HIGHLAND DUNES PUBLIC CIVIC SITE
CONCURRENCY TRAFFIC IMPACT ANALYSIS

Prepared for

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HIGHLAND DUNES PUBLIC CIVIC SITE
CONCURRENCY TRAFFIC IMPACT ANALYSIS

Introduction

Pinder Troutman Consulting, Inc. (PTC) has been retained to conduct a traffic impact analysis for the proposed Highland Dunes Public Civic Site in unincorporated Palm Beach County. The purpose of this study is to determine if the proposed development meets the requirements of Article 12, Traffic Performance Standards (TPS), of the Palm Beach County Unified Land Development Code (ULDC).

Site Data

The site, which has previously been known as Lazy F Ranch, is located on the north side of Southern Boulevard approximately 2.5 miles west of Seminole Pratt Whitney Road as shown on Exhibit 1. This 24-acre site is part of the Highland Dunes PUD, but is being analyzed separately for concurrency purposes. The following uses are proposed:

- 1 Palm Beach County Utility Site
- 20.0 Acres Park
- 50,000 SF General Office

Access to the proposed development will be via two connections to Southern Boulevard. One connection is at a full median opening with the second connection as a right-in/right-out only. Issues related to driveway location, turn lanes and geometrics will be addressed during final design. Any reference to intersection geometrics is conceptual in nature and subject to final design and approval by others. Year 2017 conditions were examined. The Property Control Number (PCN) for the site is 00-40-43-33-00-000-1000.

Existing (2012) Traffic Conditions

The 2012 peak season peak hour directional volumes for the surrounding roadway network as compiled by the Palm Beach County Traffic Division were utilized in this report. Traffic count data is included in Appendix A.

Project Traffic

Trip Generation

The daily and peak hour trip generation rates were obtained from Palm Beach County and the Institute of Transportation Engineers (ITE), Trip Generation, *9th Edition*. Exhibit 2 provides the daily, AM and PM peak hour trip generation data for the proposed development. The internalization matrices, which include the uses in the surrounding Highland Dunes PUD, are included in the Highland Dunes PUD Traffic Impact analysis by PTC, dated May 20, 2013. For Traffic Performance Standards purposes, based on the new external peak hour trip generation of 125, the radius of development influence is two (2) miles.

Trip Distribution and Assignment

A directional distribution, which was developed based on a review of land use patterns and existing travel patterns, is shown on Exhibit 3A. Exhibits 3B and 3C show the assignment of AM and PM peak hour project traffic, as well as the project impact percentage (% of peak hour directional service volume).

Future Traffic Conditions

Roadway Improvements

A review was undertaken of the FDOT Transportation Improvement Program and the Palm Beach County Five Year Road Program. The widening (from two lanes to four lanes divided) of Seminole Pratt Whitney Road from Southern Boulevard to Okeechobee Boulevard, and from Okeechobee Boulevard to Sycamore Drive is currently under construction. There is a FDOT Project Development & Environment (PD&E) Study being finalized for Southern Boulevard from C.R. 880 to Forest Hill Boulevard. FDOT anticipates the design to begin for the six-laning of Southern Boulevard from Lion Country Safari Road to Forest Hill Boulevard. However, there are no funds allocated in the Five Year Work Program for construction of this roadway.

Background Traffic

Historic growth trends and committed development traffic must be analyzed in the projection of future background traffic volumes. Historic growth data is provided on Exhibit

4 for the surrounding roadway links. Since the area wide historic growth is negative, historic growth was not utilized in the projection of future traffic.

Committed development data, compiled by Palm Beach County, was reviewed and is included in Appendix C. In addition to the approved projects from the TPS database, traffic from the proposed Highland Dunes PUD project was also considered. Total traffic includes existing traffic, significant committed development traffic, 0.50% background growth and Project traffic.

Traffic Performance Standards Analysis

Test 1 (Intersection Analysis)

Major intersections at the termini of the significantly impacted project-accessed link and major intersections for which a proposed development adds more than 10% of the total traffic on any link connecting a major intersection are required to be analyzed. The intersection of Southern Boulevard and Seminole Pratt Whitney Road was analyzed as shown on Exhibit 5 and is included in Appendix C. Since Southern Boulevard is a Strategic Intermodal System (SIS) facility, the intersection was analyzed using the Highway Capacity Software. The intersection meets the adopted standards with the existing lane configurations.

Test 1 (Link Analysis)

The second part of Test 1 examines if any roadway links required to be analyzed are projected to operate below adopted level of service standards. Roadway links are required to be analyzed where the project impact is greater than 1% of LOS D inside the radius of development influence and greater than 5% of LOS D outside the radius. Exhibit 6 shows future AM and PM peak hour directional traffic conditions for the analyzed roadway links. All of the significantly impacted links meet the adopted standards, therefore the proposed project meets the Test 1 Link Analysis.

Test 2 (Five Year Analysis)

This test examines traffic conditions at the end of the fifth year of the FDOT Five Year Transportation Improvement Program. A Test 2 analysis is required for any roadway link

within the radius of development influence where the project impact is greater than 3% of LOS E, and outside the radius where the project impact is greater than 5% of LOS E. As shown on Exhibit 7, there are two roadway links that are significantly impacted. As shown on Exhibit 6, the significantly impacted links meet the adopted standards in the five-year analysis. Therefore, the requirements of Test 2 are met.

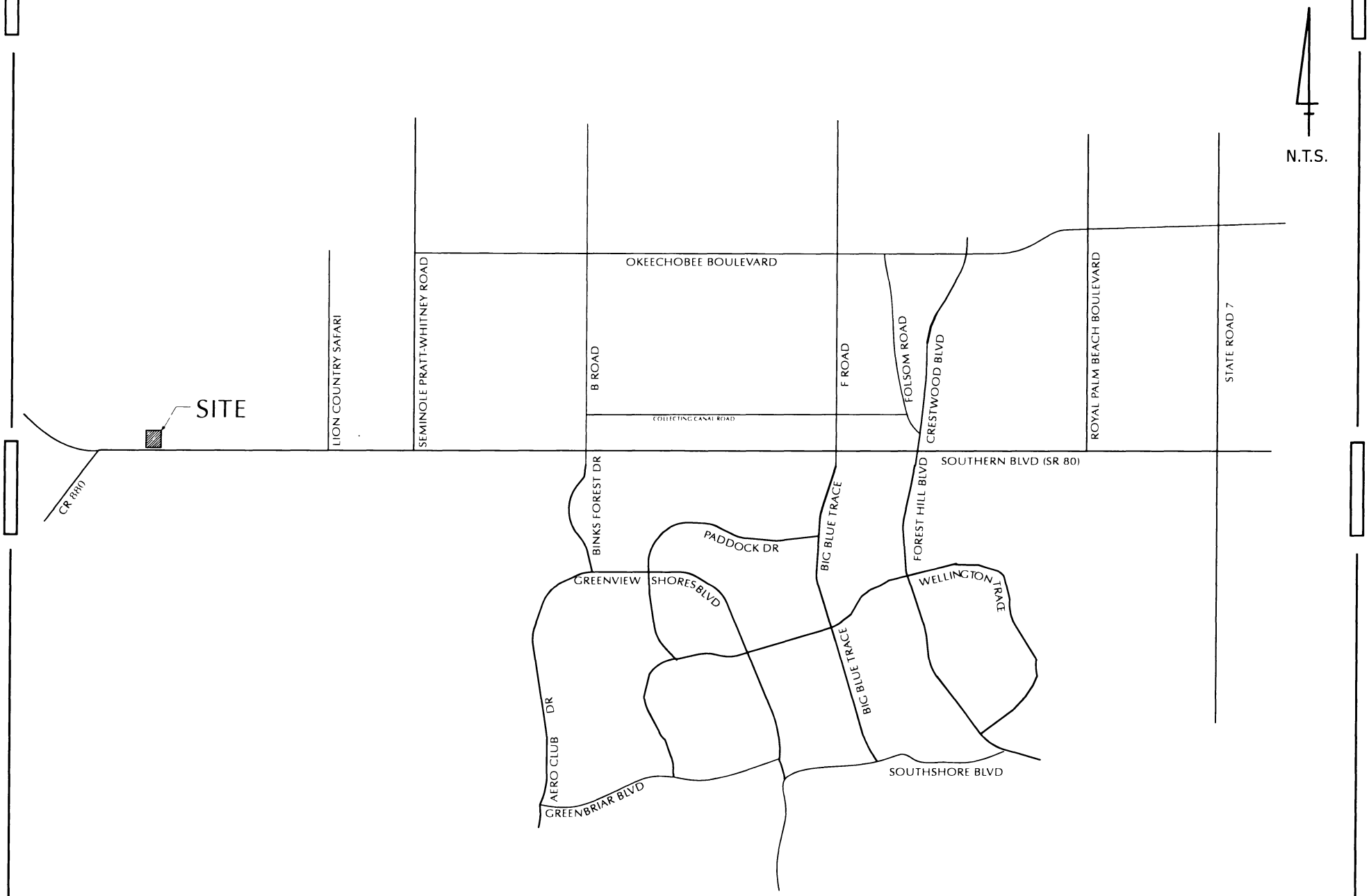
Driveway Volumes

AM and PM peak hour project driveway volumes are provided on Exhibit 8. An analysis of the main Southern Boulevard driveway at buildout conditions with 100% of the Highland Dunes PUD and Civic Site project was completed and is provided in Appendix D. The intersection is projected to operate at adopted level of service standards. This intersection is proposed to be signalized as a condition of approval for the Highland Dunes PUD project.

