APPENDIX D

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & CR 880
(Existing Geometrics w/Project)

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2021
Years = 12

AM Peak Hour
Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/10/09)	0	0	94	3	0	0	3	418	0	138	689	0
Peak Season Volume	0	0	94	3	0	0	3	418	0	138	689	0
Bkgd (Growth + Exist)	0	0	100	3	0	0	3	444	0	147	731	0
Approved Projects	0	0	0	0	0	0	0	0	0	0	0	0
% Project Traffic	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	10%	0%
Direction	in	out	out	in	in	in	in	in	in	out	out	out
Project Traffic	0	0	0	0	0	0	0	44	0	0	108	0
Total	**0**	**0**	**100**	**3**	**0**	**0**	**3**	**488**	**0**	**147**	**839**	**0**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	0 >	1	< 0	1	2	1	1	2	1
Approach Volume		100			3			491			986	
Per Lane Volume	0	100	n/a	3	3.3	n/a	3	244	0	147	420	0
Right Turn on Red			10			0			0			0
Right Turn Resultant			-157			-3			0			-3
North-South Critical	NB LT + SB TH =			3.3			SB LT + NB TH =			93		
East-West Critical	EB LT + WB TH =			423			WB LT + EB TH =			391		
Maximum Critical Sum	**93**			**+**	**423**		**=**		**516**			
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 (3/10/09)	1	0	227	0	0	0	0	649	1	133	482	0
Peak Season Volume	1	0	227	0	0	0	0	649	1	133	482	0
Bkgd (Growth + Exist)	1	0	241	0	0	0	0	689	1	141	512	0
Approved Projects	0	0	0	0	0	0	0	0	0	0	0	0
% Project Traffic	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	10%	0%
Direction	in	out	out	in	in	in	in	in	in	out	out	out
Project Traffic	0	0	0	0	0	0	0	95	0	0	56	0
Total	**1**	**0**	**241**	**0**	**0**	**0**	**0**	**784**	**1**	**141**	**568**	**0**
Critical Volume Analysis												
No. of Lanes	0 >	1	< 0	0 >	1	< 0	1	2	1	1	2	1
Per Lane Volume	1	242.1	n/a	0	0	n/a	0	392	1	141	284	0
Right Turn on Red			10			0			1			0
Right Turn Resultant			-151			0			-1			0
North-South Critical	NB LT + SB RT =			1			SB LT + NB TH =			232.1		
East-West Critical	EB LT + WB TH =			284			WB LT + EB TH =			533		
Maximum Critical Sum	**232.1**			**+**	**533**		**=**		**765**			
STATUS ?	**UNDER**											

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	PTC	Intersection	Southern Blvd. & CR 880
Agency/Co.	PTC#13-006	Jurisdiction	PBC
Date Performed	5/7/2013	Analysis Year	2021
Analysis Time Period	AM Peak Hour		

Project Description *Highland Dunes*

East/West Street: *Southern Boulevard*	North/South Street: *CR 880*
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)	3	488	0	147	839	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	3	513	0	154	883	0
Percent Heavy Vehicles	5	--	--	5	--	--
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)	0	0	100	3	0	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	105	3	0	0
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

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		LTR			LTR	
v (veh/h)	3	154		105			3	
C (m) (veh/h)	743	1028		772			152	
v/c	0.00	0.15		0.14			0.02	
95% queue length	0.01	0.53		0.47			0.06	
Control Delay (s/veh)	9.9	9.1		10.4			29.2	
LOS	A	A		B			D	
Approach Delay (s/veh)	--	--	10.4			29.2		
Approach LOS	--	--	B			D		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	PTC	Intersection	Southern Blvd. & CR 880
Agency/Co.	PTC#13-006	Jurisdiction	PBC
Date Performed	5/7/2013	Analysis Year	2021
Analysis Time Period	PM Peak Hour		

Project Description *Highland Dunes*

East/West Street: *Southern Boulevard* | North/South Street: *CR 880*

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)	0	784	1	141	568	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	825	1	148	597	0
Percent Heavy Vehicles	5	--	--	5	--	--
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)	1	0	241	0	0	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	1	0	253	0	0	0
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

