SECTION NO. 2
4	TYPICAL SECTION NO. 3

APPROVED BY:

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.

1

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- (X) MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

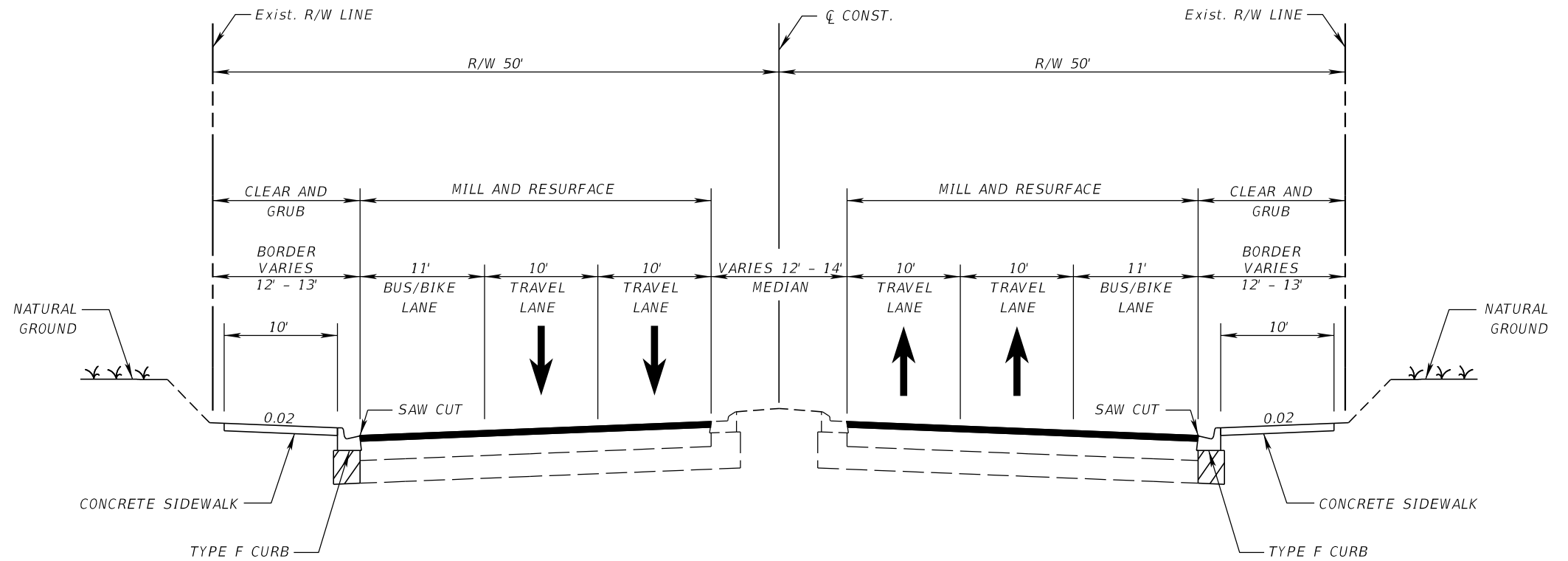
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

LANE WIDTH
MEDIAN WIDTH
BIKE LANE

TYPICAL SECTION No. 1



SR 693 (PASADENA AVENUE)
MP 1.009 TO MP 1.775

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 37,000
 ESTIMATED OPENING YEAR = 2020 AADT = 37,500
 ESTIMATED DESIGN YEAR = 2040 AADT = 39,000
 K = 9% D = 52% T = 3% (24 HOUR)
 DESIGN HOUR T = 1.5%
 DESIGN SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	2

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

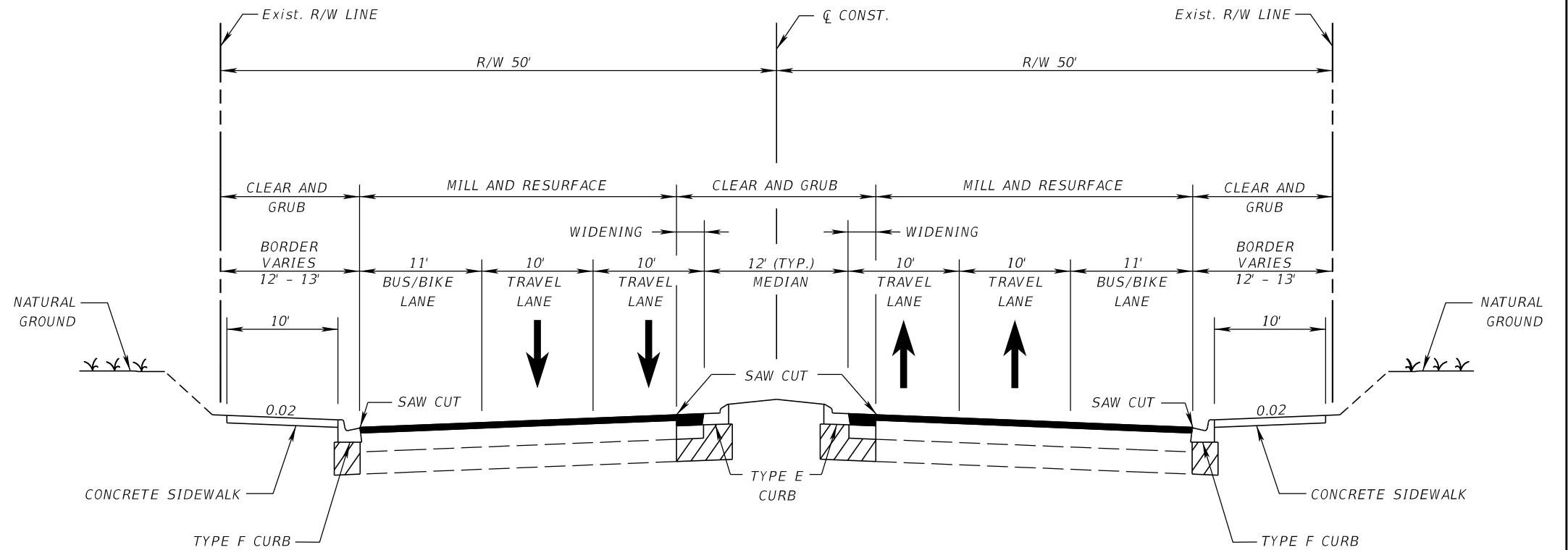
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

LANE WIDTH
MEDIAN WIDTH
BIKE LANE

TYPICAL SECTION No. 2



SR 693 (PASADENA AVENUE)
MP 0.000 TO MP 0.600

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 29,500
 ESTIMATED OPENING YEAR = 2020 AADT = 30,000
 ESTIMATED DESIGN YEAR = 2040 AADT = 32,500
 K = 9% D = 52% T = 3% (24 HOUR)
 DESIGN HOUR T = 1.5%
 DESIGN SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	3

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- () STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

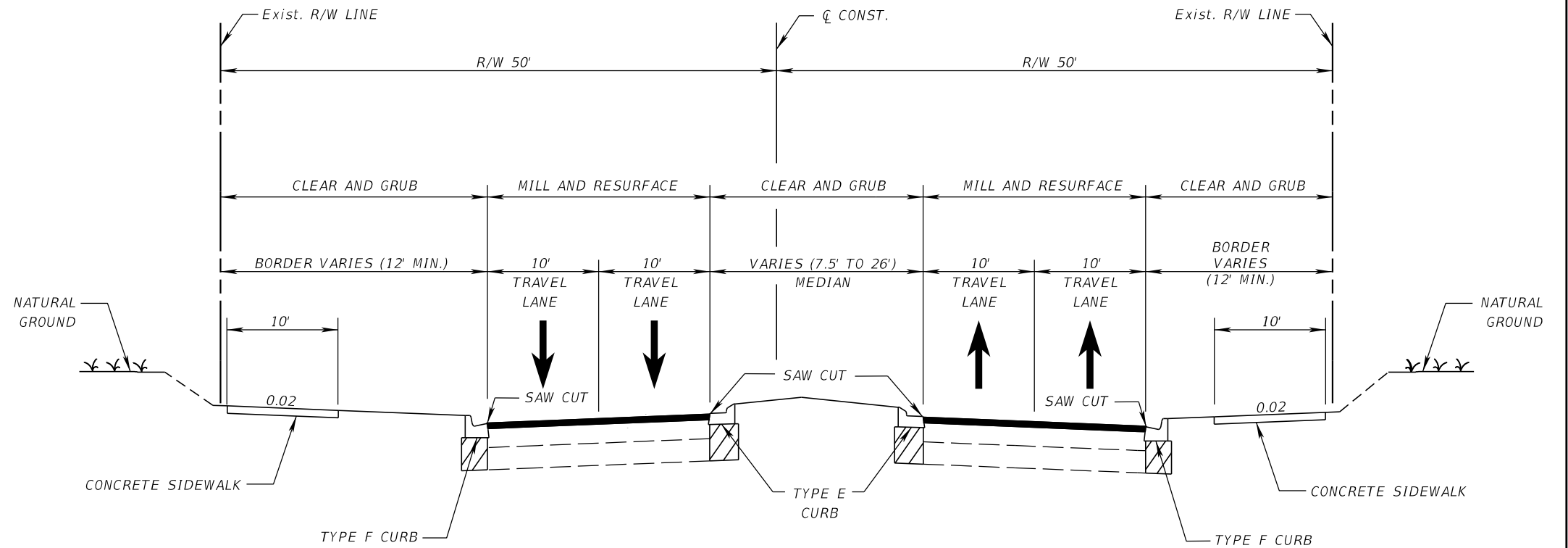
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

LANE WIDTH
 MEDIAN WIDTH
 BIKE LANE

TYPICAL SECTION No. 3



SR 693 (PASADENA AVENUE)
MP 0.600 TO MP 0.863

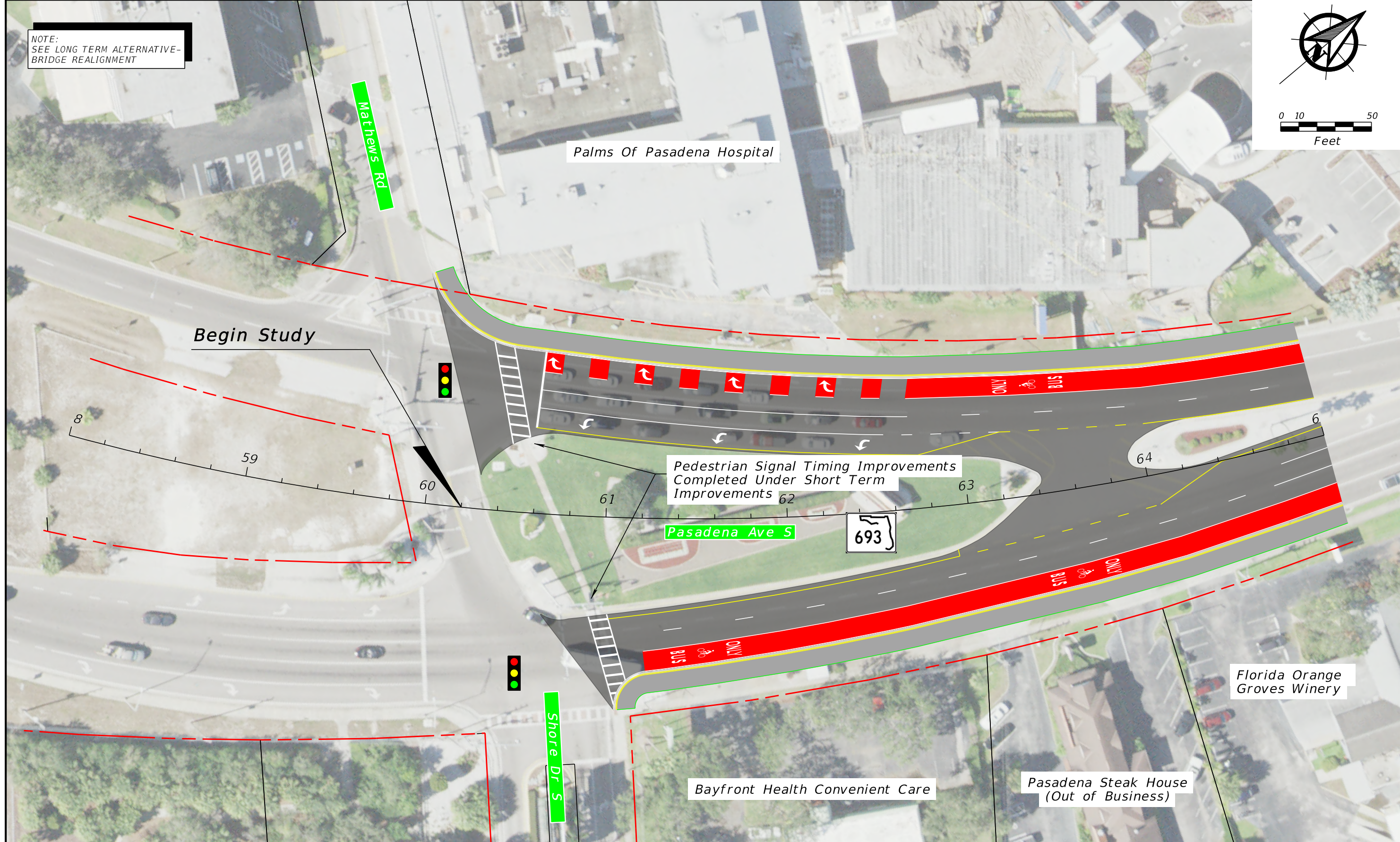
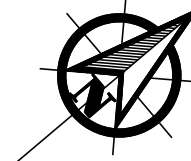
NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 28,500
 ESTIMATED OPENING YEAR = 2020 AADT = 29,000
 ESTIMATED DESIGN YEAR = 2040 AADT = 31,500
 K = 9% D = 52% T = 3% (24 HOUR)
 DESIGN HOUR T = 1.5%
 DESIGN SPEED = 40 MPH

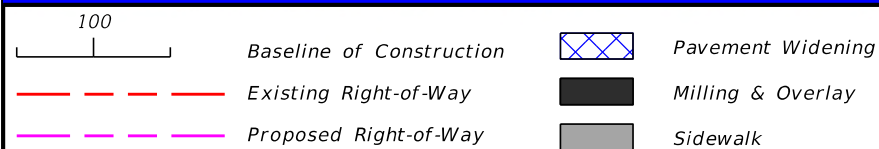
FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	4

NOTE:
SEE LONG TERM ALTERNATIVE-
BRIDGE REALIGNMENT



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk



SR 693 (Pasadena Avenue) Corridor Study

From Shore Drive South to 66th Street

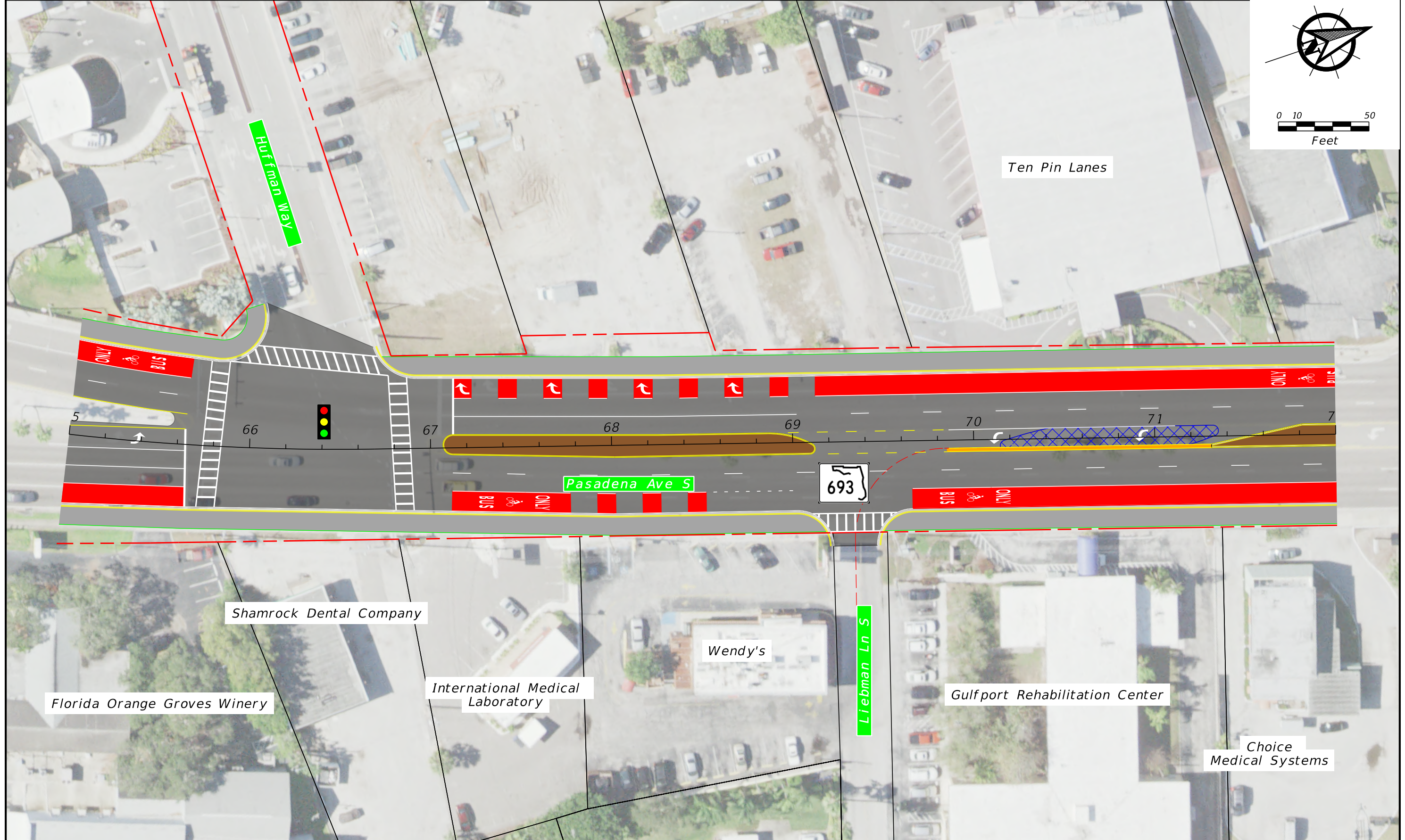
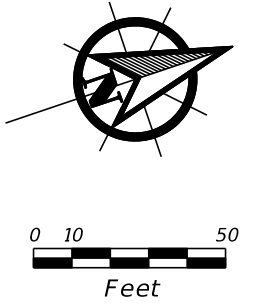
County:
Pinellas County

Work Program Segment:
NO. 435910-1



SHEET
NO.

