

ACCESS MANAGEMENT STUDY

SR 520 from West of Newfound Harbor Drive to East of South Banana River Drive Brevard County, Florida Section 70100: MP 12.450 – 13.100

PREPARED FOR:

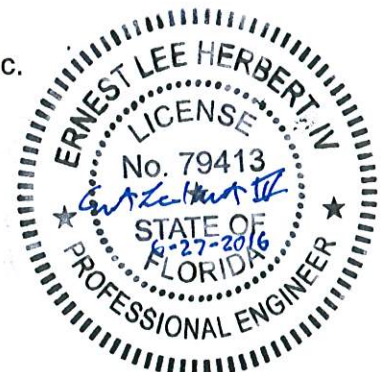
**THE FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 5 TRAFFIC OPERATIONS
719 South Woodland Boulevard, MS 3-562
DeLand, Florida 32720**



Districtwide Community Traffic Safety Program (CTSP)
Financial Project ID: 237995-1-32-11
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EXECUTIVE SUMMARY:

Comprehensive Engineering Services, Inc. (CES) was retained by the Florida Department of Transportation to complete a Access Management Study along State Road (SR) 520 from west of Newfound Harbor Drive to east of South Banana River Drive in Brevard County, Florida. The subject 0.65-mile corridor is a six-lane facility with a center two-way left turn lane. The posted speed limit is 45 MPH and the corridor has an access management classification of Access Class 3. Improvements considered to bring the subject corridor into compliance with current access management criteria include the installation of a restricted median.

Over a recent five year period (2010 – 2014) there were a total of 135 reported crash incidents within the subject corridor limits. The predominant crash types include 66 rear end crashes, 26 left turn angle crashes and 15 sideswipe crashes. Of the 135 crashes, 57 resulted in injuries, four were fatal collisions, and all included a total of \$596,597 in property damage. 40 crashes occurred at night, 15 occurred under wet pavement conditions, and seven involved a driver under the influence. The segment and intersection crash rates for the subject corridor are less than the Districtwide and Statewide crash rates with the exception of the Newfound Harbor Drive intersection which is slightly greater.

Traffic signal timing optimization at the intersections for the peak hour periods began with the review of the operational conditions associated with the existing cycle lengths and split timings. Proposed access management modifications with adjusted turning movement counts were used in the analysis of the proposed condition. Synchro software was then programmed to optimize the intersection cycle lengths, split timings and coordinated offsets. For the proposed condition, overall intersection delays and associated levels of service are adequate (LOS D or better) for all peak hour periods.

By providing a restrictive median, the subject corridor will meet Access Class 3 standards for purposes of this study. Signal and driveway connection spacing were not considered as it was assumed that all existing and/or planned driveway connections are per permit and would require additional coordination with the local governing agency and property owners prior to modification. The crashes anticipated to be mitigated by the proposed median installation involve left turning vehicles to and from driveways. The proposed median will eliminate the vehicular turning movements that directly contribute to these crashes, thereby increasing safety through the corridor.

The engineering and construction efforts for the aforementioned improvements are anticipated to cost approximately \$473,050. A Benefit-Cost Analysis and Net Present Value assessment were completed for the improvements utilizing crash reduction factors detailed in the AASHTO Highway Safety Manual (and related documents). The resulting values for these assessments are as follows which show that the proposed safety improvements can be justified from a crash mitigation perspective:

BENEFIT-COST RATIO = 4.91

NET PRESENT VALUE = \$1,821,854

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1. PURPOSE & SCOPE:

The purpose of this access management study was to evaluate needed improvements to bring the subject SR 520 corridor in Brevard County, Florida into compliance with current access management criteria (designated Access Class 3). This study was requested by the Florida Department of Transportation (FDOT). The evaluation considers existing traffic and operational conditions in combination with a historic crash analysis. The final conceptual design for the corridor considers the traffic safety and operational impacts associated with introducing access management median restrictions along the corridor. Benefit-cost ratio and Net Present Value estimates are also calculated for the proposed improvements.

This study included crash and volume data collection and evaluation using criteria specified in FDOT's Manual on Uniform Traffic Studies (MUTS), FDOT's Traffic Engineering Manual (TEM), FDOT's Standard Index, FDOT's Plans Preparation Manual (PPM), FDOT's 2014 Median Handbook and the Manual on Uniform Traffic Control Devices (MUTCD).

2. EXISTING CONDITIONS:

The subject corridor is located along SR 520 (East Merritt Island Causeway) from west of Newfound Harbor Drive to east of South Banana River Drive (State Section #70100, MP 12.450 – 13.100). SR 520 is an Urban Principal Arterial that runs east-west within the unincorporated area of Merritt Island in Brevard County. The associated Straight-line Diagram is included as Appendix A. A study location map is included as Figure 1. SR 520 is a six-lane roadway with a center two-way left turn lane (TWLTL) and has a suburban typical section. Six 12-foot wide travel lanes are provided, three eastbound and three westbound, and a 14-foot wide center two-way left turn lane. 5-foot wide sidewalks exist along the north and south side of the roadway. Paved shoulders are present along SR 520 in both directions measuring 8 feet wide. The existing typical section is included as Appendix B. The posted speed limit along SR 520 is 45 MPH.

Figure 1: Location Map
(Source: Google Maps)

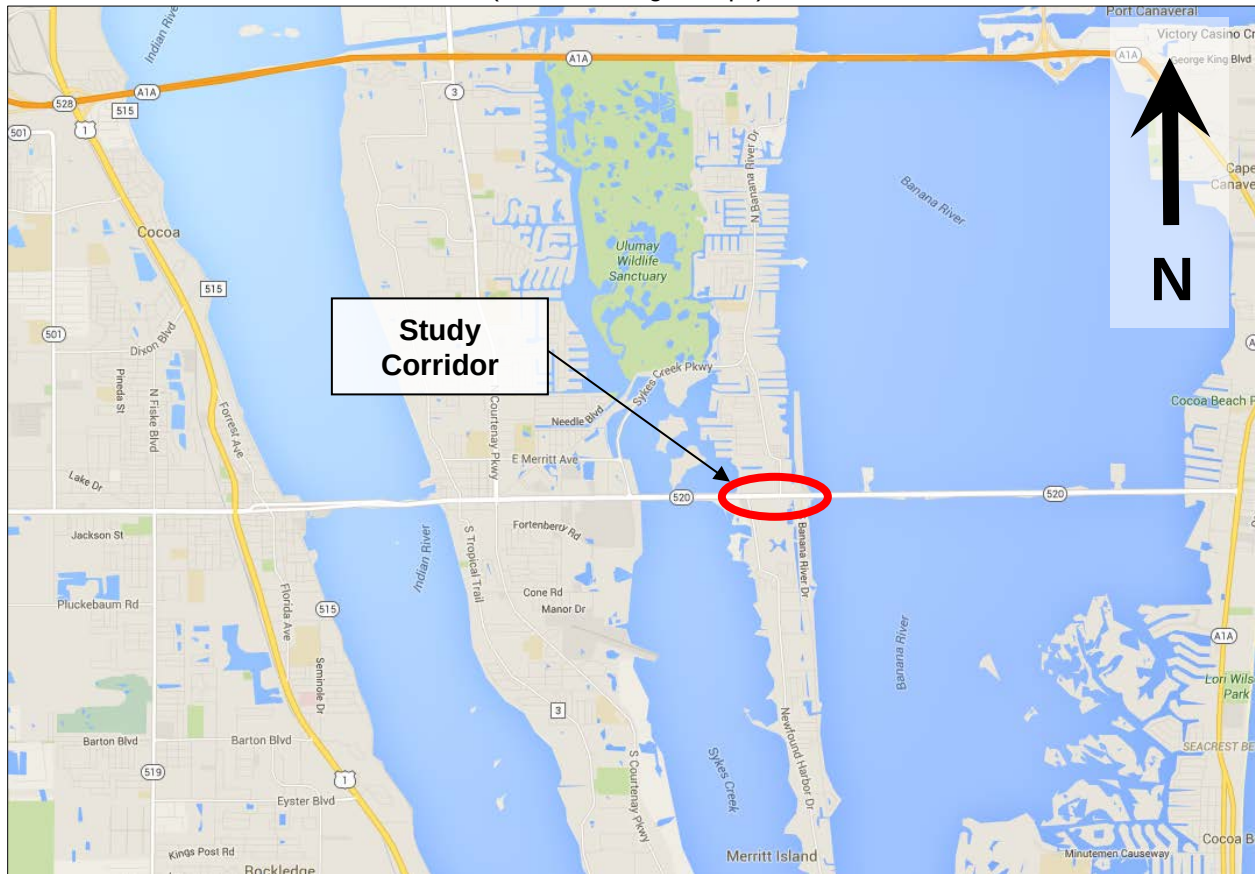


Table 1: Summary of Existing Conditions

Feature	Description
Study Limits	SR 520 in Brevard County, Section 70100 from MP 12.450 – 13.100
Area Location	The study corridor is located approximately four miles east of US 1. The E. Merritt Island Causeway adjoins both ends of the corridor. The surrounding area is commercial with access to residential areas north and south of the corridor
Typical Section	SR 520 is a six lane roadway with a center two-way left turn lane, with a suburban typical section and a drainage ditch system with inlets
Functional Classification	Classified as an Urban Principal Arterial Other
Posted Speed Limit	The posted speed limit on SR 520 is 45 mph throughout the study limits
Access Classification	Assigned: Class 3 – Restrictive: Spacing: 2640' Signal and Full, 1320' Directional, 440' Connection
Traffic	- AADT = 25,500; D = 53.80%; T = 2.90% (2014) - FDOT Count Station 701007 located on SR 520 at MP 13.108
Signalized Intersections	- Newfound Harbor Drive/Walmart Superstore, MP 12.603 N. Banana River Drive, MP 12.857 S. Banana River Drive/Milford Point Drive, MP 13.013
Sidewalks	Continuous sidewalk exists on the north and south sides of SR 520
Bike Lanes	Bike Lanes are provided on the paved shoulder and at right turn lane locations (5-foot wide)
Street Lighting	Overhead lighting is provided on the north and south sides of SR 520
Transit	Space Coast Area Transit (SCAT) Route #4 runs along the subject corridor. Bus stops with benches are located at signalized intersections in both directions
Other Distinct Features	- Walmart Superstore is a major traffic generator/attractor - Residential areas are accessed from roadways at the three signalized intersections - SR 520 is an evacuation route for Cocoa Beach (Brevard County Emergency Management Zone 5)

A mix of commercial development is present along the subject corridor. Businesses with driveway access to SR 520 include a Walmart superstore, car dealerships, gas stations, auto repair and parts stores, restaurants and bars, a gym, and boat rental establishments. Walmart and the gas stations are open 24 hours daily.

The existing condition diagram of the corridor can be found in Appendix D. The diagram reflects changes made to the roadway by a recent resurfacing project (FPID# 431139-1-52, plans are in Appendix C) that have been verified in the field. Photographs of the subject corridor are provided in Appendix E.

Access Management

From the Straight-line Diagram (Appendix A), Access Class 3 applies to the subject SR 520 corridor. The design (per recent resurfacing plans) and posted speed along this corridor is 45 MPH. In consideration of these elements, the following criteria in Table 2 was considered and obtained from the Florida Administrative Code (Chapter 14-97) and then compared with existing conditions along the SR 520 corridor:

Table 2: Access Management Criteria

Element	Class 3 Standard	SR 520 Existing
Median	Restrictive	Unrestrictive (TWLTL)
Full Opening	2,640'	n/a
Directional Opening	1,320'	n/a
Signal Spacing (min)	2,640'	823'
Connection (min) (< or = 45 MPH)	440'	< 100'

The current roadway configuration of SR 520 does not meet Access Class 3 standards as there is no restrictive median present. Table 3 lists all signalized intersections (highlighted in green) and existing driveways along the subject corridor and their corresponding spacing, which also do not meet Access Class 3 criteria. The development of any design recommendations to remove or relocate signal locations and driveway connections was not completed as part of this study. It was assumed that all existing driveway connections are per permit and would require additional coordination with the local governing agency and property owners prior to modification.

Table 3: Intersection and Driveway Connection Spacing

Intersection or Driveway No.	MP	Position	Business Name	Signal Spacing Criteria = 2,640'	Connection Spacing Criteria = 440'	
					South	North
1	12.556	South	Mike Erdman Toyota	1,341'	166'	
Newfound Harbor Drive	12.603	N/S	Walmart (North)		60'	
2	12.625	South	Express Lane		72'	
3	12.648	South	Mike Erdman Toyota Trucks & RVs		143'	584'
4	12.684	South	Ron's European Auto Service		109'	
	12.715	South	Jeep Emporium			
	12.720	North	Walmart		83'	
5	12.740	South	CARQUEST Auto Parts			129'
6	12.760	North	Fuccillo Kia		293'	102'
7	12.786	North	Fuccillo Kia			41'
	12.801	North	Vacant			
8	12.807	South	Boniface-Hiers Chrysler Dodge		167'	10'
	12.811	North	Vacant			10'
						71'
9	12.831	North	Sunoco			
N Banana River Drive	12.857	N/S	Boniface-Hiers Chrysler Dodge (South)			36'
10	12.870	North	BP	823'	92'	20'
11	12.883	North	BP			
12	12.884	South	Gen-X Motors		26'	
13	12.898	South	H&D Roadhouse Bar		34'	
14	12.911	South	H&D Roadhouse Bar		30'	
15	12.923	South	Karate Dojo		14'	
16	12.930	South	Karate Dojo			
17	12.935	North	Island Lincoln Mercury		250'	140'
18	12.972	North	Island Lincoln Mercury			
	12.986	South	Vacant			145'
					39'	
S Banana River Drive	13.013	N/S	-			61'
19	13.039	North	Beach Marine Service		198'	53'
20	13.058	North	Funtime Boats			
21	13.065	South	7-Eleven/Island Waterfront Bar & Grill			41'
22	13.071	North	Jet Ski & Boat Rentals			

3. TRAFFIC CONDITIONS:

There is one FDOT Traffic Count Station along SR 520 located just east of the subject corridor. Station #701007 is located at MP 13.108. Historical traffic data and traffic characteristics are as follows and all data obtained for this count station is included as Appendix F:

Table 4: Historic Local Traffic Data and Characteristics

Characteristic	FDOT Count Station 701007
2010 AADT	27,000
2011 AADT	27,000
2012 AADT	22,500
2013 AADT	26,000
2014 AADT	25,500
2014 K-Factor	9.00%
2014 D-Factor	53.80%
2014 Trucks	2.90%

A review of the 24-hour traffic count station synopsis data determined morning, afternoon, and midday peaks. Traffic data was collected from 7:00 AM to 9:00 AM and from Noon to 6:00 PM on Thursday, January 21, 2016, Tuesday, January 26, 2016 and Wednesday, January 27, 2016. Data collected included 8-hour turning movement counts and pedestrian/bicycle activity at following locations along SR 520:

- Newfound Harbor Drive / Walmart Superstore signalized intersection (MP 12.603)
- Walmart east unsignalized driveway connection (MP 12.720)
- North Banana River Drive signalized intersection (MP 12.857)
- South Banana River Drive / Milton Point Drive signalized intersection (MP 13.013)

Limited 4-hour turning movement counts of vehicles entering and exiting driveways of active businesses along the subject corridor were taken on the same dates as the 8-hour counts. Morning counts for the driveways were taken from 9:00 AM to 11:00 AM to encompass opening hours for businesses, and afternoon counts were taken from 3:00 PM to 5:00 PM. The gas stations open 24 hours along the corridor were observed during the qualitative assessment to determine if traffic during the morning peak hour exceeded the driveway counts from 9:00 AM to 11:00 AM. All traffic data collected as part of this study is included as Appendix G.

The turning movement counts were initially adjusted based on 2014 Brevard County – Countywide seasonal factors. To balance entering versus exiting traffic volumes at each intersection for modeling purposes, the peak hour eastbound/westbound through volumes along SR 520 at the major intersections were modified to account for the directional influencing effects of the driveways and intersections along the corridor while maintaining the average design K and D Factors for the three primary segments of SR 520. The results of this exercise are detailed in Appendix H including a diagram of the balanced turning

movement volumes. This level of balancing was required due to variations in peak hour periods at each intersection, and data collection occurring over multiple days.

Access Management Impacts

Proposed geometric conditions include a median installation to replace the current two-way left turn lane. Signal spacing along the subject corridor will not allow for directional median openings based on Access Class 3 standards. The following anticipated impacts to traffic conditions are as follows:

- Left turning vehicles from SR 520 into driveways must instead make a U-turn at the far side signal, then turn right into the driveways.
- Left turning vehicles from driveways must make a right turn on SR 520 and then a U-turn at the next signal.
- Assumed 50% of left turning traffic into the Walmart east driveway will instead turn left at the Newfound Harbor Drive intersection signal. The remaining 50% will complete a U-turn at the North Banana River Drive signalized intersection.

A diagram of the resulting access management-adjusted turning movement volumes is also presented in Appendix H.

4. COLLISION ANALYSIS:

Crash data was obtained from the Department's Crash Analysis Reporting System (CARS) database and University of Florida's Signal Four Analytics software. Crash data was reviewed for the years 2010 through 2014. A total of 135 long form crash reports were obtained and reviewed for the study corridor. A summary of the crash types by year are as shown below in Table 5:

Table 5: Crash Types by Year

Year	2010	2011	2012	2013	2014	TOTAL
Type						
Angle	1	1	1	0	1	4
Backed Into	0	0	1	1	0	2
Bicycle	0	0	3	1	0	4
Head On	0	1	1	0	0	2
Left Turn	1	5	7	5	8	26
Off Road	0	0	0	1	1	2
Other	0	0	0	3	2	5
Pedestrian	1	0	2	2	1	6
Rear End	14	10	10	16	16	66
Right Turn	1	0	1	0	1	3
Sideswipe	2	1	4	3	5	15
TOTAL	20	18	30	32	35	135

Crash totals by year and location along the corridor are provided in Table 6:

Table 6: Crash Totals by Year and Location

Intersection	Newfound Harbor Drive	North Banana River Drive	South Banana River Drive	LINK (Not at intersection)	TOTAL
Year					
2010	11	2	2	5	20
2011	6	6	2	4	18
2012	10	7	5	8	30
2013	13	6	2	11	32
2014	9	10	6	10	35
TOTAL	49	31	17	38	135

The average crash rates were calculated for the link and at the three signalized intersections along the subject corridor. The calculated crash rates were then compared to the facility type of SR 520 immediately west of the corridor (6-lane urban divided facility with raised median), as Districtwide and Statewide crash rates are not available for 6-lane suburban undivided facilities. The crash rates are presented as Table 7.

Table 7: Historic Crash Rate Comparisons

SR 520 Intersection	2010-2014		Segment Length*** (miles)	2010-2014 Crash Rates		
	Average ADT or AADT	Average Number of Crashes		Actual	Urban 6+Ln Divd Rasd	
					District	State
LINK (Not at intersection)*	25,600	7.6	0.5	1.627	2.761	3.746
Newfound Harbor Drive**	38,800	9.8	-	0.692	0.603	0.690
North Banana River Drive**	29,300	6.2	-	0.580	0.603	0.690
South Banana River Drive**	26,200	3.4	-	0.356	0.603	0.690

* - crash rate per MVM

** - crash rate per MEV

*** - excludes 0.05 mi from each intersection

The segment and intersection crash rates for the subject corridor are less than the Districtwide and Statewide crash rates over the same analysis period, with the exception of the Newfound Harbor Drive intersection which is slightly greater. At the Newfound Harbor Drive intersection, 59% of all crashes are property damage only and rear end collisions are the predominant crash type (49%).

The complete collision summary and crash diagram is included as Appendix I. The crash diagram utilizes aerial photography of SR 520 before resurfacing to display the roadway configuration at the time of the crashes (2010 – 2014). Additional collision information are as follows:

- 4 (3%) crashes resulted in a fatality and 57 (42%) resulted in an injury. The number of persons receiving non-fatal injuries was 85.
- There were 15 (11%) wet pavement related crashes, 40 (30%) nighttime crashes and 7 (5%) crashes involving a driver under the influence.
- The total property damage amount of all 135 crashes is \$596,597.
- 13 (10%) crashes have the potential for mitigation by a median installation:
 - o 12 (9%) crashes are directly attributed to vehicles turning left into or out of driveways along SR 520. Of these 12 crashes, 9 were left turn angle crashes, one was a head on collision by a left turning vehicle out of a driveway, and one was a sideswipe crash by two left turning vehicles from a driveway in the two-way left turn lane.
 - o One crash (Crash #62) at North Banana River Drive involved a southbound left vehicle at a red signal that decided to turn right and then make an illegal U-turn but was struck by a westbound through vehicle.

The four fatal crashes reported in the five year crash history are detailed below:

Sunday, December 19, 2010 at 6:48 PM: A westbound vehicle traveling on a green signal at the Newfound Harbor Drive intersection struck a pedestrian crossing north to south within the east crosswalk. The pedestrian was crossing on a "DON'T WALK" pedestrian signal indication and received fatal injuries as a result of the collision. No impairment was found with regard to the pedestrian or the driver of the vehicle. The collision occurred on dry pavement under nighttime conditions.

Saturday, May 26, 2012 at 9:12 PM: A westbound vehicle traveling in the right turn lane approximately 450 feet east of North Banana River Drive struck and fatally injured a pedestrian crossing south to north not within a crosswalk. No impairment was found with regard to the pedestrian or the driver of the vehicle. The collision occurred on dry pavement under nighttime conditions.

Sunday, May 27, 2012 at 4:32 PM: The driver of an eastbound through vehicle at the Newfound Harbor Drive intersection ran a red signal and struck the side of a northbound left turning vehicle. The passenger of the eastbound vehicle received fatal injuries as a result of the crash. No impairment was found with regard to the drivers of either vehicle. The collision occurred on dry pavement under daylight conditions.

Friday, December 14, 2012 at 7:30 PM: A westbound vehicle traveling in the right turn lane approximately 75 feet east of North Banana River Drive struck a bicyclist crossing south to north not within a crosswalk. The bicyclist received fatal injuries as a result of the collision. No impairment was found with regard to the bicyclist or the driver of the vehicle. The collision occurred on dry pavement under nighttime conditions.

5. QUALITATIVE ASSESSMENT:

The subject corridor was reviewed by a registered professional engineer on Wednesday March 16, 2016. Weather conditions were clear, warm and sunny. The focus of the review was to evaluate the general overall operational conditions and identify any safety issues or conflicts which may have contributed to the frequency or severity of historic crashes or may contribute to the frequency or severity of future crashes.

Observation periods along SR 520 were selected primarily during peak hours derived from turning movement counts taken at the signalized intersections along the subject corridor. The morning assessment period was from 7:00 AM to 9:00 AM, the midday period was from 1:00 PM to 3:00 PM, and the afternoon period was from 4:00 PM to 6:00 PM.

General Observations

- The resurfacing project along SR 520 was not yet complete at the time of the assessment. The roadway has been resurfaced and the signals replaced, with sidewalk reconfigurations constructed to realign crosswalks at the signalized intersections as well as provide access to SCAT bus stops. No roadway construction activity was observed during the assessment.
- Signage along the corridor appears to be in good condition. Pavement markings on SR 520 are temporary paint as thermoplastic has yet to be applied to the friction course surface. The special emphasis crosswalks at the signalized intersections have decorative stamped concrete patterns and are also awaiting thermoplastic striping.
- Some driveway connections to SR 520 have signage and/or pavement markings that are substandard. Pavement markings on driveways indicating a directional movement have been worn off.



Operational Conditions

- Traffic along SR 520 was light during the morning hours but grew in the afternoon. Businesses that opened after the morning peak hour contributed to the increase in mainline traffic and driveway activity. Walmart and gas stations that are open 24 hours along the corridor did not see much activity during the morning peak hour.
- Signals were observed not to be coordinated at the time of the assessment and were most likely set to isolated operations due to the resurfacing construction project that was taking place along the corridor. Protected-permissive left turn phasing along SR 520 utilizing newly installed four-section signal heads was in effect at all three signals during all peak periods. **Observed queues at the signalized intersections were irregular due to these items and do not represent normal traffic operating conditions.**
- A maximum green left turn phase in both directions of SR 520 at the South Banana River Drive signalized intersection formed platoons that created long gaps for eastbound left turning traffic at the two-way left turn lanes and the other two signals in the subject corridor. Consequently, eastbound and westbound through queues at South Banana River Drive were excessively long due to the maximum green left turn phase. These observations do not represent normal traffic operating conditions.
- Use of the two-way left turn lanes throughout the corridor was low throughout the day. The area that experienced the highest two-way left turn usage was between Newfound Harbor Drive and North Banana River Drive at the Walmart east driveway.
- At the Newfound Harbor Drive intersection, heavy traffic was observed northbound left in the morning and eastbound left in the evening peak hour. The eastbound left queue in the afternoon extended into the through lanes, although this observation does not represent normal traffic operating conditions as mentioned above.
- People were observed throughout the day boarding and alighting SCAT buses at designated bus stops along the corridor. Buses did not cause excessive delays to mainline traffic or create conflicts with other vehicles and pedestrians.



- There was moderate pedestrian activity utilizing sidewalks on both sides of SR 520. Most pedestrians continued to walk on either the north or south sidewalk and did not cross SR 520 at the signalized intersections or at mid-block locations. Sidewalks and curb ramps appeared to be in good condition with no visible ADA deficiencies noted.
- Bicyclists were observed either riding on sidewalks or within the new bike lanes along SR 520 created by the resurfacing construction project. Moderate bicycle traffic was present and no conflicts between bicyclists and motor vehicles or pedestrians were observed.

Observed Safety Issues

- Eastbound vehicles attempting to turn left onto North Banana River Drive sometimes had to swerve around westbound vehicles attempting to turn left into driveways. Although the eastbound left turn lane for North Banana River Drive starts approximately 490 feet west of the intersection, westbound vehicles still treated this section as a two-way left turn lane by illegally crossing the double yellow line into the turn lane.



- Conflicts were observed between eastbound vehicles illegally turning left into the Sunoco driveway and southbound right turning vehicles at the North Banana River Drive intersection. The driveway is configured (via striping) as “right-in, right-out” for westbound traffic; however eastbound vehicles including heavy trucks still turned left into the driveway.

- Vehicles turning left to exit driveways were observed to wait in the two-way left turn lane for gaps in order to merge onto SR 520 through traffic. This has created conflicts as vehicles wanting to turn left into driveways were blocked by these vehicles and needed to swerve around them to avoid a head on collision.
- One pedestrian was observed crossing SR 520 midblock approximately 100 feet west of the North Banana River Drive intersection. Pedestrian features of the signal were operational at the time and crosswalks present with no obstructions to the adjoining sidewalk. The pedestrian created an immediate hazard for southbound right turning vehicles who were not anticipating a pedestrian crossing outside the crosswalk.



- A rear end collision occurred at the Newfound Harbor Drive intersection at approximately 9:00 AM during the assessment. The vehicles were travelling in an unknown direction and had parked in Express Lane (Driveway #2) following the collision. Traffic was moderate at the time of the crash and no visible injuries were observed.

6. TRAFFIC SIGNAL OPERATIONAL ANALYSIS:

Synchro is a traffic signal analysis program which considers both isolated intersection conditions and the influence of coordinated signal systems to estimate average vehicular delays and queue lengths. For signalized intersections, performance is typically expressed by level of service (LOS) and capacity.

Existing signal timings for the subject corridor were obtained from Brevard County Traffic Engineering and these timings are included as Appendix J. The obtained timings were in place prior to the resurfacing project and exhibit signal coordination with a cycle length of 110 seconds and protected only left-turn phasing along SR 520. Turning movement count data (included in Appendix H) for morning, midday and afternoon periods was used in the analysis of existing conditions. Peak hour factors and heavy vehicle percentages derived from the turning movement counts were used as inputs to further calibrate the Synchro model.

The signalized intersections along SR 520 at Newfound Harbor Drive, North Banana River Drive and South Banana River Drive were modeled and analyzed utilizing Synchro software. Existing conditions for peak hours were analyzed, and proposed conditions with access management modifications were both analyzed and optimized.

Synchro modeling results utilizing the existing coordinated cycle lengths and split times are included as Appendix K and performance measures are summarized in Table 8. Table 8 includes intersection and approach delays, levels of service, and maximum volume-to-capacity ratios for each approach at the subject intersections. As reflected in the table, the overall intersection delays and associated levels of service are adequate (LOS D or better) for all peak hour periods.

Table 8: Synchro Performance Measures for Existing Condition

Cycle Length = 110 sec	AM Peak Hour			MID Peak Hour			PM Peak Hour		
Intersection	Delay (sec)	LOS	Max v/c	Delay (sec)	LOS	Max v/c	Delay (sec)	LOS	Max v/c
Newfound Harbor Drive (Overall)	23.7	C	-	34.3	C	-	35.0	D	-
Eastbound	24.7	C	0.40 (T)	25.1	C	0.54 (L)	29.3	C	0.77 (L)
Westbound	20.9	C	0.44 (T)	40.1	D	0.80 (T)	44.4	D	0.75 (T)
Northbound	24.3	C	0.57 (L)	30.6	C	0.63 (L)	33.2	C	0.66 (L)
Southbound	33.9	C	0.55 (T+R)	46.7	D	0.91 (L)	29.9	C	0.72 (T+R)
North Banana River Drive (Overall)	13.6	B	-	14.0	B	-	15.5	B	-
Eastbound	9.9	A	0.56 (L)	13.5	B	0.66 (L)	13.6	B	0.70 (L)
Westbound	10.2	B	0.26 (T)	9.9	A	0.38 (T)	11.8	B	0.40 (T)
Northbound	36.6	D	0.08 (L)	38.7	D	0.36 (L)	41.3	D	0.37 (L)
Southbound	31.2	C	0.65 (L)	28.7	C	0.63 (L)	30.5	C	0.73 (L)
South Banana River Drive (Overall)	7.2	A	-	15.9	B	-	8.8	A	-
Eastbound	3.3	A	0.29 (T)	17.1	B	0.49 (T)	5.8	A	0.43 (T)
Westbound	5.9	A	0.22 (T)	10.0	A	0.35 (T)	8.4	A	0.32 (L)
Northbound	46.1	D	0.59	56.4	E	0.69	52.8	D	0.56
Southbound	22.2	C	0.12	17.3	B	0.14	26.9	C	0.10

(T) = Through Movement, (L) = Left Movement, (T+R) = Shared Through-Right Movement

The traffic signals were then optimized as a coordinated system. Turning movement volumes adjusted to reflect access management adjustments for the morning and afternoon peak periods were used in the optimization, and protected only left-turn phasing along the mainline approaches was used in lieu of flashing yellow arrow protected-permissive phasing to determine maximum queue lengths.

For the proposed condition, the resulting optimized cycle lengths have decreased in the morning (90 seconds) and remained the same in the afternoon (110 seconds) while providing adequate intersection levels of service (LOS D or better) during both peak hour periods. The Newfound Harbor Drive intersection in the PM peak hour improved from LOS D to LOS C after optimization. Table 9 below summarizes the performance measures of the proposed condition. The increased delay at some intersections and approaches can be attributed to the additional U-turns the signals must service due to access management modifications. The optimized maximum volume-to-capacity ratios of all intersection movements for both peak hour periods are still below 1.00, indicating adequate capacity exists at the intersections after optimization.

Table 9: Synchro Performance Measures for Proposed Condition

Cycle Length = 90 sec (AM), 110 sec (PM)	AM Peak Hour			PM Peak Hour		
Intersection	Delay (sec)	LOS	Max v/c	Delay (sec)	LOS	Max v/c
Newfound Harbor Drive (Overall)	20.7	C	-	29.4	C	-
Eastbound	23.4	C	0.42 (T)	27.9	C	0.79 (L)
Westbound	16.0	B	0.46 (L)	27.9	C	0.66 (L)
Northbound	23.1	C	0.63 (L)	42.4	D	0.75 (L)
Southbound	27.3	C	0.51 (T+R)	30.3	C	0.73 (T+R)
North Banana River Drive (Overall)	13.1	B	-	17.2	B	-
Eastbound	11.4	B	0.57 (L)	16.0	B	0.75 (L)
Westbound	10.1	B	0.29 (T)	14.6	B	0.46 (T)
Northbound	28.9	C	0.07 (L)	39.4	D	0.37 (L)
Southbound	25.4	C	0.60 (L)	27.7	C	0.69 (L)
South Banana River Drive (Overall)	9.3	A	-	10.1	B	-
Eastbound	5.5	A	0.29 (T)	6.7	A	0.46 (T)
Westbound	9.7	A	0.23 (T)	10.4	B	0.38 (L)
Northbound	35.2	D	0.54	53.5	D	0.56
Southbound	18.3	B	0.11	26.9	C	0.10

(T) = Through Movement, (L) = Left Movement, (T+R) = Shared Through-Right Movement

In summary, the traffic signal timing optimization at the intersections for the peak hour periods began with the aforementioned review of the operational conditions associated with the existing cycle lengths and split timings. The proposed access management modifications with adjusted turning movement counts were used in the analysis of the optimized condition. Synchro software was then programmed to optimize the intersection cycle lengths, split timings and coordinated offsets. Measures considered in the review and timing optimizations included the volume-to-capacity ratios and the overall intersection delay. The Synchro results of the optimization are provided as Appendix K.

7. CONCEPTUAL DESIGN ALTERNATIVE:

The conceptual design recommended to bring the subject corridor into compliance with current access management criteria is depicted on the Recommended Typical Sections (Appendix L), the Recommendation Diagram (Appendix M) and are summarized below:

Installation of a raised median to replace the existing two-way left turn lane. By providing a restrictive median, the subject corridor will meet Access Class 3 standards for purposes of this study. Signal and driveway connection spacing were not considered as it was assumed that all existing driveway connections are per permit and would require additional coordination with the local governing agency and property owners prior to modification.

Median Width: The two-way left turn lane and left turn lanes at the signalized intersections measure 14 feet wide. A median width of 16 feet was selected to minimize impact to the existing roadway. It allows for the reduction of only one inside through lane in each direction to 11 feet while not affecting the other lanes. This median width would require a design variation as it would not meet FDOT criteria of 22 feet for a 45 MPH roadway.

Left Turn Lanes: Left turn lanes at the signalized intersections would measure 11 feet wide and would be bordered by a 5-foot Type 1 traffic separator with drainage slots. The lengths of the left turn lanes were designed based on Index 301 for single left turn lanes with raised separation, and a 45 MPH design speed. Queue lengths were determined using the Synchro analysis performed for the optimized condition. Lane lengths were then adjusted to accommodate possible fluctuations in traffic. Table 10 shows the development of the design lengths of the left turn lanes.

Table 10: Left Turn Lane Length Determination

Design Speed = 45 MPH						
SR 520 Intersection	Synchro 95th Queue	Eastbound Left				
		Queue	L ₁	L ₂	Total	Design
Newfound Harbor Drive	312'	312'	85'	100'	497'	500'
N. Banana River Drive	253'	253'	85'	100'	438'	475'
S. Banana River Drive	61'	100'	85'	100'	285'	300'
SR 520 Intersection	Synchro 95th Queue	Westbound Left				
		Queue	L ₁	L ₂	Total	Design
Newfound Harbor Drive	172'	172'	85'	100'	357'	400'
N. Banana River Drive	47'	100'	85'	100'	285'	285'
S. Banana River Drive	76'	100'	85'	100'	285'	300'

From Index 301:

L₁ = Clearance Distance

L₂ = Brake To Stop Distance

The eastbound left turn lane at the Newfound Harbor Drive intersection would need to extend to 500 feet in length to accommodate the queue and require a 2-foot traffic separator to allow for one 11-foot wide turn lane and one 11-foot wide through lane in the eastbound direction.

Directional Median Openings: Access Class 3 allows for directional median openings every 1,320 feet. The distances between the signals (full median openings) along the subject corridor will not allow for the placement of directional median openings. Therefore directional median openings were not considered in the conceptual design.

Right Turn Lanes: Additional right turn lanes at driveways were not needed based on driveway volumes. The minimum driveway traffic volume to consider right turn lanes is 80-125 as recommended by the FDOT Driveway Information Guide 2008. The only driveway meeting this guideline is the Walmart east driveway which is served by an existing continuous right turn lane.

U-Turns: The 8-foot paved shoulder along SR 520 eastbound and full width continuous right turn lane westbound provides adequate pavement for most vehicles (up to and including WB-40 semitrailers) to safely complete U-turns at signalized intersections. WB-62FL semitrailers and larger vehicles may need to make U-turns at intersections east or west of the subject corridor.

Signing Considerations: The installation of STOP and RIGHT TURN ONLY signage at all existing driveway connections would coincide with the median installation. All signs relating to the two-way left turn lane are to be removed, including the span wire sign assembly west of South Banana River Drive.



8. BENEFIT COST & NET PRESENT VALUE ANALYSES:

In consideration of the improvements proposed as related to the historic, reported crashes presented herein, a benefit-cost analysis and Net Present Value (NPV) calculation were compiled. The cost data was obtained from the FDOT and crash mitigation rates were derived from the AASHTO Highway Safety Manual, FHWA's Crash Modification Factor Clearinghouse, and engineering judgment. The benefit value of the proposed improvements is the estimated financial savings anticipated by the number (or proportion) of historic documented crashes mitigated as a result of the proposed improvements (Historical Crash Method).

The total construction cost for the project, including the median installation, milling and resurfacing of left turn lanes, signing and pavement markings, engineering design and CEI cost estimates, totaled approximately \$473,050. These costs are detailed as Table 12.

The five year crash analysis period considered was from 2010 through 2014. The cost-per-crash data was obtained from the FDOT's Plans Preparation Manual (Table 23.5.1: FDOT (HSIPG) Average Crash Costs by Facility Type). For a 6+ lane suburban undivided facility, the average cost per crash is not given therefore the statewide average cost per crash of \$155,695 was utilized for this analysis.

In consideration of the proposed improvements, in conjunction with the documented crash history, the Crash Modification and Crash Reduction Factor in Table 11 was utilized. Additional details of the crash reduction factor are included as Appendix N.

Table 11: Crash Reduction Factor Information

CMF ID	Description	CMF Value	Crash Reduction Factor (%)	Quality Rating
7771	Convert TWLTL to a raised median	0.53	47	3 Stars

The crashes anticipated to be mitigated by the proposed improvement involve left turning vehicles to/from driveways, and are highlighted in yellow on the crash diagram in Appendix I. The results of the benefit/cost ratio assessment are summarized in Table 13 and show that **the benefit-cost ratio for the subject improvements is estimated as 4.91.**

A Net Present Value (NPV) calculation was also completed for the proposed improvements and is included as Appendix O. The Net Present Value is defined as the sum of the discounted present value of all benefits minus the sum of discounted present value of all costs. The present values were estimated based upon a 4% discount rate (consistent with the B/C Ratio analysis) and assumed that construction would be complete in four years (2020). The calculation methodology used was provided by the FDOT and assumed no recurring costs for constructed elements with design lives less than 20 years. **The resulting Net Present Value for this project was estimated as \$1,821,854.**

Table 12: Construction Cost Estimate

PRELIMINARY ENGINEERS COST ESTIMATE
SR 520 from West of Newfound Harbor Drive to East of South Banana River Drive

RECOMMENDED IMPROVEMENTS					
PAY ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	STATE AVERAGE UNIT COST	ESTIMATED COST
ROADWAY					
101-1	MOBILIZATION (10%)	LS	1	10.00%	\$23,270.82
102-1	MAINTENANCE OF TRAFFIC (20%)	LS	1	20.00%	\$51,195.79
110-1-1	CLEARING AND GRUBBING	AC	0.43	\$12,883.64	\$5,539.97
110-4	REMOVAL OF EXIST CONC PAVEMENT	SY	235	\$21.47	\$5,045.45
120-1	REGULAR EXCAVATION	CY	417	\$4.69	\$1,955.73
120-6	EMBANKMENT	CY	567	\$8.85	\$5,017.95
285-710	OPTIONAL BASE, BASE GROUP 10	SY	127	\$15.18	\$1,927.86
327-70-6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	SY	3340	\$1.94	\$6,479.60
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	TN	10.5	\$90.98	\$955.29
337-7-74	ASPH CONC FC, TRAF C, FC-12.5, PG 76-22, ARB	TN	228	\$109.76	\$24,992.35
520-1-7	CONCRETE CURB & GUTTER, TYPE E	LF	126	\$13.39	\$1,687.14
520-2-1	CONCRETE CURB, TYPE A	LF	1646	\$44.64	\$73,477.44
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	LF	1474	\$31.84	\$46,932.16
520-70	CONCRETE TRAFFIC SEPARATOR, SP- VAR WIDT	SY	140	\$58.44	\$8,181.60
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	SY	65	\$45.29	\$2,943.85
570-1-2	PERFORMANCE TURF, SOD	SY	1021	\$2.29	\$2,338.09
ROADWAY TOTAL =					\$187,474.48

SIGNING AND PAVEMENT MARKING

641-2-80	PRESTRESSED CONCRETE POLE, COMPLETE POLE REMOVAL	EA	2	\$2,985.99	\$5,971.98
700-1-11	SINGLE POST SIGN, F&I <12 SF	AS	6	\$313.47	\$1,880.82
700-1-12	SINGLE POST SIGN, F&I 12-20 SF	AS	25	\$992.25	\$24,806.25
700-1-60	SINGLE POST SIGN, REMOVE	AS	4	\$15.83	\$63.32
705-10-1	OBJECT MARKER, TYPE 1	EA	5	\$121.60	\$608.00
705-11-1	DELINEATOR, FLEXIBLE TUBULAR	EA	2	\$51.91	\$103.82
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	128	\$3.32	\$424.96
710-90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	LS	1	-	\$2,256.89
*	PAINTED PVMT MARK, STD, WHITE, SOLID, 6"	GM	0.332	\$870.51	-
*	PAINTED PVMT MARK, STD, WHITE, SOLID, 24"	LF	66	\$1.36	-
*	PAINTED PVMT MARK, STD, WHITE, DOT GUIDE, 6"	GM	0.097	\$557.02	-
*	PAINTED PVMT MARK, STD, WHITE, ARROW	EA	24	\$26.26	-
*	PAINTED PVMT MARK, STD, YELLOW, SOLID, 18"	LF	136	\$1.09	-
*	PAINTED PVMT MARK, STD, YELLOW, SOLID, 6"	GM	1.213	\$862.19	-
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	LF	66	\$4.15	\$273.90
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	GM	0.097	\$1,620.87	\$156.56
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	EA	24	\$59.48	\$1,427.52
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	LF	136	\$3.13	\$425.68
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	GM	0.332	\$3,906.62	\$1,297.00
711-16-201	THERMOPLASTIC, STD-OTH, YELLOW, SOLID, 6"	GM	1.213	\$3,820.36	\$4,634.10
711-17	THERMOPLASTIC, REMOVE	SF	456	\$1.98	\$902.88

SIGNING AND PAVEMENT MARKING TOTAL = \$45,233.68

SUBTOTAL (ROADWAY AND S&PM PAY ITEMS) = \$232,708.15

SUBTOTAL (PAY ITEMS, MOT, MOBILIZATION) = \$307,174.76

PROJECT UNKNOWNNS (10%) = \$30,717.48

TOTAL ESTIMATED CONSTRUCTION COST = \$337,892.24

ESTIMATED ENGINEERING COST (30%) = \$101,367.67

ESTIMATED CEI COST (10%) = \$33,789.22

TOTAL ESTIMATED PROJECT COST = \$473,049.13

NOTE: 12 MO STATEWIDE AVG. UNIT COST FROM FDOT 2015/05/01 TO 2016/04/30

FORM 511

**STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
SAFETY OFFICE ANNUAL BENEFIT COST ANALYSIS**

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APPENDIX

Appendix A: Straight-Line Diagram

Appendix B: Existing Typical Section

Appendix C: SR 520 Resurfacing Plans (2014)

Appendix D: Existing Conditions Diagram

Appendix E: Photographs

Appendix F: FDOT Count Station Data

Appendix G: Traffic Data Collected

Appendix H: Turning Movement Volumes

Appendix I: Collision Summary and Diagram

Appendix J: Existing Signal Timings

Appendix K: Synchro Reports

Appendix L: Recommended Typical Section

Appendix M: Recommendation Diagram

Appendix N: Crash Mitigation Information

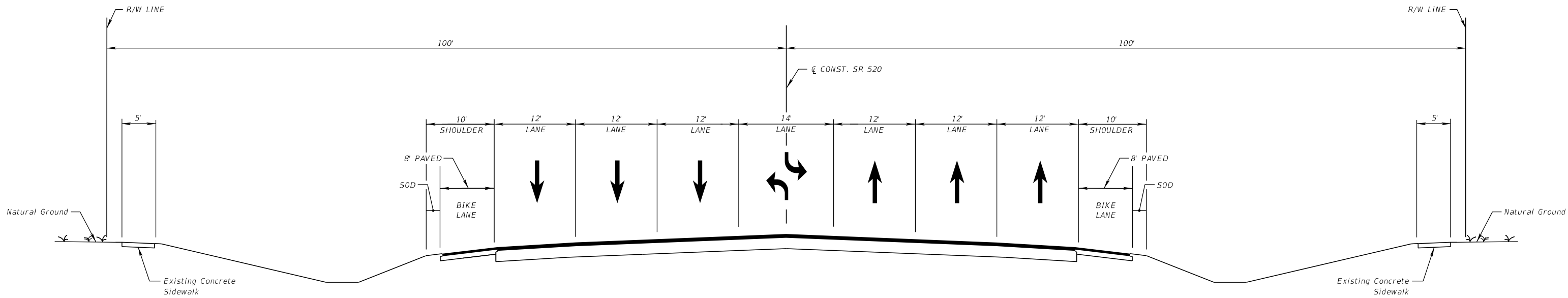
Appendix O: Net Present Value Estimate

Appendix A:

Straight-Line Diagram

Appendix B:

Existing Typical Section



SR 520
EXISTING TYPICAL SECTION

Appendix C:
SR 520 Resurfacing Plans (2014)

COMPONENTS OF CONTRACT PLANS SET

ROADWAY PLANS
SIGNING AND PAVEMENT MARKING PLANS

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

FINANCIAL PROJECT ID 431139-1-52-01

BREVARD COUNTY (70100)

STATE ROAD NO. 520

A DETAILED INDEX APPEARS ON THE
KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SIGNATURE SHEET
3	SUMMARY OF PAY ITEMS
4 - 6	TYPICAL SECTIONS
7 - 8	SUMMARY OF QUANTITIES
9	GENERAL NOTES
10 - 18	ROADWAY PLAN SHEETS
19 - 20	SPECIAL DETAILS
21 - 29	CROSS SECTIONS
30	STORMWATER POLLUTION PREVENTION PLAN
31 - 32	TEMPORARY TRAFFIC CONTROL PLANS
33 - 35	PROJECT SURVEY CONTROL SHEETS

LIST OF REVISED INDEX DRAWINGS

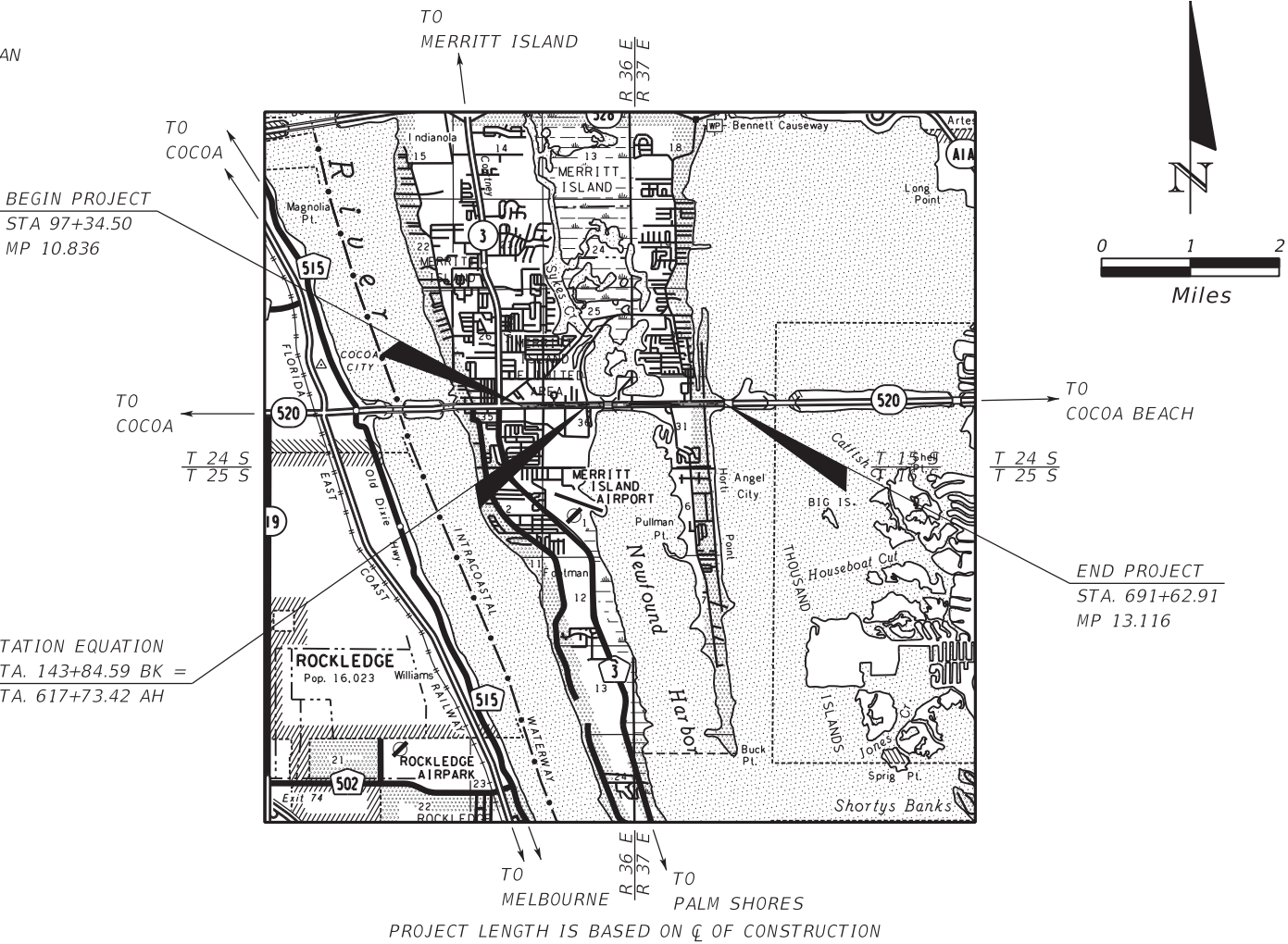
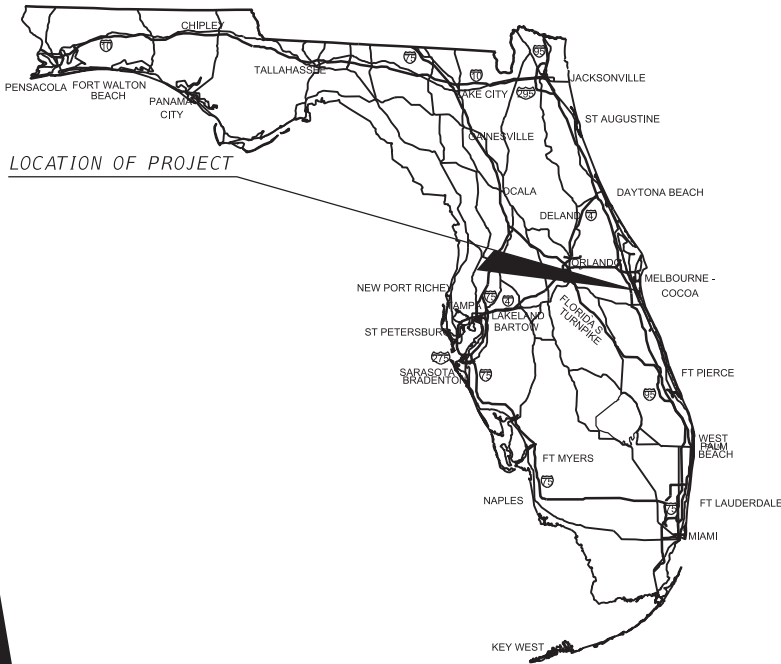
INDEX NO.	SHEET NO.
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GOVERNING STANDARDS:

Florida Department of Transportation, 2014 Standards and revised Index Drawings as appended herein, and 2014 Standard Specifications for Road and Bridge Construction, as ammended by Contract Documents.