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		LTR			LTR	
v (veh/h)	0	148		254			0	
C (m) (veh/h)	955	781		625				
v/c	0.00	0.19		0.41				
95% queue length	0.00	0.70		1.97				
Control Delay (s/veh)	8.8	10.7		14.6				
LOS	A	B		B				
Approach Delay (s/veh)	--	--	14.6					
Approach LOS	--	--	B					

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**											

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	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - 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)	*260*	*1210*		*3*	*1016*	*239*				*779*		*227*
% 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	*274*	*1274*		*3*	*1069*	*252*				*820*		*239*
Lane Group Capacity	*516*	*1143*		*156*	*830*	*1868*				*1259*		*937*
v/c Ratio	*0.53*	*1.11*		*0.02*	*1.29*	*0.13*				*0.65*		*0.26*
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*				*28.3*		*10.0*
Delay Factor k	*0.13*	*0.50*		*0.11*	*0.50*	*0.11*				*0.23*		*0.11*
Incremental Delay d_2	*1.1*	*63.9*		*0.0*	*138.6*	*0.0*				*1.2*		*0.1*
PF Factor	*1.000*	*1.000*		*1.000*	*1.000*	*1.000*				*1.000*		*1.000*
Control Delay	*43.9*	*100.7*		*45.6*	*180.4*	*6.0*				*29.5*		*10.1*
Lane Group LOS	*D*	*F*		*D*	*F*	*A*				*C*		*B*
Approach Delay	*90.6*			*146.9*						*25.1*		
Approach LOS	*F*			*F*						*C*		
Intersection Delay	*91.9*			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	*5/7/13*	Jurisdiction	*PBC - Prop. Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - 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)	*260*	*1210*		*3*	*1016*	*239*				*779*		*227*
% 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	*274*	*1274*		*3*	*1069*	*252*				*820*		*239*
Lane Group Capacity	*529*	*1550*		*143*	*1206*	*1894*				*946*		*788*
v/c Ratio	*0.52*	*0.82*		*0.02*	*0.89*	*0.13*				*0.87*		*0.30*
Green Ratio	*0.16*	*0.45*		*0.08*	*0.35*	*0.70*				*0.28*		*0.51*
Uniform Delay d_1	*46.3*	*28.8*		*50.5*	*36.8*	*6.1*				*40.8*		*16.9*
Delay Factor k	*0.12*	*0.36*		*0.11*	*0.41*	*0.11*				*0.40*		*0.11*
Incremental Delay d_2	*0.9*	*3.7*		*0.1*	*8.3*	*0.0*				*8.6*		*0.2*
PF Factor	*1.000*	*1.000*		*1.000*	*1.000*	*1.000*				*1.000*		*1.000*
Control Delay	*47.2*	*32.5*		*50.6*	*45.0*	*6.1*				*49.4*		*17.1*
Lane Group LOS	*D*	*C*		*D*	*D*	*A*				*D*		*B*
Approach Delay	*35.1*			*37.6*						*42.1*		
Approach LOS	*D*			*D*						*D*		
Intersection Delay	*37.8*			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	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - 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)	*272*	*1217*		*7*	*1239*	*822*				*441*		*282*
% 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	*286*	*1281*		*7*	*1304*	*865*				*464*		*297*
Lane Group Capacity	*567*	*1430*		*172*	*1189*	*1865*				*885*		*800*
v/c Ratio	*0.50*	*0.90*		*0.04*	*1.10*	*0.46*				*0.52*		*0.37*
Green Ratio	*0.17*	*0.41*		*0.10*	*0.34*	*0.69*				*0.26*		*0.52*
Uniform Delay d_1	*37.7*	*27.2*		*40.7*	*32.8*	*7.3*				*31.4*		*14.3*
Delay Factor k	*0.11*	*0.42*		*0.11*	*0.50*	*0.11*				*0.13*		*0.11*
Incremental Delay d_2	*0.7*	*7.8*		*0.1*	*56.7*	*0.2*				*0.6*		*0.3*
PF Factor	*1.000*	*1.000*		*1.000*	*1.000*	*1.000*				*1.000*		*1.000*
Control Delay	*38.4*	*35.0*		*40.8*	*89.5*	*7.5*				*31.9*		*14.6*
Lane Group LOS	*D*	*D*		*D*	*F*	*A*				*C*		*B*
Approach Delay	*35.6*			*56.7*						*25.2*		
Approach LOS	*D*			*E*						*C*		
Intersection Delay	*44.0*			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	*5/7/13*	Jurisdiction	*PBC - Prop Timing*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - 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)	*272*	*1217*		*7*	*1239*	*822*				*441*		*282*
% 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	*286*	*1281*		*7*	*1304*	*865*				*464*		*297*
Lane Group Capacity	*577*	*1754*		*156*	*1472*	*1893*				*668*		*692*
v/c Ratio	*0.50*	*0.73*		*0.04*	*0.89*	*0.46*				*0.69*		*0.43*
Green Ratio	*0.17*	*0.51*		*0.09*	*0.43*	*0.70*				*0.20*		*0.45*
Uniform Delay d_1	*41.2*	*21.1*		*45.6*	*29.0*	*7.5*				*40.9*		*20.6*
Delay Factor k	*0.11*	*0.29*		*0.11*	*0.41*	*0.11*				*0.26*		*0.11*
Incremental Delay d_2	*0.7*	*1.6*		*0.1*	*6.9*	*0.2*				*3.1*		*0.4*
PF Factor	*1.000*	*1.000*		*1.000*	*1.000*	*1.000*				*1.000*		*1.000*
Control Delay	*41.8*	*22.7*		*45.8*	*35.9*	*7.7*				*44.0*		*21.0*
Lane Group LOS	*D*	*C*		*D*	*D*	*A*				*D*		*C*
Approach Delay	*26.2*			*24.7*						*35.1*		
Approach LOS	*C*			*C*						*D*		
Intersection Delay	*27.0*			Intersection LOS						*C*		

