



Civil Engineers • Land Surveyors • Planners • Landscape Architects

January 9, 2018

Ms. Sarah Catala  
SIS/Growth Management Coordinator  
FDOT District One  
10041 Daniels Parkway  
Fort Myers, FL 33913

RE: **Marco Shores / Fiddler's Creek Development of Regional Impact (DRI), Notice of Proposed Change (NOPC) – FDOT Comments and Recommendations**

Dear Ms. Catala,

This correspondence is our formal response to the sufficiency review letter provided to us on September 21, 2017. Responses to staff comments have been provided in **bold**.

FDOT Comment #1

The PM peak hour inbound trips for Commercial land use totals 585 in Figure 1 - "Project Generated Traffic Assignment" compared to 525 in Exhibit 5. Please revise Figure 1 appropriately.

**Response:**

**Figure 1 has been revised per the reviewer's comment, as well as to reflect the total project external trips, which includes trips generated by the residential, golf course and commercial land uses.**

FDOT Comment #2

The two approved full access points along US 41 are currently located at Naples Reserve Boulevard and Sandpiper Drive/Greenway Road. In addition, the NOPC is requesting a right in / right out access and a full median access on US 41 east of Sandpiper Drive/Greenway Road.

The FDOT Access Management standard for US 41 is Access Class 3 from just west of CR 864 (M.P. 15.797) to just west of Joseph Lane (M.P. 23.134). The FDOT Access Management standard for US 41 is Access Class 4 from just west of Joseph Lane (M.P. 23.134) to SR 29 (M.P. 44.151).

- a. FDOT requests that intersection analyses be provided for the two approved full access points (located at Naples Reserve Boulevard and Sandpiper Drive/Greenway Road) and the two new project access points (a right in right / out access and a full median access) along US 41 for the buildout year. Based on the analysis, intersection improvements including queue lengths need to be provided. FDOT notes that the applicant will be

responsible for 100% of the cost of the intersection improvements resulting from the analysis for the four project access points along US 41.

- b. FDOT requests that the applicant provides a table in the NOPC application and the traffic statement showing whether the proposed access points meet the FDOT access management standards.

**Response:**

**The TIS has been revised according to the reviewer's comment. Intersection analyses have been performed and an access spacing compliance summation has been included in the TIS, which has been made a part of the NOPC application. As determined, the two (2) proposed access points are in compliance of FDOT's intersection separation standards.**

FDOT Comment #3

The most recent 2017 Annual Monitoring Report states that for Traffic Condition 9.a.2 of the DRI DO, all required auxiliary turn lanes required at each new intersection created on SR 951 are complete, and that all required auxiliary turn lanes required at each new intersection created on US 41 are 50% complete. FDOT requests that the status of each auxiliary lane improvement at each new intersection created by the project on SR 951 and on US 41, per Traffic Condition 9.a.2, be provided in the NOPC application and the traffic statement.

**Response:**

**The TIS has been revised according to the reviewer's comment. A summation of the completed vs. required site-related improvements has been included in the TIS which has been made a part of the NOPC application.**

Please contact either Richard D. Yovanovich at 435-3535 or me if there are any questions.

Sincerely,



D. Wayne Arnold, AICP

cc: FCC Commercial LLC  
Aubrey J. Ferrao  
Tony DiNardo  
Joseph Livio Parisi, Esq.  
Jazer Challenger  
Richard D. Yovanovich  
Collier County Growth Management  
Daniel L. Trescott, MSP  
GradyMinor File

# TRAFFIC STATEMENT

For

## Fiddler's Creek DRI - NOPC (Collier County, Florida)

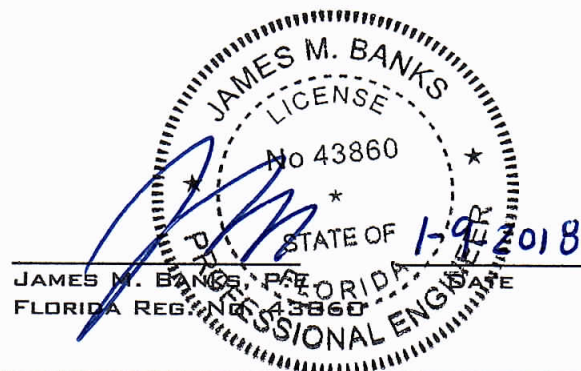
January 12, 2017  
Revised January 9, 2018

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Prepared by:

**JMB** TRANSPORTATION ENGINEERING, INC.  
4711 7TH AVENUE SW  
NAPLES, FLORIDA 34119  
(239) 227-2355  
CERTIFICATE OF AUTHORIZATION NO. 27830

(PROJECT NO. 130813)



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## **Conclusions**

A Notice of Proposed Change (NOPC) has been submitted for the intended purpose of relocating previously approved commercial/retail land uses within the ongoing development of Fiddler's Creek DRI.

Based upon the findings of this report, it was determined that the proposed relocation of previously approved commercial/retail land uses (not constructed to date) within the Fiddler's Creek DRI will not result in any additional site-generated trips or additional impacts to the adjacent road network. More specifically, it is proposed to construct a portion of the project's approved 325,000 square feet of commercial/retail land uses, which were previously planned along Collier Boulevard and U.S. 41 (Tamiami Trail East), at two alternate sites that are contiguous to U.S. 41. The two (2) commercial tracts adjacent to Collier Boulevard will remain, but substantially less commercial will be developed than previously envisioned on those parcels.

The net result of relocating a portion of the commercial land uses will be no additional site-generated trips, but previously estimated turning movements at the project's access points on Collier Boulevard and U.S. 41 will be different than originally forecasted. It is the report's findings that the project's accesses on Collier Boulevard will have notable less ingress/egress traffic movements than previously expected, as will be the case for the project's access that will be aligned with the intersection of Naples Reserve Boulevard & U.S. 41. The project's primary full access on U.S. 41 (Sandpiper Drive), which will be used by both the DRI's residential and commercial land uses, will have an increase in the volume of ingress/egress movements and most likely will warrant a traffic signal as Fiddler's Creek nears build-out. In addition, there is a proposed right-in/out access to the southeast of Sandpiper/U.S. 41 intersection which will also provide access to the newly planned commercial tract. Also proposed is a full access further to the southeast that will serve residents in the southeastern most areas of Fiddler's Creek.

It should be noted that redistribution of a portion of the project's commercial trips from the more heavily traveled Collier Boulevard (south of Tamiami Trail) to the less traveled Tamiami Trail (recently widened to six-lanes) will relieve some pressure on the more critical segment of Collier Boulevard. The relocation of commercial land uses will also better serve other existing and planned residential communities to the immediate north and to the east that currently travel to the more commercially developed areas to the west. Therefore, the effect of relocating a portion of the approved commercial land uses will be a benefit to the public in both convenience and reducing traffic demands on more heavily traveled roadways.

### *Site Access/Intersection Separation*

As part of the DRI's NOPC, the Florida Department of Transportation requested that the distance between the project's points of access and nearest intersecting street/access be summarized and compared to their intersection separation criteria along U.S. 41. Figure 1 depicts the site access/intersection spacing which has been summarized below.

<u>Site Access &amp; U.S. 41 (Class 3)</u>	<u>Closest Intersection</u>	<u>Required Spacing</u>	<u>Existing Spacing</u>
Approved - Access No. 1 (Full Access/Naples Reserve)	Manatee Road (west) (Full - Signal)	2,640'	2,430' +/-
	Imperial Wilderness (east) (Full Access)	2,640'	1,200' +/-
<u>Site Access &amp; U.S. 41 (Class 4)</u> Approved - Access No. 2 (Full Access - Sandpiper/Greenway)	First Baptist Church (west) (Directional Left)	660'	1,910' +/-
	Joseph Lane (west) (Full Access)	660'	2,540' +/-
	Proposed Access No. 3 (east) (right-in/out)	660'	1,200' +/-
Proposed - Access No. 3 (Commercial Right-In/Out Access)	Sandpiper/Greenway (west) (Full Access)	660'	1,200 +/-
	Proposed Access No. 4 (east) (Full Access)	660'	2,165' +/-
Proposed - Access No. 4 (Residential Full Access)	Proposed Access No. 3 (west) (right-in/out)	660'	2,165' +/-
	Auto Village Rd (east) (Full Access)	660'	2,345' +/-

### *Site Access Improvements - U.S. 41*

As part of the DRI's NOPC, the Florida Department of Transportation (FDOT) requested that a reevaluation of needed site-related improvements be performed for those points of access to U.S. 41 based upon the anticipated increase in traffic demands at those locations. The report performed the analysis based upon 2023 project build-out traffic conditions and U.S. 41 having a posted speed limit of 60 MPH. Per FDOT Index No. 301, the required turn lane length (taper + deceleration) is 405'. The vehicle storage determinations were based upon the use of the Highway Capacity Manual's software and the results are summarized below.

<u>Site Access &amp; U.S. 41</u>	<u>Required Improvements</u>	<u>Required Storage</u>	<u>Existing Improvements</u>
Approved - Access No. 1 (Commercial Access/Naples Reserve)	EB Right Ingress Turn Lane (free-flow condition)	None	None
	WB Left Ingress Turn Lane	50'	None
	Two (2) outbound lanes (separate left & thru/right)	50' each	None
Approved - Access No. 2 (Sandpiper/Greenway)	Traffic Signal <i>(if warranted)</i>		None
	Right Ingress Turn Lane	50'	380' in length
	Left Ingress Turn Lane	50'	405' in length
	Two (2) outbound lanes (separate left & thru/right)	50' each	3 Outbound Lanes
Proposed - Access No. 3 (Commercial Right-In/Out Access)	Right Ingress Turn Lane (free-flow condition)	None	405' in length
	One (1) outbound lane	50'	None
Proposed - Access No. 4 (Residential Full Access)	Right Ingress Turn Lane (free-flow condition)	None	None
	One (1) outbound lane	50'	None

### *Site Access Improvements - S.R. 951*

As part of the DRI's NOPC, the Florida Department of Transportation (FDOT) requested that a summation of the "required" vs. "completed" site-related improvements be provided for those points of access on S.R. 951, which has been provided below.