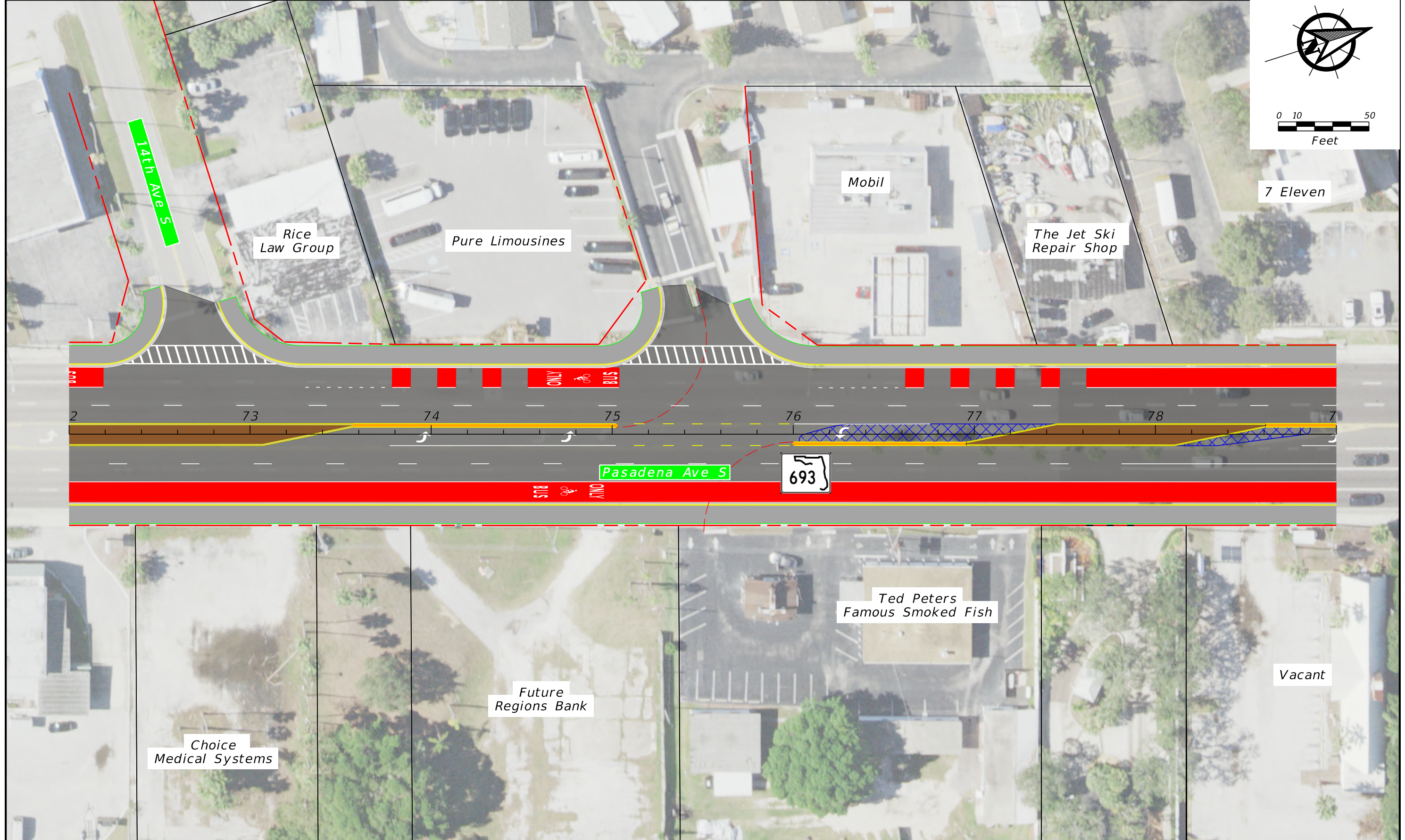
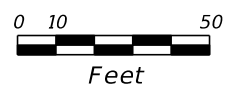
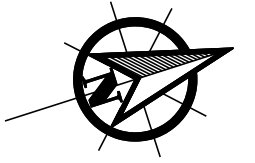
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SR 693 (Pasadena Avenue) Corridor Study **Build Alternative Bus Rapid Transit With Wide Sidewalk**

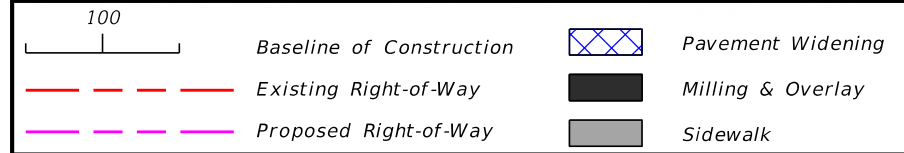
	<p>Baseline of Construction</p> <p>Existing Right-of-Way</p> <p>Proposed Right-of-Way</p>	<p>Pavement Widening</p> <p>Milling & Overlay</p> <p>Sidewalk</p>	<p>Legend:</p> <p>Sod/Landscaping</p> <p>Traffic Signal</p>
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<p>SR 693 (Pasadena Avenue) Corridor Study From Shore Drive South to 66th Street</p>			<p>SHEET NO. 2</p>
<p>County: Pinellas County</p>	<p>Work Program Segment: NO. 435910-1</p>		



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk



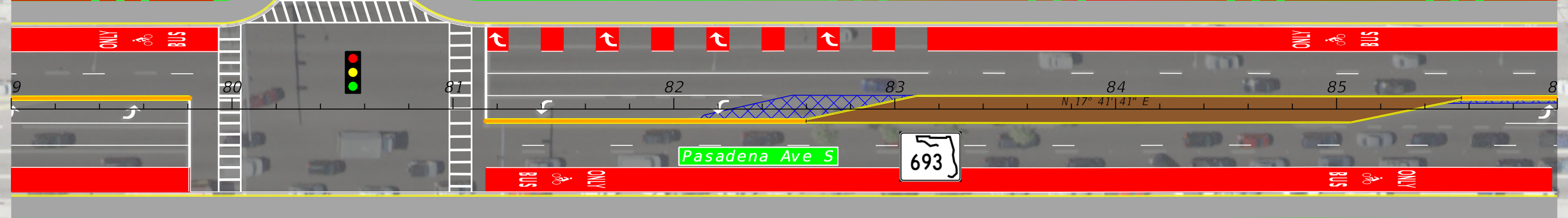
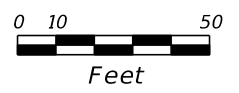
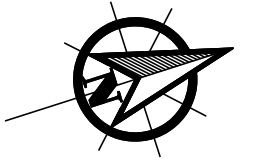
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1

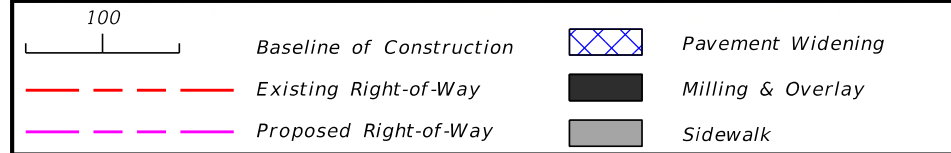


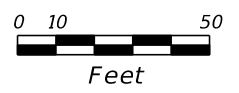
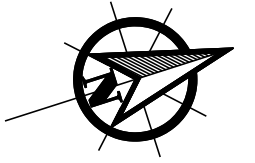
SHEET NO.

3



SR 693 (Pasadena Avenue) Corridor Study **Build Alternative Bus Rapid Transit With Wide Sidewalk**





NOTE:
SEE LONG TERM ALTERNATIVE-
GULFPORT BLVD./SUNSET DR.
INTERSECTION IMPROVEMENTS

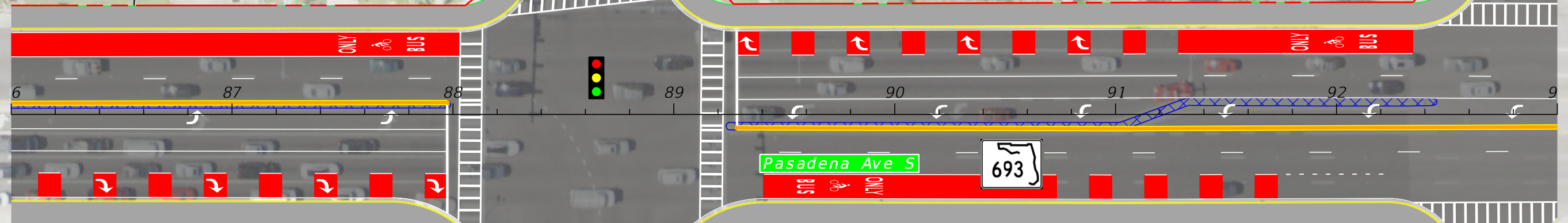
Executive
Building

Wells Fargo

Publix

Hibiscus Ave S

Sunset Dr S



Pasadena Liquors
& Fine Wines

Shell

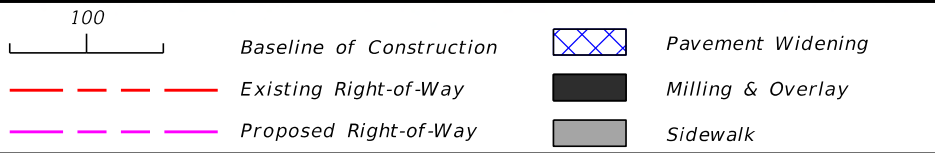
Sun
Country Cleaners

Gulfport Blvd S

Hibiscus Ave S

SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk



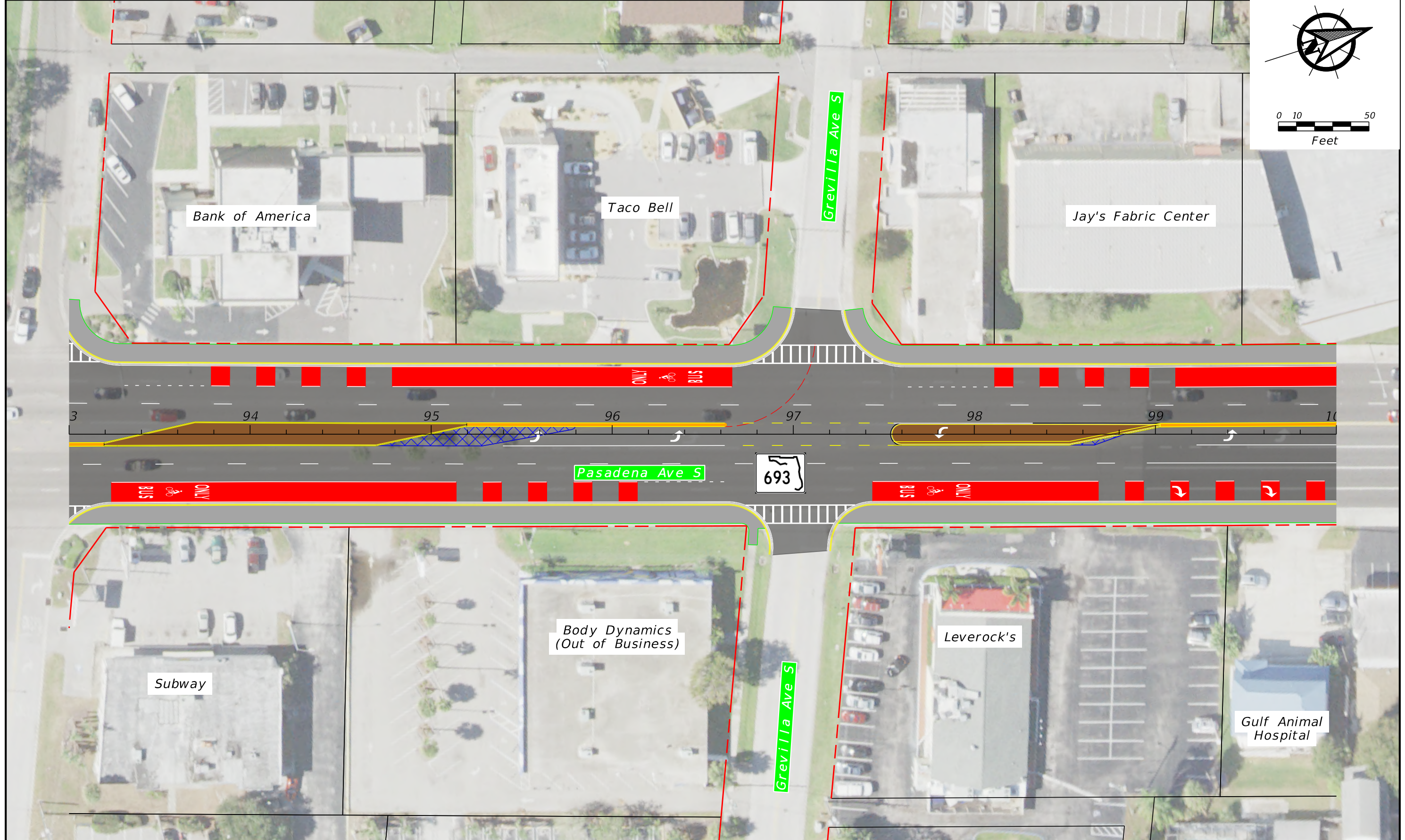
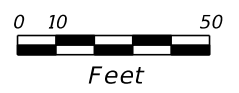
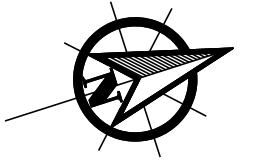
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1

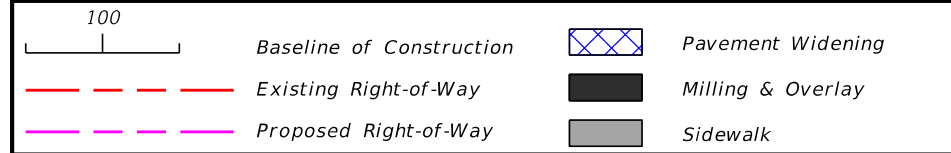


SHEET
NO.

5



Build Alternative Bus Rapid Transit With Wide Sidewalk



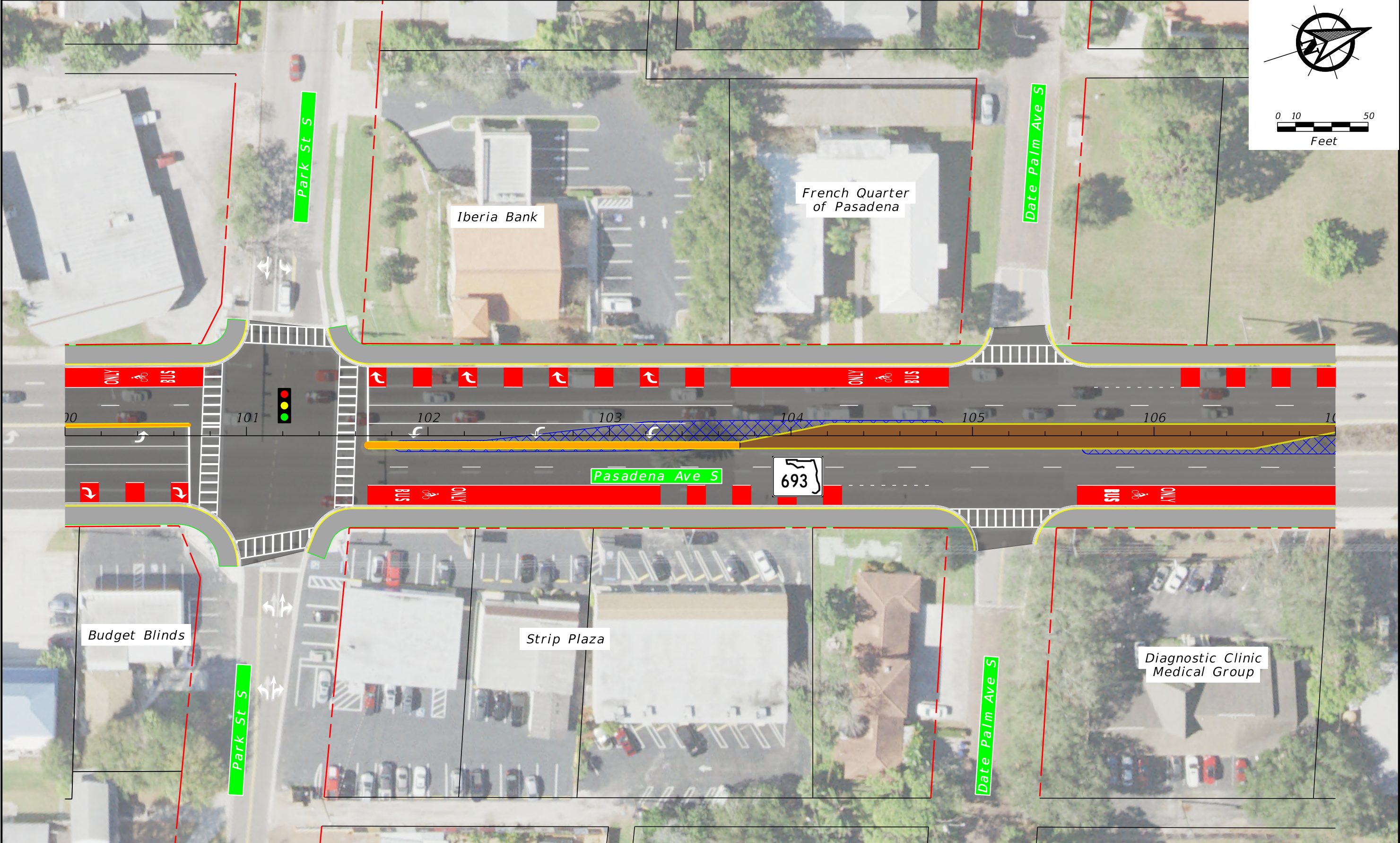
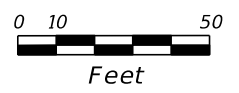
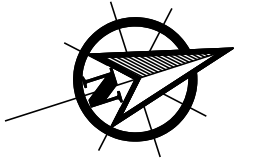
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County
 Work Program Segment: NO. 435910-1



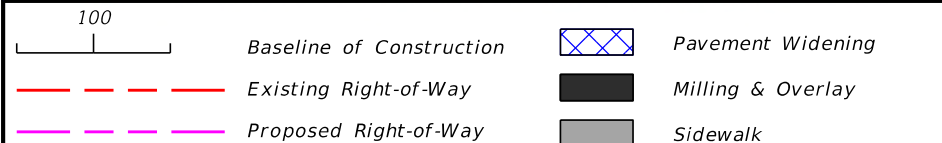
SHEET NO.

6




SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk



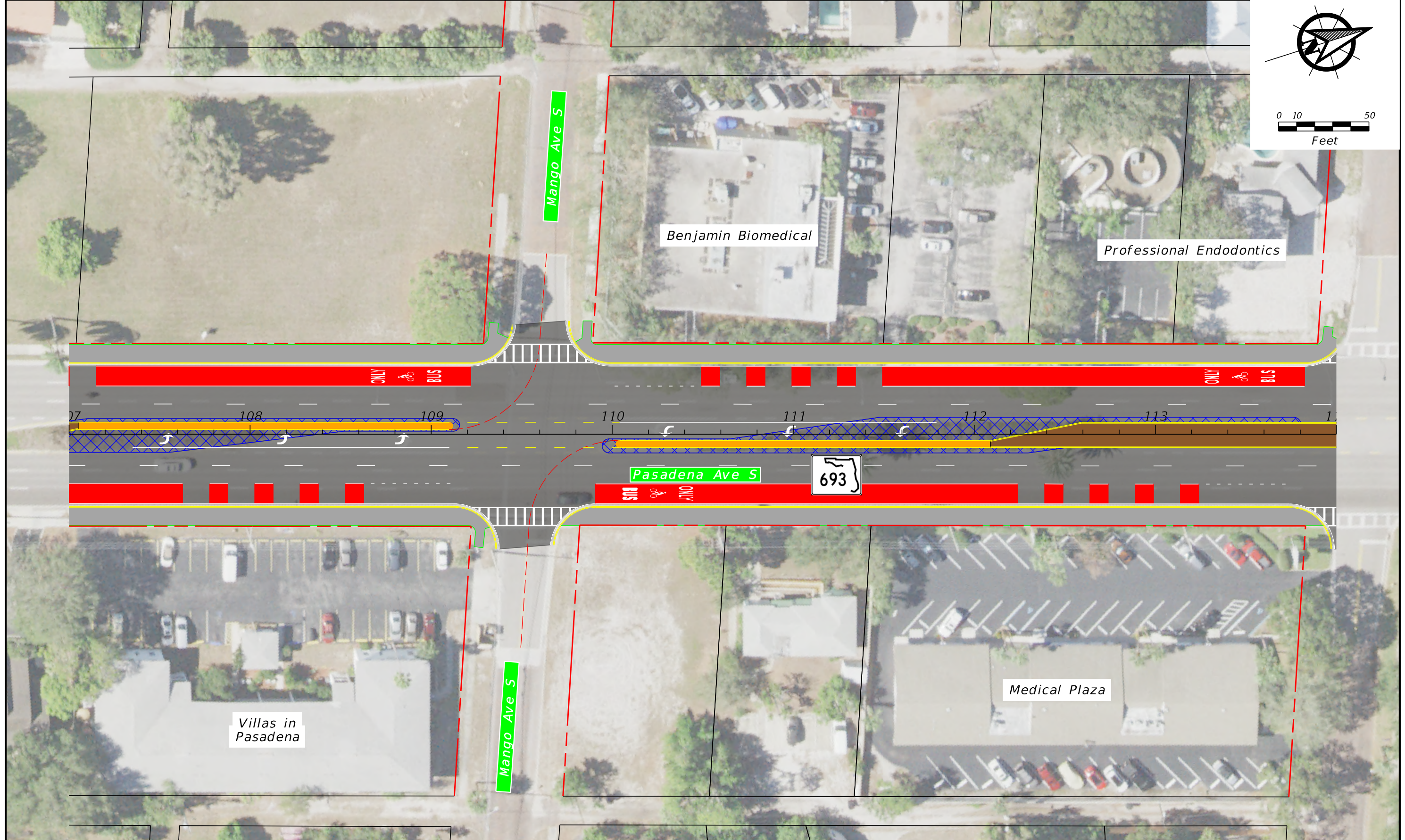
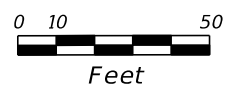
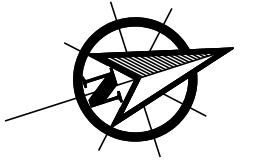
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



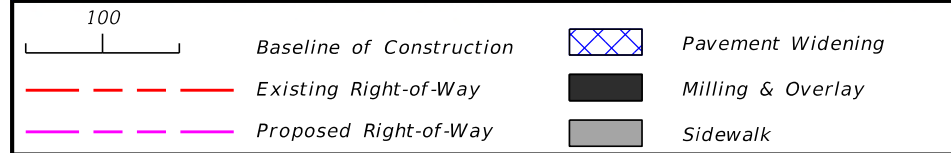
SHEET NO.