CONTROLLER TIME SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	SOUTHERN BLVD & SEMINOLE PRATT WHITNEY RD	CONTROLLER TYPE:	NAZTEC
SIGNAL #	30710	SYSTEM #	2190

PHASE NUMBER	APPROACH	MIN GREEN	GAP EXT	MAX 1	MAX 2	YEL CLR	RED CLR	WALK	PED CLR	MIN RCL	MAX RCL	PED RCL	LOCK CALLS	NA1 RIW	DETECTOR SETTINGS
	INTERVAL														
1	WALT	5.0	3.0	20.0		4.0	5.0	0.0	0.0	0	1		0		L1:NORMAL
2	EA	20.0	5.0	50.0		5.0	2.5	7.0	21.0	1	1		1		L2:NORMAL L2R=NORMAL
3															
4															
5	EALT	5.0	3.0	10.0		4.0	2.0	0.0	0.0	0	0		0		L5:NORMAL
6	WA	20.0	5.0	50.0		5.0	2.5	0.0	0.0	1	1		1		L6:NORMAL
7															
8	NA	6.0	4.0	60.0		4.0	4.5	5.0	30.0	0	1		0		L8:NORMAL L8R:D/N(10)

PRE-EMPTION TIMING							SPECIAL FUNCTIONS					
	GREEN BEFORE	TRACK CLR	TRACK CLR PHASE	MIN DWELL	DWELL PHASE	EXIT PHASE		START Φ	DUAL ENTRY	DET SWITCH	OUT OF FLASH	INTO FLASH
								2-6	2,6	NO	2-6	8

COMMENTS	PED CONFLICT PROGRAM: P8 CONFLICTS WITH 8R L8R CALLS PHASE 1 TEMPORARY SYSTEM TIMING UNTIL DETECTION INSTALLED	TIMING DESIGNED BY:	D. RAUCCI	DATE: 4/10/2012
WA ADVANCE FLASHERS TO OCCUR 10 SEC IN ADVANCE OF PH 6 YELLOW INTERVAL AND REMAIN ACTIVE DURING PH 8 AND PH 5 EA ADVANCE FLASHERS TO OCCUR 10 SEC IN ADVANCE OF PH 2 YELLOW INTERVAL AND REMAIN ACTIVE DURING PH 8 AND PH 1		APPROVED BY:	S. SHREVE, P.E.	DATE:

SYSTEM TIMING SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	SOUTHERN BLVD & SEMINOLE PRATT WHITNEY RD			CONTROLLER TYPE:	NAZTEC
SYSTEM:		INTERSECTION #	30710	SYSTEM #	2190