For Design Standards click on the "Design Standards" link at the following web site:
<http://www.dot.state.fl.us/rddesign/>

For the Standard Specifications for Road and Bridge Construction click on the "Specifications" link at the following web site:
<http://www.dot.state.fl.us/specificationsoffice/>



ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:

JASON R. FLICK, P.E.
MOFFATT & NICHOL
1025 GREENWOOD BLVD, STE. 371
LAKE MARY, FL 32746

PLANS PREPARED BY:

MOFFATT & NICHOL
1025 GREENWOOD BLVD, SUITE 371
LAKE MARY, FL 32746
PHONE: (407) 562-2030
FAX: (407) 562-2031
CONTRACT NO.: C9395
VENDOR ID.: F951951343001
CERT. OF AUTH. NO.: 4877

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

NOTE: THIS IS A LUMP SUM PROJECT.

NOTE: THIS PROJECT TO BE LET TO CONTRACT
WITH FINANCIAL PROJECT IDS 431139-2-52-01,
431139-3-52-01 & 427400-2-52-01

LENGTH OF PROJECT

	LINEAR FEET	MILES
ROADWAY	11643.20	2.205
BRIDGES	396.38	0.075
NET LENGTH OF PROJECT	11643.20	2.205
EXCEPTIONS		
GROSS LENGTH OF PROJECT	12039.58	2.280

FDOT PROJECT MANAGER: GENE VARANO

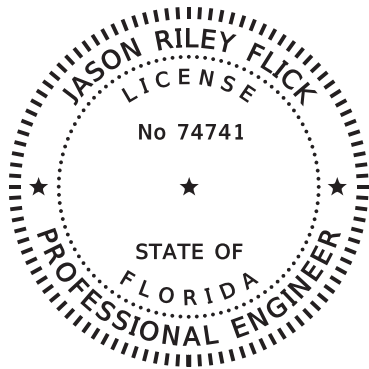
KEY SHEET REVISIONS

DATE	DESCRIPTION

ROADWAY PLANS
ENGINEER OF RECORD: JASON R. FLICK, P.E.

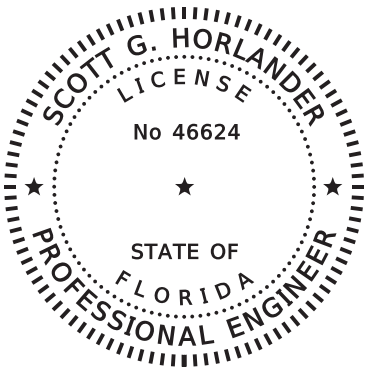
P.E. NO.: 74741

FISCAL YEAR	SHEET NO.
14	1



Jason R Flick

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Jason R Flick
Date:
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Scott G Horlander
Date: 2014.04.16
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THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.003, F.A.C.

ROADWAY PLANS

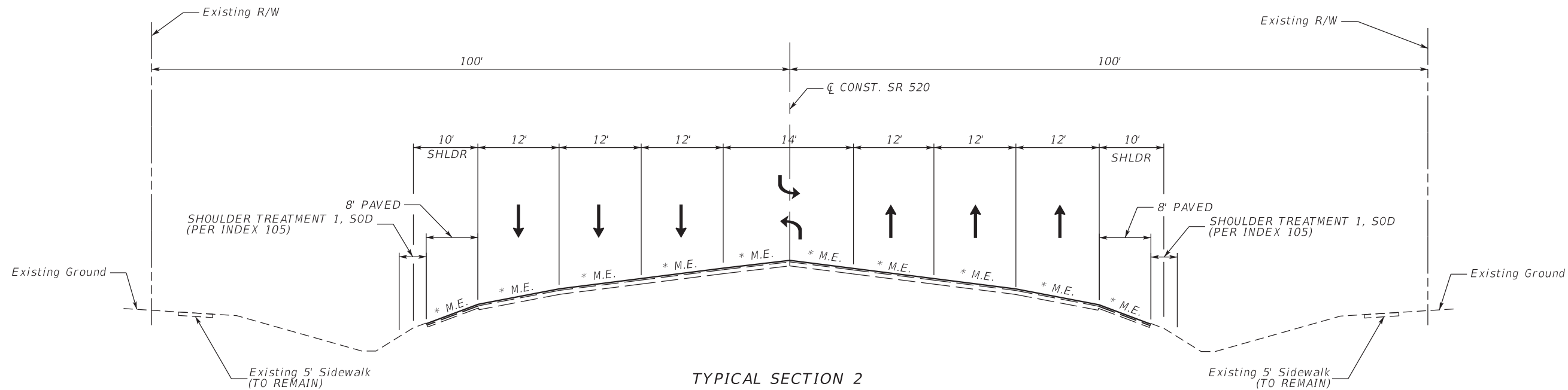
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1	KEY SHEET
2	SIGNATURE SHEET
3	SUMMARY OF PAY ITEMS
4 - 6	TYPICAL SECTIONS
7 - 8	SUMMARY OF QUANTITIES
9	GENERAL NOTES
10 - 18	ROADWAY PLAN SHEETS
19 - 20	SPECIAL DETAILS
21 - 29	CROSS SECTIONS
30	STORMWATER POLLUTION PREVENTION PLAN
31 - 32	TEMPORARY TRAFFIC CONTROL PLANS
33 - 35	PROJECT SURVEY CONTROL SHEETS

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.003, F.A.C.

SIGNING & PAVEMENT MARKING PLANS

SHEET NO.	SHEET DESCRIPTION
S-1	KEY SHEET
S-2 - S-3	TABULATION OF QUANTITIES
S-4	GENERAL NOTES
S-5 - S-22	SIGNING & MARKING PLAN
S-23 - S-24	GUIDE SIGN WORKSHEET
S-25	TRAFFIC MONITORING SITE

REVISIONS				MOFFATT & NICHOL 1025 GREENWOOD BLVD, STE 371 LAKE MARY, FL 32746 PHONE (407) 562-2030 CERT. OF AUTH. NO. 4877	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNATURE SHEET	SHEET NO. 2
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				ENGINEER OF RECORD: JASON RILEY FLICK, P.E. FL REGISTRATION NO. 74741	520	BREVARD	431139-1-52-01		



TYPICAL SECTION 2
SR 520
STA. 659+91.00 TO STA. 691+62.91
(MP 12.442 TO MP 13.116)

* NOTE: M.E. DENOTES MATCH EXISTING
CROSS-SLOPE

MILLING

MILL EXISTING ASPHALT PAVEMENT (1 1/2" AVG. DEPTH)

RESURFACING

FRICTION COURSE FC-12.5 (TRAFFIC C) (1 1/2") (PG 76-22 (ARB))

TRAFFIC DATA

CURRENT YEAR = 2011 AADT = 27,000
ESTIMATED OPENING YEAR = 2014 AADT = 27,800
ESTIMATED DESIGN YEAR = 2034 AADT = 33,100
K = 9.00% D = 55.00% T = 3.50% (24 HOUR)
DESIGN HOUR T = 1.75%
DESIGN SPEED = 45 MPH

NOTE: PAVEMENT CORING DATA, INCLUDING BASE MATERIAL TYPE AND THICKNESS, IS
AVAILABLE ON THE DEPARTMENT'S WEBSITE. THE URL FOR OBTAINING THIS
INFORMATION IS: <ftp://ftp.dot.state.fl.us/LTS/D5/Construction/PavementCoringData/>.

THE DATA REPRESENTS MATERIAL ENCOUNTERED AT EACH CORING LOCATION ONLY.
MATERIAL VARIATIONS BETWEEN CORES SHOULD BE ANTICIPATED AS INDICATED
IN SECTION 2-4 OF THE STANDARD SPECIFICATIONS.

REVISIONS				MOFFATT & NICHOL 1025 GREENWOOD BLVD, STE 371 LAKE MARY, FL 32746 PHONE (407) 562-2030 CERT. OF AUTH. NO. 4877	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL SECTION	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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ENGINEER OF RECORD:
JASON RILEY FLICK, P.E.
FL REGISTRATION NO. 74741

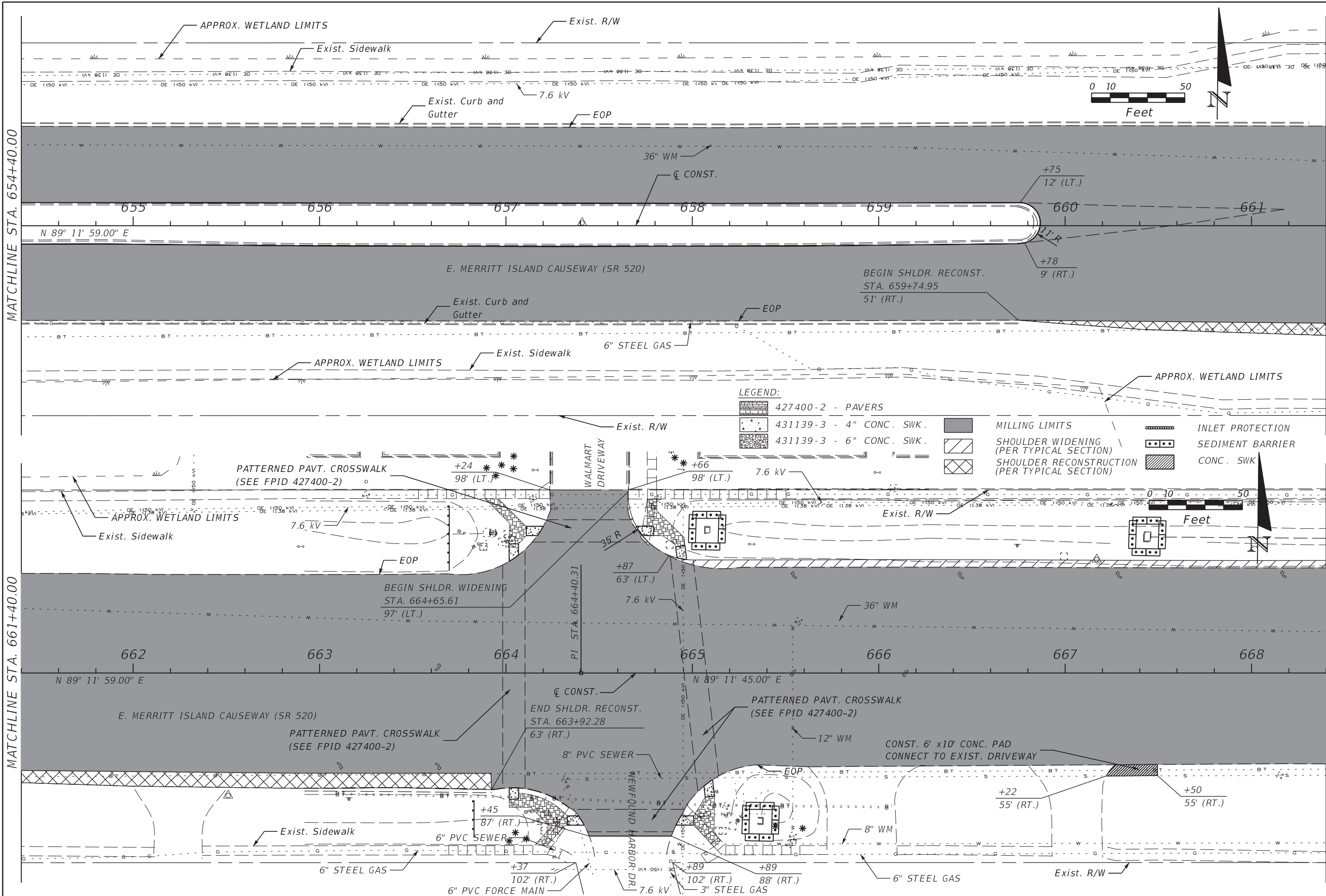
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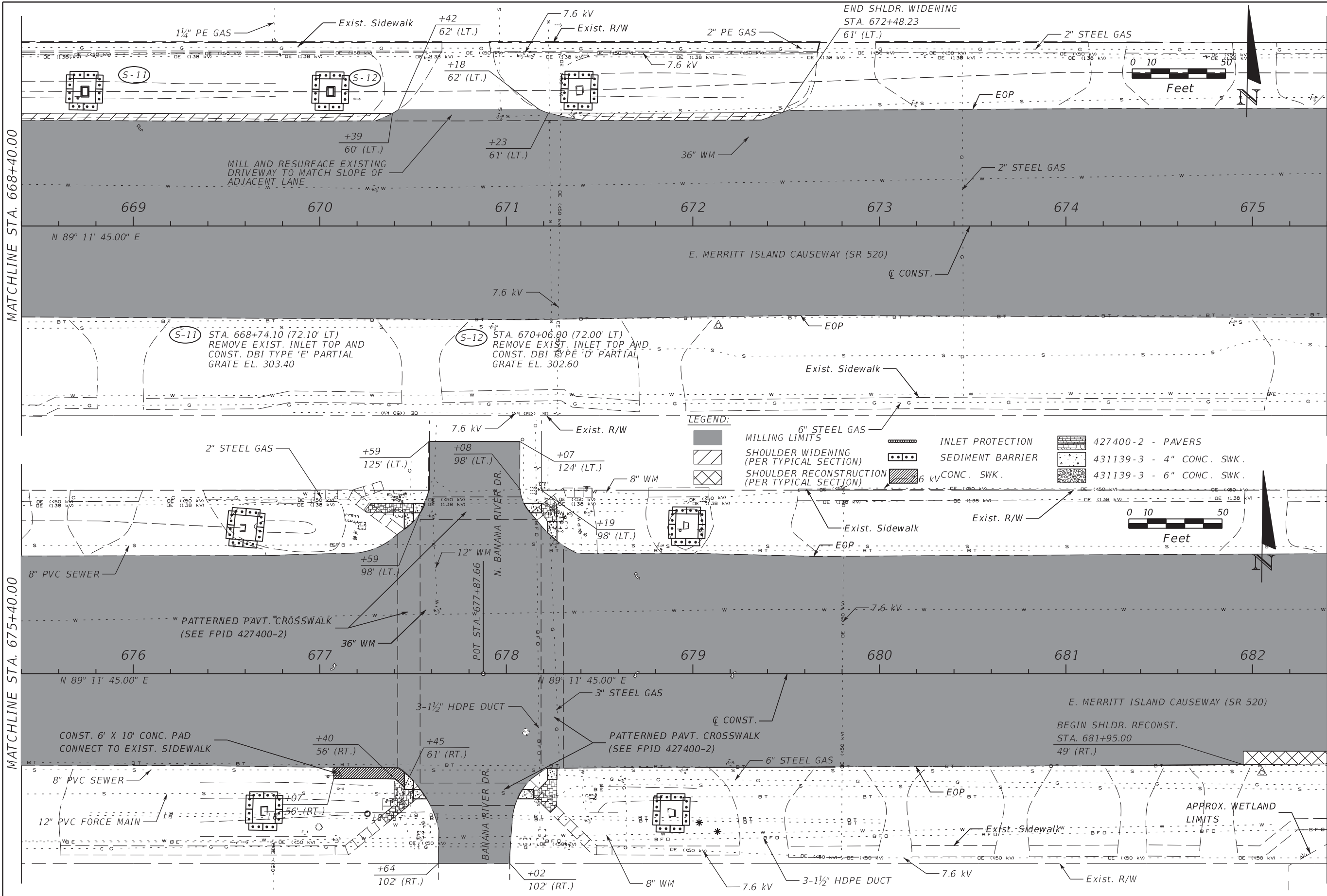
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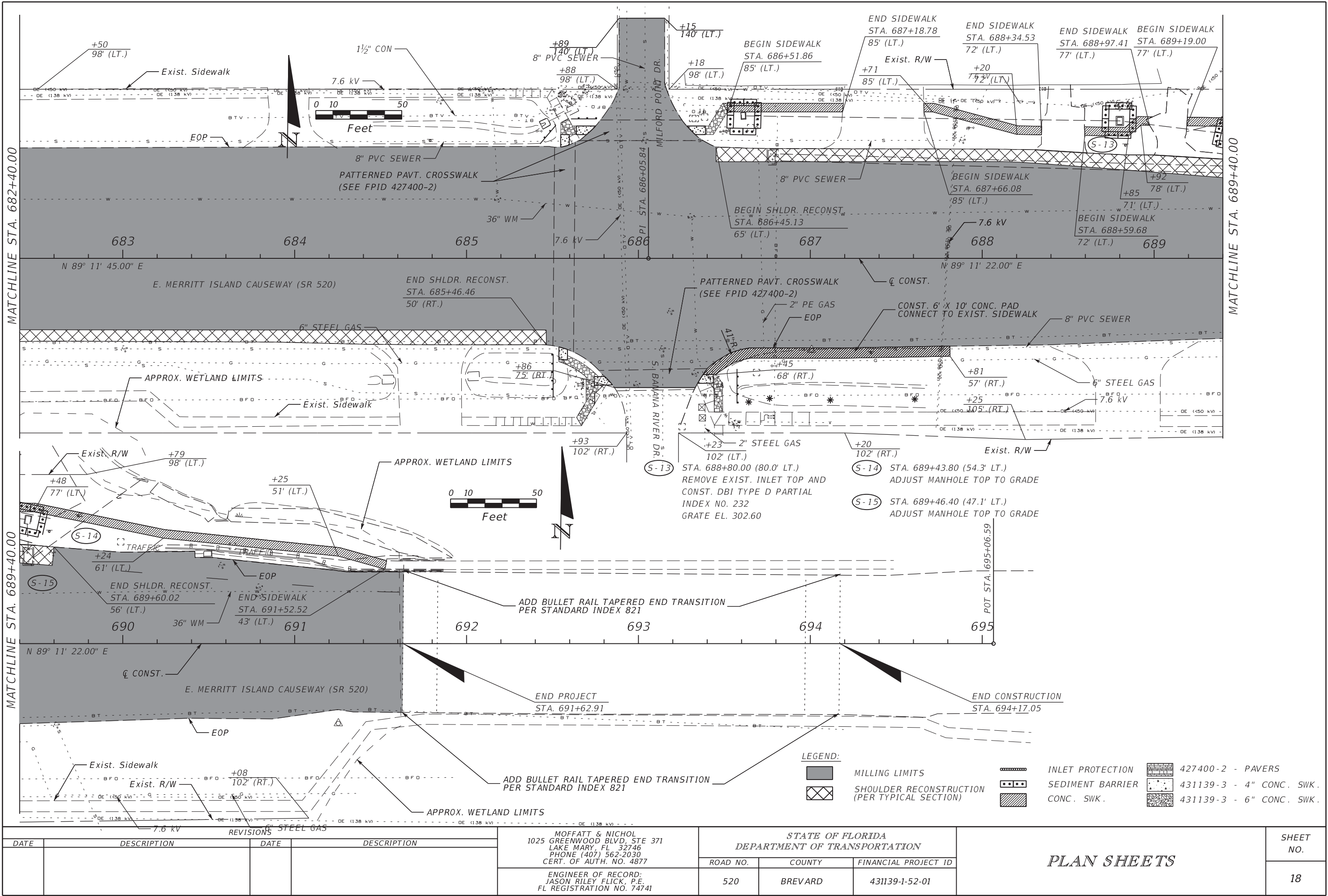
MATCHLINE STA. 668+40.00

MATCHLINE STA. 675+40.00

MATCHLINE STA. 675+40.00

MATCHLINE STA. 682+40.00

REVISIONS				MOFFATT & NICHOL 1025 GREENWOOD BLVD, STE 371 LAKE MARY, FL 32746 PHONE (407) 562-2030 CERT. OF AUTH. NO. 4877	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SHEETS	SHEET NO. 17
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				ENGINEER OF RECORD: JASON RILEY FLICK, P.E. FL REGISTRATION NO. 74741	520	BREVARD	431139-1-52-01		



REVISIONS	
DATE	DESCRIPTION

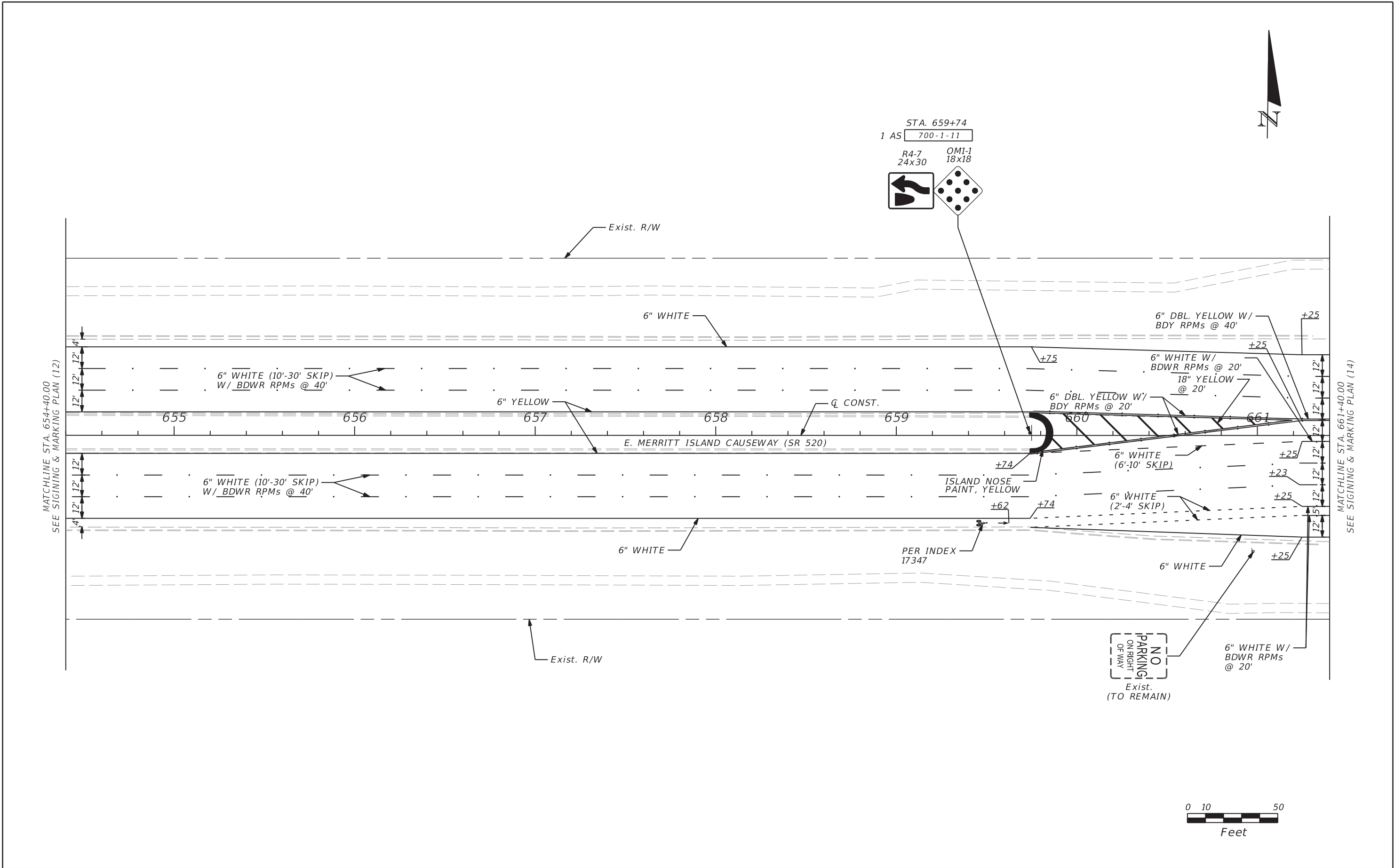
MOFFATT & NICHOL
1025 GREENWOOD BLVD, STE 371
LAKE MARY, FL 32746
PHONE (407) 562-2030
CERT. OF AUTH. NO. 4877

ENGINEER OF RECORD:
JASON RILEY FLICK, P.E.
FL REGISTRATION NO. 74741

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
520	BREVARD	431139-1-52-01

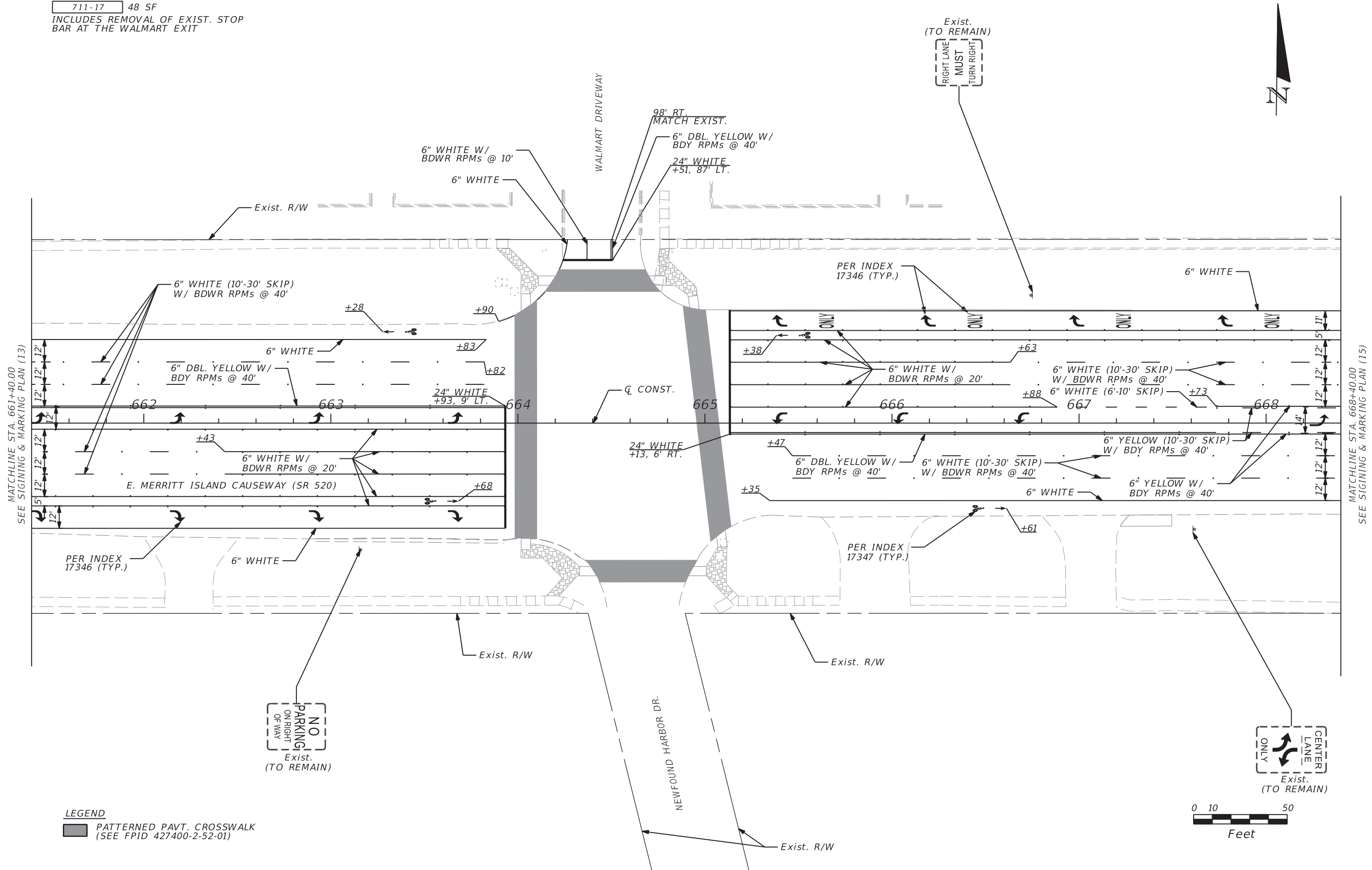
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REVISIONS				PROTEAN DESIGN GROUP SCOTT G. HORLANDER, P.E. NO. 46624 100 EAST PINE STREET, SUITE 600 ORLANDO FLORIDA 32801 PHONE (407) 246-0044 CERTIFICATE OF AUTHORIZATION NUMBER 7865	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNING & MARKING PLAN (13)		SHEET NO.
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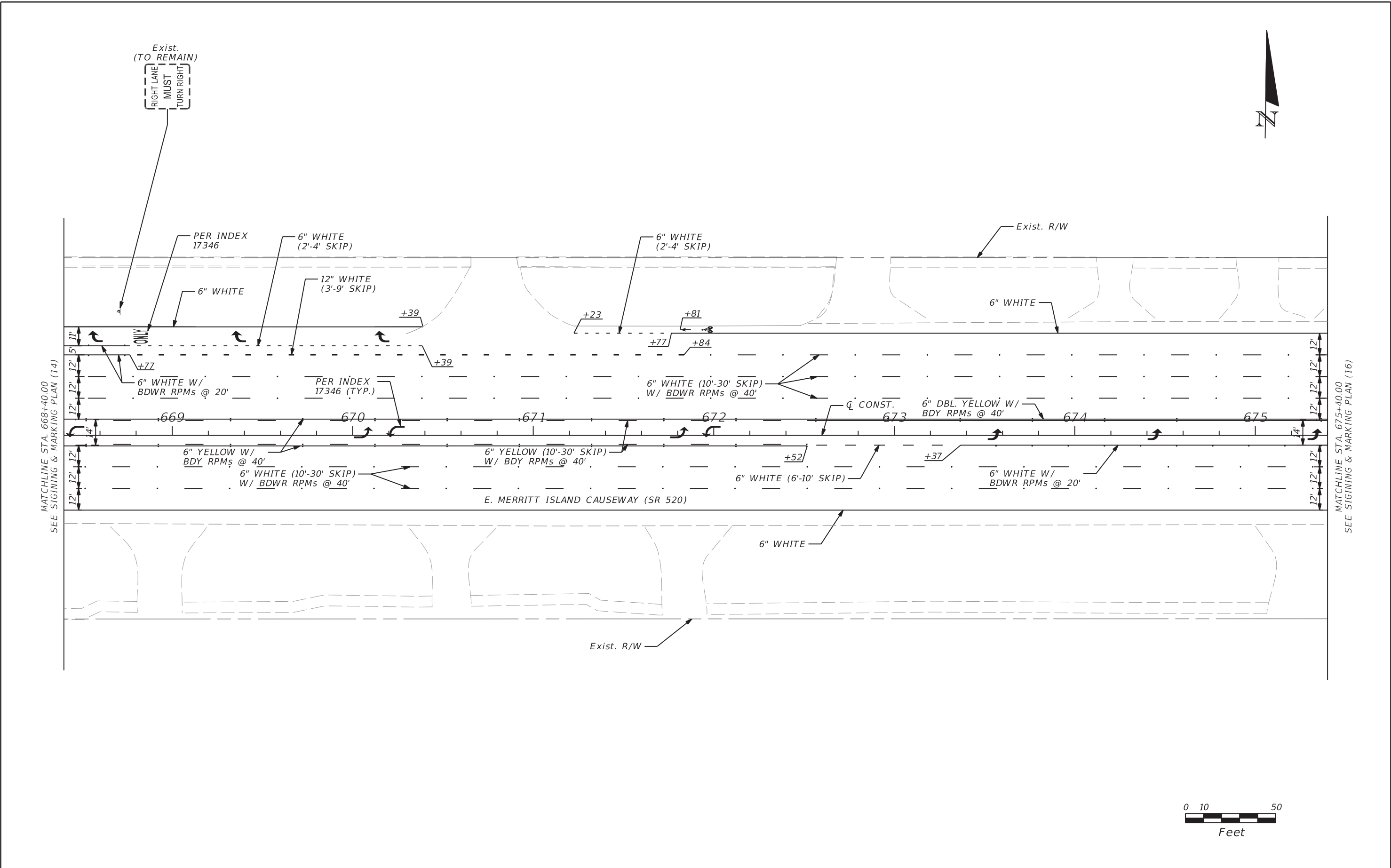
711-17 48 SF
INCLUDES REMOVAL OF EXIST. STOP
BAR AT THE WALMART EXIT



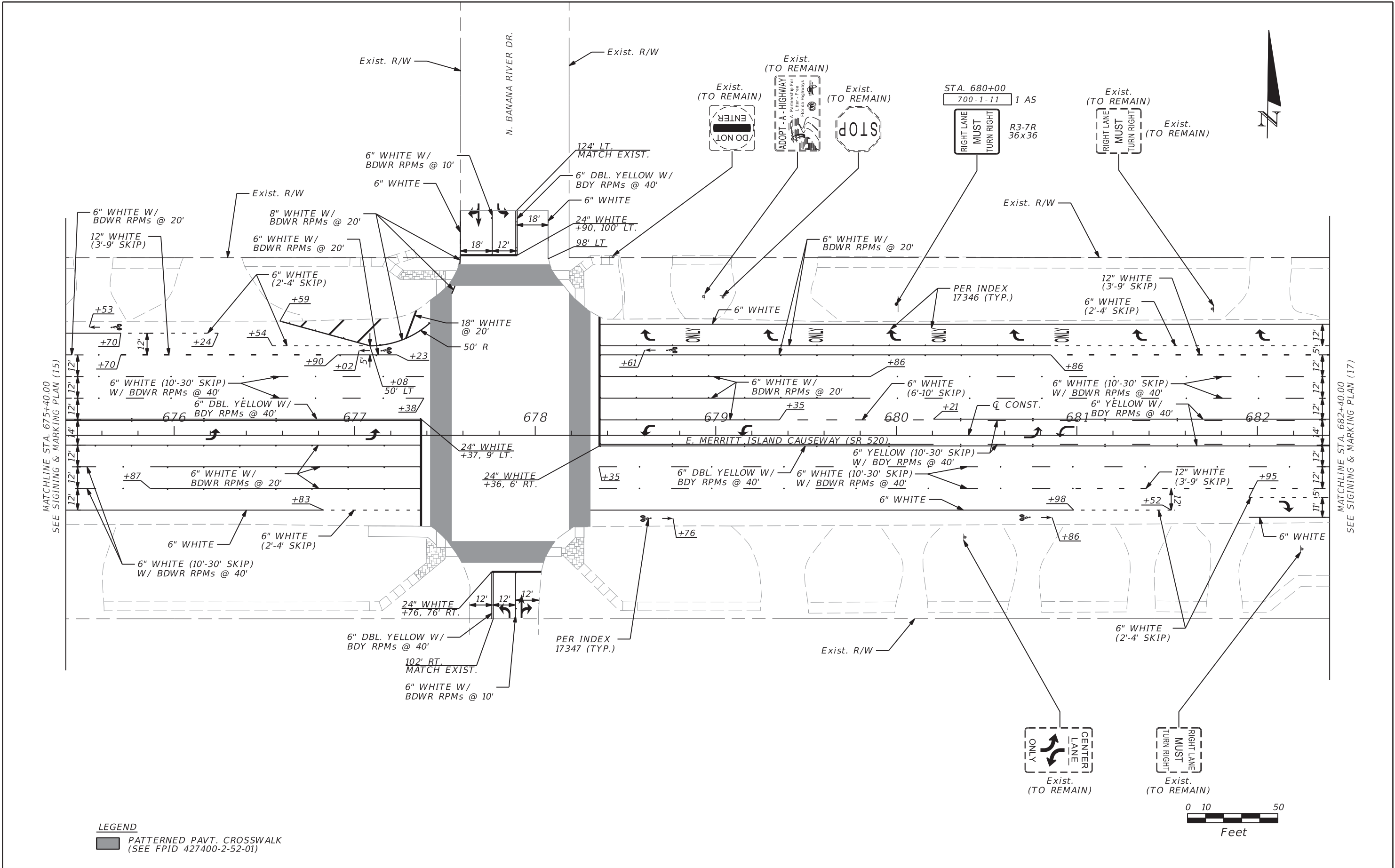
LEGEND
PATTERNED PAVT. CROSSWALK
(SEE FPID 427400-2-52-01)



REVISIONS				PROTEAN DESIGN GROUP SCOTT G. HORLANDER, P.E. NO. 46624 100 EAST PINE STREET, SUITE 600 ORLANDO FLORIDA 32801 PHONE (407) 246-0044 CERTIFICATE OF AUTHORIZATION NUMBER 7865	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNING & MARKING PLAN (14)	SHEET NO. S-18
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					520	BREVARD	431139-1-52-01		

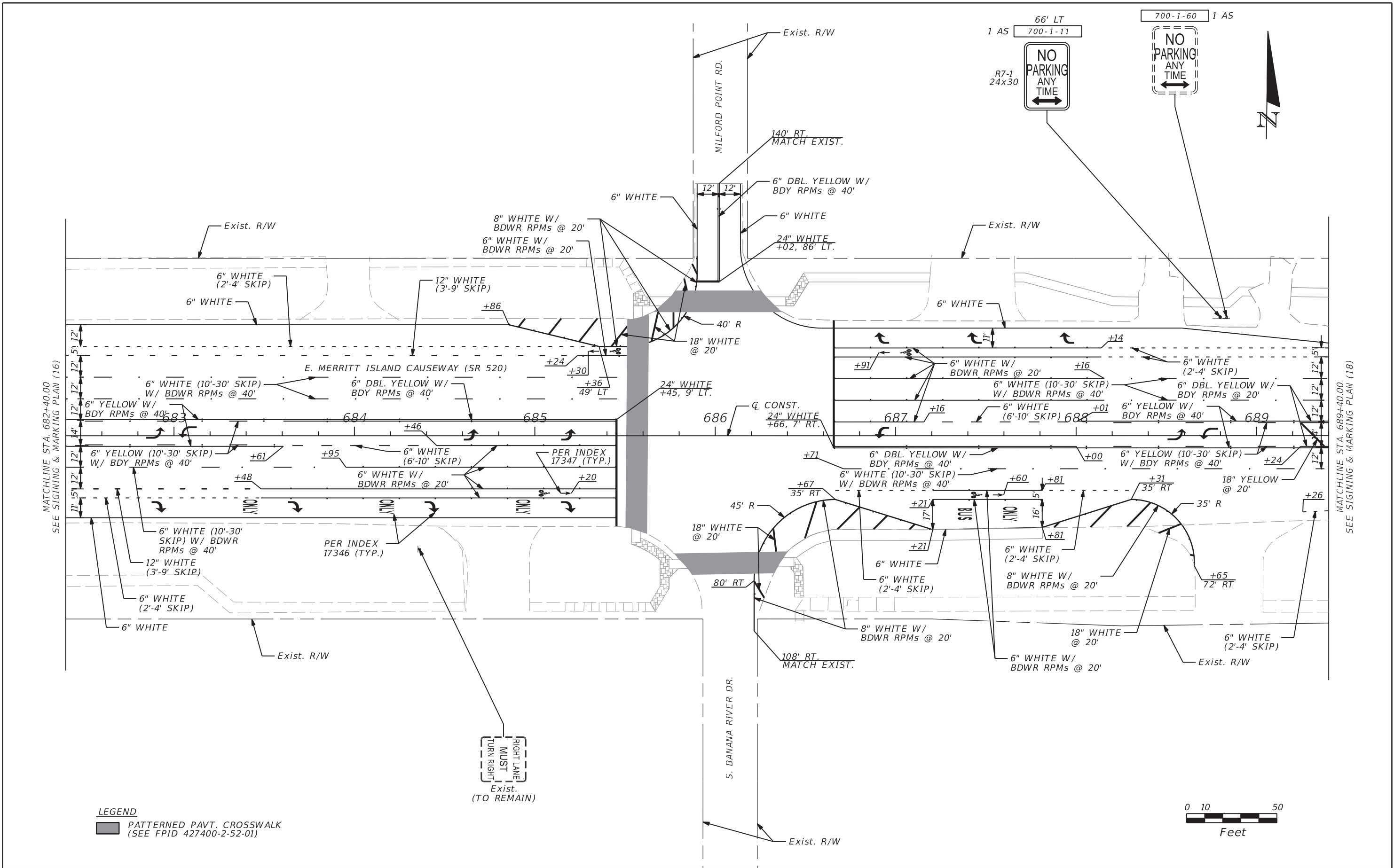


REVISIONS				PROTEAN DESIGN GROUP SCOTT G. HORLANDER, P.E. NO. 46624 100 EAST PINE STREET, SUITE 600 ORLANDO FLORIDA 32801 PHONE (407) 246-0044 CERTIFICATE OF AUTHORIZATION NUMBER 7865	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNING & MARKING PLAN (15)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		S-19



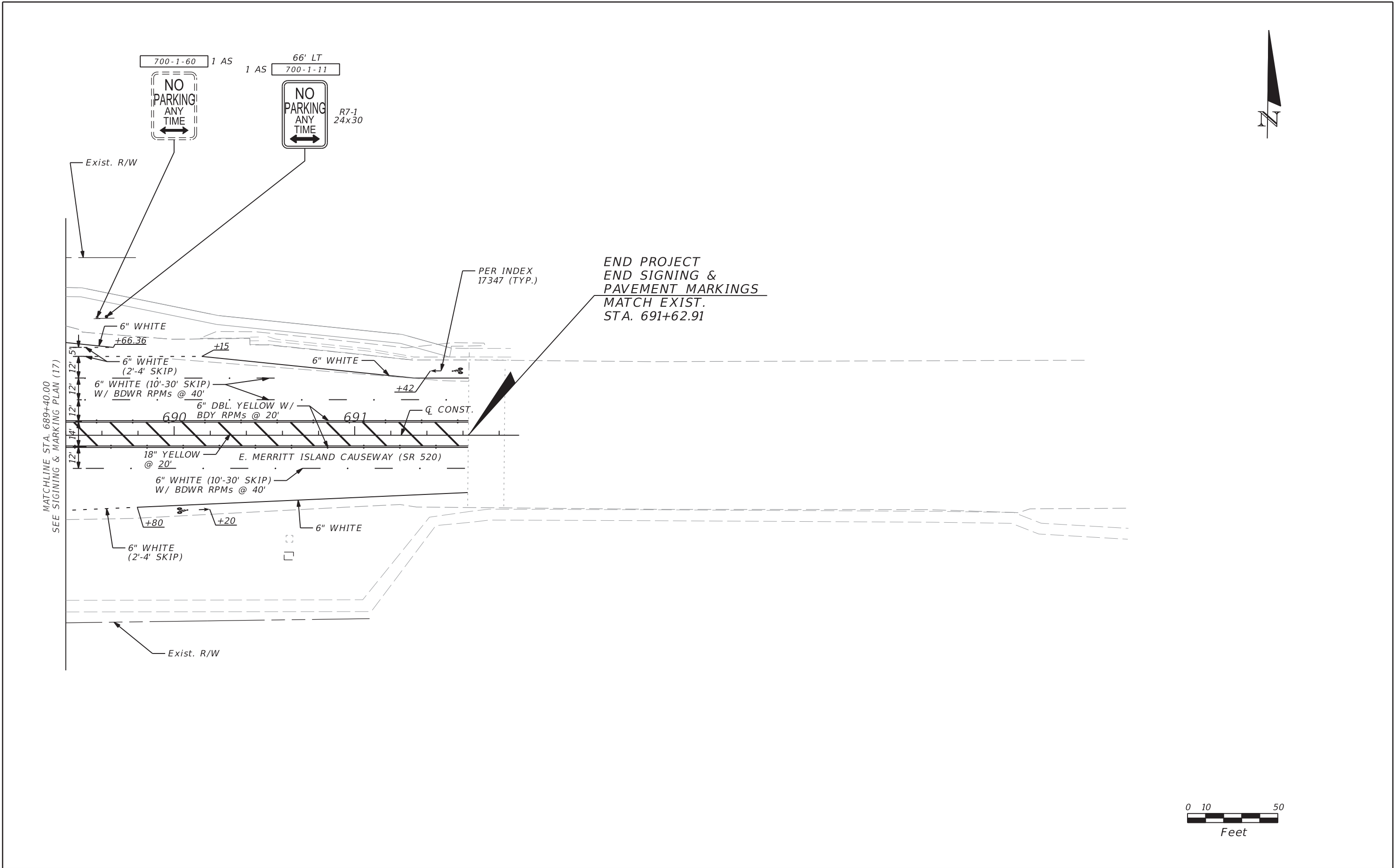
REVISIONS				PROTEAN DESIGN GROUP SCOTT G. HORLANDER, P.E. NO. 46624 100 EAST PINE STREET, SUITE 600 ORLANDO FLORIDA 32801 PHONE (407) 246-0044 CERTIFICATE OF AUTHORIZATION NUMBER 7865	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNING & MARKING PLAN (16)	SHEET NO. S-20
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					520	BREVARD	431139-1-52-01		

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.



REVISIONS				PROTEAN DESIGN GROUP SCOTT G. HORLANDER, P.E. NO. 46624 100 EAST PINE STREET, SUITE 600 ORLANDO FLORIDA 32801 PHONE (407) 246-0044 CERTIFICATE OF AUTHORIZATION NUMBER 7865	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNING & MARKING PLAN (17)	SHEET NO. S-21
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					520	BREVARD	431139-1-52-01		

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.