Conclusions

This analysis shows that the proposed development meets all of the requirements of the Traffic Performance Standards of Palm Beach County.

EXHIBITS



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HIGHLAND DUNES CIVIC SITE

EXHIBIT 1 PROJECT LOCATION

PTC

Exhibit 2
Highland Dunes Public Civic Site
Trip Generation

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips	Pass-by Trips (3)		New External Trips
Park	412	20 Acres	2.28 /Acre	46	42	92.2%	4	-	0%	4
PBC Utility Site (4)	IND	1 Site	202 /Site	202	24	12.0%	178	-	0%	178
General Office	710	50,000 SF	Ln (T) = 0.76Ln (X)+3.68	775	93	12.0%	682	-	0%	682
TOTALS				1,023	159	15.5%	864			864

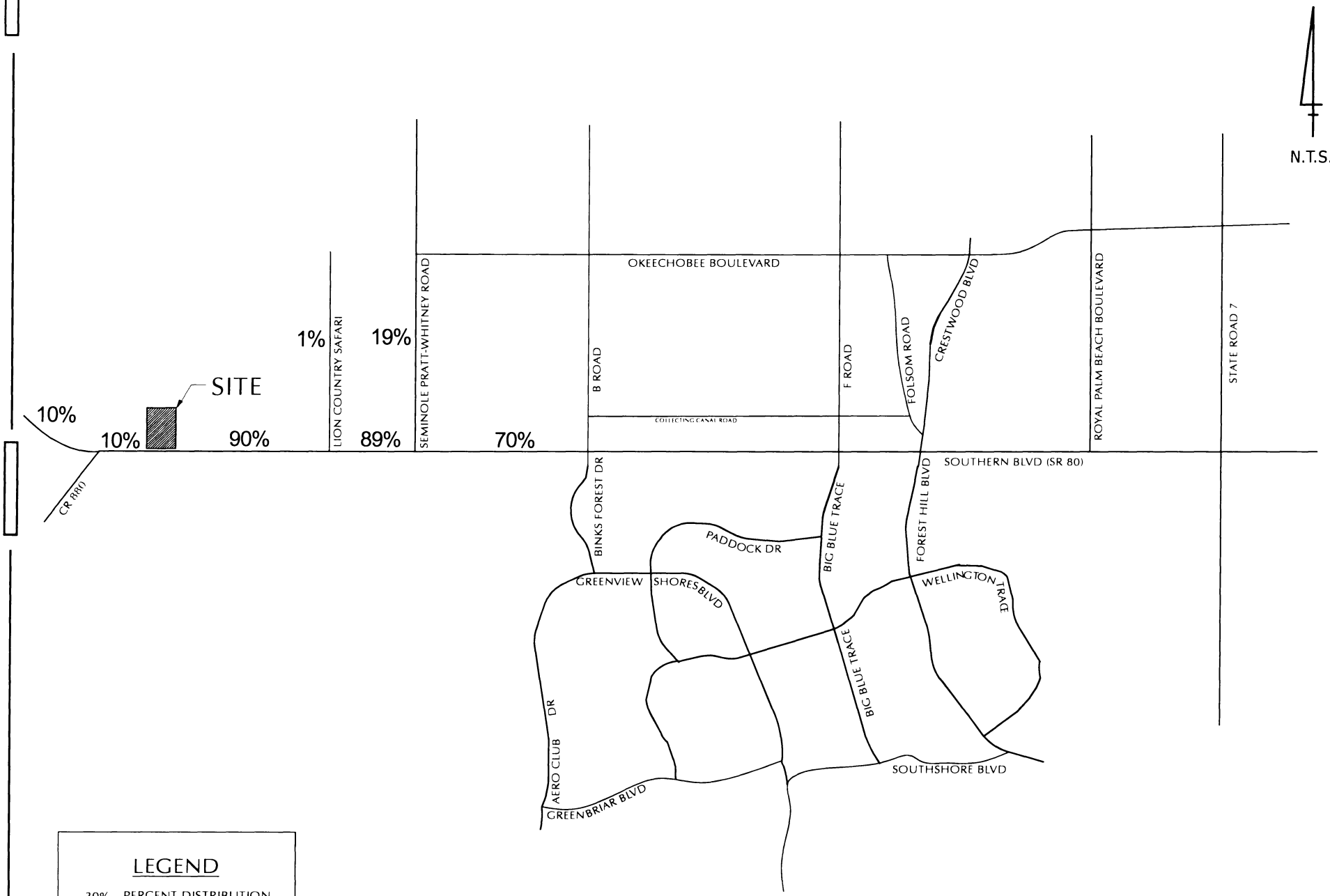
AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips			Pass-by Trips (3)		New Trips		
				In	Out	Total			In	Out	Total			In	Out	Total
Park	412	20 Acres	0.02 /Acre (61/39)	-	-	-	-	0.0%	-	-	-	-	0%	-	-	-
PBC Utility Site (4)	IND	1 Site	20 /Site (100/0)	20	-	20	1	5.3%	19	-	19	-	0%	19	-	19
General Office	710	50,000 SF	Ln (T) = 0.80Ln (X)+1.57 (88/12)	97	13	110	6	5.3%	93	11	104	-	0%	93	11	104
TOTALS				117	13	130	7	5.4%	112	11	123			112	11	123

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips			Pass-by Trips (3)		New Trips		
				In	Out	Total			In	Out	Total			In	Out	Total
Park	412	20 Acres	0.09 /Acre (61/39)	1	1	2	2	95.0%	-	-	-	-	0%	-	-	-
PBC Utility Site (4)	IND	1 Site	20 /Site (50/50)	10	10	20	1	6.2%	9	10	19	-	0%	9	10	19
General Office	710	50,000 SF	Ln (T) = 0.74Ln (X)+1.83 (17/83)	19	94	113	7	6.2%	16	90	106	-	0%	16	90	106
TOTALS				30	105	135	10	7.4%	25	100	125			25	100	125

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.
(2) See Appendix D for trip generation for the Highland Dunes PUD.
(3) Given the remote location of the Site and the high internalization, no pass-by rates were used.
(4) Trip Generation rate based on Site Plan for Minor Utility/Gov. Services Site by Matthews Consulting, approved 6/22/05.



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HIGHLAND DUNES CIVIC SITE

EXHIBIT 3A PROJECT TRAFFIC DISTRIBUTION

PTC

Exhibit 3B
Highland Dunes Public Civic Site
Project Traffic Assignment - Test One

AM Peak Hour

Roadway	Link	Lanes	Class	Dir	Project Traffic		Total Project Impact	LOS D Service Vol. (1)	Signif-icant Impact?
					% Dist.	Pk Hour Trips			
Seminole Pratt Whitney Rd	Southern Blvd to Okeechobee Blvd	4LD	I	NB	19%	2	0.11%	1960	No
				SB	19%	21	1.09%	1960	No
Southern Blvd	CR 700 to CR 880 (2)	4LD	Unint.	EB	10%	11	0.36%	3130	No
				WB	10%	1	0.04%	3130	No
	CR 880 to Site (2)	4LD	Unint.	EB	10%	11	0.36%	3130	No
				WB	10%	1	0.04%	3130	No
	Site to Lion Country Safari (2)	4LD	I	EB	90%	10	0.55%	1800	No
				WB	90%	101	5.60%	1800	YES
	Lion Country Safari to Seminole Pratt (2)	4LD	I	EB	89%	10	0.54%	1800	No
				WB	89%	100	5.54%	1800	YES
	Seminole Pratt to Binks Forest Dr	4LD	I	EB	70%	8	0.39%	1960	No
				WB	70%	78	4.00%	1960	No

(1) Source: 2009 FDOT Quality / LOS Handbook.
(2) LOS D service volume is based on "Transitioning Area" for this SIS facility.
Shaded roadway links are outside the radius of influence. Significance level is 5%.

Exhibit 3C
Highland Dunes Public Civic Site
Project Traffic Assignment - Test One

PM Peak Hour

Roadway	Link	Lanes	Class	Dir	Project Traffic		Total Project Impact	LOS D Service Vol. (1)	Signif-icant Impact?
					% Dist.	Pk Hour Trips			
Southern Blvd	CR 700 to CR 880 (2)	4LD	Unint.	EB	10%	3	0.08%	3130	No
				WB	10%	10	0.32%	3130	No
	CR 880 to Site (2)	4LD	Unint.	EB	10%	3	0.08%	3130	No
				WB	10%	10	0.32%	3130	No
	Site to Lion Country Safari (2)	4LD	I	EB	90%	90	5.00%	1800	YES
				WB	90%	23	1.25%	1800	YES
	Lion Country Safari to Seminole Pratt (2)	4LD	I	EB	89%	89	4.94%	1800	YES
				WB	89%	22	1.24%	1800	YES

(1) Source: 2009 FDOT Quality / LOS Handbook.
(2) LOS D service volume is based on "Transitioning Area" for this SIS facility.