7



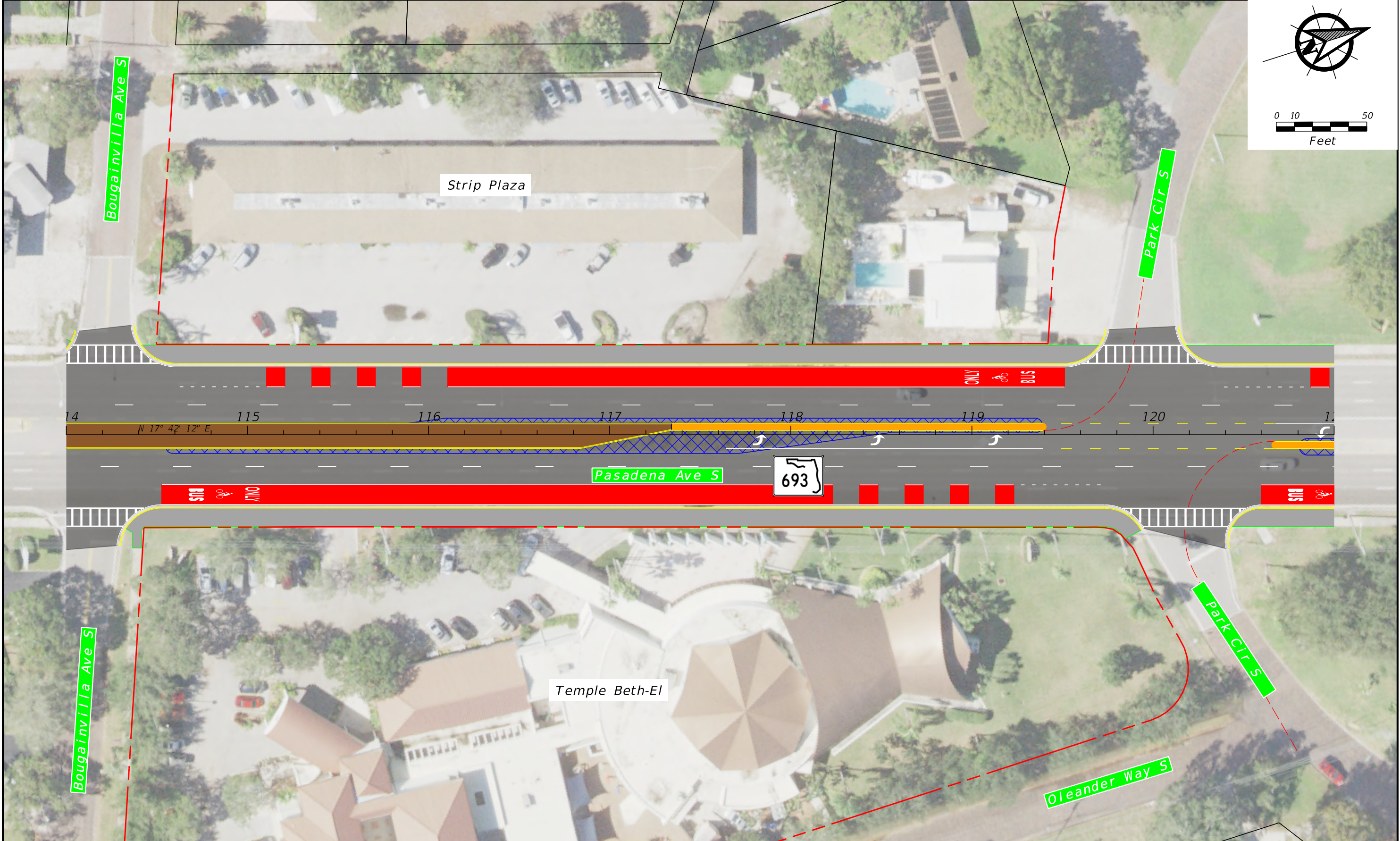
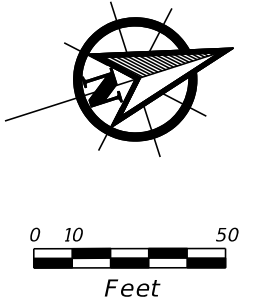
SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk



SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk

- 100
- Existing Right-of-Way
- Proposed Right-of-Way
- Pavement Widening
- Milling & Overlay
- Sidewalk
- Traffic Signal

- Legend:**
- Sod/Landscaping
 - Traffic Signal

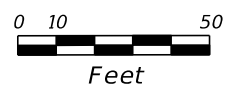
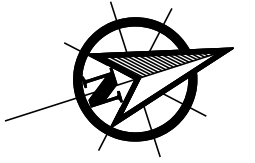
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

9

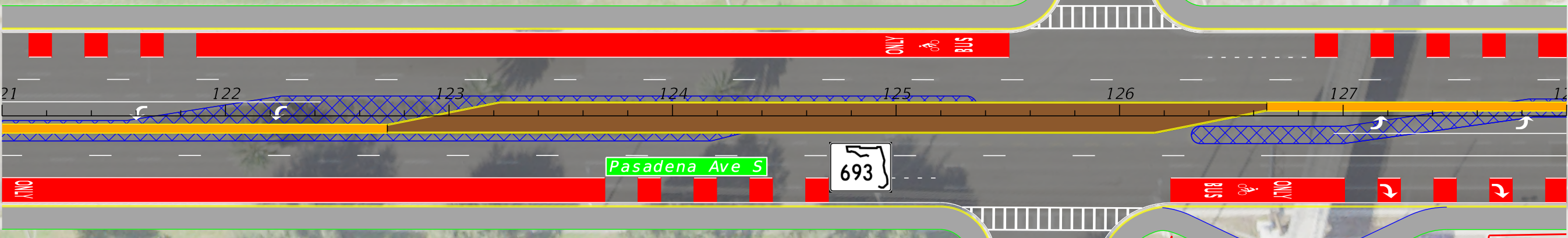


Land Owned by City of St. Pete

All Seasons Landscaping

Park Cir S

Pinellas Trail



Land Owned by City of St. Pete

Park Cir S

Pinellas Trail

Pasadena Car Care Center

SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal

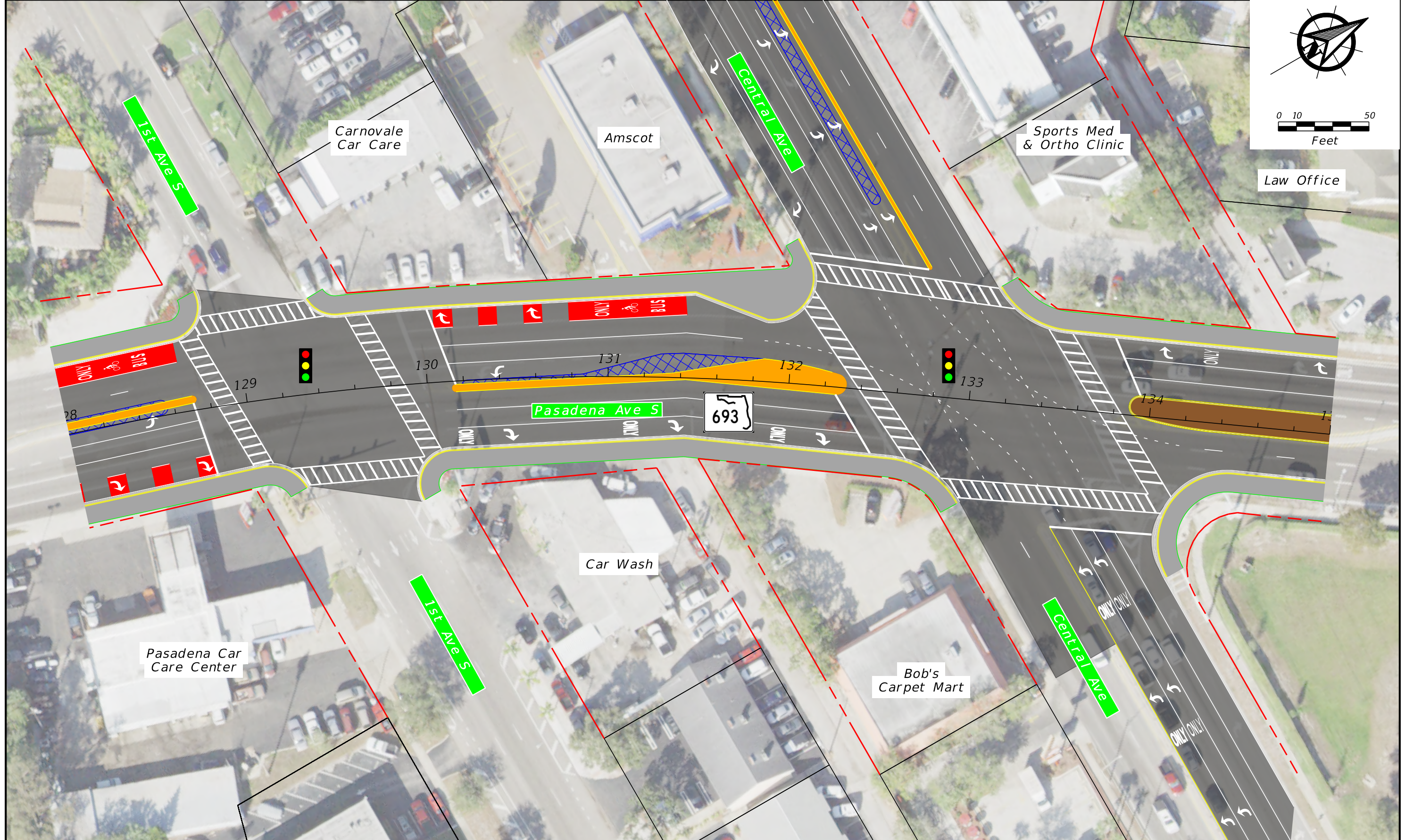
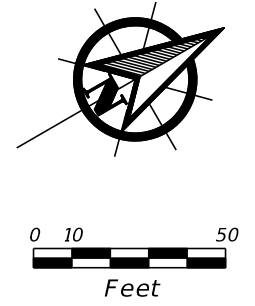
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

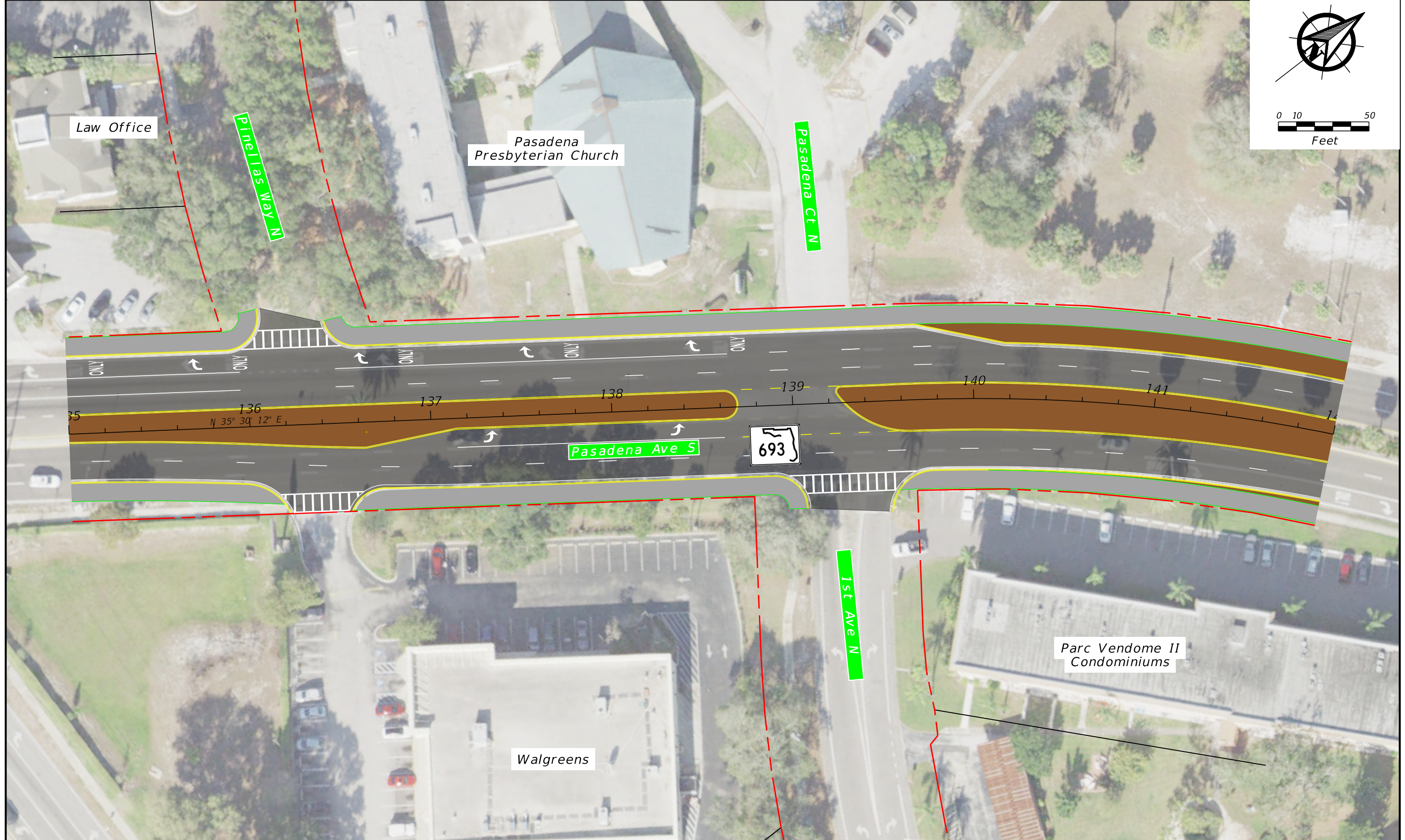
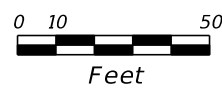
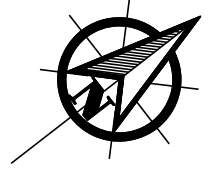
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SR 693 (Pasadena Avenue) Corridor Study **Build Alternative Bus Rapid Transit With Wide Sidewalk**

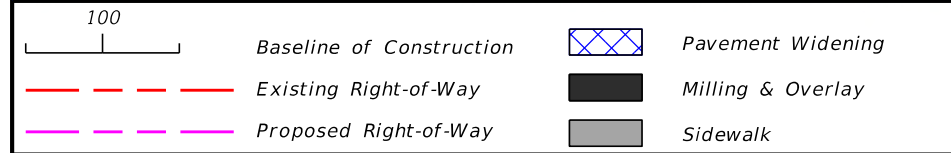
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--	--	--

<p>SR 693 (Pasadena Avenue) Corridor Study</p> <p>From Shore Drive South to 66th Street</p>			<p>SHEET NO.</p>
<p>County: Pinellas County</p>	<p>Work Program Segment: NO. 435910-1</p>		<p>11</p>




SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk

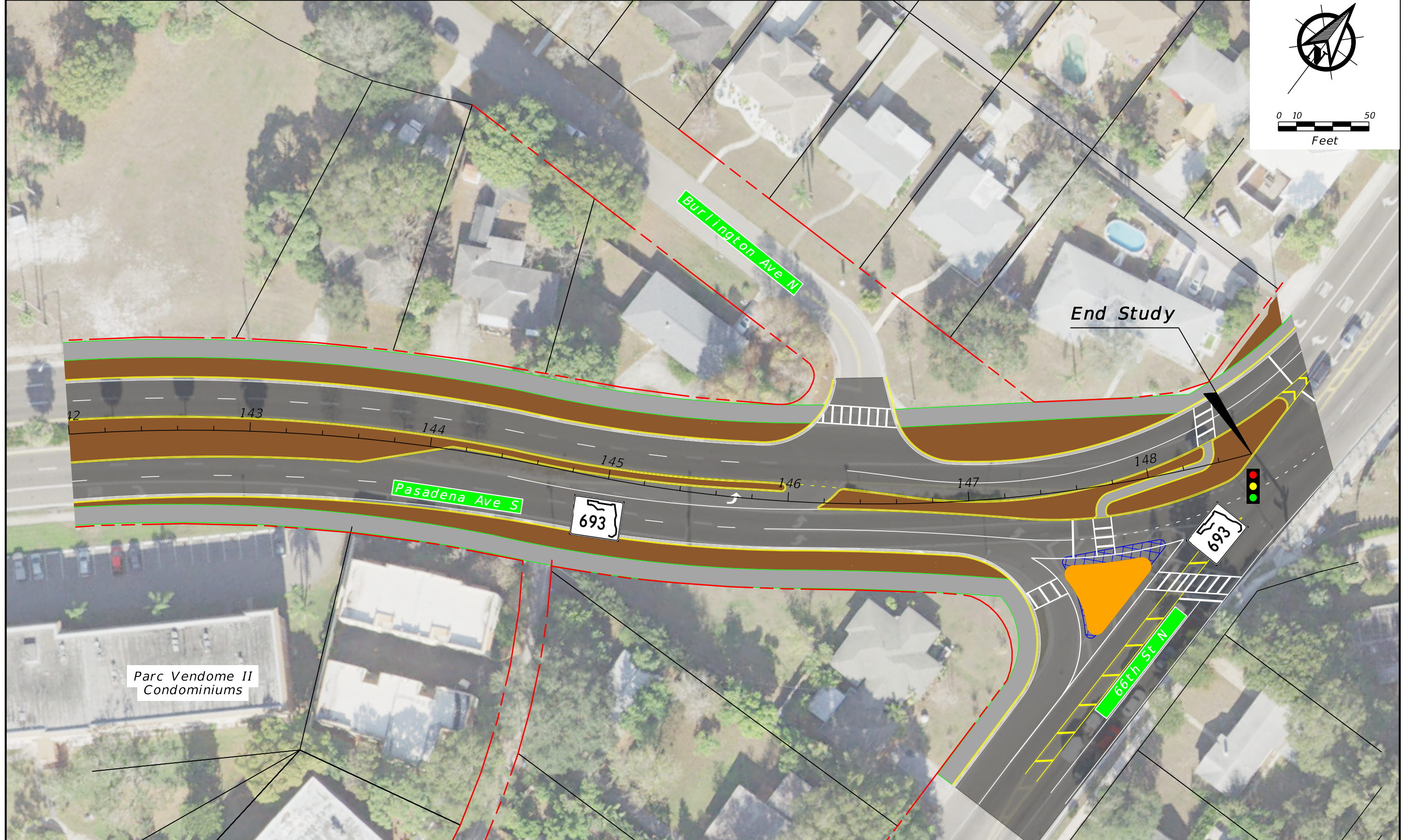
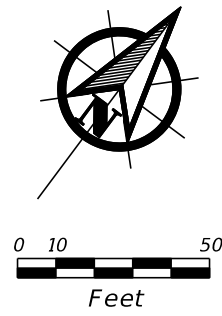


SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.
12



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk


	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

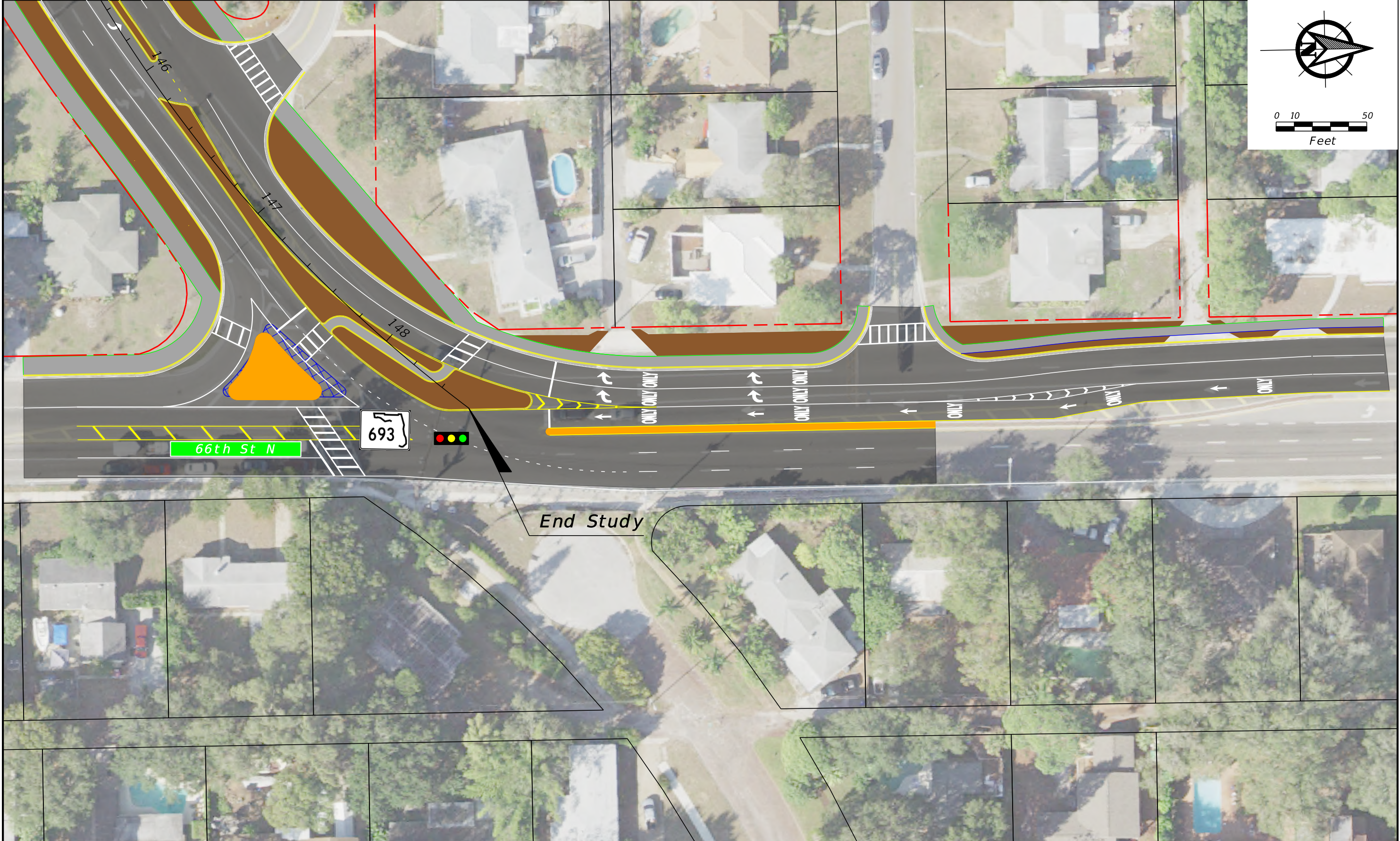
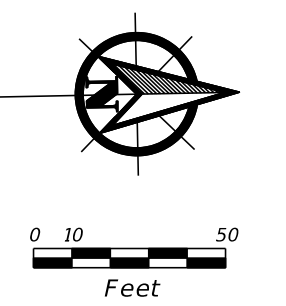
	Sod/Landscaping
	Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.
13