<u>Site Access &amp; S.R. 951</u>	<u>Required Improvements</u>	<u>Existing Improvements</u>
Championship Road	NB Right Ingress Turn Lane	Completed
	SB Left Ingress Turn Lane	Completed
Commercial Tract Access	NB Right Ingress Turn Lane	Completed
	SB Left Ingress Turn Lane	Completed
Fiddler's Creek Pkwy	NB Right Ingress Turn Lane	Completed
	SB Left Ingress Turn Lane	Completed
	Two (2) outbound lanes (separate left & right)	Completed
	Traffic Signal	Completed

### **Scope of Project**

Fiddler's Creek is an approved/vested DRI that is located south of U.S. 41 and east of Collier Boulevard within Collier County, Florida. The project is currently approved for the development of 3,000 single-family dwelling units, 3,000 multi-family units, 90-hole golf course, various types of residential amenities/recreation areas, and 325,000 square feet of commercial/retail land uses (includes up to a 150-room hotel at a equivalency rate of 1 room/215.4 s.f. of commercial/retail land use). A portion of all the land uses have been constructed, but none are built-out.

It is being proposed to relocate/construct 67,000 +/- square feet of commercial/retail land use on the southeast corner of the project's approved access that will be aligned with the existing intersection of Naples Reserve Boulevard & Tamiami Trail. This access will only provide ingress/egress for the proposed commercial land uses. The residents of Fiddler's Creek will be provided access to this commercial site via an internal interconnection. Therefore, residents of Fiddler's Creek will not need to travel on the adjacent arterials in order to access this commercial site.



It is being proposed to relocate/construct 198,000 +/- square feet of commercial/retail land use on the southeast corner of the project's existing full access (i.e., Sandpiper Drive & Tamiami Trail). Sandpiper Drive is aligned with Greenway Road which intersects Tamiami Trail from the north. Sandpiper Drive currently provides ingress/egress to the residents and will also provide full access to the proposed adjacent commercial uses. In addition, a right-in/out access for the commercial site will be constructed to the southeast of Sandpiper Drive. The residents of Fiddler's Creek will be provided access to this commercial site via an internal interconnection. Therefore, residents of Fiddler's Creek will not need to travel on the adjacent arterials in order to access this commercial site.

There is 30,400 +/- square feet of commercial/retail that has been constructed along Collier Boulevard and the remaining balance of commercial/retail land use (i.e., 30,000 square feet) will also be developed along Collier Boulevard.

It is also being proposed to construct a full access further to the southeast of Sandpiper Drive that will serve the community's residents in the southeast most areas of Fiddler's Creek.

The project's previously approved points of access to Collier Boulevard, which serve both residential and commercial land uses, will remain intact.

**Table A**  
**Approved/Vested Land Uses**

Land Use	Number of Units or Gross Square Feet
Single-Family	3,000 d.u.'s
Multi-Family	3,000 d.u.'s
** Commercial/Retail (includes up to 150 room hotel)	325,000 s.f. (hotel = 1 room/215.4 sf)
Golf Course	90 Holes

*\*\* Commercial/retail includes up to 150-room hotel at a equivalency rate of 1 room/215.4 sf of commercial/retail. Refer to table 2 in the appendix for trip generation equivalency computations.*

# Fiddler's Creek

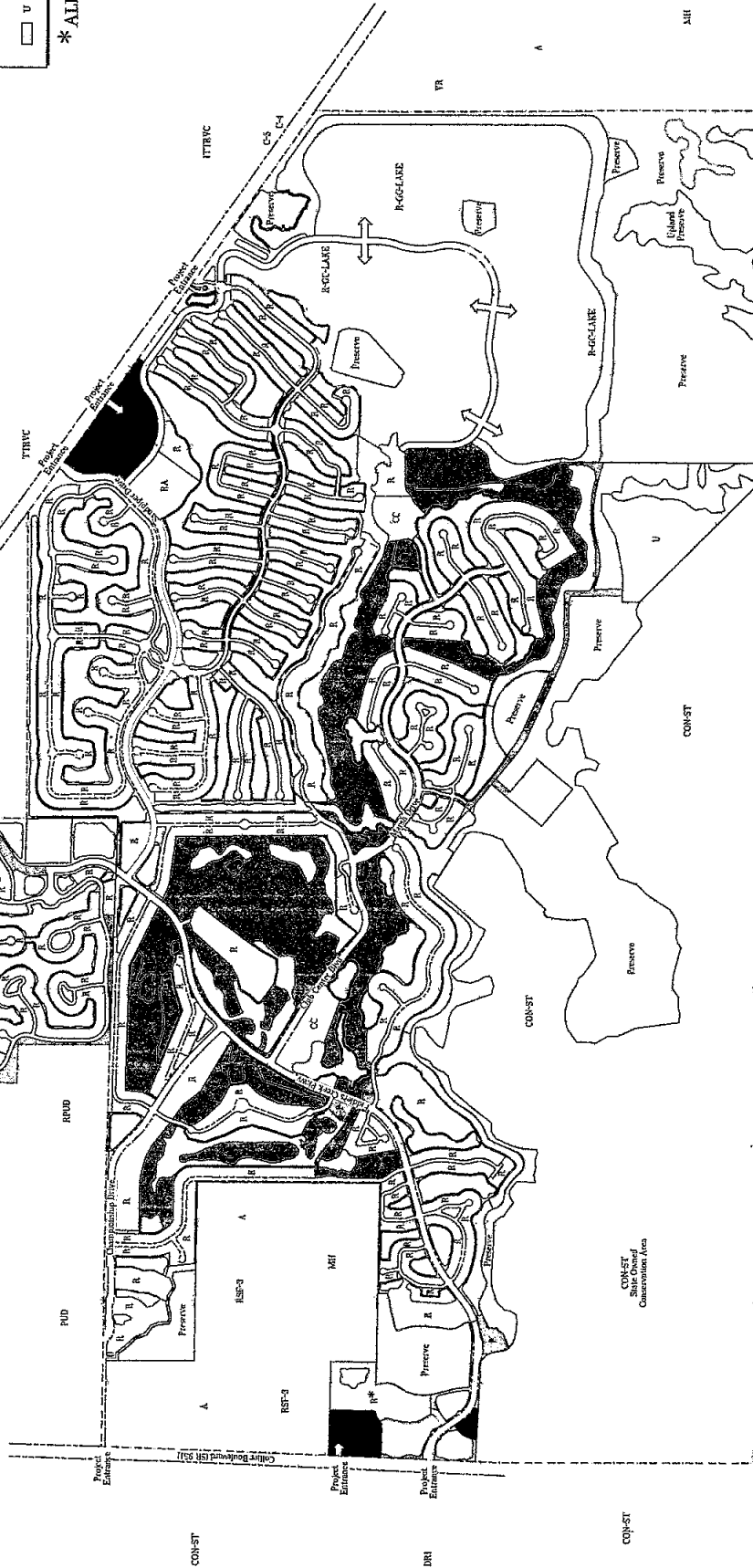
naples, florida



Scale: 1"=800'  
Date: November 2017  
Master Plan  
Exhibit FC-A1

Land Use Key	
[Symbol]	R Residential
[Symbol]	B Institutional/Commercial
[Symbol]	P Park
[Symbol]	GC Golf Course
[Symbol]	RA Recreational Amenities
[Symbol]	CC Community Facility
[Symbol]	CC Road Right-Of-Way
[Symbol]	Preserve
[Symbol]	Lake
[Symbol]	Miscellaneous Structures
[Symbol]	Drainage Structures
[Symbol]	Utility (Siding)

\* ALF Permitted



### **Vested Site-Generated Trips**

Traffic that can be expected to be generated by the project was previously established by David Plummer & Associates (refer to page 6.1 - Exhibit 5) based upon the trip rates provided by ITE's Trip Generation Manual, 6th Edition. At that time, the internal capture and pass-by adjustments were also agreed to by the applicable governmental agencies and the results of those adjustments are depicted in Exhibit 5. (Refer to pages A13 thru A17 for computations performed in determining the project generated trips.) A summary of the vested new site-generated trips is provided in Table B.

**Table B**  
**Vested Site-Generated Trips**  
*(Summation of Exhibit 5 - ITE 6th Edition)*

PM New Peak Hour Two-Way Trips (vph)	PM New Peak Hour Entering Trips (vph)	PM New Peak Hour Exiting Trips (vph)
<b>3,265</b> Enter/Exit	<b>1,985</b> Enter	<b>1,280</b> Exit

### **Hotel Land Use vs. Commercial/Retail Trips Equivalency**

The DRI was approved for a 150-room hotel which is part of the total build-out of commercial land uses. If a hotel is constructed, then it will displace commercial/retail based upon a trips equivalent rate. More specifically, a trip generation equivalency factor shall be used to convert allowable commercial land uses for hotel. Table 1 reflects the equivalency factor of 1 room/215.4 s.f. of commercial land uses. As an example, if a 150 room hotel were to be constructed, then the total amount of approved commercial land uses will be reduced by 32,300 s.f., and if a 90-room hotel were to be constructed then the total amount of approved commercial land uses will be reduced by 19,385 s.f.