Exhibit 4
Highland Dunes Public Civic Site
Historic Growth

Roadway	Link	Peak Season Daily Traffic Volumes		Growth Rate
		2009	2012	
Southern Blvd	CR 880 to Lion Country Safari	16,585	13,813	-5.91% /Year
	Lion Country Safari to Seminole Pratt	23,112	18,500	-7.15% /Year
Areawide		39,697	32,313	-6.63% /Year

Exhibit 5
Highland Dunes Public Civic Site
Test 1 Intersection Analysis (1)

Intersection	Existing Geometrics (2)			
	2017 AM Peak Hour		2017 PM Peak Hour	
	Intersection Delay (sec)	LOS	Intersection Delay (sec)	LOS
Southern Blvd / Seminole Pratt Whitney Rd	40.6	D	27.8	C

(1) See Appendix C for intersection capacity analyses. Southern Boulevard intersections require HCS analyses because they are on
(2) Includes revised signal timing. See Appendix C.

Exhibit 6
Highland Dunes Public Civic Site
Test 1 Link Analysis

Roadway	Link	Lanes	Dir	AM PEAK HOUR									
				Existing	Committed Dev. Analysis (2)				Total		Total	Service	Meets
				(2012) (1)	Projects	High. Dunes	Growth	Total	Bkgd.	Project	(2017)	Volume	Std?
Southern Boulevard	Site to Lion Country Safari	4LD	WB	876	-	393	22	415	1,291	101	1,392	1,800	Yes
	Lion Country Safari to Seminole Pratt	4LD	WB	1,044	-	389	26	415	1,459	100	1,559	1,800	Yes

Roadway	Link	Station Number	Dir	PM PEAK HOUR									
				Existing	Committed Dev. Analysis (2)				Total		Total	Service	Meets
				(2012) (1)	Projects	High. Dunes	Growth	Total	Bkgd.	Project	(2017)	Volume	Std?
Southern Boulevard	Site to Lion Country Safari	4LD	EB	823	73	501	21	595	1,418	90	1,508	1,800	Yes
	Site to Lion Country Safari	4LD	WB	386	78	851	10	939	1,325	23	1,348	1,800	Yes
	Lion Country Safari to Seminole Pratt	4LD	EB	1,044	73	496	26	595	1,639	89	1,728	1,800	Yes
	Lion Country Safari to Seminole Pratt	4LD	WB	463	78	841	12	931	1,394	22	1,416	1,800	Yes

(1) Count data from Palm Beach County. See Appendix A.
(2) Committed development data from County TPS Database and Highland Dunes Traffic Study dated May 2013. See Appendix B.

Exhibit 7
Highland Dunes Public Civic Site
Project Traffic Assignment - Test Two

AM Peak Hour

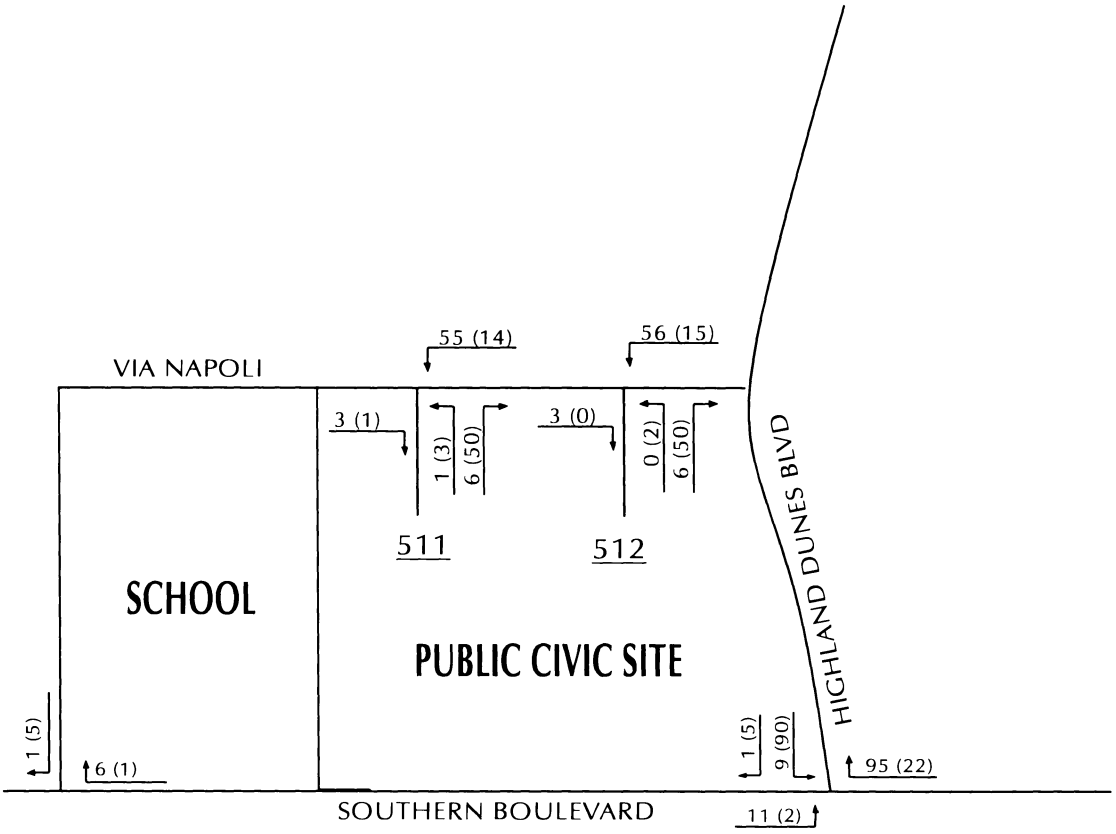
Roadway	Link	Lanes	Class	Dir	Project Traffic		Total Project Impact	LOS E Service Vol. (1)	Signif-icant Impact?
					% Dist.	Pk Hour Trips			
Seminole Pratt Whitney Rd	Southern Blvd to Okeechobee Blvd	4LD	I	NB	19%	2	0.11%	1960	No
				SB	19%	21	1.09%	1960	No
Southern Blvd	CR 700 to CR 880 (2)	4LD	Unint.	EB	10%	11	0.32%	3550	No
				WB	10%	1	0.03%	3550	No
	CR 880 to Site (2)	4LD	Unint.	EB	10%	11	0.32%	3550	No
				WB	10%	1	0.03%	3550	No
	Site to Lion Country Safari (2)	4LD	I	EB	90%	10	0.55%	1800	No
				WB	90%	101	5.60%	1800	YES
	Lion Country Safari to Seminole Pratt (2)	4LD	I	EB	89%	10	0.54%	1800	No
				WB	89%	100	5.54%	1800	YES
	Seminole Pratt to Binks Forest Dr	4LD	I	EB	70%	8	0.39%	1960	No
				WB	70%	78	4.00%	1960	No

PM Peak Hour

Roadway	Link	Lanes	Class	Dir	Project Traffic		Total Project Impact	LOS E Service Vol. (1)	Signif-icant Impact?
					% Dist.	Pk Hour Trips			
Southern Blvd	CR 700 to CR 880 (2)	4LD	Unint.	EB	10%	3	0.07%	3550	No
				WB	10%	10	0.28%	3550	No
	CR 880 to Site (2)	4LD	Unint.	EB	10%	3	0.07%	3550	No
				WB	10%	10	0.28%	3550	No
	Site to Lion Country Safari (2)	4LD	I	EB	90%	90	5.00%	1800	YES
				WB	90%	23	1.25%	1800	No
	Lion Country Safari to Seminole Pratt (2)	4LD	I	EB	89%	89	4.94%	1800	YES
				WB	89%	22	1.24%	1800	No

(1) Source: 2009 FDOT Quality / LOS Handbook.
(2) LOS D service volume is based on "Transitioning Area" for this SIS facility.
Shaded roadway links are outside the radius of influence. Significance level is 5%.

N.T.S.



