

Transportation Consultants

601 Heritage Drive, Suite 493 Jupiter, FL 33458 (561) 296-9698

March 27, 2024 Revised April 24, 2024 Revised July 19, 2024

Mr. Quazi Bari, P.E. Palm Beach County Traffic Division 2300 North Jog Road, 3rd Floor West Palm Beach, Florida 33411-3745

Re: The Reserve at Eagles Landing - #PTC24-018
Future Land Use Amendment Traffic Statement

Dear Mr. Bari:

The purpose of this letter is to provide a Future Land Use Plan Amendment Traffic Analysis for a 26.24-acre site in unincorporated Palm Beach County. The site is located on the south side of Lantana Road, west of SR 7, as shown on **Attachment 1**. The PCN for the site is: 00-41-44-37-00-037-0021. It is proposed to change the Future Land Use (FLU) designation from RR-10 to LR 1. The Comprehensive Plan assigns a maximum intensity to the FLU designations. The maximum intensity scenario for the existing FLU is 3 single family units. For the proposed FLU, the maximum intensity is 26 single family units.

Attachments 2A through 2C provide the daily and peak hour trip generation potential of the existing land use designation as compared to the proposed future land use designation. The daily trips are used in the Long-Range (Year 2045) Analysis. The proposed future land use designation is projected to generate 230 daily trips more than the existing land use designation. This requires an analysis of the directly accessed links of Lantana Road and SR 7. Year 2045 volumes and roadway lanes from the Palm Beach TPA are provided in the Appendix. No Active Amendments in the area have significant impacts on the analyzed links. Attachment 3 provides the long range roadway link analysis showing that no roadway links are significantly impacted by this proposed land use change. Therefore, this project meets the Long-Range (Year 2045) requirements for the proposed land use designation at the maximum intensity.

Attachment 2B provides the peak hour trip generation of the proposed FLU at maximum intensity. The peak hour trips are used in the Five-Year Analysis. The maximum trip generation is 24 PM peak hour trips. The radius of development influence is one-half mile.

The trip distribution is shown on **Attachment 4A**. The AM and PM peak hour directional trip assignments are provided on **Attachments 4B and 4C**. The maximum percent impact on the study area roadways is 0.32%. The project impact is below 3% of the adopted LOS E service volume and does not significantly impact any roadway links. Therefore, the proposed FLU meets the Test 2 requirements for the proposed development plan.

Mr. Quazi Bari Re: PTC24-018 July 19, 2024 Page 2

This analysis shows that the proposed Future Land Use designation of LR-1 for the 26.24-acre site meets the transportation standards and is consistent with the Comprehensive Plan.

Please contact me by phone or at <u>atroutman@pindertroutman.com</u> if you need any additional information or have any questions.

Sincerely,

Digitally signed by Andrea M Troutman

Date: 2024.07.19 09:51:09 -04'00'

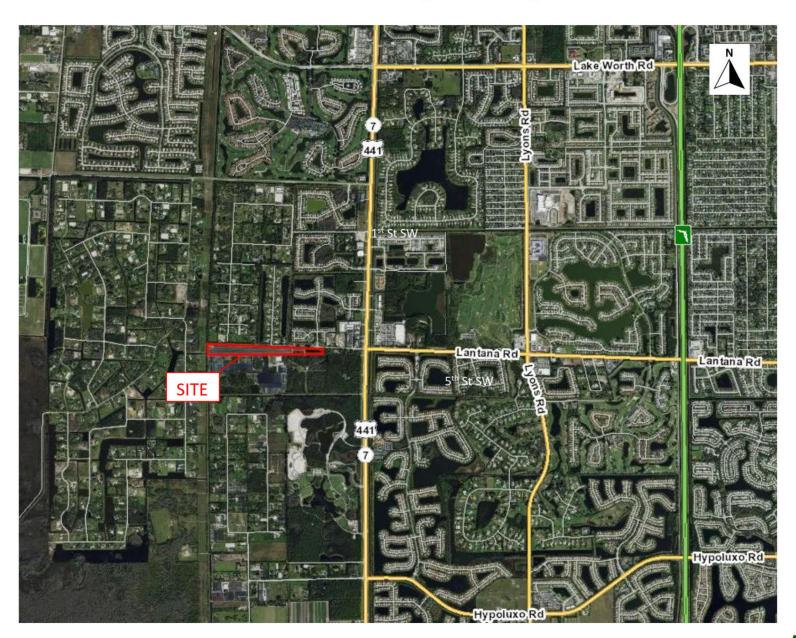
Andrea M. Troutman, P.E. President

Attachments

Andrea M. Troutman, State of Florida, Professional Engineer, License No. 45409

This item has been electronically signed and sealed by Andrea M. Troutman, P.E. on 7/19/24 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Attachment 1 Project Location The Reserve at Eagles Landing