REVISIONS				PROTEAN DESIGN GROUP SCOTT G. HORLANDER, P.E. NO. 46624 100 EAST PINE STREET, SUITE 600 ORLANDO FLORIDA 32801 PHONE (407) 246-0044 CERTIFICATE OF AUTHORIZATION NUMBER 7865	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNING & MARKING PLAN (18)		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION							
					ROAD NO.	COUNTY	FINANCIAL PROJECT ID			
					520	BREVARD	431139-1-52-01			S-22

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

Appendix D:

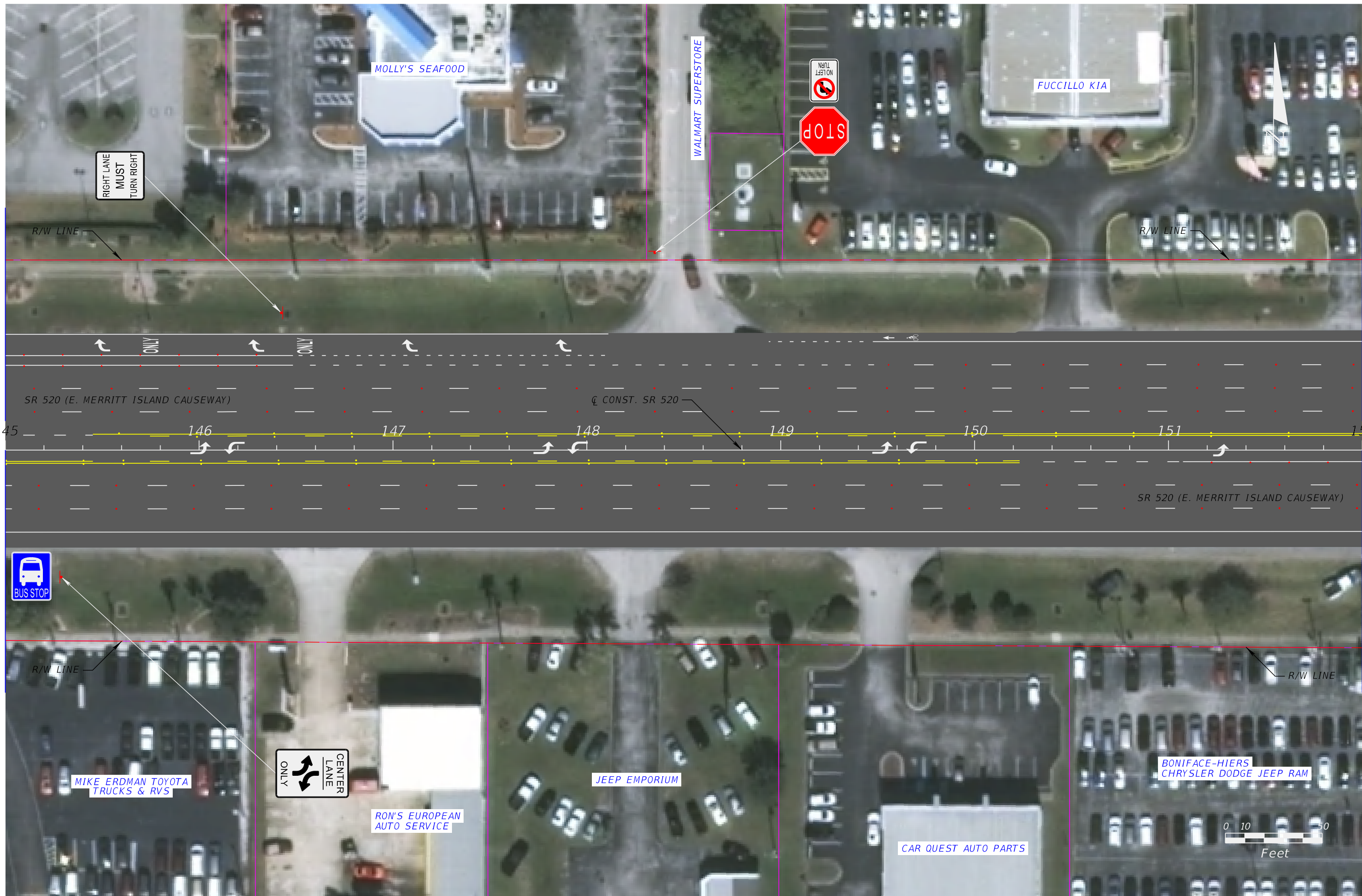
Existing Conditions Diagram



MATCH LINE STA. 138+00.00

REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CONDITION DIAGRAM	SHEET NO.	
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		1	
					SR 520	BREVARD	N/A			

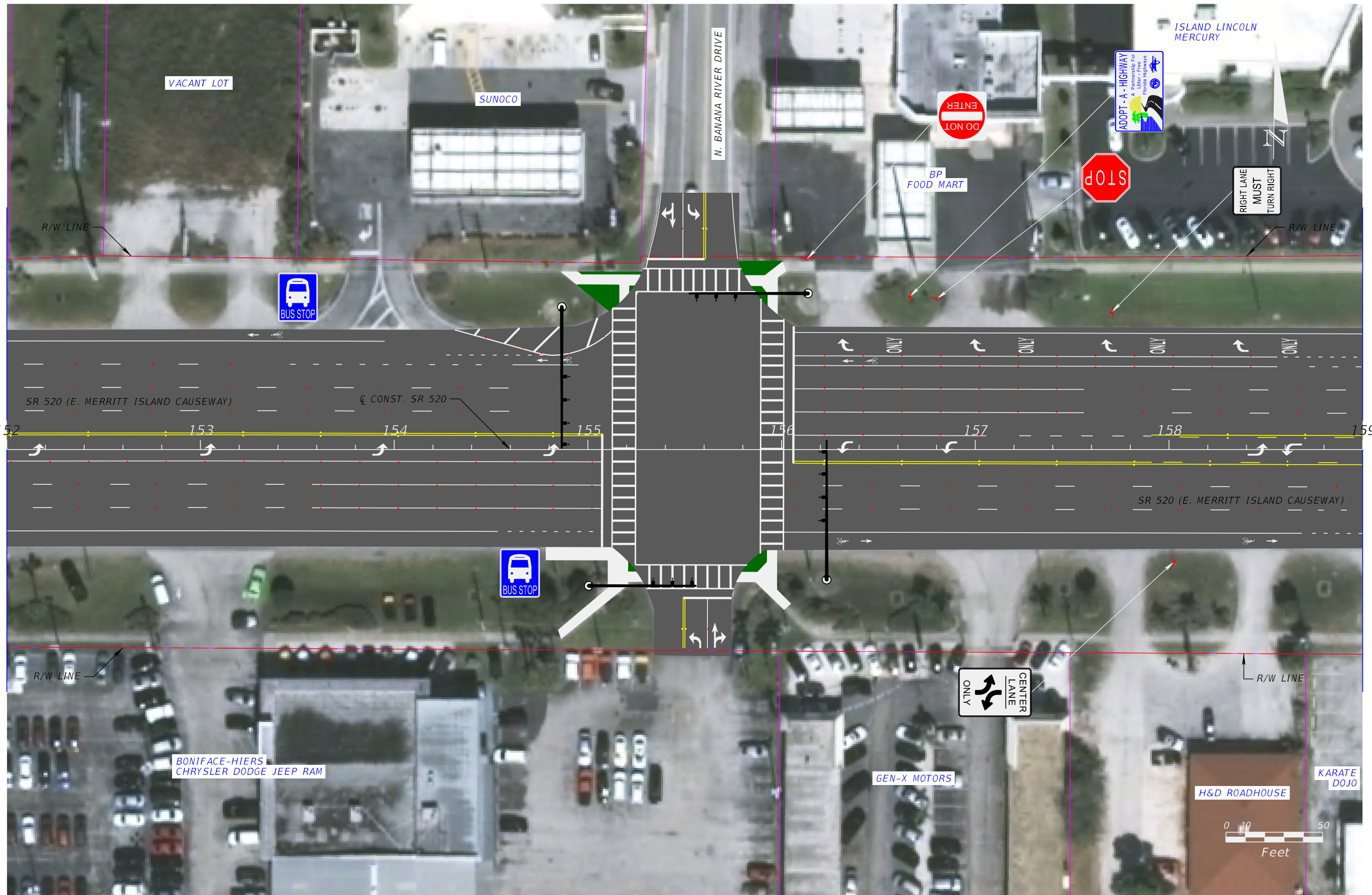
MATCH LINE STA. 145+00.00



MATCH LINE STA. 152+00.00

REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CONDITION DIAGRAM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		3
					SR 520	BREVARD	N/A		

MATCH LINE STA. 152+00.00

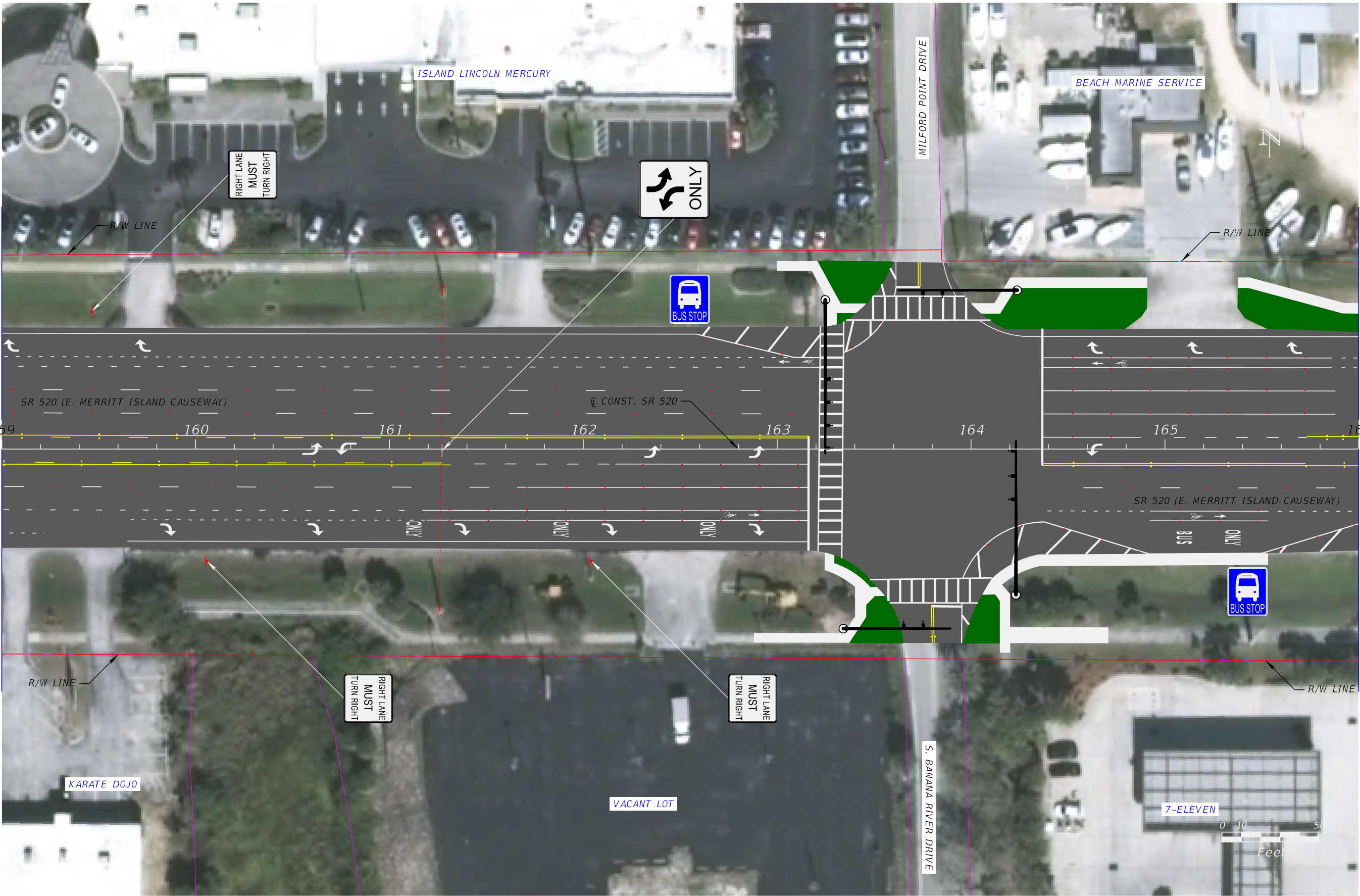


MATCH LINE STA. 159+00.00

REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CONDITION DIAGRAM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		4
					SR 520	BREVARD	N/A		

MATCH LINE STA. 159+00.00

MATCH LINE STA. 166+00.00



REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CONDITION DIAGRAM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 520	BREVARD	N/A		



REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CONDITION DIAGRAM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		6
					SR 520	BREVARD	N/A		

Appendix E: Photographs



Looking East along SR 520 at the Beginning of Study Limits



Looking East at the Two-Way Left Turn Lane along SR 520



Looking East along SR 520 at the Newfound Harbor Drive Intersection



Looking West along SR 520 at the Newfound Harbor Drive Intersection



Looking East along SR 520 at the North Banana River Drive Intersection



Looking West along SR 520 at the North Banana River Drive Intersection

STUDY PHOTOGRAPHS:

SR 520 from Newfound Harbor Drive to South Banana River Drive

PAGE

3



Looking East along SR 520 at the South Banana River Drive Intersection



Looking West along SR 520 at the South Banana River Drive Intersection

STUDY PHOTOGRAPHS:

SR 520 from Newfound Harbor Drive to South Banana River Drive

PAGE

4



Looking South along the Sunoco Driveway at SR 520 near North Banana River Drive



Looking West along SR 520 at the End of Study Limits

Appendix F:

FDOT Count Station Data

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2014 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 1007 - ON SR-520, 0.095 MI. E OF MILFORD PT (UCLP)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----	-----	-----	-----	-----	-----
2014	25500 C	E 13000	W 12500	9.00	53.80	2.90
2013	26000 C	E 13000	W 13000	9.00	54.20	6.20
2012	22500 C	E 11000	W 11500	9.00	53.60	6.20
2011	27000 C	E 13500	W 13500	9.00	54.30	3.50
2010	27000 C	E 13500	W 13500	10.91	56.02	3.00
2009	27500 C	E 14000	W 13500	11.80	61.02	3.00
2008	31500 C	E 16000	W 15500	11.37	57.79	2.80
2007	31500 C	E 16000	W 15500	9.20	54.21	3.00
2006	32500 C	E 16500	W 16000	11.35	57.22	3.00
2005	31000 C	E 15500	W 15500	11.30	53.80	2.50
2004	35000 C	E 17500	W 17500	10.10	56.80	2.50
2003	32500 C	E 16500	W 16000	9.80	53.10	2.20
2002	36000 F	E 18000	W 18000	9.90	53.90	3.00
2001	35000 C	E 17500	W 17500	11.40	60.10	4.10
2000	32500 C	E 16500	W 16000	10.20	52.40	8.90
1999	31500 C	E 16000	W 15500	10.30	53.70	2.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

COUNTY: 70
STATION: 1007
DESCRIPTION: ON SR-520, 0.095 MI. E OF MILFORD PT (UCLP)
START DATE: 09/10/2014
START TIME: 1315

TIME	DIRECTION: E					DIRECTION: W					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	17	17	11	12	57	17	18	26	20	81	138	
0100	9	12	9	8	38	12	11	11	12	46	84	
0200	7	8	8	2	25	21	18	11	5	55	80	
0300	7	5	11	6	29	5	4	5	9	23	52	
0400	2	6	15	12	35	8	6	4	13	31	66	
0500	12	19	36	50	117	18	13	17	31	79	196	
0600	64	91	111	109	375	39	48	60	71	218	593	
0700	131	124	187	178	620	102	127	175	166	570	1190	
0800	202	186	200	182	770	169	162	172	198	701	1471	
0900	175	171	162	156	664	178	193	194	181	746	1410	
1000	161	185	157	172	675	202	189	214	199	804	1479	
1100	192	194	214	189	789	179	189	227	199	794	1583	
1200	185	218	209	214	826	203	192	235	198	828	1654	
1300	215	219	229	238	901	190	212	238	234	874	1775	
1400	221	220	261	196	898	196	233	245	273	947	1845	
1500	213	223	235	248	919	261	242	234	230	967	1886	
1600	216	236	244	212	908	231	220	217	235	903	1811	
1700	217	240	202	224	883	282	236	196	207	921	1804	
1800	184	194	172	126	676	159	189	168	136	652	1328	
1900	175	147	168	167	657	140	133	131	128	532	1189	
2000	130	118	123	96	467	110	100	86	81	377	844	
2100	112	86	79	57	334	87	81	69	55	292	626	
2200	59	58	44	50	211	53	68	55	38	214	425	
2300	22	30	20	23	95	46	30	28	24	128	223	
24-HOUR TOTALS:					11969						11783	23752

PEAK VOLUME INFORMATION							COMBINED DIRECTIONS	
DIRECTION: E			DIRECTION: W					
A.M.	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME		
	800	770	845	763	800	1471		
P.M.	1545	944	1430	1021	1430	1914		
DAILY	1545	944	1430	1021	1430	1914		
TRUCK PERCENTAGE	2.94		2.91		2.93			

CLASSIFICATION SUMMARY DATABASE															TOTTRK	TOTVOL
DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
E	26	9582	2009	52	257	13	0	21	9	0	0	0	0	0	0	352 11969
W	23	9465	1952	62	222	22	0	25	12	0	0	0	0	0	0	343 11783

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2014 VEHICLE CLASS HISTORY DATA

COUNTY: 70 -- BREVARD

SITE: 1007 DESCRIPTION: ON SR-520, 0.095 MI. E OF MILFORD PT (UCLP)

YEAR	AADT	PASSENGER VEHICLES		TOTAL TRUCKS		SINGLE UNIT TRUCKS		COMBINATION TRAILER TRUCKS		MULTI TRAILER TRUCKS	
		%	VOLUME	%	VOLUME	%	VOLUME	%	VOLUME	%	VOLUME
2014	25500	97.07	24,753	2.93	747	2.65	676	0.28	71	0.00	0
2013	26000	100.00	26,000	0.00	0	0.00	0	0.00	0	0.00	0
2012	22500	93.84	21,114	6.16	1,386	4.77	1,073	1.36	306	0.03	7
2011	27000	96.50	26,055	3.50	945	2.98	805	0.52	140	0.00	0
2010	27000	96.96	26,179	3.04	821	2.55	689	0.49	132	0.00	0
2009	27500	97.00	26,675	3.00	825	2.69	740	0.31	85	0.00	0
2008	31500	97.17	30,609	2.83	891	2.29	721	0.54	170	0.00	0
2007	31500	96.98	30,549	3.02	951	2.51	791	0.51	161	0.00	0
2006	32500	96.97	31,515	3.03	985	2.58	839	0.45	146	0.00	0
2005	31000	96.80	30,008	3.20	992	2.67	828	0.53	164	0.00	0
2004	35000	97.50	34,125	2.50	875	2.05	718	0.45	158	0.00	0
2003	32500	97.70	31,753	2.30	748	1.80	585	0.50	163	0.00	0
2002	36000	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
2001	35000	95.71	33,498	4.29	1,502	3.79	1,327	0.50	175	0.00	0
2000	32500	91.02	29,581	8.98	2,919	7.88	2,562	1.10	357	0.00	0
1999	31500	97.40	30,681	2.60	819	2.20	693	0.40	126	0.00	0

NOTE: 1 - PASSENGER VEHICLES = VEHICLE CLASS 1-3, 14, 15
2 - TOTAL TRUCKS = VEHICLE CLASS 4-13
3 - SINGLE UNIT TRUCKS = VEHICLE CLASS 4-7
4 - COMBINATION TRAILER TRUCKS = VEHICLE CLASS 8-10
5 - MULTI TRAILER TRUCKS = VEHICLE CLASS 11-13

2014 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 7000 BREVARD COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.93 PSCF
1	01/01/2014 - 01/04/2014	1.01	1.09
2	01/05/2014 - 01/11/2014	1.02	1.10
3	01/12/2014 - 01/18/2014	1.03	1.11
4	01/19/2014 - 01/25/2014	1.01	1.09
5	01/26/2014 - 02/01/2014	0.99	1.06
* 6	02/02/2014 - 02/08/2014	0.97	1.04
* 7	02/09/2014 - 02/15/2014	0.95	1.02
* 8	02/16/2014 - 02/22/2014	0.93	1.00
* 9	02/23/2014 - 03/01/2014	0.92	0.99
*10	03/02/2014 - 03/08/2014	0.91	0.98
*11	03/09/2014 - 03/15/2014	0.90	0.97
*12	03/16/2014 - 03/22/2014	0.90	0.97
*13	03/23/2014 - 03/29/2014	0.91	0.98
*14	03/30/2014 - 04/05/2014	0.92	0.99
*15	04/06/2014 - 04/12/2014	0.93	1.00
*16	04/13/2014 - 04/19/2014	0.95	1.02
*17	04/20/2014 - 04/26/2014	0.96	1.03
*18	04/27/2014 - 05/03/2014	0.97	1.04
19	05/04/2014 - 05/10/2014	0.98	1.05
20	05/11/2014 - 05/17/2014	0.99	1.06
21	05/18/2014 - 05/24/2014	1.01	1.09
22	05/25/2014 - 05/31/2014	1.02	1.10
23	06/01/2014 - 06/07/2014	1.03	1.11
24	06/08/2014 - 06/14/2014	1.04	1.12
25	06/15/2014 - 06/21/2014	1.05	1.13
26	06/22/2014 - 06/28/2014	1.05	1.13
27	06/29/2014 - 07/05/2014	1.04	1.12
28	07/06/2014 - 07/12/2014	1.04	1.12
29	07/13/2014 - 07/19/2014	1.04	1.12
30	07/20/2014 - 07/26/2014	1.04	1.12
31	07/27/2014 - 08/02/2014	1.04	1.12
32	08/03/2014 - 08/09/2014	1.04	1.12
33	08/10/2014 - 08/16/2014	1.04	1.12
34	08/17/2014 - 08/23/2014	1.04	1.12
35	08/24/2014 - 08/30/2014	1.05	1.13
36	08/31/2014 - 09/06/2014	1.07	1.15
37	09/07/2014 - 09/13/2014	1.08	1.16
38	09/14/2014 - 09/20/2014	1.09	1.17
39	09/21/2014 - 09/27/2014	1.08	1.16
40	09/28/2014 - 10/04/2014	1.06	1.14
41	10/05/2014 - 10/11/2014	1.04	1.12
42	10/12/2014 - 10/18/2014	1.02	1.10
43	10/19/2014 - 10/25/2014	1.02	1.10
44	10/26/2014 - 11/01/2014	1.03	1.11
45	11/02/2014 - 11/08/2014	1.03	1.11
46	11/09/2014 - 11/15/2014	1.03	1.11
47	11/16/2014 - 11/22/2014	1.04	1.12
48	11/23/2014 - 11/29/2014	1.03	1.11
49	11/30/2014 - 12/06/2014	1.02	1.10
50	12/07/2014 - 12/13/2014	1.01	1.09
51	12/14/2014 - 12/20/2014	1.01	1.09
52	12/21/2014 - 12/27/2014	1.02	1.10
53	12/28/2014 - 12/31/2014	1.03	1.11

* PEAK SEASON

09-MAR-2015 16:07:54

830UPD

5_7000_PKSEASON.TXT

Appendix G:

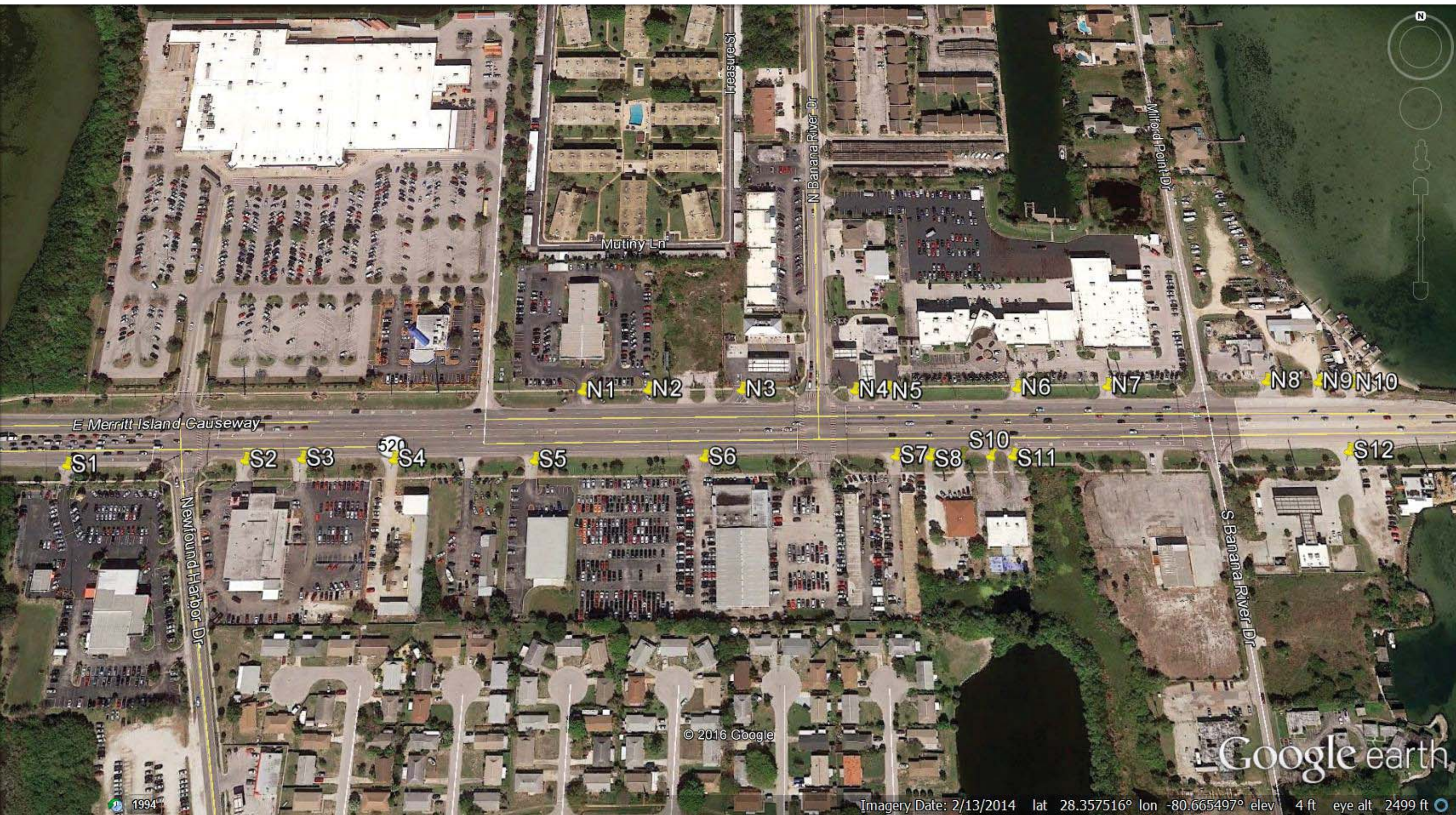
Traffic Data Collected

State Road 520 Corridor Driveway Study

Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
3	2	3	2	9-10am	N1	5	0	2	0	9-10am	S1
5	4	4	1	10-11am		6	0	2	0	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
0	0	0	0	9-10am	N2	0	0	0	0	9-10am	S2
0	0	0	0	10-11am		0	0	0	0	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
9	4	21	0	9-10am	N3	4	2	4	0	9-10am	S3
7	10	17	0	10-11am		6	1	7	0	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
1	0	0	0	9-10am	N4	7	7	3	1	9-10am	S4
1	0	1	1	10-11am		9	4	6	3	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
12	0	7	3	9-10am	N5	7	4	3	2	9-10am	S5
16	0	9	6	10-11am		9	3	6	3	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
2	16	4	1	9-10am	N6	8	2	3	1	9-10am	S6
1	11	7	1	10-11am		10	3	4	2	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
18	6	4	1	9-10am	N7	11	0	3	1	9-10am	S7
11	5	4	2	10-11am		13	0	6	2	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
2	0	2	0	9-10am	N8	3	1	1	0	9-10am	S8
3	0	1	0	10-11am		6	2	1	2	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
3	2	1	1	9-10am	N9	5	1	2	0	9-10am	S9
4	4	3	2	10-11am		7	1	5	1	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
1	1	0	1	9-10am	N10	1	2	0	2	9-10am	S10
2	1	2	0	10-11am		4	3	1	1	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
0	0	1	2	9-10am	S11	0	0	1	2	9-10am	S11
1	1	4	1	10-11am		1	1	4	1	10-11am	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
11	9	27	3	9-10am	S12	11	9	27	3	9-10am	S12
8	12	37	2	10-11am		8	12	37	2	10-11am	

State Road 520 Corridor Driveway Study

Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
3	2	2	1	3-4pm	N1	4	0	2	0	3-4pm	S1
0	4	2	1	4-5pm		7	0	1	0	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
0	0	0	0	3-4pm	N2	0	0	0	0	3-4pm	S2
0	0	0	0	4-5pm		0	0	0	0	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
7	5	21	1	3-4pm	N3	0	1	8	1	3-4pm	S3
9	9	14	0	4-5pm		1	3	13	1	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
2	0	1	0	3-4pm	N4	2	2	7	4	3-4pm	S4
1	0	0	0	4-5pm		4	1	5	3	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
12	1	2	0	3-4pm	N5	6	6	4	4	3-4pm	S5
12	1	0	1	4-5pm		7	2	4	8	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
0	5	10	8	3-4pm	N6	3	4	3	1	3-4pm	S6
2	0	15	2	4-5pm		6	2	7	5	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
1	0	3	0	3-4pm	N7	2	4	4	2	3-4pm	S7
0	0	3	0	4-5pm		3	3	3	3	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
0	0	0	0	3-4pm	N8	3	3	2	0	3-4pm	S8
0	0	1	0	4-5pm		2	1	0	2	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
1	0	1	0	3-4pm	N9	1	0	2	5	3-4pm	S9
0	0	1	0	4-5pm		1	0	1	6	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
0	1	1	1	3-4pm	N10	5	1	0	0	3-4pm	S10
1	1	4	0	4-5pm		14	3	0	0	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
0	0	0	0	3-4pm	S11	0	0	0	0	3-4pm	S11
0	0	1	1	4-5pm		0	0	1	1	4-5pm	
Right In	Left In	Right Out	Left Out	Time	Station	Right In	Left In	Right Out	Left Out	Time	Station
11	10	27	3	3-4pm	S12	11	10	27	3	3-4pm	S12
8	11	23	0	4-5pm		8	11	23	0	4-5pm	



E Merritt Island Causeway

Treasure St

N Banana River Dr

Milford Point Dr

Muliny Ln

S Banana River Dr

Newfound Harbor Dr

S1

S2

S3

520
S4

S5

S6

S7

S8

S10

S11

S12

N1

N2

N3

N4

N5

N6

N7

N8

N9

N10

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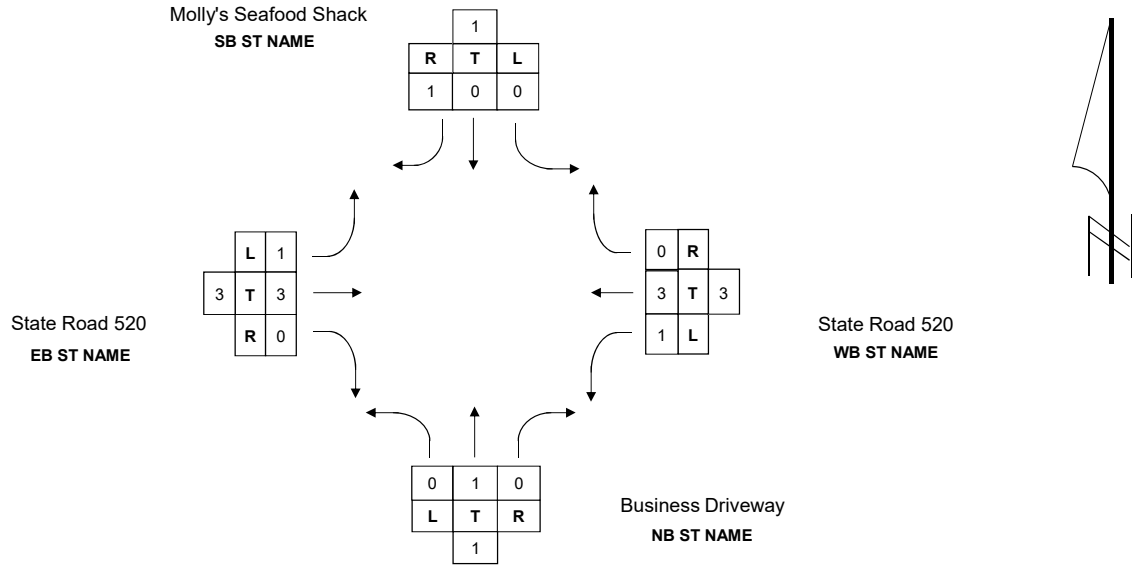
Google earth

Imagery Date: 2/13/2014 lat 28.357516° lon -80.665497° elev 4 ft eye alt 2499 ft

FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF VEHICLE MOVEMENTS

SECTION	70100	CITY Merritt Island	COUNTY Brevard
STATE ROUTE	State Road 520	INTERSECTING ROUTE Molly's Seafood Shack	
OBSERVER	TEDS	DATE 1/21/2016	MILEPOST 12.724
WEATHER	Sunny	ROAD CONDITION	Good
REMARKS			
FORM COMPLETED BY PHF DATE 02/04/16			



TIME	NORTHBOUND					SOUTHBOUND					TOTAL	EASTBOUND					WESTBOUND					TOTAL
BEGIN/END	L	T	R	U	TOT	L	T	R	U	TOT	N/S	L	T	R	U	TOT	L	T	R	U	TOT	E/W
7 - 8	0	0	0	0	0	5	0	2	0	7	7	9	618	2	0	629	0	643	23	0	666	1295
8 - 9	0	0	0	0	0	4	0	3	0	7	7	13	809	0	1	823	0	812	61	0	873	1696
12 - 1	0	0	1	0	1	11	0	30	0	41	42	30	1098	5	0	1133	3	1121	111	0	1235	2368
1 - 2	2	0	3	0	5	3	0	44	0	47	52	30	1148	2	0	1180	1	1197	91	0	1289	2469
2 - 3	1	0	1	0	2	10	0	39	0	49	51	17	1179	0	2	1198	0	1142	91	0	1233	2431
3 - 4	0	0	0	0	0	16	0	27	0	43	43	31	1213	1	0	1245	0	1163	106	0	1269	2514
4 - 5	1	0	0	0	1	11	0	39	0	50	51	22	1165	1	0	1188	1	1074	106	0	1181	2369
5 - 6	2	0	1	0	3	8	0	36	0	44	47	16	1099	0	2	1117	0	1046	108	0	1154	2271
TOTAL	6	0	6	0	12	68	0	220	0	288	300	168	8329	11	5	8513	5	8198	697	0	8900	17413

FLORIDA DEPARTMENT OF TRANSPORTATION

PEDESTRIAN MOVEMENT SUMMARY

SECTION 70100 CITY Merritt Island COUNTY Brevard
 STATE ROUTE State Road 520 INTERSECTING ROUTE Molly's Seafood Shack
 OBSERVER TEDS DATE 1/21/2016

REMARKS

FORM COMPLETED BY PHF

DATE 02/04/16

Molly's Seafood Shack

SB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	1
1	0	0	0	0	0	0	0	1



State Road 520
 EB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	1	1	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0
0	1	1	0	0	0	0	0	2
0	2	2	0	0	0	0	0	4

State Road 520
 WB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
1	1	0	0	0	1	0	0	3
0	0	1	0	0	0	0	0	1
1	1	1	0	0	1	0	0	4

Business Driveway
 NB ST NAME

FLORIDA DEPARTMENT OF TRANSPORTATION

BICYCLE MOVEMENT SUMMARY

SECTION 70100 CITY Merritt Island COUNTY Brevard
 STATE ROUTE State Road 520 INTERSECTING ROUTE Molly's Seafood Shack
 OBSERVER TEDS DATE 1/21/2016

REMARKS

FORM COMPLETED BY PHF

DATE 02/04/16

Molly's Seafood Shack
 SB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0



7 - 8	0	0	0
8 - 9	0	0	0
12 - 1	0	0	0
1 - 2	0	0	0
2 - 3	0	0	0
3 - 4	0	0	0
4 - 5	0	0	0
5 - 6	0	0	0
Total	0	0	0

State Road 520
 EB ST NAME

7 - 8	0	0	0
8 - 9	0	0	0
12 - 1	0	0	0
1 - 2	0	0	0
2 - 3	0	0	0
3 - 4	0	0	0
4 - 5	0	0	0
5 - 6	0	0	0
Total	0	0	0

State Road 520
 WB ST NAME

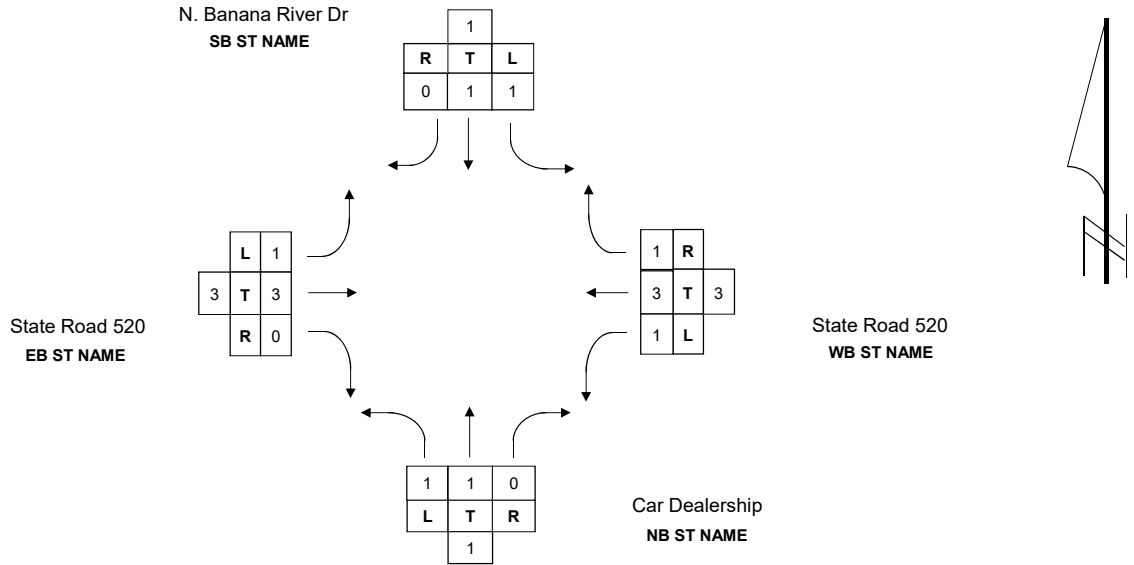
7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	2	1	2	2	2	0	1	10
0	2	4	1	0	1	2	1	11
0	4	5	3	2	3	2	2	21

Business Driveway
 NB ST NAME

FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF VEHICLE MOVEMENTS

SECTION	70100	CITY	Merritt Island	COUNTY	Brevard
STATE ROUTE	State Road 520	INTERSECTING ROUTE	N. Banana River Dr		
OBSERVER	TEDS	DATE	1/26/2016	MILEPOST	12.857
WEATHER	Sunny	ROAD CONDITION	Good		
REMARKS					
FORM COMPLETED BY PHF DATE 02/04/16					



TIME	NORTHBOUND					SOUTHBOUND					TOTAL	EASTBOUND					WESTBOUND					TOTAL
BEGIN/END	L	T	R	U	TOT	L	T	R	U	TOT	N/S	L	T	R	U	TOT	L	T	R	U	TOT	E/W
7 - 8	3	0	1	0	4	96	3	101	0	200	204	70	569	8	0	647	3	577	83	0	663	1310
8 - 9	8	3	2	0	13	115	10	149	0	274	287	107	689	22	0	818	3	731	66	0	800	1618
12 - 1	15	2	4	0	21	98	4	164	0	266	287	134	956	15	1	1106	3	1036	108	0	1147	2253
1 - 2	18	0	8	0	26	100	3	182	0	285	311	170	1019	17	0	1206	9	1064	117	1	1191	2397
2 - 3	7	2	7	0	16	85	2	161	0	248	264	153	1048	9	1	1211	7	1024	96	0	1127	2338
3 - 4	12	6	6	0	24	103	2	184	0	289	313	169	1065	8	2	1244	7	1005	119	1	1132	2376
4 - 5	11	3	10	0	24	102	1	207	0	310	334	161	1001	10	0	1172	4	902	137	0	1043	2215
5 - 6	12	11	2	0	25	130	0	204	0	334	359	188	950	5	3	1146	3	901	135	0	1039	2185
TOTAL	86	27	40	0	153	829	25	1352	0	2206	2359	1152	7297	94	7	8550	39	7240	861	2	8142	16692

FLORIDA DEPARTMENT OF TRANSPORTATION

PEDESTRIAN MOVEMENT SUMMARY

SECTION 70100 CITY Merritt Island COUNTY Brevard
 STATE ROUTE State Road 520 INTERSECTING ROUTE N. Banana River Dr
 OBSERVER TEDS DATE 1/26/2016

REMARKS

FORM COMPLETED BY PHF

DATE 02/04/16

N. Banana River Dr

SB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	2
0	0	0	1	1	0	0	0	2



7 - 8	0	0	0
8 - 9	0	0	0
12 - 1	0	0	0
1 - 2	0	0	0
2 - 3	1	2	3
3 - 4	0	1	1
4 - 5	1	1	2
5 - 6	0	1	1
Total	2	5	7

State Road 520

EB ST NAME

7 - 8	0	0	0
8 - 9	0	0	0
12 - 1	0	0	0
1 - 2	1	0	1
2 - 3	0	0	0
3 - 4	0	0	0
4 - 5	1	1	2
5 - 6	0	0	0
Total	2	1	3

State Road 520

WB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
1	3	0	0	0	0	0	0	4
0	1	2	0	0	1	0	1	5
1	4	2	0	0	1	0	1	9

Car Dealership

NB ST NAME

BICYCLE MOVEMENT SUMMARY

DATE 02/04/16

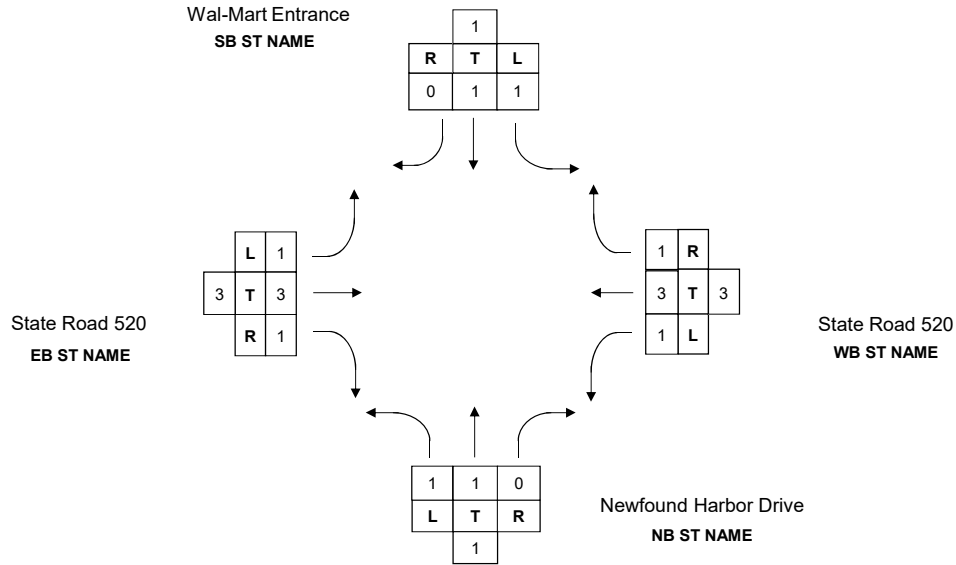
Car Dealership
NB ST NAME

FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF VEHICLE MOVEMENTS

SECTION	70100	CITY Merritt Island	COUNTY Brevard
STATE ROUTE	State Road 520	INTERSECTING ROUTE Newfound Harbor Drive	
OBSERVER	TEDS	DATE 1/27/2016	MILEPOST 12.603
WEATHER	Sunny	ROAD CONDITION	Good
REMARKS			

FORM COMPLETED BY PHF **DATE** 02/04/16



TIME	NORTHBOUND					SOUTHBOUND					TOTAL	EASTBOUND					WESTBOUND					TOTAL
	L	T	R	U	TOT	L	T	R	U	TOT	N/S	L	T	R	U	TOT	L	T	R	U	TOT	E/W
7 - 8	255	7	101	0	363	15	6	48	0	69	432	28	557	91	0	676	26	614	23	1	664	1340
8 - 9	231	8	85	0	324	37	4	52	0	93	417	87	735	131	1	954	48	718	27	0	793	1747
12 - 1	204	12	70	0	286	150	21	183	0	354	640	242	950	164	0	1356	44	1046	81	2	1173	2529
1 - 2	168	16	52	0	236	206	22	198	0	426	662	195	988	153	0	1336	51	1102	98	0	1251	2587
2 - 3	190	14	69	0	273	178	21	187	0	386	659	193	1004	176	0	1373	59	1039	91	3	1192	2565
3 - 4	188	20	62	0	270	185	22	185	0	392	662	193	1025	205	0	1423	64	1113	60	0	1237	2660
4 - 5	234	26	58	0	318	188	35	190	0	413	731	252	1016	305	0	1573	113	1028	58	1	1200	2773
5 - 6	213	30	91	0	334	177	30	177	0	384	718	203	989	304	1	1497	105	965	63	1	1134	2631
TOTAL	1683	133	588	0	2404	1136	161	1220	0	2517	4921	1393	7264	1529	2	10188	510	7625	501	8	8644	18832

FLORIDA DEPARTMENT OF TRANSPORTATION

PEDESTRIAN MOVEMENT SUMMARY

SECTION 70100 CITY Merritt Island COUNTY Brevard
 STATE ROUTE State Road 520 INTERSECTING ROUTE Newfound Harbor Drive
 OBSERVER TEDS DATE 1/27/2016

REMARKS

FORM COMPLETED BY PHF

DATE 02/04/16

Wal-Mart Entrance

SB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
1	0	0	1	0	0	0	0	2
2	0	0	1	0	0	0	0	3
3	0	0	2	0	0	0	0	5



7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

State Road 520
 EB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
1	0	1	1	0	0	1	1	2
0	1	1	1	0	0	1	1	2
0	2	2	7	0	2	2	2	2
5	2	0	0	0	2	1	1	2
0	0	0	0	0	2	1	1	2
0	2	0	2	0	2	2	2	2
2	0	2	2	0	2	2	2	2
9	8	17						

State Road 520
 WB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
1	1	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	2

Newfound Harbor Drive
 NB ST NAME

FLORIDA DEPARTMENT OF TRANSPORTATION

BICYCLE MOVEMENT SUMMARY

SECTION 70100 CITY Merritt Island COUNTY Brevard
 STATE ROUTE State Road 520 INTERSECTING ROUTE Newfound Harbor Drive
 OBSERVER TEDS DATE 1/27/2016

REMARKS _____

FORM COMPLETED BY PHF

DATE 02/04/16

Wal-Mart Entrance
 SB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	1	2	2	0	0	1	2	8
0	0	2	1	0	0	0	1	4
0	1	4	3	0	0	1	3	12



State Road 520
 EB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	3

State Road 520
 WB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
0	1	1	1	0	0	0	0	3
0	2	2	0	0	0	0	0	4
1	0	1	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
1	3	4	0	0	0	0	0	8

Newfound Harbor Drive
 NB ST NAME

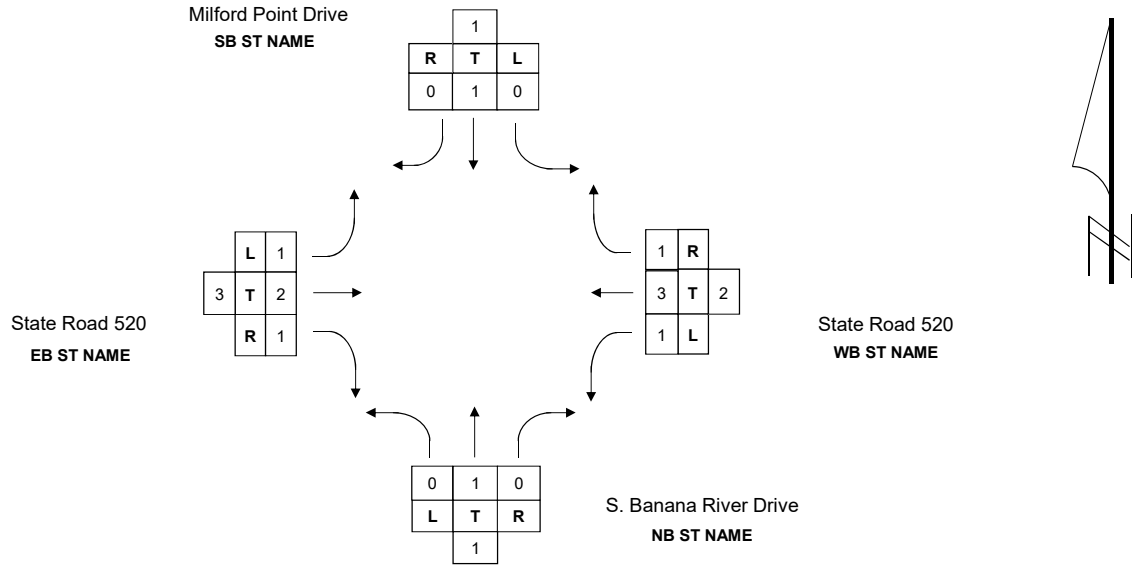
7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
1	0	0	1	2	1	0	2	7
0	0	2	1	3	0	1	2	9
1	0	2	2	5	1	1	4	16

FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF VEHICLE MOVEMENTS

SECTION	70100	CITY Merrit Island	COUNTY Brevard
STATE ROUTE	State Road 520	INTERSECTING ROUTE S. Banana River Drive	
OBSERVER	TEDS	DATE 1/26/2016	MILEPOST 13.013
WEATHER	Sunny	ROAD CONDITION	Good
REMARKS			

FORM COMPLETED BY PHF **DATE** 02/04/16



TIME	NORTHBOUND					SOUTHBOUND					TOTAL	EASTBOUND					WESTBOUND					TOTAL
BEGIN/END	L	T	R	U	TOT	L	T	R	U	TOT	N/S	L	T	R	U	TOT	L	T	R	U	TOT	E/W
7 - 8	54	2	34	0	90	2	1	17	0	20	110	1	571	35	0	607	7	585	3	0	595	1202
8 - 9	44	2	34	0	80	2	2	11	0	15	95	9	716	72	1	798	11	724	1	0	736	1534
12 - 1	71	0	22	0	93	7	1	22	0	30	123	14	960	76	0	1050	22	1013	5	0	1040	2090
1 - 2	67	1	25	0	93	4	1	12	0	17	110	13	1016	74	0	1103	22	1155	10	0	1187	2290
2 - 3	84	1	21	0	106	4	3	20	0	27	133	18	1022	80	0	1120	22	1004	7	0	1033	2153
3 - 4	50	2	27	0	79	5	2	14	0	21	100	17	1050	83	3	1153	25	1077	5	0	1107	2260
4 - 5	45	3	12	0	60	1	2	11	0	14	74	8	1068	81	1	1158	41	995	6	1	1043	2201
5 - 6	52	1	22	0	75	0	4	11	0	15	90	17	951	85	0	1053	38	981	4	0	1023	2076
TOTAL	467	12	197	0	676	25	16	118	0	159	835	97	7354	586	5	8042	188	7534	41	1	7764	15806

FLORIDA DEPARTMENT OF TRANSPORTATION

PEDESTRIAN MOVEMENT SUMMARY

SECTION 70100 CITY Merrit Island COUNTY Brevard
 STATE ROUTE State Road 520 INTERSECTING ROUTE S. Banana River Drive
 OBSERVER TEDS DATE 1/26/2016

REMARKS

FORM COMPLETED BY PHF

DATE 02/04/16

Milford Point Drive

SB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	1
0	0	0	0	0	0	0	1	1

7 - 8	0	0	0
8 - 9	0	0	0
12 - 1	0	0	0
1 - 2	0	0	0
2 - 3	2	0	2
3 - 4	0	0	0
4 - 5	1	0	1
5 - 6	0	0	0
Total	3	0	3

State Road 520

EB ST NAME

7 - 8	1	0	1
8 - 9	0	0	0
12 - 1	0	0	0
1 - 2	0	0	0
2 - 3	0	0	0
3 - 4	0	0	0
4 - 5	0	0	0
5 - 6	0	0	0
Total	1	0	1

State Road 520

WB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	1	0	0	0	0	1	0	2
0	1	0	0	0	0	1	1	3
0	2	0	0	0	0	2	1	5

S. Banana River Drive

NB ST NAME

FLORIDA DEPARTMENT OF TRANSPORTATION

BICYCLE MOVEMENT SUMMARY

SECTION 70100 CITY Merrit Island COUNTY Brevard
 STATE ROUTE State Road 520 INTERSECTING ROUTE S. Banana River Drive
 OBSERVER TEDS DATE 1/26/2016

REMARKS

FORM COMPLETED BY PHF

DATE 02/04/16

Milford Point Drive
 SB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
1	0	0	0	0	1	0	0	2
0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	2



State Road 520
 EB ST NAME

7 - 8	1	0	1
8 - 9	0	0	0
12 - 1	0	1	1
1 - 2	2	0	2
2 - 3	0	1	1
3 - 4	0	0	0
4 - 5	0	0	0
5 - 6	0	0	0
Total	3	2	5

State Road 520
 WB ST NAME

7 - 8	0	0	0
8 - 9	0	0	0
12 - 1	0	1	1
1 - 2	0	0	0
2 - 3	0	0	0
3 - 4	0	0	0
4 - 5	0	0	0
5 - 6	0	0	0
Total	0	1	1

S. Banana River Drive
 NB ST NAME

7 - 8	8 - 9	12 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	Total
0	0	2	1	4	2	0	3	12
1	1	1	3	2	2	2	0	12
1	1	3	4	6	4	2	3	24

File Name : Not Named 1

Site Code : 00000000

Start Date : 10/27/2015

Page No : 1

Groups Printed- All Vehicles

	DRIVEWAY Northbound					MOLLYS SEAFOOD SHACK Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	0	0	1	4	85	0	0	89	0	107	7	0	114	204
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	140	0	1	143	0	144	3	0	147	290
07:30 AM	0	0	0	0	0	1	0	2	0	3	2	168	0	0	170	0	162	7	0	169	342
07:45 AM	0	0	0	0	0	3	0	0	0	3	1	225	2	0	228	0	230	6	1	237	468
Total	0	0	0	0	0	5	0	2	0	7	9	618	2	1	630	0	643	23	1	667	1304
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	184	0	0	185	0	186	15	0	201	386
08:15 AM	0	0	0	0	0	1	0	0	0	1	4	238	0	1	243	0	209	13	0	222	466
08:30 AM	0	0	0	0	0	1	0	3	0	4	2	177	0	0	179	0	215	8	0	223	406
08:45 AM	0	0	0	0	0	2	0	0	0	2	7	210	0	0	217	0	202	25	0	227	446
Total	0	0	0	0	0	4	0	3	0	7	14	809	0	1	824	0	812	61	0	873	1704
*** BREAK ***																					
12:00 PM	0	0	0	0	0	0	0	5	0	5	10	281	0	0	291	0	279	22	0	301	597
12:15 PM	0	0	1	0	1	5	0	9	0	14	4	250	1	1	256	0	303	25	0	328	599
12:30 PM	0	0	0	0	0	6	0	1	0	7	8	265	4	0	277	2	255	32	0	289	573
12:45 PM	0	0	0	0	0	0	0	15	0	15	8	302	0	0	310	1	284	32	0	317	642
Total	0	0	1	0	1	11	0	30	0	41	30	1098	5	1	1134	3	1121	111	0	1235	2411
01:00 PM	1	0	1	0	2	0	0	13	0	13	8	240	0	0	248	0	267	25	0	292	555
01:15 PM	1	0	0	0	1	1	0	8	0	9	8	299	1	0	308	0	318	20	0	338	656
01:30 PM	0	0	1	0	1	2	0	11	0	13	8	316	1	0	325	1	281	23	0	305	644
01:45 PM	0	0	1	0	1	0	0	12	0	12	6	293	0	0	299	0	331	23	0	354	666
Total	2	0	3	0	5	3	0	44	0	47	30	1148	2	0	1180	1	1197	91	0	1289	2521
02:00 PM	1	0	0	0	1	4	0	6	0	10	2	296	0	0	298	0	296	26	0	322	631
02:15 PM	0	0	1	0	1	2	0	10	0	12	6	282	0	0	288	0	296	21	0	317	618
02:30 PM	0	0	0	0	0	2	0	14	0	16	7	320	0	0	327	0	267	24	0	291	634
02:45 PM	0	0	0	0	0	2	0	9	0	11	4	281	0	0	285	0	283	20	0	303	599
Total	1	0	1	0	2	10	0	39	0	49	19	1179	0	0	1198	0	1142	91	0	1233	2482
03:00 PM	0	0	0	0	0	3	0	4	0	7	5	332	1	1	339	0	279	29	0	308	654
03:15 PM	0	0	0	0	0	1	0	10	0	11	8	297	0	0	305	0	290	20	0	310	626
03:30 PM	0	0	0	0	0	5	0	7	1	13	8	288	0	0	296	0	304	29	0	333	642
03:45 PM	0	0	0	0	0	7	0	6	0	13	10	296	0	0	306	0	290	28	0	318	637
Total	0	0	0	0	0	16	0	27	1	44	31	1213	1	1	1246	0	1163	106	0	1269	2559
04:00 PM	0	0	0	0	0	2	0	16	0	18	5	295	1	0	301	0	293	25	0	318	637
04:15 PM	0	0	0	0	0	4	0	13	0	17	4	305	0	0	309	0	247	39	0	286	612
04:30 PM	0	0	0	0	0	5	0	3	0	8	8	296	0	0	304	1	272	20	0	293	605
04:45 PM	1	0	0	0	1	0	0	7	0	7	5	269	0	0	274	0	262	22	0	284	566
Total	1	0	0	0	1	11	0	39	0	50	22	1165	1	0	1188	1	1074	106	0	1181	2420
05:00 PM	0	0	1	0	1	3	0	7	0	10	5	272	0	0	277	0	289	30	0	319	607
05:15 PM	1	0	0	0	1	2	0	10	1	13	4	310	0	0	314	0	257	27	0	284	612
05:30 PM	1	0	0	0	1	2	0	7	0	9	5	284	0	0	289	0	274	23	0	297	596
05:45 PM	0	0	0	0	0	1	0	12	0	13	4	233	0	0	237	0	226	28	0	254	504
Total	2	0	1	0	3	8	0	36	1	45	18	1099	0	0	1117	0	1046	108	0	1154	2319
Grand Total	6	0	6	0	12	68	0	220	2	290	173	8329	11	4	8517	5	8198	697	1	8901	17720
Apprch %	50	0	50	0		23.4	0	75.9	0.7		2	97.8	0.1	0		0.1	92.1	7.8	0		
Total %	0	0	0	0	0.1	0.4	0	1.2	0	1.6	1	47	0.1	0	48.1	0	46.3	3.9	0	50.2	