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Bus Rapid Transit With Wide Sidewalk

- 100
- Existing Right-of-Way
- Proposed Right-of-Way
- Pavement Widening
- Milling & Overlay
- Sidewalk

- Legend:**
- Sod/Landscaping
 - Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

14



APPENDIX N – Mid-Term Typical Section and Concept Plans (Build Alternative Road Diet 4-Lane)

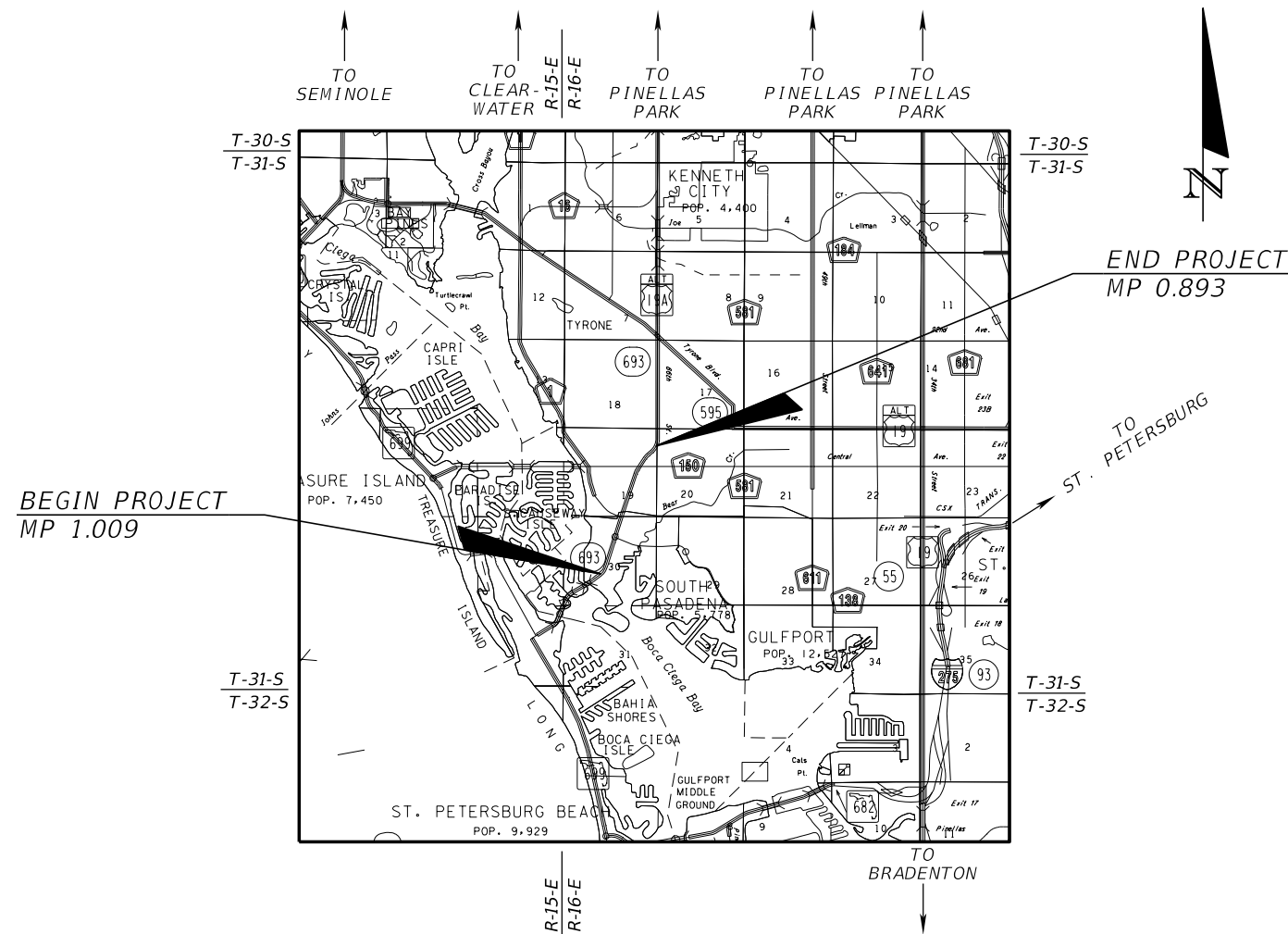
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION PACKAGE

FINANCIAL PROJECT ID 435910-1-22-01

PINELLAS COUNTY (15111 & 15230)

STATE ROAD NO. 693



TYPICAL SECTION PACKAGE

SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
2	TYPICAL SECTION NO. 1
3	TYPICAL SECTION NO. 2
4	TYPICAL SECTION NO. 3

APPROVED BY:

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.

1

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- (X) MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

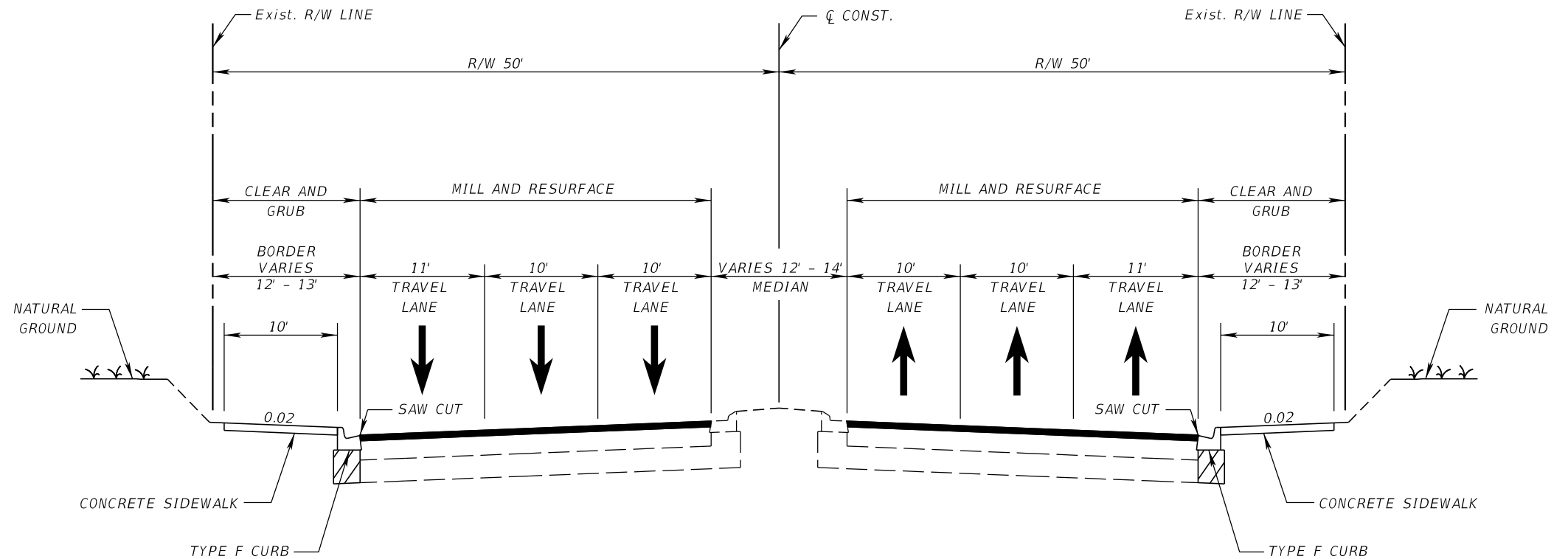
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

LANE WIDTH
MEDIAN WIDTH
BIKE LANE

TYPICAL SECTION No. 1



SR 693 (PASADENA AVENUE)
MP 1.009 TO MP 1.775

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 37,000
 ESTIMATED OPENING YEAR = 2020 AADT = 37,500
 ESTIMATED DESIGN YEAR = 2040 AADT = 40,000
 K = 9% D = 52% T = 3% (24 HOUR)
 DESIGN HOUR T = 1.5%
 DESIGN SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	2

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

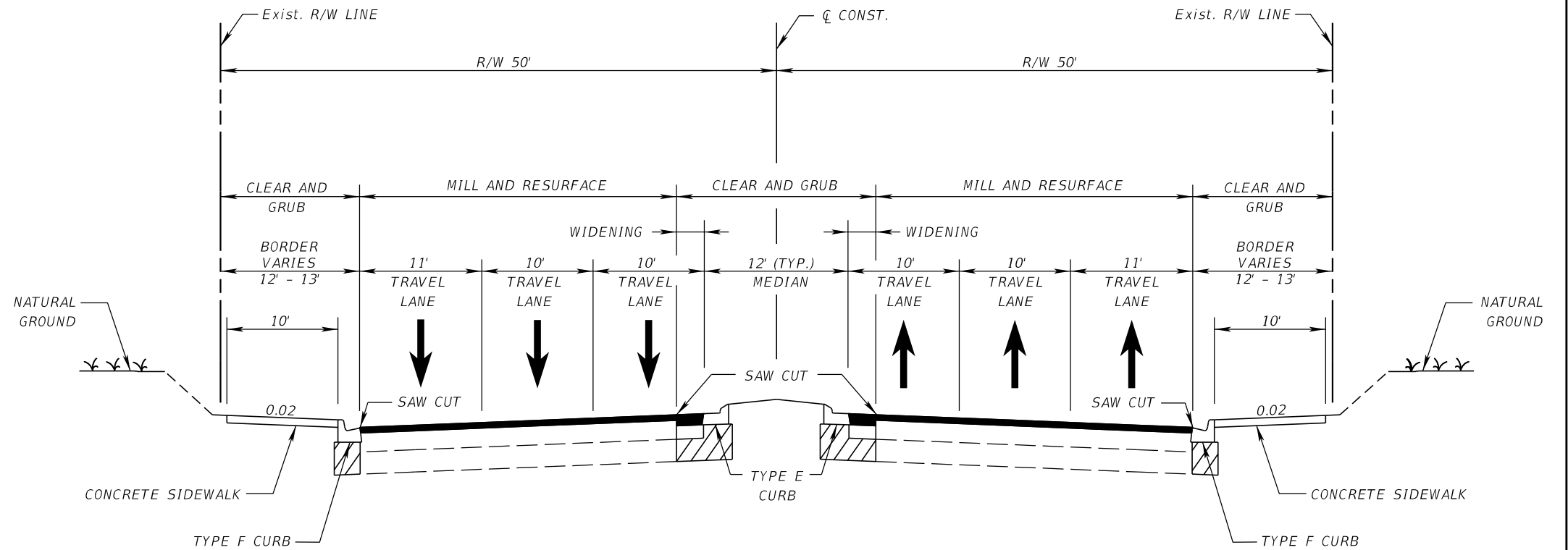
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

LANE WIDTH
MEDIAN WIDTH
BIKE LANE

TYPICAL SECTION No. 2



SR 693 (PASADENA AVENUE)
MP 0.000 TO MP 0.600

NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 29,500
ESTIMATED OPENING YEAR = 2020 AADT = 30,000
ESTIMATED DESIGN YEAR = 2040 AADT = 32,500
K = 9% D = 52% T = 3% (24 HOUR)
DESIGN HOUR T = 1.5%
DESIGN SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	3

PROJECT CONTROLS

CONTEXT CLASSIFICATION

- () C1 : NATURAL () C3C : SUBURBAN COMM.
- () C2 : RURAL (X) C4 : URBAN GENERAL
- () C2T : RURAL TOWN () C5 : URBAN CENTER
- () C3R : SUBURBAN RES. () C6 : URBAN CORE
- () N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- () FREEWAY/EXPWY. () MINOR COLLECTOR
- (X) PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

HIGHWAY SYSTEM

- () NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- () 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- (X) 7 - BOTH MEDIAN TYPES

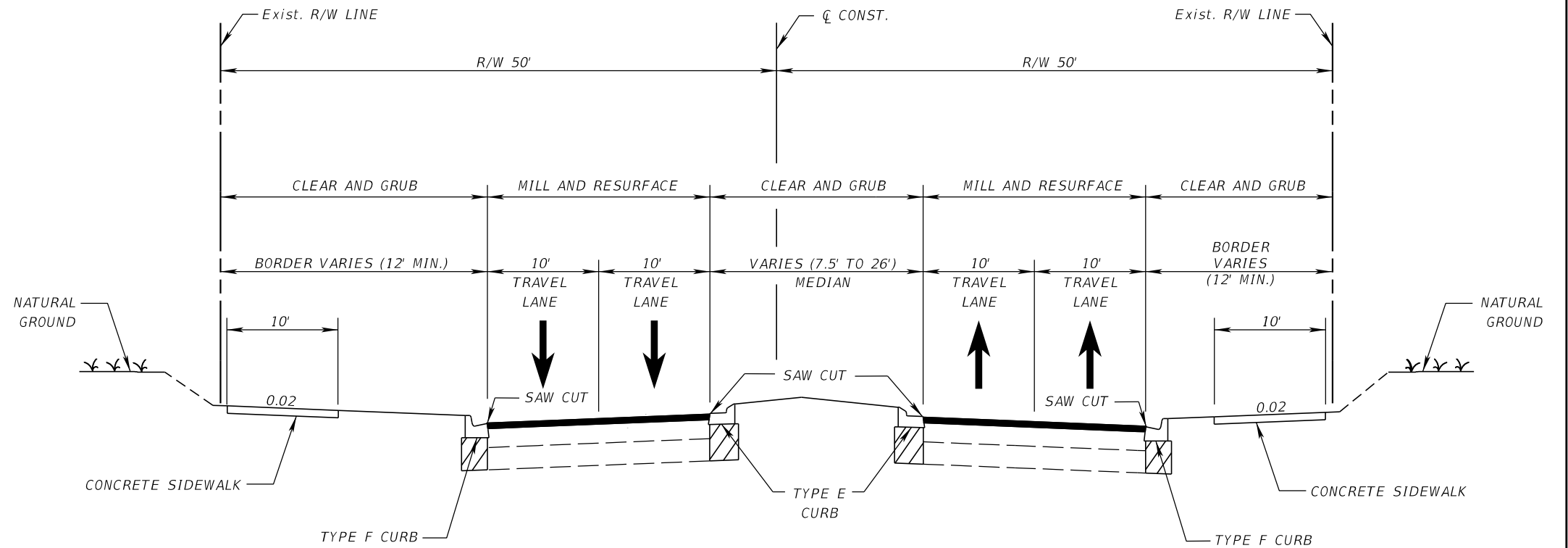
CRITERIA

- () NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

LANE WIDTH
MEDIAN WIDTH
BIKE LANE

TYPICAL SECTION No. 3



SR 693 (PASADENA AVENUE)
MP 0.600 TO MP 0.863

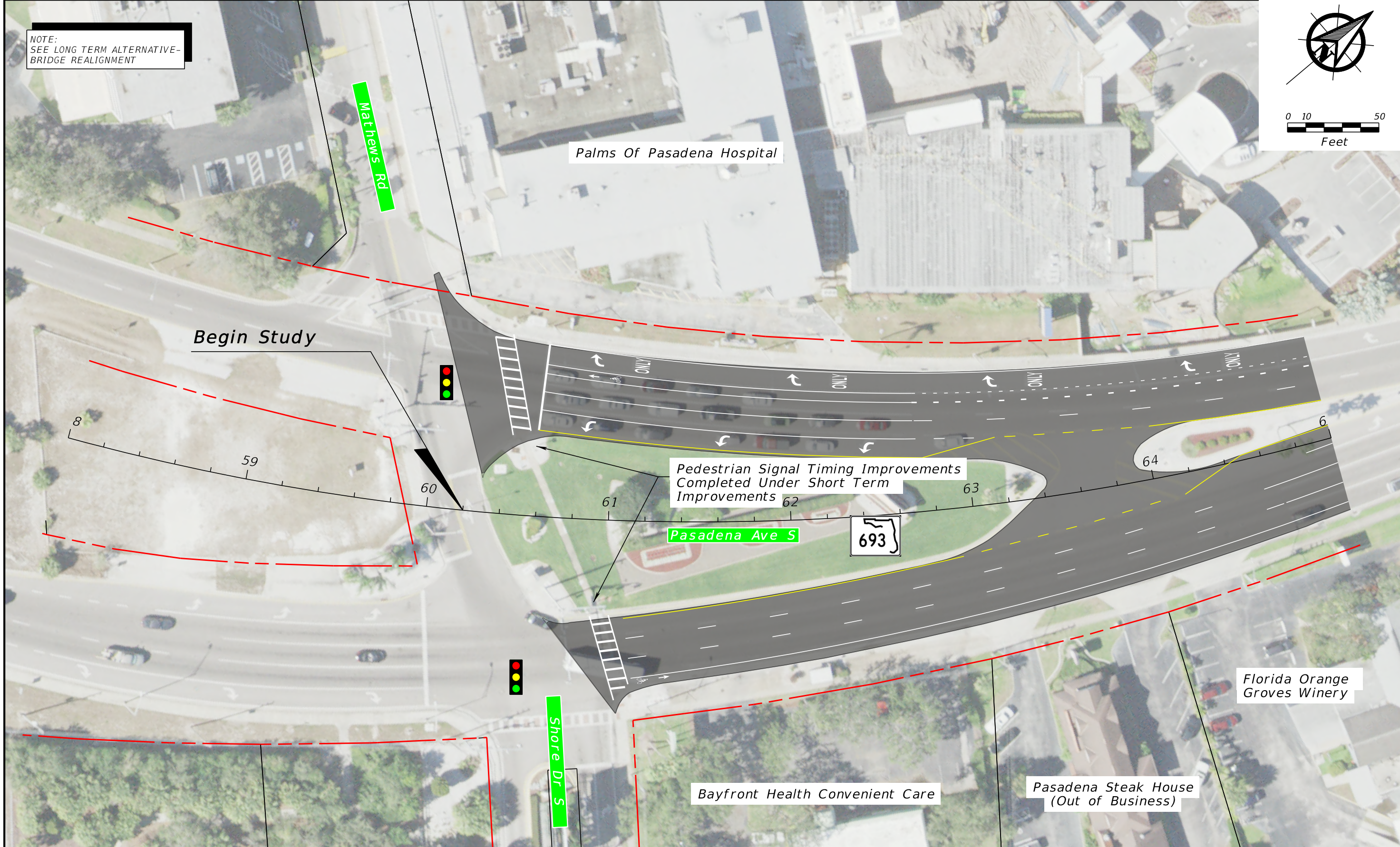
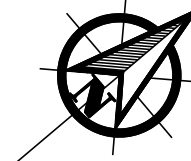
NOT TO SCALE

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 28,500
ESTIMATED OPENING YEAR = 2020 AADT = 29,000
ESTIMATED DESIGN YEAR = 2040 AADT = 32,000
K = 9% D = 52% T = 3% (24 HOUR)
DESIGN HOUR T = 1.5%
DESIGN SPEED = 40 MPH

FINANCIAL PROJECT ID	SHEET NO.
435910-1-22-01	4

NOTE:
SEE LONG TERM ALTERNATIVE-
BRIDGE REALIGNMENT



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Road Diet (4-Lane)