Attachment 2A
The Reserve at Eagles Landing
Trip Generation - Existing FLUA Maximum Uses

DAILY

	ITE			%	Total	Interna	l Trips	External	Pass	s-by	Total
Land Use	Code	Intensity	Trip Generation Rate (1)	In	Trips	Trips	%	Trips	Trips	s (1)	Trips
Resid. Single Family	210	3 DUs	10 / DU	50%	30	-	0%	30	-	0%	30
TOTAL	1				30	1-	0.0%	30			30

AM PEAK HOUR

	ITE			%	Т	otal Trip	s	Interna	l Trips	Ex	ternal Tri	ps	Pass	-by	١	New Trips	s
Land Use	Code	Intensity	Trip Generation Rate (1)	In	In	Out	Trips	Trips	%	In	Out	Trips	Trips	s (1)	In	Out	Trips
Resid. Single Family	210	3 DUs	0.70 / DU	26%	1	1	2	-	0%	1	1	2		0%	1	1	2
TOTAL					1	1	2	-	0.0%	1	1	2	-		1	1	2

PM PEAK HOUR

	ITE			%	Т	otal Trip	s	Interna	l Trips	Ex	ternal Tri	ps	Pass-	by	1	New Trips	s
Land Use	Code	Intensity	Trip Generation Rate (1)	In	In	Out	Trips	Trips	%	In	Out	Trips	Trips	(1)	In	Out	Trips
Resid. Single Family	210	3 DUs	0.94 / DU	63%	2	1	3	-	0%	2	. 1	3	- 2	0%	2	1	3
TOTAL					2	1	3	-	0.0%	2	1	3	(2)		2	1	3

(1) Source: Palm Beach County Traffic Division and ITE Trip Generation, 11th Edition.

Attachment 2B
The Reserve at Eagles Landing
Trip Generation - Proposed FLUA Maximum Uses

DAILY

	ITE			%	Total	Interna	Trips	External	Pass	-by	Total
Land Use	Code	Intensity	Trip Generation Rate (1)	In	Trips	Trips	%	Trips	Trips	s (1)	Trips
Resid. Single Family	210	26 DUs	10 / DU	50%	260	12	0%	260	-	0%	260
TOTAL					260	120	0.0%	260	-		260

AM PEAK HOUR

	ITE			%		Total Trip	S	Internal	Trips	Ext	ternal Tri	ps	Pass	-by	١	New Trips	s
Land Use	Code	Intensity	Trip Generation Rate (1)	In	In	Out	Trips	Trips	%	In	Out	Trips	Trips	(1)	In	Out	Trips
Resid. Single Family	210	26 DUs	0.70 / DU	26%	5	13	18	-	0%	5	13	18	-	0%	5	13	18
TOTAL					5	13	18		0.0%	5	13	18	-		5	13	18

PM PEAK HOUR

	ITE			%	Т	otal Trip	s	Interna	Trips	Ext	ernal Tri	ps	Pass-	-by	1	New Trip	s
Land Use	Code	Intensity	Trip Generation Rate (1)	In	In	Out	Trips	Trips	%	In	Out	Trips	Trips	(1)	In	Out	Trips
Resid. Single Family	210	26 DUs	0.94 / DU	63%	15	9	24	-	0%	15	9	24	(5)	0%	15	9	24
TOTAL					15	9	24	-	0.0%	15	9	24	-		15	9	24

(1) Source: Palm Beach County Traffic Division and ITE Trip Generation, 11th Edition.