	DRIVEWAY Northbound					MOLLYS SEAFOOD SHACK Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	3	0	0	0	3	1	225	2	0	228	0	230	6	1	237	468
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	184	0	0	185	0	186	15	0	201	386
08:15 AM	0	0	0	0	0	1	0	0	0	1	4	238	0	1	243	0	209	13	0	222	466
08:30 AM	0	0	0	0	0	1	0	3	0	4	2	177	0	0	179	0	215	8	0	223	406
Total Volume	0	0	0	0	0	5	0	3	0	8	8	824	2	1	835	0	840	42	1	883	1726
% App. Total	0	0	0	0		62.5	0	37.5	0		1	98.7	0.2	0.1		0	95.1	4.8	0.1		
PHF	.000	.000	.000	.000	.000	.417	.000	.250	.000	.500	.500	.866	.250	.250	.859	.000	.913	.700	.250	.931	.922

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:45 AM					07:45 AM					07:45 AM				
+0 mins.	0	0	0	0	0	3	0	0	0	3	1	225	2	0	228	0	230	6	1	237
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	184	0	0	185	0	186	15	0	201
+30 mins.	0	0	0	0	0	1	0	0	0	1	4	238	0	1	243	0	209	13	0	222
+45 mins.	0	0	0	0	0	1	0	3	0	4	2	177	0	0	179	0	215	8	0	223
Total Volume	0	0	0	0	0	5	0	3	0	8	8	824	2	1	835	0	840	42	1	883
% App. Total	0	0	0	0		62.5	0	37.5	0		1	98.7	0.2	0.1		0	95.1	4.8	0.1	
PHF	.00	.00	.00	.00	.000	.41	.00	.25	.00	.500	.50	.86	.25	.25	.859	.00	.91	.70	.25	.931
	0	0	0	0		7	0	0	0		0	6	0	0		0	3	0	0	

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 01:00 PM

01:00 PM	1	0	1	0	2	0	0	13	0	13	8	240	0	0	248	0	267	25	0	292	555
01:15 PM	1	0	0	0	1	1	0	8	0	9	8	299	1	0	308	0	318	20	0	338	656
01:30 PM	0	0	1	0	1	2	0	11	0	13	8	316	1	0	325	1	281	23	0	305	644
01:45 PM	0	0	1	0	1	0	0	12	0	12	6	293	0	0	299	0	331	23	0	354	666
Total Volume	2	0	3	0	5	3	0	44	0	47	30	1148	2	0	1180	1	1197	91	0	1289	2521
% App. Total	40	0	60	0		6.4	0	93.6	0		2.5	97.3	0.2	0		0.1	92.9	7.1	0		
PHF	.500	.000	.750	.000	.625	.375	.000	.846	.000	.904	.938	.908	.500	.000	.908	.250	.904	.910	.000	.910	.946

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	01:00 PM					12:45 PM					12:45 PM					01:00 PM				
+0 mins.	1	0	1	0	2	0	0	15	0	15	8	302	0	0	310	0	267	25	0	292
+15 mins.	1	0	0	0	1	0	0	13	0	13	8	240	0	0	248	0	318	20	0	338
+30 mins.	0	0	1	0	1	1	0	8	0	9	8	299	1	0	308	1	281	23	0	305
+45 mins.	0	0	1	0	1	2	0	11	0	13	8	316	1	0	325	0	331	23	0	354
Total Volume	2	0	3	0	5	3	0	47	0	50	32	1157	2	0	1191	1	1197	91	0	1289
% App. Total	40	0	60	0		6	0	94	0		2.7	97.1	0.2	0		0.1	92.9	7.1	0	
PHF	.50	.00	.75	.00	.625	.37	.00	.78	.00	.833	1.000	.91	.50	.00	.916	.25	.90	.91	.00	.910
	0	0	0	0		5	0	3	0		5	0	0	0		0	4	0	0	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:00 PM

03:00 PM	0	0	0	0	0	3	0	4	0	7	5	332	1	1	339	0	279	29	0	308	654
03:15 PM	0	0	0	0	0	1	0	10	0	11	8	297	0	0	305	0	290	20	0	310	626
03:30 PM	0	0	0	0	0	5	0	7	1	13	8	288	0	0	296	0	304	29	0	333	642
03:45 PM	0	0	0	0	0	7	0	6	0	13	10	296	0	0	306	0	290	28	0	318	637
Total Volume	0	0	0	0	0	16	0	27	1	44	31	1213	1	1	1246	0	1163	106	0	1269	2559
% App. Total	0	0	0	0	0	36.4	0	61.4	2.3		2.5	97.4	0.1	0.1		0	91.6	8.4	0		
PHF	.000	.000	.000	.000	.000	.571	.000	.675	.250	.846	.775	.913	.250	.250	.919	.000	.956	.914	.000	.953	.978

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM					03:30 PM					02:30 PM					03:15 PM				
+0 mins.	1	0	0	0	1	5	0	7	1	13	7	320	0	0	327	0	290	20	0	310
+15 mins.	0	0	1	0	1	7	0	6	0	13	4	281	0	0	285	0	304	29	0	333
+30 mins.	1	0	0	0	1	2	0	16	0	18	5	332	1	1	339	0	290	28	0	318
+45 mins.	1	0	0	0	1	4	0	13	0	17	8	297	0	0	305	0	293	25	0	318
Total Volume	3	0	1	0	4	18	0	42	1	61	24	1230	1	1	1256	0	1177	102	0	1279
% App. Total	75	0	25	0		29.5	0	68.9	1.6		1.9	97.9	0.1	0.1		0	92	8	0	
PHF	.75	.00	.25	.00	1.000	.64	.00	.65	.25	.847	.75	.92	.25	.25	.926	.00	.96	.87	.00	.960
	0	0	0	0		3	0	6	0		0	6	0	0		0	8	9	0	

Groups Printed- Heavy Trucks

	DRIVEWAY Northbound					MOLLYS SEAFOOD SHACK Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0	2	0	0	2	5
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	4	1	0	5	11
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	4	0	1	5	11
Total	0	0	0	0	0	0	0	0	0	0	1	14	0	1	16	0	12	1	1	14	30
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	4
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	8	0	1	9	0	1	1	0	2	11
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	5	0	0	6	0	3	1	0	4	10
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	5	1	0	6	11
Total	0	0	0	0	0	0	0	0	0	0	1	20	0	1	22	0	10	4	0	14	36
*** BREAK ***																					
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	6	1	0	7	12
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	1	0	4	7
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	2	1	0	3	6
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2	8
Total	0	0	0	0	0	0	0	0	0	0	0	17	0	0	17	0	13	3	0	16	33
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	4
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	7	1	0	8	13
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	1	0	4	6
01:45 PM	0	0	0	0	0	0	0	0	0	0	1	5	0	0	6	0	2	0	0	2	8
Total	0	0	0	0	0	0	0	0	0	0	1	14	0	0	15	0	13	3	0	16	31
02:00 PM	0	0	0	0	0	0	0	1	0	1	0	9	0	0	9	0	5	1	0	6	16
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5	7
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5	7
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5	7
Total	0	0	0	0	0	0	0	1	0	1	0	15	0	0	15	0	17	4	0	21	37
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	1	4	0	2	1	0	3	7
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	6	1	0	7	11
03:30 PM	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	0	4	1	0	5	7
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	4	1	0	5	8
Total	0	0	0	0	0	0	0	0	1	1	0	11	0	1	12	0	16	4	0	20	33
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	0	0	4	6
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	2	0	6	8
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	2	1	0	3	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	4
Total	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	0	11	4	0	15	24
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	1	0	4	5
05:15 PM	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	2	4
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
Total	0	0	0	0	0	0	0	0	1	1	0	3	0	0	3	0	6	4	0	10	14
Grand Total	0	0	0	0	0	0	0	1	2	3	3	103	0	3	109	0	98	27	1	126	238
Apprch %	0	0	0	0		0	0	33.3	66.7		2.8	94.5	0	2.8		0	77.8	21.4	0.8		
Total %	0	0	0	0	0	0	0	0.4	0.8	1.3	1.3	43.3	0	1.3	45.8	0	41.2	11.3	0.4	52.9	

	DRIVEWAY Northbound					MOLLYS SEAFOOD SHACK Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	4	1	0	5	11
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	4	0	1	5	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	4
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	8	0	1	9	0	1	1	0	2	11
Total Volume	0	0	0	0	0	0	0	0	0	0	0	22	0	1	23	0	10	3	1	14	37
% App. Total	0	0	0	0		0	0	0	0		0	95.7	0	4.3		0	71.4	21.4	7.1		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.688	.000	.250	.639	.000	.625	.750	.250	.700	.841

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					07:30 AM					07:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	8	0	1	9	0	4	0	1	5
Total Volume	0	0	0	0	0	0	0	0	0	0	0	22	0	1	23	0	12	1	1	14
% App. Total	0	0	0	0		0	0	0	0		0	95.7	0	4.3		0	85.7	7.1	7.1	
PHF	.00	.00	.00	.00	.000	.00	.00	.00	.00	.000	.00	.68	.00	.25	.639	.00	.75	.25	.25	.700
	0	0	0	0		0	0	0	0		0	8	0	0		0	0	0	0	

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:00 PM

12:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	6	1	0	7	12
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	1	0	4	7
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	2	1	0	3	6
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2	8
Total Volume	0	0	0	0	0	0	0	0	0	0	0	17	0	0	17	0	13	3	0	16	33
% App. Total	0	0	0	0		0	0	0	0		0	100	0	0		0	81.2	18.8	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.708	.000	.000	.708	.000	.542	.750	.000	.571	.688

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	10:00 AM					10:00 AM					12:00 PM					12:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	6	1	0	7
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	1	0	4
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	2	1	0	3
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	0	2
Total Volume	0	0	0	0	0	0	0	0	0	0	0	17	0	0	17	0	13	3	0	16
% App. Total	0	0	0	0		0	0	0	0		0	100	0	0		0	81.2	18.8	0	
PHF	.00	.00	.00	.00	.000	.00	.00	.00	.00	.000	.00	.70	.00	.00	.708	.00	.54	.75	.00	.571
	0	0	0	0		0	0	0	0		0	8	0	0		0	2	0	0	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:00 PM

02:00 PM	0	0	0	0	0	0	0	1	0	1	0	9	0	0	9	0	5	1	0	6	16
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5	7
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5	7
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5	7
Total Volume	0	0	0	0	0	0	0	1	0	1	0	15	0	0	15	0	17	4	0	21	37
% App. Total	0	0	0	0		0	0	100	0		0	100	0	0		0	81	19	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.417	.000	.000	.417	.000	.850	1.00	.000	.875	.578

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM					02:00 PM					02:00 PM					02:00 PM				
+0 mins.	0	0	0	0	0	0	0	1	0	1	0	9	0	0	9	0	5	1	0	6
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	1	0	5
Total Volume	0	0	0	0	0	0	0	1	0	1	0	15	0	0	15	0	17	4	0	21
% App. Total	0	0	0	0		0	0	100	0		0	100	0	0		0	81	19	0	
PHF	.00	.00	.00	.00	.000	.00	.00	.25	.00	.250	.00	.41	.00	.00	.417	.00	.85	1.000	.00	.875
	0	0	0	0		0	0	0	0		0	7	0	0		0	0	0	0	

File Name : TMC
Site Code : 00000000
Start Date : 10/27/2015
Page No : 1

Groups Printed- UTurns

	DRIVEWAY Northbound					MOLLYS SEAFOOD SHACK Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
*** BREAK ***																					
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
02:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
02:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2
*** BREAK ***																					
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2
Grand Total	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	5
Apprch %	0	0	0	0		0	0	0	0		100	0	0	0		0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0	0	0	0	0	

	DRIVEWAY Northbound					MOLLYS SEAFOOD SHACK Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
% App. Total	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.000	.250	.000	.000	.000	.000	.000	.250

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

[illegible]

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 10:00 AM

[illegible]

File Name : TMC
 Site Code : 00000000
 Start Date : 10/27/2015
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	DRIVEWAY Northbound					MOLLYS SEAFOOD SHACK Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	10:00 AM					10:00 AM					10:00 AM					10:00 AM					
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:00 PM

	02:00 PM					02:00 PM					02:00 PM					02:00 PM					
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
02:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	2
% App. Total	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	0	0	100
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.000	.000	.500	.000	.000	.000	.000	.500

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM					02:00 PM					02:00 PM					02:00 PM					
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	
% App. Total	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.000	.000	.500	.000	.000	.000	.000	

File Name : Not Named 1

Site Code : 00000000

Start Date : 10/27/2015

Page No : 1

Groups Printed- All Vehicles

	NORTH BANANA RIVER DR Northbound					NORTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	17	0	19	0	36	8	92	0	1	101	0	115	18	0	133	270
07:15 AM	0	0	0	0	0	28	1	21	0	50	23	119	1	0	143	0	125	24	0	149	342
07:30 AM	0	0	0	0	0	22	2	20	0	44	19	181	2	0	202	3	167	26	0	196	442
07:45 AM	3	0	1	0	4	29	0	41	0	70	20	177	5	0	202	0	170	15	0	185	461
Total	3	0	1	0	4	96	3	101	0	200	70	569	8	1	648	3	577	83	0	663	1515
08:00 AM	2	0	1	0	3	38	2	40	0	80	26	178	8	1	213	1	180	16	0	197	493
08:15 AM	3	1	0	0	4	27	2	39	0	68	26	180	5	2	213	0	176	16	0	192	477
08:30 AM	2	0	0	0	2	22	3	28	0	53	22	169	3	1	195	1	182	18	0	201	451
08:45 AM	1	2	1	0	4	28	3	42	0	73	33	162	6	0	201	1	193	16	0	210	488
Total	8	3	2	0	13	115	10	149	0	274	107	689	22	4	822	3	731	66	0	800	1909
*** BREAK ***																					
12:00 PM	6	1	1	0	8	27	1	35	0	63	27	237	4	1	269	1	225	26	0	252	592
12:15 PM	3	0	0	0	3	18	2	45	0	65	39	209	2	1	251	1	281	31	0	313	632
12:30 PM	3	1	2	0	6	23	1	45	0	69	33	244	2	0	279	1	241	33	0	275	629
12:45 PM	3	0	1	0	4	30	0	39	0	69	36	266	7	0	309	0	289	18	0	307	689
Total	15	2	4	0	21	98	4	164	0	266	135	956	15	2	1108	3	1036	108	0	1147	2542
01:00 PM	5	0	2	0	7	25	0	40	0	65	39	241	4	0	284	2	245	29	0	276	632
01:15 PM	2	0	2	1	5	20	2	47	0	69	46	255	4	0	305	4	268	30	1	303	682
01:30 PM	4	0	1	0	5	20	1	49	0	70	39	267	3	0	309	3	290	22	0	315	699
01:45 PM	7	0	3	0	10	35	0	46	0	81	46	256	6	0	308	1	261	36	0	298	697
Total	18	0	8	1	27	100	3	182	0	285	170	1019	17	0	1206	10	1064	117	1	1192	2710
02:00 PM	2	1	1	0	4	15	1	42	0	58	39	223	3	0	265	2	273	24	1	300	627
02:15 PM	2	1	4	0	7	20	0	29	1	50	46	270	2	0	318	2	271	31	0	304	679
02:30 PM	3	0	1	0	4	24	0	46	0	70	31	298	1	0	330	1	237	22	0	260	664
02:45 PM	0	0	1	0	1	26	1	44	2	73	38	257	3	0	298	2	243	19	0	264	636
Total	7	2	7	0	16	85	2	161	3	251	154	1048	9	0	1211	7	1024	96	1	1128	2606
03:00 PM	3	2	1	0	6	24	0	30	0	54	42	270	3	0	315	2	267	29	0	298	673
03:15 PM	4	0	0	0	4	19	0	43	0	62	40	269	2	0	311	2	240	32	0	274	651
03:30 PM	2	3	3	0	8	29	2	55	0	86	52	254	2	1	309	2	265	33	0	300	703
03:45 PM	3	1	2	0	6	31	0	56	1	88	37	272	1	0	310	2	233	25	0	260	664
Total	12	6	6	0	24	103	2	184	1	290	171	1065	8	1	1245	8	1005	119	0	1132	2691
04:00 PM	0	0	3	2	5	27	0	56	0	83	35	223	3	0	261	0	246	43	0	289	638
04:15 PM	2	1	1	0	4	21	0	47	0	68	40	315	4	0	359	2	205	33	0	240	671
04:30 PM	7	1	4	0	12	31	1	56	1	89	41	221	3	0	265	0	237	31	0	268	634
04:45 PM	2	1	2	0	5	23	0	48	1	72	45	242	0	0	287	2	214	30	0	246	610
Total	11	3	10	2	26	102	1	207	2	312	161	1001	10	0	1172	4	902	137	0	1043	2553
05:00 PM	2	1	0	0	3	46	0	59	0	105	50	280	3	0	333	2	284	31	0	317	758
05:15 PM	5	4	2	0	11	32	0	53	1	86	54	228	1	1	284	0	213	31	0	244	625
05:30 PM	4	1	0	0	5	23	0	52	0	75	49	210	1	0	260	0	206	39	0	245	585
05:45 PM	1	5	0	0	6	29	0	40	0	69	38	232	0	0	270	1	198	34	0	233	578
Total	12	11	2	0	25	130	0	204	1	335	191	950	5	1	1147	3	901	135	0	1039	2546
Grand Total	86	27	40	3	156	829	25	1352	7	2213	1159	7297	94	9	8559	41	7240	861	2	8144	19072
Apprch %	55.1	17.3	25.6	1.9		37.5	1.1	61.1	0.3		13.5	85.3	1.1	0.1		0.5	88.9	10.6	0		
Total %	0.5	0.1	0.2	0	0.8	4.3	0.1	7.1	0	11.6	6.1	38.3	0.5	0	44.9	0.2	38	4.5	0	42.7	

	NORTH BANANA RIVER DR Northbound					NORTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	2	0	1	0	3	38	2	40	0	80	26	178	8	1	213	1	180	16	0	197	493
08:15 AM	3	1	0	0	4	27	2	39	0	68	26	180	5	2	213	0	176	16	0	192	477
08:30 AM	2	0	0	0	2	22	3	28	0	53	22	169	3	1	195	1	182	18	0	201	451
08:45 AM	1	2	1	0	4	28	3	42	0	73	33	162	6	0	201	1	193	16	0	210	488
Total Volume	8	3	2	0	13	115	10	149	0	274	107	689	22	4	822	3	731	66	0	800	1909
% App. Total	61.5	23.1	15.4	0		42	3.6	54.4	0		13	83.8	2.7	0.5		0.4	91.4	8.2	0		
PHF	.667	.375	.500	.000	.813	.757	.833	.887	.000	.856	.811	.957	.688	.500	.965	.750	.947	.917	.000	.952	.968

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM					08:00 AM					07:30 AM					08:00 AM				
+0 mins.	3	0	1	0	4	38	2	40	0	80	19	181	2	0	202	1	180	16	0	197
+15 mins.	2	0	1	0	3	27	2	39	0	68	20	177	5	0	202	0	176	16	0	192
+30 mins.	3	1	0	0	4	22	3	28	0	53	26	178	8	1	213	1	182	18	0	201
+45 mins.	2	0	0	0	2	28	3	42	0	73	26	180	5	2	213	1	193	16	0	210
Total Volume	10	1	2	0	13	115	10	149	0	274	91	716	20	3	830	3	731	66	0	800
% App. Total	76.9	7.7	15.4	0		42	3.6	54.4	0		11	86.3	2.4	0.4		0.4	91.4	8.2	0	
PHF	.833	.250	.500	.000	.813	.757	.833	.887	.000	.856	.875	.980	.625	.375	.974	.750	.947	.917	.000	.952

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 01:00 PM

01:00 PM	5	0	2	0	7	25	0	40	0	65	39	241	4	0	284	2	245	29	0	276	632
01:15 PM	2	0	2	1	5	20	2	47	0	69	46	255	4	0	305	4	268	30	1	303	682
01:30 PM	4	0	1	0	5	20	1	49	0	70	39	267	3	0	309	3	290	22	0	315	699
01:45 PM	7	0	3	0	10	35	0	46	0	81	46	256	6	0	308	1	261	36	0	298	697
Total Volume	18	0	8	1	27	100	3	182	0	285	170	1019	17	0	1206	10	1064	117	1	1192	2710
% App. Total	66.7	0	29.6	3.7		35.1	1.1	63.9	0		14.1	84.5	1.4	0		0.8	89.3	9.8	0.1		
PHF	.643	.000	.667	.250	.675	.714	.375	.929	.000	.880	.924	.954	.708	.000	.976	.625	.917	.813	.250	.946	.969

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	01:00 PM					01:00 PM					12:45 PM					12:45 PM				
+0 mins.	5	0	2	0	7	25	0	40	0	65	36	266	7	0	309	0	289	18	0	307
+15 mins.	2	0	2	1	5	20	2	47	0	69	39	241	4	0	284	2	245	29	0	276
+30 mins.	4	0	1	0	5	20	1	49	0	70	46	255	4	0	305	4	268	30	1	303
+45 mins.	7	0	3	0	10	35	0	46	0	81	39	267	3	0	309	3	290	22	0	315
Total Volume	18	0	8	1	27	100	3	182	0	285	160	1029	18	0	1207	9	1092	99	1	1201
% App. Total	66.7	0	29.6	3.7		35.1	1.1	63.9	0		13.3	85.3	1.5	0		0.7	90.9	8.2	0.1	
PHF	.643	.000	.666	.250	.675	.714	.375	.929	.000	.880	.875	.960	.643	.000	.977	.563	.941	.820	.250	.953

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:00 PM

03:00 PM	3	2	1	0	6	24	0	30	0	54	42	270	3	0	315	2	267	29	0	298	673
03:15 PM	4	0	0	0	4	19	0	43	0	62	40	269	2	0	311	2	240	32	0	274	651
03:30 PM	2	3	3	0	8	29	2	55	0	86	52	254	2	1	309	2	265	33	0	300	703
03:45 PM	3	1	2	0	6	31	0	56	1	88	37	272	1	0	310	2	233	25	0	260	664
Total Volume	12	6	6	0	24	103	2	184	1	290	171	1065	8	1	1245	8	1005	119	0	1132	2691
% App. Total	50	25	25	0		35.5	0.7	63.4	0.3		13.7	85.5	0.6	0.1		0.7	88.8	10.5	0		
PHF	.750	.500	.500	.000	.750	.831	.250	.821	.250	.824	.822	.979	.667	.250	.988	1.000	.941	.902	.000	.943	.957

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM					04:30 PM					02:15 PM					02:45 PM				
+0 mins.	7	1	4	0	12	31	1	56	1	89	46	270	2	0	318	2	243	19	0	264
+15 mins.	2	1	2	0	5	23	0	48	1	72	31	298	1	0	330	2	267	29	0	298
+30 mins.	2	1	0	0	3	46	0	59	0	105	38	257	3	0	298	2	240	32	0	274
+45 mins.	5	4	2	0	11	32	0	53	1	86	42	270	3	0	315	2	265	33	0	300
Total Volume	16	7	8	0	31	132	1	216	3	352	157	1095	9	0	1261	8	1015	113	0	1136
% App. Total	51.6	22.6	25.8	0		37.5	0.3	61.4	0.9		12.5	86.8	0.7	0		0.7	89.3	9.9	0	
PHF	.571	.438	.500	.000	.646	.714	.250	.915	.750	.838	.853	.919	.750	.000	.955	1.000	.950	.856	.000	.947

File Name : SR 520 & N. Banana River Dr

Site Code : 00000000

Start Date : 10/27/2015

Page No : 1

Groups Printed- Heavy Trucks

	NORTH BANANA RIVER DR Northbound					NORTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	2	0	0	2	5
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	2	0	0	2	4	
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	5	0	0	6	0	5	0	0	5	11	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	3	0	0	3	7	
Total	0	0	0	0	0	0	0	0	0	0	3	11	0	1	15	0	12	0	0	12	27	
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	2	0	0	2	7	
08:15 AM	0	0	0	0	0	0	0	1	0	1	0	5	0	2	7	0	1	1	0	2	10	
08:30 AM	0	0	0	0	0	0	0	1	0	1	1	6	0	1	8	0	5	2	0	7	16	
08:45 AM	0	0	0	0	0	0	0	1	0	1	0	5	0	0	5	0	6	0	0	6	12	
Total	0	0	0	0	0	0	0	3	0	3	2	20	0	3	25	0	14	3	0	17	45	
*** BREAK ***																						
12:00 PM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	6	0	0	6	10	
12:15 PM	0	0	0	0	0	2	0	1	0	3	1	3	0	0	4	0	2	0	0	2	9	
12:30 PM	0	0	1	0	1	0	0	1	0	1	0	3	1	0	4	0	1	2	0	3	9	
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	1	0	0	1	6	
Total	0	0	1	0	1	2	0	3	0	5	2	13	1	0	16	0	10	2	0	12	34	
01:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	5	0	0	5	7	
01:15 PM	0	0	0	1	1	1	0	3	0	4	0	3	0	0	3	0	3	0	1	4	12	
01:30 PM	0	0	0	0	0	0	0	2	0	2	0	2	0	0	2	0	2	0	0	2	6	
01:45 PM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	5	
Total	0	0	0	1	1	1	0	5	0	6	2	10	0	0	12	0	10	0	1	11	30	
02:00 PM	0	0	0	0	0	0	0	1	0	1	1	6	0	0	7	0	5	0	1	6	14	
02:15 PM	0	0	1	0	1	1	0	1	1	3	0	3	0	0	3	0	2	0	0	2	9	
02:30 PM	0	0	0	0	0	0	0	2	0	2	0	3	0	0	3	0	3	0	0	3	8	
02:45 PM	0	0	0	0	0	0	0	1	1	2	1	4	0	0	5	0	5	0	0	5	12	
Total	0	0	1	0	1	1	0	5	2	8	2	16	0	0	18	0	15	0	1	16	43	
03:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	5	
03:15 PM	0	0	0	0	0	0	0	4	0	4	0	4	0	0	4	0	3	1	0	4	12	
03:30 PM	0	0	1	0	1	0	0	1	0	1	0	2	1	0	3	0	2	0	0	2	7	
03:45 PM	1	0	0	0	1	0	0	2	1	3	0	2	0	0	2	0	2	0	0	2	8	
Total	1	0	1	0	2	0	0	7	1	8	1	9	1	0	11	0	10	1	0	11	32	
04:00 PM	0	0	0	1	1	0	0	1	0	1	0	1	0	0	1	0	4	1	0	5	8	
04:15 PM	0	0	0	0	0	0	0	1	0	1	1	3	0	0	4	0	2	1	0	3	8	
04:30 PM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	3	0	0	3	7	
04:45 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	2	0	1	0	0	1	4	
Total	0	0	0	1	1	0	0	3	1	4	1	9	0	0	10	0	10	2	0	12	27	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3	
05:15 PM	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	2	
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3	
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2	
Total	0	0	0	0	0	0	0	0	1	1	0	2	0	0	2	0	7	0	0	7	10	
Grand Total	1	0	3	2	6	4	0	26	5	35	13	90	2	4	109	0	88	8	2	98	248	
Apprch %	16.7	0	50	33.3		11.4	0	74.3	14.3		11.9	82.6	1.8	3.7		0	89.8	8.2	2			
Total %	0.4	0	1.2	0.8	2.4	1.6	0	10.5	2	14.1	5.2	36.3	0.8	1.6	44	0	35.5	3.2	0.8	39.5		

	NORTH BANANA RIVER DR Northbound					NORTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	2	0	0	2	7
08:15 AM	0	0	0	0	0	0	0	1	0	1	0	5	0	2	7	0	1	1	0	2	10
08:30 AM	0	0	0	0	0	0	0	1	0	1	1	6	0	1	8	0	5	2	0	7	16
08:45 AM	0	0	0	0	0	0	0	1	0	1	0	5	0	0	5	0	6	0	0	6	12
Total Volume	0	0	0	0	0	0	0	3	0	3	2	20	0	3	25	0	14	3	0	17	45
% App. Total	0	0	0	0		0	0	100	0		8	80	0	12		0	82.4	17.6	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.750	.000	.750	.500	.833	.000	.375	.781	.000	.583	.375	.000	.607	.703

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					08:00 AM					08:00 AM					08:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	2	0	0	2
+15 mins.	0	0	0	0	0	0	0	1	0	1	0	5	0	2	7	0	1	1	0	2
+30 mins.	0	0	0	0	0	0	0	1	0	1	1	6	0	1	8	0	5	2	0	7
+45 mins.	0	0	0	0	0	0	0	1	0	1	0	5	0	0	5	0	6	0	0	6
Total Volume	0	0	0	0	0	0	0	3	0	3	2	20	0	3	25	0	14	3	0	17
% App. Total	0	0	0	0		0	0	100	0		8	80	0	12		0	82.4	17.6	0	
PHF	.00	.00	.00	.00	.000	.00	.00	.75	.00	.750	.50	.83	.00	.37	.781	.00	.58	.37	.00	.607
	0	0	0	0		0	0	0	0		0	3	0	5		0	3	5	0	

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:00 PM

12:00 PM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	6	0	0	6	10
12:15 PM	0	0	0	0	0	2	0	1	0	3	1	3	0	0	4	0	2	0	0	2	9
12:30 PM	0	0	1	0	1	0	0	1	0	1	0	3	1	0	4	0	1	2	0	3	9
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	1	0	0	1	6
Total Volume	0	0	1	0	1	2	0	3	0	5	2	13	1	0	16	0	10	2	0	12	34
% App. Total	0	0	100	0		40	0	60	0		12.5	81.2	6.2	0		0	83.3	16.7	0		
PHF	.000	.000	.250	.000	.250	.250	.000	.750	.000	.417	.500	.813	.250	.000	.800	.000	.417	.250	.000	.500	.850

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:30 PM					12:45 PM					12:00 PM					12:30 PM				
+0 mins.	0	0	1	0	1	0	0	0	0	0	0	3	0	0	3	0	1	2	0	3
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	0	1	0	0	1
+30 mins.	0	0	0	0	0	1	0	3	0	4	0	3	1	0	4	0	5	0	0	5
+45 mins.	0	0	0	1	1	0	0	2	0	2	1	4	0	0	5	0	3	0	1	4
Total Volume	0	0	1	1	2	1	0	5	0	6	2	13	1	0	16	0	10	2	1	13
% App. Total	0	0	50	50		16.7	0	83.3	0		12.5	81.2	6.2	0		0	76.9	15.4	7.7	
PHF	.00	.00	.25	.25	.500	.25	.00	.41	.00	.375	.50	.81	.25	.00	.800	.00	.50	.25	.25	.650
	0	0	0	0		0	0	7	0		0	3	0	0		0	0	0	0	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:00 PM

02:00 PM	0	0	0	0	0	0	0	1	0	1	1	6	0	0	7	0	5	0	1	6	14
02:15 PM	0	0	1	0	1	1	0	1	1	3	0	3	0	0	3	0	2	0	0	2	9
02:30 PM	0	0	0	0	0	0	0	2	0	2	0	3	0	0	3	0	3	0	0	3	8
02:45 PM	0	0	0	0	0	0	0	1	1	2	1	4	0	0	5	0	5	0	0	5	12
Total Volume	0	0	1	0	1	1	0	5	2	8	2	16	0	0	18	0	15	0	1	16	43
% App. Total	0	0	100	0		12.5	0	62.5	25		11.1	88.9	0	0		0	93.8	0	6.2		
PHF	.000	.000	.250	.000	.250	.250	.000	.625	.500	.667	.500	.667	.000	.000	.643	.000	.750	.000	.250	.667	.768

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM					03:15 PM					02:00 PM					02:00 PM				
+0 mins.	0	0	0	0	0	0	0	4	0	4	1	6	0	0	7	0	5	0	1	6
+15 mins.	0	0	1	0	1	0	0	1	0	1	0	3	0	0	3	0	2	0	0	2
+30 mins.	1	0	0	0	1	0	0	2	1	3	0	3	0	0	3	0	3	0	0	3
+45 mins.	0	0	0	1	1	0	0	1	0	1	1	4	0	0	5	0	5	0	0	5
Total Volume	1	0	1	1	3	0	0	8	1	9	2	16	0	0	18	0	15	0	1	16
% App. Total	33.3	0	33.3	33.3		0	0	88.9	11.1		11.1	88.9	0	0		0	93.8	0	6.2	
	3		3	3				9	1		1	9					8			
PHF	.25	.00	.25	.25	.750	.00	.00	.50	.25	.563	.50	.66	.00	.00	.643	.00	.75	.00	.25	.667
	0	0	0	0		0	0	0	0		0	7	0	0		0	0	0	0	

File Name : SR 520 & N. Banana River Dr
 Site Code : 00000000
 Start Date : 10/27/2015
 Page No : 1

Groups Printed- UTurns

	NORTH BANANA RIVER DR Northbound					NORTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
*** BREAK ***																					
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***																					
02:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
03:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1	3
*** BREAK ***																					
05:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2
*** BREAK ***																					
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	3
Grand Total	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	2	0	0	0	2	9
Apprch %	0	0	0	0		0	0	0	0		100	0	0	0		100	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	77.8	0	0	0	77.8	22.2	0	0	0	22.2	

	NORTH BANANA RIVER DR Northbound					NORTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					07:00 AM					07:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
PHF	.00	.00	.00	.00	.000	.00	.00	.00	.00	.000	.00	.00	.00	.00	.000	.00	.00	.00	.00	.000
	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	

File Name : SR 520 & N. Banana River Dr
 Site Code : 00000000
 Start Date : 10/27/2015
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	NORTH BANANA RIVER DR Northbound					NORTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
% App. Total	0	0	0	0		0	0	0	0		100	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.000	.250	.000	.000	.000	.000	.000	.250

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	10:00 AM					10:00 AM					11:30 AM					12:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
% App. Total	0	0	0	0		0	0	0	0		100	0	0	0		100	0	0	0	
PHF	.00	.00	.00	.00	.000	.00	.00	.00	.00	.000	.25	.00	.00	.00	.250	.25	.00	.00	.00	.250
	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 03:00 PM

03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1	3
% App. Total	0	0	0	0		0	0	0	0		100	0	0	0		100	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.000	.500	.250	.000	.000	.000	.250	.750

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	02:00 PM					02:00 PM					04:45 PM					03:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1	0	0	0	1
% App. Total	0	0	0	0		0	0	0	0		100	0	0	0		100	0	0	0	
PHF	.00	.00	.00	.00	.000	.00	.00	.00	.00	.000	.37	.00	.00	.00	.375	.25	.00	.00	.00	.250
	0	0	0	0		0	0	0	0		5	0	0	0		0	0	0	0	

Groups Printed- All Vehicles

	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	48	2	21	0	71	3	1	16	0	20	5	76	13	0	94	6	91	7	0	104	289
07:15 AM	46	2	20	0	68	3	3	14	0	20	10	121	33	0	164	7	152	4	2	165	417
07:30 AM	99	1	26	1	127	5	0	8	0	13	2	169	19	1	191	6	169	6	1	182	513
07:45 AM	62	2	34	0	98	4	2	10	0	16	11	192	26	0	229	8	202	6	0	216	559
Total	255	7	101	1	364	15	6	48	0	69	28	558	91	1	678	27	614	23	3	667	1778
08:00 AM	59	1	20	0	80	11	1	11	0	23	21	181	23	0	225	12	150	7	0	169	497
08:15 AM	71	1	22	0	94	7	1	13	0	21	21	201	38	1	261	14	211	6	0	231	607
08:30 AM	56	4	22	0	82	8	0	13	0	21	13	170	39	0	222	15	185	9	0	209	534
08:45 AM	45	2	21	1	69	11	2	15	0	28	33	183	31	0	247	7	172	5	0	184	528
Total	231	8	85	1	325	37	4	52	0	93	88	735	131	1	955	48	718	27	0	793	2166
*** BREAK ***																					
12:00 PM	56	4	16	0	76	40	7	50	0	97	59	237	47	0	343	14	243	12	0	269	785
12:15 PM	42	2	21	0	65	33	6	34	0	73	51	210	25	0	286	8	286	24	0	318	742
12:30 PM	53	2	9	0	64	39	2	46	0	87	79	222	51	0	352	12	243	21	0	276	779
12:45 PM	53	4	24	2	83	38	6	53	0	97	53	281	41	0	375	12	274	24	0	310	865
Total	204	12	70	2	288	150	21	183	0	354	242	950	164	0	1356	46	1046	81	0	1173	3171
01:00 PM	35	2	12	2	51	45	5	42	0	92	50	222	35	0	307	10	243	21	1	275	725
01:15 PM	34	4	10	2	50	49	5	52	0	106	49	271	32	0	352	12	305	28	1	346	854
01:30 PM	46	4	14	2	66	69	6	52	0	127	41	272	49	0	362	7	254	25	0	286	841
01:45 PM	53	6	16	1	76	43	6	52	0	101	55	223	37	0	315	22	300	24	0	346	838
Total	168	16	52	7	243	206	22	198	0	426	195	988	153	0	1336	51	1102	98	2	1253	3258
02:00 PM	37	3	22	0	62	32	4	41	0	77	50	247	49	0	346	15	284	23	0	322	807
02:15 PM	45	2	16	0	63	46	9	44	0	99	48	257	39	0	344	13	258	20	0	291	797
02:30 PM	60	4	18	0	82	54	3	58	0	115	46	269	47	0	362	18	240	23	0	281	840
02:45 PM	48	5	13	0	66	46	5	44	0	95	49	231	41	0	321	16	257	25	0	298	780
Total	190	14	69	0	273	178	21	187	0	386	193	1004	176	0	1373	62	1039	91	0	1192	3224
03:00 PM	39	5	17	0	61	47	6	37	0	90	57	284	38	0	379	15	240	20	0	275	805
03:15 PM	43	6	15	1	65	47	7	50	0	104	37	247	55	0	339	16	290	13	0	319	827
03:30 PM	51	4	14	1	70	48	4	53	0	105	48	237	51	0	336	14	299	12	0	325	836
03:45 PM	55	5	16	0	76	43	5	45	0	93	51	257	61	0	369	19	284	15	0	318	856
Total	188	20	62	2	272	185	22	185	0	392	193	1025	205	0	1423	64	1113	60	0	1237	3324
04:00 PM	58	7	15	1	81	49	8	48	0	105	70	231	66	0	367	28	294	13	0	335	888
04:15 PM	56	5	19	1	81	49	8	52	0	109	64	286	84	0	434	16	231	16	0	263	887
04:30 PM	62	5	11	0	78	46	7	52	0	105	64	271	80	0	415	42	278	12	0	332	930
04:45 PM	58	9	13	0	80	44	12	38	0	94	54	228	75	0	357	28	225	17	0	270	801
Total	234	26	58	2	320	188	35	190	0	413	252	1016	305	0	1573	114	1028	58	0	1200	3506
05:00 PM	60	6	31	0	97	33	4	41	0	78	53	278	79	0	410	28	289	11	0	328	913
05:15 PM	55	7	24	2	88	52	8	47	0	107	55	248	92	0	395	34	239	13	0	286	876
05:30 PM	50	15	19	0	84	54	8	48	0	110	53	217	64	0	334	28	240	18	0	286	814
05:45 PM	48	2	17	0	67	38	10	41	0	89	43	246	69	0	358	16	197	21	0	234	748
Total	213	30	91	2	336	177	30	177	0	384	204	989	304	0	1497	106	965	63	0	1134	3351
Grand Total	1683	133	588	17	2421	1136	161	1220	0	2517	1395	7265	1529	2	10191	518	7625	501	5	8649	23778
Apprch %	69.5	5.5	24.3	0.7		45.1	6.4	48.5	0		13.7	71.3	15	0		6	88.2	5.8	0.1		
Total %	7.1	0.6	2.5	0.1	10.2	4.8	0.7	5.1	0	10.6	5.9	30.6	6.4	0	42.9	2.2	32.1	2.1	0	36.4	

	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	62	2	34	0	98	4	2	10	0	16	11	192	26	0	229	8	202	6	0	216	559
08:00 AM	59	1	20	0	80	11	1	11	0	23	21	181	23	0	225	12	150	7	0	169	497
08:15 AM	71	1	22	0	94	7	1	13	0	21	21	201	38	1	261	14	211	6	0	231	607
08:30 AM	56	4	22	0	82	8	0	13	0	21	13	170	39	0	222	15	185	9	0	209	534
Total Volume	248	8	98	0	354	30	4	47	0	81	66	744	126	1	937	49	748	28	0	825	2197
% App. Total	70.1	2.3	27.7	0		37	4.9	58	0		7	79.4	13.4	0.1		5.9	90.7	3.4	0		
PHF	.873	.500	.721	.000	.903	.682	.500	.904	.000	.880	.786	.925	.808	.250	.898	.817	.886	.778	.000	.893	.905

File Name : Not Named 1

Site Code : 00000000

Start Date : 1/26/2016

Page No : 2

	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM					08:00 AM					08:00 AM					07:45 AM				
+0 mins.	99	1	26	1	127	11	1	11	0	23	21	181	23	0	225	8	202	6	0	216
+15 mins.	62	2	34	0	98	7	1	13	0	21	21	201	38	1	261	12	150	7	0	169
+30 mins.	59	1	20	0	80	8	0	13	0	21	13	170	39	0	222	14	211	6	0	231
+45 mins.	71	1	22	0	94	11	2	15	0	28	33	183	31	0	247	15	185	9	0	209
Total Volume	291	5	102	1	399	37	4	52	0	93	88	735	131	1	955	49	748	28	0	825
% App. Total	72.9	1.3	25.6	0.3		39.8	4.3	55.9	0		9.2	77	13.7	0.1		5.9	90.7	3.4	0	
PHF	.735	.625	.750	.250	.785	.841	.500	.867	.000	.830	.667	.914	.840	.250	.915	.817	.886	.778	.000	.893

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:45 PM

	12:45 PM					01:00 PM					12:45 PM					01:00 PM					
12:45 PM	53	4	24	2	83	38	6	53	0	97	53	281	41	0	375	12	274	24	0	310	865
01:00 PM	35	2	12	2	51	45	5	42	0	92	50	222	35	0	307	10	243	21	1	275	725
01:15 PM	34	4	10	2	50	49	5	52	0	106	49	271	32	0	352	12	305	28	1	346	854
01:30 PM	46	4	14	2	66	69	6	52	0	127	41	272	49	0	362	7	254	25	0	286	841
Total Volume	168	14	60	8	250	201	22	199	0	422	193	1046	157	0	1396	41	1076	98	2	1217	3285
% App. Total	67.2	5.6	24	3.2		47.6	5.2	47.2	0		13.8	74.9	11.2	0		3.4	88.4	8.1	0.2		
PHF	.792	.875	.625	1.00	.753	.728	.917	.939	.000	.831	.910	.931	.801	.000	.931	.854	.882	.875	.500	.879	.949

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:00 PM					01:00 PM					12:45 PM					01:00 PM				
+0 mins.	56	4	16	0	76	45	5	42	0	92	53	281	41	0	375	10	243	21	1	275
+15 mins.	42	2	21	0	65	49	5	52	0	106	50	222	35	0	307	12	305	28	1	346
+30 mins.	53	2	9	0	64	69	6	52	0	127	49	271	32	0	352	7	254	25	0	286
+45 mins.	53	4	24	2	83	43	6	52	0	101	41	272	49	0	362	22	300	24	0	346
Total Volume	204	12	70	2	288	206	22	198	0	426	193	1046	157	0	1396	51	1102	98	2	1253
% App. Total	70.8	4.2	24.3	0.7		48.4	5.2	46.5	0		13.8	74.9	11.2	0		4.1	87.9	7.8	0.2	
PHF	.911	.750	.729	.250	.867	.746	.917	.952	.000	.839	.910	.931	.801	.000	.931	.580	.903	.875	.500	.905

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:45 PM

	03:45 PM					04:00 PM					04:15 PM					03:45 PM					
03:45 PM	55	5	16	0	76	43	5	45	0	93	51	257	61	0	369	19	284	15	0	318	856
04:00 PM	58	7	15	1	81	49	8	48	0	105	70	231	66	0	367	28	294	13	0	335	888
04:15 PM	56	5	19	1	81	49	8	52	0	109	64	286	84	0	434	16	231	16	0	263	887
04:30 PM	62	5	11	0	78	46	7	52	0	105	64	271	80	0	415	42	278	12	0	332	930
Total Volume	231	22	61	2	316	187	28	197	0	412	249	1045	291	0	1585	105	1087	56	0	1248	3561
% App. Total	73.1	7	19.3	0.6		45.4	6.8	47.8	0		15.7	65.9	18.4	0		8.4	87.1	4.5	0		
PHF	.931	.786	.803	.500	.975	.954	.875	.947	.000	.945	.889	.913	.866	.000	.913	.625	.924	.875	.000	.931	.957

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM					04:00 PM					04:15 PM					03:15 PM				
+0 mins.	58	9	13	0	80	49	8	48	0	105	64	286	84	0	434	16	290	13	0	319
+15 mins.	60	6	31	0	97	49	8	52	0	109	64	271	80	0	415	14	299	12	0	325
+30 mins.	55	7	24	2	88	46	7	52	0	105	54	228	75	0	357	19	284	15	0	318
+45 mins.	50	15	19	0	84	44	12	38	0	94	53	278	79	0	410	28	294	13	0	335
Total Volume	223	37	87	2	349	188	35	190	0	413	235	1063	318	0	1616	77	1167	53	0	1297
% App. Total	63.9	10.6	24.9	0.6		45.5	8.5	46	0		14.5	65.8	19.7	0		5.9	90	4.1	0	
PHF	.929	.617	.702	.250	.899	.959	.729	.913	.000	.947	.918	.929	.946	.000	.931	.688	.976	.883	.000	.968

File Name : TMC
 Site Code : 00000000
 Start Date : 1/26/2016
 Page No : 1

Groups Printed- Heavy Trucks

	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	2	0	2	0	1	3	0	4	0	0	0	0	0	6
07:15 AM	3	0	1	0	4	0	0	1	0	1	2	2	1	0	5	0	2	1	1	4	14
07:30 AM	1	0	0	1	2	1	0	1	0	2	0	4	0	1	5	0	4	0	1	5	14
07:45 AM	1	0	0	0	1	0	0	2	0	2	0	5	1	0	6	0	2	2	0	4	13
Total	5	0	1	1	7	1	0	6	0	7	2	12	5	1	20	0	8	3	2	13	47
08:00 AM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	1	0	0	1	5
08:15 AM	2	0	0	0	2	0	0	1	0	1	0	6	0	1	7	0	0	1	0	1	11
08:30 AM	0	0	1	0	1	0	0	3	0	3	1	5	1	0	7	0	3	0	0	3	14
08:45 AM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	2	0	5	0	0	5	9
Total	2	0	1	0	3	1	0	6	0	7	1	16	1	1	19	0	9	1	0	10	39
*** BREAK ***																					
12:00 PM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	1	5	0	0	6	10
12:15 PM	0	0	0	0	0	0	0	1	0	1	2	2	0	0	4	0	3	0	0	3	8
12:30 PM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	2	0	0	2	6
12:45 PM	0	0	0	0	0	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	6
Total	0	0	0	0	0	1	0	3	0	4	2	13	0	0	15	1	10	0	0	11	30
01:00 PM	0	0	0	1	1	1	0	2	0	3	0	0	0	0	0	0	3	0	1	4	8
01:15 PM	1	0	0	2	3	0	0	1	0	1	0	2	0	0	2	0	4	0	0	4	10
01:30 PM	0	0	0	1	1	1	0	1	0	2	0	1	0	0	1	0	2	0	0	2	6
01:45 PM	0	0	0	1	1	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	6
Total	1	0	0	5	6	2	0	4	0	6	1	7	0	0	8	0	9	0	1	10	30
02:00 PM	0	0	0	0	0	0	0	1	0	1	0	9	0	0	9	0	3	0	0	3	13
02:15 PM	0	0	1	0	1	0	0	1	0	1	0	1	2	0	3	0	4	0	0	4	9
02:30 PM	0	0	0	0	0	0	0	1	0	1	0	3	2	0	5	1	2	0	0	3	9
02:45 PM	3	0	1	0	4	0	0	1	0	1	0	2	1	0	3	0	5	0	0	5	13
Total	3	0	2	0	5	0	0	4	0	4	0	15	5	0	20	1	14	0	0	15	44
03:00 PM	2	0	0	0	2	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	5
03:15 PM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	1	3	0	0	4	6
03:30 PM	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	3
03:45 PM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	3
Total	2	0	0	0	2	0	0	5	0	5	0	5	0	0	5	1	4	0	0	5	17
04:00 PM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	4	0	0	4	6
04:15 PM	0	0	0	1	1	0	0	2	0	2	0	2	1	0	3	0	2	0	0	2	8
04:30 PM	0	0	0	0	0	0	0	1	0	1	0	4	0	0	4	0	2	0	0	2	7
04:45 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	3
Total	1	0	0	1	2	0	0	4	0	4	0	8	1	0	9	0	9	0	0	9	24
05:00 PM	0	0	0	0	0	0	0	2	0	2	1	1	1	0	3	0	0	0	0	0	5
05:15 PM	0	0	0	2	2	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	5
05:30 PM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	0	0	2	2	0	0	5	0	5	1	3	1	0	5	0	2	0	0	2	14
Grand Total	14	0	4	9	27	5	0	37	0	42	7	79	13	2	101	3	65	4	3	75	245
Apprch %	51.9	0	14.8	33.3		11.9	0	88.1	0		6.9	78.2	12.9	2		4	86.7	5.3	4		
Total %	5.7	0	1.6	3.7	11	2	0	15.1	0	17.1	2.9	32.2	5.3	0.8	41.2	1.2	26.5	1.6	1.2	30.6	