**Table C**  
**Trips Equivalency**  
*(Summation of Table 1)*

Hotel	Commercial Retail
<b>1 Room</b>	<b>215.4 s.f.</b>

## EXHIBIT 5

### FIDDLER'S CREEK <sup>(A)</sup>

#### TRIP GENERATION CALCULATION (Current Development Parameters – 6,000 Dwelling Units – and New Trip Generation Calculations <sup>(1)</sup>)

<u>Land Use</u>	<u>Size</u>		<u>PM Peak Hour</u>		<u>Total</u>	<u>24-Hour</u>
			<u>In</u>	<u>Out</u>		
Single-Family	3,000 d.u.	Total	1,472	828	2,300	23,691
		Internal <sup>(2)</sup>	353	199	552	5,686
		External	1,119	629	1,748	18,005
Multifamily	3,000 d.u.	Total	685	338	1,023	11,724
		Internal <sup>(2)</sup>	164	81	245	2,862
		External	521	257	778	8,862
Business/Commercial	325,000 s.f. <sup>(3)</sup>	Total	656	711	1,367	14,545
		Internal <sup>(2)</sup>	131	142	273	2,909
		External	525	569	1,094	11,636
		Pass-By <sup>(4)</sup>	202	202	404	3,025
		Net New	323	367	690	8,611
Golf	90 holes	Total	109	138	247	3,217
		Internal	87	111	198	2,574
		External	22	27	49	643
TOTAL		Total	2,922	2,015	4,937	53,177
		Internal	735	533	1,268	14,031
		External	2,187	1,482	3,669	39,146
		Pass-By	202	202	404	3,025
		Net New	1,985	1,280	3,265	36,121

Footnotes:

- (A) Exhibit taken from the report titled Fiddler's Creek DRI Notice of Proposed Change Traffic Study and dated April 26, 2000.
- (1) ITE, Trip Generation, Sixth Edition.
- (2) Internal orientation based on prior NOPC Traffic Study.
- (3) Considered as commercial.
- (4) Pass-by derived from prior NOPC Traffic Study.



**TABLE 1**  
**TRIP GENERATION EQUIVALENCY COMPUTATIONS**  
Fiddler's Creek DRI - NOPC

Land Use

<u>Code</u>	<u>Land Use Description</u>	<u>Build Schedule</u>
<b>310</b>	<b>Hotel</b>	150 Rooms
<b>820</b>	<b>Shopping Center</b>	325,000 s.f.

Land Use

<u>Code</u>	<u>Trip Period</u>	<u>Trip Generation Equation</u>	<u>Total Trips</u>	<u>Trips Enter/Exit</u>
<b>LUC 310</b>	PM Peak Hour (vph) =	T = 0.70(X) = 49% Enter/ 51% Exit =	<b>105 vph</b>	51 / 54 vph

\*\*\*\*\*

<b>LUC 820</b>	PM Peak Hour (vph) =	Ln(T) = 0.67Ln(X)+3.31 = 48% Enter/ 52% Exit =	1,320 vph	633 / 686 vph
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Adjusted for Internal Capture =	20% Internal	<b>1,056 vph</b>	507 / 549 vph
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**Averaged Trip Rate**

Hotel = 0.70 Trip/Room

Retail/Commercial = (1,056 trips/325 ksf) = 3.25 Trip/1 ksf

**Equivalency Trip Rate**

1 Hotel Room = 215.4 s.f. of Retail/Commercial

*1st Example Computations - 150 Rooms @ 0.70 trips/room = 105 vph*

*& 32,300 s.f. of Retail/Commerical @ 3.25 Trip/ 1ksf = 105 vph*

*Therefore: 32,300 s.f. of Retail/Commercial/150 Rooms = 215.4 s.f./1 room*

*2nd Example Computations - 90 Rooms @ 0.70 trips/room = 63 vph*

*& 19,385 s.f. of Retail/Commerical @ 3.25 Trip/ 1ksf = 105 vph*

*Therefore: 19,385 s.f. of Retail/Commercial/90 Rooms = 215.4 s.f./1 room*

\*\*\*\*\*

*For informational purposes, this report includes trips estimated for the DRI based upon the ITE's Trip Generation Manual, 9th Edition (See Table 2). The total estimated trips were adjusted for pass-by and internal capture using the same rates previously established for the DRI. The results are summarized below which reflect that the trips estimated based upon the 9th Edition are slightly fewer than the results based upon the 6th Edition. The more conservative values (6th Edition) will be used for the purpose of establishing needed site-related improvements.*

*Table D  
Site-Generated Trips  
(ITE 9th Edition - see Table 1)*

<i>PM New Peak Hour Two-Way Trips (vph)</i>	<i>PM New Peak Hour Entering Trips (vph)</i>	<i>PM New Peak Hour Exiting Trips (vph)</i>
<i>3,152 Enter/Exit</i>	<i>1,908 Enter</i>	<i>1,244 Exit</i>

**TABLE 2**  
**TRIP GENERATION COMPUTATIONS**  
**Fiddler's Creek DRI - NOPC**

Land Use

<u>Code</u>	<u>Land Use Description</u>	<u>Build Schedule</u>
<b>210</b>	<b>Single-Family Detached Housing</b>	3,000 Units
<b>230</b>	<b>Residential Condo/Townhouse</b>	3,000 Units
<b>820</b>	<b>Shopping Center</b>	325,000 s.f.
	<b>Golf Course</b>	90 Holes

Land Use

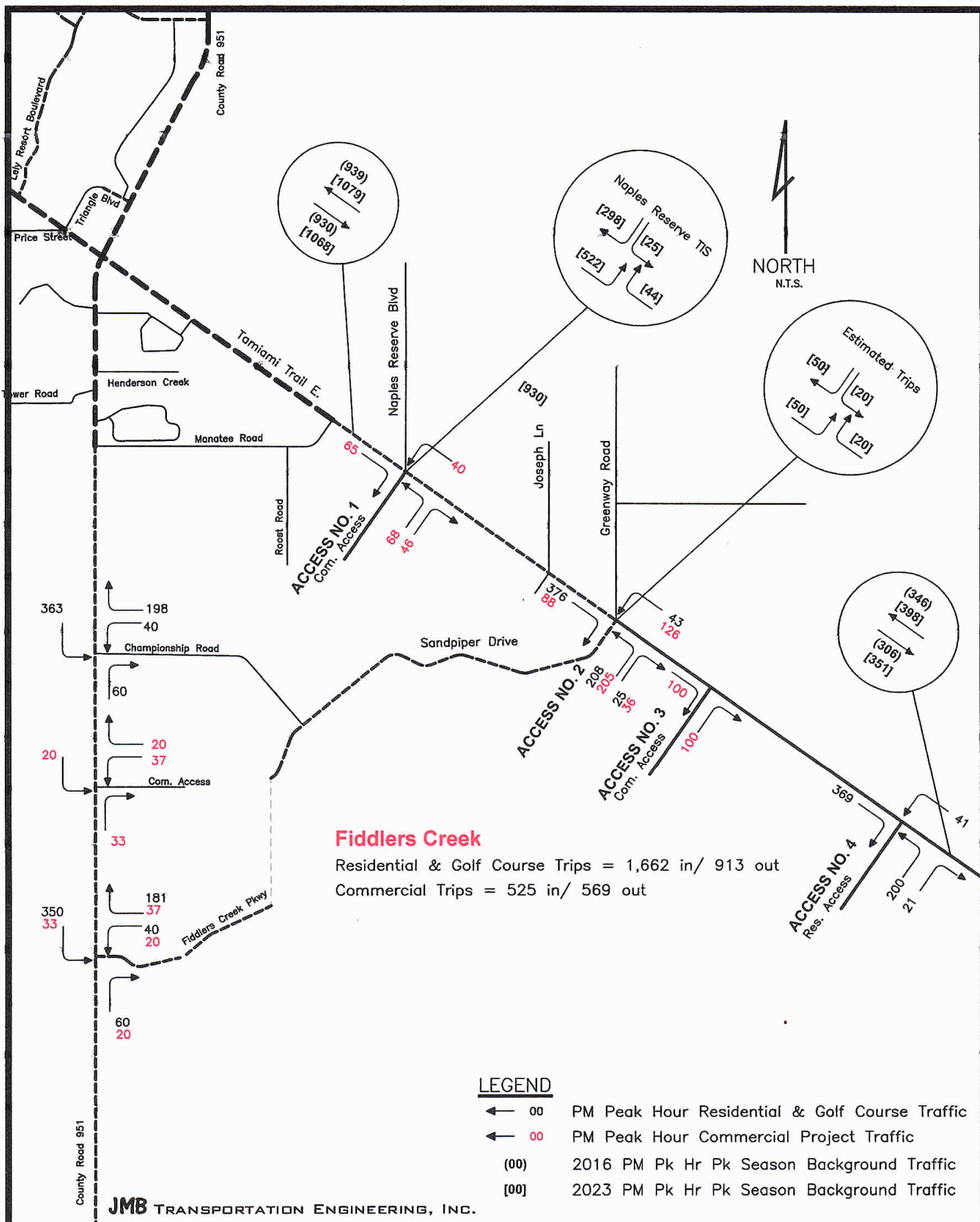
<u>Code</u>	<u>Trip Period</u>	<u>Trip Generation Equation</u>	<u>Total Trips</u>	<u>Trips Enter/Exit</u>
<b>LUC 210</b>	PM Peak Hour (vph) =	$\ln(T) = 0.90\ln(X) + 0.51 =$ 63% Enter/ 37% Exit =	2,243 vph	1413 / 830 vph
	Adjusted for Internal Capture =	24% Internal	<b>1,705 vph</b>	1,074 / 631 vph
*****				
<b>LUC 230</b>	PM Peak Hour (vph) =	$\ln(T) = 0.82\ln(X) + 0.32 =$ 67% Enter/ 33% Exit =	978 vph	655 / 323 vph
	Adjusted for Internal Capture =	24% Internal	<b>743 vph</b>	498 / 245 vph
*****				
<b>LUC 820</b>	PM Peak Hour (vph) =	$\ln(T) = 0.67\ln(X) + 3.31 =$ 48% Enter/ 52% Exit =	1,320 vph	633 / 686 vph
	Adjusted for Internal Capture =	20% Internal	<b>1,056 vph</b>	507 / 549 vph
	Adjusted for Pass-by =	38% Internal	<b>655 vph</b>	314 / 340 vph
*****				
<b>Golf</b>	PM Peak Hour (vph) =		247 vph	109 / 138 vph
	Adjusted for Internal Capture =	80% Internal	<b>49 vph</b>	22 / 28 vph
*****				
*****				
<b>Total External Trips</b>		PM Peak Hour (vph) =	<b>3,553 vph</b>	<b>2,101 / 1,453 vph</b>
<b>Total New External Trips</b>		PM Peak Hour (vph) =	<b>3,152 vph</b>	<b>1,908 / 1,244 vph</b>

### **Reassignment of Project Traffic**

As previously mentioned, there will be no change in the type, number or size of the previously approved/vested land uses within Fiddlers Creek DRI. Therefore, there will be no increase in site-generated trips and no increase in off-site transportation impacts. However, the relocation of a portion of the commercial land uses from the Collier Boulevard corridor over to Tamiami Trail will result in a change in the previously estimated ingress/egress movements at the project's accesses on both of the adjacent arterials. Figure 1 provides a detail of the expected site access turning movement volumes at build-out of Fiddler's Creek as a result of relocating a portion of the commercial land uses and the proposed access modifications.