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study

From Shore Drive South to 66th Street

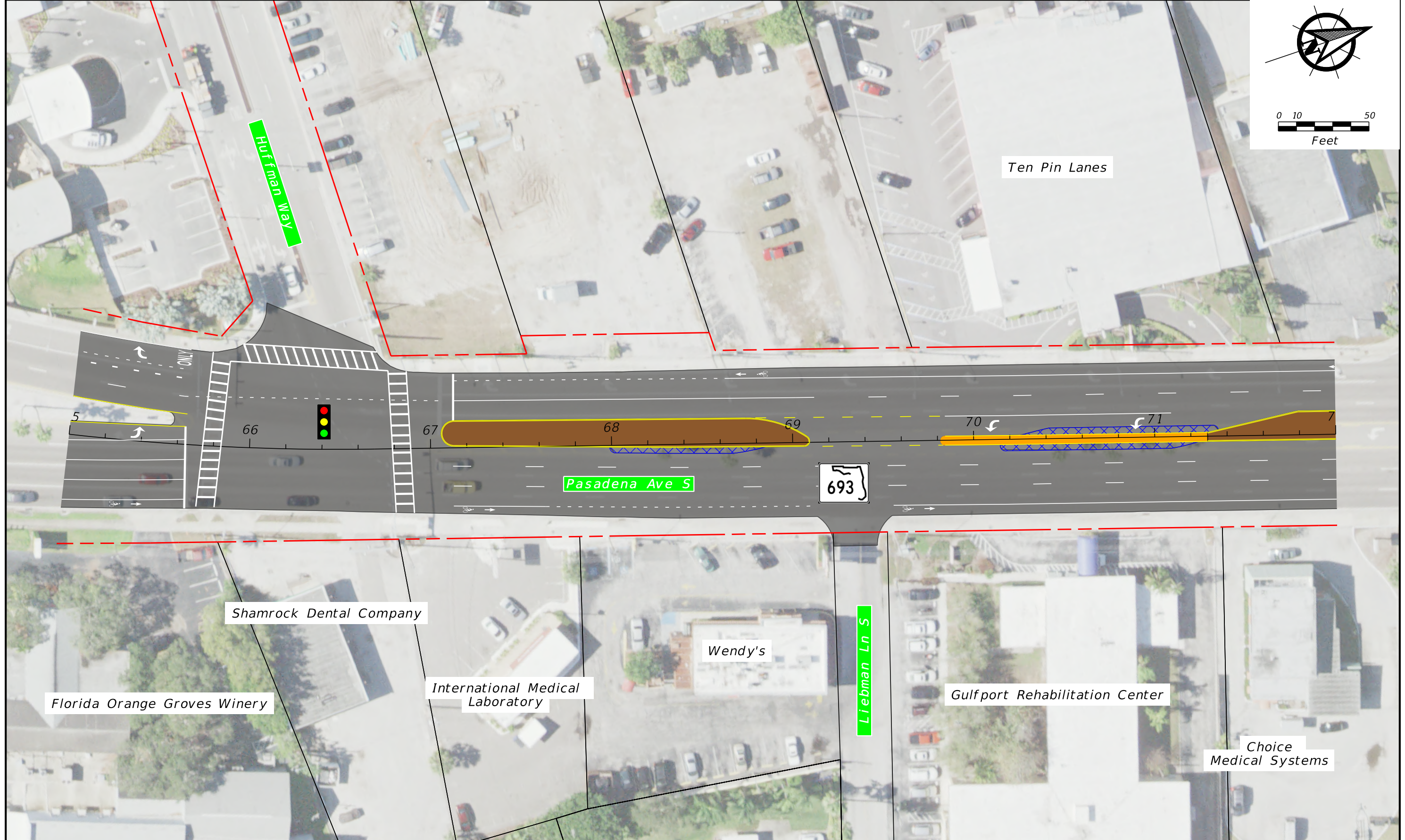
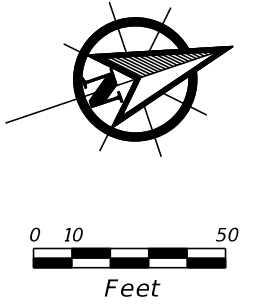
County:
Pinellas County

Work Program Segment:
NO. 435910-1



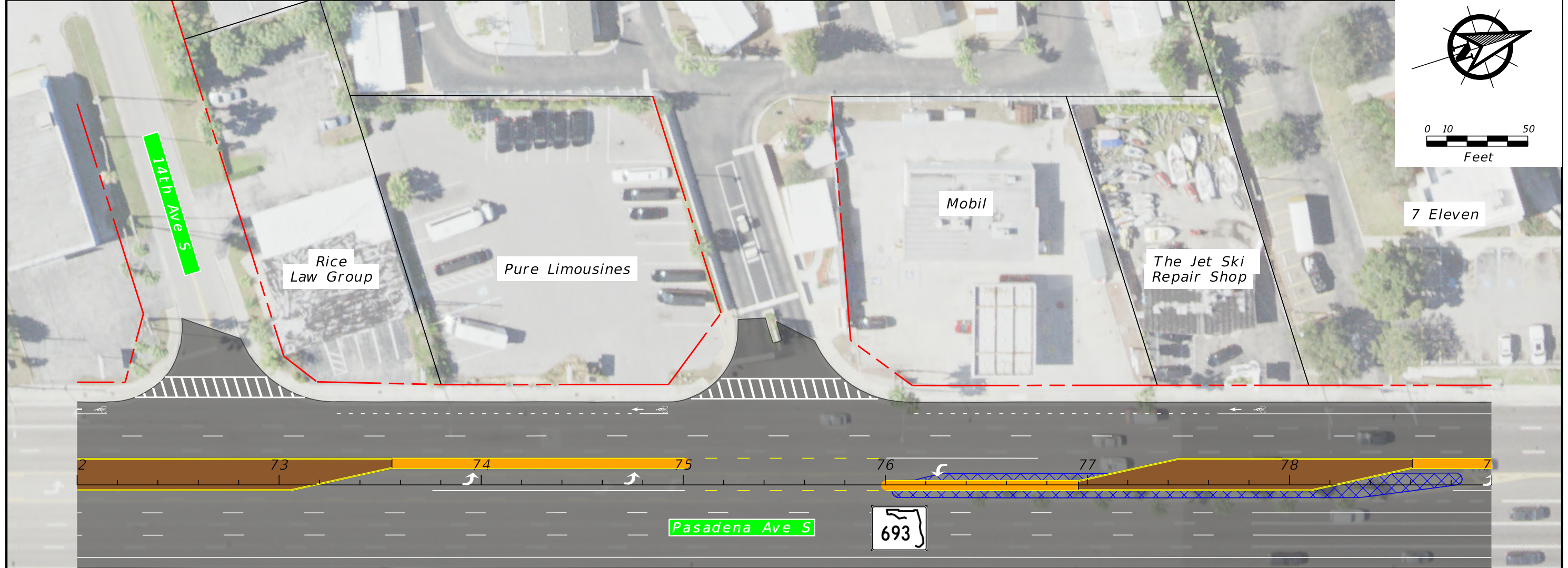
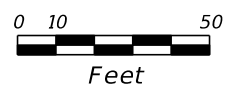
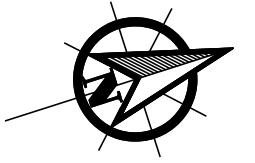
SHEET
NO.

1



	Baseline of Construction		Pavement Widening		Sod/Landscaping
	Existing Right-of-Way		Milling & Overlay		Traffic Signal
	Proposed Right-of-Way		Sidewalk		

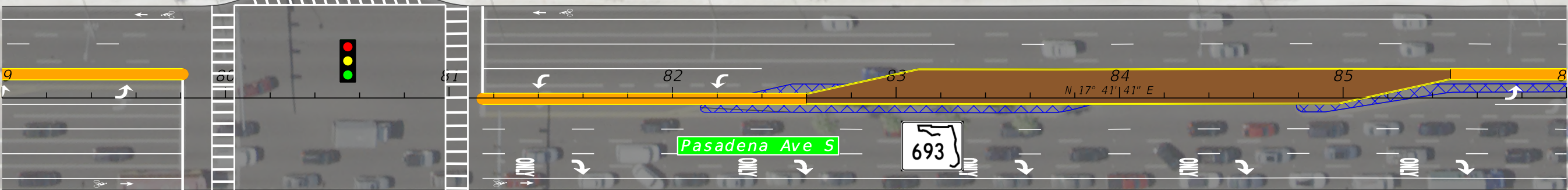
SR 693 (Pasadena Avenue) Corridor Study		
<i>From Shore Drive South to 66th Street</i>		
County: Pinellas County	Work Program Segment: NO. 435910-1	SHEET NO. 2



SR 693 (Pasadena Avenue) Corridor Study **Build Alternative Road Diet (4-Lane)**

	Baseline of Construction		Pavement Widening		Sod/Landscaping
	Existing Right-of-Way		Milling & Overlay		Traffic Signal
	Proposed Right-of-Way		Sidewalk		

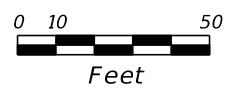
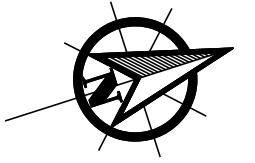
SR 693 (Pasadena Avenue) Corridor Study			SHEET NO.
From Shore Drive South to 66th Street			3
County: Pinellas County	Work Program Segment: NO. 435910-1		



SR 693 (Pasadena Avenue) Corridor Study **Build Alternative Road Diet (4-Lane)**

	<p>Baseline of Construction</p> <p>Existing Right-of-Way</p> <p>Proposed Right-of-Way</p>	<p>Pavement Widening</p> <p>Milling & Overlay</p> <p>Sidewalk</p>	<p>Legend:</p> <p>Sod/Landscaping</p> <p>Traffic Signal</p>
--	---	---	--

<p>SR 693 (Pasadena Avenue) Corridor Study</p> <p>From Shore Drive South to 66th Street</p>			<p>SHEET NO.</p>
<p>County: Pinellas County</p>	<p>Work Program Segment: NO. 435910-1</p>		<p>4</p>



NOTE:
SEE LONG TERM ALTERNATIVE-
GULFPORT BLVD./SUNSET DR.
INTERSECTION IMPROVEMENTS

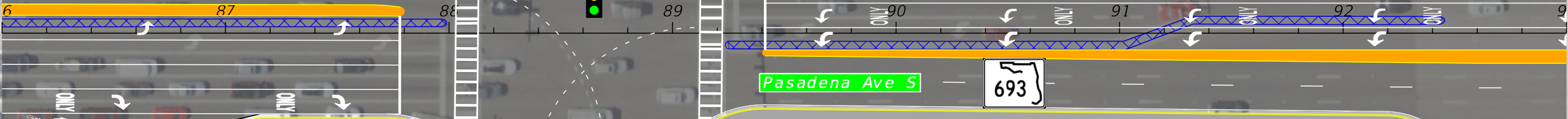
Executive Building

Wells Fargo

Sunset Dr S

Publix

Hibiscus Ave S



Pasadena Liquors & Fine Wines

Gulfport Blvd S

Shell

Sun Country Cleaners

Hibiscus Ave S

SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Road Diet (4-Lane)

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal

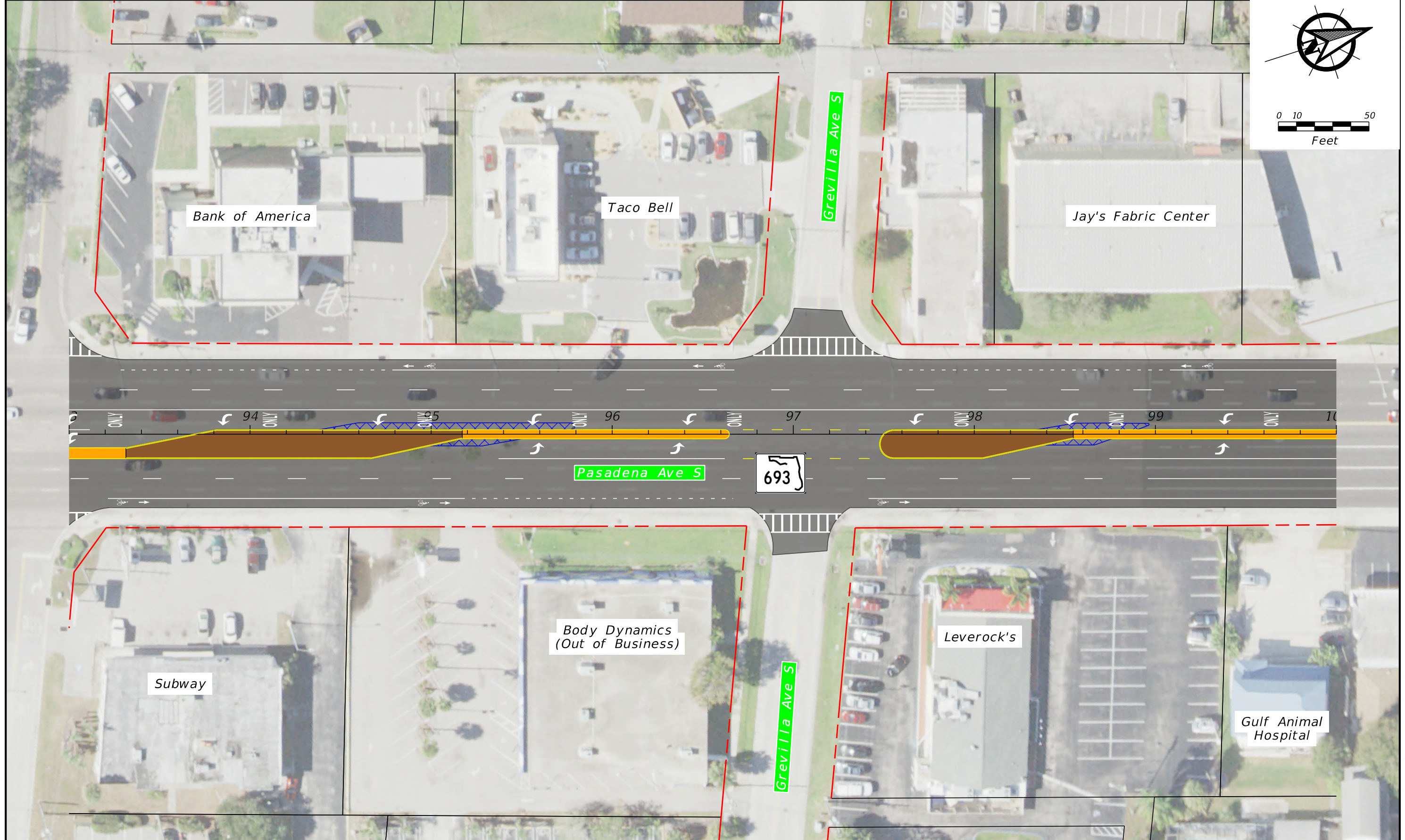
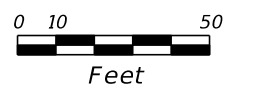
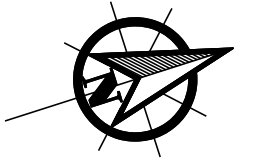
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SHEET NO.

5



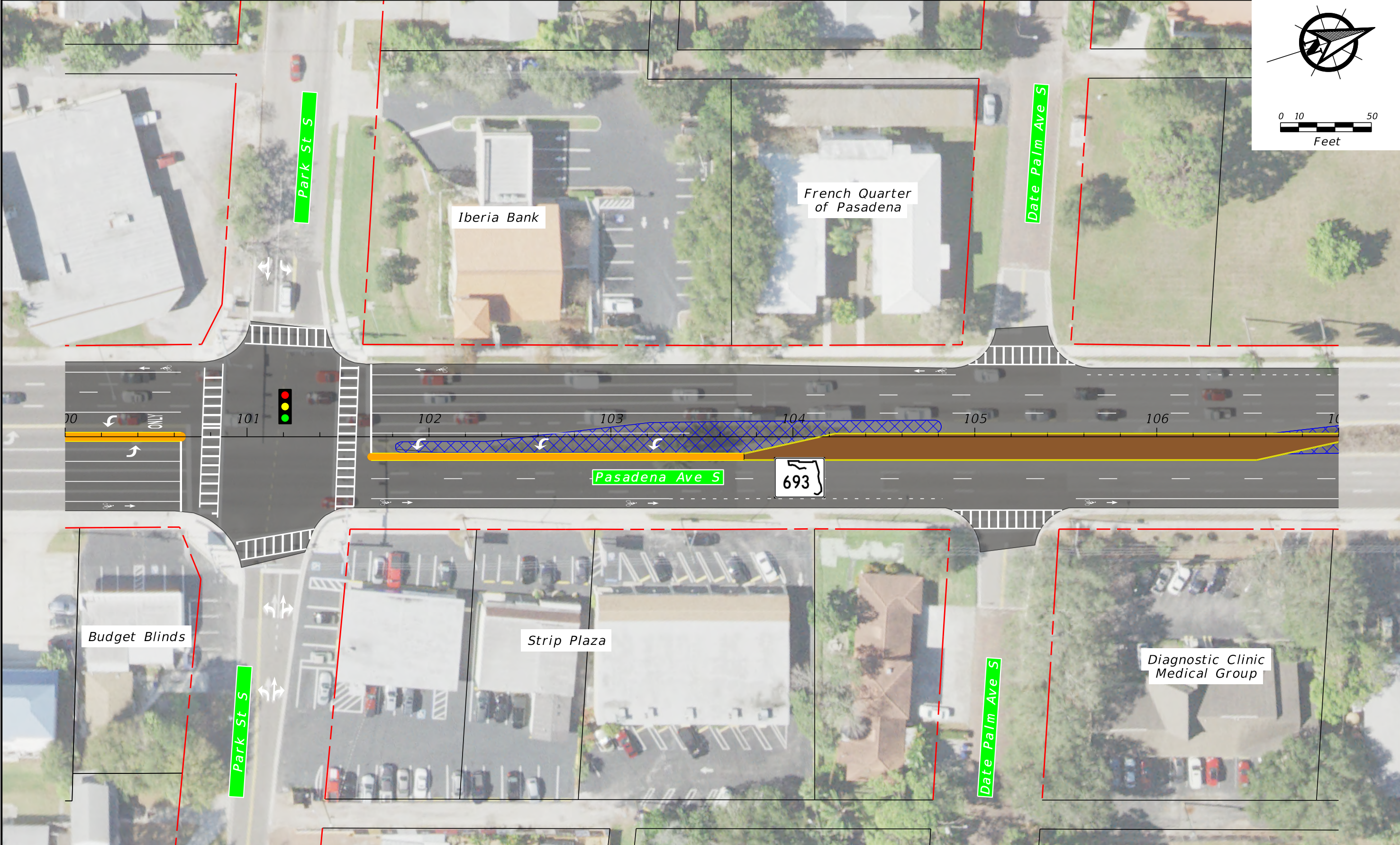
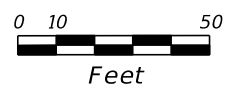
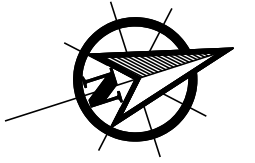
SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Road Diet (4-Lane)

	Baseline of Construction	Pavement Widening	Sod/Landscaping
	Existing Right-of-Way	Milling & Overlay	Traffic Signal
	Proposed Right-of-Way	Sidewalk	

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Road Diet (4-Lane)

- Baseline of Construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Pavement Widening
- Milling & Overlay
- Sidewalk

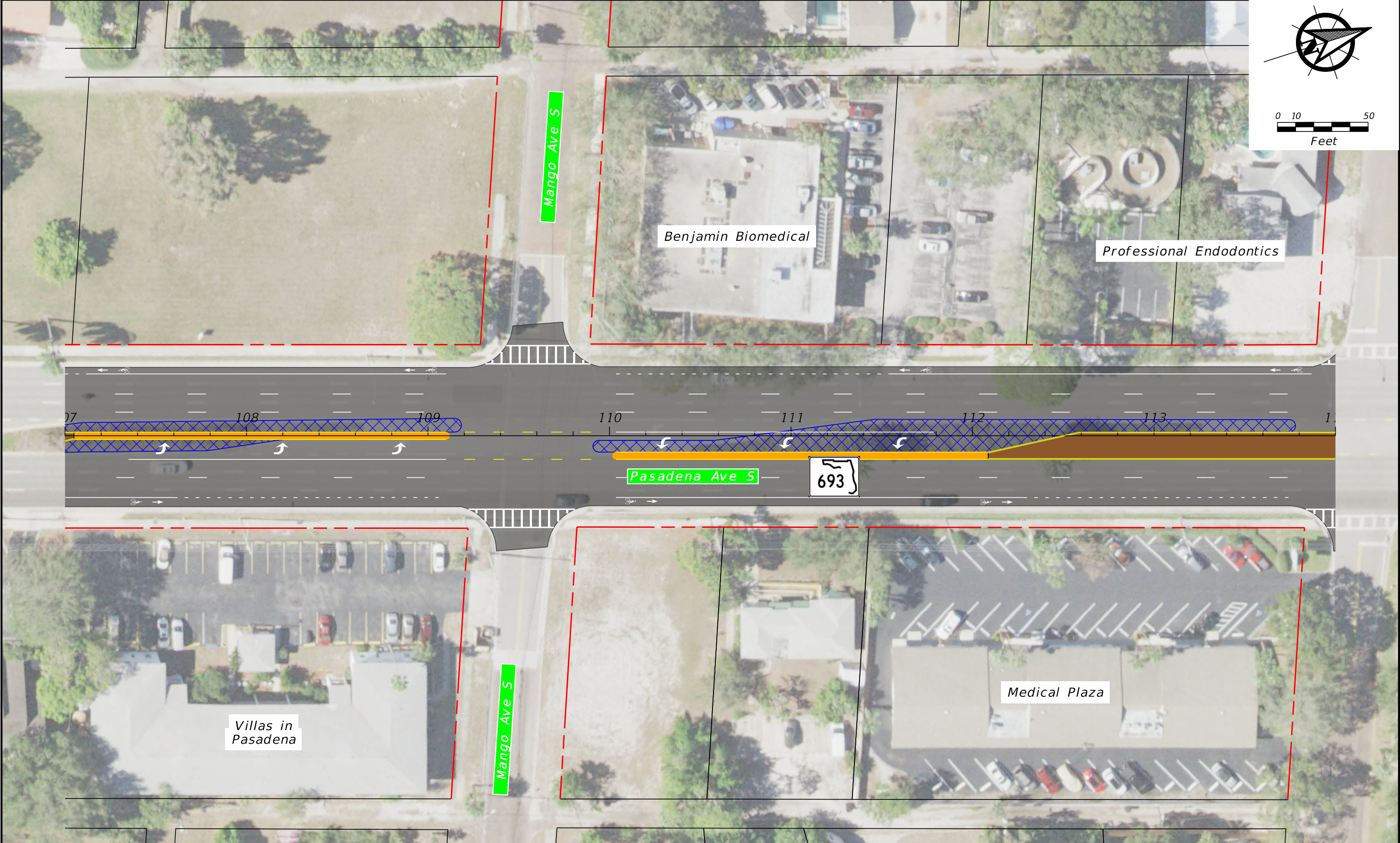
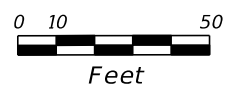
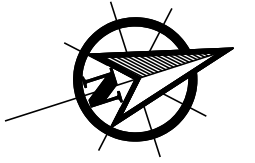
- Legend:**
- Sod/Landscaping
 - Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1

SHEET NO.