	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	2	0	2	0	1	3	0	4	0	0	0	0	0	6
07:15 AM	3	0	1	0	4	0	0	1	0	1	2	2	1	0	5	0	2	1	1	4	14
07:30 AM	1	0	0	1	2	1	0	1	0	2	0	4	0	1	5	0	4	0	1	5	14
07:45 AM	1	0	0	0	1	0	0	2	0	2	0	5	1	0	6	0	2	2	0	4	13
Total Volume	5	0	1	1	7	1	0	6	0	7	2	12	5	1	20	0	8	3	2	13	47
% App. Total	71.4	0	14.3	14.3		14.3	0	85.7	0		10	60	25	5		0	61.5	23.1	15.4		
PHF	.417	.000	.250	.250	.438	.250	.000	.750	.000	.875	.250	.600	.417	.250	.833	.000	.500	.375	.500	.650	.839

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	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					07:45 AM					07:15 AM				
+0 mins.	0	0	0	0	0	0	0	2	0	2	0	5	1	0	6	0	2	1	1	4
+15 mins.	3	0	1	0	4	0	0	1	0	1	0	3	0	0	3	0	4	0	1	5
+30 mins.	1	0	0	1	2	1	0	1	0	2	0	6	0	1	7	0	2	2	0	4
+45 mins.	1	0	0	0	1	0	0	2	0	2	1	5	1	0	7	0	1	0	0	1
Total Volume	5	0	1	1	7	1	0	6	0	7	1	19	2	1	23	0	9	3	2	14
% App. Total	71.4	0	14.3	14.3		14.3	0	85.7	0		4.3	82.6	8.7	4.3		0	64.3	21.4	14.3	
PHF	.417	.000	.250	.250	.438	.250	.000	.750	.000	.875	.250	.792	.500	.250	.821	.000	.563	.375	.500	.700

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:00 PM

	12:00 PM					12:00 PM					12:00 PM					12:15 PM					
12:00 PM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	1	5	0	0	6	10
12:15 PM	0	0	0	0	0	0	0	1	0	1	2	2	0	0	4	0	3	0	0	3	8
12:30 PM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	2	0	0	2	6
12:45 PM	0	0	0	0	0	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	6
Total Volume	0	0	0	0	0	1	0	3	0	4	2	13	0	0	15	1	10	0	0	11	30
% App. Total	0	0	0	0		25	0	75	0		13.3	86.7	0	0		9.1	90.9	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.750	.000	1.00	.250	.650	.000	.000	.750	.250	.500	.000	.000	.458	.750

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	01:00 PM					12:45 PM					12:00 PM					11:45 AM				
+0 mins.	0	0	0	1	1	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0
+15 mins.	1	0	0	2	3	1	0	2	0	3	2	2	0	0	4	1	5	0	0	6
+30 mins.	0	0	0	1	1	0	0	1	0	1	0	3	0	0	3	0	3	0	0	3
+45 mins.	0	0	0	1	1	1	0	1	0	2	0	5	0	0	5	0	2	0	0	2
Total Volume	1	0	0	5	6	3	0	4	0	7	2	13	0	0	15	1	10	0	0	11
% App. Total	16.7	0	0	83.3		42.9	0	57.1	0		13.3	86.7	0	0		9.1	90.9	0	0	
PHF	.250	.000	.000	.625	.500	.750	.000	.500	.000	.583	.250	.650	.000	.000	.750	.250	.500	.000	.000	.458

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:00 PM

	02:00 PM					02:15 PM					02:30 PM					02:45 PM					
02:00 PM	0	0	0	0	0	0	0	1	0	1	0	9	0	0	9	0	3	0	0	3	13
02:15 PM	0	0	1	0	1	0	0	1	0	1	0	1	2	0	3	0	4	0	0	4	9
02:30 PM	0	0	0	0	0	0	0	1	0	1	0	3	2	0	5	1	2	0	0	3	9
02:45 PM	3	0	1	0	4	0	0	1	0	1	0	2	1	0	3	0	5	0	0	5	13
Total Volume	3	0	2	0	5	0	0	4	0	4	0	15	5	0	20	1	14	0	0	15	44
% App. Total	60	0	40	0		0	0	100	0		0	75	25	0		6.7	93.3	0	0		
PHF	.250	.000	.500	.000	.313	.000	.000	1.00	.000	1.00	.000	.417	.625	.000	.556	.250	.700	.000	.000	.750	.846

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:15 PM					03:30 PM					02:00 PM					02:00 PM				
+0 mins.	0	0	1	0	1	0	0	2	0	2	0	9	0	0	9	0	3	0	0	3
+15 mins.	0	0	0	0	0	0	0	1	0	1	0	1	2	0	3	0	4	0	0	4
+30 mins.	3	0	1	0	4	0	0	1	0	1	0	3	2	0	5	1	2	0	0	3
+45 mins.	2	0	0	0	2	0	0	2	0	2	0	2	1	0	3	0	5	0	0	5
Total Volume	5	0	2	0	7	0	0	6	0	6	0	15	5	0	20	1	14	0	0	15
% App. Total	71.4	0	28.6	0		0	0	100	0		0	75	25	0		6.7	93.3	0	0	
PHF	.417	.000	.500	.000	.438	.000	.000	.750	.000	.750	.000	.417	.625	.000	.556	.250	.700	.000	.000	.750

File Name : TMC
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Groups Printed- UTurns

	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
*** BREAK ***																					
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
*** BREAK ***																					
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***																					
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
*** BREAK ***																					
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
*** BREAK ***																					
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***																					
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2
Grand Total	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	8	0	0	0	8	11
Apprch %	0	0	0	0		0	0	0	0		66.7	33.3	0	0		100	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	18.2	9.1	0	0	27.3	72.7	0	0	0	72.7	

	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
% App. Total	0	0	0	0		0	0	0	0		0	100	0	0		100	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.250	.500

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					07:00 AM					07:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1
% App. Total	0	0	0	0		0	0	0	0		0	100	0	0		100	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.250

File Name : TMC
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	NEW FOUND HARBOR Northbound					NEW FOUND HARBOR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.000	.500	.500

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	10:00 AM					10:00 AM					10:00 AM					12:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.000	.500

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:00 PM

02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.000	.000	.000	.750	.750

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM					02:00 PM					05:00 PM					02:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0	0	0	3
% App. Total	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.000	.250	.750	.000	.000	.000	.750

File Name : Not Named 1

Site Code : 00000000

Start Date : 10/27/2015

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Groups Printed- All Vehicles

	SOUTH BANANA RIVER DR Northbound					SOUTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	12	0	6	0	18	0	0	2	0	2	0	88	7	0	95	1	101	1	0	103	218
07:15 AM	10	2	8	0	20	2	0	4	0	6	0	119	9	0	128	1	129	1	0	131	285
07:30 AM	13	0	13	0	26	0	0	7	0	7	1	156	11	0	168	3	163	0	0	166	367
07:45 AM	19	0	7	1	27	0	1	4	0	5	0	208	8	0	216	2	192	1	0	195	443
Total	54	2	34	1	91	2	1	17	0	20	1	571	35	0	607	7	585	3	0	595	1313
08:00 AM	7	0	6	0	13	0	1	5	0	6	2	176	26	1	205	1	157	1	0	159	383
08:15 AM	9	1	9	0	19	0	1	2	0	3	4	198	16	1	219	3	179	0	0	182	423
08:30 AM	9	1	10	0	20	1	0	3	0	4	1	168	15	0	184	5	205	0	0	210	418
08:45 AM	19	0	9	0	28	1	0	1	0	2	3	174	15	0	192	2	183	0	0	185	407
Total	44	2	34	0	80	2	2	11	0	15	10	716	72	2	800	11	724	1	0	736	1631
*** BREAK ***																					
12:00 PM	20	0	7	0	27	1	0	5	0	6	5	252	23	0	280	13	245	2	0	260	573
12:15 PM	22	0	6	0	28	3	1	7	0	11	4	210	12	0	226	5	266	0	0	271	536
12:30 PM	11	0	7	0	18	1	0	6	0	7	2	219	15	0	236	0	245	1	0	246	507
12:45 PM	18	0	2	0	20	2	0	4	0	6	3	279	26	0	308	4	257	2	0	263	597
Total	71	0	22	0	93	7	1	22	0	30	14	960	76	0	1050	22	1013	5	0	1040	2213
01:00 PM	13	1	5	0	19	3	0	3	0	6	2	211	13	0	226	5	266	3	0	274	525
01:15 PM	19	0	7	0	26	1	1	7	0	9	2	294	23	0	319	6	298	2	0	306	660
01:30 PM	22	0	8	0	30	0	0	2	0	2	5	267	20	0	292	4	277	3	0	284	608
01:45 PM	13	0	5	0	18	0	0	0	0	0	4	244	18	0	266	7	314	2	0	323	607
Total	67	1	25	0	93	4	1	12	0	17	13	1016	74	0	1103	22	1155	10	0	1187	2400
02:00 PM	30	1	6	0	37	1	0	4	0	5	4	235	15	0	254	6	240	2	0	248	544
02:15 PM	24	0	8	0	32	2	2	7	1	12	8	245	23	0	276	6	263	1	0	270	590
02:30 PM	14	0	1	0	15	1	0	6	1	8	3	292	16	0	311	6	249	1	0	256	590
02:45 PM	16	0	6	0	22	0	1	3	0	4	3	250	26	0	279	4	252	3	0	259	564
Total	84	1	21	0	106	4	3	20	2	29	18	1022	80	0	1120	22	1004	7	0	1033	2288
03:00 PM	14	0	8	0	22	1	0	3	0	4	8	268	16	0	292	8	252	1	0	261	579
03:15 PM	10	1	5	0	16	2	0	5	0	7	6	243	20	0	269	5	285	2	0	292	584
03:30 PM	16	0	9	0	25	1	0	5	0	6	3	255	23	0	281	7	271	0	0	278	590
03:45 PM	10	1	5	0	16	1	2	1	0	4	3	284	24	0	311	5	269	2	0	276	607
Total	50	2	27	0	79	5	2	14	0	21	20	1050	83	0	1153	25	1077	5	0	1107	2360
04:00 PM	15	0	5	0	20	0	0	5	1	6	1	273	18	0	292	11	284	1	0	296	614
04:15 PM	0	0	2	0	2	0	0	1	0	1	1	264	18	2	285	14	227	0	0	241	529
04:30 PM	19	1	3	0	23	0	1	2	0	3	4	291	23	0	318	8	249	1	0	258	602
04:45 PM	11	2	2	0	15	1	1	3	0	5	3	240	22	0	265	9	235	4	0	248	533
Total	45	3	12	0	60	1	2	11	1	15	9	1068	81	2	1160	42	995	6	0	1043	2278
05:00 PM	18	0	3	0	21	0	2	2	0	4	5	245	21	0	271	12	272	0	0	284	580
05:15 PM	12	1	10	0	23	0	1	2	0	3	6	247	29	1	283	11	256	0	1	268	577
05:30 PM	11	0	6	0	17	0	1	5	0	6	2	245	15	0	262	8	236	4	0	248	533
05:45 PM	11	0	3	0	14	0	0	2	0	2	4	214	20	0	238	7	217	0	0	224	478
Total	52	1	22	0	75	0	4	11	0	15	17	951	85	1	1054	38	981	4	1	1024	2168
Grand Total	467	12	197	1	677	25	16	118	3	162	102	7354	586	5	8047	189	7534	41	1	7765	16651
Apprch %	69	1.8	29.1	0.1		15.4	9.9	72.8	1.9		1.3	91.4	7.3	0.1		2.4	97	0.5	0		
Total %	2.8	0.1	1.2	0	4.1	0.2	0.1	0.7	0	1	0.6	44.2	3.5	0	48.3	1.1	45.2	0.2	0	46.6	

	SOUTH BANANA RIVER DR Northbound					SOUTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	19	0	7	1	27	0	1	4	0	5	0	208	8	0	216	2	192	1	0	195	443
08:00 AM	7	0	6	0	13	0	1	5	0	6	2	176	26	1	205	1	157	1	0	159	383
08:15 AM	9	1	9	0	19	0	1	2	0	3	4	198	16	1	219	3	179	0	0	182	423
08:30 AM	9	1	10	0	20	1	0	3	0	4	1	168	15	0	184	5	205	0	0	210	418
Total Volume	44	2	32	1	79	1	3	14	0	18	7	750	65	2	824	11	733	2	0	746	1667
% App. Total	55.7	2.5	40.5	1.3		5.6	16.7	77.8	0		0.8	91	7.9	0.2		1.5	98.3	0.3	0		
PHF	.579	.500	.800	.250	.731	.250	.750	.700	.000	.750	.438	.901	.625	.500	.941	.550	.894	.500	.000	.888	.941

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:15 AM					07:45 AM					07:45 AM				
+0 mins.	12	0	6	0	18	2	0	4	0	6	0	208	8	0	216	2	192	1	0	195
+15 mins.	10	2	8	0	20	0	0	7	0	7	2	176	26	1	205	1	157	1	0	159
+30 mins.	13	0	13	0	26	0	1	4	0	5	4	198	16	1	219	3	179	0	0	182
+45 mins.	19	0	7	1	27	0	1	5	0	6	1	168	15	0	184	5	205	0	0	210
Total Volume	54	2	34	1	91	2	2	20	0	24	7	750	65	2	824	11	733	2	0	746
% App. Total	59.3	2.2	37.4	1.1		8.3	8.3	83.3	0		0.8	91	7.9	0.2		1.5	98.3	0.3	0	
PHF	.711	.25	.65	.25	.843	.25	.50	.71	.00	.857	.43	.90	.62	.50	.941	.55	.89	.50	.00	.888
	1	0	4	0		0	0	4	0		8	1	5	0		0	4	0	0	

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 01:00 PM

01:00 PM	13	1	5	0	19	3	0	3	0	6	2	211	13	0	226	5	266	3	0	274	525
01:15 PM	19	0	7	0	26	1	1	7	0	9	2	294	23	0	319	6	298	2	0	306	660
01:30 PM	22	0	8	0	30	0	0	2	0	2	5	267	20	0	292	4	277	3	0	284	608
01:45 PM	13	0	5	0	18	0	0	0	0	0	4	244	18	0	266	7	314	2	0	323	607
Total Volume	67	1	25	0	93	4	1	12	0	17	13	1016	74	0	1103	22	1155	10	0	1187	2400
% App. Total	72	1.1	26.9	0		23.5	5.9	70.6	0		1.2	92.1	6.7	0		1.9	97.3	0.8	0		
PHF	.761	.250	.781	.000	.775	.333	.250	.429	.000	.472	.650	.864	.804	.000	.864	.786	.920	.833	.000	.919	.909

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:45 PM					12:00 PM					12:45 PM					01:00 PM				
+0 mins.	18	0	2	0	20	1	0	5	0	6	3	279	26	0	308	5	266	3	0	274
+15 mins.	13	1	5	0	19	3	1	7	0	11	2	211	13	0	226	6	298	2	0	306
+30 mins.	19	0	7	0	26	1	0	6	0	7	2	294	23	0	319	4	277	3	0	284
+45 mins.	22	0	8	0	30	2	0	4	0	6	5	267	20	0	292	7	314	2	0	323
Total Volume	72	1	22	0	95	7	1	22	0	30	12	1051	82	0	1145	22	1155	10	0	1187
% App. Total	75.8	1.1	23.2	0		23.3	3.3	73.3	0		1	91.8	7.2	0		1.9	97.3	0.8	0	
PHF	.818	.25	.68	.00	.792	.58	.25	.78	.00	.682	.60	.89	.78	.00	.897	.78	.92	.83	.00	.919
	8	0	8	0		3	0	6	0		0	4	8	0		6	0	3	0	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:15 PM

03:15 PM	10	1	5	0	16	2	0	5	0	7	6	243	20	0	269	5	285	2	0	292	584
03:30 PM	16	0	9	0	25	1	0	5	0	6	3	255	23	0	281	7	271	0	0	278	590
03:45 PM	10	1	5	0	16	1	2	1	0	4	3	284	24	0	311	5	269	2	0	276	607
04:00 PM	15	0	5	0	20	0	0	5	1	6	1	273	18	0	292	11	284	1	0	296	614
Total Volume	51	2	24	0	77	4	2	16	1	23	13	1055	85	0	1153	28	1109	5	0	1142	2395
% App. Total	66.2	2.6	31.2	0		17.4	8.7	69.6	4.3		1.1	91.5	7.4	0		2.5	97.1	0.4	0		
PHF	.797	.500	.667	.000	.770	.500	.250	.800	.250	.821	.542	.929	.885	.000	.927	.636	.973	.625	.000	.965	.975

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM					02:00 PM					03:45 PM					03:15 PM				
+0 mins.	30	1	6	0	37	1	0	4	0	5	3	284	24	0	311	5	285	2	0	292
+15 mins.	24	0	8	0	32	2	2	7	1	12	1	273	18	0	292	7	271	0	0	278
+30 mins.	14	0	1	0	15	1	0	6	1	8	1	264	18	2	285	5	269	2	0	276
+45 mins.	16	0	6	0	22	0	1	3	0	4	4	291	23	0	318	11	284	1	0	296
Total Volume	84	1	21	0	106	4	3	20	2	29	9	1112	83	2	1206	28	1109	5	0	1142
% App. Total	79.2	0.9	19.8	0		13.8	10.3	69	6.9		0.7	92.2	6.9	0.2		2.5	97.1	0.4	0	
PHF	.700	.25	.65	.00	.716	.50	.37	.71	.50	.604	.56	.95	.86	.25	.948	.63	.97	.62	.00	.965
	0	0	6	0		0	5	4	0		3	5	5	0		6	3	5	0	

File Name : SR 520 & S. Banana River DR

Site Code : 00000000

Start Date : 10/27/2015

Page No : 1

Groups Printed- Heavy Trucks

	SOUTH BANANA RIVER DR Northbound					SOUTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	1	0	0	1	4
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	4
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	4	0	0	4	7
07:45 AM	1	0	0	1	2	0	0	0	0	0	0	4	0	0	4	0	3	0	0	3	9
Total	2	0	0	1	3	0	0	0	0	0	0	9	1	0	10	0	11	0	0	11	24
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	1	0	0	1	5
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	1	7	0	1	0	0	1	8
08:30 AM	1	0	0	0	1	0	0	0	0	0	0	2	2	0	4	0	4	0	0	4	9
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	6	0	0	6	10
Total	1	0	0	0	1	0	0	0	0	0	0	14	4	1	19	0	12	0	0	12	32
*** BREAK ***																					
12:00 PM	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	0	5	0	0	5	9
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	0	3	0	0	3	7
12:30 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	5
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1	5
Total	2	0	0	0	2	0	0	0	0	0	0	12	1	0	13	0	11	0	0	11	26
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	0	0	4	6
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	4	0	0	4	8
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	0	1	6
Total	0	0	0	0	0	0	0	0	0	0	0	13	0	0	13	0	11	0	0	11	24
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	1	0	6	0	3	0	0	3	9
02:15 PM	1	0	0	0	1	0	0	0	0	0	0	4	0	0	4	0	4	0	0	4	9
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	5
02:45 PM	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	0	3	1	0	4	8
Total	2	0	0	0	2	0	0	0	0	0	0	13	2	0	15	0	13	1	0	14	31
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
03:15 PM	0	0	0	0	0	1	0	0	0	1	0	4	0	0	4	0	5	0	0	5	10
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	5
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	3	0	0	3	6
Total	0	0	0	0	0	1	0	0	0	1	0	10	1	0	11	0	13	0	0	13	25
04:00 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	4	0	0	4	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0	4	0	0	4	7
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	2	0	0	2	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	5
Total	1	0	0	0	1	0	0	0	0	0	0	7	1	1	9	0	13	0	0	13	23
05:00 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	1	3	4
*** BREAK ***																					
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	3
Total	1	0	0	0	1	0	0	0	0	0	0	4	0	0	4	0	4	0	1	5	10
Grand Total	9	0	0	1	10	1	0	0	0	1	0	82	10	2	94	0	88	1	1	90	195
Apprch %	90	0	0	10		100	0	0	0		0	87.2	10.6	2.1		0	97.8	1.1	1.1		
Total %	4.6	0	0	0.5	5.1	0.5	0	0	0	0.5	0	42.1	5.1	1	48.2	0	45.1	0.5	0.5	46.2	

File Name : SR 520 & S. Banana River DR
 Site Code : 00000000
 Start Date : 10/27/2015
 Page No : 2

	SOUTH BANANA RIVER DR Northbound					SOUTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	1	0	0	1	5
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	1	7	0	1	0	0	1	8
08:30 AM	1	0	0	0	1	0	0	0	0	0	0	2	2	0	4	0	4	0	0	4	9
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	6	0	0	6	10
Total Volume	1	0	0	0	1	0	0	0	0	0	0	14	4	1	19	0	12	0	0	12	32
% App. Total	100	0	0	0		0	0	0	0		0	73.7	21.1	5.3		0	100	0	0		
PHF	.250	.000	.000	.000	.250	.000	.000	.000	.000	.000	.000	.583	.500	.250	.679	.000	.500	.000	.000	.500	.800

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					07:45 AM					08:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	1	0	0	1
+30 mins.	1	0	0	0	1	0	0	0	0	0	0	6	0	1	7	0	4	0	0	4
+45 mins.	1	0	0	1	2	0	0	0	0	0	0	2	2	0	4	0	6	0	0	6
Total Volume	2	0	0	1	3	0	0	0	0	0	0	14	4	1	19	0	12	0	0	12
% App. Total	66.7	0	0	33.3		0	0	0	0		0	73.7	21.1	5.3		0	100	0	0	
PHF	.500	.000	.000	.250	.375	.000	.000	.000	.000	.000	.000	.583	.500	.250	.679	.000	.500	.000	.000	.500

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:00 PM

12:00 PM	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	0	5	0	0	5	9
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	0	3	0	0	3	7
12:30 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	5
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1	5
Total Volume	2	0	0	0	2	0	0	0	0	0	0	12	1	0	13	0	11	0	0	11	26
% App. Total	100	0	0	0		0	0	0	0		0	92.3	7.7	0		0	100	0	0		
PHF	.500	.000	.000	.000	.500	.000	.000	.000	.000	.000	.000	.750	.250	.000	.813	.000	.550	.000	.000	.550	.722

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:45 AM					10:00 AM					12:00 PM					12:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	5	0	0	5
+15 mins.	1	0	0	0	1	0	0	0	0	0	0	3	1	0	4	0	3	0	0	3
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2
+45 mins.	1	0	0	0	1	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1
Total Volume	2	0	0	0	2	0	0	0	0	0	0	12	1	0	13	0	11	0	0	11
% App. Total	100	0	0	0		0	0	0	0		0	92.3	7.7	0		0	100	0	0	
PHF	.500	.000	.000	.000	.500	.000	.000	.000	.000	.000	.000	.750	.250	.000	.813	.000	.550	.000	.000	.550

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:00 PM

02:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	1	0	6	0	3	0	0	3	9
02:15 PM	1	0	0	0	1	0	0	0	0	0	0	4	0	0	4	0	4	0	0	4	9
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	5
02:45 PM	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	0	3	1	0	4	8
Total Volume	2	0	0	0	2	0	0	0	0	0	0	13	2	0	15	0	13	1	0	14	31
% App. Total	100	0	0	0		0	0	0	0		0	86.7	13.3	0		0	92.9	7.1	0		
PHF	.500	.000	.000	.000	.500	.000	.000	.000	.000	.000	.000	.650	.500	.000	.625	.000	.813	.250	.000	.875	.861

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM					02:30 PM					02:00 PM					03:15 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	5	1	0	6	0	5	0	0	5
+15 mins.	1	0	0	0	1	0	0	0	0	0	0	4	0	0	4	0	3	0	0	3
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3
+45 mins.	1	0	0	0	1	1	0	0	0	1	0	2	1	0	3	0	4	0	0	4
Total Volume	2	0	0	0	2	1	0	0	0	1	0	13	2	0	15	0	15	0	0	15
% App. Total	100	0	0	0		100	0	0	0		0	86.7	13.3	0		0	100	0	0	
PHF	.500	.000	.000	.000	.500	.250	.000	.000	.000	.250	.000	.650	.500	.000	.625	.000	.750	.000	.000	.750

Page No : 1

	SOUTH BANANA RIVER DR Northbound					SOUTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
*** BREAK ***																					
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
03:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
03:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
03:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	3
*** BREAK ***																					
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2
*** BREAK ***																					
Grand Total	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	1	0	0	0	1	6
Apprch %	0	0	0	0		0	0	0	0		100	0	0	0		100	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	83.3	0	0	0	83.3	16.7	0	0	0	16.7	

	SOUTH BANANA RIVER DR Northbound					SOUTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
% App. Total	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.000	.250	.000	.000	.000	.000	.000	.250

Peak Hour for Each Approach Begins at:

[illegible]

Peak Hour for Entire Intersection Begins at 10:00 AM

San Juan 101, Entire Intersection, Begins at 1.000 km																				
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

File Name : SR 520 & S. Banana River DR
 Site Code : 00000000
 Start Date : 10/27/2015
 Page No : 2

	SOUTH BANANA RIVER DR Northbound					SOUTH BANANA RIVER DR Southbound					STATE ROAD 520 Eastbound					STATE ROAD 520 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	10:00 AM					10:00 AM					10:00 AM					10:00 AM					
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:00 PM

03:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
03:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	3
% App. Total	0	0	0	0	0	0	0	0	0	0	.100	0	0	0	.750	0	0	0	0	0	.750
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.000	.000	.000	.750	.000	.000	.000	.000	.000	.750

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM					02:00 PM					03:00 PM					03:30 PM					
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	
Total Volume	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1	0	0	0	1	
% App. Total	0	0	0	0	0	0	0	0	0	0	.100	0	0	0	.750	.100	0	0	0	.250	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.000	.000	.000	.750	.250	.000	.000	.000	.250	

Appendix H:

Turning Movement Volumes

INTERSECTION: SR 520 AT NEWFOUND HARBOR DRIVE

SECTION #70100 & MP 12.603

E/W Road:	SR 520
N/S Road:	Newfound Harbor Drive
Count Date(s):	1/27/2016
Traffic Control:	Signalized
Notes:	

Existing Lanes:	Lefts	Throughs	Rights
Eastbound Approach:	1	3	1
Westbound Approach:	1	3	1
Northbound Approach:	1	1	0
Southbound Approach:	1	1	0

Condition	Eastbound (SR 520)				Westbound (SR 520)				Northbound (Newfound Harbor)				Southbound (Walmart)			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
AM PEAK HOUR (7:45 - 8:45 AM)																
Counted Total Volume:	0	67	763	128	0	49	754	31	0	251	8	99	0	30	44	54
Counted Heavy Vehicles:	---	1	19	2	---	0	6	3	---	3	0	1	---	0	0	7
Percent Heavy Vehicles:	---	1%	2%	2%	---	0%	1%	10%	---	1%	0%	1%	---	0%	0%	13%
Approach Peak Hour Factor:	0.90				0.90				0.90				0.92			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Balance Adjustments**:	---	---	-29	---	---	---	15	---	---	---	---	---	---	---	---	---
Balanced 2016 Volume:	0	66	726	127	0	49	761	31	0	248	8	98	0	30	44	53
Access Mgmt Adjustment***:	0	4	-4	---	17	---	---	---	---	---	---	---	---	---	---	---
Build Condition Volume:	0	70	722	127	17	49	761	31	0	248	8	98	0	30	44	53
Bicycle Movements:																
Peds Crossing Approach:																
MID PEAK HOUR (1:15 - 2:15 PM)																
Counted Total Volume:	0	196	1029	167	0	56	1152	100	0	171	17	62	0	194	21	200
Counted Heavy Vehicles:	---	1	16	0	---	0	9	0	---	1	0	0	---	1	0	3
Percent Heavy Vehicles:	---	1%	2%	0%	---	0%	1%	0%	---	1%	0%	0%	---	1%	0%	2%
Approach Peak Hour Factor:	0.96				0.94				0.83				0.80			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adjusted 2016 Volume:	0	194	1019	165	0	55	1140	99	0	169	17	61	0	192	21	198
Bicycle Movements:																
Peds Crossing Approach:																
PM PEAK HOUR (3:45 - 4:45 PM)																
Counted Total Volume:	0	249	1054	292	1	105	1095	56	0	231	22	61	0	187	28	202
Counted Heavy Vehicles:	---	0	9	1	---	0	8	0	---	0	0	0	---	0	0	5
Percent Heavy Vehicles:	---	0%	1%	0%	---	0%	1%	0%	---	0%	0%	0%	---	0%	0%	2%
Approach Peak Hour Factor:	0.91				0.93				0.98				0.94			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Balance Adjustments**:	---	---	-49	---	---	---	-90	---	---	---	---	---	---	---	---	---
Balanced 2016 Volume:	0	247	994	289	1	104	994	55	0	229	22	60	0	185	28	200
Access Mgmt Adjustment***:	0	16	-16	---	28	---	---	---	---	---	---	---	---	---	---	---
Build Condition Volume:	0	263	978	289	29	104	994	55	0	229	22	60	0	185	28	200
Bicycle Movements:																
Peds Crossing Approach:																

* Seasonal Adjustment Factor from FDOT Traffic Information (2014 Brevard County - Countywide)

** Manual Volume Adjustments to Mainline Through Movements to Promote Balancing of Traffic Volumes Between Intersections; Throughout Study Corridor

*** Volume Adjustment Based Upon Proposed Access Management Improvements (Raised Median Installation).

INTERSECTION: SR 520 AT WALMART DRIVEWAY
SECTION #70100 & MP 12.720

E/W Road:	SR 520
N/S Road:	Walmart Driveway
Count Date(s):	1/21/2016
Traffic Control:	Side Street Stop-Controlled
Notes:	

Existing Lanes:	Lefts	Throughs	Rights
Eastbound Approach:	TWLTL	3	1
Westbound Approach:	TWLTL	4	0
Northbound Approach:	0	1	0
Southbound Approach:	0	0	1

Condition	Eastbound (SR 520)				Westbound (SR 520)				Northbound (Driveway)				Southbound (Walmart)			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
AM PEAK HOUR (7:45 - 8:45 AM)																
Counted Total Volume:	1	7	824	2	0	0	840	42	0	0	0	0	0	5	0	3
Counted Heavy Vehicles:	---	1	21	0	---	0	9	3	---	0	0	0	---	0	0	0
Percent Heavy Vehicles:	---	13%	3%	0%	---	0%	1%	7%	---	0%	0%	0%	---	0%	0%	0%
Approach Peak Hour Factor:	0.86				0.93				0.00				0.50			
Seasonal Factor*:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Balance Adjustments**:	---	---	10	---	---	---	-9	---	---	---	---	---	---	---	---	---
Balanced 2016 Volume:	1	7	842	2	0	0	839	42	0	0	0	0	0	5	0	3
Access Mgmt Adjustment***:	-1	-7	19	0	0	0	11	3	---	0	0	0	---	-5	0	5
Build Condition Volume:	0	0	861	2	0	0	850	45	0	0	0	0	0	0	0	8
Bicycle Movements:																
Peds Crossing Approach:																
MID PEAK HOUR (1:15 - 2:15 PM)																
Counted Total Volume:	0	24	1204	2	0	1	1226	92	0	2	0	2	0	7	0	37
Counted Heavy Vehicles:	---	1	21	0	---	0	17	3	---	0	0	0	---	0	0	1
Percent Heavy Vehicles:	---	4%	2%	0%	---	0%	1%	3%	---	0%	0%	0%	---	0%	0%	3%
Approach Peak Hour Factor:	0.95				0.93				1.00				0.85			
Seasonal Factor*:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Adjusted 2016 Volume:	0	24	1216	2	0	1	1238	93	0	2	0	2	0	7	0	37
Bicycle Movements:																
Peds Crossing Approach:																
PM PEAK HOUR (3:00 - 4:00 PM)																
Counted Total Volume:	0	31	1213	1	0	0	1163	106	0	0	0	0	0	16	0	27
Counted Heavy Vehicles:	---	0	11	0	---	0	16	4	---	0	0	0	---	0	0	0
Percent Heavy Vehicles:	---	0%	1%	0%	---	0%	1%	4%	---	0%	0%	0%	---	0%	0%	0%
Approach Peak Hour Factor:	0.92				0.95				0.00				0.83			
Seasonal Factor*:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Balance Adjustments**:	---	---	0	---	---	---	-48	---	---	---	---	---	---	---	---	---
Balanced 2016 Volume:	0	31	1225	1	0	0	1127	107	0	0	0	0	0	16	0	27
Access Mgmt Adjustment***:	0	-31	42	0	0	0	11	15	---	0	0	0	---	-16	0	16
Build Condition Volume:	0	0	1267	1	0	0	1138	122	0	0	0	0	0	0	0	43
Bicycle Movements:																
Peds Crossing Approach:																

* Seasonal Adjustment Factor from FDOT Traffic Information (2014 Brevard County - Countywide)

** Manual Volume Adjustments to Mainline Through Movements to Promote Balancing of Traffic Volumes Between Intersections; Throughout Study Corridor

*** Volume Adjustment Based Upon Proposed Access Management Improvements (Raised Median Installation).

INTERSECTION: SR 520 AT NORTH BANANA RIVER DRIVE
SECTION #70100 & MP 12.857

E/W Road:	SR 520
N/S Road:	North Banana River Drive
Count Date(s):	1/26/2016
Traffic Control:	Signalized
Notes:	

Existing Lanes:	Lefts	Throughs	Rights
Eastbound Approach:	1	3	0
Westbound Approach:	1	3	1
Northbound Approach:	1	1	0
Southbound Approach:	1	1	0

Condition	Eastbound (SR 520)				Westbound (SR 520)				Northbound (Driveway)				Southbound (N. Banana River)			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
AM PEAK HOUR (8:00 - 9:00 AM)																
Counted Total Volume:	0	107	689	22	0	3	731	66	0	8	3	2	0	115	10	149
Counted Heavy Vehicles:	---	2	20	0	---	0	14	3	---	0	0	0	---	0	0	3
Percent Heavy Vehicles:	---	2%	3%	0%	---	0%	2%	5%	---	0%	0%	0%	---	0%	0%	2%
Approach Peak Hour Factor:	0.96				0.95				0.81				0.86			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Balance Adjustments**:	---	---	15	---	---	---	-7	---	---	---	---	---	---	---	---	---
Balanced 2016 Volume:	0	106	697	22	0	3	717	65	0	8	3	2	0	114	10	148
Access Mgmt Adjustment***:	26	---	---	---	16	---	---	---	---	---	---	---	---	---	---	---
Build Condition Volume:	26	106	697	22	16	3	717	65	0	8	3	2	0	114	10	148
Bicycle Movements:																
Peds Crossing Approach:																
MID PEAK HOUR (1:00 - 2:00 PM)																
Counted Total Volume:	0	170	1019	17	1	9	1064	117	0	18	0	8	0	100	3	182
Counted Heavy Vehicles:	---	2	10	0	---	0	10	0	---	0	0	0	---	1	0	5
Percent Heavy Vehicles:	---	1%	1%	0%	---	0%	1%	0%	---	0%	0%	0%	---	1%	0%	3%
Approach Peak Hour Factor:	0.98				0.95				0.65				0.88			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adjusted 2016 Volume:	0	168	1009	17	1	9	1053	116	0	18	0	8	0	99	3	180
Bicycle Movements:																
Peds Crossing Approach:																
PM PEAK HOUR (4:15 - 5:15 PM)																
Counted Total Volume:	2	174	1058	10	0	6	940	125	0	13	4	7	0	121	1	210
Counted Heavy Vehicles:	---	1	8	0	---	0	9	1	---	0	0	0	---	0	0	2
Percent Heavy Vehicles:	---	1%	1%	0%	---	0%	1%	1%	---	0%	0%	0%	---	0%	0%	1%
Approach Peak Hour Factor:	0.87				0.84				0.50				0.79			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Balance Adjustments**:	---	---	3	---	---	---	58	---	---	---	---	---	---	---	---	---
Balanced 2016 Volume:	2	172	1050	10	0	6	989	124	0	13	4	7	0	120	1	208
Access Mgmt Adjustment***:	40	---	---	---	18	---	---	---	---	---	---	---	---	---	---	---
Build Condition Volume:	42	172	1050	10	18	6	989	124	0	13	4	7	0	120	1	208
Bicycle Movements:																
Peds Crossing Approach:																

* Seasonal Adjustment Factor from FDOT Traffic Information (2014 Brevard County - Countywide)

** Manual Volume Adjustments to Mainline Through Movements to Promote Balancing of Traffic Volumes Between Intersections; Throughout Study Corridor

*** Volume Adjustment Based Upon Proposed Access Management Improvements (Raised Median Installation).

INTERSECTION: SR 520 AT SOUTH BANANA RIVER DRIVE
SECTION #70100 & MP 13.013

E/W Road:	SR 520
N/S Road:	South Banana River Drive / Milton Point Drive
Count Date(s):	1/26/2016
Traffic Control:	Signalized
Notes:	

Existing Lanes:	Lefts	Throughs	Rights
Eastbound Approach:	1	2	1
Westbound Approach:	1	3	1
Northbound Approach:	0	1	0
Southbound Approach:	0	1	0

Condition	Eastbound (SR 520)				Westbound (SR 520)				Northbound (S. Banana River)				Southbound (Milton Point)			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
AM PEAK HOUR (7:45 - 8:45 AM)																
Counted Total Volume:	0	7	750	65	0	11	733	2	0	44	2	32	0	1	3	14
Counted Heavy Vehicles:	---	0	14	4	---	0	9	0	---	2	0	0	---	0	0	0
Percent Heavy Vehicles:	---	0%	2%	6%	---	0%	1%	0%	---	5%	0%	0%	---	0%	0%	0%
Approach Peak Hour Factor:	0.94				0.89				0.75				0.75			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Balance Adjustments**:	---	---	-28	---	---	---	20	---	---	---	---	---	---	---	---	---
Balanced 2016 Volume:	0	7	715	64	0	11	746	2	0	44	2	32	0	1	3	14
Access Mgmt Adjustment***:	29	---	---	---	14	---	---	---	---	---	---	---	---	---	---	---
Build Condition Volume:	29	7	715	64	14	11	746	2	0	44	2	32	0	1	3	14
Bicycle Movements:																
Peds Crossing Approach:																
MID PEAK HOUR (1:15 - 2:15 PM)																
Counted Total Volume:	0	15	1040	76	0	23	1129	9	0	84	1	26	0	2	1	13
Counted Heavy Vehicles:	---	0	16	1	---	0	10	0	---	0	0	0	---	0	0	0
Percent Heavy Vehicles:	---	0%	2%	1%	---	0%	1%	0%	---	0%	0%	0%	---	0%	0%	0%
Approach Peak Hour Factor:	0.89				0.90				0.75				0.44			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adjusted 2016 Volume:	0	15	1030	75	0	23	1118	9	0	83	1	26	0	2	1	13
Bicycle Movements:																
Peds Crossing Approach:																
PM PEAK HOUR (4:30 - 5:30 PM)																
Counted Total Volume:	1	17	1023	95	0	40	1012	5	0	60	4	18	0	1	5	9
Counted Heavy Vehicles:	---	0	5	1	---	0	8	0	---	1	0	0	---	0	0	0
Percent Heavy Vehicles:	---	0%	0%	1%	---	0%	1%	0%	---	2%	0%	0%	---	0%	0%	0%
Approach Peak Hour Factor:	0.89				0.93				0.89				0.75			
Seasonal Factor*:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Balance Adjustments**:	---	---	42	---	---	---	48	---	---	---	---	---	---	---	---	---
Balanced 2016 Volume:	1	17	1055	94	0	40	1050	5	0	59	4	18	0	1	5	9
Access Mgmt Adjustment***:	15	---	---	---	10	---	---	---	---	---	---	---	---	---	---	---
Build Condition Volume:	16	17	1055	94	10	40	1050	5	0	59	4	18	0	1	5	9
Bicycle Movements:																
Peds Crossing Approach:																

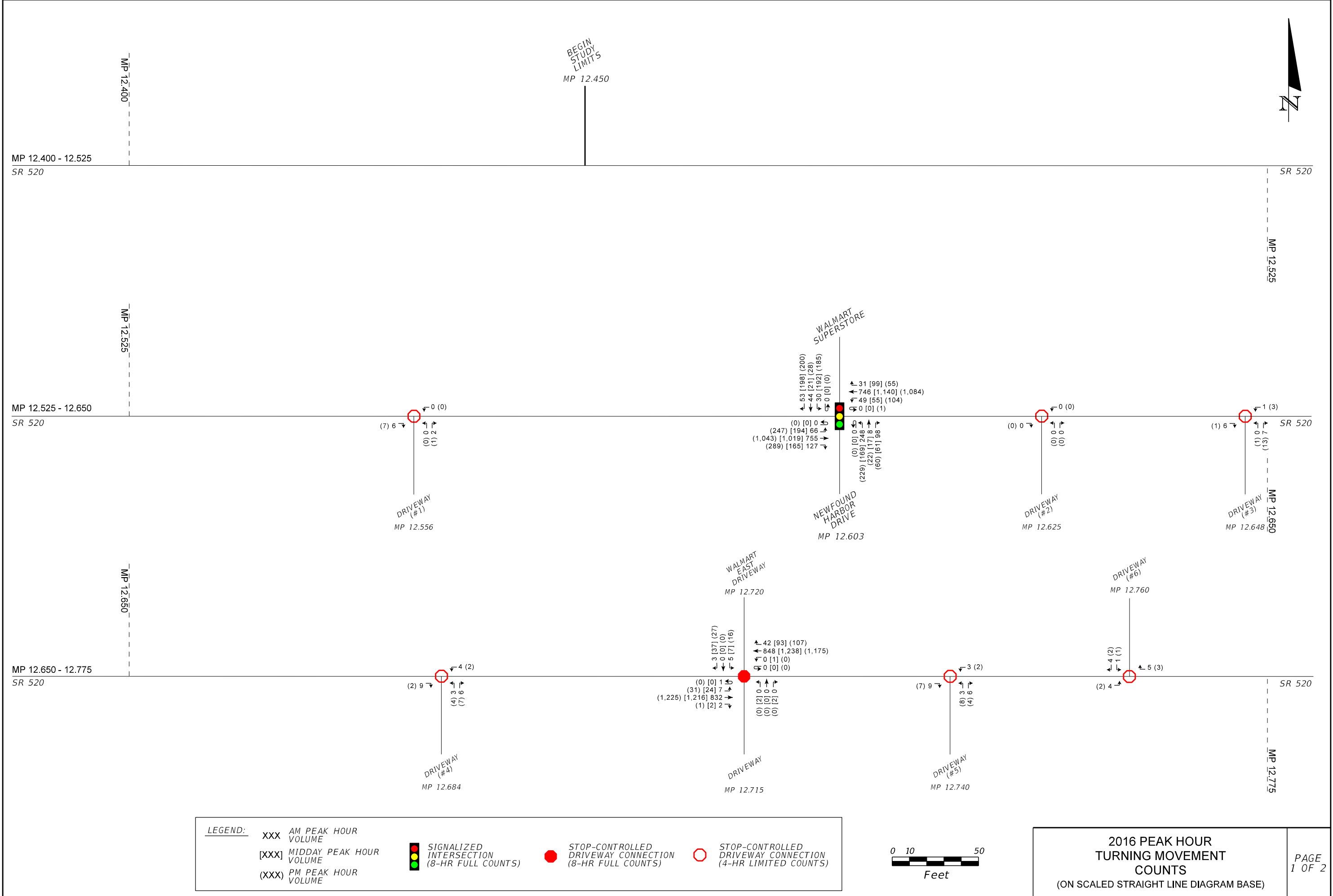
* Seasonal Adjustment Factor from FDOT Traffic Information (2014 Brevard County - Countywide)

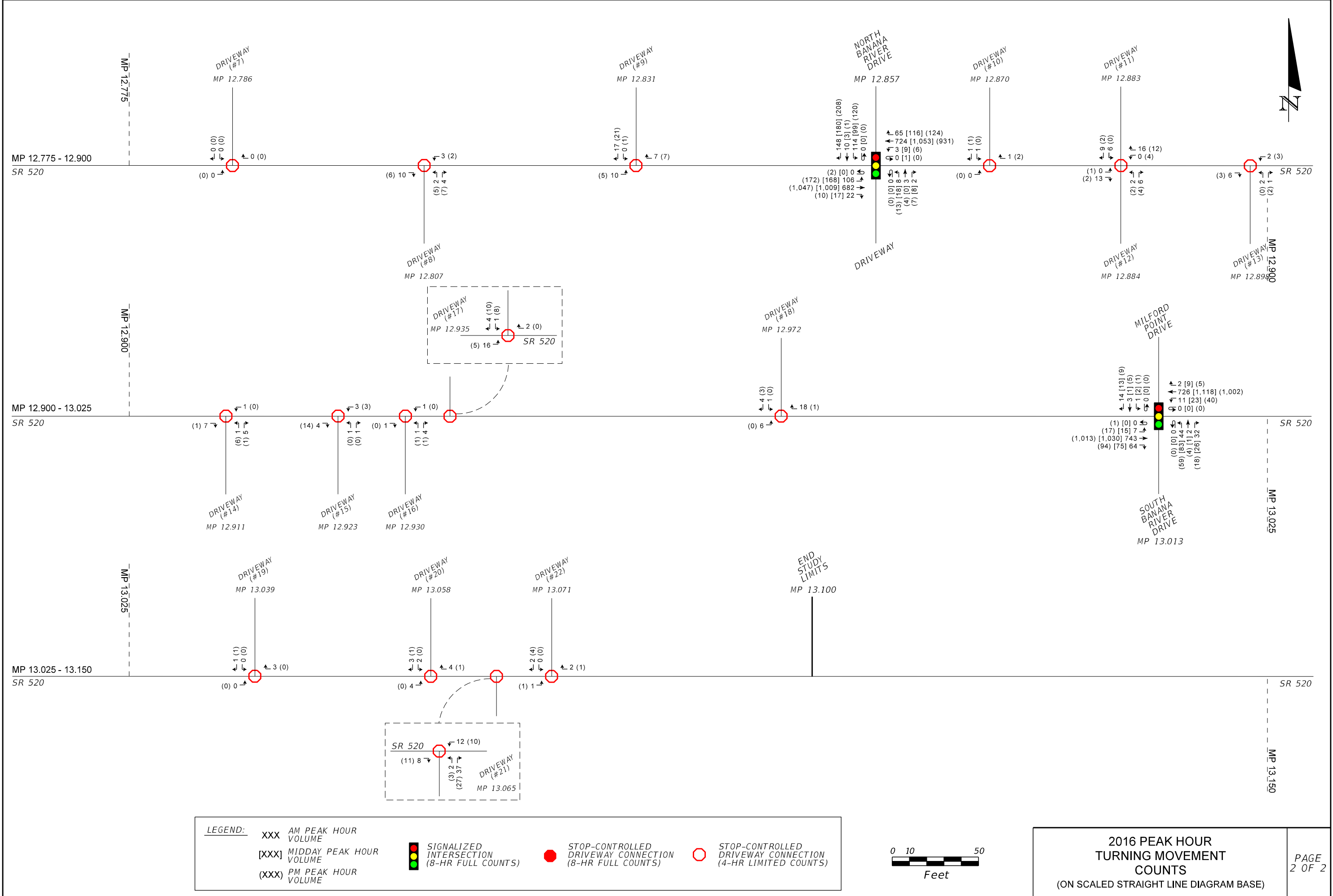
** Manual Volume Adjustments to Mainline Through Movements to Promote Balancing of Traffic Volumes Between Intersections; Throughout Study Corridor