LEGEND

37	- AM PEAK HOUR
(18)	- PM PEAK HOUR
1126	- ADT

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HIGHLAND DUNES CIVIC SITE

EXHIBIT 8
PROJECT DRIVEWAY VOLUMES

PTC

APPENDIX A

STA	ROAD	FROM	TO	LANES	DAILY TRAFFIC VOLUMES					2012 DAILY			2012 AM PEAK HOUR			2012 PM PEAK HOUR		
					2007	2008	2009	2010	2011	DATE	VOL	GR	2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
3429	SOUTH SHORE DR	Greenview Shores Bl	Big Blue Trace	4D	19744	19087	18028	18470	19147	2/21/2012	19657	2.93%	1657	638	1089	1620	905	722
3421	SOUTH SHORE DR	Big Blue Trace	Forest Hill Blvd	4D	26556	25227	22287	23838	25586	2/13/2012	25823	5.03%	1748	1068	683	2218	1081	1148
3101	SOUTHERN BLVD	CR 880	Lion Country Safari	4D	17190	16198	16585	19702	15140	1/23/2012	13813	-5.91%	1229	378	876	1209	823	386
3467	SOUTHERN BLVD	Lion Country Safari	Seminole Pratt Whitney Rd	4D	23814	21535	23112	22490	18663	3/12/2012	18500	-7.15%	1580	581	1044	1506	1044	463
3443	SOUTHERN BLVD	Seminole Pratt Whitney Rd	Binks Forest Drive	4D	29807	28605	32183	28630	27143	2/27/2012	25048	-8.02%	1968	1091	938	2050	1091	1007
3431	SOUTHERN BLVD	Binks Forest Drive	Big Blue Trace	4D	32664	30997	32120	35305	31051	2/27/2012	33763	1.68%	2928	1544	1564	2954	1553	1463
3413	SOUTHERN BLVD	Big Blue Trace	Forest Hill/Crestwood	4D	44382	42116	43777	46881	43698	2/26/2012	42972	-0.62%	3478	1913	1565	3465	1670	1845
3417	SOUTHERN BLVD	Forest Hill/Crestwood	Cypress Head	6D	46087	48632	52215	54303	54813	2/27/2012	53757	0.97%	4298	2863	1486	4407	1892	2699
3437	SOUTHERN BLVD	Cypress Head	Royal Palm Beach Blvd	6D	46826	46769	51088	53158	55124	2/27/2012	52734	1.06%	4191	2776	1467	4425	1862	2667
3405	SOUTHERN BLVD	Royal Palm Beach Blvd	Lamstein Ln	8D	50600	50500	61396											
3409	SOUTHERN BLVD	Lamstein Ln	SR-7	8D	52000	51800	61795	65897	61903	2/22/2012	58568	-1.77%	4452	3178	1570	4805	2297	2705
3415	SOUTHERN BLVD	SR 7	Sansbury's Way	8D	42900	43500	53262	61147	60612	2/22/2012	61843	5.11%	5130	3344	1830	4897	2083	2936
3105	SOUTHERN BLVD	Sansbury's Way	Pike Rd	8D	46545	47700	54803	62010	63607	2/21/2012	64205	5.42%	5350	3498	1908	5410	2090	3348
3215	SOUTHERN BLVD	Pike Rd	Fla Turnpike Entrance	8D	52700	54700	55700	56749										
3223	SOUTHERN BLVD	Fla Turnpike Entrance	Jog Rd	8D	40685	42908	50518	56858	56164	2/22/2012	64470	8.47%	5726	3671	2093	5642	2209	3533
3643	SOUTHERN BLVD	Jog Rd	Haverhill Rd	8D	43708	46081	56391	61432	64391	2/22/2012	71670	8.32%	6972	4744	2228	6451	2360	4118
3635	SOUTHERN BLVD	Haverhill Rd	Military Tr	8D	36020	46959	45467	64446	65982									
3637	SOUTHERN BLVD	Military Tr	Kirk Rd	8D	42293	43800	48376	67701	58981	4/2/2012	64992	10.34%	6001	4121	1880	5749	2041	3724
3673	SOUTHERN BLVD	Kirk Rd	Congress Ave	8D	42504	43264	50713	58752	59687	3/14/2012	62292	7.10%	5704	4001	1748	5441	1943	3512
3639	SOUTHERN BLVD	Congress Ave SB	Congress Ave NB	8D	38664													
3675	SOUTHERN BLVD	Congress Ave NB	Gem Lake	8D	38664		39000	58349										
3217	SOUTHERN BLVD	Gem Lake	I-95	8D	42475	40378	47271	51969	57619	3/14/2012	59277	7.84%	5151	3133	2018	5223	2053	3170

SIGNAL_ID	E-W STREET	N-S STREET	DATE	TIME	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
30750	SOUTHERN BLVD	ROYAL PALM BEACH	3/23/2010	7:15 AM	0	20	5	36	0	438	7	171	2	202	2831	22	42	25	1312	213	5326
30750	SOUTHERN BLVD	ROYAL PALM BEACH	1/12/2009	7:15 AM	0	21	6	34	2	482	13	159	3	201	2581	22	13	14	1063	176	4790
30750	SOUTHERN BLVD	ROYAL PALM BEACH	10/8/2008	7:30 AM	0	14	4	22	0	517	8	206	3	217	2343	20	18	11	1151	236	4770
30750	SOUTHERN BLVD	ROYAL PALM BEACH	2/29/2012	4:45 PM	0	31	5	32	0	373	11	160	5	235	1965	32	1	43	2164	407	5464
30750	SOUTHERN BLVD	ROYAL PALM BEACH	9/8/2011	4:45 PM	0	11	5	5	0	281	9	177	2	221	1907	12	8	15	2364	508	5525
30750	SOUTHERN BLVD	ROYAL PALM BEACH	2/22/2011	5:00 PM	0	49	11	29	0	340	12	256	4	228	1732	33	10	40	2625	582	5951
30750	SOUTHERN BLVD	ROYAL PALM BEACH	3/23/2010	5:00 PM	0	36	7	30	0	306	7	193	15	229	1875	29	22	32	3063	613	6457
30750	SOUTHERN BLVD	ROYAL PALM BEACH	1/12/2009	5:00 PM	0	35	12	23	0	283	13	193	8	240	1435	11	28	34	2319	605	5239
30750	SOUTHERN BLVD	ROYAL PALM BEACH	10/8/2008	5:00 PM	0	14	6	14	0	289	5	214	6	238	1351	23	9	26	2195	638	5028
30790	SOUTHERN BLVD	SANSBURY'S WAY	2/29/2012	7:15 AM	0	187	197	463	0	103	153	107	0	101	3393	222	16	94	1617	188	6841
30790	SOUTHERN BLVD	SANSBURY'S WAY	9/14/2011	7:15 AM	0	443	177	192	3	97	129	96	0	254	3468	95	6	141	1666	87	6854
30790	SOUTHERN BLVD	SANSBURY'S WAY	2/17/2011	7:30 AM	0	175	223	392	0	74	131	64	1	102	3320	172	6	88	1689	245	6682
30790	SOUTHERN BLVD	SANSBURY'S WAY	10/6/2010	7:15 AM	0	176	192	481	0	92	124	65	0	55	2899	219	5	120	1470	103	6001
30790	SOUTHERN BLVD	SANSBURY'S WAY	1/6/2009	7:15 AM	0	91	170	410	0	75	63	66	0	77	3072	54	5	84	1268	100	5535
30790	SOUTHERN BLVD	SANSBURY'S WAY	10/1/2008	7:15 AM	0	98	194	424	0	77	66	36	3	118	2863	49	3	103	1157	173	5364
30790	SOUTHERN BLVD	SANSBURY'S WAY	3/18/2008	7:30 AM	0	73	222	452	0	74	109	36	0	80	1875	39	6	88	1163	122	4339
30790	SOUTHERN BLVD	SANSBURY'S WAY	2/29/2012	4:45 PM	0	152	164	139	0	135	205	170	1	134	1813	153	19	357	3052	202	6696
30790	SOUTHERN BLVD	SANSBURY'S WAY	9/14/2011	5:00 PM	0	134	111	126	0	141	220	136	0	139	1570	195	25	385	2905	181	6268
30790	SOUTHERN BLVD	SANSBURY'S WAY	2/17/2011	5:00 PM	0	122	126	137	0	135	213	125	3	105	1999	146	29	351	3217	177	6885
30790	SOUTHERN BLVD	SANSBURY'S WAY	10/6/2010	5:00 PM	0	144	125	121	0	130	223	129	3	134	1676	137	6	402	2630	149	6009
30790	SOUTHERN BLVD	SANSBURY'S WAY	1/6/2009	5:00 PM	0	81	99	113	0	71	162	94	2	72	1617	109	13	299	2786	102	5620
30790	SOUTHERN BLVD	SANSBURY'S WAY	10/1/2008	5:00 PM	0	47	118	92	0	124	207	74	0	68	1363	123	2	266	2446	106	5036
30790	SOUTHERN BLVD	SANSBURY'S WAY	3/18/2008	4:45 PM	0	56	150	109	0	80	231	45	0	86	1245	89	14	234	1614	89	4042
30710	SOUTHERN BLVD	SEMINOLE PRATT W	3/5/2012	7:15 AM	0	0	0	0	5	644	0	138	0	53	380	0	3	0	663	198	2084
30710	SOUTHERN BLVD	SEMINOLE PRATT W	2/9/2011	7:00 AM	0	0	0	0	0	626	0	124	0	90	409	0	8	0	764	219	2240
30710	SOUTHERN BLVD	SEMINOLE PRATT W	6/1/2010	7:00 AM	0	0	0	0	0	652	0	113	0	82	456	0	0	0	946	178	2427
30710	SOUTHERN BLVD	SEMINOLE PRATT W	3/24/2010	7:00 AM	0	0	0	0	0	761	0	125	0	82	511	0	0	0	875	225	2579
30710	SOUTHERN BLVD	SEMINOLE PRATT W	1/14/2009	7:15 AM	0	0	0	0	0	633	0	162	0	107	516	0	8	0	779	195	2400
30710	SOUTHERN BLVD	SEMINOLE PRATT W	3/11/2008	7:15 AM	0	0	0	0	0	626	0	169	0	113	535	0	5	0	1011	223	2682
30710	SOUTHERN BLVD	SEMINOLE PRATT W	3/5/2012	5:00 PM	0	0	0	0	0	290	0	98	0	159	721	0	7	0	478	645	2398
30710	SOUTHERN BLVD	SEMINOLE PRATT W	2/9/2011	4:45 PM	0	0	0	0	0	387	0	59	0	201	649	0	20	0	697	586	2599
30710	SOUTHERN BLVD	SEMINOLE PRATT W	6/1/2010	5:00 PM	0	0	0	0	0	385	0	88	0	181	1083	0	0	0	562	495	2794
30710	SOUTHERN BLVD	SEMINOLE PRATT W	3/24/2010	5:00 PM	0	0	0	0	0	361	0	79	0	248	1319	0	0	0	549	571	3127