7



SR 693 (Pasadena Avenue) Corridor Study **Build Alternative Road Diet (4-Lane)**

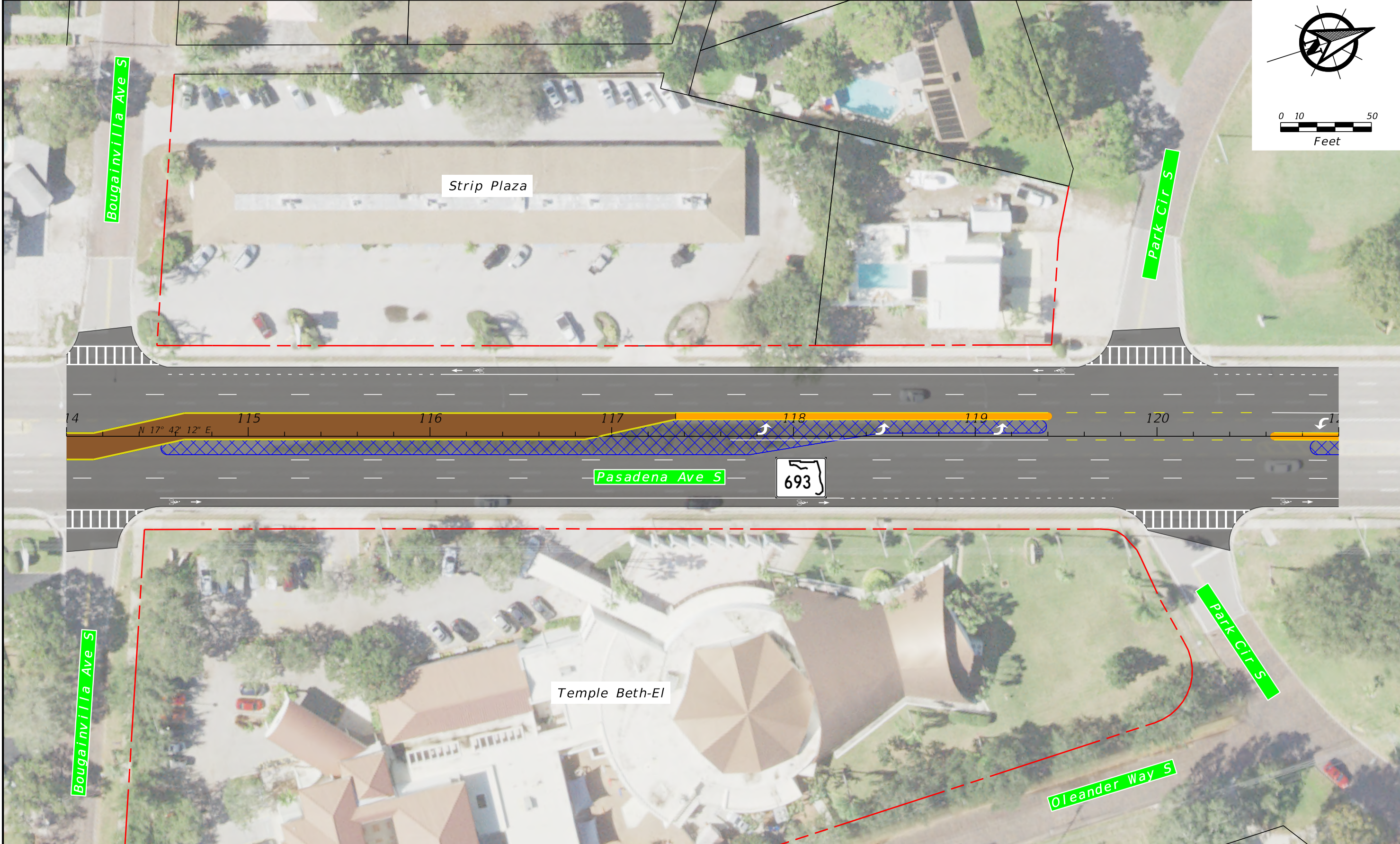
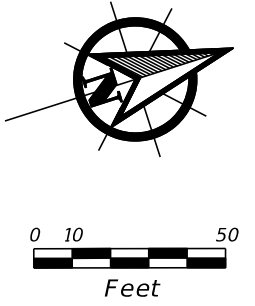
	Baseline of Construction		Pavement Widening		Sod/Landscaping
	Existing Right-of-Way		Milling & Overlay		Traffic Signal
	Proposed Right-of-Way		Sidewalk		

SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



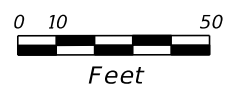
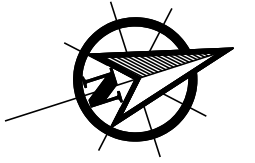
SHEET NO. 8



SR 693 (Pasadena Avenue) Corridor Study **Build Alternative Road Diet (4-Lane)**

	<p>Baseline of Construction</p> <p>Existing Right-of-Way</p> <p>Proposed Right-of-Way</p>	<p> Pavement Widening</p> <p> Milling & Overlay</p> <p> Sidewalk</p>	<p>Legend:</p> <p> Sod/Landscaping</p> <p> Traffic Signal</p>
--	---	--	--

<p>SR 693 (Pasadena Avenue) Corridor Study</p> <p><i>From Shore Drive South to 66th Street</i></p>			<p>SHEET NO.</p>
<p>County: Pinellas County</p>	<p>Work Program Segment: NO. 435910-1</p>		<p>9</p>

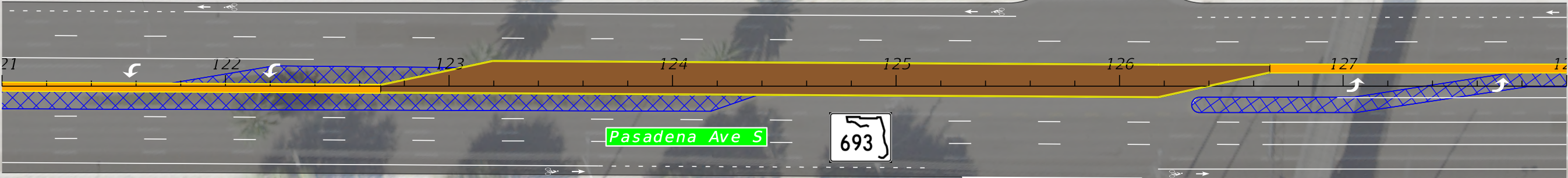


Land Owned by City of St. Pete

All Seasons Landscaping

Park Cir S

Pinellas Trail



Pasadena Ave S

Land Owned by City of St. Pete

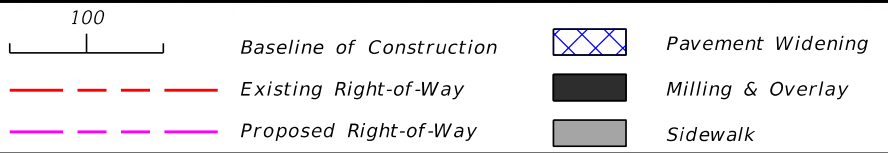
Pasadena Car Care Center

Park Cir S

Pinellas Trail

SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Road Diet (4-Lane)



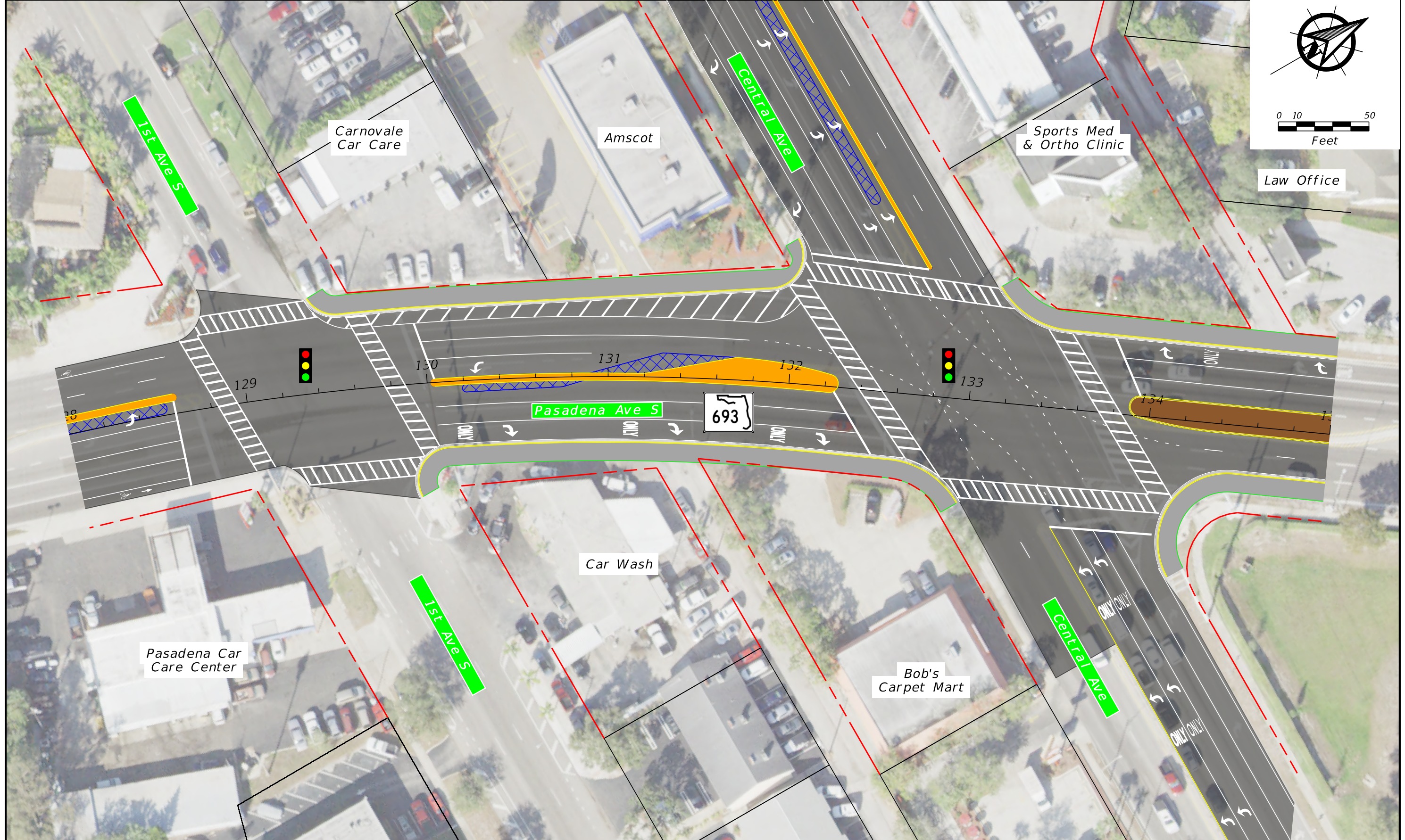
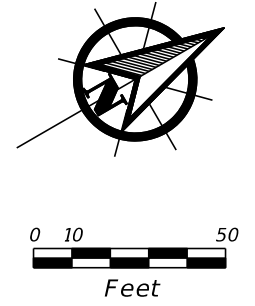
SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street

County: Pinellas County
Work Program Segment: NO. 435910-1



SHEET NO.

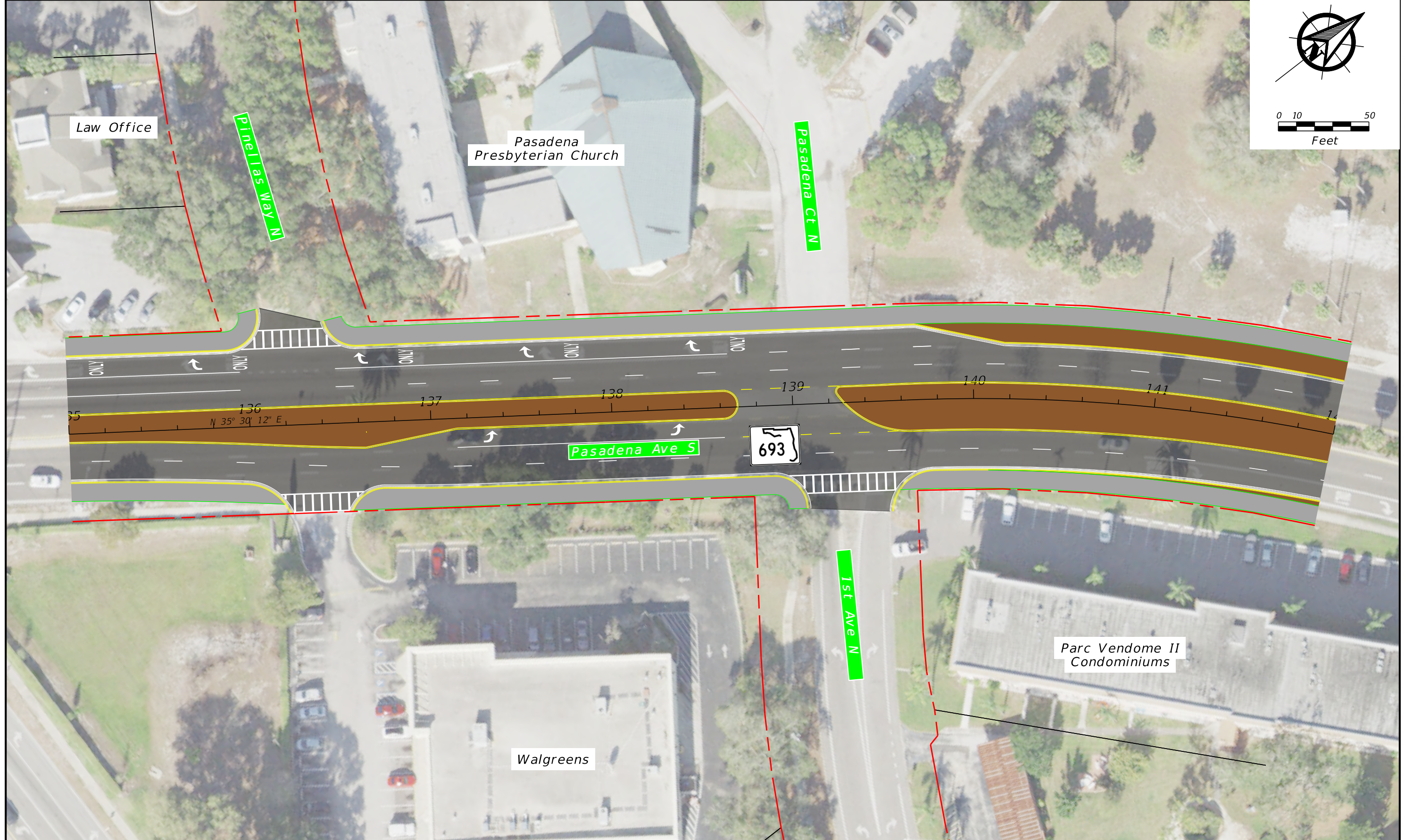
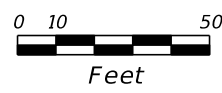
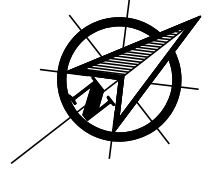
10



SR 693 (Pasadena Avenue) Corridor Study **Build Alternative Road Diet (4-Lane)**

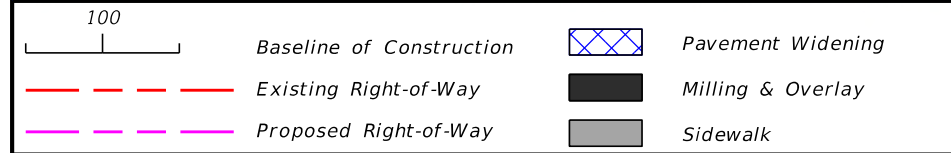
	Baseline of Construction		Pavement Widening		Sod/Landscaping
	Existing Right-of-Way		Milling & Overlay		Traffic Signal
	Proposed Right-of-Way		Sidewalk		

SR 693 (Pasadena Avenue) Corridor Study		
From Shore Drive South to 66th Street		
County: Pinellas County	Work Program Segment: NO. 435910-1	SHEET NO. 11



SR 693 (Pasadena Avenue) Corridor Study

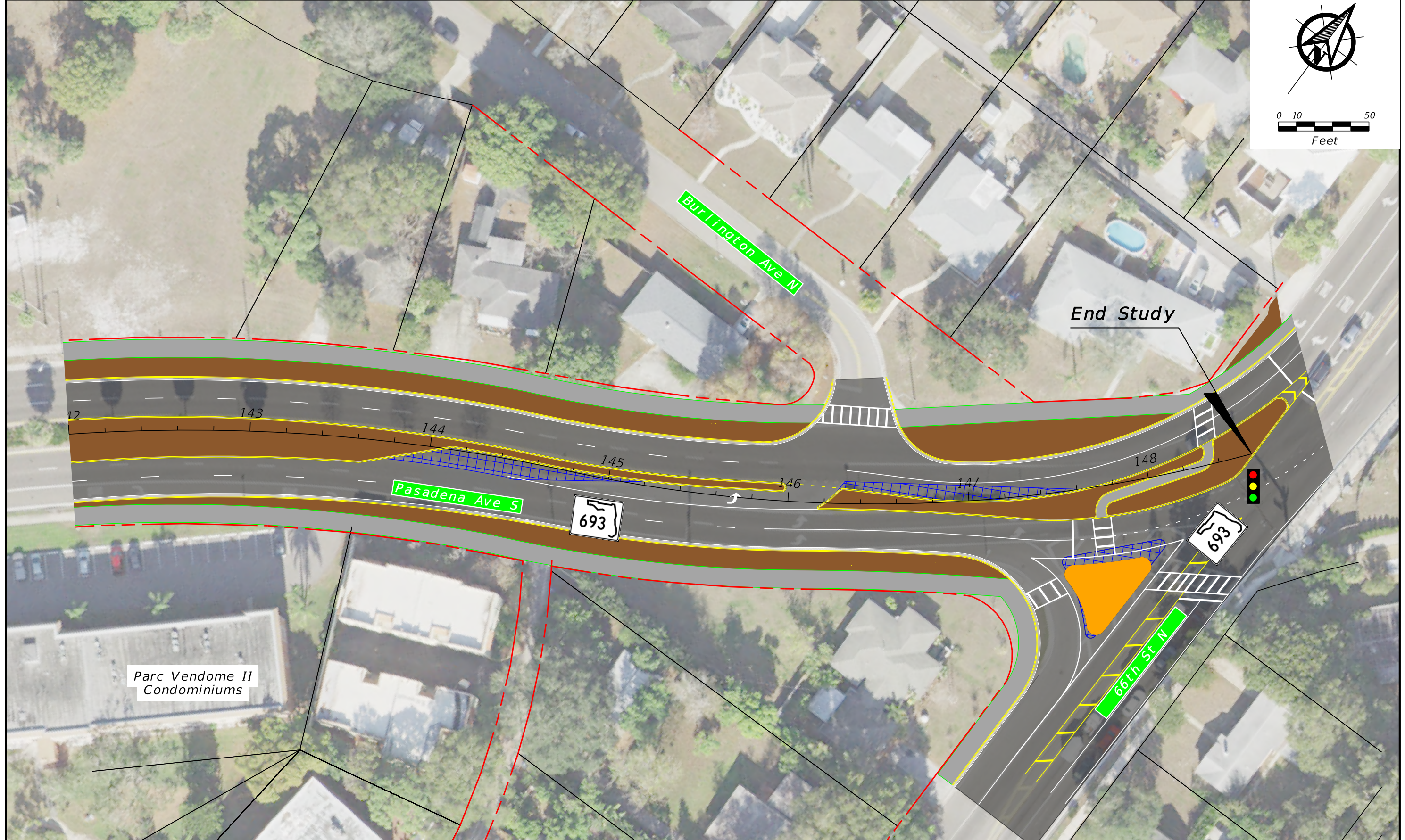
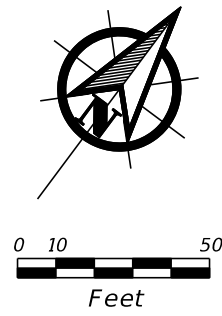
Build Alternative Road Diet (4-Lane)



SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1

SHEET NO.
12



SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Road Diet (4-Lane)

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:

	Sod/Landscaping
	Traffic Signal

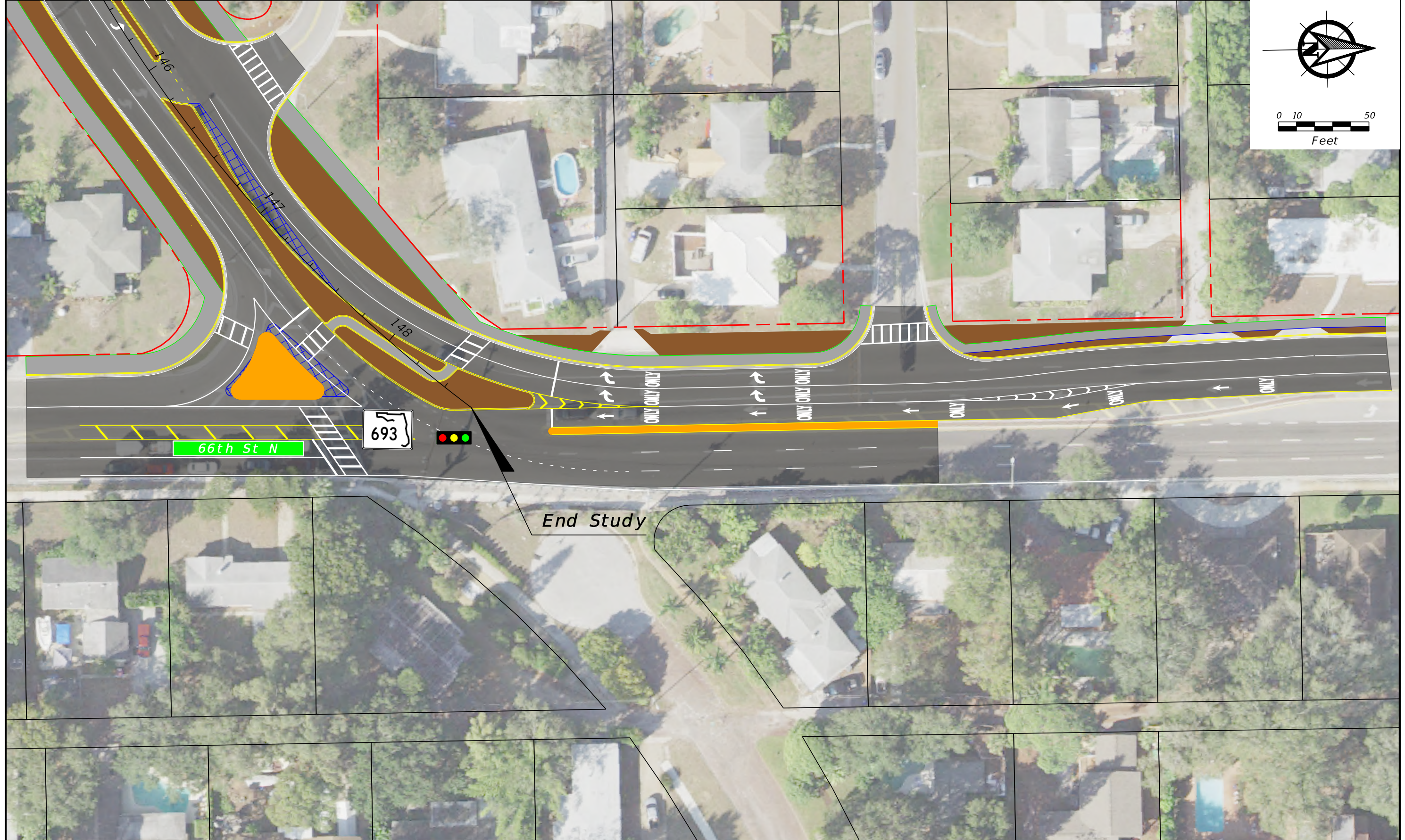
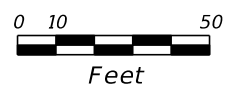
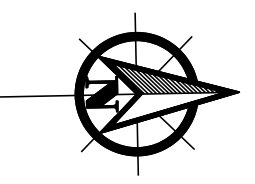
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

13



End Study

SR 693 (Pasadena Avenue) Corridor Study

Build Alternative Road Diet (4-Lane)

- 100
- Baseline of Construction
- Existing Right-of-Way
- Proposed Right-of-Way
- Pavement Widening
- Milling & Overlay
- Sidewalk

- Legend:**
- Sod/Landscaping
 - Traffic Signal

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County
 Work Program Segment: NO. 435910-1

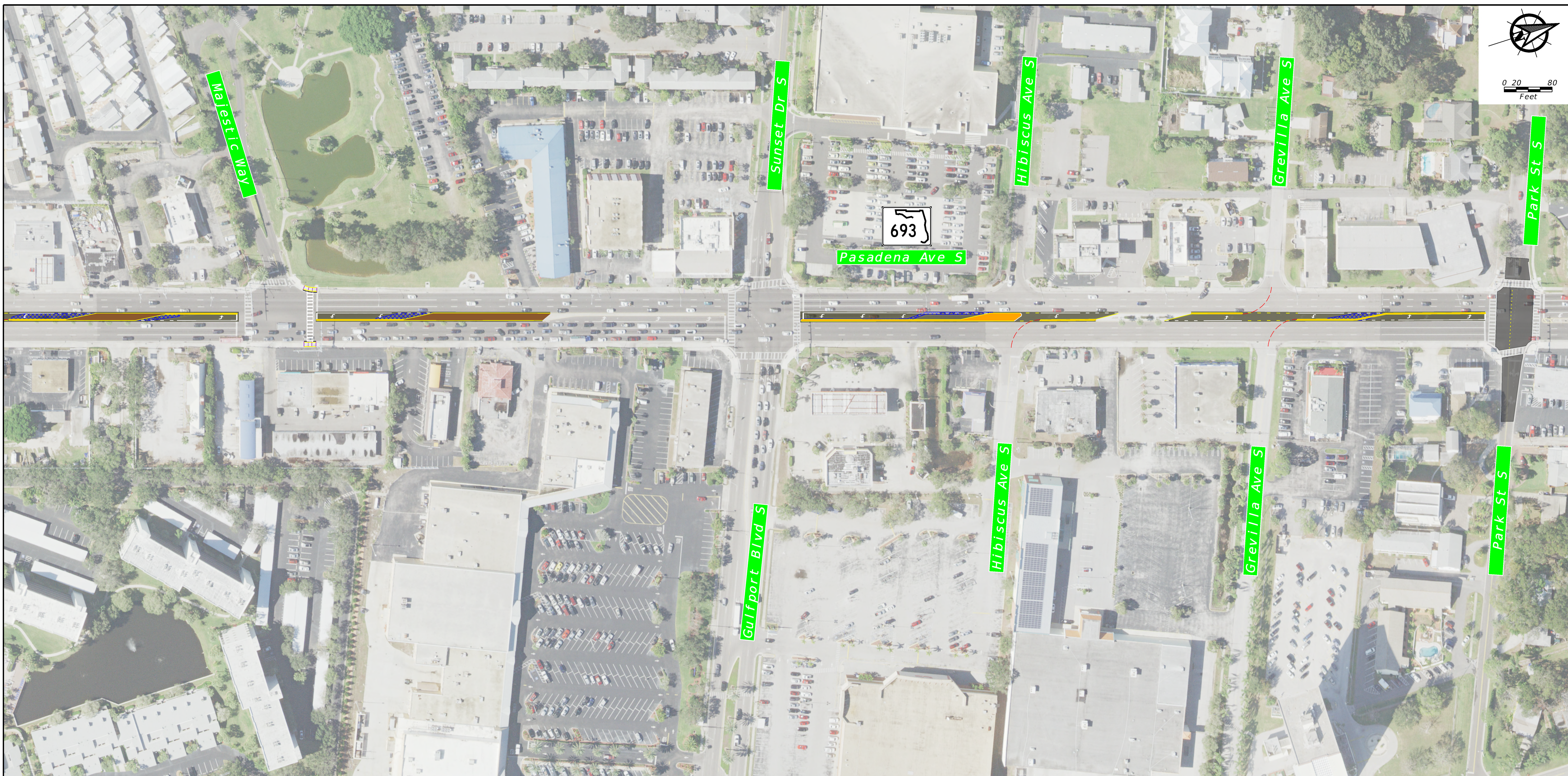


SHEET NO.

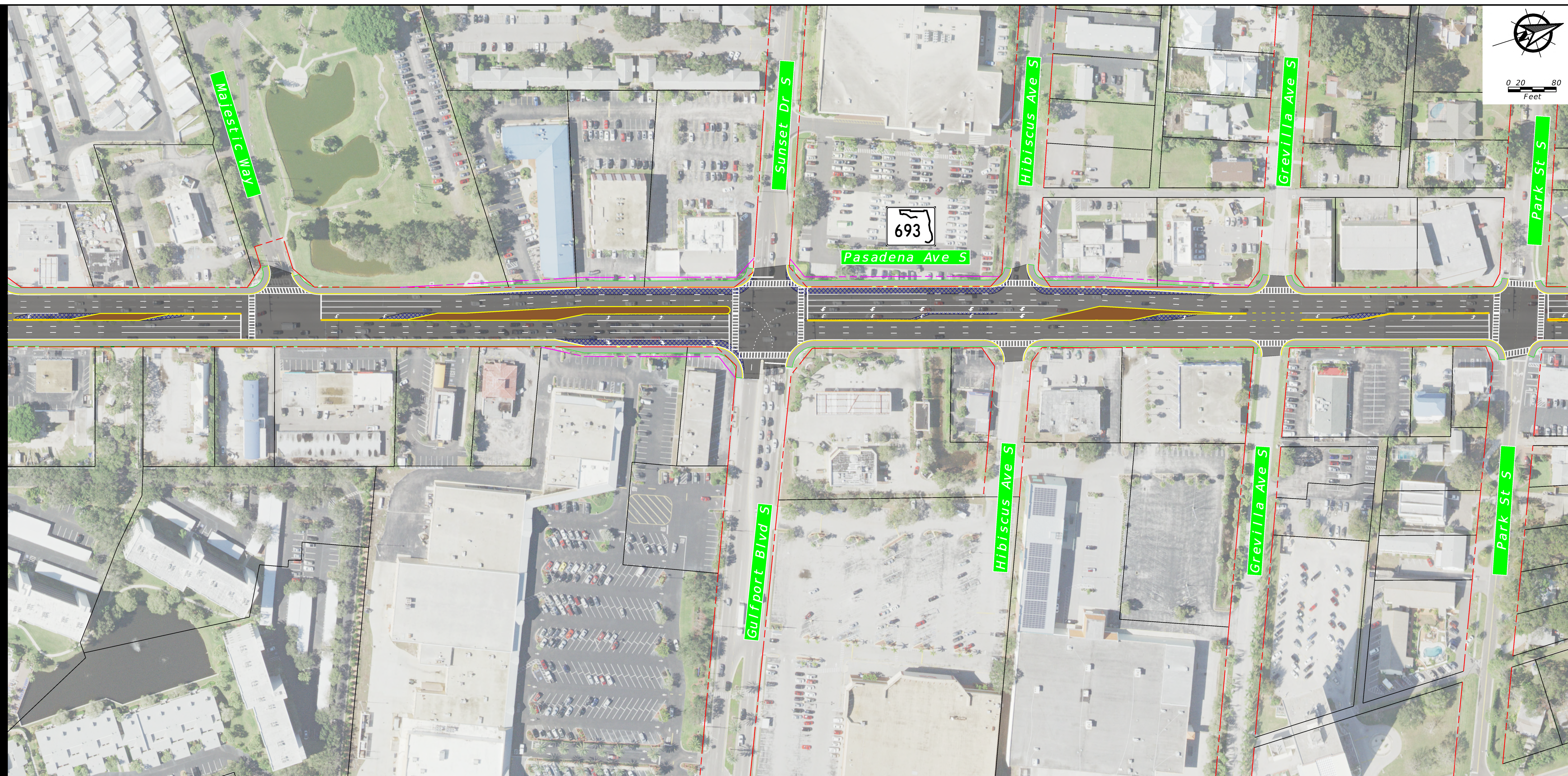
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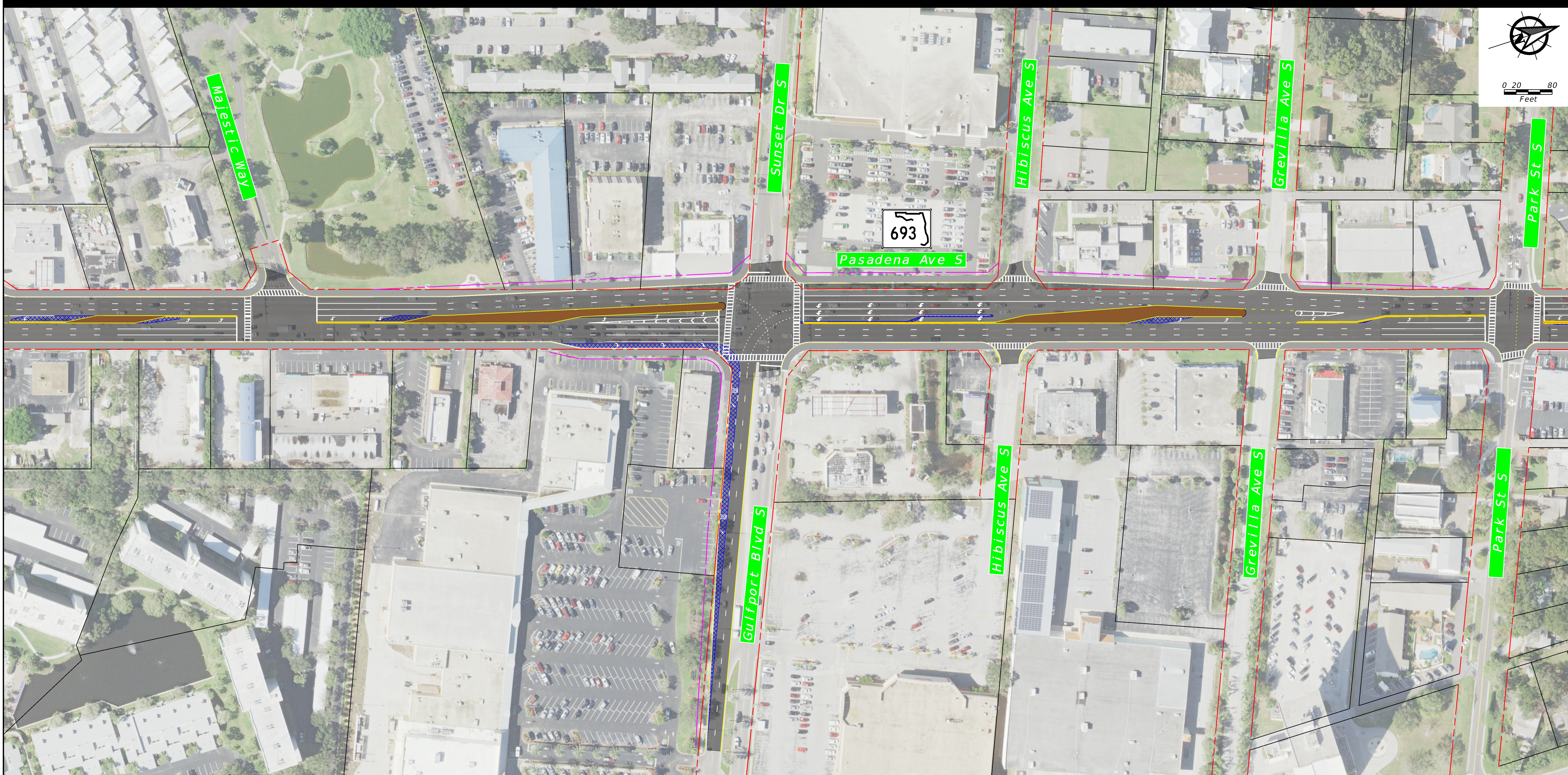
APPENDIX O – Gulfport Blvd./ Sunset Drive Concept Plans



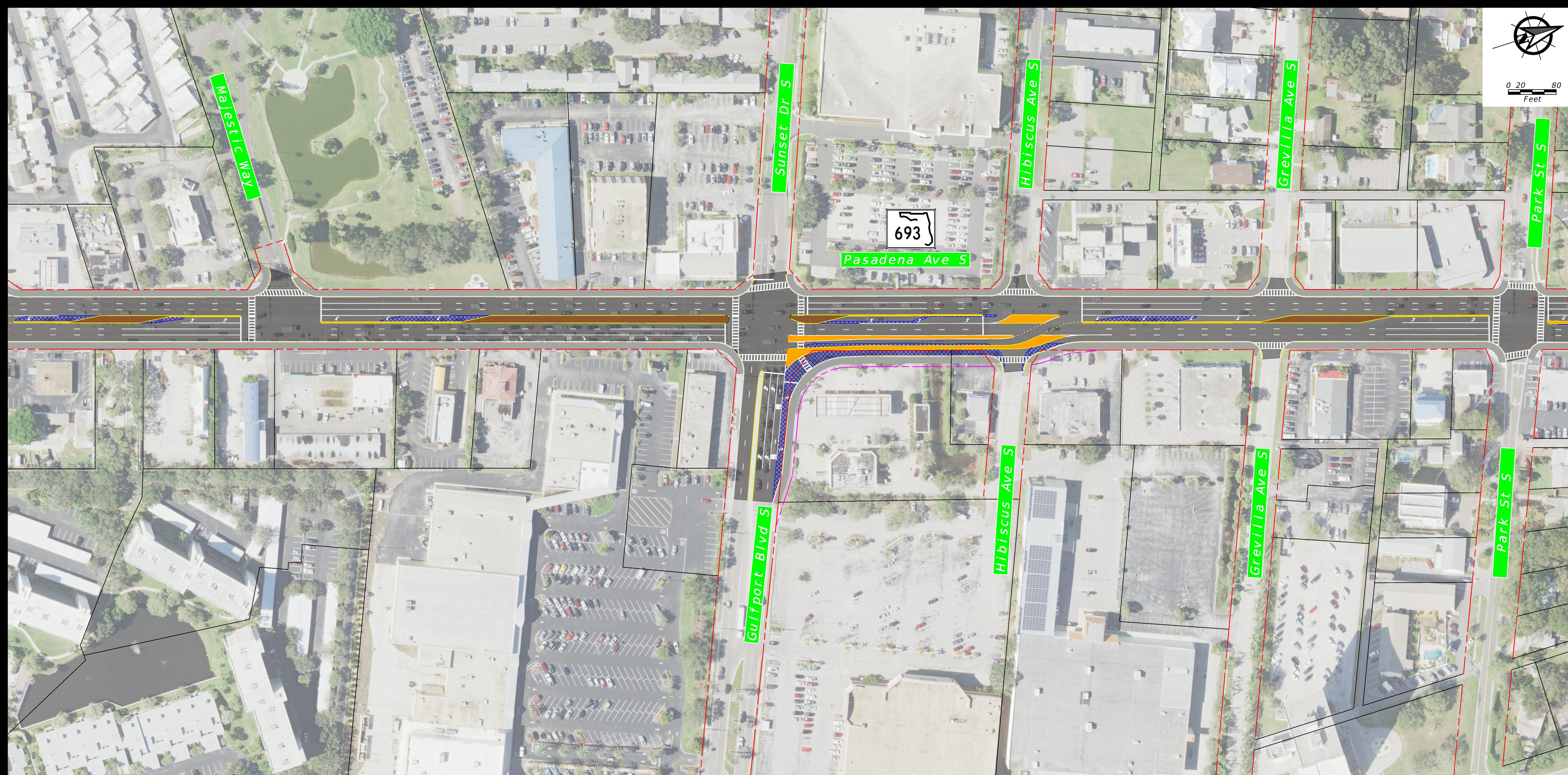
GULFPORT BLVD. S. / SUNSET DR. S. (SHORT-TERM ALTERNATIVE)