*** Volume Adjustment Based Upon Proposed Access Management Improvements (Raised Median Installation).

SR 520 Driveways

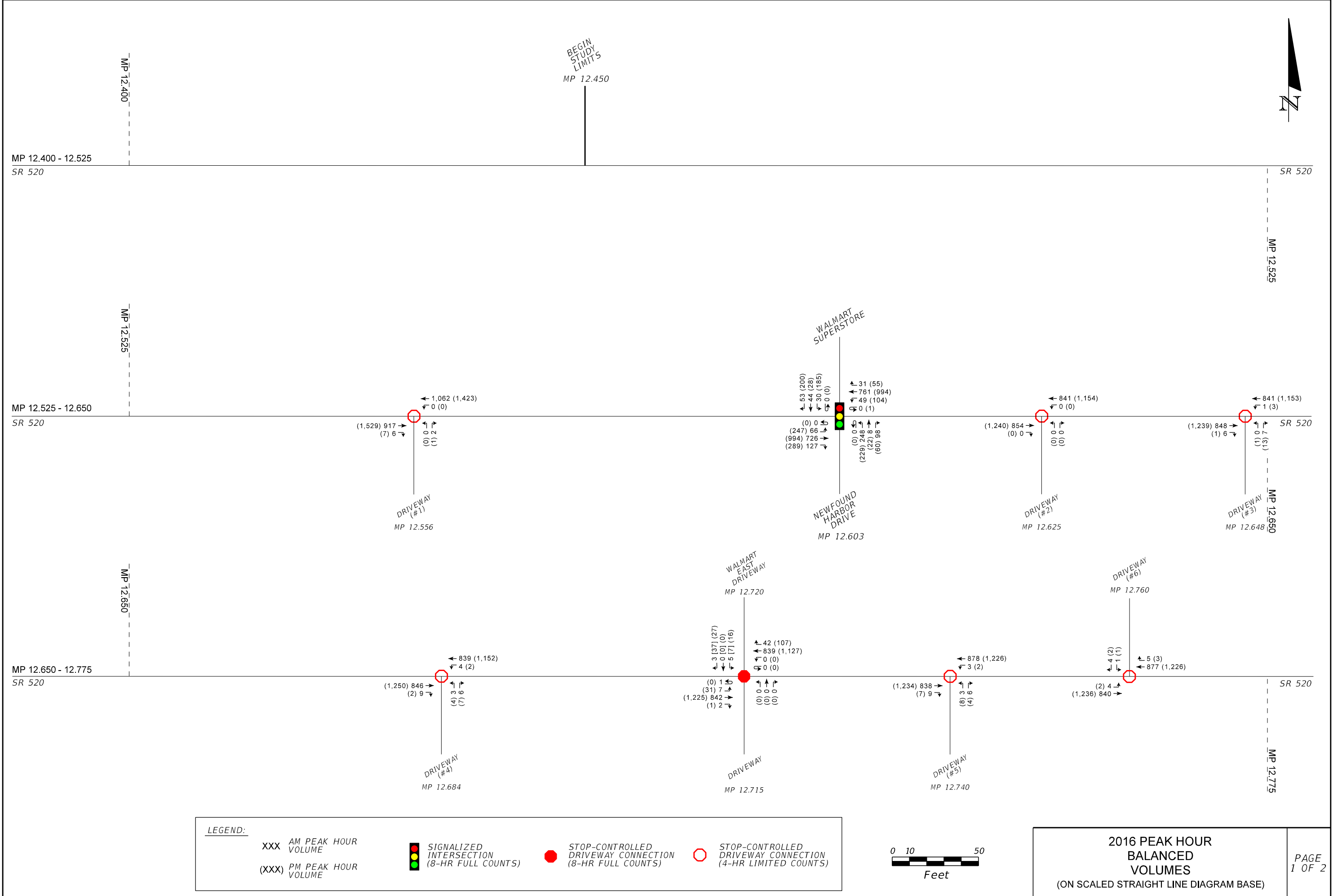
Driveway No.	MP	Position	Business Name	Station	9 - 11 AM						3 - 5 PM					
					Right In	Left In	Right Out	Left Out		Total	Right In	Left In	Right Out	Left Out		Total
1	12.556	South	Mike Erdman Toyota	S1	5	0	2	0	9-10AM	7	4	0	2	0	3-4PM	6
					6	0	2	0	10-11AM	8	7	0	1	0	4-5PM	8
2	12.625	South	Express Lane	S2	0	0	0	0	9-10AM	0	0	0	0	0	3-4PM	0
					0	0	0	0	10-11AM	0	0	0	0	0	4-5PM	0
3	12.648	South	Mike Erdman Toyota Trucks & RVs	S3	4	2	4	0	9-10AM	10	0	1	8	1	3-4PM	10
					6	1	7	0	10-11AM	14	1	3	13	1	4-5PM	18
4	12.684	South	Ron's European Auto Service	S4	7	7	3	1	9-10AM	18	2	2	7	4	3-4PM	15
					9	4	6	3	10-11AM	22	4	1	5	3	4-5PM	13
5	12.740	South	CARQUEST Auto Parts	S5	7	4	3	2	9-10AM	16	6	6	4	4	3-4PM	20
					9	3	6	3	10-11AM	21	7	2	4	8	4-5PM	21
6	12.760	North	Fuccillo Kia	N1	3	2	3	2	9-10AM	10	3	2	2	1	3-4PM	8
					5	4	4	1	10-11AM	14	0	4	2	1	4-5PM	7
7	12.786	North	Fuccillo Kia	N2	0	0	0	0	9-10AM	0	0	0	0	0	3-4PM	0
					0	0	0	0	10-11AM	0	0	0	0	0	4-5PM	0
8	12.807	South	Boniface-Hiers Chrysler Dodge	S6	8	2	3	1	9-10AM	14	3	4	3	1	3-4PM	11
					10	3	4	2	10-11AM	19	6	2	7	5	4-5PM	20
9	12.831	North	Sunoco	N3	9	4	21	0	9-10AM	34	7	5	21	1	3-4PM	34
					7	10	17	0	10-11AM	34	9	9	14	0	4-5PM	32
10	12.870	North	BP	N4	1	0	0	0	9-10AM	1	2	0	1	0	3-4PM	3
					1	0	1	1	10-11AM	3	1	0	0	0	4-5PM	1
11	12.883	North	BP	N5	12	0	7	3	9-10AM	22	12	1	2	0	3-4PM	15
					16	0	9	6	10-11AM	31	12	1	0	1	4-5PM	14
12	12.884	South	Gen-X Motors	S7	11	0	3	1	9-10AM	15	2	4	4	2	3-4PM	12
					13	0	6	2	10-11AM	21	3	3	3	3	4-5PM	12
13	12.898	South	H&D Roadhouse Bar	S8	3	1	1	0	9-10AM	5	3	3	2	0	3-4PM	8
					6	2	1	2	10-11AM	11	2	1	0	2	4-5PM	5
14	12.911	South	H&D Roadhouse Bar	S9	5	1	2	0	9-10AM	8	1	0	2	5	3-4PM	8
					7	1	5	1	10-11AM	14	1	0	1	6	4-5PM	8
15	12.923	South	Karate Dojo	S10	1	2	0	2	9-10AM	5	5	1	0	0	3-4PM	6
					4	3	1	1	10-11AM	9	14	3	0	0	4-5PM	17
16	12.930	South	Karate Dojo	S11	0	0	1	2	9-10AM	3	0	0	0	0	3-4PM	0
					1	1	4	1	10-11AM	7	0	0	1	1	4-5PM	2
17	12.935	North	Island Lincoln Mercury	N6	2	16	4	1	9-10AM	23	0	5	10	8	3-4PM	23
					1	11	7	1	10-11AM	20	2	0	15	2	4-5PM	19
18	12.972	North	Island Lincoln Mercury	N7	18	6	4	1	9-10AM	29	1	0	3	0	3-4PM	4
					11	5	4	2	10-11AM	22	0	0	3	0	4-5PM	3
19	13.039	North	Beach Marine Service	N8	2	0	2	0	9-10AM	4	0	0	0	0	3-4PM	0
					3	0	1	0	10-11AM	4	0	0	1	0	4-5PM	1
20	13.058	North	Funtime Boats	N9	3	2	1	1	9-10AM	7	1	0	1	0	3-4PM	2
					4	4	3	2	10-11AM	13	0	0	1	0	4-5PM	1
21	13.065	South	7-Eleven / Island Waterfront Bar & Grill	S12	11	9	27	3	9-10AM	50	11	10	27	3	3-4PM	51
					8	12	37	2	10-11AM	59	8	11	23	0	4-5PM	42
22	13.071	North	Jet Ski & Boat Rentals	N10	1	1	0	1	9-10AM	3	0	1	1	1	3-4PM	3
					2	1	2	0	10-11AM	5	1	1	4	0	4-5PM	6

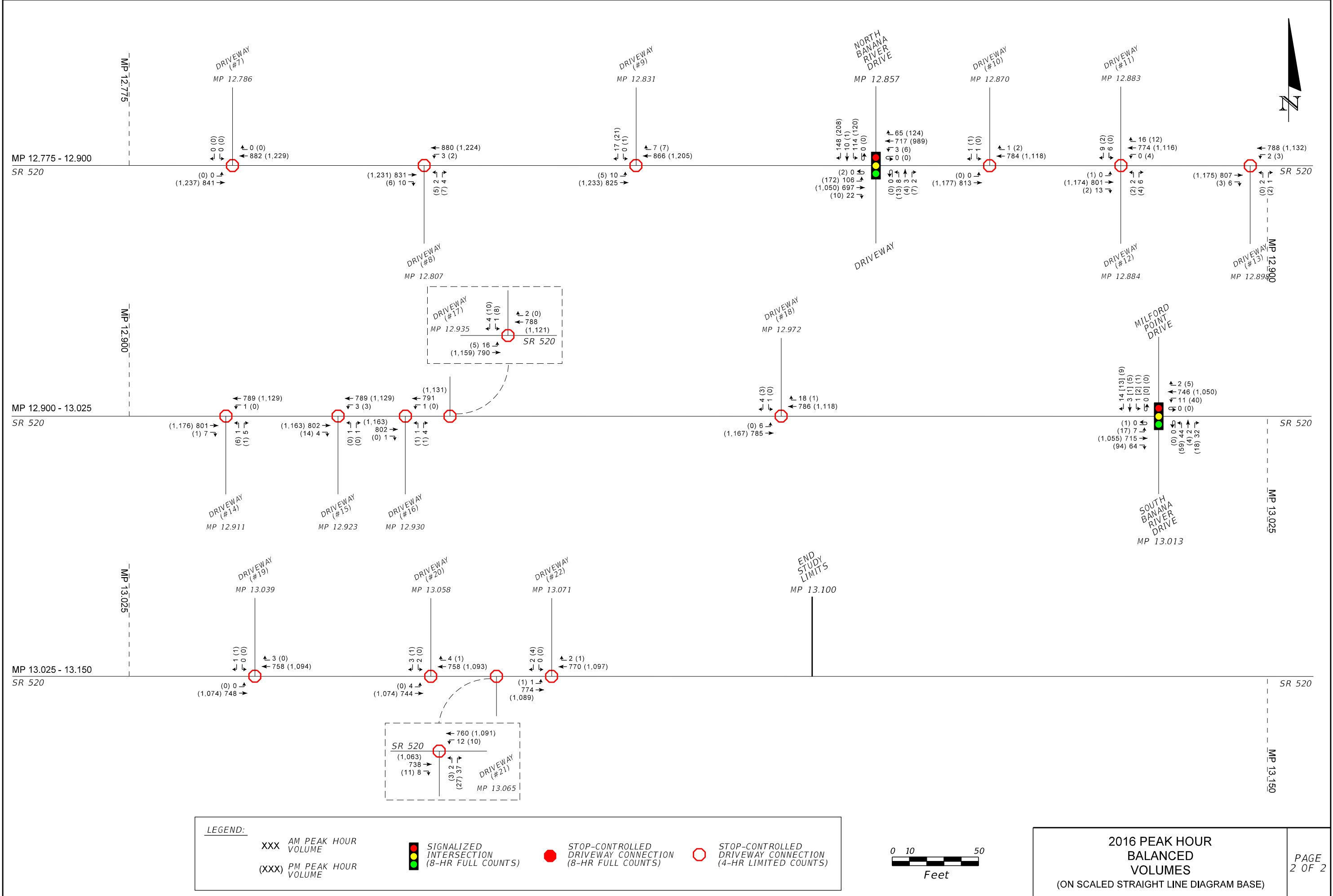


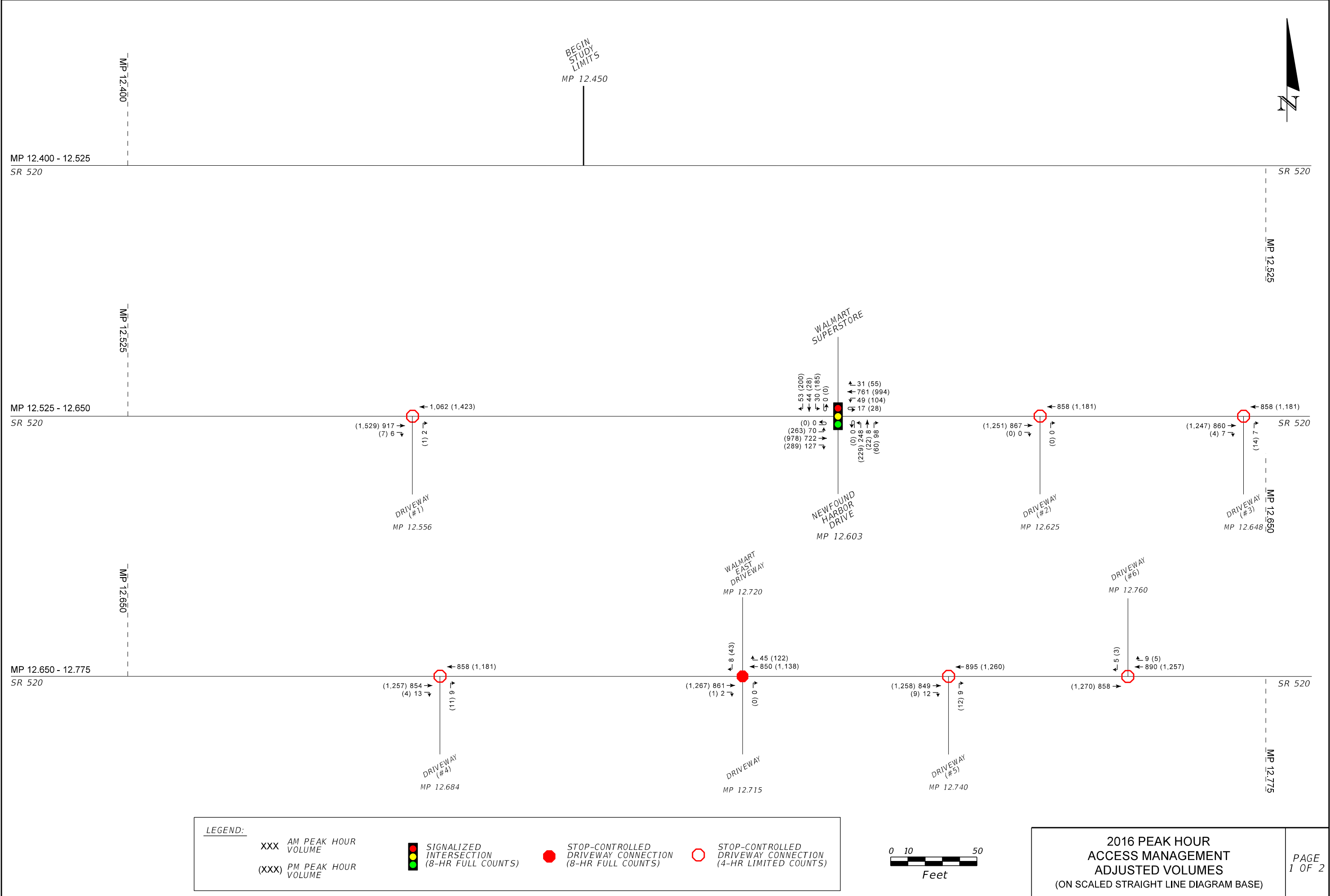


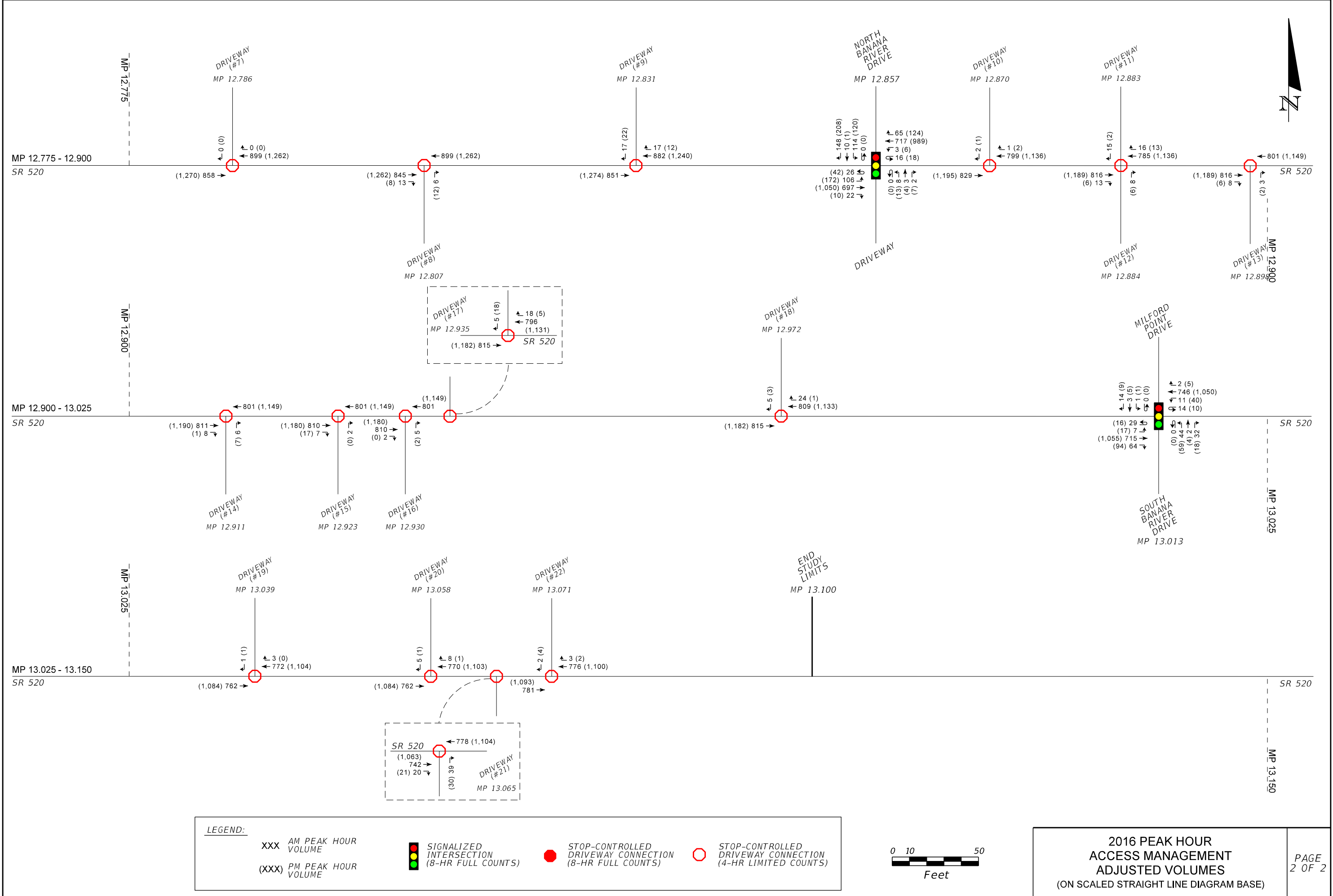
2016 AM COUNT DATA	SR 520 WESTBOUND				SR 520 EASTBOUND				AADT	POST-ADJUSTMENT			EXISTING PER TMCS			TOTAL LINK
Intersections (Count Date)	Intersection	Balanced	Resulting		Intersection	Balanced	Resulting		Calculated	K	D _{WB}	D _{EB}	K	D _{WB}	D _{EB}	ADJUSTMENT
Driveways	Appr. Counts & Dir. Impacts	Volumes: BASE	Adjustments:		Appr. Counts & Dir. Impacts	Volumes: BASE	Adjustments:		per TMCs							PROPOSED
	739	759	20		776	748	-28		16,833	8.95%	50.4%	49.6%	9.00%	48.8%	51.2%	-8
S Banana River (1/26/2016)	45				-38											
	784	804	20		814	786	-28		17,756	8.95%	50.6%	49.4%	9.00%	49.1%	50.9%	-8
Driveways 10-18:	-19				-27											
	792	785	-7		798	813	15		17,667	9.05%	49.1%	50.9%	9.00%	49.8%	50.2%	8
N Banana River (1/26/2016)	88				-12											
	880	873	-7		810	825	15		18,778	9.04%	51.4%	48.6%	9.00%	52.1%	47.9%	8
Driveways 5-9:	8				-22											
	890	881	-9		837	847	10		19,189	9.01%	51.0%	49.0%	9.00%	51.5%	48.5%	1
Walmart Driveway (1/21/2016)	-38				-5											
	852	843	-9		842	852	10		18,822	9.01%	49.7%	50.3%	9.00%	50.3%	49.7%	1
Driveways 2-4:	-2				-2											
	826	841	15		883	854	-29		18,989	8.93%	49.6%	50.4%	9.00%	48.3%	51.7%	-14
Newfound Harbor (1/26/2016)	221				-65											
	1047	1062	15		948	919	-29		22,167	8.94%	53.6%	46.4%	9.00%	52.5%	47.5%	-14
Average WB Adjustment:			5	Average EB Adjustment:			-8	Newfound-S Banana:			9.00%	50.2%	49.8%	9.00%*	50.2%	49.8%
											K	D-WB	D-EB	K	D-WB	D-EB
								GOAL VALUES:			9.00%	50.20%	49.80%	*FDOT Standard K		

2016 PM COUNT DATA	SR 520 WESTBOUND				SR 520 EASTBOUND				AADT	POST-ADJUSTMENT			EXISTING PER TMCS			TOTAL LINK
Intersections (Count Date)	Intersection	Balanced	Resulting		Intersection	Balanced	Resulting		Calculated	K	D _{WB}	D _{EB}	K	D _{WB}	D _{EB}	ADJUSTMENT
Driveways	Appr. Counts & Dir. Impacts	Volumes: BASE	Adjustments:		Appr. Counts & Dir. Impacts	Volumes: BASE	Adjustments:		per TMCs							PROPOSED
	1047	1095	48		1032	1074	42		23,100	9.39%	50.5%	49.5%	9.00%	50.4%	49.6%	90
S Banana River (1/26/2016)	24				-93											
	1071	1119	48		1125	1167	42		24,400	9.37%	49.0%	51.0%	9.00%	48.8%	51.2%	90
Driveways 10-18:	0				-10											
	1061	1119	58		1174	1177	3		24,833	9.25%	48.7%	51.3%	9.00%	47.5%	52.5%	61
N Banana River (1/26/2016)	93				-57											
	1154	1212	58		1231	1234	3		26,500	9.23%	49.6%	50.4%	9.00%	48.4%	51.6%	61
Driveways 5-9:	22				-7											
	1282	1234	-48		1241	1241	0		28,033	8.83%	49.9%	50.1%	9.00%	50.8%	49.2%	-48
Walmart Driveway (1/21/2016)	-80				-16											
	1202	1154	-48		1257	1257	0		27,322	8.82%	47.9%	52.1%	9.00%	48.9%	51.1%	-48
Driveways 2-4:	0				17											
	1244	1154	-90		1289	1240	-49		28,144	8.51%	48.2%	51.8%	9.00%	49.1%	50.9%	-139
Newfound Harbor (1/26/2016)	269				-290											
	1513	1423	-90		1579	1530	-49		34,356	8.60%	48.2%	51.8%	9.00%	48.9%	51.1%	-139
Average WB Adjustment:			-8	Average EB Adjustment:			-1	Newfound-S Banana:			9.00%	48.9%	51.1%	9.00%*	48.9%	51.1%
										K	D-WB	D-EB	K	D-WB	D-EB	
GOAL VALUES:										9.00%	48.90%	51.10%	*FDOT Standard K			









LEGEND:

XXX AM PEAK HOUR
VOLUME

(XXX) PM PEAK HOUR
VOLUME



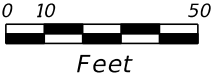
SIGNALIZED
INTERSECTION
(8-HR FULL COUNTS)



STOP-CONTROLLED
DRIVEWAY CONNECTION
(8-HR FULL COUNTS)



STOP-CONTROLLED
DRIVEWAY CONNECTION
(4-HR LIMITED COUNTS)



2016 PEAK HOUR
ACCESS MANAGEMENT
ADJUSTED VOLUMES
(ON SCALED STRAIGHT LINE DIAGRAM BASE)

Appendix I:

Collision Summary and Diagram

State of Florida Department of Transportation

COLLISION SUMMARY**General Information**

Section/Roadway ID:	70100000	State Road:	SR 520
Intersecting Route:	n/a	Study Period:	1/1/2010 To: 12/31/2014
Milepost:	12.450 - 13.100	Data by:	ELH
County:	Brevard	Date:	January 28, 2016

No.	Date	Day	Time	Severity		Property Damage	Crash Type	Day / Night	Wet / Dry	Contributing Cause
				Fatal	Injury					
1	01/08/10	Friday	15:29	0	1	\$20,000	Left Turn	Day	Dry	Failed to Yield ROW
2	01/08/10	Friday	15:47	0	1	\$7,000	Right Turn	Day	Dry	Failed to Yield ROW
3	02/22/10	Monday	20:30	0	0	\$5,500	Rear End	Night	Wet	Careless Driving
4	02/26/10	Friday	14:06	0	0	\$300	Rear End	Day	Dry	Careless Driving
5	03/20/10	Saturday	16:59	0	0	\$500	Rear End	Day	Dry	Careless Driving
6	04/05/10	Monday	22:00	0	1	\$6,500	Sideswipe	Night	Dry	Improper Lane Change
7	04/17/10	Saturday	17:02	0	0	\$8,000	Rear End	Day	Dry	Careless Driving
8	05/02/10	Sunday	12:41	0	0	\$10,000	Rear End	Day	Dry	Exceeded Speed
9	06/29/10	Tuesday	12:21	0	0	\$7,600	Rear End	Day	Dry	Followed Too Closely
10	07/27/10	Tuesday	15:55	0	3	\$1,350	Rear End	Day	Dry	Careless Driving
11	07/30/10	Friday	21:48	0	1	\$50	Rear End	Night	Dry	Driver Distraction
12	08/23/10	Monday	7:26	0	1	\$9,000	Rear End	Day	Dry	Careless Driving
13	09/08/10	Wednesday	8:35	0	2	\$14,000	Angle	Day	Dry	Disregarded Control Devices
14	09/08/10	Wednesday	9:09	0	0	\$1,000	Sideswipe	Day	Dry	Other
15	09/20/10	Monday	15:38	0	0	\$1,000	Rear End	Day	Dry	Careless Driving
16	10/10/10	Sunday	18:06	0	1	\$6,000	Rear End	Day	Dry	Careless Driving
17	10/23/10	Saturday	7:07	0	0	\$1,001	Rear End	Day	Dry	Careless Driving
18	11/20/10	Saturday	14:31	0	0	\$2,000	Rear End	Day	Dry	Careless Driving
19	12/19/10	Sunday	18:48	1	0	\$2,000	Pedestrian	Night	Dry	Pedestrian
20	12/23/10	Thursday	14:30	0	2	\$10,000	Rear End	Day	Dry	Careless Driving
21	02/02/11	Wednesday	12:15	0	0	\$3,000	Rear End	Day	Dry	Careless Driving
22	03/25/11	Friday	14:45	0	1	\$7,000	Head-on	Day	Dry	Improper Turn
23	04/06/11	Wednesday	9:13	0	2	\$10,000	Left Turn	Day	Dry	Disregarded Control Devices
24	05/10/11	Tuesday	8:20	0	0	\$1,000	Sideswipe	Day	Dry	Improper Lane Change
25	06/10/11	Friday	12:00	0	0	\$10,000	Left Turn	Day	Dry	Improper Turn
26	06/18/11	Saturday	14:04	0	5	\$1,750	Rear End	Day	Dry	Careless Driving
27	07/02/11	Saturday	16:15	0	0	\$8,500	Angle	Day	Dry	DUI
28	07/07/11	Thursday	11:39	0	1	\$10,000	Left Turn	Day	Wet	Disregarded Control Devices
29	07/08/11	Friday	18:45	0	0	\$0	Rear End	Day	Dry	Careless Driving
30	07/10/11	Sunday	15:05	0	0	\$1,500	Rear End	Day	Dry	Careless Driving
31	07/18/11	Monday	12:05	0	0	\$6,000	Rear End	Day	Dry	Failure to Maintain Lane
32	09/01/11	Thursday	12:35	0	1	\$1,000	Rear End	Day	Dry	Hit & Run
33	09/16/11	Friday	22:28	0	0	\$10,000	Rear End	Night	Dry	Hit & Run
34	10/21/11	Friday	19:42	0	2	\$1,200	Rear End	Night	Dry	Careless Driving
35	10/29/11	Saturday	11:24	0	0	\$10,000	Rear End	Day	Wet	Careless Driving
36	10/30/11	Sunday	19:58	0	2	\$2,100	Left Turn	Night	Dry	Disregarded Control Devices
37	11/01/11	Tuesday	7:25	0	1	\$1,250	Left Turn	Night	Dry	Failed to Yield ROW
38	11/20/11	Sunday	12:25	0	2	\$2,000	Rear End	Day	Dry	Careless Driving
39	01/03/12	Tuesday	21:12	0	2	\$17,000	Head-on	Night	Dry	Improper Lane Change
40	01/21/12	Saturday	19:40	0	1	\$2,000	Rear End	Night	Dry	DUI
41	02/17/12	Friday	10:57	0	0	\$2,500	Rear End	Day	Dry	Careless Driving
42	02/22/12	Wednesday	12:30	0	1	\$4,000	Rear End	Day	Dry	Careless Driving
43	02/29/12	Wednesday	16:26	0	1	\$510	Bicycle	Day	Dry	Bicycle
44	03/11/12	Sunday	19:40	0	0	\$2,000	Right Turn	Night	Wet	Failed to Yield ROW

State of Florida Department of Transportation

COLLISION SUMMARY**General Information**

Section/Roadway ID:	70100000	State Road:	SR 520
Intersecting Route:	n/a	Study Period:	1/1/2010 To: 12/31/2014
Milepost:	12.450 - 13.100	Data by:	ELH
County:	Brevard	Date:	January 28, 2016

No.	Date	Day	Time	Severity		Property Damage	Crash Type	Day / Night	Wet / Dry	Contributing Cause
				Fatal	Injury					
45	03/23/12	Friday	11:00	0	0	\$3,000	Rear End	Day	Dry	Driver Distraction
46	03/26/12	Monday	13:49	0	0	\$1	Sideswipe	Day	Dry	Hit & Run
47	04/11/12	Wednesday	12:35	0	0	\$1,000	Rear End	Day	Dry	Careless Driving
48	04/18/12	Wednesday	16:15	0	0	\$2,300	Left Turn	Day	Dry	Failed to Yield ROW
49	04/19/12	Thursday	0:18	0	1	\$500	Pedestrian	Night	Dry	Hit & Run
50	05/18/12	Friday	10:55	0	0	\$1,100	Rear End	Day	Dry	Careless Driving
51	05/26/12	Saturday	21:12	1	0	\$1,000	Pedestrian	Night	Dry	Pedestrian
52	05/27/12	Sunday	16:32	1	2	\$20,000	Left Turn	Day	Dry	Disregarded Control Devices
53	06/17/12	Sunday	19:41	0	1	\$6,000	Rear End	Day	Dry	Careless Driving
54	06/24/12	Sunday	20:05	0	2	\$19,000	Left Turn	Night	Wet	Improper Turn
55	07/09/12	Monday	12:55	0	1	\$1,500	Left Turn	Day	Dry	Failed to Yield ROW
56	08/01/12	Wednesday	20:25	0	2	\$11,000	Left Turn	Night	Dry	Disregarded Control Devices
57	08/14/12	Tuesday	16:52	0	0	\$1,100	Sideswipe	Day	Dry	Improper Lane Change
58	09/25/12	Tuesday	19:35	0	0	\$6,000	Left Turn	Night	Dry	Failed to Yield ROW
59	10/05/12	Friday	21:11	0	0	\$2,000	Sideswipe	Night	Wet	Failed to Yield ROW
60	10/06/12	Saturday	16:40	0	0	\$750	Sideswipe	Day	Wet	Improper Lane Change
61	10/18/12	Thursday	6:30	0	2	\$3,500	Rear End	Night	Dry	Careless Driving
62	10/28/12	Sunday	10:00	0	1	\$10,000	Angle	Day	Dry	Improper Turn
63	11/09/12	Friday	18:28	0	1	\$500	Bicycle	Night	Dry	Failed to Yield ROW
64	11/14/12	Wednesday	12:50	0	5	\$10,750	Rear End	Day	Dry	Careless Driving
65	12/05/12	Wednesday	18:30	0	1	\$13,000	Rear End	Night	Dry	Careless Driving
66	12/14/12	Friday	19:30	1	0	\$600	Bicycle	Night	Dry	Bicycle
67	12/25/12	Tuesday	18:54	0	0	\$700	Backed Into	Night	Dry	Hit & Run
68	12/28/12	Friday	18:45	0	0	\$1,000	Left Turn	Night	Wet	Failed to Yield ROW
69	01/07/13	Monday	21:15	0	0	\$10,000	Rear End	Night	Dry	Careless Driving
70	01/12/13	Saturday	13:13	0	1	\$1,500	Rear End	Day	Dry	Careless Driving
71	01/22/13	Tuesday	14:00	0	0	\$5,000	Sideswipe	Day	Dry	Improper Lane Change
72	01/24/13	Thursday	20:12	0	0	\$1,000	Left Turn	Night	Dry	Failed to Yield ROW
73	02/03/13	Sunday	14:00	0	1	\$0	Pedestrian	Day	Dry	Hit & Run
74	02/09/13	Saturday	19:00	0	1	\$5,000	Pedestrian	Night	Dry	Pedestrian
75	02/19/13	Tuesday	18:59	0	0	\$1,000	Sideswipe	Night	Dry	Hit & Run
76	02/25/13	Monday	8:50	0	0	\$2,000	Sideswipe	Day	Dry	Improper Lane Change
77	02/26/13	Tuesday	15:40	0	0	\$6,200	Rear End	Day	Wet	Careless Driving
78	03/01/13	Friday	18:15	0	1	\$1,000	Rear End	Night	Dry	Medical Condition
79	03/14/13	Thursday	12:30	0	0	\$2,500	Left Turn	Day	Dry	Failed to Yield ROW
80	04/10/13	Wednesday	17:55	0	0	\$400	Other	Day	Dry	Falling Cargo
81	04/18/13	Thursday	16:30	0	0	\$1,000	Rear End	Day	Dry	Careless Driving
82	04/29/13	Monday	13:25	0	1	\$1,100	Bicycle	Day	Dry	Bicycle
83	04/30/13	Tuesday	17:20	0	0	\$1,800	Rear End	Day	Dry	Followed Too Closely
84	05/18/13	Saturday	16:04	0	0	\$5,500	Rear End	Day	Dry	Followed Too Closely
85	06/02/13	Sunday	7:35	0	0	\$700	Rear End	Day	Dry	Careless Driving
86	06/03/13	Monday	16:00	0	1	\$8,000	Left Turn	Day	Wet	Disregarded Control Devices
87	06/08/13	Saturday	12:30	0	0	\$2,000	Rear End	Day	Dry	Followed Too Closely
88	06/21/13	Friday	14:38	0	0	\$1,000	Backed Into	Day	Dry	Improper Backing

State of Florida Department of Transportation

COLLISION SUMMARY**General Information**

Section/Roadway ID:	70100000	State Road:	SR 520
Intersecting Route:	n/a	Study Period:	1/1/2010 To: 12/31/2014
Milepost:	12.450 - 13.100	Data by:	ELH
County:	Brevard	Date:	January 28, 2016

No.	Date	Day	Time	Severity		Property Damage	Crash Type	Day / Night	Wet / Dry	Contributing Cause
				Fatal	Injury					
89	07/01/13	Monday	14:30	0	0	\$750	Rear End	Day	Dry	Careless Driving
90	07/02/13	Tuesday	16:30	0	0	\$7,000	Rear End	Day	Wet	Careless Driving
91	07/03/13	Wednesday	11:41	0	0	\$5,000	Rear End	Day	Dry	Exceeded Speed
92	08/15/13	Thursday	9:30	0	0	\$1,250	Rear End	Day	Dry	Careless Driving
93	09/02/13	Monday	15:15	0	1	\$500	Other	Day	Dry	Falling Cargo
94	09/18/13	Wednesday	19:40	0	0	\$2,400	Left Turn	Night	Dry	Failed to Yield ROW
95	10/06/13	Sunday	1:15	0	0	\$5,000	Off Road	Night	Dry	DUI
96	10/08/13	Tuesday	18:06	0	0	\$2,100	Rear End	Day	Dry	Careless Driving
97	11/07/13	Thursday	10:25	0	0	\$4,000	Rear End	Day	Dry	Careless Driving
98	11/12/13	Tuesday	10:20	0	0	\$1,000	Rear End	Day	Dry	Careless Driving
99	12/06/13	Friday	20:00	0	0	\$5,000	Left Turn	Night	Dry	Failed to Yield ROW
100	12/13/13	Friday	14:45	0	1	\$8,000	Other	Day	Dry	Failed to Yield ROW
101	01/16/14	Thursday	15:05	0	1	\$1,500	Other	Day	Dry	Improper Turn
102	01/19/14	Sunday	20:35	0	0	\$3,200	Left Turn	Night	Dry	Hit & Run
103	01/23/14	Thursday	10:40	0	0	\$5,000	Sideswipe	Day	Dry	Improper Lane Change
104	01/27/14	Monday	14:10	0	0	\$3,000	Rear End	Day	Dry	Careless Driving
105	03/18/14	Tuesday	0:00	0	0	\$1,500	Sideswipe	Night	Dry	Hit & Run
106	03/28/14	Friday	15:56	0	0	\$75	Rear End	Day	Dry	Careless Driving
107	03/30/14	Sunday	13:30	0	1	\$2,500	Sideswipe	Day	Dry	Failure to Maintain Lane
108	04/26/14	Saturday	13:40	0	1	\$750	Rear End	Day	Dry	Careless Driving
109	05/12/14	Monday	22:00	0	0	\$500	Rear End	Night	Dry	DUI
110	05/26/14	Monday	21:16	0	1	\$13,000	Left Turn	Night	Dry	Failed to Yield ROW
111	06/14/14	Saturday	17:55	0	0	\$7,000	Angle	Day	Wet	Failed to Yield ROW
112	06/22/14	Sunday	12:40	0	3	\$12,000	Rear End	Day	Dry	Careless Driving
113	07/11/14	Friday	13:24	0	0	\$4,000	Left Turn	Day	Dry	Failed to Yield ROW
114	07/19/14	Saturday	12:23	0	1	\$6,000	Rear End	Day	Dry	Careless Driving
115	07/29/14	Tuesday	9:00	0	0	\$500	Rear End	Day	Dry	Followed Too Closely
116	08/04/14	Monday	9:55	0	0	\$1,000	Rear End	Day	Dry	Careless Driving
117	08/28/14	Thursday	15:00	0	0	\$4,700	Sideswipe	Day	Dry	Improper Lane Change
118	09/06/14	Saturday	19:21	0	1	\$2,050	Rear End	Night	Wet	Followed Too Closely
119	09/11/14	Thursday	17:30	0	0	\$900	Right Turn	Day	Dry	Failed to Yield ROW
120	09/15/14	Monday	12:01	0	1	\$7,500	Rear End	Day	Dry	Careless Driving
121	10/05/14	Sunday	7:55	0	1	\$5,500	Rear End	Day	Dry	Careless Driving
122	10/20/14	Monday	9:45	0	1	\$6,000	Left Turn	Day	Dry	Careless Driving
123	11/18/14	Tuesday	11:00	0	0	\$2,100	Rear End	Day	Wet	Hit & Run
124	11/22/14	Saturday	0:30	0	2	\$4,000	Off Road	Night	Wet	DUI
125	11/26/14	Wednesday	15:15	0	0	\$2,800	Rear End	Day	Dry	Careless Driving
126	11/27/14	Thursday	16:10	0	0	\$6,500	Rear End	Day	Dry	Careless Driving
127	11/28/14	Friday	12:15	0	0	\$2,000	Rear End	Day	Dry	Followed Too Closely
128	12/01/14	Monday	12:50	0	1	\$10	Pedestrian	Day	Dry	Pedestrian
129	12/03/14	Wednesday	15:40	0	1	\$10,000	Left Turn	Day	Dry	Failed to Yield ROW
130	12/07/14	Sunday	13:30	0	0	\$100	Rear End	Day	Dry	Hit & Run
131	12/11/14	Thursday	14:12	0	1	\$2,500	Left Turn	Day	Dry	Disregarded Control Devices
132	12/12/14	Friday	18:45	0	2	\$10,000	Left Turn	Night	Dry	Failed to Yield ROW

State of Florida Department of Transportation

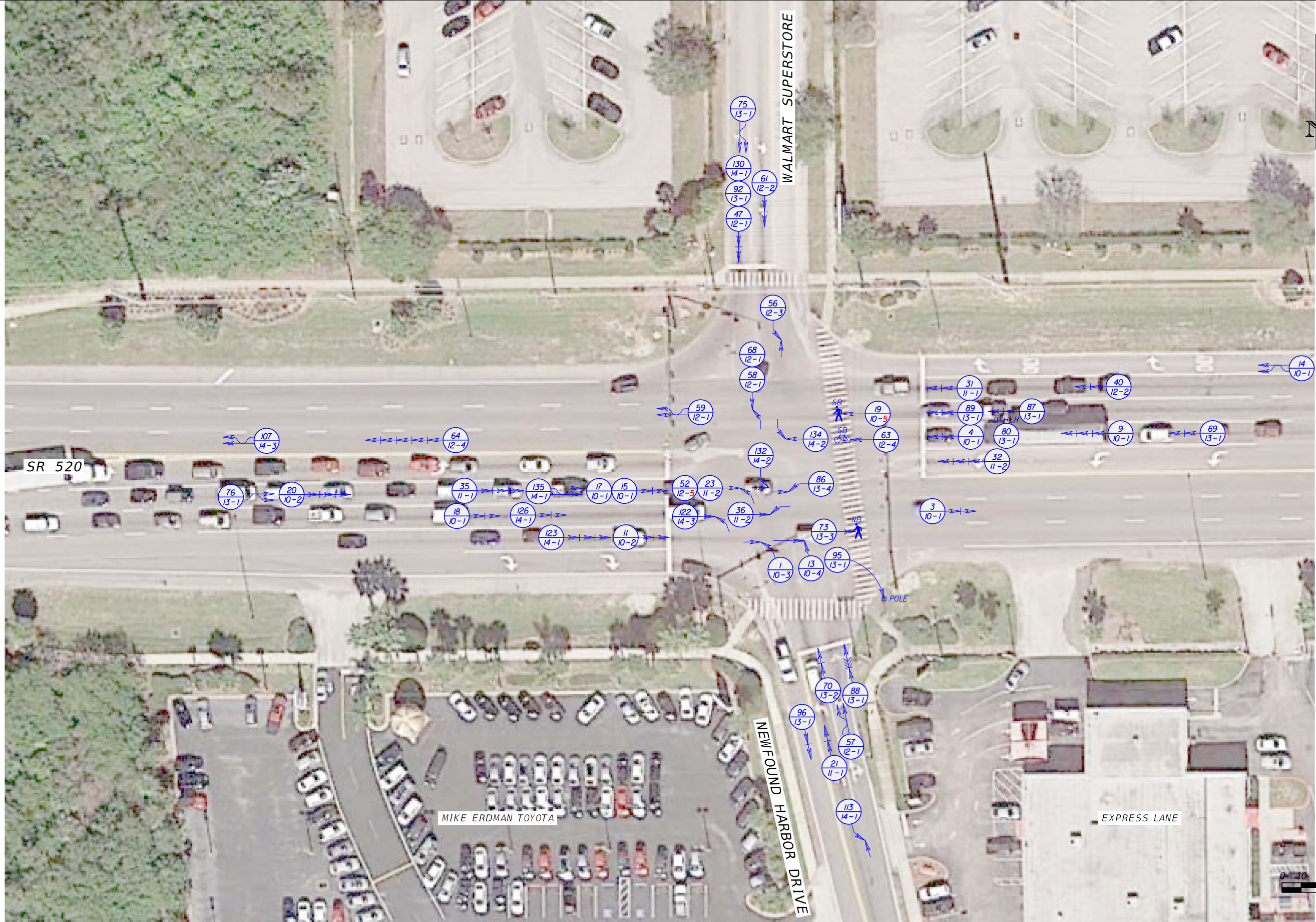
COLLISION SUMMARY**General Information**

Section/Roadway ID:	70100000	State Road:	SR 520
Intersecting Route:	n/a	Study Period:	1/1/2010 To: 12/31/2014
Milepost:	12.450 - 13.100	Data by:	ELH
County:	Brevard	Date:	January 28, 2016

No.	Date	Day	Time	Severity		Property Damage	Crash Type		Day / Night	Wet / Dry	Contributing Cause	
				Fatal	Injury							
133	12/22/14	Monday	18:14	0	1	\$1,000	Other		Night	Dry	DUI	
134	12/22/14	Monday	18:20	0	3	\$23,000	Left Turn		Night	Dry	DUI	
135	12/23/14	Tuesday	15:15	0	0	\$2,300	Sideswipe		Day	Dry	Improper Lane Change	
TOTAL				4	85	\$596,597						
Total No.	Fatal	Injury	PDO	Rear End	Head-on	Angle	Left Turn	Right Turn	Sideswipe	Backed Into	Bicycle / Pedestrian	Other
135	4	57	74	66	2	4	26	3	15	2	10	7
PERCENT	3%	42%	55%	49%	1%	3%	19%	2%	11%	1%	7%	5%
Contrib. Cause	Day	Night	PAVEMENT CONDITION			Exceeded Speed	DUI	Careless Driving	Improper Lane Change	Failed to Yield ROW	Disregarded Control Devices	Other
			Wet	Dry	Unknown							
TOTAL	95	40	15	120	0	2	7	48	10	21	8	39
PERCENT	70%	30%	11%	89%	0%	1%	5%	36%	7%	16%	6%	29%

Total Vehicles Entering/ADT:	n/a	Collision Rate:	n/a	PER M.E.V.
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Source: FDOT Crash Analysis Reporting System and University of Florida's Signal Four Analytics



COLLISION SYMBOLS

- VEHICLE PATH
- BACKING VEHICLE
- FIXED OBJECT



PEDESTRIAN



BICYCLE



OUT OF CONTROL



OVERTURNED VEHICLE



RIGHT ANGLE COLLISION



LEFT TURN COLLISION



REAR-END COLLISION



HEAD-ON COLLISION



RIGHT TURN COLLISION



SIDE SWIPE COLLISION



LONG FORM CRASHES



LONG FORM CRASHES MITIGATED BY MEDIAN INSTALLATION

CRASH NUMBER



INJURY SEVERITY:
1 = NO INJURY
2 = POSSIBLE INJURY
3 = NON-INCAPACITATING
4 = INCAPACITATING
5 = FATALITY

Comprehensive Engineering Services, Inc.
201 S Orange Ave, Suite 1300
Orlando, FL 32801-3442
Certificate of Authorization No. 7862

CRASH DIAGRAM

SHEET NO.

2

SUSERS

SDATES

STIMES

SFILES



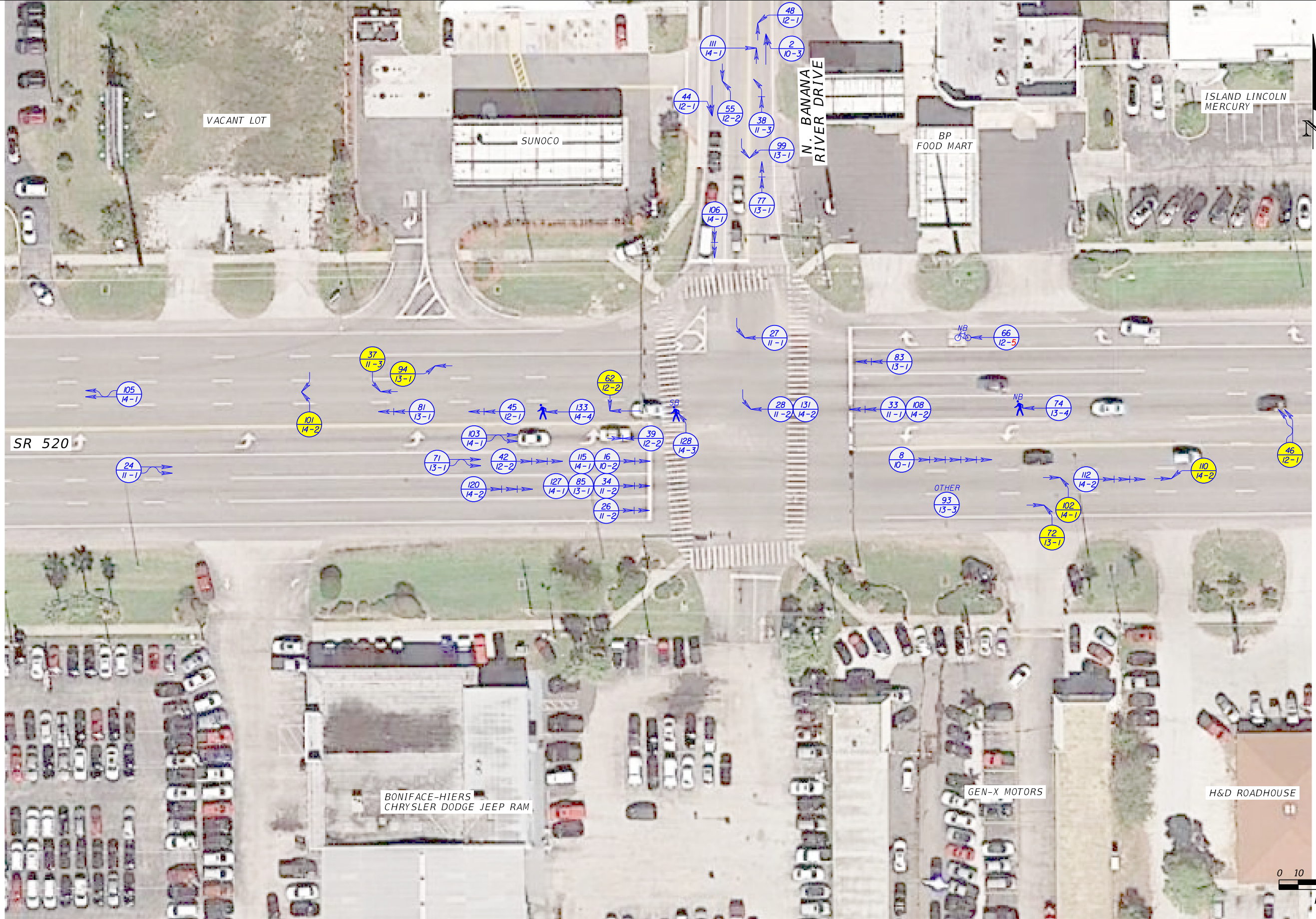
COLLISION SYMBOLS ← VEHICLE PATH ←>> BACKING VEHICLE □ FIXED OBJECT 🚶 PEDESTRIAN 🚲 BICYCLE ~~~~~ OUT OF CONTROL ↺ OVERTURNED VEHICLE ↗ RIGHT ANGLE COLLISION ↘ LEFT TURN COLLISION ↔ REAR-END COLLISION ↔ HEAD-ON COLLISION ↶ RIGHT TURN COLLISION ↷ SIDE SWIPE COLLISION # 10-3 LONG FORM CRASHES # 10-3 LONG FORM CRASHES MITIGATED BY MEDIAN INSTALLATION # 10-3 YEAR INJURY SEVERITY: 1 = NO INJURY 2 = POSSIBLE INJURY 3 = NON-INCAPACITATING 4 = INCAPACITATING 5 = FATALITY	Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	CRASH DIAGRAM	SHEET NO. 3

SUSERS

SDATES

STIMES

SFILES



COLLISION SYMBOLS

- VEHICLE PATH
- BACKING VEHICLE
- FIXED OBJECT



PEDESTRIAN



BICYCLE



OUT OF CONTROL



OVERTURNED VEHICLE



RIGHT ANGLE COLLISION



LEFT TURN COLLISION



REAR-END COLLISION



HEAD-ON COLLISION



RIGHT TURN COLLISION



SIDE SWIPE COLLISION

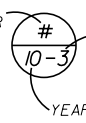


LONG FORM CRASHES



LONG FORM CRASHES MITIGATED BY MEDIAN INSTALLATION

CRASH NUMBER



INJURY SEVERITY:
1 = NO INJURY
2 = POSSIBLE INJURY
3 = NON-INCAPACITATING
4 = INCAPACITATING
5 = FATALITY

Comprehensive Engineering Services, Inc.
201 S Orange Ave, Suite 1300
Orlando, FL 32801-3442
Certificate of Authorization No. 7862

CRASH DIAGRAM

SHEET NO.