Attachment 2C The Reserve at Eagles Landing Trip Generation Comparison

		AM	Peak Hou	<u>ır</u>	<u>P/</u>	M Peak Ho	<u>ur</u>
	<u>Daily</u>	<u>In</u>	<u>Out</u>	Total	<u>In</u>	<u>Out</u>	<u>Total</u>
Existing FLUA	30	1	1	2	2	1	3
Proposed FLUA	260	5	13	18	15	9	24
Net New Trips:	230	4	12	16	13	8	21

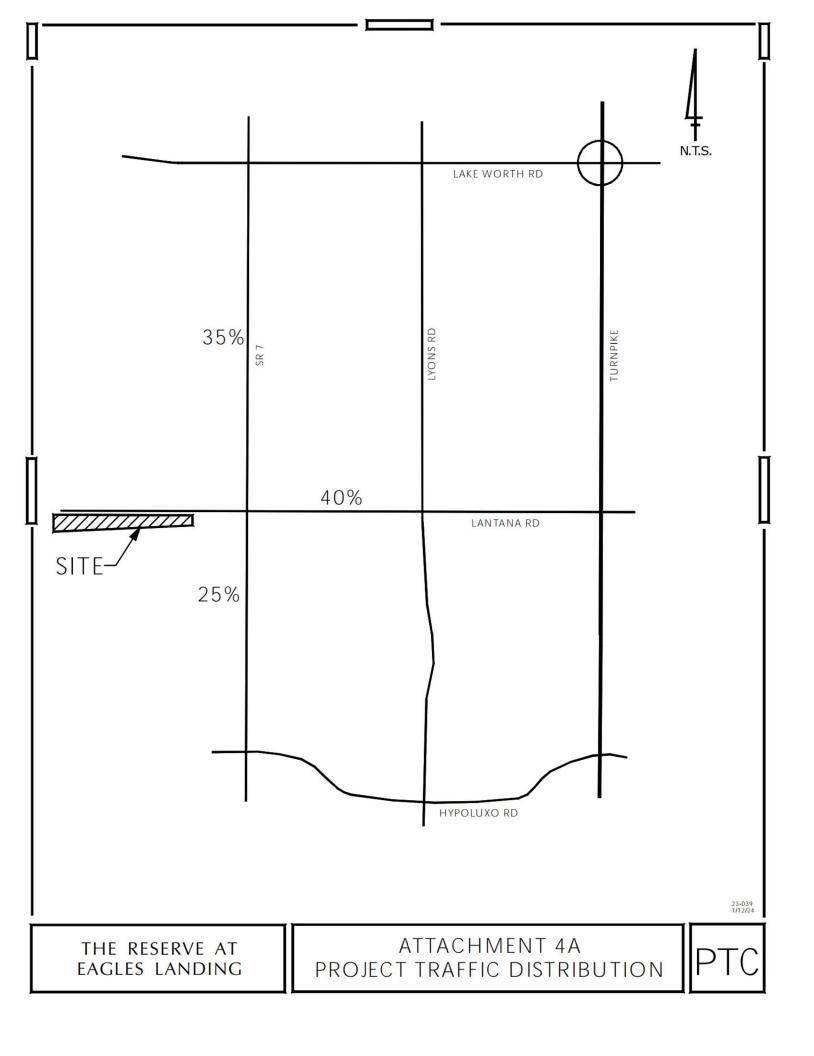
Attachment 3
The Reserve at Eagles Landing
Land Use Amendment
Project Traffic Assignment - 2045 Analysis

Proposed FLU (Maximum Intensity) - Current FLU (Maximum Intensity)

			2045 Conditi	ons	2045	V/C	Meets	Net Proje	ect Traffic	2045		Total	Signif-	Meets
				LOS D	Bkgd	w/o	Standard	230	Project	Total	V/C	Project	icant	Standard
Roadway	Link	Lanes (1)	Volume (1)	Capacity (2)	Traffic	Project	w/o Proj?	% Dist	Trips	Traffic	w/ Proj.	Impact	Impact?	w/ Proj?
Lantana Road	SR 7 to Lyons Road	4LD	13,800	33,200	13,800	0.42	YES	40.0%	92	13,892	0.42	0.28%	No	
SR 7	Lake Worth Rd to Lantana Rd	6LD	57,200	50,300	57,200	1.14	No	35.0%	81	57,281	1.14	0.16%	No	
SK /	Lantana Rd to Hypoluxo Rd	6LD	54,000	50,300	54,000	1.07	No	25.0%	58	54,058	1.07	0.11%	No	

(1) Source: Palm Beach TPA. See Appendix.

(2) Source: Table TE 1a, Palm Beach County Comprehensive Plan.