It should be noted that redistribution of a portion of the project's commercial trips from the more heavily traveled Collier Boulevard (south of Tamiami Trail) to the less traveled Tamiami Trail (recently widened to six lanes) will relieve some pressure on the more critical segment of Collier Boulevard. The relocation of commercial land uses will also better serve other existing and planned residential communities to the immediate north and to the east that currently travel to the more commercially developed areas to the west. Therefore, the net effect of relocating a portion of the approved commercial land uses will be a benefit to the public in both convenience and reducing traffic demands on more heavily traveled roadways.





# Fiddler's Creek

Sept 27, 2017

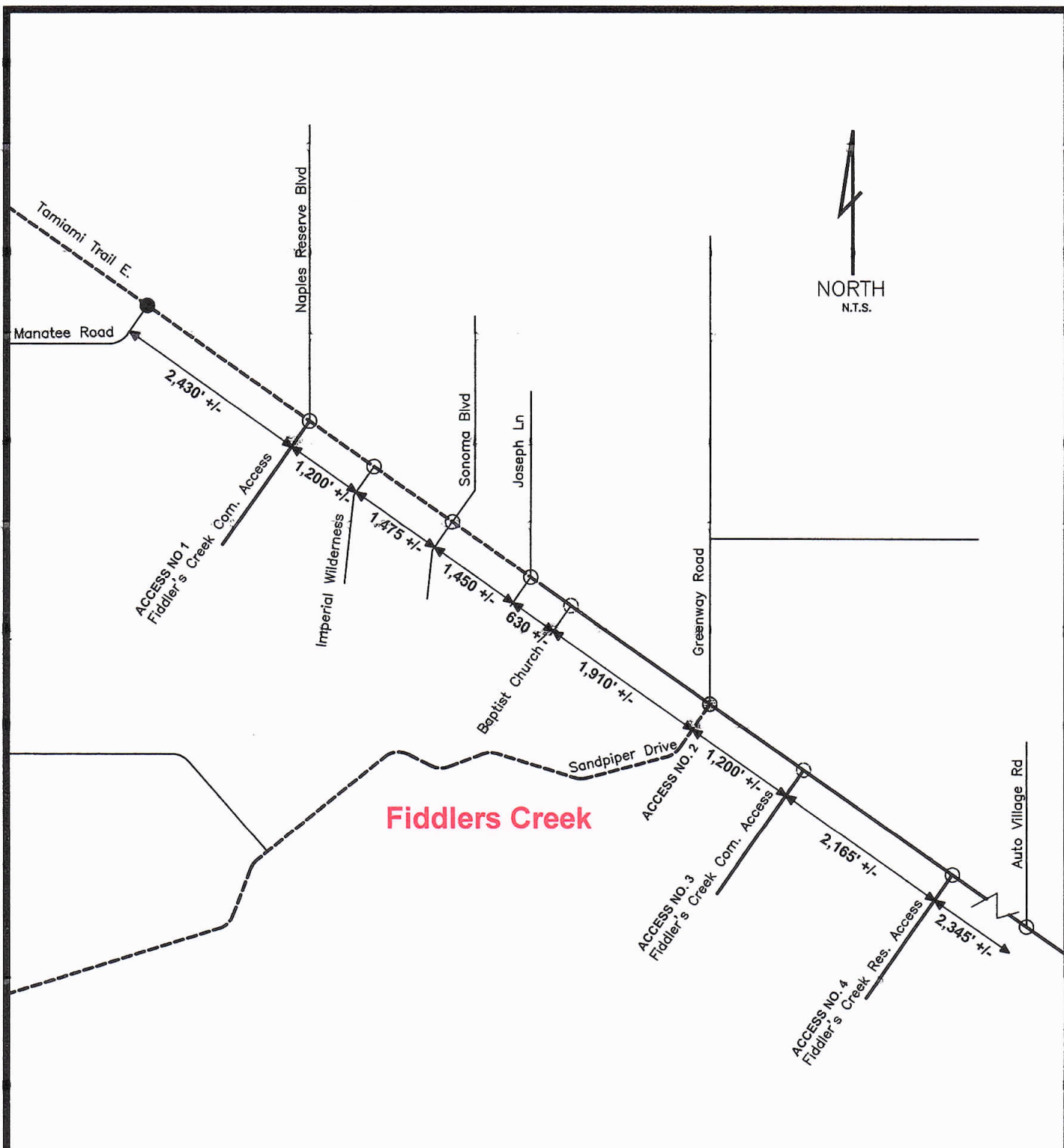
## Project Traffic Assignment & 2023 Background Traffic Volumes

FIGURE 1

### Site Access/Intersection Separation

As part of the DRI's NOPC, the Florida Department of Transportation requested that the distance between the project's points of access and nearest intersecting street/access be summarized and compared to their intersection separation criteria along U.S. 41. Figure 2 depicts the site access spacing which has been summarized below.

<u>Site Access &amp; U.S. 41 (Class 3)</u>	<u>Closest Intersection</u>	<u>Required Spacing</u>	<u>Existing Spacing</u>
Approved - Access No. 1 (Full Access/Naples Reserve)	Manatee Road (west) (Full - Signal)	2,640'	2,430' +/-
	Imperial Wilderness (east) (Full Access)	2,640'	1,200' +/-
<u>Site Access &amp; U.S. 41 (Class 4)</u>			
Approved - Access No. 2 (Full Access - Sandpiper/Greenway)	First Baptist Church (west) (Directional Left)	660'	1,910' +/-
	Joseph Lane (west) (Full Access)	660'	2,540' +/-
	Proposed Access No. 3 (east) (right-in/out)	660'	1,200' +/-
Proposed - Access No. 3 (Commercial Right-In/Out Access)	Sandpiper/Greenway (west) (Full Access)	660'	1,200 +/-
	Proposed Access No. 4 (east) (Full Access)	660'	2,165' +/-
Proposed - Access No. 4 (Residential Full Access)	Proposed Access No. 3 (west) (right-in/out)	660'	2,165' +/-
	Auto Village Rd (east) (Full Access)	660'	2,345' +/-



#### LEGEND

- Full Access w/ Traffic Signal
- ⊗ Full Access (Potential Future Traffic Signal)
- Full Access
- Right in/out or Directional Median Opening

JMB TRANSPORTATION ENGINEERING, INC.

# Fiddler's Creek

Sept 27, 2017

## U.S. 41 - Access Spacing

## FIGURE 2

### Site Access Improvements - U.S. 41

As part of the DRI's NOPC, the Florida Department of Transportation (FDOT) requested that a reevaluation of needed site-related improvements be performed for those points of access on U.S. 41 based upon the anticipated increase in traffic demands at those locations. The report performed the analysis based upon 2023 project build-out traffic conditions. The 2023 background traffic were estimated based upon traffic counts obtained within proximity of the site and adjusted for peak season conditions. An annual growth rate of 2% was used to forecast future traffic demands.

U.S. 41 has a posted speed limit of 60 MPH and pursuant to FDOT Index No. 301, the required turn lane length (taper + deceleration) is 405'. The vehicle storage determinations for each of the access points were based upon the use of the Highway Capacity Manual's software (refer to pages A1 thru A3 in the appendix) and the results are summarized below.

<u>Site Access &amp; U.S. 41</u>	<u>Required Improvements</u>	<u>Required Storage</u>	<u>Existing Improvements</u>
Approved - Access No. 1 (Commercial Access/Naples Reserve)	EB Right Ingress Turn Lane (free-flow condition)	None	None
	WB Left Ingress Turn Lane	50'	None
	Two (2) outbound lanes (separate left & thru/right)	50' each	None
Approved - Access No. 2 (Sandpiper/Greenway)	Traffic Signal ( <i>if warranted</i> )		None
	Right Ingress Turn Lane	50'	380' in length
	Left Ingress Turn Lane	50'	405' in length
	Two (2) outbound lanes (separate left & thru/right)	50' each	3 Outbound Lanes
Proposed - Access No. 3 (Commercial Right-In/Out Access)	Right Ingress Turn Lane (free-flow condition)	None	405' in length
	One (1) outbound lane	50'	None
Proposed - Access No. 4 (Residential Full Access)	Right Ingress Turn Lane (free-flow condition)	None	None
	One (1) outbound lane	50'	None

### Site Access Improvements - S.R. 951

As part of the DRI's NOPC, the Florida Department of Transportation (FDOT) requested that a summation of the "required" vs. "completed" site-related improvements be provided for those points of access on S.R. 951, which has been provided below.