APPENDIX B

Input Data

ROAD NAME: Southern Blvd
CURRENT YEAR: 2012
ANALYSIS YEAR: 2017
GROWTH RATE: -5.91%

STATION: 3101
FROM: County Road 880
TO: ~~Midpoint~~ Site
COUNT DATE: 1/23/2012
PSF: 1

Report Created: 05/08/2013

Link Analysis

Time Period	AM			PM		
Direction	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB
Existing Volume	1229	378	876	1209	823	386
Peak Volume	1229	378	876	1209	823	386
Diversion(%)	0	0	0	0	0	0
Volume after Diversion	1229	378	876	1209	823	386

Committed Developments							Type	% Complete
Lazy F Ranch	0	0	0	0	0	0	NR	0%
Groves Town Center	15	0	0	51	0	0	NR	0%
Loxahatchee Groves Commons	17	0	0	48	0	0	NR	0%
Palm Beach State College	41	36	0	53	0	0	NR	0%
Total Committed Developments	73	36	0	152	0	0		
Total Committed Residential	0	0	0	0	0	0		
Total Committed Non-Residential	73	36	0	152	0	0		
Double Count Reduction	0	0	0	0	0	0		
Total Discounted Committed Developments	73	36	0	152	0	0		
Historical Growth	-323	-99	-230	-318	-216	-101		
Comm Dev+1% Growth	136	55	45	214	42	20		
Growth Volume Used	136	55	45	214	42	20		
Total Volume	1365	433	921	1423	865	406		

Lanes	4LD					
LOS D Capacity	3220	3320	3320	3220	3320	3320
Link Meets Test 1?	YES	YES	YES	YES	YES	YES
LOS E Capacity	3400	3760	3760	3400	3760	3760
Link Meets Test 2?	YES	YES	YES	YES	YES	YES

Input Data

ROAD NAME: Southern Blvd
CURRENT YEAR: 2012
ANALYSIS YEAR: 2017
GROWTH RATE: -7.15%

STATION: 3467
FROM: ~~MIDPOINT~~ site
TO: Seminole Pratt Whitney Rd
COUNT DATE: 3/12/2012
PSF: 1

Report Created: 05/08/2013

Link Analysis

Time Period	AM			PM		
Direction	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB
Existing Volume	1580	581	1044	1506	1044	463
Peak Volume	1580	581	1044	1506	1044	463
Diversion(%)	0	0	0	0	0	0
Volume after Diversion	1580	581	1044	1506	1044	463

Committed Developments							Type	% Complete
Lazy F Ranch	0	0	0	0	0	0	NR	0%
Groves Town Center	15	0	0	51	22	30	NR	0%
Loxahatchee Groves Commons	17	0	0	48	23	24	NR	0%
Palm Beach State College	41	36	0	53	28	24	NR	0%
Total Committed Developments	73	36	0	152	73	78		
Total Committed Residential	0	0	0	0	0	0		
Total Committed Non-Residential	73	36	0	152	73	78		
Double Count Reduction	0	0	0	0	0	0		
Total Discounted Committed Developments	73	36	0	152	73	78		
Historical Growth	-490	-180	-324	-467	-324	-144		
Comm Dev+1% Growth	154	66	53	229	126	102		
Growth Volume Used	154	66	53	229	126	102		
Total Volume	1734	647	1097	1735	1170	565		
Lanes		1800		4LD	1800			
LOS D Capacity	3220	3320	3320	3220	3320	3320		
Link Meets Test 1?	YES	YES	YES	YES	YES	YES		
LOS E Capacity	3400	3760	3760	3400	3760	3760		
Link Meets Test 2?	YES	YES	YES	YES	YES	YES		

Input Data

E-W Street: Southern Blvd | COUNT DATE: 3/5/2012 | Report Created: 05/09/2013
N-S STREET: Seminole Pratt Whitney Rd | CURRENT YEAR: 2012 ✓
TIME PERIOD: AM | ANALYSIS YEAR: 2017 ✓
GROWTH RATE: -7.65% | PSF: 1
SIGNAL ID: 30710

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing Volume	53	380	0	3	663	198	0	0	0	649	0	138		
Diversions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Peak Season Volume	53	380	0	3	663	198	0	0	0	649	0	138		
Committed Developments													Type	% Complete
Bink's Corporate Center	0	0	0	0	0	3	0	0	0	4	0	0	NR	0%
Groves Town Center	0	18	0	0	9	17	0	0	0	35	0	0	NR	0%
Palm Beach State College	0	50	0	0	8	13	0	0	0	84	0	0	NR	0%
Loxahatchee Groves Commons	0	3	0	0	2	4	0	0	0	7	0	0	NR	0%
Lazy F Ranch													NR	0%
Total Committed Developments	0	71	0	0	19	37	0	0	0	130	0	0		
Total Committed Residential	0	0	0	0	0	0	0	0	0	0	0	0		
Total Committed Non-Residential	0	71	0	0	19	37	0	0	0	130	0	0		
Double Count Reduction	0	0	0	0	0	0	0	0	0	0	0	0		
Total Discounted Committed	0	71	0	0	19	37	0	0	0	130	0	0		

Input Data

E-W Street: Southern Blvd | COUNT DATE: 3/5/2012 | Report Created: 05/09/2013
N-S STREET: Seminole Pratt Whitney Rd | CURRENT YEAR: 2012
TIME PERIOD: PM | ANALYSIS YEAR: 2017
GROWTH RATE: -7.65% | PSF: 1
SIGNAL ID: 30710

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing Volume	159	721	0	7	478	645	0	0	0	290	0	98		
Diversions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Peak Season Volume	159	721	0	7	478	645	0	0	0	290	0	98		
Committed Developments													Type	% Complete
Bink's Corporate Center	0	0	0	0	0	13	0	0	0	12	0	0	NR	0%
Groves Town Center	0	24	0	0	31	62	0	0	0	48	0	0	NR	0%
Palm Beach State College	0	40	0	0	34	56	0	0	0	66	0	0	NR	0%
Loxahatchee Groves Commons	0	19	0	0	20	40	0	0	0	37	0	0	NR	0%
Lazy F Ranch													NR	0%
Total Committed Developments	0	83	0	0	85	171	0	0	0	163	0	0		
Total Committed Residential	0	0	0	0	0	0	0	0	0	0	0	0		
Total Committed Non-Residential	0	83	0	0	85	171	0	0	0	163	0	0		
Double Count Reduction	0	0	0	0	0	0	0	0	0	0	0	0		
Total Discounted Committed	0	83	0	0	85	171	0	0	0	163	0	0		

COMMITTED TRAFFIC

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Seminole Pratt Whitney Rd

(Existing Geometrics w/Project)

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2021
Years = 9

AM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/5/12)	0	0	0	649	0	138	53	380	0	3	663	198
Peak Season Volume	0	0	0	649	0	138	53	380	0	3	663	198
Bkgd (Growth + Exist)	0	0	0	679	0	144	55	397	0	3	693	207
Approved Projects	0	0	0	100	0	0	0	56	0	0	17	32
% Project Traffic	0%	0%	0%	0%	0%	19%	19%	70%	0%	0%	70%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	0	0	0	0	0	83	205	757	0	0	306	0
Total	**0**	**0**	**0**	**779**	**0**	**227**	**260**	**1,210**	**0**	**3**	**1,016**	**239**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	2	1	1	2	2	0	1	2	2
Approach Volume		0			1,006			1,470			1,258	
Per Lane Volume	0	0	n/a	390	0	227	130	605	n/a	3	508	120
Right Turn on Red			0			60			0			60
Right Turn Resultant			-3			37			0			-330
North-South Critical	NB LT + SB RT =			37			SB LT + NB TH =			390		
East-West Critical	EB LT + WB TH =			638			WB LT + EB TH =			608		
Maximum Critical Sum	**390**			**+**	**638**		**=**		**1,028**			
STATUS ?	**UNDER**											

PM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/5/12)	0	0	0	290	0	98	159	721	0	7	478	645
Peak Season Volume	0	0	0	290	0	98	159	721	0	7	478	645
Bkgd (Growth + Exist)	0	0	0	303	0	102	166	754	0	7	500	675
Approved Projects	0	0	0	138	0	0	0	73	0	0	77	147
% Project Traffic	0%	0%	0%	0%	0%	19%	19%	70%	0%	0%	70%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	0	0	0	0	0	180	106	390	0	0	662	0
Total	**0**	**0**	**0**	**441**	**0**	**282**	**272**	**1,217**	**0**	**7**	**1,239**	**822**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	2	1	1	2	2	0	1	2	2
Per Lane Volume	0	0	n/a	221	0	282	136	609	n/a	7	620	411
Right Turn on Red			0			60			0			60
Right Turn Resultant			-7			86			0			130
North-South Critical	NB LT + SB RT =			86			SB LT + NB TH =			221		
East-West Critical	EB LT + WB TH =			756			WB LT + EB TH =			616		
Maximum Critical Sum	**221**			**+**	**756**		**=**		**977**			
STATUS ?	**UNDER**											