4

SUSERS

SDATES

STIMES

SFILES



COLLISION SYMBOLS										CRASH NUMBER										INJURY SEVERITY:										Comprehensive Engineering Services, Inc.										CRASH DIAGRAM										SHEET NO.																													
VEHICLE PATH										PEDESTRIAN										RIGHT ANGLE COLLISION										RIGHT TURN COLLISION										1 = NO INJURY										201 S Orange Ave, Suite 1300																				5									
BICYCLE										BICYCLE										LEFT TURN COLLISION										SIDE SWIPE COLLISION										2 = POSSIBLE INJURY										Orlando, FL 32801-3442																													
BACKING VEHICLE										OUT OF CONTROL										REAR-END COLLISION										LONG FORM CRASHES										3 = NON-INCAPACITATING										Certificate of Authorization No. 7862																													
FIXED OBJECT										OVERTURNED VEHICLE										HEAD-ON COLLISION										LONG FORM CRASHES MITIGATED BY MEDIAN INSTALLATION										4 = INCAPACITATING																																							
																																								5 = FATALITY																																							



COLLISION SYMBOLS		PEDESTRIAN BICYCLE		RIGHT ANGLE COLLISION LEFT TURN COLLISION REAR-END COLLISION HEAD-ON COLLISION		RIGHT TURN COLLISION SIDE SWIPE COLLISION LONG FORM CRASHES LONG FORM CRASHES MITIGATED BY MEDIAN INSTALLATION		CRASH NUMBER #10-3 YEAR		INJURY SEVERITY: 1 = NO INJURY 2 = POSSIBLE INJURY 3 = NON-INCAPACITATING 4 = INCAPACITATING 5 = FATALITY		Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862		CRASH DIAGRAM		SHEET NO.	
																6	
VEHICLE PATH BACKING VEHICLE FIXED OBJECT		OUT OF CONTROL OVERTURNED VEHICLE															

Appendix J:

Existing Signal Timings

Brevard County

Timing Sheet

2/8/2016 10:17:15 AM

Station : 20 - SR 520 & Newfound Harbor Dr (Standard File)

Phase	1 (WR)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		12		7		12								
Ped Clearance		16		42		17		37								
Min Green	5	12	5	7	5	12	5	7	3		3		3		3	
Gap Ext	5	3	3	3	3	3	3	3								
Max1	30	60	30	35	12	60	30	35								
Max2	25	50	15	42	25	50	15	40								
Yellow Clr	4.8	4.8	3.7	3.7	4.8	4.8	3.7	3.7	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2.6	2.6	3.7	3.7	2.6	2.6	3.7	3.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON					ON	ON	ON	ON
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable		ON		ON		ON		ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage	ON															
Rest In Walk																
Cond Service																
Add Init Calc																
Concurrent Ps	1	1	1	1	2	2	2	2								

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON					
Override Higher Preempt	ON					
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

[illegible]

2/8/2016 10:17:15 AM

Station : 20 - SR 520 & Newfound Harbor Dr (Standard File)

[illegible]

Scheduler

[illegible]

Brevard County

Timing Sheet

2/8/2016 10:23:39 AM

Station : 22 - SR 520 & N Banana River (Standard File)

Phase	1 (EL)	2 (WT)	3	4 (NT)	5 (WL)	6 (ET)	7	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		8		7		9								
Ped Clearance		21		44		16		40								
Min Green	5	12		7	5	12		7	3		3		3		3	
Gap Ext	3	3		3	3	3		3								
Max1	15	60		35	15	60	2	35								
Max2	20	45		15	20	45		15								
Yellow Clr	4.3	4.8	4	3	4.3	4.8	4	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2.3	2.3	2	3	2.3	2.3	2	3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON		ON	ON	ON		ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable		ON				ON										
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																
Concurrent Ps	1	1	1	1	2	2	2	2								

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON	ON	ON	ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

2/8/2016 10:23:39 AM

Coordination

[illegible]

[illegible]

2/8/2016 10:23:39 AM

Station : 22 - SR 520 & N Banana River (Standard File)[illegible]

Scheduler

[illegible]

Brevard County

Timing Sheet

2/8/2016 10:24:02 AM

Station : 23 - SR 520 & S Banana River Drive (Standard File)

Phase	1 (EL)	2 (WT)	3	4 (NT)	5 (WL)	6 (ET)	7	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		8		7		9								
Ped Clearance		19		44		16		40								
Min Green	5	12		7	5	12		7	3		3		3		3	
Gap Ext	3	3		3	3	3		3								
Max1	15	60		35	15	60	2	35								
Max2	20	45		40	20	45		40								
Yellow Clr	4.3	4.8	4	3.2	4.3	4.8	4	3.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2.6	2.6	1.5	3	2.6	2.6	1	3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON		ON	ON	ON		ON					ON		ON	ON
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1		ON				ON										
Non-Actuated 2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable		ON				ON				ON		ON		ON		ON
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																
Concurrent Ps	1	1	1	1	2	2	2	2								

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON	ON	ON	ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

[illegible]

2/8/2016 10:24:02 AM

Station : 23 - SR 520 & S Banana River Drive (Standard File)[illegible]

Scheduler

[illegible]

Appendix K:

Synchro Reports

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (vph)	66	755	127	49	776	31	248	8	98	30	44	53
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		200	240		0	125		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	100			25			300			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.861			0.918	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1834	5219	1625	1852	5271	1507	1834	1664	0	1852	1671	0
Flt Permitted	0.950			0.950			0.434			0.681		
Satd. Flow (perm)	1834	5219	1625	1852	5271	1507	838	1664	0	1328	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			264			264		109			52	
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		1003			630			1067			629	
Travel Time (s)		13.7			8.6			24.3			14.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	2%	0%	1%	10%	1%	0%	1%	0%	0%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	73	839	141	54	862	34	276	9	109	33	48	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	839	141	54	862	34	276	118	0	33	106	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4			8		
Detector Phase	1	6	6	5	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	7.0		5.0	7.0	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	12.4	19.4	19.4	12.4	19.4	19.4	12.4	14.4		12.4	14.4	
Total Split (s)	16.0	28.0	28.0	16.0	28.0	28.0	33.0	53.0		13.0	33.0	
Total Split (%)	14.5%	25.5%	25.5%	14.5%	25.5%	25.5%	30.0%	48.2%		11.8%	30.0%	
Maximum Green (s)	8.6	20.6	20.6	8.6	20.6	20.6	25.6	45.6		5.6	25.6	
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.7	3.7		3.7	3.7	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	3.7	3.7		3.7	3.7	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4		7.4	7.4	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	Max	Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	11.6	44.2	44.2	8.0	41.0	41.0	38.2	30.4		15.2	9.6	
Actuated g/C Ratio	0.11	0.40	0.40	0.07	0.37	0.37	0.35	0.28		0.14	0.09	
v/c Ratio	0.38	0.40	0.17	0.40	0.44	0.05	0.57	0.22		0.16	0.55	
Control Delay	50.7	26.5	0.5	46.2	20.1	0.2	31.4	7.7		25.8	36.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	50.7	26.5	0.5	46.2	20.1	0.2	31.4	7.7		25.8	36.4	
LOS	D	C	A	D	C	A	C	A		C	D	
Approach Delay		24.7			20.9			24.3			33.9	
Approach LOS		C			C			C			C	
90th %ile Green (s)	15.2	32.1	32.1	8.6	25.5	25.5	25.6	34.1		5.6	14.1	
90th %ile Term Code	Gap	Coord	Coord	Max	Coord	Coord	Max	Hold		Max	Gap	
70th %ile Green (s)	13.1	36.0	36.0	8.6	31.5	31.5	24.7	30.2		5.6	11.1	
70th %ile Term Code	Gap	Coord	Coord	Max	Coord	Coord	Gap	Hold		Max	Gap	
50th %ile Green (s)	11.6	41.4	41.4	8.6	38.4	38.4	21.4	24.8		5.6	9.0	
50th %ile Term Code	Gap	Coord	Coord	Max	Coord	Coord	Gap	Hold		Max	Gap	
30th %ile Green (s)	10.1	45.3	45.3	8.6	43.8	43.8	19.5	33.9		0.0	7.0	
30th %ile Term Code	Gap	Coord	Coord	Hold	Coord	Coord	Gap	Hold		Skip	Min	
10th %ile Green (s)	0.0	66.0	66.0	0.0	66.0	66.0	14.8	29.2		0.0	7.0	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Gap	Hold		Skip	Min	
Stops (vph)	61	535	0	43	474	0	181	18		25	50	
Fuel Used(gal)	2	17	1	1	14	0	5	1		0	1	
CO Emissions (g/hr)	142	1194	57	92	948	9	325	80		31	104	
NOx Emissions (g/hr)	28	232	11	18	184	2	63	16		6	20	
VOC Emissions (g/hr)	33	277	13	21	220	2	75	19		7	24	
Dilemma Vehicles (#)	0	34	0	0	51	0	0	0		0	0	
Queue Length 50th (ft)	49	159	0	37	139	0	149	5		16	37	
Queue Length 95th (ft)	92	226	0	58	193	0	195	46		32	90	
Internal Link Dist (ft)		923			550			987			549	
Turn Bay Length (ft)	300		200	240			125					
Base Capacity (vph)	195	2095	810	144	1966	727	523	753		210	428	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.37	0.40	0.17	0.38	0.44	0.05	0.53	0.16		0.16	0.25	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 57 (52%), Referenced to phase 2:WBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 23.7

Intersection LOS: C

Intersection Capacity Utilization 57.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Newfound Harbor Dr/Walmart & SR 520

 $\phi 1$	 $\phi 2 (R)$	 $\phi 3$	 $\phi 4$
16 s	28 s	13 s	53 s
 $\phi 6$	 $\phi 5$	 $\phi 7$	 $\phi 8$
28 s	16 s	33 s	33 s

Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	682	22	3	724	65	8	3	2	114	10	148
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	200		700	0		0	0		100
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995				0.850		0.950			0.860	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1816	5147	0	1852	5219	1579	1852	1852	0	1852	1646	0
Flt Permitted	0.950			0.950			0.444			0.754		
Satd. Flow (perm)	1816	5147	0	1852	5219	1579	866	1852	0	1470	1646	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				161		2			172	
Link Speed (mph)		50			50			30			25	
Link Distance (ft)		712			813			547			1044	
Travel Time (s)		9.7			11.1			12.4			28.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.95	0.95	0.95	0.81	0.81	0.81	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	3%	0%	0%	2%	5%	0%	0%	0%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	110	710	23	3	762	68	10	4	2	133	12	172
Shared Lane Traffic (%)												
Lane Group Flow (vph)	110	733	0	3	762	68	10	6	0	133	184	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						2	4			8		
Detector Phase	1	6		5	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	7.0	7.0		7.0	7.0	

Lanes, Volumes, Timings
2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.6	19.1		11.6	19.1	19.1	13.0	13.0		13.0	13.0	
Total Split (s)	31.0	59.0		16.0	44.0	44.0	35.0	35.0		35.0	35.0	
Total Split (%)	28.2%	53.6%		14.5%	40.0%	40.0%	31.8%	31.8%		31.8%	31.8%	
Maximum Green (s)	24.4	51.9		9.4	36.9	36.9	29.0	29.0		29.0	29.0	
Yellow Time (s)	4.3	4.8		4.3	4.8	4.8	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.3	2.3		2.3	2.3	2.3	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.6	7.1		6.6	7.1	7.1	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	12.0	78.8		5.8	62.9	62.9	15.5	15.5		15.5	15.5	
Actuated g/C Ratio	0.11	0.72		0.05	0.57	0.57	0.14	0.14		0.14	0.14	
v/c Ratio	0.56	0.20		0.03	0.26	0.07	0.08	0.02		0.65	0.49	
Control Delay	68.5	1.2		52.3	10.9	0.1	39.4	32.0		58.2	11.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	68.5	1.2		52.3	10.9	0.1	39.4	32.0		58.2	11.8	
LOS	E	A		D	B	A	D	C		E	B	
Approach Delay		9.9			10.2			36.6			31.2	
Approach LOS		A			B			D			C	
90th %ile Green (s)	16.6	61.5		6.4	51.3	51.3	22.4	22.4		22.4	22.4	
90th %ile Term Code	Gap	Coord		Gap	Coord	Coord	Hold	Hold		Gap	Gap	
70th %ile Green (s)	13.8	79.0		0.0	58.6	58.6	17.9	17.9		17.9	17.9	
70th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
50th %ile Green (s)	12.0	81.6		0.0	63.0	63.0	15.3	15.3		15.3	15.3	
50th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
30th %ile Green (s)	10.1	84.2		0.0	67.5	67.5	12.7	12.7		12.7	12.7	
30th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
10th %ile Green (s)	7.4	87.9		0.0	73.9	73.9	9.0	9.0		9.0	9.0	
10th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
Stops (vph)	106	48		5	254	0	8	5		105	27	
Fuel Used(gal)	4	4		0	9	0	0	0		3	2	
CO Emissions (g/hr)	250	285		9	646	24	10	6		193	132	
NOx Emissions (g/hr)	49	56		2	126	5	2	1		38	26	
VOC Emissions (g/hr)	58	66		2	150	5	2	1		45	31	
Dilemma Vehicles (#)	0	13		0	32	0	0	0		0	0	
Queue Length 50th (ft)	82	4		2	72	0	6	2		90	7	
Queue Length 95th (ft)	142	21		m10	94	0	19	12		137	58	
Internal Link Dist (ft)		632			733			467			964	
Turn Bay Length (ft)	400			200		700						
Base Capacity (vph)	402	3690		158	2982	971	228	489		387	560	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	

Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.27	0.20		0.02	0.26	0.07	0.04	0.01		0.34	0.33	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 60 (55%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 13.6

Intersection LOS: B

Intersection Capacity Utilization 48.6%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Dodge/N. Banana River Dr & SR 520



Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	743	64	11	766	2	44	2	32	1	3	14
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		250	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.945			0.893	
Flt Protected	0.950			0.950				0.973			0.998	
Satd. Flow (prot)	1852	3632	1564	1852	5271	1658	0	1744	0	0	1738	0
Flt Permitted	0.950			0.950				0.812			0.988	
Satd. Flow (perm)	1852	3632	1564	1852	5271	1658	0	1455	0	0	1720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			100			100		31			19	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		813			414			776			1028	
Travel Time (s)		11.1			5.6			21.2			28.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.89	0.89	0.89	0.75	0.75	0.75	0.75	0.75	0.75
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	6%	0%	1%	0%	5%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	7	790	68	12	861	2	59	3	43	1	4	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	790	68	12	861	2	0	105	0	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases			6			2	4			8		
Detector Phase	1	6	6	5	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	7.0	7.0		7.0	7.0	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.9	19.4	19.4	11.9	19.4	19.4	13.2	13.2		13.2	13.2	
Total Split (s)	18.0	54.0	54.0	20.0	56.0	56.0	36.0	36.0		36.0	36.0	
Total Split (%)	16.4%	49.1%	49.1%	18.2%	50.9%	50.9%	32.7%	32.7%		32.7%	32.7%	
Maximum Green (s)	11.1	46.6	46.6	13.1	48.6	48.6	29.8	29.8		29.8	29.8	
Yellow Time (s)	4.3	4.8	4.8	4.3	4.8	4.8	3.2	3.2		3.2	3.2	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	6.9	7.4	7.4	6.9	7.4	7.4		6.2			6.2	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	6.0	82.2	82.2	6.3	82.3	82.3		11.3			11.3	
Actuated g/C Ratio	0.05	0.75	0.75	0.06	0.75	0.75		0.10			0.10	
v/c Ratio	0.07	0.29	0.06	0.11	0.22	0.00		0.59			0.12	
Control Delay	58.4	3.1	0.3	51.1	5.2	0.0		46.1			22.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	58.4	3.1	0.3	51.1	5.2	0.0		46.1			22.2	
LOS	E	A	A	D	A	A		D			C	
Approach Delay		3.3			5.9			46.1			22.2	
Approach LOS		A			A			D			C	
90th %ile Green (s)	7.0	65.3	65.3	7.6	65.9	65.9	16.6	16.6		16.6	16.6	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
70th %ile Green (s)	0.0	83.1	83.1	0.0	83.1	83.1	13.3	13.3		13.3	13.3	
70th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Gap	Gap		Hold	Hold	
50th %ile Green (s)	0.0	85.4	85.4	0.0	85.4	85.4	11.0	11.0		11.0	11.0	
50th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	87.8	87.8	0.0	87.8	87.8	8.6	8.6		8.6	8.6	
30th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	89.4	89.4	0.0	89.4	89.4	7.0	7.0		7.0	7.0	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Min	Min		Hold	Hold	
Stops (vph)	9	108	1	12	222	0		53			8	
Fuel Used(gal)	0	6	0	0	10	0		1			0	
CO Emissions (g/hr)	18	417	24	27	702	1		103			19	
NOx Emissions (g/hr)	4	81	5	5	137	0		20			4	
VOC Emissions (g/hr)	4	97	6	6	163	0		24			4	
Dilemma Vehicles (#)	0	42	0	0	35	0		0			0	
Queue Length 50th (ft)	5	36	0	8	48	0		50			3	
Queue Length 95th (ft)	m20	75	1	27	121	0		80			21	
Internal Link Dist (ft)		733			334			696			948	
Turn Bay Length (ft)	200			200		250						
Base Capacity (vph)	186	2713	1193	220	3944	1265		416			479	
Starvation Cap Reductn	0	0	0	0	0	0		0			0	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0	0		0			0	
Storage Cap Reductn	0	0	0	0	0	0		0			0	
Reduced v/c Ratio	0.04	0.29	0.06	0.05	0.22	0.00		0.25			0.05	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 84 (76%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 7.2

Intersection LOS: A

Intersection Capacity Utilization 42.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: S. Banana River Dr/Milford Point Dr & SR 520



Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Volume (vph)	194	1019	165	55	1140	99	169	17	61	192	21	198
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		200	240		0	125		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	100			25			300			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.882			0.864	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1834	5219	1658	1852	5271	1658	1834	1720	0	1834	1655	0
Flt Permitted	0.950			0.950			0.222			0.697		
Satd. Flow (perm)	1834	5219	1658	1852	5271	1658	429	1720	0	1346	1655	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			264			264		73			248	
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		1003			630			1067			629	
Travel Time (s)		13.7			8.6			24.3			14.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.83	0.83	0.83	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	0%	0%	1%	0%	1%	0%	0%	1%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	202	1061	172	59	1213	105	204	20	73	240	26	248
Shared Lane Traffic (%)												
Lane Group Flow (vph)	202	1061	172	59	1213	105	204	93	0	240	274	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4			8		
Detector Phase	1	6	6	5	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	7.0		5.0	7.0	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	12.4	19.4	19.4	12.4	19.4	19.4	12.4	14.4		12.4	14.4	
Total Split (s)	19.0	28.0	28.0	17.0	26.0	26.0	27.0	52.0		13.0	38.0	
Total Split (%)	17.3%	25.5%	25.5%	15.5%	23.6%	23.6%	24.5%	47.3%		11.8%	34.5%	
Maximum Green (s)	11.6	20.6	20.6	9.6	18.6	18.6	19.6	44.6		5.6	30.6	
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.7	3.7		3.7	3.7	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	3.7	3.7		3.7	3.7	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4		7.4	7.4	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	22.5	48.0	48.0	8.9	31.8	31.8	30.6	19.4		18.1	9.9	
Actuated g/C Ratio	0.20	0.44	0.44	0.08	0.29	0.29	0.28	0.18		0.16	0.09	
v/c Ratio	0.54	0.47	0.20	0.40	0.80	0.16	0.63	0.26		0.91	0.73	
Control Delay	44.9	25.3	0.6	46.1	43.0	4.0	38.6	12.8		76.9	20.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	44.9	25.3	0.6	46.1	43.0	4.0	38.6	12.8		76.9	20.2	
LOS	D	C	A	D	D	A	D	B		E	C	
Approach Delay		25.1			40.1			30.6			46.7	
Approach LOS		C			D			C			D	
90th %ile Green (s)	24.4	31.9	31.9	12.1	19.6	19.6	19.6	30.8		5.6	16.8	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold		Max	Gap	
70th %ile Green (s)	22.9	39.6	39.6	10.2	26.9	26.9	19.3	25.0		5.6	11.3	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Hold		Max	Gap	
50th %ile Green (s)	22.2	47.4	47.4	8.9	34.1	34.1	16.7	18.5		5.6	7.4	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Hold		Max	Gap	
30th %ile Green (s)	21.7	51.8	51.8	7.5	37.6	37.6	14.1	15.5		5.6	7.0	
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Hold		Max	Min	
10th %ile Green (s)	21.4	69.4	69.4	0.0	40.6	40.6	11.4	0.0		25.8	7.0	
10th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Gap	Skip		Hold	Min	
Stops (vph)	169	720	1	46	995	19	128	21		191	41	
Fuel Used(gal)	6	23	1	1	30	1	3	1		5	2	
CO Emissions (g/hr)	391	1593	76	101	2083	54	241	67		350	154	
NOx Emissions (g/hr)	76	310	15	20	405	10	47	13		68	30	
VOC Emissions (g/hr)	91	369	18	23	483	12	56	16		81	36	
Dilemma Vehicles (#)	0	46	0	0	12	0	0	0		0	0	
Queue Length 50th (ft)	129	191	0	40	320	9	116	12		~150	18	
Queue Length 95th (ft)	200	295	1	62	#509	27	139	43		#164	62	
Internal Link Dist (ft)		923			550			987			549	
Turn Bay Length (ft)	300		200	240			125					
Base Capacity (vph)	375	2278	872	171	1521	666	376	740		264	639	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.54	0.47	0.20	0.35	0.80	0.16	0.54	0.13		0.91	0.43	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 78 (71%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 34.3

Intersection LOS: C

Intersection Capacity Utilization 78.7%

ICU Level of Service D

Analysis Period (min) 15

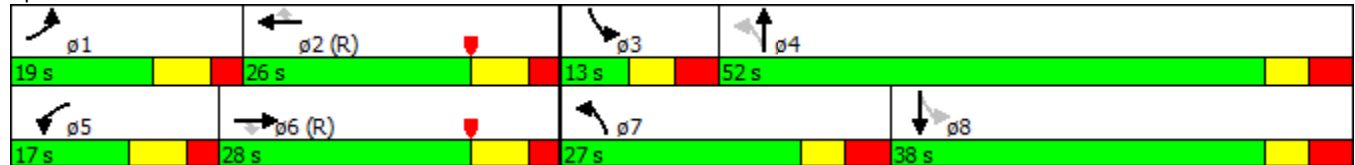
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Newfound Harbor Dr/Walmart & SR 520



Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	1009	17	11	1053	116	18	0	8	99	3	180
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	100		700	0		0	0		100
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998				0.850		0.850			0.852	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1834	5261	0	1852	5271	1658	1852	1658	0	1834	1614	0
Flt Permitted	0.950			0.950			0.326			0.750		
Satd. Flow (perm)	1834	5261	0	1852	5271	1658	636	1658	0	1448	1614	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				161		241			205	
Link Speed (mph)		50			50			30			25	
Link Distance (ft)		712			813			547			1044	
Travel Time (s)		9.7			11.1			12.4			28.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.95	0.95	0.95	0.65	0.65	0.65	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	171	1030	17	12	1108	122	28	0	12	112	3	205
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	1047	0	12	1108	122	28	12	0	112	208	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						2	4			8		
Detector Phase	1	6		5	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	7.0	7.0		7.0	7.0	

Lanes, Volumes, Timings
2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.6	19.1		11.6	19.1	19.1	13.0	13.0		13.0	13.0	
Total Split (s)	35.0	69.0		16.0	50.0	50.0	25.0	25.0		25.0	25.0	
Total Split (%)	31.8%	62.7%		14.5%	45.5%	45.5%	22.7%	22.7%		22.7%	22.7%	
Maximum Green (s)	28.4	61.9		9.4	42.9	42.9	19.0	19.0		19.0	19.0	
Yellow Time (s)	4.3	4.8		4.3	4.8	4.8	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.3	2.3		2.3	2.3	2.3	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.6	7.1		6.6	7.1	7.1	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	15.6	80.4		6.3	61.1	61.1	13.7	13.7		13.7	13.7	
Actuated g/C Ratio	0.14	0.73		0.06	0.56	0.56	0.12	0.12		0.12	0.12	
v/c Ratio	0.66	0.27		0.11	0.38	0.12	0.36	0.03		0.63	0.55	
Control Delay	38.0	9.5		52.2	10.5	0.4	55.2	0.1		60.2	11.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	38.0	9.5		52.2	10.5	0.4	55.2	0.1		60.2	11.8	
LOS	D	A		D	B	A	E	A		E	B	
Approach Delay		13.5			9.9			38.7			28.7	
Approach LOS		B			A			D			C	
90th %ile Green (s)	21.2	63.7		7.6	50.1	50.1	19.0	19.0		19.0	19.0	
90th %ile Term Code	Gap	Coord		Gap	Coord	Coord	Hold	Hold		Max	Max	
70th %ile Green (s)	17.9	80.8		0.0	56.3	56.3	16.1	16.1		16.1	16.1	
70th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
50th %ile Green (s)	15.6	83.1		0.0	60.9	60.9	13.8	13.8		13.8	13.8	
50th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
30th %ile Green (s)	13.2	85.5		0.0	65.7	65.7	11.4	11.4		11.4	11.4	
30th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
10th %ile Green (s)	9.9	88.9		0.0	72.4	72.4	8.0	8.0		8.0	8.0	
10th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
Stops (vph)	144	631		12	320	1	17	0		92	26	
Fuel Used(gal)	4	16		0	13	1	0	0		2	2	
CO Emissions (g/hr)	298	1139		25	881	44	26	2		171	151	
NOx Emissions (g/hr)	58	222		5	171	8	5	0		33	29	
VOC Emissions (g/hr)	69	264		6	204	10	6	1		40	35	
Dilemma Vehicles (#)	0	8		0	44	0	0	0		0	0	
Queue Length 50th (ft)	118	184		9	93	0	18	0		76	2	
Queue Length 95th (ft)	m100	m263		m25	110	3	33	0		127	62	
Internal Link Dist (ft)		632			733			467			964	
Turn Bay Length (ft)	400			100		700						
Base Capacity (vph)	473	3846		158	2926	992	109	485		250	448	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	

Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.36	0.27		0.08	0.38	0.12	0.26	0.02		0.45	0.46	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 14.0

Intersection LOS: B

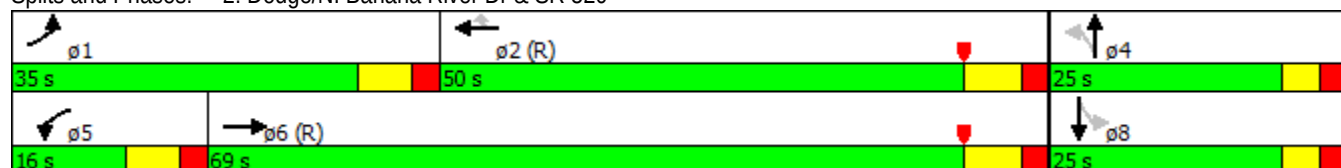
Intersection Capacity Utilization 59.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Dodge/N. Banana River Dr & SR 520



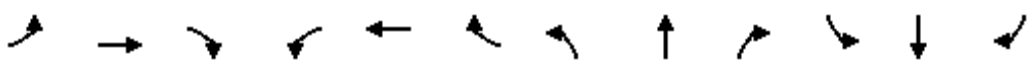
Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	1030	75	23	1118	9	83	1	26	2	1	13
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	200		250	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.968			0.891	
Flt Protected	0.950			0.950				0.964			0.993	
Satd. Flow (prot)	1852	3632	1641	1852	5271	1658	0	1820	0	0	1725	0
Flt Permitted	0.950			0.950				0.755			0.961	
Satd. Flow (perm)	1852	3632	1641	1852	5271	1658	0	1425	0	0	1670	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			100			100		13			30	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		813			414			776			1028	
Travel Time (s)		11.1			5.6			21.2			28.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.75	0.75	0.75	0.44	0.44	0.44
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	17	1157	84	26	1242	10	111	1	35	5	2	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	1157	84	26	1242	10	0	147	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases			6			2	4			8		
Detector Phase	1	6	6	5	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	7.0	7.0		7.0	7.0	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.9	19.4	19.4	11.9	19.4	19.4	13.2	13.2		13.2	13.2	
Total Split (s)	14.0	65.0	65.0	16.0	67.0	67.0	29.0	29.0		29.0	29.0	
Total Split (%)	12.7%	59.1%	59.1%	14.5%	60.9%	60.9%	26.4%	26.4%		26.4%	26.4%	
Maximum Green (s)	7.1	57.6	57.6	9.1	59.6	59.6	22.8	22.8		22.8	22.8	
Yellow Time (s)	4.3	4.8	4.8	4.3	4.8	4.8	3.2	3.2		3.2	3.2	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	6.9	7.4	7.4	6.9	7.4	7.4		6.2			6.2	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	6.4	71.8	71.8	7.1	75.1	75.1		15.7			15.7	
Actuated g/C Ratio	0.06	0.65	0.65	0.06	0.68	0.68		0.14			0.14	
v/c Ratio	0.16	0.49	0.08	0.22	0.35	0.01		0.69			0.14	
Control Delay	58.5	17.5	3.8	52.6	9.2	0.0		56.4			17.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	58.5	17.5	3.8	52.6	9.2	0.0		56.4			17.3	
LOS	E	B	A	D	A	A		E			B	
Approach Delay		17.1			10.0			56.4			17.3	
Approach LOS		B			A			E			B	
90th %ile Green (s)	7.5	58.0	58.0	9.1	59.6	59.6	22.4	22.4		22.4	22.4	
90th %ile Term Code	Max	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
70th %ile Green (s)	7.1	63.3	63.3	7.8	64.0	64.0	18.4	18.4		18.4	18.4	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
50th %ile Green (s)	0.0	66.8	66.8	7.0	80.7	80.7	15.7	15.7		15.7	15.7	
50th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	83.5	83.5	0.0	83.5	83.5	12.9	12.9		12.9	12.9	
30th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	87.5	87.5	0.0	87.5	87.5	8.9	8.9		8.9	8.9	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Gap	Gap		Hold	Hold	
Stops (vph)	14	786	21	24	455	0		93			6	
Fuel Used(gal)	0	21	1	1	18	0		2			0	
CO Emissions (g/hr)	33	1471	54	55	1228	5		164			15	
NOx Emissions (g/hr)	6	286	10	11	239	1		32			3	
VOC Emissions (g/hr)	8	341	12	13	284	1		38			4	
Dilemma Vehicles (#)	0	4	0	0	51	0		0			0	
Queue Length 50th (ft)	8	405	19	18	96	0		91			4	
Queue Length 95th (ft)	m36	458	14	46	219	0		120			6	
Internal Link Dist (ft)		733			334			696			948	
Turn Bay Length (ft)	100			200		250						
Base Capacity (vph)	120	2371	1105	153	3596	1163		305			369	
Starvation Cap Reductn	0	0	0	0	0	0		0			0	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0	0		0			0	
Storage Cap Reductn	0	0	0	0	0	0		0			0	
Reduced v/c Ratio	0.14	0.49	0.08	0.17	0.35	0.01		0.48			0.10	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 55 (50%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 15.9

Intersection LOS: B

Intersection Capacity Utilization 51.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: S. Banana River Dr/Milford Point Dr & SR 520

 ø1	 ø2 (R)	 ø4
14 s	67 s	29 s
 ø5	 ø6 (R)	 ø8
16 s	65 s	29 s

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (vph)	247	1043	289	106	1084	55	229	22	60	185	28	200
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		200	240		0	125		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	100			25			300			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.890			0.869	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1852	5271	1658	1852	5271	1658	1852	1735	0	1852	1665	0
Flt Permitted	0.950			0.950			0.263			0.703		
Satd. Flow (perm)	1852	5271	1658	1852	5271	1658	513	1735	0	1371	1665	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			317			264		61			213	
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		1003			630			1067			629	
Travel Time (s)		13.7			8.6			24.3			14.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.98	0.98	0.98	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	271	1146	318	114	1166	59	234	22	61	197	30	213
Shared Lane Traffic (%)												
Lane Group Flow (vph)	271	1146	318	114	1166	59	234	83	0	197	243	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4			8		
Detector Phase	1	6	6	5	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	7.0		5.0	7.0	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	12.4	19.4	19.4	12.4	19.4	19.4	12.4	14.4		12.4	14.4	
Total Split (s)	25.0	40.0	40.0	20.0	35.0	35.0	28.0	33.0		17.0	22.0	
Total Split (%)	22.7%	36.4%	36.4%	18.2%	31.8%	31.8%	25.5%	30.0%		15.5%	20.0%	
Maximum Green (s)	17.6	32.6	32.6	12.6	27.6	27.6	20.6	25.6		9.6	14.6	
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.7	3.7		3.7	3.7	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	3.7	3.7		3.7	3.7	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4		7.4	7.4	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	21.1	42.3	42.3	11.2	32.5	32.5	31.0	16.6		21.2	9.5	
Actuated g/C Ratio	0.19	0.38	0.38	0.10	0.30	0.30	0.28	0.15		0.19	0.09	
v/c Ratio	0.77	0.57	0.38	0.60	0.75	0.09	0.66	0.26		0.61	0.72	
Control Delay	57.8	29.4	4.8	57.8	45.3	0.9	39.4	15.8		39.6	22.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	57.8	29.4	4.8	57.8	45.3	0.9	39.4	15.8		39.6	22.1	
LOS	E	C	A	E	D	A	D	B		D	C	
Approach Delay		29.3			44.4			33.2			29.9	
Approach LOS		C			D			C			C	
90th %ile Green (s)	17.6	32.6	32.6	12.6	27.6	27.6	20.6	25.6		9.6	14.6	
90th %ile Term Code	Max	Coord	Coord	Max	Coord	Coord	Max	Hold		Max	Max	
70th %ile Green (s)	21.2	34.9	34.9	13.9	27.6	27.6	20.5	22.0		9.6	11.1	
70th %ile Term Code	Max	Coord	Coord	Gap	Coord	Coord	Gap	Hold		Max	Gap	
50th %ile Green (s)	25.0	42.8	42.8	12.0	29.8	29.8	17.9	16.0		9.6	7.7	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Hold		Max	Gap	
30th %ile Green (s)	22.8	48.0	48.0	10.2	35.4	35.4	15.2	12.6		9.6	7.0	
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Hold		Max	Min	
10th %ile Green (s)	18.8	53.2	53.2	7.5	41.9	41.9	12.7	0.0		27.1	7.0	
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Skip		Hold	Min	
Stops (vph)	211	809	27	104	735	3	176	25		172	48	
Fuel Used(gal)	8	25	3	3	26	0	5	1		3	2	
CO Emissions (g/hr)	539	1769	177	228	1791	19	329	75		234	168	
NOx Emissions (g/hr)	105	344	34	44	348	4	64	15		46	33	
VOC Emissions (g/hr)	125	410	41	53	415	4	76	17		54	39	
Dilemma Vehicles (#)	0	47	0	0	118	0	0	0		0	0	
Queue Length 50th (ft)	174	228	0	84	198	0	132	14		109	20	
Queue Length 95th (ft)	#346	319	64	145	#349	m6	178	52		150	97	
Internal Link Dist (ft)		923			550			987			549	
Turn Bay Length (ft)	300		200	240			125					
Base Capacity (vph)	354	2027	832	216	1555	675	404	450		321	405	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.77	0.57	0.38	0.53	0.75	0.09	0.58	0.18		0.61	0.60	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 13 (12%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 35.0

Intersection LOS: D

Intersection Capacity Utilization 84.2%

ICU Level of Service E

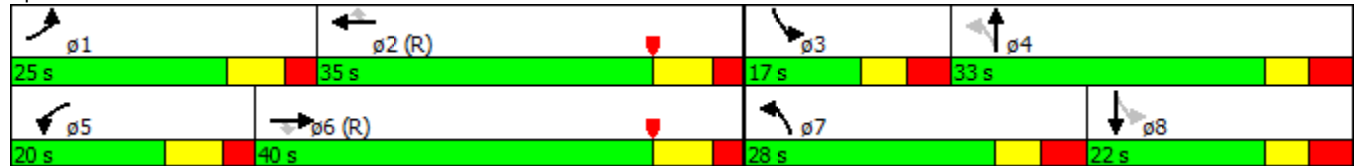
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Newfound Harbor Dr/Walmart & SR 520



Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	176	1047	10	6	931	124	13	4	7	120	1	208
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	200		700	0		0	0		100
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999				0.850		0.905			0.851	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1834	5266	0	1852	5271	1641	1852	1765	0	1852	1643	0
Flt Permitted	0.950			0.950			0.255			0.743		
Satd. Flow (perm)	1834	5266	0	1852	5271	1641	497	1765	0	1449	1643	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				161		14			263	
Link Speed (mph)		50			50			30			25	
Link Distance (ft)		712			813			547			1044	
Travel Time (s)		9.7			11.1			12.4			28.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.50	0.50	0.50	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	202	1203	11	7	1108	148	26	8	14	152	1	263
Shared Lane Traffic (%)												
Lane Group Flow (vph)	202	1214	0	7	1108	148	26	22	0	152	264	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						2	4			8		
Detector Phase	1	6		5	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0	12.0	7.0	7.0		7.0	7.0	

Lanes, Volumes, Timings
2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.6	19.1		11.6	19.1	19.1	13.0	13.0		13.0	13.0	
Total Split (s)	35.0	69.0		16.0	50.0	50.0	25.0	25.0		25.0	25.0	
Total Split (%)	31.8%	62.7%		14.5%	45.5%	45.5%	22.7%	22.7%		22.7%	22.7%	
Maximum Green (s)	28.4	61.9		9.4	42.9	42.9	19.0	19.0		19.0	19.0	
Yellow Time (s)	4.3	4.8		4.3	4.8	4.8	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.3	2.3		2.3	2.3	2.3	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.6	7.1		6.6	7.1	7.1	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	17.4	78.4		6.0	57.2	57.2	15.7	15.7		15.7	15.7	
Actuated g/C Ratio	0.16	0.71		0.05	0.52	0.52	0.14	0.14		0.14	0.14	
v/c Ratio	0.70	0.32		0.07	0.40	0.16	0.37	0.08		0.73	0.57	
Control Delay	73.2	3.7		53.2	13.0	0.9	56.4	23.4		65.3	10.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	73.2	3.7		53.2	13.0	0.9	56.4	23.4		65.3	10.4	
LOS	E	A		D	B	A	E	C		E	B	
Approach Delay		13.6			11.8			41.3			30.5	
Approach LOS		B			B			D			C	
90th %ile Green (s)	23.5	64.3		7.0	47.8	47.8	19.0	19.0		19.0	19.0	
90th %ile Term Code	Gap	Coord		Gap	Coord	Coord	Hold	Hold		Max	Max	
70th %ile Green (s)	20.0	77.9		0.0	51.3	51.3	19.0	19.0		19.0	19.0	
70th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Max	Max	
50th %ile Green (s)	17.4	80.2		0.0	56.2	56.2	16.7	16.7		16.7	16.7	
50th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
30th %ile Green (s)	14.9	82.9		0.0	61.4	61.4	14.0	14.0		14.0	14.0	
30th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
10th %ile Green (s)	11.2	86.9		0.0	69.1	69.1	10.0	10.0		10.0	10.0	
10th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	
Stops (vph)	176	159		8	394	4	13	6		113	26	
Fuel Used(gal)	6	8		0	13	1	0	0		3	2	
CO Emissions (g/hr)	428	559		15	931	51	19	9		216	168	
NOx Emissions (g/hr)	83	109		3	181	10	4	2		42	33	
VOC Emissions (g/hr)	99	130		4	216	12	4	2		50	39	
Dilemma Vehicles (#)	0	61		0	40	0	0	0		0	0	
Queue Length 50th (ft)	153	49		5	178	0	17	5		103	1	
Queue Length 95th (ft)	221	66		m19	102	7	24	11		147	41	
Internal Link Dist (ft)		632			733			467			964	
Turn Bay Length (ft)	400			200		700						
Base Capacity (vph)	473	3755		158	2739	930	85	316		250	501	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	

Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.43	0.32		0.04	0.40	0.16	0.31	0.07		0.61	0.53	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 15.5

Intersection LOS: B

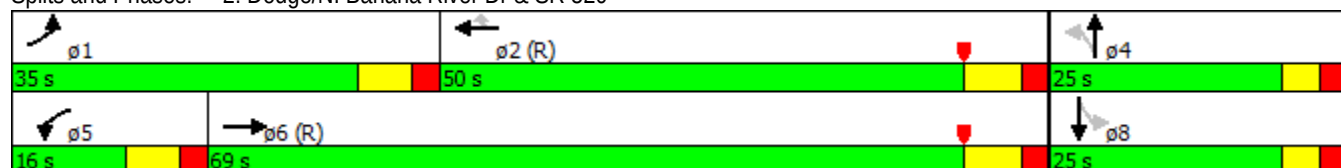
Intersection Capacity Utilization 56.6%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Dodge/N. Banana River Dr & SR 520



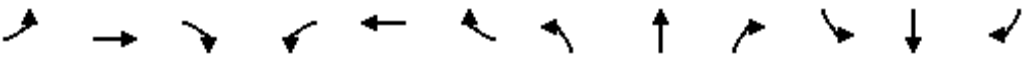
Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	1013	94	40	1002	5	59	4	18	1	5	9
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	200		250	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.970			0.919	
Flt Protected	0.950			0.950				0.965			0.998	
Satd. Flow (prot)	1852	3705	1641	1852	5271	1658	0	1799	0	0	1788	0
Flt Permitted	0.950			0.950				0.771			0.985	
Satd. Flow (perm)	1852	3705	1641	1852	5271	1658	0	1437	0	0	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			106			100		12			12	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		813			414			776			1028	
Travel Time (s)		11.1			5.6			21.2			28.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.89	0.89	0.89	0.75	0.75	0.75
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	1%	0%	1%	0%	2%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	19	1138	106	43	1077	5	66	4	20	1	7	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	1138	106	43	1077	5	0	90	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases			6			2	4			8		
Detector Phase	1	6	6	5	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	7.0	7.0		7.0	7.0	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.9	19.4	19.4	11.9	19.4	19.4	13.2	13.2		13.2	13.2	
Total Split (s)	14.0	65.0	65.0	16.0	67.0	67.0	29.0	29.0		29.0	29.0	
Total Split (%)	12.7%	59.1%	59.1%	14.5%	60.9%	60.9%	26.4%	26.4%		26.4%	26.4%	
Maximum Green (s)	7.1	57.6	57.6	9.1	59.6	59.6	22.8	22.8		22.8	22.8	
Yellow Time (s)	4.3	4.8	4.8	4.3	4.8	4.8	3.2	3.2		3.2	3.2	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	6.9	7.4	7.4	6.9	7.4	7.4		6.2			6.2	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	6.7	79.3	79.3	8.0	83.1	83.1		11.6			11.6	
Actuated g/C Ratio	0.06	0.72	0.72	0.07	0.76	0.76		0.11			0.11	
v/c Ratio	0.17	0.43	0.09	0.32	0.27	0.00		0.56			0.10	
Control Delay	60.3	5.3	0.9	54.0	6.7	0.0		52.8			26.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	60.3	5.3	0.9	54.0	6.7	0.0		52.8			26.9	
LOS	E	A	A	D	A	A		D			C	
Approach Delay		5.8			8.4			52.8			26.9	
Approach LOS		A			A			D			C	
90th %ile Green (s)	8.4	62.1	62.1	10.7	64.4	64.4	16.7	16.7		16.7	16.7	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
70th %ile Green (s)	7.3	66.9	66.9	9.1	68.7	68.7	13.5	13.5		13.5	13.5	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
50th %ile Green (s)	0.0	70.2	70.2	7.9	85.0	85.0	11.4	11.4		11.4	11.4	
50th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	87.2	87.2	0.0	87.2	87.2	9.2	9.2		9.2	9.2	
30th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	102.6	102.6	0.0	102.6	102.6	0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Skip		Skip	Skip	
Stops (vph)	17	223	6	38	315	0		63			9	
Fuel Used(gal)	1	10	1	1	14	0		2			0	
CO Emissions (g/hr)	39	681	42	93	965	3		114			17	
NOx Emissions (g/hr)	8	133	8	18	188	1		22			3	
VOC Emissions (g/hr)	9	158	10	21	224	1		26			4	
Dilemma Vehicles (#)	0	0	0	0	38	0		0			0	
Queue Length 50th (ft)	12	120	1	29	65	0		53			5	
Queue Length 95th (ft)	m39	146	m2	65	164	0		100			22	
Internal Link Dist (ft)		733			334			696			948	
Turn Bay Length (ft)	200			200		250						
Base Capacity (vph)	124	2670	1212	158	3980	1276		307			375	
Starvation Cap Reductn	0	0	0	0	0	0		0			0	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0	0		0			0	
Storage Cap Reductn	0	0	0	0	0	0		0			0	
Reduced v/c Ratio	0.15	0.43	0.09	0.27	0.27	0.00		0.29			0.05	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 55 (50%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 8.8

Intersection LOS: A

Intersection Capacity Utilization 54.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: S. Banana River Dr/Milford Point Dr & SR 520

 ø1	 ø2 (R)	 ø4
14 s	67 s	29 s
 ø5	 ø6 (R)	 ø8
16 s	65 s	29 s

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

													
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 	  							
Volume (vph)	70	722	127	17	49	761	31	248	8	98	30	44	53
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	11	12	12	11	11	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%	
Storage Length (ft)	300		200		240		0	125		0	0		0
Storage Lanes	1		1		1		1	1		0	1		0
Taper Length (ft)	100				50			300			25		
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor													
Frt			0.850				0.850		0.861			0.918	
Flt Protected	0.950				0.950			0.950			0.950		
Satd. Flow (prot)	1773	5219	1625	0	1782	5271	1507	1834	1664	0	1852	1671	0
Flt Permitted	0.950				0.950			0.372			0.681		
Satd. Flow (perm)	1773	5219	1625	0	1782	5271	1507	718	1664	0	1328	1671	0
Right Turn on Red			Yes				Yes			Yes			Yes
Satd. Flow (RTOR)			322				322		109			55	
Link Speed (mph)		50				50			30			30	
Link Distance (ft)		1003				630			1067			629	
Travel Time (s)		13.7				8.6			24.3			14.3	
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.92	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	2%	2%	0%	1%	10%	1%	0%	1%	0%	0%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)													
Mid-Block Traffic (%)		0%				0%			0%			0%	
Adj. Flow (vph)	78	802	141	18	54	846	34	276	9	109	33	48	58
Shared Lane Traffic (%)													
Lane Group Flow (vph)	78	802	141	0	72	846	34	276	118	0	33	106	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11				11			12			12	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

													
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Link Offset(ft)		0				0			0			0	
Crosswalk Width(ft)		16				16			16			16	
Two way Left Turn Lane													
Headway Factor	1.01	0.97	0.97	1.01	1.01	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	5	2		7	4		3	8	
Permitted Phases			6				2	4			8		
Detector Phase	1	6	6	5	5	2	2	7	4		3	8	
Switch Phase													
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0	12.0	12.0	5.0	7.0		5.0	7.0	
Minimum Split (s)	12.4	19.4	19.4	12.4	12.4	19.4	19.4	12.4	14.4		12.4	14.4	
Total Split (s)	17.0	31.0	31.0	16.0	16.0	30.0	30.0	25.0	30.0		13.0	18.0	
Total Split (%)	18.9%	34.4%	34.4%	17.8%	17.8%	33.3%	33.3%	27.8%	33.3%		14.4%	20.0%	
Maximum Green (s)	9.6	23.6	23.6	8.6	8.6	22.6	22.6	17.6	22.6		5.6	10.6	
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.7	3.7		3.7	3.7	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.7	3.7		3.7	3.7	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.4	7.4	7.4	7.4	7.4		7.4	7.4	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?													
Vehicle Extension (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	Max	Max	None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)													
Flash Dont Walk (s)													
Pedestrian Calls (#/hr)													
Act Effect Green (s)	9.7	33.0	33.0		8.0	31.7	31.7	29.4	21.6		12.7	8.6	

SR 520 Optimized AM Peak

ELH

Synchro 8 Report

Page 2

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

													
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.11	0.37	0.37		0.09	0.35	0.35	0.33	0.24		0.14	0.10	
v/c Ratio	0.41	0.42	0.18		0.46	0.46	0.05	0.63	0.24		0.15	0.51	
Control Delay	44.2	25.3	0.5		33.8	15.2	0.1	29.5	8.1		21.2	29.2	
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	44.2	25.3	0.5		33.8	15.2	0.1	29.5	8.1		21.2	29.2	
LOS	D	C	A		C	B	A	C	A		C	C	
Approach Delay		23.4				16.0			23.1			27.3	
Approach LOS		C				B			C			C	
90th %ile Green (s)	9.6	23.6	23.6	8.6	8.6	22.6	22.6	17.6	22.6		5.6	10.6	
90th %ile Term Code	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold		Max	Max	
70th %ile Green (s)	10.2	24.2	24.2	8.6	8.6	22.6	22.6	17.6	22.0		5.6	10.0	
70th %ile Term Code	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold		Max	Gap	
50th %ile Green (s)	11.2	26.0	26.0	8.6	8.6	23.4	23.4	17.6	20.2		5.6	8.2	
50th %ile Term Code	Gap	Coord	Coord	Max	Max	Coord	Coord	Max	Hold		Max	Gap	
30th %ile Green (s)	9.8	28.4	28.4	8.6	8.6	27.2	27.2	16.4	30.8		0.0	7.0	
30th %ile Term Code	Gap	Coord	Coord	Hold	Hold	Coord	Coord	Gap	Hold		Skip	Min	
10th %ile Green (s)	0.0	62.9	62.9	0.0	0.0	62.9	62.9	12.3	12.3		0.0	0.0	
10th %ile Term Code	Skip	Coord	Coord	Skip	Skip	Coord	Coord	Gap	Hold		Skip	Skip	
Stops (vph)	64	543	0		56	427	0	183	21		25	49	
Fuel Used(gal)	2	17	1		2	12	0	5	1		0	1	
CO Emissions (g/hr)	144	1164	57		109	835	9	319	82		29	93	
NOx Emissions (g/hr)	28	227	11		21	162	2	62	16		6	18	
VOC Emissions (g/hr)	33	270	13		25	193	2	74	19		7	22	
Dilemma Vehicles (#)	0	40	0		0	50	0	0	0		0	0	
Queue Length 50th (ft)	41	139	0		40	101	0	115	4		12	28	
Queue Length 95th (ft)	86	186	0		55	73	0	174	45		30	76	
Internal Link Dist (ft)		923				550			987			549	
Turn Bay Length (ft)	300		200		240			125					
Base Capacity (vph)	198	1914	800		170	1858	740	461	527		220	245	
Starvation Cap Reductn	0	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.39	0.42	0.18		0.42	0.46	0.05	0.60	0.22		0.15	0.43	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 6 (7%), Referenced to phase 2:WBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 20.7

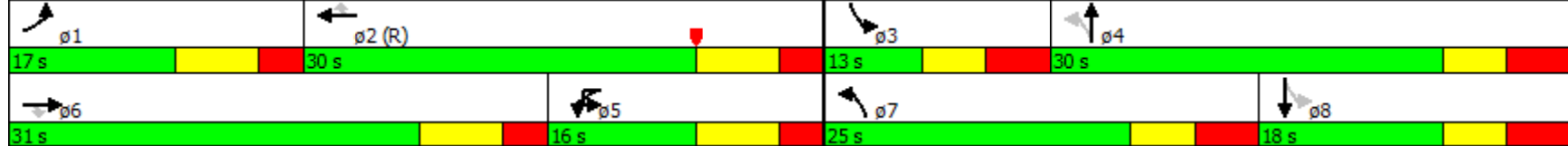
Intersection LOS: C

Intersection Capacity Utilization 57.0%

ICU Level of Service B

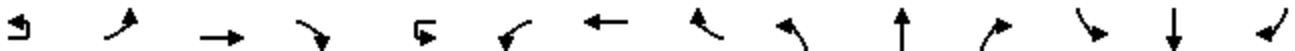
Analysis Period (min) 15

Splits and Phases: 1: Newfound Harbor Dr/Walmart & SR 520



Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Volume (vph)	26	106	697	22	16	3	717	65	8	3	2	114	10	148
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	11	11	12	12	11	11	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%			0%	
Storage Length (ft)		400		0		200		700	0		0	0		100
Storage Lanes		1		0		1		1	1		0	1		1
Taper Length (ft)		50				50			25			25		
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor														
Frt			0.995					0.850		0.950			0.860	
Flt Protected		0.950				0.950			0.950			0.950		
Satd. Flow (prot)	0	1756	5147	0	0	1761	5219	1579	1852	1852	0	1852	1646	0
Flt Permitted		0.950				0.950			0.513			0.754		
Satd. Flow (perm)	0	1756	5147	0	0	1761	5219	1579	1000	1852	0	1470	1646	0
Right Turn on Red				Yes				Yes			Yes			Yes
Satd. Flow (RTOR)			7					196		2			172	
Link Speed (mph)			50				50			30			25	
Link Distance (ft)			712				813			547			1044	
Travel Time (s)			9.7				11.1			12.4			28.5	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.95	0.95	0.95	0.81	0.81	0.81	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	3%	0%	2%	0%	2%	5%	0%	0%	0%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)			0%				0%			0%			0%	
Adj. Flow (vph)	28	110	726	23	17	3	755	68	10	4	2	133	12	172
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	138	749	0	0	20	755	68	10	6	0	133	184	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)			12				12			12			12	

Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Link Offset(ft)			0				0			0			0	
Crosswalk Width(ft)			16				16			16			16	
Two way Left Turn Lane														
Headway Factor	1.01	1.01	0.97	0.97	1.01	1.01	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	9	15		9	9	15		9	15		9	15		9
Number of Detectors	1	1	2		1	1	2	1	1	2		1	2	
Detector Template	Left	Left	Thru		Left	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	20	100		20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0		0	0	0	0	0	0		0	0	
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	1	6		5	5	2			4			8	
Permitted Phases								2	4			8		
Detector Phase	1	1	6		5	5	2	2	4	4		8	8	
Switch Phase														
Minimum Initial (s)	5.0	5.0	12.0		5.0	5.0	12.0	12.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.6	11.6	19.1		11.6	11.6	19.1	19.1	13.0	13.0		13.0	13.0	
Total Split (s)	26.0	26.0	49.0		15.0	15.0	38.0	38.0	26.0	26.0		26.0	26.0	
Total Split (%)	28.9%	28.9%	54.4%		16.7%	16.7%	42.2%	42.2%	28.9%	28.9%		28.9%	28.9%	
Maximum Green (s)	19.4	19.4	41.9		8.4	8.4	30.9	30.9	20.0	20.0		20.0	20.0	
Yellow Time (s)	4.3	4.3	4.8		4.3	4.3	4.8	4.8	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.3	2.3	2.3		2.3	2.3	2.3	2.3	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.6	7.1			6.6	7.1	7.1	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag	Lag						
Lead-Lag Optimize?														
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	C-Max		None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)														
Flash Dont Walk (s)														
Pedestrian Calls (#/hr)														
Act Effect Green (s)		12.3	57.6			6.6	44.4	44.4	13.5	13.5		13.5	13.5	

Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14	0.64			0.07	0.49	0.49	0.15	0.15		0.15	0.15	
v/c Ratio		0.57	0.23			0.16	0.29	0.08	0.07	0.02		0.60	0.47	
Control Delay		48.9	4.4			44.6	10.1	0.2	30.9	25.6		46.3	10.3	
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		48.9	4.4			44.6	10.1	0.2	30.9	25.6		46.3	10.3	
LOS		D	A			D	B	A	C	C		D	B	
Approach Delay			11.4				10.1			28.9			25.4	
Approach LOS			B				B			C			C	
90th %ile Green (s)	17.1	17.1	42.4		8.2	8.2	33.5	33.5	19.7	19.7		19.7	19.7	
90th %ile Term Code	Gap	Gap	Coord		Gap	Gap	Coord	Coord	Hold	Hold		Gap	Gap	
70th %ile Green (s)	14.3	14.3	47.4		7.2	7.2	40.3	40.3	15.7	15.7		15.7	15.7	
70th %ile Term Code	Gap	Gap	Coord		Gap	Gap	Coord	Coord	Hold	Hold		Gap	Gap	
50th %ile Green (s)	12.3	12.3	63.5		0.0	0.0	44.6	44.6	13.4	13.4		13.4	13.4	
50th %ile Term Code	Gap	Gap	Coord		Skip	Skip	Coord	Coord	Hold	Hold		Gap	Gap	
30th %ile Green (s)	10.4	10.4	65.8		0.0	0.0	48.8	48.8	11.1	11.1		11.1	11.1	
30th %ile Term Code	Gap	Gap	Coord		Skip	Skip	Coord	Coord	Hold	Hold		Gap	Gap	
10th %ile Green (s)	7.6	7.6	69.1		0.0	0.0	54.9	54.9	7.8	7.8		7.8	7.8	
10th %ile Term Code	Gap	Gap	Coord		Skip	Skip	Coord	Coord	Hold	Hold		Gap	Gap	
Stops (vph)		127	127			21	232	0	9	6		103	28	
Fuel Used(gal)		4	6			1	9	0	0	0		2	2	
CO Emissions (g/hr)		269	409			40	610	24	9	6		174	129	
NOx Emissions (g/hr)		52	80			8	119	5	2	1		34	25	
VOC Emissions (g/hr)		62	95			9	141	5	2	1		40	30	
Dilemma Vehicles (#)		0	57			0	37	0	0	0		0	0	
Queue Length 50th (ft)		83	21			12	46	0	5	2		72	6	
Queue Length 95th (ft)		138	42			36	68	0	16	10		114	52	
Internal Link Dist (ft)			632				733			467			964	
Turn Bay Length (ft)		400				200		700						
Base Capacity (vph)		378	3298			164	2575	878	222	413		326	499	
Starvation Cap Reductn		0	0			0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0			0	0	0	0	0		0	0	
Storage Cap Reductn		0	0			0	0	0	0	0		0	0	
Reduced v/c Ratio		0.37	0.23			0.12	0.29	0.08	0.05	0.01		0.41	0.37	

Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 13.1

Intersection LOS: B

Intersection Capacity Utilization 49.9%

ICU Level of Service A

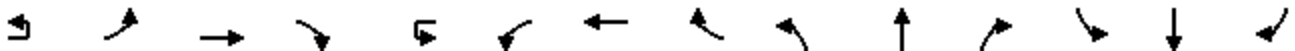
Analysis Period (min) 15

Splits and Phases: 2: Dodge/N. Banana River Dr & SR 520



Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Volume (vph)	29	7	715	64	14	11	746	2	44	2	32	1	3	14
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	11	11	12	12	11	11	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%			0%	
Storage Length (ft)		200		0		200		250	0		0	0		0
Storage Lanes		1		1		1		1	0		0	0		0
Taper Length (ft)		50				50			25			25		
Lane Util. Factor	0.95	1.00	0.95	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor														
Frt				0.850				0.850		0.945			0.893	
Flt Protected		0.950				0.950				0.973			0.998	
Satd. Flow (prot)	0	1762	3632	1564	0	1771	5271	1658	0	1744	0	0	1738	0
Flt Permitted		0.950				0.950				0.812			0.987	
Satd. Flow (perm)	0	1762	3632	1564	0	1771	5271	1658	0	1455	0	0	1719	0
Right Turn on Red				Yes				Yes			Yes			Yes
Satd. Flow (RTOR)				122				122		35			19	
Link Speed (mph)			50				50			25			30	
Link Distance (ft)			813				414			776			1028	
Travel Time (s)			11.1				5.6			21.2			23.4	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	0.92	0.94	0.94	0.94	0.92	0.89	0.89	0.89	0.75	0.75	0.75	0.75	0.75	0.75
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	2%	6%	2%	0%	1%	0%	5%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)			0%				0%			0%			0%	
Adj. Flow (vph)	32	7	761	68	15	12	838	2	59	3	43	1	4	19
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	39	761	68	0	27	838	2	0	105	0	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)			11				11			0			0	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Link Offset(ft)			0				0			0			0	
Crosswalk Width(ft)			16				16			16			16	
Two way Left Turn Lane														
Headway Factor	1.01	1.01	0.97	0.97	1.01	1.01	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	9	15		9	9	15		9	15		9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1	2	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	1	6		5	5	2			4			8	
Permitted Phases				6				2	4			8		
Detector Phase	1	1	6	6	5	5	2	2	4	4		8	8	
Switch Phase														
Minimum Initial (s)	5.0	5.0	12.0	12.0	5.0	5.0	12.0	12.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.9	11.9	19.4	19.4	11.9	11.9	19.4	19.4	13.2	13.2		13.2	13.2	
Total Split (s)	17.0	17.0	49.0	49.0	17.0	17.0	49.0	49.0	24.0	24.0		24.0	24.0	
Total Split (%)	18.9%	18.9%	54.4%	54.4%	18.9%	18.9%	54.4%	54.4%	26.7%	26.7%		26.7%	26.7%	
Maximum Green (s)	10.1	10.1	41.6	41.6	10.1	10.1	41.6	41.6	17.8	17.8		17.8	17.8	
Yellow Time (s)	4.3	4.3	4.8	4.8	4.3	4.3	4.8	4.8	3.2	3.2		3.2	3.2	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)		6.9	7.4	7.4		6.9	7.4	7.4		6.2			6.2	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag						
Lead-Lag Optimize?														
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)														
Flash Dont Walk (s)														
Pedestrian Calls (#/hr)														
Act Effect Green (s)		7.5	64.2	64.2		6.9	61.0	61.0		10.3			10.3	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.08	0.71	0.71		0.08	0.68	0.68		0.11			0.11	
v/c Ratio		0.27	0.29	0.06		0.20	0.23	0.00		0.54			0.11	
Control Delay		41.5	4.1	0.2		41.8	8.7	0.0		35.2			18.3	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay		41.5	4.1	0.2		41.8	8.7	0.0		35.2			18.3	
LOS		D	A	A		D	A	A		D			B	
Approach Delay			5.5				9.7			35.2			18.3	
Approach LOS			A				A			D			B	
90th %ile Green (s)	9.9	9.9	45.8	45.8	8.8	8.8	44.7	44.7	14.9	14.9		14.9	14.9	
90th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
70th %ile Green (s)	8.4	8.4	50.0	50.0	7.6	7.6	49.2	49.2	11.9	11.9		11.9	11.9	
70th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
50th %ile Green (s)	7.4	7.4	66.6	66.6	0.0	0.0	52.3	52.3	9.8	9.8		9.8	9.8	
50th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Skip	Coord	Coord	Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	0.0	68.7	68.7	0.0	0.0	68.7	68.7	7.7	7.7		7.7	7.7	
30th %ile Term Code	Skip	Skip	Coord	Coord	Skip	Skip	Coord	Coord	Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	0.0	82.6	82.6	0.0	0.0	82.6	82.6	0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Skip	Coord	Coord	Skip	Skip	Coord	Coord	Skip	Skip		Skip	Skip	
Stops (vph)		20	127	0		24	297	0		51			9	
Fuel Used(gal)		1	6	0		1	12	0		1			0	
CO Emissions (g/hr)		56	436	23		53	807	1		90			18	
NOx Emissions (g/hr)		11	85	5		10	157	0		17			4	
VOC Emissions (g/hr)		13	101	5		12	187	0		21			4	
Dilemma Vehicles (#)		0	38	0		0	36	0		0			0	
Queue Length 50th (ft)		21	40	0		15	80	0		38			3	
Queue Length 95th (ft)		0	67	1		39	125	0		65			18	
Internal Link Dist (ft)			733				334			696			948	
Turn Bay Length (ft)		200				200		250						
Base Capacity (vph)		197	2591	1151		198	3571	1162		315			355	
Starvation Cap Reductn		0	0	0		0	0	0		0			0	
Spillback Cap Reductn		0	0	0		0	0	0		0			0	
Storage Cap Reductn		0	0	0		0	0	0		0			0	
Reduced v/c Ratio		0.20	0.29	0.06		0.14	0.23	0.00		0.33			0.07	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 10 (11%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 9.3

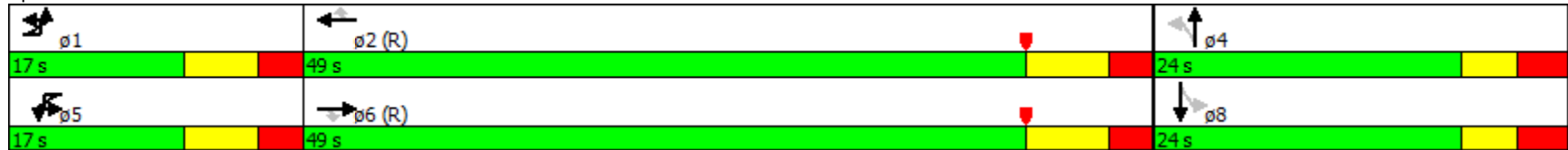
Intersection LOS: A

Intersection Capacity Utilization 51.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: S. Banana River Dr/Milford Point Dr & SR 520



Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

													
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Volume (vph)	263	978	289	28	104	994	55	229	22	60	185	28	200
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	11	12	12	11	11	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%	
Storage Length (ft)	300		200		240		0	125		0	0		0
Storage Lanes	1		1		1		1	1		0	1		0
Taper Length (ft)	100				50			300			25		
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor													
Frt			0.850				0.850		0.890			0.869	
Flt Protected	0.950				0.950			0.950			0.950		
Satd. Flow (prot)	1791	5271	1658	0	1783	5271	1658	1852	1735	0	1852	1665	0
Flt Permitted	0.950				0.950			0.430			0.617		
Satd. Flow (perm)	1791	5271	1658	0	1783	5271	1658	838	1735	0	1203	1665	0
Right Turn on Red			Yes				Yes			Yes			Yes
Satd. Flow (RTOR)			318				264		61			213	
Link Speed (mph)		50				50			30			30	
Link Distance (ft)		1003				630			1067			629	
Travel Time (s)		13.7				8.6			24.3			14.3	
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.91	0.91	0.91	0.92	0.93	0.93	0.93	0.98	0.98	0.98	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	0%	0%	0%	0%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)													
Mid-Block Traffic (%)		0%				0%			0%			0%	
Adj. Flow (vph)	289	1075	318	30	112	1069	59	234	22	61	197	30	213
Shared Lane Traffic (%)													
Lane Group Flow (vph)	289	1075	318	0	142	1069	59	234	83	0	197	243	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11				11			12			12	

SR 520 Optimized PM Peak

ELH

Synchro 8 Report

Page 1

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

													
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Link Offset(ft)		0				0			0			0	
Crosswalk Width(ft)		16				16			16			16	
Two way Left Turn Lane													
Headway Factor	1.01	0.97	0.97	1.01	1.01	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	5	2		7	4		3	8	
Permitted Phases			6				2	4			8		
Detector Phase	1	6	6	5	5	2	2	7	4		3	8	
Switch Phase													
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0	12.0	12.0	5.0	7.0		5.0	7.0	
Minimum Split (s)	12.4	19.4	19.4	12.4	12.4	19.4	19.4	12.4	14.4		12.4	14.4	
Total Split (s)	31.0	45.0	45.0	23.0	23.0	37.0	37.0	22.0	22.0		20.0	20.0	
Total Split (%)	28.2%	40.9%	40.9%	20.9%	20.9%	33.6%	33.6%	20.0%	20.0%		18.2%	18.2%	
Maximum Green (s)	23.6	37.6	37.6	15.6	15.6	29.6	29.6	14.6	14.6		12.6	12.6	
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.7	3.7		3.7	3.7	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.7	3.7		3.7	3.7	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.4	7.4	7.4		7.4	7.4	7.4	7.4	7.4		7.4	7.4	
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?													
Vehicle Extension (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)													
Flash Dont Walk (s)													
Pedestrian Calls (#/hr)													
Act Effect Green (s)	22.6	43.8	43.8		13.3	34.4	34.4	23.6	10.7		23.3	9.1	

SR 520 Optimized PM Peak

ELH

Synchro 8 Report

Page 2

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

													
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.21	0.40	0.40		0.12	0.31	0.31	0.21	0.10		0.21	0.08	
v/c Ratio	0.79	0.51	0.37		0.66	0.65	0.08	0.75	0.37		0.57	0.73	
Control Delay	57.2	27.0	4.2		72.2	23.6	0.3	49.8	21.7		39.1	23.1	
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	57.2	27.0	4.2		72.2	23.6	0.3	49.8	21.7		39.1	23.1	
LOS	E	C	A		E	C	A	D	C		D	C	
Approach Delay		27.9				27.9			42.4			30.3	
Approach LOS		C				C			D			C	
90th %ile Green (s)	23.6	37.6	37.6	15.6	15.6	29.6	29.6	14.6	14.6		12.6	12.6	
90th %ile Term Code	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold		Max	Max	
70th %ile Green (s)	25.1	38.6	38.6	16.1	16.1	29.6	29.6	14.6	13.1		12.6	11.1	
70th %ile Term Code	Max	Coord	Coord	Gap	Gap	Coord	Coord	Max	Hold		Max	Gap	
50th %ile Green (s)	24.8	44.1	44.1	14.0	14.0	33.3	33.3	14.6	9.7		12.6	7.7	
50th %ile Term Code	Gap	Coord	Coord	Gap	Gap	Coord	Coord	Max	Hold		Max	Gap	
30th %ile Green (s)	21.9	47.0	47.0	11.8	11.8	36.9	36.9	14.6	9.0		12.6	7.0	
30th %ile Term Code	Gap	Coord	Coord	Gap	Gap	Coord	Coord	Max	Hold		Max	Min	
10th %ile Green (s)	17.6	51.5	51.5	8.8	8.8	42.7	42.7	13.1	0.0		27.5	7.0	
10th %ile Term Code	Gap	Coord	Coord	Gap	Gap	Coord	Coord	Gap	Skip		Hold	Min	
Stops (vph)	239	723	25		129	670	0	198	28		161	49	
Fuel Used(gal)	8	23	2		4	19	0	5	1		3	2	
CO Emissions (g/hr)	587	1587	173		311	1330	16	372	83		229	172	
NOx Emissions (g/hr)	114	309	34		61	259	3	72	16		44	33	
VOC Emissions (g/hr)	136	368	40		72	308	4	86	19		53	40	
Dilemma Vehicles (#)	0	44	0		0	63	0	0	0		0	0	
Queue Length 50th (ft)	190	205	0		104	128	0	138	15		114	20	
Queue Length 95th (ft)	#312	275	59		172	165	m0	201	60		170	100	
Internal Link Dist (ft)		923				550			987			549	
Turn Bay Length (ft)	300		200		240			125					
Base Capacity (vph)	393	2096	851		254	1649	700	316	283		346	379	
Starvation Cap Reductn	0	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.74	0.51	0.37		0.56	0.65	0.08	0.74	0.29		0.57	0.64	

Lanes, Volumes, Timings

1: Newfound Harbor Dr/Walmart & SR 520

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 104 (95%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 29.4

Intersection LOS: C

Intersection Capacity Utilization 83.4%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

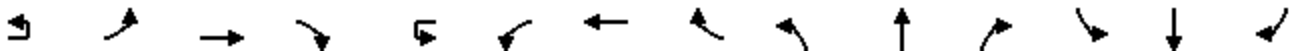
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Newfound Harbor Dr/Walmart & SR 520



Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Volume (vph)	42	172	1050	10	18	6	989	124	13	4	7	120	1	208
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	11	11	12	12	11	11	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%			0%	
Storage Length (ft)		400		0		200		700	0		0	0		100
Storage Lanes		1		0		1		1	1		0	1		1
Taper Length (ft)		50				50			25			25		
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor														
Frt			0.999					0.850		0.905			0.851	
Flt Protected		0.950				0.950			0.950			0.950		
Satd. Flow (prot)	0	1770	5266	0	0	1765	5271	1641	1852	1765	0	1852	1643	0
Flt Permitted		0.950				0.950			0.241			0.743		
Satd. Flow (perm)	0	1770	5266	0	0	1765	5271	1641	470	1765	0	1449	1643	0
Right Turn on Red				Yes				Yes			Yes			Yes
Satd. Flow (RTOR)			2					161		14			263	
Link Speed (mph)			50				50			30			25	
Link Distance (ft)			712				813			547			1044	
Travel Time (s)			9.7				11.1			12.4			28.5	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	0.92	0.87	0.87	0.87	0.92	0.84	0.84	0.84	0.50	0.50	0.50	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	1%	1%	0%	2%	0%	1%	1%	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)			0%				0%			0%			0%	
Adj. Flow (vph)	46	198	1207	11	20	7	1177	148	26	8	14	152	1	263
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	244	1218	0	0	27	1177	148	26	22	0	152	264	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)			12				12			12			12	

SR 520 Optimized PM Peak

ELH

Synchro 8 Report

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Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Link Offset(ft)			0				0			0			0	
Crosswalk Width(ft)			16				16			16			16	
Two way Left Turn Lane														
Headway Factor	1.01	1.01	0.97	0.97	1.01	1.01	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	9	15		9	9	15		9	15		9	15		9
Number of Detectors	1	1	2		1	1	2	1	1	2		1	2	
Detector Template	Left	Left	Thru		Left	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	20	100		20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0		0	0	0	0	0	0		0	0	
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	1	6		5	5	2			4			8	
Permitted Phases								2	4			8		
Detector Phase	1	1	6		5	5	2	2	4	4		8	8	
Switch Phase														
Minimum Initial (s)	5.0	5.0	12.0		5.0	5.0	12.0	12.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.6	11.6	19.1		11.6	11.6	19.1	19.1	13.0	13.0		13.0	13.0	
Total Split (s)	34.0	34.0	67.0		14.0	14.0	47.0	47.0	29.0	29.0		29.0	29.0	
Total Split (%)	30.9%	30.9%	60.9%		12.7%	12.7%	42.7%	42.7%	26.4%	26.4%		26.4%	26.4%	
Maximum Green (s)	27.4	27.4	59.9		7.4	7.4	39.9	39.9	23.0	23.0		23.0	23.0	
Yellow Time (s)	4.3	4.3	4.8		4.3	4.3	4.8	4.8	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.3	2.3	2.3		2.3	2.3	2.3	2.3	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.6	7.1			6.6	7.1	7.1	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag	Lag						
Lead-Lag Optimize?														
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	C-Max		None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)														
Flash Dont Walk (s)														
Pedestrian Calls (#/hr)														
Act Effect Green (s)		20.3	71.6			6.8	53.1	53.1	16.8	16.8		16.8	16.8	

SR 520 Optimized PM Peak

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Synchro 8 Report

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Lanes, Volumes, Timings
2: Dodge/N. Banana River Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.18	0.65			0.06	0.48	0.48	0.15	0.15		0.15	0.15	
v/c Ratio		0.75	0.36			0.25	0.46	0.17	0.37	0.08		0.69	0.56	
Control Delay		58.3	7.5			59.2	15.3	0.9	54.2	21.9		59.2	9.6	
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		58.3	7.5			59.2	15.3	0.9	54.2	21.9		59.2	9.6	
LOS		E	A			E	B	A	D	C		E	A	
Approach Delay			16.0				14.6			39.4			27.7	
Approach LOS			B				B			D			C	
90th %ile Green (s)	27.2	27.2	59.9		7.4	7.4	40.1	40.1	23.0	23.0		23.0	23.0	
90th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord	Coord	Hold	Hold		Max	Max	
70th %ile Green (s)	23.2	23.2	61.9		8.1	8.1	46.8	46.8	20.3	20.3		20.3	20.3	
70th %ile Term Code	Gap	Gap	Coord		Gap	Gap	Coord	Coord	Hold	Hold		Gap	Gap	
50th %ile Green (s)	20.4	20.4	66.4		7.1	7.1	53.1	53.1	16.8	16.8		16.8	16.8	
50th %ile Term Code	Gap	Gap	Coord		Gap	Gap	Coord	Coord	Hold	Hold		Gap	Gap	
30th %ile Green (s)	17.5	17.5	82.9		0.0	0.0	58.8	58.8	14.0	14.0		14.0	14.0	
30th %ile Term Code	Gap	Gap	Coord		Skip	Skip	Coord	Coord	Hold	Hold		Gap	Gap	
10th %ile Green (s)	13.3	13.3	86.8		0.0	0.0	66.9	66.9	10.1	10.1		10.1	10.1	
10th %ile Term Code	Gap	Gap	Coord		Skip	Skip	Coord	Coord	Hold	Hold		Gap	Gap	
Stops (vph)		211	293			25	591	4	13	6		110	25	
Fuel Used(gal)		7	11			1	17	1	0	0		3	2	
CO Emissions (g/hr)		473	762			56	1205	51	19	9		205	165	
NOx Emissions (g/hr)		92	148			11	235	10	4	2		40	32	
VOC Emissions (g/hr)		110	177			13	279	12	4	2		48	38	
Dilemma Vehicles (#)		0	65			0	43	0	0	0		0	0	
Queue Length 50th (ft)		180	91			20	95	0	17	5		103	1	
Queue Length 95th (ft)		253	134			47	179	6	23	11		140	39	
Internal Link Dist (ft)			632				733			467			964	
Turn Bay Length (ft)		400				200		700						
Base Capacity (vph)		440	3427			120	2546	876	98	380		302	551	
Starvation Cap Reductn		0	0			0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0			0	0	0	0	0		0	0	
Storage Cap Reductn		0	0			0	0	0	0	0		0	0	
Reduced v/c Ratio		0.55	0.36			0.23	0.46	0.17	0.27	0.06		0.50	0.48	

Lanes, Volumes, Timings

2: Dodge/N. Banana River Dr & SR 520

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 106 (96%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 17.2

Intersection LOS: B

Intersection Capacity Utilization 59.7%

ICU Level of Service B

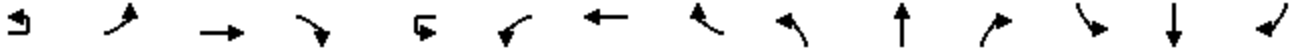
Analysis Period (min) 15

Splits and Phases: 2: Dodge/N. Banana River Dr & SR 520



Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Volume (vph)	16	17	1055	94	10	40	1050	5	59	4	18	1	5	9
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Lane Width (ft)	11	11	12	12	11	11	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%			0%	
Storage Length (ft)		200		0		200		250	0		0	0		0
Storage Lanes		1		1		1		1	0		0	0		0
Taper Length (ft)		50				50			25			25		
Lane Util. Factor	0.95	1.00	0.95	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor														
Frt				0.850				0.850		0.970			0.919	
Flt Protected		0.950				0.950				0.965			0.998	
Satd. Flow (prot)	0	1774	3705	1641	0	1783	5271	1658	0	1799	0	0	1788	0
Flt Permitted		0.950				0.950				0.771			0.985	
Satd. Flow (perm)	0	1774	3705	1641	0	1783	5271	1658	0	1437	0	0	1765	0
Right Turn on Red				Yes				Yes			Yes			Yes
Satd. Flow (RTOR)				106				100		11			12	
Link Speed (mph)			50				50			25			30	
Link Distance (ft)			813				414			776			1028	
Travel Time (s)			11.1				5.6			21.2			23.4	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	0.92	0.89	0.89	0.89	0.92	0.93	0.93	0.93	0.89	0.89	0.89	0.75	0.75	0.75
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	0%	1%	2%	0%	1%	0%	2%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)			0%				0%			0%			0%	
Adj. Flow (vph)	17	19	1185	106	11	43	1129	5	66	4	20	1	7	12
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	36	1185	106	0	54	1129	5	0	90	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)			11				11			0			0	

SR 520 Optimized PM Peak

ELH

Synchro 8 Report

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Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Link Offset(ft)			0				0			0			0	
Crosswalk Width(ft)			16				16			16			16	
Two way Left Turn Lane														
Headway Factor	1.01	1.01	0.97	0.97	1.01	1.01	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	9	15		9	9	15		9	15		9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	2		1	2	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0	0	
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	1	6		5	5	2			4			8	
Permitted Phases				6				2	4			8		
Detector Phase	1	1	6	6	5	5	2	2	4	4		8	8	
Switch Phase														
Minimum Initial (s)	5.0	5.0	12.0	12.0	5.0	5.0	12.0	12.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.9	11.9	19.4	19.4	11.9	11.9	19.4	19.4	13.2	13.2		13.2	13.2	
Total Split (s)	16.0	16.0	67.0	67.0	19.0	19.0	70.0	70.0	24.0	24.0		24.0	24.0	
Total Split (%)	14.5%	14.5%	60.9%	60.9%	17.3%	17.3%	63.6%	63.6%	21.8%	21.8%		21.8%	21.8%	
Maximum Green (s)	9.1	9.1	59.6	59.6	12.1	12.1	62.6	62.6	17.8	17.8		17.8	17.8	
Yellow Time (s)	4.3	4.3	4.8	4.8	4.3	4.3	4.8	4.8	3.2	3.2		3.2	3.2	
All-Red Time (s)	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)		6.9	7.4	7.4		6.9	7.4	7.4		6.2			6.2	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag						
Lead-Lag Optimize?														
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	C-Max	C-Max	None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)														
Flash Dont Walk (s)														
Pedestrian Calls (#/hr)														
Act Effect Green (s)		7.7	75.8	75.8		8.7	79.5	79.5		11.6			11.6	

SR 520 Optimized PM Peak

ELH

Synchro 8 Report

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Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

														
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.07	0.69	0.69		0.08	0.72	0.72		0.11			0.11	
v/c Ratio		0.29	0.46	0.09		0.38	0.30	0.00		0.56			0.10	
Control Delay		59.1	5.6	0.5		55.1	8.3	0.0		53.5			26.9	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay		59.1	5.6	0.5		55.1	8.3	0.0		53.5			26.9	
LOS		E	A	A		E	A	A		D			C	
Approach Delay			6.7				10.4			53.5			26.9	
Approach LOS			A				B			D			C	
90th %ile Green (s)	10.2	10.2	60.9	60.9	11.9	11.9	62.6	62.6	16.7	16.7		16.7	16.7	
90th %ile Term Code	Max	Max	Coord	Coord	Gap	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
70th %ile Green (s)	8.7	8.7	66.0	66.0	10.0	10.0	67.3	67.3	13.5	13.5		13.5	13.5	
70th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
50th %ile Green (s)	7.6	7.6	69.4	69.4	8.7	8.7	70.5	70.5	11.4	11.4		11.4	11.4	
50th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
30th %ile Green (s)	0.0	0.0	72.8	72.8	7.4	7.4	87.1	87.1	9.3	9.3		9.3	9.3	
30th %ile Term Code	Skip	Skip	Coord	Coord	Gap	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	0.0	102.6	102.6	0.0	0.0	102.6	102.6	0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Skip	Coord	Coord	Skip	Skip	Coord	Coord	Skip	Skip		Skip	Skip	
Stops (vph)		34	329	3		46	379	0		65			9	
Fuel Used(gal)		1	12	1		2	16	0		2			0	
CO Emissions (g/hr)		76	818	38		115	1087	3		115			18	
NOx Emissions (g/hr)		15	159	7		22	212	1		22			3	
VOC Emissions (g/hr)		18	189	9		27	252	1		27			4	
Dilemma Vehicles (#)		0	12	0		0	40	0		0			0	
Queue Length 50th (ft)		27	62	1		37	122	0		54			5	
Queue Length 95th (ft)		m61	245	2		76	182	0		101			22	
Internal Link Dist (ft)			733				334			696			948	
Turn Bay Length (ft)		200				200		250						
Base Capacity (vph)		150	2554	1164		196	3809	1226		241			295	
Starvation Cap Reductn		0	0	0		0	0	0		0			0	
Spillback Cap Reductn		0	0	0		0	0	0		0			0	
Storage Cap Reductn		0	0	0		0	0	0		0			0	
Reduced v/c Ratio		0.24	0.46	0.09		0.28	0.30	0.00		0.37			0.07	

Lanes, Volumes, Timings

3: S. Banana River Dr/Milford Point Dr & SR 520

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 8 (7%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 10.1

Intersection LOS: B

Intersection Capacity Utilization 60.8%

ICU Level of Service B

Analysis Period (min) 15

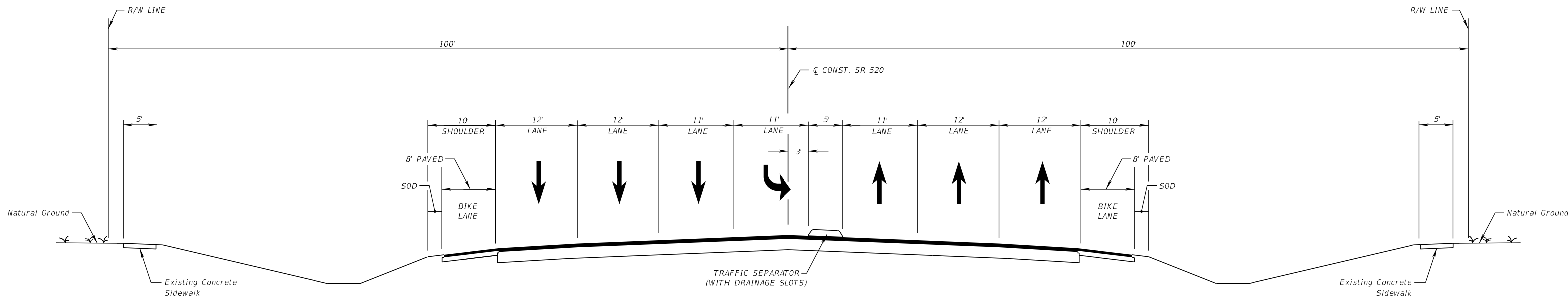
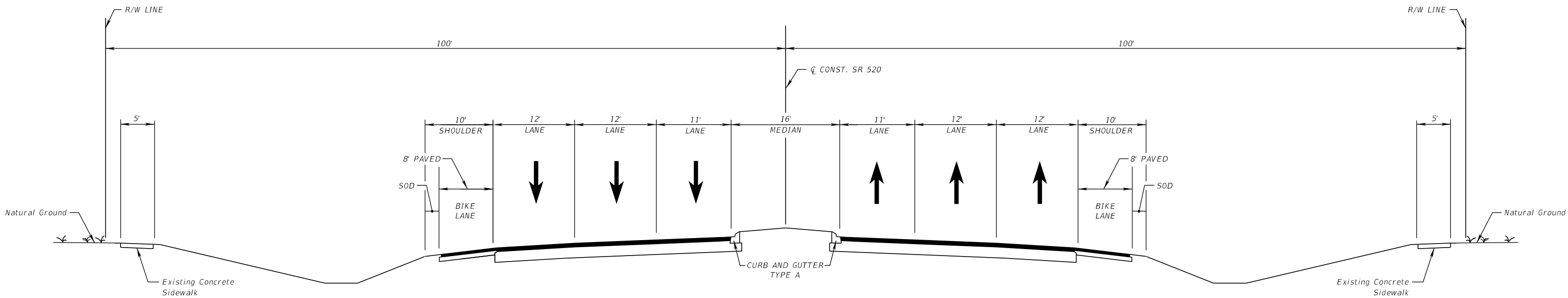
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: S. Banana River Dr/Milford Point Dr & SR 520



Appendix L:

Recommended Typical Section



SR 520
PROPOSED TYPICAL SECTIONS

Appendix M:

Recommendation Diagram

RECOMMENDATION:
INSTALLATION OF A RAISED MEDIAN TO REPLACE EXISTING TWO-WAY LEFT TURN LANE
-INSTALL 16'-WIDE FULL WIDTH MEDIAN
-MILL AND RESURFACE LEFT TURN LANES
-INSTALL TRAFFIC SEPARATORS WITH DRAINAGE SLOTS TO BORDER LEFT TURN LANES
-INSTALL NEW SIGN ASSEMBLIES (R1-1 & FTP-55R-06) AT EXISTING DRIVEWAY CONNECTIONS

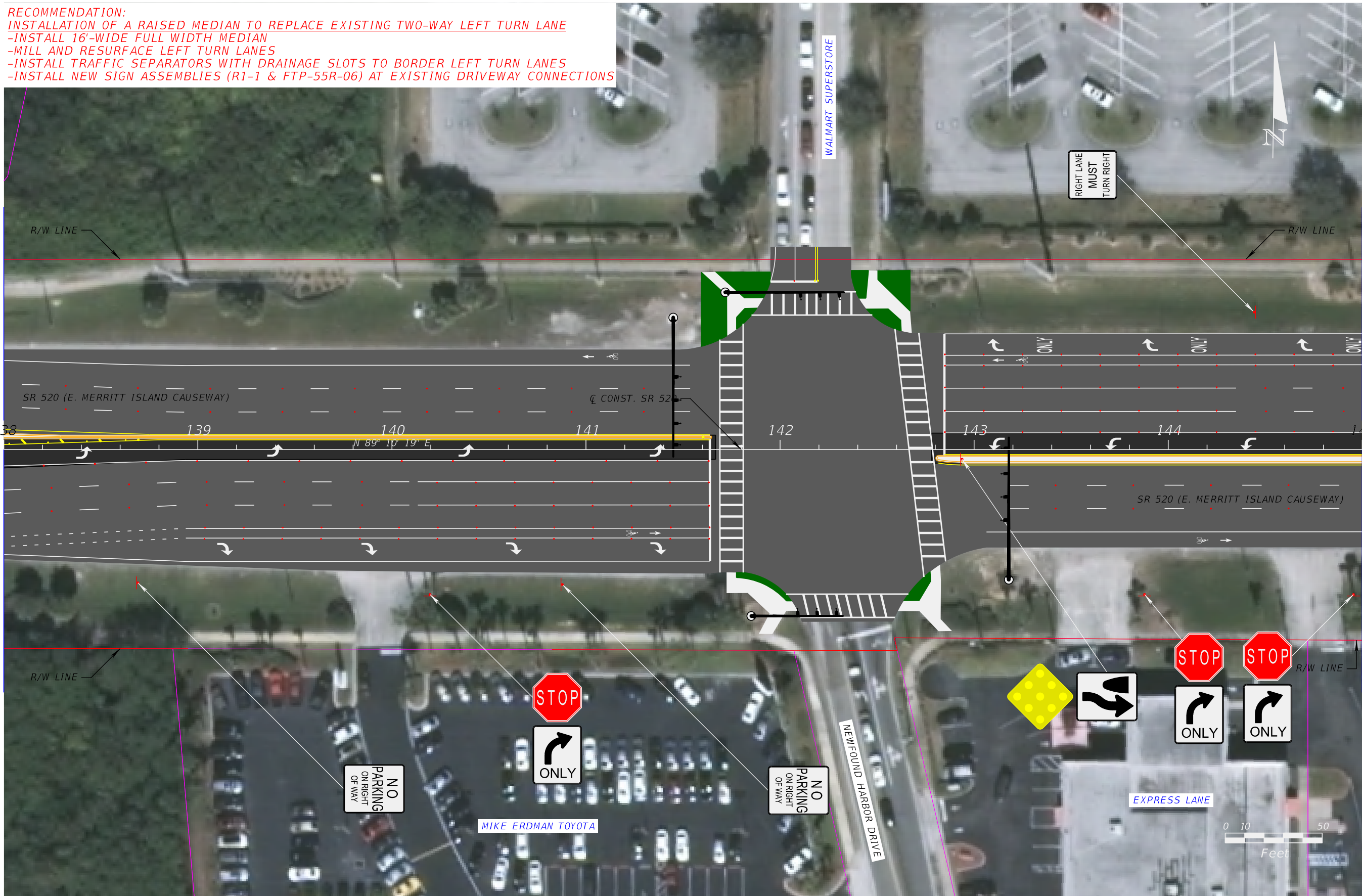


MATCH LINE STA. 138+00.00

REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			RECOMMENDATION DIAGRAM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PRELIMINARY NOT FOR CONSTRUCTION				SR 520	BREVARD	N/A		1
\$DATE\$	\$TIME\$								

RECOMMENDATION:
INSTALLATION OF A RAISED MEDIAN TO REPLACE EXISTING TWO-WAY LEFT TURN LANE
-INSTALL 16'-WIDE FULL WIDTH MEDIAN
-MILL AND RESURFACE LEFT TURN LANES
-INSTALL TRAFFIC SEPARATORS WITH DRAINAGE SLOTS TO BORDER LEFT TURN LANES
-INSTALL NEW SIGN ASSEMBLIES (R1-1 & FTP-55R-06) AT EXISTING DRIVEWAY CONNECTIONS

MATCH LINE STA. 138+00.00



MATCH LINE STA. 145+00.00

REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			RECOMMENDATION DIAGRAM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PRELIMINARY NOT FOR CONSTRUCTION				SR 520	BREVARD	N/A		2

RECOMMENDATION:
INSTALLATION OF A RAISED MEDIAN TO REPLACE EXISTING TWO-WAY LEFT TURN LANE
-INSTALL 16'-WIDE FULL WIDTH MEDIAN
-MILL AND RESURFACE LEFT TURN LANES
-INSTALL TRAFFIC SEPARATORS WITH DRAINAGE SLOTS TO BORDER LEFT TURN LANES
-INSTALL NEW SIGN ASSEMBLIES (R1-1 & FTP-55R-06) AT EXISTING DRIVEWAY CONNECTIONS



REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			RECOMMENDATION DIAGRAM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PRELIMINARY NOT FOR CONSTRUCTION				SR 520	BREVARD	N/A		3

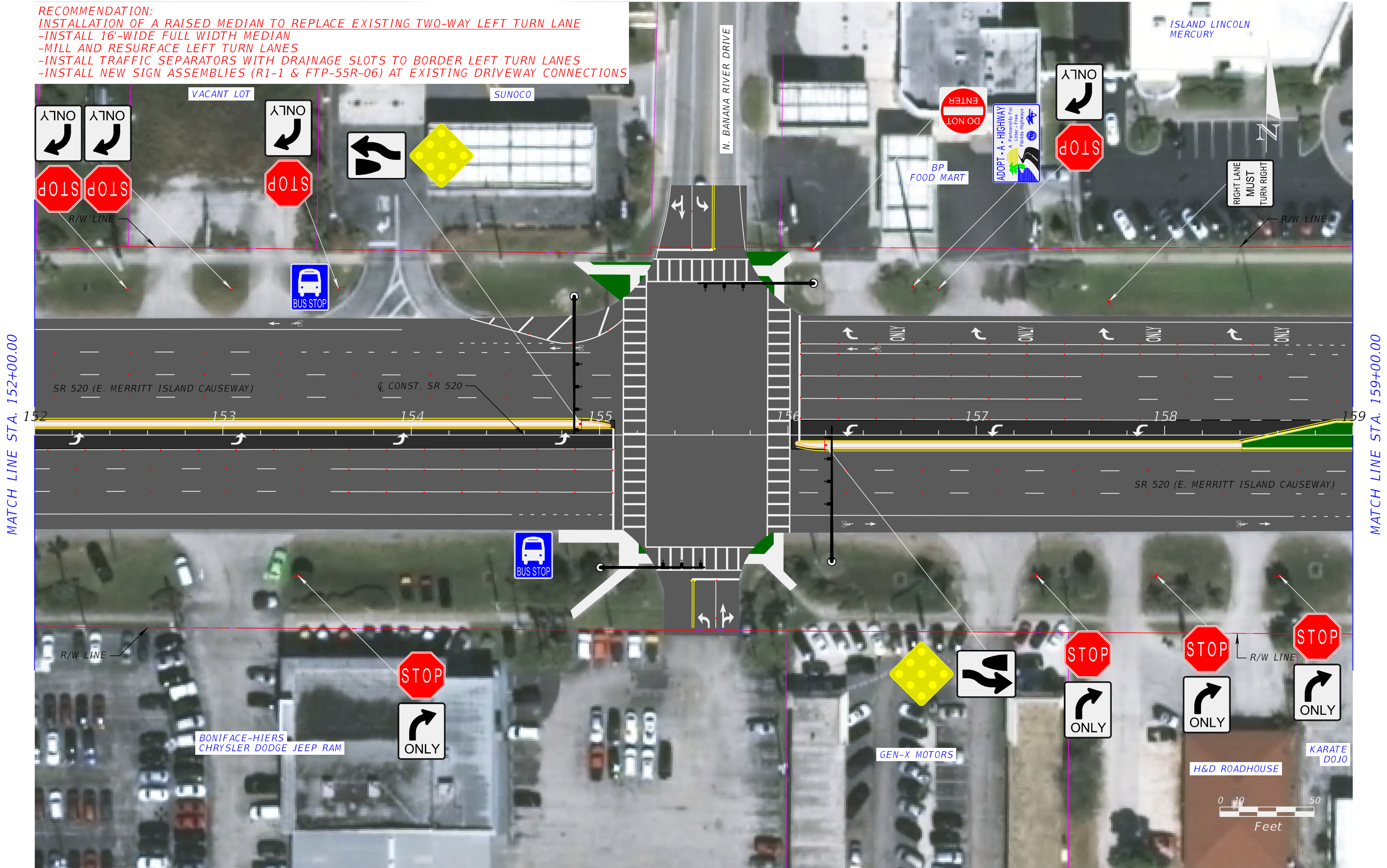
\$USERS

\$DATES

\$TIMES

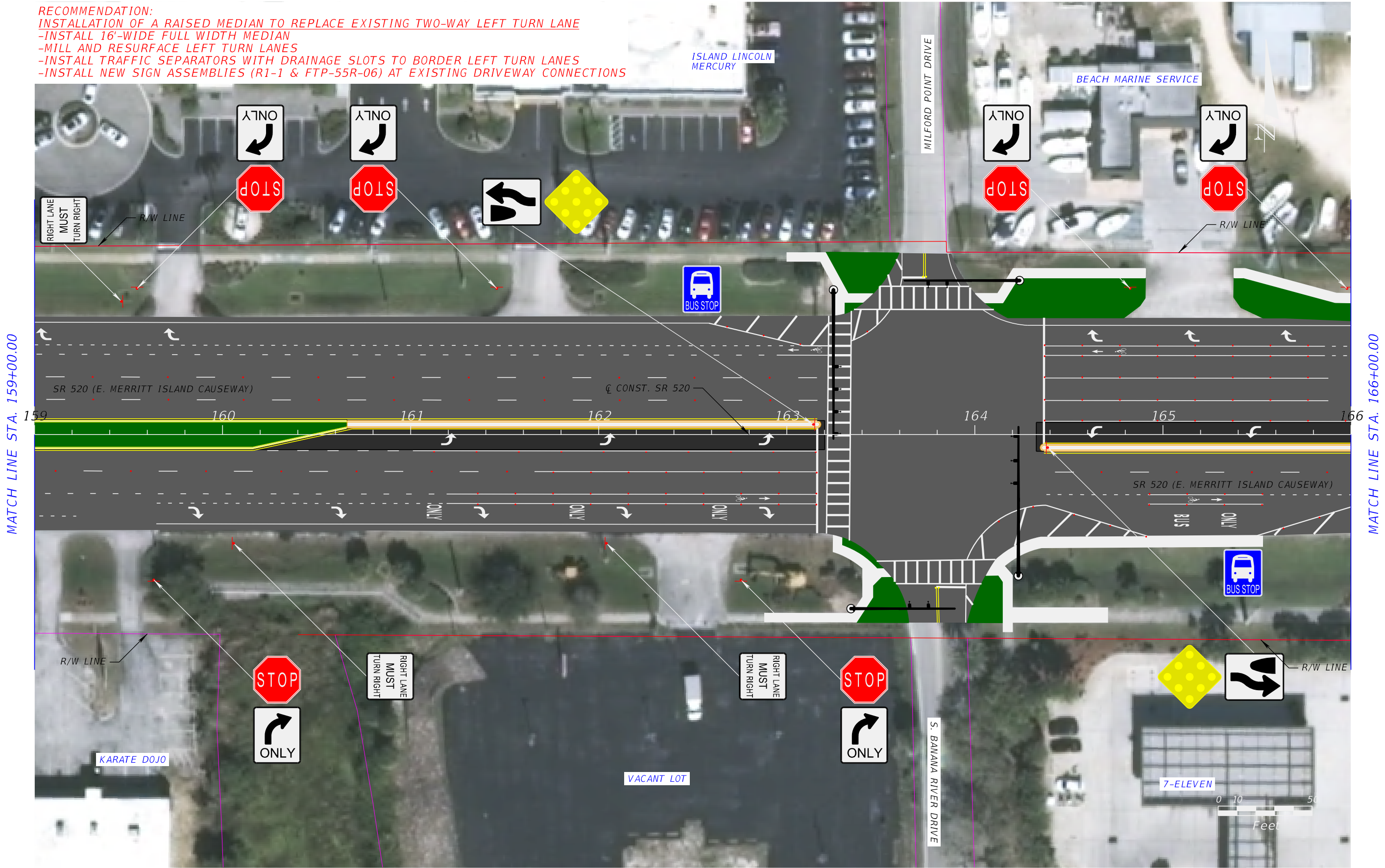
\$FILES

RECOMMENDATION:
INSTALLATION OF A RAISED MEDIAN TO REPLACE EXISTING TWO-WAY LEFT TURN LANE
-INSTALL 16'-WIDE FULL WIDTH MEDIAN
-MILL AND RESURFACE LEFT TURN LANES
-INSTALL TRAFFIC SEPARATORS WITH DRAINAGE SLOTS TO BORDER LEFT TURN LANES
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REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			RECOMMENDATION DIAGRAM	SHEET NO. 4
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PRELIMINARY NOT FOR CONSTRUCTION				SR 520	BREVARD	N/A		

RECOMMENDATION:
INSTALLATION OF A RAISED MEDIAN TO REPLACE EXISTING TWO-WAY LEFT TURN LANE
-INSTALL 16'-WIDE FULL WIDTH MEDIAN
-MILL AND RESURFACE LEFT TURN LANES
-INSTALL TRAFFIC SEPARATORS WITH DRAINAGE SLOTS TO BORDER LEFT TURN LANES
-INSTALL NEW SIGN ASSEMBLIES (R1-1 & FTP-55R-06) AT EXISTING DRIVEWAY CONNECTIONS



REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			RECOMMENDATION DIAGRAM	SHEET NO. 5
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PRELIMINARY NOT FOR CONSTRUCTION				SR 520	BREVARD	N/A		

RECOMMENDATION:
INSTALLATION OF A RAISED MEDIAN TO REPLACE EXISTING TWO-WAY LEFT TURN LANE
-INSTALL 16'-WIDE FULL WIDTH MEDIAN
-MILL AND RESURFACE LEFT TURN LANES
-INSTALL TRAFFIC SEPARATORS WITH DRAINAGE SLOTS TO BORDER LEFT TURN LANES
-INSTALL NEW SIGN ASSEMBLIES (R1-1 & FTP-55R-06) AT EXISTING DRIVEWAY CONNECTIONS

MATCH LINE STA. 166+00.00



REVISIONS				Comprehensive Engineering Services, Inc. 201 S Orange Ave, Suite 1300 Orlando, FL 32801-3442 Certificate of Authorization No. 7862	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			RECOMMENDATION DIAGRAM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PRELIMINARY NOT FOR CONSTRUCTION \$DATE\$ \$TIME\$				SR 520	BREVARD	N/A		6

Appendix N:

Crash Mitigation Information



CMF / CRF Details

CMF ID: 7771

Convert a TWLTL to a raised median

Description:

Prior Condition: Roadway with a TWLTL

Category: Roadway

Study: [Validation and Application of Highway Safety Manual \(Part D\) in Florida, Abdel-Aty et al., 2014](#)

Star Quality Rating: ★★★★★ [\[View score details\]](#)

Crash Modification Factor (CMF)

Value: 0.53

Adjusted Standard Error:

Unadjusted Standard Error: 0.02

Crash Reduction Factor (CRF)

Value: 47 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 2

Applicability

Crash Type: All

Crash Severity: All

Roadway Types: Not specified

Number of Lanes:

Road Division Type: Divided by TWLTL

Speed Limit:

Area Type: Not specified

Traffic Volume:

Time of Day:	All
<i>If countermeasure is intersection-based</i>	
Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	
Development Details	
Date Range of Data Used:	2004 to 2012
Municipality:	
State:	FL
Country:	USA
Type of Methodology Used:	Before/after using comparison group
Sample Size Used:	
Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Mar-08-2016
Comments:	

[\[View the Full Study Details\]](#)

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This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

For more information, contact **Karen Scurry**, FHWA Office of Safety Programs 609-637-4207

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.

Appendix O:
Net Present Value Estimate

Project Name	SR 520 Corridor
Current Year	2016
Project Completion	2020
Project Life	20
Project Category	
Discount Rate	0.04
Project Ends	2039

Year #	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Calendar Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Estimated Cost	473,050																							
Estimated Benefits					189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948	189,948
Calculation																								
Discount Factor	1.000	0.962	0.925	0.889	0.855	0.822	0.790	0.760	0.731	0.703	0.676	0.650	0.625	0.601	0.577	0.555	0.534	0.513	0.494	0.475	0.456	0.439	0.422	0.406
Discounted Cost	-473,050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Discounted Benefits	0	0	0	0	162,368	156,123	150,119	144,345	138,793	133,455	128,322	123,387	118,641	114,078	109,690	105,471	101,415	97,514	93,764	90,157	86,690	83,356	80,150	77,067
NPV	1,821,854																							

Access Management Modifications: Convert existing TWLTL to a raised median