<u>Site Access &amp; S.R. 951</u>	<u>Required Improvements</u>	<u>Existing Improvements</u>
Championship Road	NB Right Ingress Turn Lane	Completed
	SB Left Ingress Turn Lane	Completed
Commercial Tract Access	NB Right Ingress Turn Lane	Completed
	SB Left Ingress Turn Lane	Completed
Fiddler's Creek Pkwy	NB Right Ingress Turn Lane	Completed
	SB Left Ingress Turn Lane	Completed
	Two (2) outbound lanes (separate left & right)	Completed
	Traffic Signal	Completed

## **APPENDIX**

### **Support Documents**

## **APPENDIX**

### **Support Documents**

# TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information	
Analyst	JMB Transportation		Intersection	Access No. 1
Agency/Co.			Jurisdiction	
Date Performed	10/11/2017		Analysis Year	2023 Project Build-Out
Analysis Time Period	PM Peak hour			

Project Description				
East/West Street: U.S. 41			North/South Street: Site Access/Naples Reserve	
Intersection Orientation: East-West			Study Period (hrs): 0.25	

## Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	522	850	65	40	900	44
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	549	894	68	42	947	46
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Raised curb					
RT Channelized			0			0
Lanes	1	2	1	1	2	1
Configuration	L	T	R	L	T	R
Upstream Signal		0			0	
Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	68	1	46	25	1	44
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	71	1	48	26	1	46
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	1	1	0	1	1	0
Configuration	L		TR	L		TR

## Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	L		TR	L		TR
v (veh/h)	549	42	71		49	26		47
C (m) (veh/h)	704	724			0			0
v/c	0.78	0.06						
95% queue length	7.63	0.18						
Control Delay (s/veh)	25.8	10.3						
LOS	D	B			F			F
Approach Delay (s/veh)	--	--						
Approach LOS	--	--						



# TWO-WAY STOP CONTROL SUMMARY

General Information				Site Information			
Analyst	JMB Transportation			Intersection	Access No. 2		
Agency/Co.				Jurisdiction			
Date Performed	10/11/2017			Analysis Year	2023 Project Build-Out		
Analysis Time Period	PM Peak hour						
Project Description							
East/West Street: U.S. 41				North/South Street: Sandpiper/Greenway			
Intersection Orientation: East-West				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	50	510	457	167	650	20	
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR (veh/h)	52	536	481	175	684	21	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Raised curb						
RT Channelized			0			0	
Lanes	1	2	1	1	2	1	
Configuration	L	T	R	L	T	R	
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	405	5	57	20		50	
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR (veh/h)	426	5	60	21	1	52	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	1	1	0	1	1	0	
Configuration	L		TR	L		TR	
Delay, Queue Length, and Level of Service							
Approach	Eastbound	Westbound	Northbound		Southbound		
Movement	1	4	7	8	9	10	11
Lane Configuration	L	L	L		TR	L	TR
v (veh/h)	52	175	426		65	21	53
C (m) (veh/h)	902	690	166		572	140	606
v/c	0.06	0.25	2.57		0.11	0.15	0.09
95% queue length	0.18	1.00	36.84		0.38	0.51	0.29
Control Delay (s/veh)	9.2	12.0	765.4		12.1	35.2	11.5
LOS	A	B	F		B	E	B
Approach Delay (s/veh)	--	--	665.7		18.2		
Approach LOS	--	--	F		C		

# TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information	
Analyst	JMB Transportation		Intersection	Access No. 4
Agency/Co.			Jurisdiction	
Date Performed	10/11/2017		Analysis Year	2023 Project Build-Out
Analysis Time Period	PM Peak hour			

## Project Description

East/West Street: U.S. 41	North/South Street: Site Access No. 4
Intersection Orientation: East-West	Study Period (hrs): 0.25

## Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		351	369	41	398	
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	369	388	43	418	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Raised curb					
RT Channelized			0			0
Lanes	0	1	1	1	1	0
Configuration		T	R	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	200		46			
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	210	0	48	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	1	0	1	0	0	0
Configuration	L		R			

## Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L	L		R			
v (veh/h)		43	210		48			
C (m) (veh/h)		863	428		681			
v/c		0.05	0.49		0.07			
95% queue length		0.16	2.64		0.23			
Control Delay (s/veh)		9.4	21.2		10.7			
LOS		A	C		B			
Approach Delay (s/veh)	--	--	19.3					
Approach LOS	--	--	C					

# INTERSECTION TURNING MOVEMENT COUNTS

Intersection: Manatee Road & U.S. 41  
Date of Count: 2/9/2016 Tuesday

	Eastbound			Westbound			Northbound			Southbound			Total All
AM Period	L	T	R	L	T	R	L	T	R	L	T	R	Approch's
7:00 - 7:15	0	82	18	18	95	0	19	0	14	0	0	0	246
7:15 - 7:30	0	105	27	31	112	0	26	0	18	0	0	0	319
7:30 - 7:45	0	148	32	40	162	0	18	0	12	0	0	0	412
7:45 - 8:00	0	155	47	40	187	0	27	0	11	0	0	0	467
8:00 - 8:15	0	167	52	46	175	0	35	0	25	0	0	0	500
8:15 - 8:30	0	143	44	39	191	0	34	0	17	0	0	0	468
8:30 - 8:45	0	162	36	23	218	0	21	0	11	0	0	0	471
8:45 - 9:00	0	142	28	28	209	0	27	0	21	0	0	0	455
AM Totals	0	1104	284	265	1349	0	207	0	129	0	0	0	3338
Approach %	0.0%	79.5%	20.5%	16.4%	83.6%	0.0%	61.6%	0.0%	38.4%				
% / Lane	0.0%	33.1%	8.5%	7.9%	40.4%	0.0%	6.2%	0.0%	3.9%				
% / Inter.		41.6%			48.4%			10.1%					

	Eastbound			Westbound			Northbound			Southbound			
PM Period	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 4:15	0	133	19	13	198	0	12	0	12	0	0	0	387
4:15 - 4:30	0	179	21	11	222	0	15	0	19	0	0	0	467
4:30 - 4:45	0	196	17	14	219	0	23	0	21	0	0	0	490
4:45 - 5:00	0	206	14	14	213	0	22	0	22	0	0	0	491
5:00 - 5:15	0	209	12	12	208	0	19	0	14	0	0	0	474
5:15 - 5:30	0	229	16	15	231	0	16	0	16	0	0	0	523
5:30 - 5:45	0	221	14	13	233	0	14	0	13	0	0	0	508
5:45 - 6:00	0	185	18	9	187	0	18	0	15	0	0	0	432
PM Totals	0	1558	131	101	1711	0	139	0	132	0	0	0	3772
Approach %	0.0%	92.2%	7.8%	5.6%	94.4%	0.0%	51.3%	0.0%	48.7%				
% / Lane	0.0%	41.3%	3.5%	2.7%	45.4%	0.0%	3.7%	0.0%	3.5%				
% / Inter.		44.8%			48.0%			7.2%					

## PEAK HOUR TURNING MOVEMENT VOLUMES

	Eastbound			Westbound			Northbound			Southbound			
AM Period	L	T	R	L	T	R	L	T	R	L	T	R	
7:45 - 8:45	0	613	175	165	715	0	114	0	65				1847
Approach %	0.0%	77.8%	22.2%	18.8%	81.3%	0.0%	63.7%	0.0%	36.3%				
PM Period	L	T	R	L	T	R	L	T	R	L	T	R	
4:45 - 5:45	0	865	56	54	885	0	71	0	65				1996
Approach %	0.0%	93.9%	6.1%	5.8%	94.2%	0.0%	52.2%	0.0%	47.8%				

AM Peak Hour Factor = 0.92  
PM Peak Hour Factor = 0.95

Intersection: Manatee Road & U.S. 41

Date of Count: 2/9/2016

## 2016 PEAK HOUR TURNING MOVEMENT VOLUMES

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
<u>AM Period</u>	0	613	175	165	715	0	114	0	65	0	0	0
<u>PM Period</u>	0	865	56	54	885	0	71	0	65	0	0	0