TOD SCHEDULER

WEEKDAY				WEEKEND							
				SATURDAY				SUNDAY			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00	1	6:00	2	0:00	1			0:00	1		
9:00	1										

TIMING PLANS

DIAL		1		2		3		4		5		6	
CYCLE LENGTH (SEC)		100		110									
OFFSET (SEC)		0		0									
COORDINATED PHASE		2		2									
SEQUENCE		1		1									
		SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE
FORCE-OFF 1 (SEC)	WALT	23	NON	26	NON								
FORCE-OFF 2 (SEC)	EA	42	MAX	34	MAX								
FORCE-OFF 3 (SEC)													
FORCE-OFF 4 (SEC)		35	NON	50	NON								
FORCE-OFF 5 (SEC)	EALT	16	NON	16	NON								
FORCE-OFF 6 (SEC)	WA	49	MAX	44	MAX								
FORCE-OFF 7 (SEC)													
FORCE-OFF 8 (SEC)	NA	35	NON	50	NON								

Special Features:

1)

2)

3)

TIMING DESIGNED BY:	D. RAUCCI	DATE:	4/10/2012
APPROVED BY:	S. SHREVE, P.E.	DATE:	

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Binks Forest Dr
(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 (3/1/12)	203	18	524	19	26	7	5	984	120	138	817	18
Peak Season Volume	203	18	524	19	26	7	5	984	120	138	817	18
Bkgd (Growth + Exist)	212	19	548	20	27	7	5	1,029	126	144	855	19
Approved Projects	15	37	24	48	21	3	138	32	2	18	154	14
% Project Traffic	5%	0%	0%	0%	0%	1%	1%	62%	5%	0%	62%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	22	0	0	0	0	4	11	670	54	0	271	0
Total	**249**	**56**	**572**	**68**	**48**	**14**	**154**	**1,731**	**182**	**162**	**1,280**	**33**
Critical Volume Analysis												
No. of Lanes	1	1	1	1	1	< 0	1	2	1	2	2	1
Approach Volume		877			130			2,067			1,475	
Per Lane Volume	249	56	572	68	62	n/a	154	866	182	81	640	33
Right Turn on Red			60			10			60			33
Right Turn Resultant			431			-164			-127			-68
North-South Critical	NB LT + SB TH =			301			SB LT + NB RT =			499		
East-West Critical	EB LT + WB TH =			794			WB LT + EB TH =			947		
Maximum Critical Sum	**499**			**+**	**947**		**=**		**1,446**			
STATUS ?	**OVER**											

PM Peak Hour
Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/1/12)	240	49	216	15	15	5	7	1173	199	231	1040	32
Peak Season Volume	240	49	216	15	15	5	7	1,173	199	231	1,040	32
Bkgd (Growth + Exist)	251	51	226	16	16	5	7	1,227	208	242	1,088	33
Approved Projects	36	73	56	212	95	22	180	85	12	153	255	35
% Project Traffic	5%	0%	0%	0%	0%	1%	1%	62%	5%	0%	62%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	47	0	0	0	0	9	6	345	28	0	586	0
Total	**334**	**124**	**282**	**228**	**111**	**36**	**193**	**1,657**	**248**	**395**	**1,929**	**68**
Critical Volume Analysis												
No. of Lanes	1	1	1	1	1	< 0	1	2	1	2	2	1
Per Lane Volume	334	124	282	228	147	n/a	193	829	248	198	965	68
Right Turn on Red			60			10			60			60
Right Turn Resultant			24			-203			-146			-220
North-South Critical	NB LT + SB TH =			471			SB LT + NB TH =			352		
East-West Critical	EB LT + WB TH =			1158			WB LT + EB TH =			1027		
Maximum Critical Sum	**471**			**+**	**1158**		**=**		**1,629**			
STATUS ?	**OVER**											

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Binks Forest*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*AM Peak*	Analysis Year	*2021 - 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*	*1*	*2*	*2*	*1*	*1*	*1*	*1*	*1*	*1*	*0*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*TR*	
Volume (vph)	*154*	*1731*	*182*	*162*	*1280*	*33*	*249*	*56*	*572*	*68*	*48*	*14*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	*2.0*	
Arrival Type	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	
Unit Extension	*3.0*	*3.0*	*3.0*	*3.0*	*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*	*60*	*0*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	Excl. Left	Thru & RT	03	04	NS Perm	06	07	08
Timing	G = *20.0*	G = *60.0*	G = *0.0*	G = *0.0*	G = *25.0*	G = *0.0*	G = *0.0*	G = *0.0*
	Y = *6*	Y = *6*	Y = *0*	Y = *0*	Y = *7*	Y = *0*	Y = *0*	Y = *0*