Attachment 4B The Reserve at Eagles Landing Project Traffic Assignment - Test 2

AM Peak Hour

					Project	Traffic	Total	LOS E	Signif-
						Pk Hour	Project	Service	icant
Roadway	Link	Lanes	Class	Dir	% Dist.	Trips	Impact	Vol. (1)	Impact?
Lantana Road	SR 7 to Lyons Rd	4LD	П	EB	40%	5	0.28%	1870	No
Lantana Noau				WB	40%	2	0.11%	1870	No
	Lake Worth Rd to Lantana Rd	6LD	I	NB	35%	5	0.15%	2940	No
SR 7				SB	35%	2	0.06%	2940	No
SK /	Lantana Rd to Hypoluxo Rd	6LD	1	NB	25%	1	0.04%	2940	No
				SB	25%	3	0.11%	2940	No

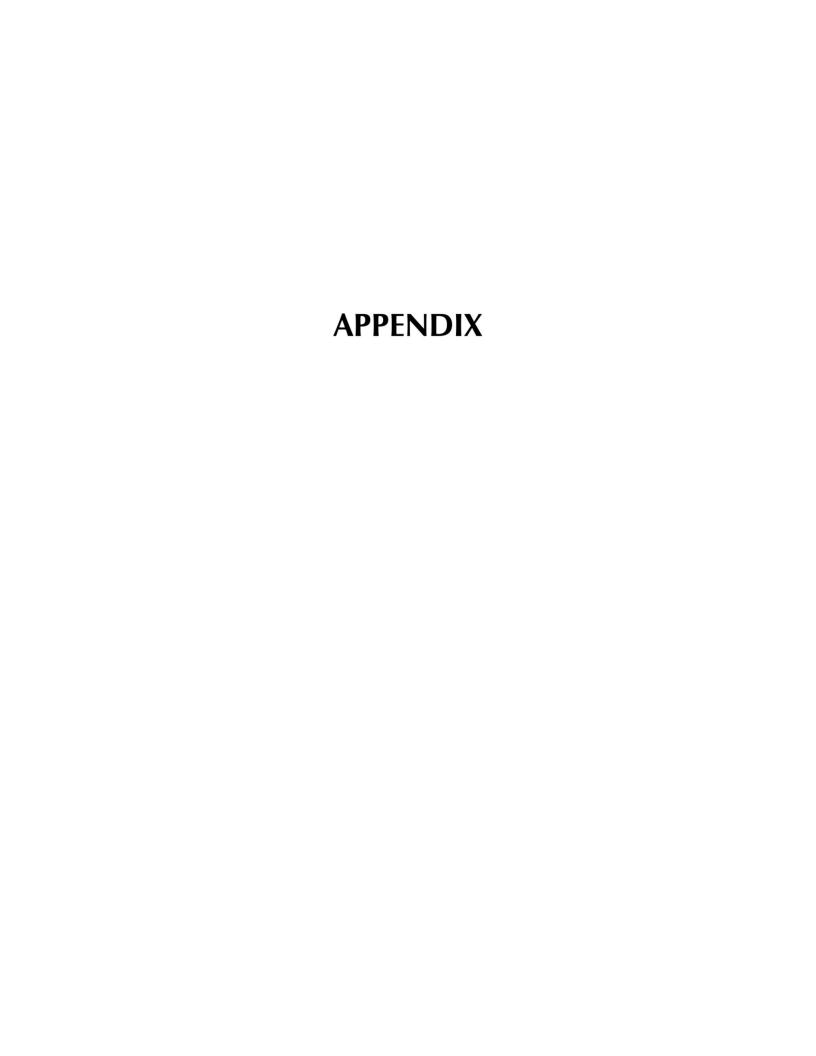
⁽¹⁾ Source: 2009 FDOT Quality / LOS Handbook.

Attachment 4C The Reserve at Eagles Landing Project Traffic Assignment - Test 2

PM Peak Hour

					Project	Traffic	Total	LOS E	Signif-
						Pk Hour	Project	Service	icant
Roadway	Link	Lanes	Class	Dir	% Dist.	Trips	Impact	Vol. (1)	Impact?
Lantana Road	SR 7 to Lyons Rd	4LD	П	EB	40%	4	0.19%	1870	No
Lantana Kodu				WB	40%	6	0.32%	1870	No
	Lake Worth Rd to Lantana Rd	6LD	I	NB	35%	3	0.11%	2940	No
SR 7				SB	35%	5	0.18%	2940	No
SK /	Lantana Rd to Hypoluxo Rd	6LD	1	NB	25%	4	0.13%	2940	No
				SB	25%	2	0.08%	2940	No

⁽¹⁾ Source: 2009 FDOT Quality / LOS Handbook.