COMMITTED TRAFFIC

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Site Entrance

(Existing Geometrics w/Project)

Growth Rate =	0.50%
Peak Season =	1.00
Buildout Year =	2021
Years =	9

AM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/5/12)	0	0	0	0	0	0	0	378	0	0	876	0
Peak Season Volume	0	0	0	0	0	0	0	378	0	0	876	0
Bkgd (Growth + Exist)	0	0	0	0	0	0	0	395	0	0	916	0
Approved Projects	0	0	0	0	0	0	0	33	0	0	0	0
Project Traffic	0	0	0	983	0	97	55	0	0	0	166	328
Total	**0**	**0**	**0**	**983**	**0**	**97**	**55**	**428**	**0**	**0**	**1,082**	**328**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	2	1	1	1	2	0	1	2	1
Approach Volume		0			1,080			483			1,410	
Per Lane Volume	0	0	n/a	492	0	97	55	214	n/a	0	541	328
Right Turn on Red			0			60			0			60
Right Turn Resultant			0			-18			0			-224
North-South Critical	NB LT + SB TH =			0			SB LT + NB RT =			492		
East-West Critical	EB LT + WB TH =			596			WB LT + EB TH =			214		
Maximum Critical Sum	**492**			**+**	**596**		**=**	**1,088**				
STATUS ?	**UNDER**											

PM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/5/12)	0	0	0	0	0	0	0	823	0	0	386	0
Peak Season Volume	0	0	0	0	0	0	0	823	0	0	386	0
Bkgd (Growth + Exist)	0	0	0	0	0	0	0	861	0	0	404	0
Approved Projects	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic	0	0	0	591	0	57	97	0	0	0	52	821
Total	**0**	**0**	**0**	**591**	**0**	**57**	**97**	**861**	**0**	**0**	**456**	**821**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	2	1	1	1	2	0	1	2	1
Approach Volume		0			648			958			1,277	
Per Lane Volume	0	0	n/a	296	0	57	97	431	n/a	0	228	821
Right Turn on Red			0			57			0			60
Right Turn Resultant			0			-97			0			465
North-South Critical	NB LT + SB TH =			0			SB LT + NB RT =			296		
East-West Critical	EB LT + WB RT =			562			WB LT + EB TH =			431		
Maximum Critical Sum	**296**			**+**	**562**		**=**	**858**				
STATUS ?	**UNDER**											

APPENDIX C

INTERSECTION ANALYSIS SHEET
Highland Dunes Civic Site

Southern Blvd & Seminole Pratt Whitney Rd

(Existing Geometrics w/Project)

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2017
Years = 5

AM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/5/12)	0	0	0	649	0	138	53	380	0	3	663	198
Peak Season Volume	0	0	0	649	0	138	53	380	0	3	663	198
Bkgd (Growth + Exist)	0	0	0	665	0	141	54	390	0	3	680	203
Approved Projects	0	0	0	130	0	0	0	71	0	0	19	37
Highland Dunes	0	0	0	0	0	83	205	757	0	0	306	0
% Project Traffic	0%	0%	0%	0%	0%	19%	19%	70%	0%	0%	70%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	0	0	0	0	0	21	2	8	0	0	78	0
Total	**0**	**0**	**0**	**795**	**0**	**245**	**261**	**1,226**	**0**	**3**	**1,083**	**240**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	2	1	1	2	2	0	1	2	2
Approach Volume		0			1,040			1,487			1,326	
Per Lane Volume	0	0	n/a	398	0	245	131	613	n/a	3	542	120
Right Turn on Red			0			60			0			60
Right Turn Resultant			-3			54			0			-338
North-South Critical	NB LT + SB RT =			54			SB LT + NB TH =			398		
East-West Critical	EB LT + WB TH =			673			WB LT + EB TH =			616		
Maximum Critical Sum	**398**			**+**	**673**			**=**	**1,071**			
STATUS ?	**UNDER**											

PM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/5/12)	0	0	0	290	0	98	159	721	0	7	478	645
Peak Season Volume	0	0	0	290	0	98	159	721	0	7	478	645
Bkgd (Growth + Exist)	0	0	0	297	0	100	163	739	0	7	490	661
Approved Projects	0	0	0	163	0	0	0	83	0	0	85	171
Highland Dunes	0	0	0	0	0	180	106	390	0	0	662	0
% Project Traffic	0%	0%	0%	0%	0%	19%	19%	70%	0%	0%	70%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	0	0	0	0	0	5	19	70	0	0	18	0
Total	**0**	**0**	**0**	**460**	**0**	**285**	**288**	**1,282**	**0**	**7**	**1,255**	**832**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	2	1	1	2	2	0	1	2	2
Per Lane Volume	0	0	n/a	230	0	285	144	641	n/a	7	628	416
Right Turn on Red			0			60			0			60
Right Turn Resultant			-7			81			0			126
North-South Critical	NB LT + SB RT =			81			SB LT + NB TH =			230		
East-West Critical	EB LT + WB TH =			772			WB LT + EB TH =			648		
Maximum Critical Sum	**230**			**+**	**772**			**=**	**1,002**			
STATUS ?	**UNDER**											

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Seminole Pratt*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/9/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2017 - Existing Geom.*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2	2		1	2	2				2		1
Lane Group	L	T		L	T	R				L		R
Volume (vph)	261	1226		3	1083	240				795		245
% Heavy Vehicles	5	5		5	5	5				5		5
PHF	0.95	0.95		0.95	0.95	0.95				0.95		0.95
Pretimed/Actuated (P/A)	A	A		A	A	A				A		A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0				2.0		2.0
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0				2.0		2.0
Arrival Type	3	3		3	3	3				3		3
Unit Extension	3.0	3.0		3.0	3.0	3.0				3.0		3.0
Ped/Bike/RTOR Volume	0	0		0	0	0	0	0		0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0				12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0				0		0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	06	07	08
Timing	G = 10.0	G = 1.0	G = 26.5	G = 0.0	G = 41.5	G = 0.0	G = 0.0	G =
	Y = 6	Y = 9	Y = 7.5	Y = 0	Y = 8.5	Y = 0	Y = 0	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 110.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	275	1291		3	1140	253				837		258
Lane Group Capacity	516	1143		156	830	1868				1259		937
v/c Ratio	0.53	1.13		0.02	1.37	0.14				0.66		0.28
Green Ratio	0.15	0.33		0.09	0.24	0.69				0.38		0.61
Uniform Delay d_1	42.8	36.8		45.5	41.8	6.0				28.5		10.1
Delay Factor k	0.14	0.50		0.11	0.50	0.11				0.24		0.11
Incremental Delay d_2	1.1	69.7		0.0	175.7	0.0				1.3		0.2
PF Factor	1.000	1.000		1.000	1.000	1.000				1.000		1.000
Control Delay	43.9	106.5		45.6	217.5	6.0				29.8		10.3
Lane Group LOS	D	F		D	F	A				C		B
Approach Delay	95.5			178.8						25.2		
Approach LOS	F			F						C		
Intersection Delay	105.2			Intersection LOS						F		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Seminole Pratt*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/9/13*	Jurisdiction	*PBC - Prop. Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2017 - Existing Geom.*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2	2		1	2	2				2		1
Lane Group	L	T		L	T	R				L		R
Volume (vph)	261	1226		3	1083	240				795		245
% Heavy Vehicles	5	5		5	5	5				5		5
PHF	0.95	0.95		0.95	0.95	0.95				0.95		0.95
Pretimed/Actuated (P/A)	A	A		A	A	A				A		A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0				2.0		2.0
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0				2.0		2.0
Arrival Type	3	3		3	3	3				3		3
Unit Extension	3.0	3.0		3.0	3.0	3.0				3.0		3.0
Ped/Bike/RTOR Volume	0	0		0	0	0	0	0		0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0				12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0				0		0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	06	07	08
Timing	G = 10.0	G = 3.0	G = 42.0	G = 0.0	G = 34.0	G = 0.0	G = 0.0	G =
	Y = 6	Y = 9	Y = 7.5	Y = 0	Y = 8.5	Y = 0	Y = 0	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 120.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	275	1291		3	1140	253				837		258
Lane Group Capacity	529	1550		143	1206	1894				946		788
v/c Ratio	0.52	0.83		0.02	0.95	0.13				0.88		0.33
Green Ratio	0.16	0.45		0.08	0.35	0.70				0.28		0.51
Uniform Delay d_1	46.3	29.0		50.5	37.9	6.1				41.1		17.1
Delay Factor k	0.13	0.37		0.11	0.46	0.11				0.41		0.11
Incremental Delay d_2	0.9	4.1		0.1	14.7	0.0				10.0		0.2
PF Factor	1.000	1.000		1.000	1.000	1.000				1.000		1.000
Control Delay	47.2	33.1		50.6	52.6	6.2				51.2		17.4
Lane Group LOS	D	C		D	D	A				D		B
Approach Delay	35.6			44.2						43.2		
Approach LOS	D			D						D		
Intersection Delay	40.6			Intersection LOS						D		

SHORT REPORT

General Information		Site Information	
Analyst	PTC	Intersection	Southern Blvd & Seminole Pratt
Agency or Co.	#13-006	Area Type	All other areas
Date Performed	5/9/13	Jurisdiction	PBC - Existing Timing
Time Period	PM Peak Hour	Analysis Year	2017- Existing Geom.