## 2016 PEAK SEASON PEAK HOUR TURNING MOVEMENTS

Seasonal Adj Seasonal Adjustment Factor = 1

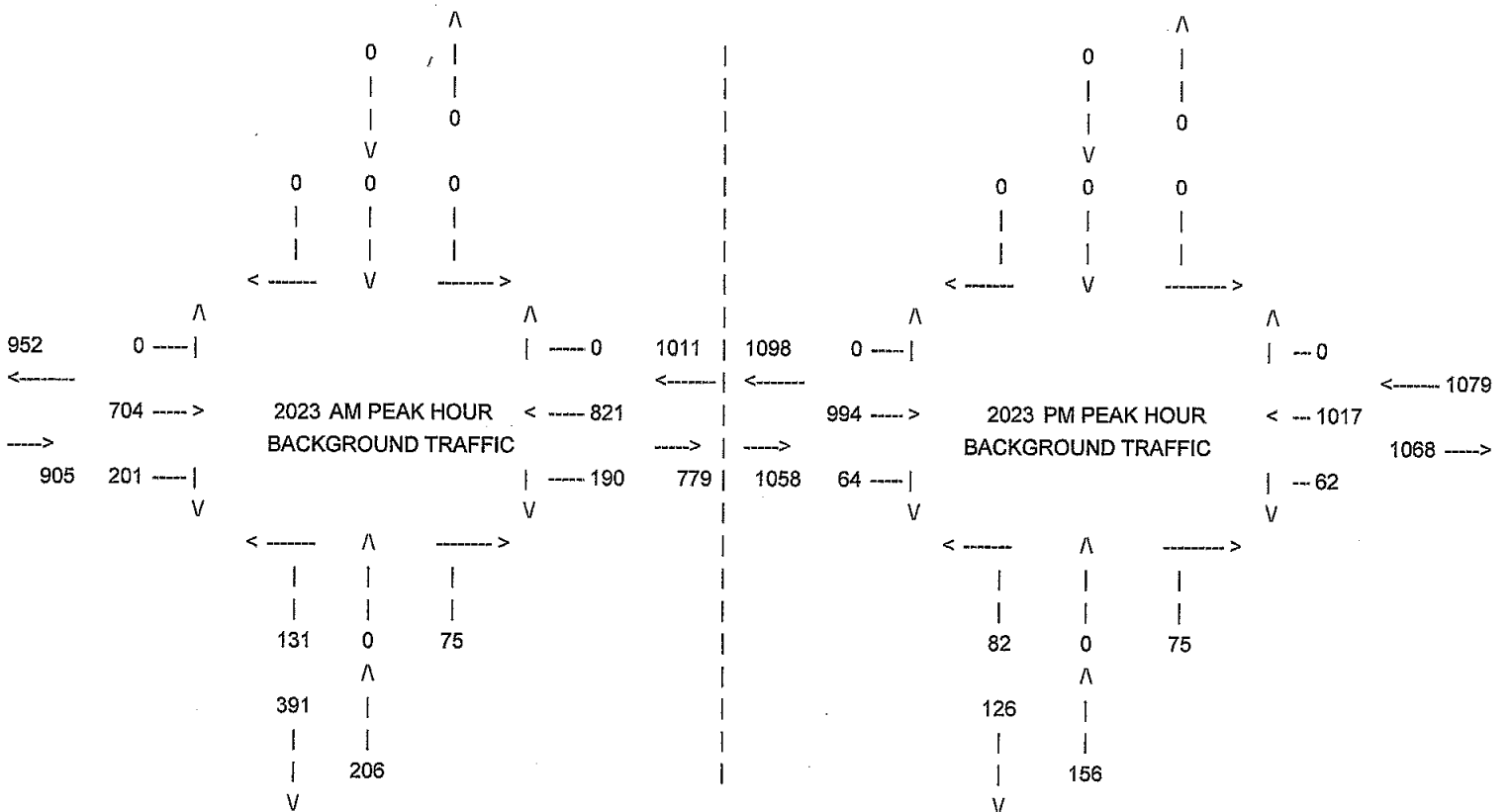
	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
<u>AM Period</u>	0	613	175	165	715	0	114	0	65	0	0	0
<u>PM Period</u>	0	865	56	54	885	0	71	0	65	0	0	0

## 2023 PEAK SEASON PEAK HOUR TURNING MOVEMENTS

Annual Growth Rate = 2.0%

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
<u>AM Period</u>	0	704	201	190	821	0	131	0	75	0	0	0
<u>PM Period</u>	0	994	64	62	1017	0	82	0	75	0	0	0

## Intersection: Manatee Road &amp; U.S. 41



# INTERSECTION TURNING MOVEMENT COUNTS

Intersection: Riggs Road @ Tamiami Trail East

Date of Count: 05/13/2014 Tuesday

	Eastbound			Westbound			Northbound			Southbound			
PM Period	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 4:15	3	33	0	0	60	0	0	0	0	0	0	3	99
4:15 - 4:30	2	35	0	0	57	1	0	0	0	1	0	2	98
4:30 - 4:45	4	49	0	0	61	2	0	0	0	0	0	2	118
4:45 - 5:00	3	55	0	0	66	1	0	0	0	0	0	0	125
5:00 - 5:15	3	54	0	0	60	0	0	0	0	1	0	3	121
5:15 - 5:30	1	48	0	0	55	0	0	0	0	0	0	2	106
5:30 - 5:45	5	57	0	0	70	1	0	0	0	0	0	0	133
5:45 - 6:00	2	53	0	0	66	0	0	0	0	0	0	1	122
PM Totals	23	384	0	0	495	5	0	0	0	2	0	13	922
Approach %	5.7%	94.3%	0.0%	0.0%	99.0%	1.0%				13.3%	0.0%	86.7%	
% / Lane	2.5%	41.6%	0.0%	0.0%	53.7%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	1.4%	
% / Inter.		44.1%			54.2%			0.0%			1.6%		

## PEAK HOUR TURNING MOVEMENT VOLUMES

	Eastbound			Westbound			Northbound			Southbound			
PM Period	L	T	R	L	T	R	L	T	R	L	T	R	
4:45 - 5:45	12	214	0	0	251	2	0	0	0	1	0	5	485

PM Peak Hour Factor = 0.91

## 2014 PEAK SEASON PEAK HOUR TURNING MOVEMENTS

Seasonal Adjustment Factor = 1.3

	Eastbound			Westbound			Northbound			Southbound			
PM Period	L	T	R	L	T	R	L	T	R	L	T	R	
	16	278	0	0	326	3	0	0	0	1	0	7	

Intersection: Riggs Road @ Tamiami Trail East  
 Date of Count: 05/13/2014

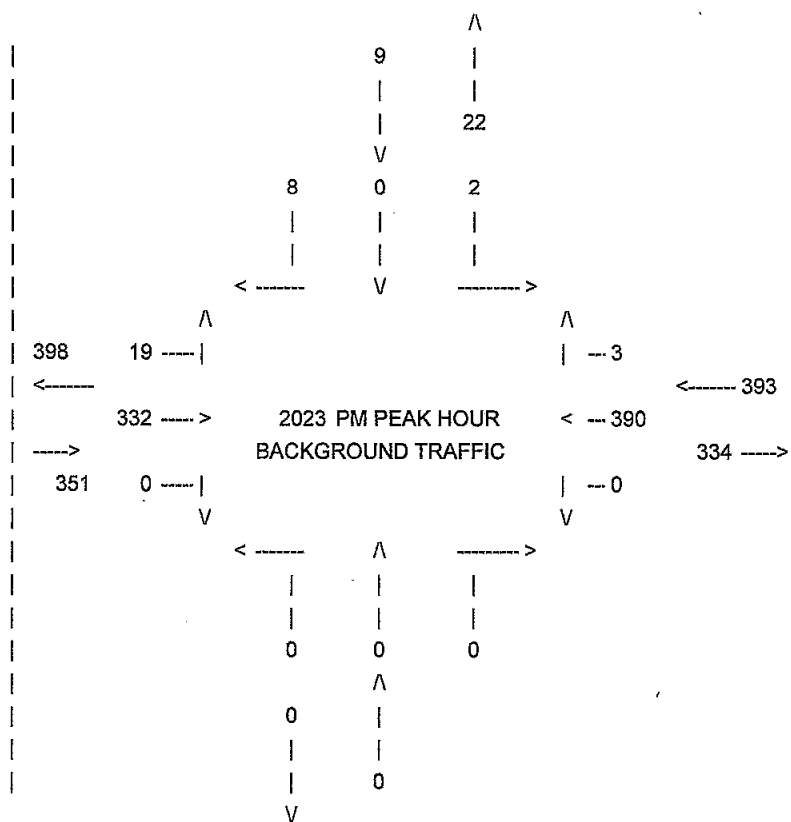
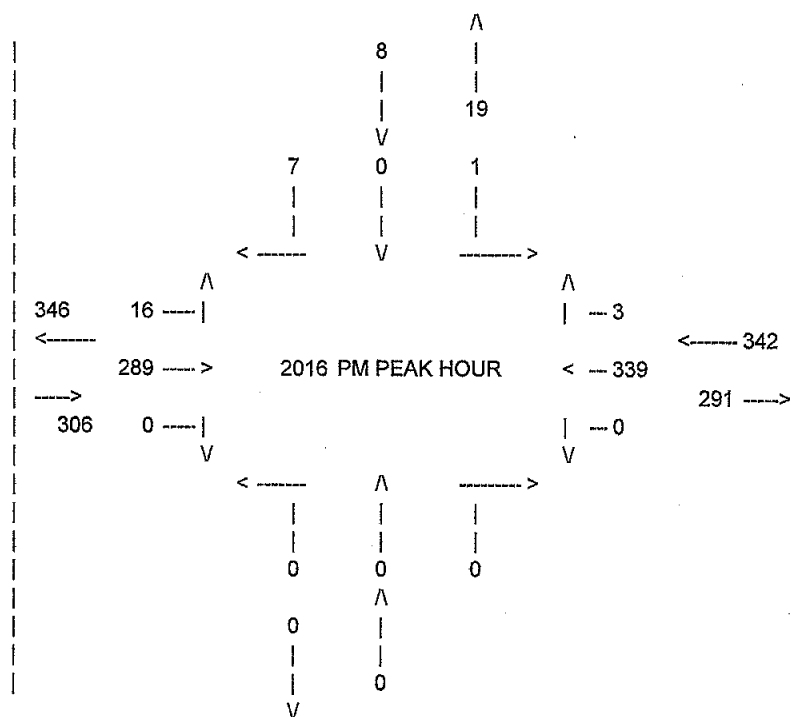
## 2016 PEAK SEASON PEAK HOUR TURNING MOVEMENTS

Annual Growth Rate = 2.0%															
	Eastbound				Westbound				Northbound				Southbound		
	<u>L</u>	<u>T</u>	<u>R</u>		<u>L</u>	<u>T</u>	<u>R</u>		<u>L</u>	<u>T</u>	<u>R</u>		<u>L</u>	<u>T</u>	<u>R</u>
<u>PM Period</u>	16	289	0		0	339	3		0	0	0		1	0	7

## 2023 PEAK SEASON PEAK HOUR TURNING MOVEMENTS

Annual Growth Rate = 2.0%															
	Eastbound				Westbound				Northbound				Southbound		
	<u>L</u>	<u>T</u>	<u>R</u>		<u>L</u>	<u>T</u>	<u>R</u>		<u>L</u>	<u>T</u>	<u>R</u>		<u>L</u>	<u>T</u>	<u>R</u>
<u>PM Period</u>	19	332	0		0	390	3		0	0	0		2	0	8