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *124.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*162*	*1822*	*192*	*171*	*1347*	*35*	*262*	*59*	*539*	*72*	*66*	
Lane Group Capacity	*285*	*1802*	*766*	*571*	*1802*	*766*	*268*	*376*	*664*	*270*	*363*	
v/c Ratio	*0.57*	*1.01*	*0.25*	*0.30*	*0.75*	*0.05*	*0.98*	*0.16*	*0.81*	*0.27*	*0.18*	
Green Ratio	*0.16*	*0.48*	*0.48*	*0.16*	*0.48*	*0.48*	*0.20*	*0.20*	*0.42*	*0.20*	*0.20*	
Uniform Delay d_1	*48.0*	*32.0*	*18.8*	*45.8*	*25.9*	*16.9*	*49.2*	*40.8*	*31.7*	*41.8*	*41.0*	
Delay Factor k	*0.16*	*0.50*	*0.11*	*0.11*	*0.30*	*0.11*	*0.48*	*0.11*	*0.35*	*0.11*	*0.11*	
Incremental Delay d_2	*2.7*	*24.0*	*0.2*	*0.3*	*1.8*	*0.0*	*48.6*	*0.2*	*7.6*	*0.5*	*0.2*	
PF Factor	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	
Control Delay	*50.7*	*56.0*	*19.0*	*46.1*	*27.6*	*16.9*	*97.8*	*41.0*	*39.3*	*42.3*	*41.3*	
Lane Group LOS	*D*	*E*	*B*	*D*	*C*	*B*	*F*	*D*	*D*	*D*	*D*	
Approach Delay	*52.3*			*29.4*			*57.2*			*41.8*		
Approach LOS	*D*			*C*			*E*			*D*		
Intersection Delay	*45.4*			Intersection LOS						*D*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Binks Forest*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*PM Peak*	Analysis Year	*2021 - 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*	*1*	*2*	*2*	*1*	*1*	*1*	*1*	*1*	*1*	*0*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*TR*	
Volume (vph)	*193*	*1657*	*248*	*395*	*1929*	*68*	*334*	*124*	*282*	*228*	*111*	*36*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	*2.0*	
Arrival Type	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	
Unit Extension	*3.0*	*3.0*	*3.0*	*3.0*	*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*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	Excl. Left	Thru & RT	03	04	NS Perm	06	07	08
Timing	G = *20.0*	G = *60.0*	G = *0.0*	G = *0.0*	G = *25.0*	G = *0.0*	G = *0.0*	G = *0.0*
	Y = *6*	Y = *6*	Y = *0*	Y = *0*	Y = *7*	Y = *0*	Y = *0*	Y = *0*
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *124.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*203*	*1744*	*261*	*416*	*2031*	*72*	*352*	*131*	*297*	*240*	*155*	
Lane Group Capacity	*285*	*1802*	*766*	*571*	*1802*	*766*	*224*	*376*	*664*	*245*	*362*	
v/c Ratio	*0.71*	*0.97*	*0.34*	*0.73*	*1.13*	*0.09*	*1.57*	*0.35*	*0.45*	*0.98*	*0.43*	
Green Ratio	*0.16*	*0.48*	*0.48*	*0.16*	*0.48*	*0.48*	*0.20*	*0.20*	*0.42*	*0.20*	*0.20*	
Uniform Delay d_1	*49.3*	*31.1*	*19.8*	*49.4*	*32.0*	*17.3*	*49.5*	*42.5*	*25.7*	*49.2*	*43.3*	
Delay Factor k	*0.28*	*0.47*	*0.11*	*0.29*	*0.50*	*0.11*	*0.50*	*0.11*	*0.11*	*0.48*	*0.11*	
Incremental Delay d_2	*8.1*	*14.3*	*0.3*	*4.7*	*65.0*	*0.1*	*277.6*	*0.6*	*0.5*	*51.6*	*0.8*	
PF Factor	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	
Control Delay	*57.4*	*45.4*	*20.0*	*54.1*	*97.0*	*17.4*	*327.1*	*43.1*	*26.2*	*100.8*	*44.1*	
Lane Group LOS	*E*	*D*	*C*	*D*	*F*	*B*	*F*	*D*	*C*	*F*	*D*	
Approach Delay	*43.5*			*87.6*			*164.8*			*78.6*		
Approach LOS	*D*			*F*			*F*			*E*		
Intersection Delay	*80.7*			Intersection LOS						*F*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Binks Forest*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Prop. Timing*
Time Period	*PM Peak*	Analysis Year	*2021 - Prop. 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*	*3*	*1*	*2*	*3*	*1*	*1*	*1*	*1*	*1*	*1*	*0*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*TR*	
Volume (vph)	*193*	*1657*	*248*	*395*	*1929*	*68*	*334*	*124*	*282*	*228*	*111*	*36*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	*2.0*	
Arrival Type	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	
Unit Extension	*3.0*	*3.0*	*3.0*	*3.0*	*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*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	Excl. Left	Thru & RT	03	04	Excl. Left	NS Perm	07	08
Timing	G = *18.0*	G = *50.0*	G = *0.0*	G =	G = *21.0*	G = *15.0*	G = *0.0*	G = *0.0*
	Y = *6*	Y = *6*	Y = *0*	Y =	Y = *7*	Y = *7*	Y = *0*	Y = *0*