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2	2		1	2	2				2		1
Lane Group	L	T		L	T	R				L		R
Volume (vph)	288	1282		7	1255	832				460		285
% Heavy Vehicles	5	5		5	5	5				5		5
PHF	0.95	0.95		0.95	0.95	0.95				0.95		0.95
Pretimed/Actuated (P/A)	A	A		A	A	A				A		A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0				2.0		2.0
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0				2.0		2.0
Arrival Type	3	3		3	3	3				3		3
Unit Extension	3.0	3.0		3.0	3.0	3.0				3.0		3.0
Ped/Bike/RTOR Volume	0	0		0	0	0	0	0		0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0				12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0				0		0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	06	07	08
Timing	G = 10.0	G = 1.0	G = 34.5	G = 0.0	G = 26.5	G = 0.0	G = 0.0	G =
	Y = 6	Y = 6	Y = 7.5	Y = 0	Y = 8.5	Y = 0	Y = 0	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 100.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	303	1349		7	1321	876				484		300
Lane Group Capacity	567	1430		172	1189	1865				885		800
v/c Ratio	0.53	0.94		0.04	1.11	0.47				0.55		0.38
Green Ratio	0.17	0.41		0.10	0.34	0.69				0.26		0.52
Uniform Delay d_1	37.9	28.1		40.7	32.8	7.3				31.6		14.3
Delay Factor k	0.14	0.46		0.11	0.50	0.11				0.15		0.11
Incremental Delay d_2	1.0	12.7		0.1	62.1	0.2				0.7		0.3
PF Factor	1.000	1.000		1.000	1.000	1.000				1.000		1.000
Control Delay	38.9	40.9		40.8	94.9	7.5				32.3		14.6
Lane Group LOS	D	D		D	F	A				C		B
Approach Delay	40.5			60.0						25.5		
Approach LOS	D			E						C		
Intersection Delay	47.2			Intersection LOS						D		

SHORT REPORT

General Information		Site Information	
Analyst	PTC	Intersection	Southern Blvd & Seminole Pratt
Agency or Co.	#13-006	Area Type	All other areas
Date Performed	5/9/13	Jurisdiction	PBC - Prop Timing
Time Period	PM Peak Hour	Analysis Year	2017 - Existing Geom.

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2	2		1	2	2				2		1
Lane Group	L	T		L	T	R				L		R
Volume (vph)	288	1282		7	1255	832				460		285
% Heavy Vehicles	5	5		5	5	5				5		5
PHF	0.95	0.95		0.95	0.95	0.95				0.95		0.95
Pretimed/Actuated (P/A)	A	A		A	A	A				A		A
Startup Lost Time	2.0	2.0		2.0	2.0	2.0				2.0		2.0
Extension of Effective Green	2.0	2.0		2.0	2.0	2.0				2.0		2.0
Arrival Type	3	3		3	3	3				3		3
Unit Extension	3.0	3.0		3.0	3.0	3.0				3.0		3.0
Ped/Bike/RTOR Volume	0	0		0	0	0	0	0		0	0	0
Lane Width	12.0	12.0		12.0	12.0	12.0				12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0	0				0		0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	06	07	08
Timing	G = 10.0	G = 3.0	G = 47.0	G = 0.0	G = 22.0	G = 0.0	G = 0.0	G =
	Y = 6	Y = 6	Y = 7.5	Y = 0	Y = 8.5	Y = 0	Y = 0	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 110.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	303	1349		7	1321	876				484		300
Lane Group Capacity	577	1754		156	1472	1893				668		692
v/c Ratio	0.53	0.77		0.04	0.90	0.46				0.72		0.43
Green Ratio	0.17	0.51		0.09	0.43	0.70				0.20		0.45
Uniform Delay d_1	41.4	21.8		45.6	29.3	7.5				41.2		20.7
Delay Factor k	0.13	0.32		0.11	0.42	0.11				0.29		0.11
Incremental Delay d_2	0.9	2.1		0.1	7.7	0.2				3.9		0.4
PF Factor	1.000	1.000		1.000	1.000	1.000				1.000		1.000
Control Delay	42.3	23.9		45.8	37.0	7.7				45.1		21.1
Lane Group LOS	D	C		D	D	A				D		C
Approach Delay	27.3			25.4						35.9		
Approach LOS	C			C						D		
Intersection Delay	27.8			Intersection LOS						C		

APPENDIX D

INTERSECTION ANALYSIS SHEET
Highland Dunes Civic Site

Southern Blvd & Site Entrance
(Existing Geometrics w/Project)

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2017
Years = 5

AM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/5/12)	0	0	0	0	0	0	0	378	0	0	876	0
Peak Season Volume	0	0	0	0	0	0	0	378	0	0	876	0
Bkgd (Growth + Exist)	0	0	0	0	0	0	0	388	0	0	898	0
Approved Projects	0	0	0	0	0	0	0	36	0	0	0	0
Highland Dunes	0	0	0	974	0	96	44	0	0	0	160	233
Project Traffic	0	0	0	9	0	1	11	0	0	0	6	95
Total	**0**	**0**	**0**	**983**	**0**	**97**	**55**	**424**	**0**	**0**	**1,064**	**328**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	2	1	1	1	2	0	1	2	1
Approach Volume		0			1,080			479			1,392	
Per Lane Volume	0	0	n/a	492	0	97	55	212	n/a	0	532	328
Right Turn on Red			0			60			0			60
Right Turn Resultant			0			-18			0			-224
North-South Critical	NB LT + SB TH =			0			SB LT + NB RT =			492		
East-West Critical	EB LT + WB TH =			587			WB LT + EB TH =			212		
Maximum Critical Sum	**492**			**+**	**587**		**=**	**1,079**				
STATUS ?	**UNDER**											

PM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/5/12)	0	0	0	0	0	0	0	823	0	0	386	0
Peak Season Volume	0	0	0	0	0	0	0	823	0	0	386	0
Bkgd (Growth + Exist)	0	0	0	0	0	0	0	844	0	0	396	0
Approved Projects	0	0	0	0	0	0	0	0	0	0	0	0
Highland Dunes	0	0	0	501	0	52	95	0	0	0	51	799
Project Traffic	0	0	0	90	0	5	2	0	0	0	1	22
Total	**0**	**0**	**0**	**591**	**0**	**57**	**97**	**844**	**0**	**0**	**448**	**821**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	2	1	1	1	2	0	1	2	1
Approach Volume		0			648			941			1,269	
Per Lane Volume	0	0	n/a	296	0	57	97	422	n/a	0	224	821
Right Turn on Red			0			57			0			60
Right Turn Resultant			0			-97			0			465
North-South Critical	NB LT + SB TH =			0			SB LT + NB RT =			296		
East-West Critical	EB LT + WB RT =			562			WB LT + EB TH =			422		
Maximum Critical Sum	**296**			**+**	**562**		**=**	**858**				
STATUS ?	**UNDER**											

SHORT REPORT

General Information		Site Information	
Analyst	PTC	Intersection	Southern Blvd & Site Entrance
Agency or Co.	#13-006	Area Type	All other areas
Date Performed	5/9/13	Jurisdiction	PBC
Time Period	AM Peak Hour	Analysis Year	2017- Proposed Geometry

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2			2	1				2		1
Lane Group	L	T			T	R				L		R
Volume (vph)	55	424			1064	328				983		97
% Heavy Vehicles	2	5			5	2				2		2
PHF	0.95	0.95			0.95	0.95				0.95		0.95
Pretimed/Actuated (P/A)	A	A			A	A				A		A
Startup Lost Time	2.0	2.0			2.0	2.0				2.0		2.0
Extension of Effective Green	2.0	2.0			2.0	2.0				2.0		2.0
Arrival Type	3	3			3	3				3		3
Unit Extension	3.0	3.0			3.0	3.0				3.0		3.0
Ped/Bike/RTOR Volume	0	0		0	0	0	0	0		0	0	0
Lane Width	12.0	12.0			12.0	12.0				12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0	0				0		0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	EW Perm	03	04	SB Only	06	07	08
Timing	G = 10.0	G = 50.0	G = 0.0	G =	G = 45.0	G = 0.0	G = 0.0	G =
	Y = 9	Y = 7.5	Y = 0	Y =	Y = 8.5	Y = 0	Y = 0	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 130.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	58	446			1120	345				1035		102
Lane Group Capacity	204	1828			1325	1248				1190		773
v/c Ratio	0.28	0.24			0.85	0.28				0.87		0.13
Green Ratio	0.52	0.53			0.38	0.79				0.35		0.49
Uniform Delay d_1	22.1	16.4			36.5	3.7				39.8		18.2
Delay Factor k	0.11	0.11			0.38	0.11				0.40		0.11
Incremental Delay d_2	0.8	0.1			5.2	0.1				7.2		0.1
PF Factor	1.000	1.000			1.000	1.000				1.000		1.000
Control Delay	22.9	16.5			41.7	3.8				46.9		18.3
Lane Group LOS	C	B			D	A				D		B
Approach Delay	17.2			32.8						44.4		
Approach LOS	B			C						D		
Intersection Delay	34.5			Intersection LOS						C		

SHORT REPORT

General Information		Site Information	
Analyst	PTC	Intersection	Southern Blvd & Site Entrance
Agency or Co.	#13-006	Area Type	All other areas
Date Performed	5/9/13	Jurisdiction	PBC
Time Period	PM Peak Hour	Analysis Year	2017 - Existing Geom.