GULFPORT BLVD. S. / SUNSET DR. S. (MID-TERM ALTERNATIVE)



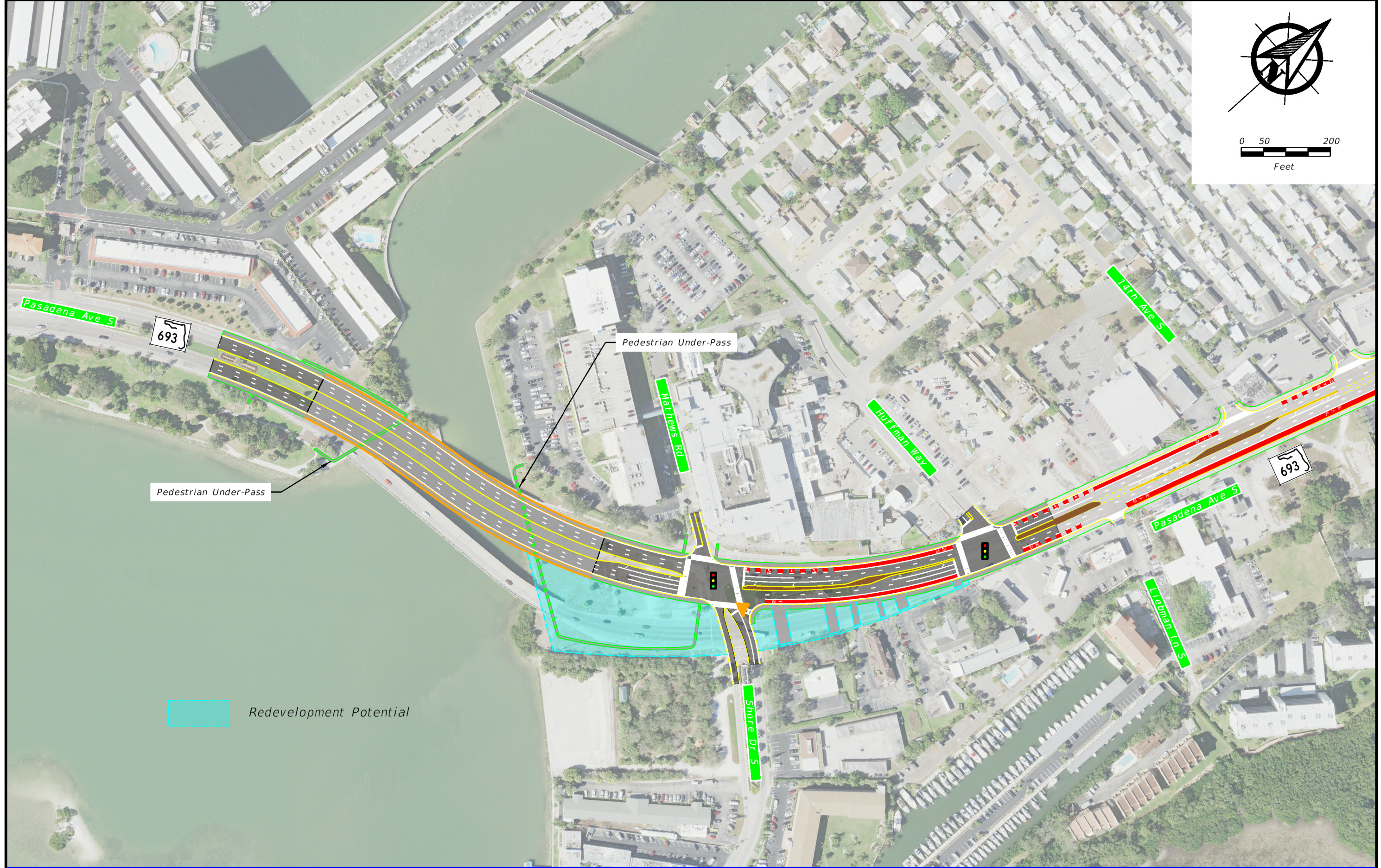
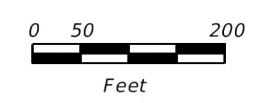
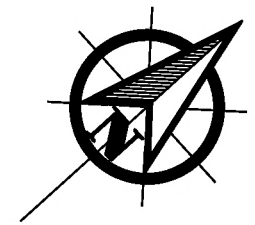
GULFPORT BLVD. S. / SUNSET DR. S. (LONG-TERM ALTERNATIVE)



GULFPORT BLVD. S. / SUNSET DR. S. (DISPLACED LEFT/MEDIAN U-TURN ALTERNATIVE)




APPENDIX P – Bridge #1500054L and #150137R Concept Plans

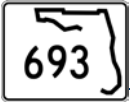


Pedestrian Under-Pass

Pedestrian Under-Pass

 Redevelopment Potential

Long Term Alternative-Bridge Realignment



APPENDIX Q – Revised Short Term Cost Estimate (Segment 3)

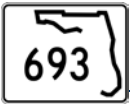
ENGINEER'S ESTIMATE
FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 7

FINANCIAL PROJECT ID # :	435910-1-22-01
PROJECT DESCRIPTION:	SR 693/Pasadena Ave. Corridor Study from Shore Dr. South to 66th St., Pinellas County
PAY ITEM SPEC YEAR:	January 2019
SUBMITTAL TYPE:	PD&E Estimate
COUNTY:	Pinellas
DATE:	January 29, 2019
ENGINEERING CONSULTANT FIRM:	ICON CONSULTANT GROUP INC.
CONTACT NAME:	DANIEL CARNLEY P.E.
PHONE NUMBER:	(813) 962-8689
FILE VERSION:	EE_11-05_Rev29
PAGE NUMBER:	1 of 1

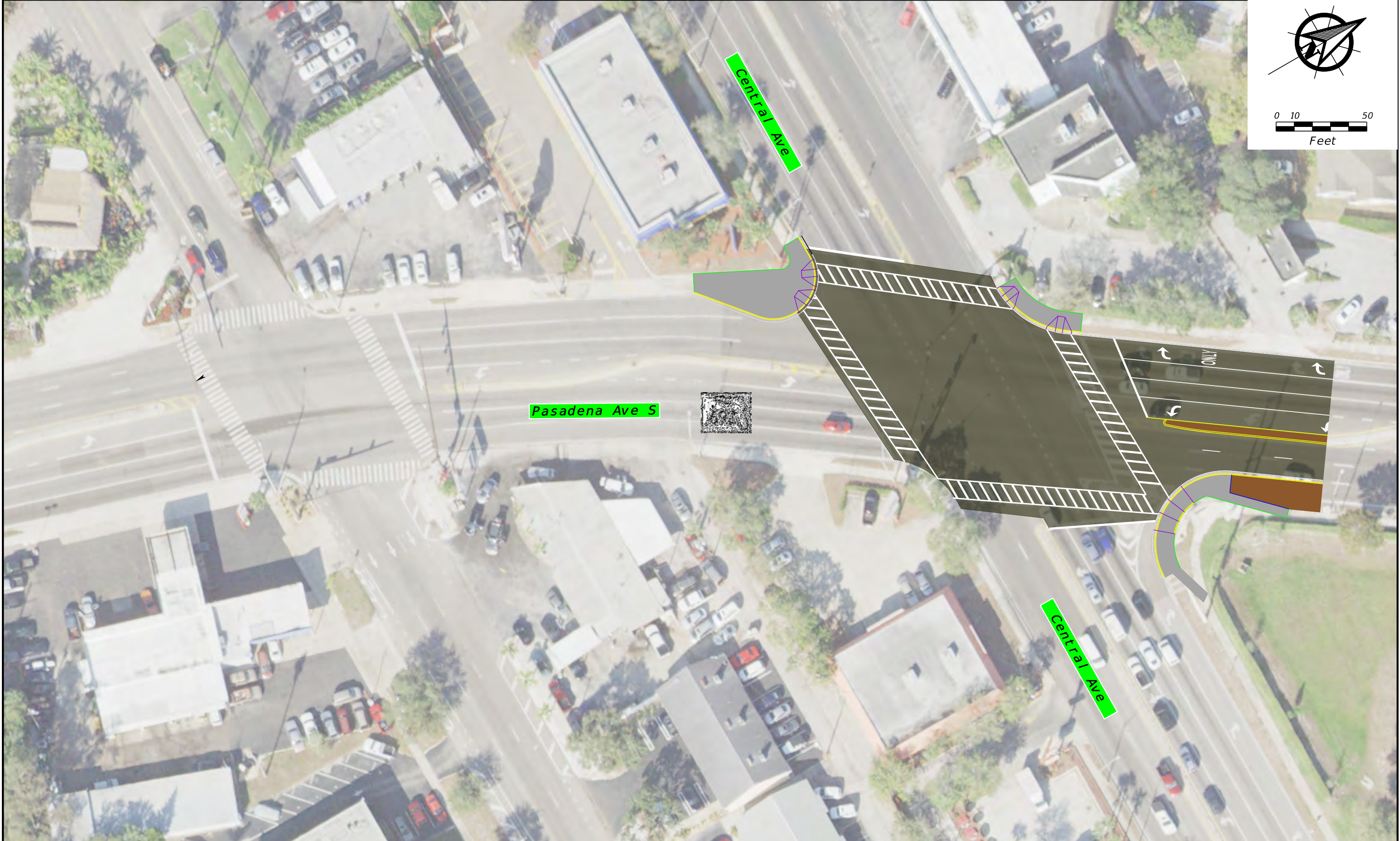
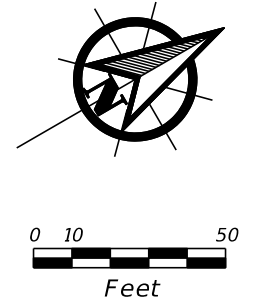
COMPONENT GROUPS

100 - STRUCTURES	<i>NOT USED</i>	
200 - ROADWAY		\$408,342.56
300 - SIGNING & PAVEMENT MARKINGS		Included with RRR
400 - LIGHTING	<i>NOT USED</i>	
500 - SIGNALIZATION		Included with RRR
550 - ITS	<i>NOT USED</i>	
600 - LANDSCAPE / PERIPHERALS	<i>NOT USED</i>	
700 - UTILITIES	<i>NOT USED</i>	
800 - ARCHITECTURAL	<i>NOT USED</i>	
900 - MASS TRANSIT	<i>NOT USED</i>	
1000 - INVALID & OTHER ITEMS	<i>NOT USED</i>	
COMPONENT SUB-TOTAL		\$408,342.56
(102-1) MOT (Maintenance of Traffic)	10%	\$40,834.26
SUB-TOTAL		\$449,176.82
(101-1) MOB (Mobilization)	10%	\$44,917.68
SUB-TOTAL		\$494,094.50
PU (Project Unknowns)	15%	\$74,114.17
SUB-TOTAL		\$568,208.67
(999-25) Initial Contingency (Do Not Bid)		\$50,000.00
PROJECT GRAND TOTAL		\$618,208.67

NOTES:



APPENDIX R – Revised Short Term Concept Plans (Segment 3)



SR 693 (Pasadena Avenue) Corridor Study

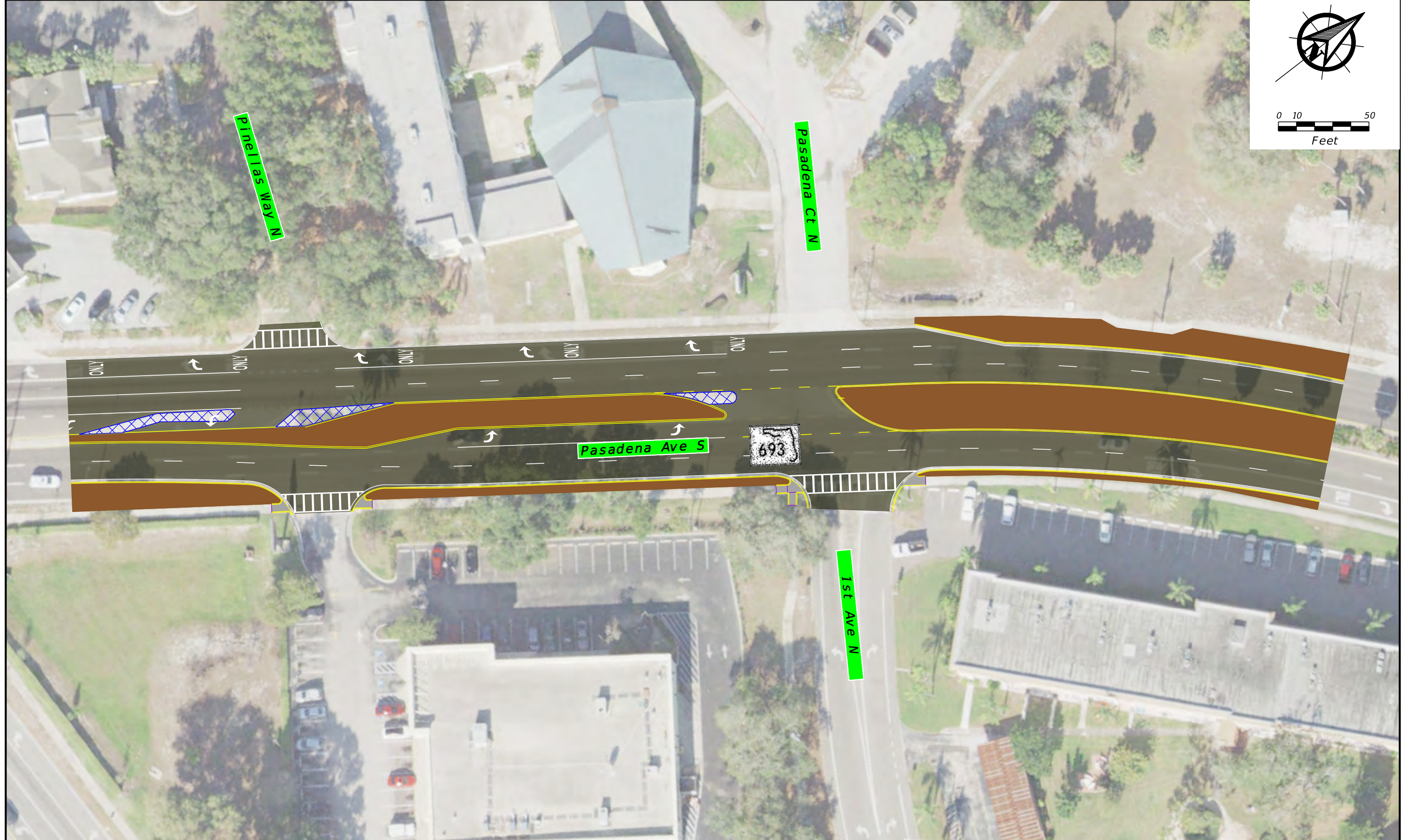
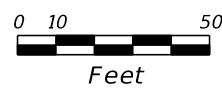
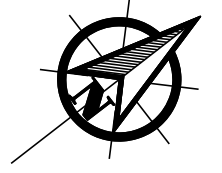
Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening
	Existing Right-of-Way		Milling & Overlay
	Proposed Right-of-Way		Sidewalk

Legend:	
	Sod/Landscaping
	Traffic Signal
	Sharrow Installed Under FPID: 434806-1-52-01

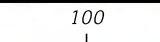





SR 693 (Pasadena Avenue) Corridor Study
From Shore Drive South to 66th Street




County: Pinellas County Work Program Segment: NO. 435910-1



SR 693 (Pasadena Avenue) Corridor Study


Short Term Safety Improvements Alternative

-  100
-  Existing Right-of-Way
-  Proposed Right-of-Way
-  Pavement Widening
-  Milling & Overlay
-  Sidewalk

- Legend:**
-  Sod/Landscaping
 -  Traffic Signal
 -  Sharrow Installed Under FPID: 434806-1-52-01

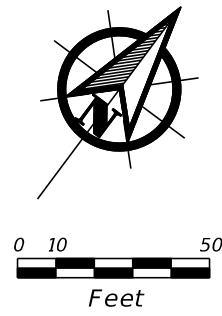
SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SHEET NO.

12



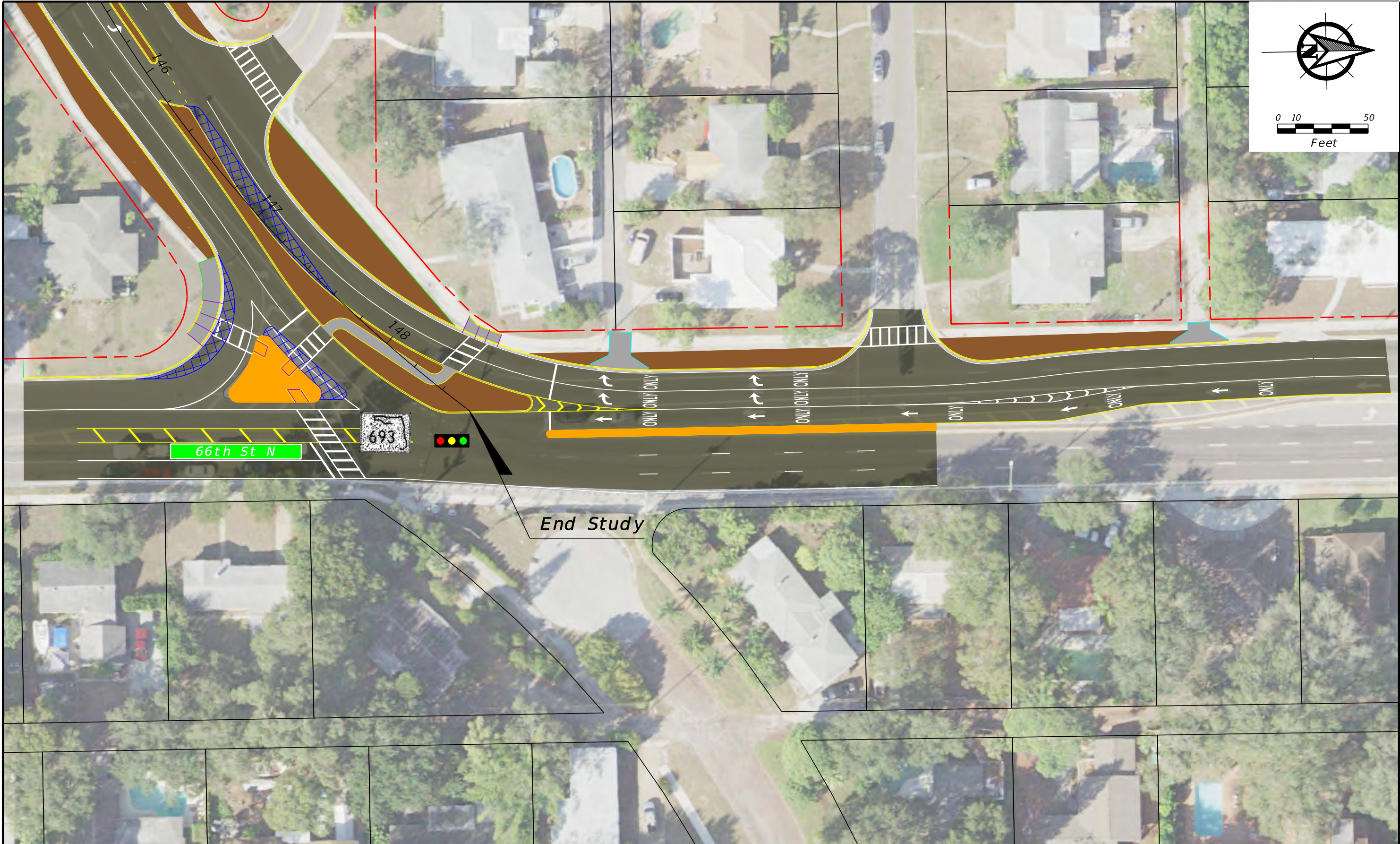
SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

	Baseline of Construction		Pavement Widening		Sod/Landscaping
	Existing Right-of-Way		Milling & Overlay		Traffic Signal
	Proposed Right-of-Way		Sidewalk		Sharrow Installed Under FPID: 434806-1-52-01

SR 693 (Pasadena Avenue) Corridor Study
 From Shore Drive South to 66th Street

County: Pinellas County Work Program Segment: NO. 435910-1



SR 693 (Pasadena Avenue) Corridor Study

Short Term Safety Improvements Alternative

<p>100</p> <p>Baseline of Construction</p> <p>Existing Right-of-Way</p> <p>Proposed Right-of-Way</p>	<p>Pavement Widening</p> <p>Milling & Overlay</p> <p>Sidewalk</p>	<p>Legend:</p> <p>Sod/Landscaping</p> <p>Traffic Signal</p> <p>Sharrow Installed Under FPID: 434806-1-52-01</p>
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<p>SR 693 (Pasadena Avenue) Corridor Study</p> <p>From Shore Drive South to 66th Street</p>		<p>SHEET NO.</p> <p>14</p>
<p>County: Pinellas County</p>	<p>Work Program Segment: NO. 435910-1</p>	