SERPM 8 2045 Cost Feasible Adjusted Two-Way Traffic Volumes - Palm Beach County

PBC Station	FDOT Station	Roadway	From	То	Existing Lanes	Cost Feasible Lanes	2005 Counts	2010 Count	2015 Count	2018 Count	2015 Model	2045 Model	2045 Adjusted
	935071	LAKE AVE	Dixie Hwy	S. M St	2	2			•	-	7,932	8,479	8,500
5649	937072	LAKE IDA RD	Hagen Ranch Rd	Jog Rd	2	2	12,238	7,591	7,536	8,812	3,015	3,482	8,000
5653	937074	LAKE IDA RD	Jog Rd	El Clair Ranch Rd	2	2	12,383	10,168	10,969	11,274	3,474	4,792	12,300
5651	937073	LAKE IDA RD	El Clair Ranch Rd	Military Tr	2	2	13,228	11,590	11,682	12,608	5,795	6,444	12,300
5623	937017	LAKE IDA RD	Military Tr	Barwick Rd	4	4	20,410	15,701	19,827	20,420	10,394	13,568	23,000
5605	937016	LAKE IDA RD	Barwick Rd	Congress Ave	4	4	29,688	27,179	28,271	30,891	13,799	17,154	31,600
5307	937061	LAKE IDA RD	Congress Ave	Swinton Ave	4	4	19,839	21,306	21,542	24,685	13,516	22,317	30,300
	937424	LAKE OSBORNE DR	12th Av S	Lake Worth Rd	2	2				-	91	492	500
3445	937163	LAKE WORTH RD	South Shore Blvd	120th Av	2	2	15,873	23,445	12,221	13,300	9,509	13,097	15,800
4409	937120	LAKE WORTH RD	120th Av	Isles Bl	4	4	20,557	15,106	14,871	17,500	10,481	16,195	20,600
4407	937119	LAKE WORTH RD	Isles Bl	SR-7	4	4	31,272	24,753	26,672	28,030	23,647	30,859	34,800
4401	930053	LAKE WORTH RD	SR-7	Lyons Rd	6	6T	36,432	33,787	38,065	39,252	29,845	37,416	45,600
4101	930054	LAKE WORTH RD	Lyons Rd	Florida Turnpike	6	6T			•	-	37,500	47,734	47,700
4201	930055	LAKE WORTH RD	Florida Turnpike	Pinehurst Dr	6	6T	42,905	34,043	39,166	42,106	37,301	45,035	47,300
4645	937233	LAKE WORTH RD	Pinehurst Dr	Jog Rd	6	6T	53,067	44,593	46,028	51,629	45,864	52,388	52,600
4609	937232	LAKE WORTH RD	Jog Rd	Sherwood Forest Blvd	6	6T	45,006	44,260	45,661	48,041	24,773	33,520	54,400
4673	937232	LAKE WORTH RD	Sherwood Forest Blvd	Haverhill Rd	6	6T	51,532	41,648	41,210	44,850	24,773	33,520	50,000
4627	930404	LAKE WORTH RD	Haverhill Rd	Military Tr	6	6T	50,676	43,493	44,371	44,984	22,275	29,002	51,100
4611	930024	LAKE WORTH RD	Military Tr	Kirk Rd	6	6T	47,121	43,790	42,951	44,802	26,081	34,974	51,800