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	2			2	1				2		1
Lane Group	L	T			T	R				L		R
Volume (vph)	97	844			448	821				591		57
% Heavy Vehicles	2	5			5	2				2		2
PHF	0.95	0.95			0.95	0.95				0.95		0.95
Pretimed/Actuated (P/A)	A	A			A	A				A		A
Startup Lost Time	2.0	2.0			2.0	2.0				2.0		2.0
Extension of Effective Green	2.0	2.0			2.0	2.0				2.0		2.0
Arrival Type	3	3			3	3				3		3
Unit Extension	3.0	3.0			3.0	3.0				3.0		3.0
Ped/Bike/RTOR Volume	0	0		0	0	0	0	0		0	0	0
Lane Width	12.0	12.0			12.0	12.0				12.0		12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0	0				0		0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	EW Perm	03	04	SB Only	06	07	08
Timing	G = 18.0	G = 35.5	G = 0.0	G =	G = 31.5	G = 0.0	G = 0.0	G =
	Y = 9	Y = 7.5	Y = 0	Y =	Y = 8.5	Y = 0	Y = 0	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 110.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	102	888			472	864				622		60
Lane Group Capacity	544	1957			1112	1072				984		835
v/c Ratio	0.19	0.45			0.42	0.81				0.63		0.07
Green Ratio	0.55	0.57			0.32	0.68				0.29		0.53
Uniform Delay d_1	12.3	13.8			29.2	12.6				34.2		12.8
Delay Factor k	0.11	0.11			0.11	0.35				0.21		0.11
Incremental Delay d_2	0.2	0.2			0.3	4.6				1.3		0.0
PF Factor	1.000	1.000			1.000	1.000				1.000		1.000
Control Delay	12.5	14.0			29.5	17.2				35.5		12.8
Lane Group LOS	B	B			C	B				D		B
Approach Delay	13.8			21.6						33.5		
Approach LOS	B			C						C		
Intersection Delay	21.7			Intersection LOS						C		

Exhibit 2
Highland Dunes PUD
Trip Generation

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips	Pass-by Trips (3)		New External Trips
Residential Single Family	210	1,880 DUs	10 /DU	18,800	2,086	11.1%	16,714	-	0%	16,714
Residential Multi Family	230	120 DUs	7 /DU	840	93	11.1%	747	-	0%	747
School - Elementary	520	970 Students	1.29 /Student	1,251	408	32.6%	843	-	0%	843
Specialty Retail	826	50,000 SF	T = 42.78(X)+37.66	2,177	1,830	84.1%	347	-	0%	347
TOTALS				23,068	4,417	19.1%	18,651			18,651

AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips			Pass-by Trips (3)		New Trips		
				In	Out	Total			In	Out	Total			In	Out	Total
Residential Single Family	210	1,880 DUs	T = 0.70(X)+9.74 (25/75)	332	994	1,326	165	12.5%	260	901	1,161	-	0%	260	901	1,161
Residential Multi Family	230	120 DUs	Ln (T) = 0.80Ln (X)+0.26 (17/83)	10	50	60	7	12.5%	8	45	53	-	0%	8	45	53
School - Elementary	520	970 Students	0.45 /Student (55/45)	240	197	437	137	31.5%	166	134	300	-	0%	166	134	300
Specialty Retail (4)	826	50,000 SF	0.96 /1000SF (62/38)	30	18	48	44	91.5%	3	1	4	-	0%	3	1	4
TOTALS				612	1,259	1,871	353	18.9%	437	1,081	1,518			437	1,081	1,518

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips			Pass-by Trips (3)		New Trips		
				In	Out	Total			In	Out	Total			In	Out	Total
Residential Single Family	210	1,880 DUs	Ln (T) = 0.90Ln (X)+0.51 (63/37)	928	545	1,473	155	10.5%	844	474	1,318	-	0%	844	474	1,318
Residential Multi Family	230	120 DUs	Ln (T) = 0.82Ln (X)+0.32 (67/33)	47	23	70	7	10.5%	43	20	63	-	0%	43	20	63
School - Elementary	520	970 Students	0.15 /Student (49/51)	72	74	146	48	33.1%	48	50	98	-	0%	48	50	98
Specialty Retail	826	50,000 SF	T = 2.40(X)+21.48 (44/56)	62	79	141	118	83.6%	10	13	23	-	0%	10	13	23
TOTALS				1,109	721	1,830	328	17.9%	945	557	1,502			945	557	1,502

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.
(2) See Appendix B for internalization, which includes public civic site.
(3) Given the remote location of the Site and the high internalization, no pass-by rates were used.
(4) No AM peak hour data available for Specialty Retail. Used ITE Code 820.

LEGEND

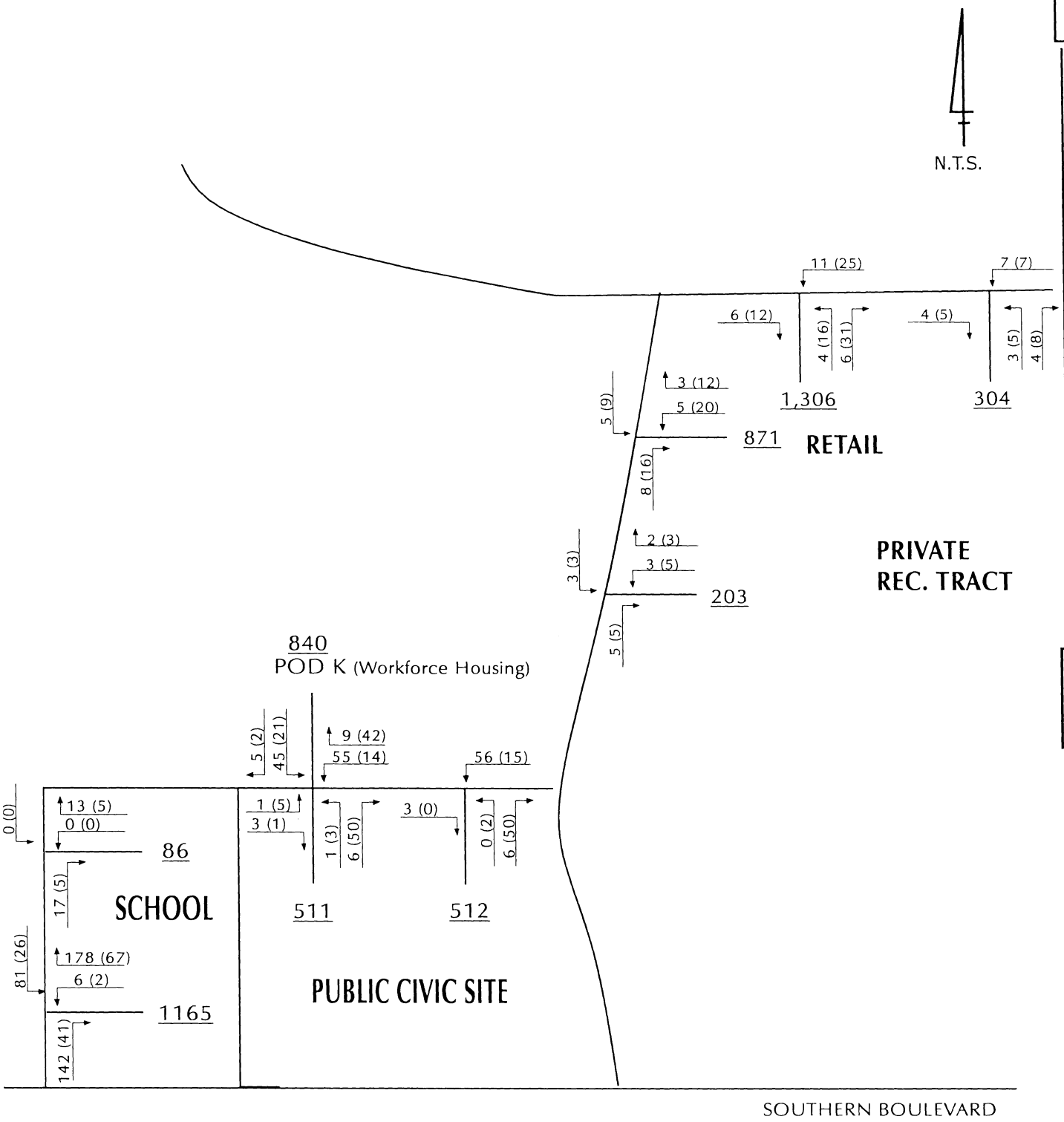
55	-AM PEAK HOUR
(97)	-PM PEAK HOUR
18088	-ADT

3/19/13
13-006

HIGHLAND DUNES

EXHIBIT 10A
EXTERNAL PROJECT DRIVEWAY VOLUMES

PTC



LEGEND

81	- AM PEAK HOUR
(26)	- PM PEAK HOUR
1165	- ADT

05-17-13
13-006

HIGHLAND DUNES

EXHIBIT 10B
INTERNAL PROJECT DRIVEWAY
VOLUMES - NON-RESIDENTIAL

PTC