Intersection: Riggs Road @ Tamiami Trail East





FLORIDA DEPARTMENT OF TRANSPORTATION  
2016 ANNUAL AVERAGE DAILY TRAFFIC REPORT - REPORT TYPE: ALL

COUNTY: 03 COLLIER

SITE TYPE	DESCRIPTION	DIRECTION 1	DIRECTION 2	AADT TWO-WAY	"K" FCR	"D" FCR	"T" FCR
0001	SR 29, NORTH OF CR 890/LAKE TRAFFORD ROAD	N 6200 S	6400	12600 C	9.0	58.2F	6.8A
0002	SR 29, SOUTHEAST OF CR 846/14TH STREET	N 3500E S	3600E	7100 F	9.0	58.2F	18.3P
0003	SR 45/US 41, SOUTH OF CR 896/PINE RIDGE RD	S 22000 N	23000	45000 C	9.0	56.8F	3.0A
0005	SR 90/US 41, NORTHWEST OF CR 92	E 3000E W	3100E	6100 F	9.5	57.4F	9.1P
0006	SR 29, NORTHEAST OF SR 90/US 41	N 1000E S	900E	1900 F	9.5	57.4F	14.5P
0011	US 41, 200 FT. EAST OF CR-94	E 1200E W	1300E	2500 F	9.5	54.0F	14.3P
0012	SR 45/US 41 NORTH OF CR 896, PINE RIDGE RD	S 22000 N	21000	43000 C	9.0	56.8F	3.2A
0014	SR 90/US 41, NORTHWEST OF SR 951	E 16000 W	16500	32500 C	9.0	56.8F	3.7A
0015	SR 90/US 41 SE OF CR 864/RATTLESNAKE HAMMOCK	E 21000 W	21000	42000 C	9.0	56.8F	3.5A
0017	SR 45/US 41, SOUTH OF CR 862/VAN BEACH RD	S 20500 N	20500	41000 C	9.0	56.8F	2.8P
0018	SR45/US41, N OF CR846/IMMOKALEE RD/111TH AV	S 30000 N	31000	61000 C	9.0	56.8F	3.1P
0022	NORTH RD, FROM TERMINAL DRIVE TO CR 31	E 1100E W	1100E	2200 F	9.0	57.4F	3.1P
0023	CR 31/AIRPORT ROAD, S OF CR 886/GGATE PKWY	N 24500 S	24000	48500 C	9.0	57.4F	5.4A
0024	CR 31/AIRPORT RD, S OF CR 896/PINE RIDGE RD	N 20000 S	19500	39500 C	9.0	57.4F	3.2P
0029	SR 29, WEST OF CR 846/1ST STREET	W 7700 E	8300	16000 C	9.0	58.2F	6.6A
0031	SR 29, SOUTH OF SR 93/I 75	N 750 S	700	1450 C	9.5	57.4F	18.7A

SITE TYPE : BLANK= PORTABLE; T= TELEMETERED  
"K" FACTOR : DEPARTMENT ADOPTED STANDARD K FACTOR BEGINING WITH COUNT YEAR 2011  
AADT FLAGS : C= COMPUTED; E= MANUAL EST; F= FIRST YEAR EST; S= SECOND YEAR EST; T= THIRD YEAR EST; R= FOURTH YEAR EST;  
V= FIFTH YEAR EST; 6= SIXTH YEAR EST; X= UNKNOWN  
"D/T" FLAGS : A= ACTUAL; F= FACTOR CATG; D= DIST FUNCL; P= PRIOR YEAR; S= STATEWIDE DEFAULT; W= ONE-WAY ROAD; X= CROSS REF

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FLORIDA DEPARTMENT OF TRANSPORTATION  
2016 ANNUAL AVERAGE DAILY TRAFFIC REPORT - REPORT TYPE: ALL

COUNTY: 03 COLLIER

SITE TYPE	DESCRIPTION	DIRECTION 1	DIRECTION 2	AADT TWO-WAY	"K" FCTR	"D" FCTR	"T" FCTR
=====	=====	=====	=====	=====	=====	=====	=====
0182	SR 29, NORTH OF SR 93/I 75	N 1600E	S 1600E	3200 F	9.5	58.2F	24.1P
0183	SR 82, EAST OF HENDRY/COLLIER COUNTY LINE	E 6100	W 5900	12000 C	9.5	58.2F	12.3A
0184	SR-29, N OF SR-82	N 2600E	S 2600E	5200 F	9.5	58.2F	22.8P
0189	N COLLIER BLVD, N OF SAN MARCO RD	N 10500	S 10500	21000 C	9.0	54.4F	2.2A
0190	SR 951, NORTH OF SR 84 & SOUTH OF I-75/SR93	N 26500	S 28500	55000 C	9.0	54.4F	6.4A
0191	SR-93/I-75, 0.5 MI N OF CR-896, COLLIER CO.	N 39569	S 40884	80453 C	9.0	56.3A	7.9A
0192	SR 45/US 41, SOUTH OF 99TH AVENUE NORTH	S 26000	N 24000	50000 C	9.0	56.8F	2.9A
0193	SR 84/DAVIS BLVD, WEST OF SR/CR 951	E 11000	W 12500	23500 C	9.0	57.4F	5.5A
0194	SR 90/US 41, SOUTHEAST OF SR 951	E 7800	W 7400	15200 C	9.0	57.4F	8.5A
0195	SR 84, WEST OF SANTA BARBARA BOULEVARD	E 13500	W 13500	27000 C	9.0	57.4F	3.8A
0200	SR 82, WEST OF SR 29	E 6400	W 6400	12800 C	9.5	58.2F	12.7A
0205	SR 29, NORTH OF FARM WORKER'S VILLAGE	N 3000E	S 3000E	6000 F	9.0	58.2F	17.1P
0270	SR-90/US-41, 0.7 MI W OF CR-94, COLLIER CO.	E 1465	W 1561	3026 C	9.5	55.1A	12.0A
0351	SR-93/I-75, W OF EVERGLADES BLVD, COLLIER CO.	E 12207	W 12390	24597 C	10.5	54.5A	10.9A
2000	SR 93/I 75, WEST OF CR 951	W 19500	E 20000	39500 C	9.0	56.1F	9.9P
2003	SR 93/I-75, SOUTH OF CR 896/PINE RIDGE ROAD	N 35500	S 37000	72500 C	9.0	56.1F	9.3A

SITE TYPE : BLANK= PORTABLE; T= TELEMETERED  
"K" FACTOR : DEPARTMENT ADOPTED STANDARD K FACTOR BEGINNING WITH COUNT YEAR 2011  
AADT FLAGS : C= COMPUTED; E= MANUAL EST; F= FIRST YEAR EST; S= SECOND YEAR EST; T= THIRD YEAR EST; R= FOURTH YEAR EST;  
V= FIFTH YEAR EST; 6= SIXTH YEAR EST; X= UNKNOWN  
"D/T" FLAGS : A= ACTUAL; F= FACTOR CATG; D= DIST FUNCL; P= PRIOR YEAR; S= STATEWIDE DEFAULT; W= ONE-WAY ROAD; X= CROSS REF

All

FLORIDA DEPARTMENT OF TRANSPORTATION  
2016 ANNUAL AVERAGE DAILY TRAFFIC REPORT - REPORT TYPE: ALL

COUNTY: 03 COLLIER

SITE TYPE	DESCRIPTION	DIRECTION 1	DIRECTION 2	AADT TWO-WAY	"K" FCTR	"D" FCTR	"T" FCTR
=====	=====	=====	=====	=====	=====	=====	=====
0094 T	SR-90/US-41, .3 MI SE OF CR31/AIRPORT RD, COLLIER	E 20878	W 21408	42286 C	9.0	55.8A	2.9A
0104	SR 90/US 41, EAST OF SR 29 CC616	E 1900E	W 2000E	3900 F	9.5	54.0F	11.7P
0111	SR 90/US 41, WEST OF SR 29 CC617	E 2300E	W 2300E	4600 F	9.5	57.4F	9.8P
0123	SR90/US41 W OF CR851/GOODLETTE (W OF 12TH ST) NP	E 19000	W 19000	38000 C	9.0	56.8F	3.6P
0124	SR 90/US 41, SOUTHEAST OF CR 851/GOODLETTE RD NP	E 28000	W 29000	57000 C	9.0	56.8F	2.8A
0143 T	SR 29,0.4 MI S OF SR-82, IMMOKALEE, COLLIER CO.	N 8183	S 8267	16450 C	9.5	58.2A	10.3A
0157	SR 951, SOUTH OF SR 90/US 41 CC557	N 21000	S 20500	41500 C	9.0	54.4F	4.6A
0158	CR 851, GOODLETTE RD, S OF CR896, P RIDGE RD CC5	N 19000E	S 19000E	38000 F	9.0	57.4F	3.0P
0160	PINE RIDGE RD, E OF CR 31/AIRPORT RD CC526	N 28500E	W 29000E	57500 F	9.0	57.4F	3.8P
0170	SR 84, EAST OF SANTA BARBARA BLVD CC560	E 6500	W 6900	13400 C	9.0	57.4F	5.7A
0173	SR 93/I 75, EAST OF SR 29 COLLIER COUNTY	W 11000	E 11500	22500 C	10.5	55.2F	15.3A
0175	CR 31/AIRPORT ROAD, N OF SR 84/DAVIS BLVD CC55	N 24000E	S 22500E	46500 F	9.0	57.4F	4.3P
0176	SR 84, EAST OF CR 31/AIRPORT ROAD CC5	E 12500	W 12500	25000 C	9.0	57.4F	3.2A
0177	CR 31/AIRPORT ROAD, S OF SR 84/DAVIS BLVD CC55	N 16500E	S 15500E	32000 F	9.0	57.4F	4.5P
0178	SR 84, WEST OF CR 31/AIRPORT ROAD CC5	E 13000	W 13000	26000 C	9.0	57.4F	4.3A
0179	SR-45/US-41, N OF CR 887/OLD US 41	S 19000	N 19500	38500 C	9.0	56.8F	2.9P