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	*203*	*1744*	*261*	*416*	*2031*	*72*	*352*	*131*	*297*	*240*	*155*	
Lane Group Capacity	*245*	*2149*	*938*	*490*	*2149*	*938*	*391*	*215*	*487*	*411*	*207*	
v/c Ratio	*0.83*	*0.81*	*0.28*	*0.85*	*0.95*	*0.08*	*0.90*	*0.61*	*0.61*	*0.58*	*0.75*	
Green Ratio	*0.14*	*0.38*	*0.59*	*0.14*	*0.38*	*0.59*	*0.33*	*0.12*	*0.31*	*0.33*	*0.12*	
Uniform Delay d_1	*54.5*	*35.8*	*12.9*	*54.7*	*38.7*	*11.3*	*41.5*	*54.7*	*38.4*	*34.1*	*55.7*	
Delay Factor k	*0.37*	*0.35*	*0.11*	*0.38*	*0.46*	*0.11*	*0.42*	*0.20*	*0.20*	*0.18*	*0.30*	
Incremental Delay d_2	*20.5*	*2.5*	*0.2*	*13.2*	*9.5*	*0.0*	*23.1*	*5.0*	*2.2*	*2.1*	*14.0*	
PF Factor	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	
Control Delay	*75.0*	*38.3*	*13.1*	*67.9*	*48.2*	*11.4*	*64.7*	*59.7*	*40.6*	*36.2*	*69.7*	
Lane Group LOS	*E*	*D*	*B*	*E*	*D*	*B*	*E*	*E*	*D*	*D*	*E*	
Approach Delay	*38.7*			*50.4*			*54.7*			*49.3*		
Approach LOS	*D*			*D*			*D*			*D*		
Intersection Delay	*46.5*			Intersection LOS			*D*					

Rec'd 1/24/13

CONTROLLER TIME SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	SOUTHERN BLVD AND BINKS FOREST DR	CONTROLLER TYPE:	NAZTEC
SIGNAL #	30718	SYSTEM #	2195

PHASE NUMBER	APPROACH	MIN GREEN	GAP EXT	MAX 1	MAX 2	YEL CLR	RED CLR	WALK	PED CLR	MIN RCL	MAX RCL	PED RCL	LOCK CALLS	DETECTOR SETTINGS
	INTERVAL													
1	WALT	4.0	2.0	20.0		4.0	2.0	0.0	0.0	0	0		0	L1:NORMAL
2	EA	20.0	4.0	60.0		5.0	1.0	7.0	14.0	1	1		1	ADV:NORMAL
3														
4	SA	6.0	3.0	25.0		4.0	3.0	7.0	36.0	0	0		0	L4:D/N (5) L4R:D/N (10)
5	EALT	4.0	2.0	20.0		4.0	2.0	0.0	0.0	0	0		0	L5:NORMAL
6	WA	20.0	4.0	60.0		5.0	1.0	0.0	0.0	1	1		1	ADV:NORMAL
7														
8	NA	6.0	3.0	25.0		4.0	3.0	7.0	35.0	0	0		0	L8:D/N (5) L8R:D/N (10)