4647	937234	LAKE WORTH RD	Kirk Rd	Congress Ave	6	6T	43,331	37,971	38,415	40,684	21,652	26,913	43,700
4651	930025	LAKE WORTH RD	Congress Ave	Boutwell Rd	4	4T	29,118	28,562	23,415	26,619	12,045	17,150	28,500
4305	930751	LAKE WORTH RD	Boutwell Rd	Lake/Lucerne Split	4	4T	24,924	-	25,497	25,500	14,494	19,765	30,800
4817	935069	LAKE WORTH RD	Dixie Hwy (SR-805)	'A' St	3	3	9,126	-	8,385	8,900	3,936	5,959	10,400
4813	935068	LAKE WORTH RD	Dixie Hwy (SR-805)	'A' St	2	2	10,601	-	8,078	8,200	4,936	6,196	9,300
4815	935076	LAKE WORTH RD	Federal Hwy (US-1)	Dixie Hwy (SR-805)	2	2	10,042	8,559	8,410	-	3,428	3,878	8,900
4811	935070	LAKE WORTH RD	Federal Hwy	Dixie Hwy (SR-805)	2	2	10,669	8,322	9,526	9,600	7,859	8,516	10,300
4801	930118	LAKE WORTH RD	A1A	Lucerne Ave	4	4	15,674	12,934	16,111	12,100	8,069	8,737	16,800
4403	937291	LANTANA RD	SR-7	Lyons Rd	4	4	19,621	14,775	15,574	17,057	18,458	16,412	13,800
4207	937290	LANTANA RD	Lyons Rd	Hagen Ranch Rd	4	4	38,436	24,298	25,977	28,535	27,248	44,140	42,100
4669	937293	LANTANA RD	Hagen Ranch Rd	Jog Rd	6	6	38,587	32,050	32,219	36,116	35,241	50,031	45,700
4619	937292	LANTANA RD	Jog Rd	Haverhill Rd	6	6	40,005	35,130	35,845	42,984	29,837	41,862	50,300
4605	930693	LANTANA RD	Military Tr	Lawrence Rd	6	6	42,958	33,827	41,854	49,357	35,147	46,266	55,100
4665	937289	LANTANA RD	Lawrence Rd	Congress Ave	6	6	47,796	47,863	47,054	50,923	56,534	66,732	57,300
4623	937288	LANTANA RD	Congress Ave	High Ridge Rd	6	6	42,455	43,695	41,390	46,300	32,001	40,113	49,500
4209	930076	LANTANA RD	High Ridge Rd	1-95	5	6	42,461	45,356	43,805	45,500	35,422	43,085	53,300
4311	930077	LANTANA RD	1-95	Redding Dr	5	6	41,769	38,457	37,424	36,000	28,787	39,254	47,900
4807	935214	LANTANA RD	Redding Dr	Federal Hwy	5	5	21,493	-	19,392	18,253	12,402	12,848	19,800
	937618	LARRIMORE RD	SR-15	SR-729	2	2			-	-	586	827	800
5638	937303	LAWRENCE RD	Woolbright Rd	Boynton Beach Blvd	3	3	7,854	7,167	7,651	8,714	7,479	10,007	10,200
5204	937302	LAWRENCE RD	Boynton Beach Blvd	Gateway Blvd	5	5	16,110	13,804	14,777	17,539	9,617	13,795	19,000