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NOPC EXHIBIT "E"

FIDDLER'S CREEK DRI  
NOTICE OF PROPOSED CHANGE  
TRAFFIC STUDY

Project #00540

April 26, 2000

Prepared by:  
DAVID PLUMMER & ASSOCIATES, INC.  
1531 Hendry Street  
Fort Myers, Florida 33901



SUMMARY OF TRIP GENERATION CALCULATION  
FOR 3000 DWELLING UNITS OF SINGLE FAMILY DWELLINGS

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DRIVE WAY VOLUME
AVG WKDY 2-WAY VOL	7.90	0.00	1.00	23691
7-9 AM PK HR ENTER	0.18	0.00	1.00	527
7-9 AM PK HR EXIT	0.53	0.00	1.00	1582
7-9 AM PK HR TOTAL	0.70	0.00	1.00	2109
4-6 PM PK HR ENTER	0.49	0.00	1.00	1472
4-6 PM PK HR EXIT	0.28	0.00	1.00	828
4-6 PM PK HR TOTAL	0.77	0.00	1.00	2300
SATURDAY 2-WAY VOL	8.91	0.00	1.00	26745
PK HR ENTER	0.48	0.00	1.00	1441
PK HR EXIT	0.41	0.00	1.00	1228
PK HR TOTAL	0.89	0.00	1.00	2669
SUNDAY 2-WAY VOL	8.83	0.00	1.00	26484
PK HR ENTER	0.40	0.00	1.00	1215
PK HR EXIT	0.36	0.00	1.00	1077
PK HR TOTAL	0.76	0.00	1.00	2292

Note: A zero rate indicates no rate data available  
The above rates were calculated from these equations:

24-Hr. 2-Way Volume:  $LN(T) = .92LN(X) + 2.707, R^2 = .96$   
7-9 AM Peak Hr. Total:  $T = .7(X) + 9.477$   
 $R^2 = .89, .25$  Enter,  $.75$  Exit.  
4-6 PM Peak Hr. Total:  $LN(T) = .901LN(X) + .527$   
 $R^2 = .91, .64$  Enter,  $.36$  Exit  
AM Gen Pk Hr. Total:  $T = .704(X) + 12.09$   
 $R^2 = .89, .25$  Enter,  $.75$  Exit  
PM Gen Pk Hr. Total:  $LN(T) = .887LN(X) + .605$   
 $R^2 = .91, .64$  Enter,  $.36$  Exit  
Sat. 2-Way Volume:  $LN(T) = .956LN(X) + 2.54, R^2 = .92$   
Sat. Pk Hr. Total:  $T = .886(X) + 11.065$   
 $R^2 = .9, .54$  Enter,  $.46$  Exit  
Sun. 2-Way Volume:  $T = 8.832(X) + -11.604, R^2 = .94$   
Sun. Pk Hr. Total:  $T = .756(X) + 23.815$   
 $R^2 = .86, .53$  Enter,  $.47$  Exit

Source: Institute of Transportation Engineers  
Trip Generation, 6th Edition, 1997.

TRIP GENERATION BY MICROTRANS

SUMMARY OF TRIP GENERATION CALCULATION  
FOR 3000 DWELLING UNITS OF RESIDENTIAL CONDOMINIUM

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DRIVE WAY VOLUME
AVG WKDY 2-WAY VOL	3.91	0.00	1.00	11724
7-9 AM PK HR ENTER	0.04	0.00	1.00	128
7-9 AM PK HR EXIT	0.21	0.00	1.00	624
7-9 AM PK HR TOTAL	0.25	0.00	1.00	752
4-6 PM PK HR ENTER	0.23	0.00	1.00	685
4-6 PM PK HR EXIT	0.11	0.00	1.00	338
4-6 PM PK HR TOTAL	0.34	0.00	1.00	1023
SATURDAY 2-WAY VOL	3.76	0.00	1.00	11273
PK HR ENTER	0.16	0.00	1.00	486
PK HR EXIT	0.14	0.00	1.00	414
PK HR TOTAL	0.30	0.00	1.00	901
SUNDAY 2-WAY VOL	3.25	0.00	1.00	9753
PK HR ENTER	0.12	0.00	1.00	366
PK HR EXIT	0.13	0.00	1.00	380
PK HR TOTAL	0.25	0.00	1.00	746

Note: A zero rate indicates no rate data available  
The above rates were calculated from these equations:

24-Hr. 2-Way Volume:  $LN(T) = .85LN(X) + 2.564, R^2 = .83$   
7-9 AM Peak Hr. Total:  $LN(T) = .79LN(X) + .298$   
 $R^2 = .74, .17$  Enter, .83 Exit  
4-6 PM Peak Hr. Total:  $LN(T) = .827LN(X) + .309$   
 $R^2 = .79, .67$  Enter, .33 Exit  
AM Gen Pk Hr. Total:  $LN(T) = .808LN(X) + .209$   
 $R^2 = .78, .18$  Enter, .82 Exit  
PM Gen Pk Hr. Total:  $LN(T) = .777LN(X) + .59$   
 $R^2 = .8, .65$  Enter, .35 Exit  
Sat. 2-Way Volume:  $T = 3.615(X) + 427.925, R^2 = .84$   
Sat. Pk Hr. Total:  $T = .286(X) + 42.627$   
 $R^2 = .84, .54$  Enter, .46 Exit  
Sun. 2-Way Volume:  $T = 3.132(X) + 357.258, R^2 = .88$   
Sun. Pk Hr. Total:  $T = .232(X) + 50.009$   
 $R^2 = .78, .49$  Enter, .51 Exit

Source: Institute of Transportation Engineers  
Trip Generation, 6th Edition, 1997.

TRIP GENERATION BY MICROTRANS

SUMMARY OF TRIP GENERATION CALCULATION  
FOR 325 T.G.L.A. OF SHOPPING CENTER

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DR-WAY VOLUME
AVG WKDY 2-WAY VOL	44.75	0.00	1.00	14545
7-9 AM PK HR ENTER	0.61	0.00	1.00	197
7-9 AM PK HR EXIT	0.39	0.00	1.00	126
7-9 AM PK HR TOTAL	0.99	0.00	1.00	323
4-6 PM PK HR ENTER	2.02	0.00	1.00	656
4-6 PM PK HR EXIT	2.19	0.00	1.00	711
4-6 PM PK HR TOTAL	4.21	0.00	1.00	1367
SATURDAY 2-WAY VOL	58.99	0.00	1.00	19173
PK HR ENTER	3.01	0.00	1.00	977
PK HR EXIT	2.77	0.00	1.00	902
PK HR TOTAL	5.78	0.00	1.00	1879
SUNDAY 2-WAY VOL	28.60	0.00	1.00	9295
PK HR ENTER	1.53	0.00	1.00	497
PK HR EXIT	1.59	0.00	1.00	517
PK HR TOTAL	3.12	0.00	1.00	1014

Note: A zero rate indicates no rate data available  
The above rates were calculated from these equations:

24-Hr. 2-Way Volume:  $LN(T) = .643LN(X) + 5.866$ ,  $R^2 = .78$   
7-9 AM Peak Hr. Total:  $LN(T) = .596LN(X) + 2.329$   
 $R^2 = .51$ , .61 Enter, .39 Exit  
4-6 PM Peak Hr. Total:  $LN(T) = .66LN(X) + 3.403$   
 $R^2 = .81$ , .48 Enter, .52 Exit  
AM Gen Pk Hr. Total: 0  
 $R^2 = 0$ , 0 Enter, 0 Exit  
PM Gen Pk Hr. Total: 0  
 $R^2 = 0$ , 0 Enter, 0 Exit  
Sat. 2-Way Volume:  $LN(T) = .628LN(X) + 6.229$ ,  $R^2 = .82$   
Sat. Pk Hr. Total:  $LN(T) = .651LN(X) + 3.773$   
 $R^2 = .84$ , .52 Enter, .48 Exit  
Sun. 2-Way Volume:  $T = 15.632(X) + 4214.458$ ,  $R^2 = .52$   
Sun. Pk Hr. Total:  $T = 3.12(X) + 0$   
 $R^2 = 0$ , .49 Enter, .51 Exit

Source: Institute of Transportation Engineers  
Trip Generation, 6th Edition, 1997.

TRIP GENERATION BY MICROTRANS

SUMMARY OF TRIP GENERATION CALCULATION  
FOR 90 HOLES OF GOLF COURSE

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DRIVE WAY VOLUME
AVG WKDY 2-WAY VOL	35.74	12.12	1.00	3217
7-9 AM PK HR ENTER	1.75	0.00	1.00	158
7-9 AM PK HR EXIT	0.47	0.00	1.00	42
7-9 AM PK HR TOTAL	2.22	1.82	1.00	200
4-6 PM PK HR ENTER	1.21	0.00	1.00	109
4-6 PM PK HR EXIT	1.53	0.00	1.00	138
4-6 PM PK HR TOTAL	2.74	1.79	1.00	247
SATURDAY 2-WAY VOL	40.63	17.12	1.00	3657
PK HR ENTER	2.25	0.00	1.00	202
PK HR EXIT	2.34	0.00	1.00	211
PK HR TOTAL	4.59	2.73	1.00	413
SUNDAY 2-WAY VOL	39.53	13.52	1.00	3558
PK HR ENTER	0.00	0.00	1.00	0
PK HR EXIT	0.00	0.00	1.00	0
PK HR TOTAL	4.43	2.44	1.00	399

Note: A zero rate indicates no rate data available  
Source: Institute of Transportation Engineers  
Trip Generation, 6th Edition, 1997.

TRIP GENERATION BY MICROTRANS