SERPM 8 2045 Cost Feasible Adjusted Two-Way Traffic Volumes - Palm Beach County

PBC Station	FDOT Station	Roadway	From	То	Existing Lanes	Cost Feasible Lanes	2005 Counts	2010 Count	2015 Count	2018 Count	2015 Model	2045 Model	2045 Adjusted
5402	930031	SR-7	Flavor Pict Rd	Boynton Beach Blvd	4	4	27,483	22,402	23,191	26,985	31,409	52,899	44,700
5102	930716	SR-7	Boynton Beach Blvd	Hypoluxo Rd	6	6	32,692	24,669	27,687	29,795	37,618	65,569	55,600
4402	937242	SR-7	Hypoluxo Rd	Lantana Rd	6	6	31,171	28,880	31,450	35,927	39,604	62,147	54,000
4400	930753	SR-7	Lantana Rd	Lake Worth Rd	6	6	42,465	37,709	41,210	44,964	56,024	72,015	57,200
4406	937243	SR-7	Lake Worth Rd	Stribling Way	8	8T		53,939	65,398	66,899	66,602	81,026	79,600
4102	930721	SR-7	Stribling Way	Forest Hill Blvd	8	8T	51,821	43,846	49,645	55,559	61,629	80,009	68,000
3452	937241	SR-7	Forest Hill Blvd	Pioneer Rd	8	8T	55,024	54,731	58,868	65,204	56,526	76,840	80,000
3408	930037	SR-7	Pioneer Rd	Southern Blvd	8	8T	55,628	52,008	56,643	63,674	56,796	78,681	78,500
3406	930514	SR-7	Southern Blvd	Belvedere Rd	8	8T	59,099	47,669	51,645	52,881	48,293	69,506	74,300
3404	930034	SR-7	Belvedere Rd	Okeechobee Blvd	6	6T	47,176	36,000	38,417	41,440	27,827	48,785	59,400
3468	937259	SR-7	Okeechobee Blvd	60th St	2	4		13,661	17,803	20,034	17,983	39,682	39,300
	TPA014	SR-7	60th St	Northlake Blvd	0	4						13,308	13,300
7006	930003	SR-700	Muck City Rd	US-98 SR-700	2	2	1,966	591	1,833	1,500	3,551	4,281	2,600
7038	930004	SR-700	CR 717	Hatton Hwy	2	2	2,466	-	4,414	3,100	7,951	10,756	7,200
7004	935335	SR-700	Hatton Hwy	SR-80	2	2	2,923	-	4,071	3,100	7,763	10,630	6,900
1101	930687	SR-710	Martin County Line	Indiantown Rd	4	4	7,500	7,411	8,186	12,168	7,129	14,707	16,900
ALS-UNISHE	930140	SR-710	Indiantown Rd	Moroso Speedway	4	4	30.70.50.50.	35.3.8.8.0050	-	-	5,392	9,668	9,700
1401	939140	SR-710	Moroso Speedway	Pratt-Whitney Rd	4	4	7,381	6,109	6,604		15,190	26,164	17,600
1411	930688	SR-710	Pratt-Whitney Rd	Caloosa	4	4	11,000	-	13,905	16,687	19,807	40,401	34,500
2109	930688	SR-710	Caloosa	N County Airport	4	4	11,000		14,160	18,838	19,807	40,401	34,800
2101	930688	SR-710	N County Airport	PGA Blvd	4	4	14,185	12,585	14,459	17,888	19,807	40,401	35,100
2403	930717	SR-710	PGA Blvd	Northlake Blvd	4	4	12,034	10,561	15,237	16,143	16,808	28,176	25,500
2419	930689	SR-710	Northlake Blvd	1 mi S of Northlake Blvd	4	6	24,000	22,948	21,969	27,414	16,808	28,256	33,400
	937400	SR-710	1 mi S of Northlake Blvd	Jog Rd	4	6			-	-	31,513	53,591	53,600
2209	937265	SR-710	Jog Rd	Blue Heron Blvd	4	6	25,248	25,414	25,909	34,690	34,779	52,420	43,600
2313	930747	SR-710	Blue Heron Blvd	Congress Ave	4	4	19,137	14,536	15,716	14,100	11,098	18,473	23,100
2841	937266	SR-710	Congress Ave	Australian Ave	4	4	19,555	17,322	17,857	16,900	16,401	27,179	29,600
2813	935287	SR-710	Australian Ave	Old Dixie Hwy	4	4	7,557	9,012	7,848	8,500	8,391	19,311	18,100
1,000	930657	SR-715	SR-80	Glades Central HS	2	2			-		6,260	7,598	7,600
7026	930670	SR-715	Glades Central HS	Ave E	2	2	14,046	25,160	13,235	10,800	7,746	8,893	14,400
7028	930078	SR-715	Ave E	W Canal St	2	2	10,318	10,035	10,712	11,100	5,843	7,371	12,200
7042	930257	SR-715	W Canal St	Hooker Hwy	2	2	11,178	6,865	6,296	6,346	5,925	8,164	8,700
7014	930506	SR-715	Hooker Hwy	Wilder Rd	2	2	7,159	3,927	3,535	3,300	3,567	4,782	4,700
	930777	SR-715	Hooker Hwy	N/A	2	2	1,121	-,	-,	-,	3,961	5,593	5,600
7019	930085	SR-717	SR-715	Main St	4	4	4,224	4,830	3,771	4,200	1,967	2,453	4,300
7021	935180	SR-717	Main St	MLK BI	2	2	2,862	2,610	2,462	2,400	543	647	2,600
7010	930698	SR-729	E Main St SR-15, US-441	Muck City Rd CR-717	2	2	3,798	3,577	5,708	4,400	3,912	4,947	6,700
7029	930142	SR-80	US 27	SR-715	4	4	26,355	19,792	19,226	18,300	16,621	14,498	16,800
7025	930445	SR-80	SR-715	CR 827a	4	4	17,275	15,276	16,602	15,000	12,427	9,732	13,900
7036	930359	SR-80	CR 827a	Ave G	4	4	21,417	19,507	17,362	22,000	19,691	19,712	17,400