PRE-EMPTION TIMING

	GREEN BEFORE	TRACK CLR	TRACK CLR YEL	MIN DWELL	YEL AFTER	RED AFTER

SPECIAL FUNCTIONS

	START Φ	DUAL ENTRY	DET SWITCH	OUT OF FLASH	INTO FLASH	
		YES	NO			
	2 - 6			2 - 6	4 - 8	

COMMENTS	TEMPORARY SYSTEM TIMING - BAD LOOPS ON MAIN STREET	TIMING DESIGNED BY:	S. LEWIS	DATE:	7/7/2005
		APPROVED BY:	G.V. JEEDIGUNTA, P.E.	DATE:	

SYSTEM TIMING SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	SOUTHERN BLVD AND BINKS FOREST DR			CONTROLLER TYPE:	NAZTEC
SYSTEM:		INTERSECTION #	30718	SYSTEM #	2195

TOD SCHEDULER											
WEEKDAY				WEEKEND							
				SATURDAY				SUNDAY			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00	1	5:30	100	0:00	1	5:30	100	0:00	1	5:30	100
22:00	1			22:00	1			22:00	1		

TIMING PLANS													
DIAL		1		2		3		4		5		6	
CYCLE LENGTH (SEC)		0											
OFFSET (SEC)		0											
PERMISSIVES		AUTO		AUTO		AUTO		AUTO		AUTO		AUTO	
SEQUENCE		1											
COORDINATED PHASE		0											
		SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE
FORCE-OFF 1 (SEC)	WALT	0	NON										
FORCE-OFF 2 (SEC)	EA	0	MAX										
FORCE-OFF 3 (SEC)													
FORCE-OFF 4 (SEC)	SA	0	NON										
FORCE-OFF 5 (SEC)	EALT	0	NON										
FORCE-OFF 6 (SEC)	WA	0	MAX										
FORCE-OFF 7 (SEC)													
FORCE-OFF 8 (SEC)	NA	0	NON										

Special Features:

1) TEMPORARY SYSTEM TIMING DUE TO BAD LOOPS ON EAST/WEST APPROACHES

2) PATTERN 1 IS FREE WITH ALTERNATE MAX TIMES. Ø2 & Ø6 MAX1 = 25

3)

TIMING DESIGNED BY:	S. LEWIS	DATE:	7/7/2005
APPROVED BY:	G.V. JEEDIGUNTA, P.E.	DATE:	

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Big Blue Trace
(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 (3/1/12)	128	13	713	19	29	7	5	1428	71	228	1026	21
Peak Season Volume	128	13	713	19	29	7	5	1,428	71	228	1,026	21
Bkgd (Growth + Exist)	134	14	746	20	30	7	5	1,494	74	238	1,073	22
Approved Projects	47	0	20	0	0	0	0	76	19	11	198	0
% Project Traffic	5%	0%	0%	0%	0%	1%	1%	54%	5%	0%	54%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	22	0	0	0	0	4	11	584	54	0	236	0
Total	**203**	**14**	**766**	**20**	**30**	**11**	**16**	**2,154**	**147**	**249**	**1,507**	**22**
Critical Volume Analysis												
No. of Lanes	0 >	1	2	1	1	< 0	1	2	1	2	2	1
Approach Volume		983			61			2,317			1,778	
Per Lane Volume	183	217	383	20	41	n/a	16	1077	147	125	754	22
Right Turn on Red			60			10			60			22
Right Turn Resultant			198			-26			-96			-20
North-South Critical	NB LT + SB TH =			214			SB LT + NB TH =			237		
East-West Critical	EB LT + WB TH =			770			WB LT + EB TH =			1202		
Maximum Critical Sum	**237**			**+**	**1202**		**=**		**1,439**			
STATUS ?	**OVER**											

PM Peak Hour
Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/1/12)	75	16	247	18	24	7	5	1255	116	555	1336	42
Peak Season Volume	75	16	247	18	24	7	5	1,255	116	555	1,336	42
Bkgd (Growth + Exist)	78	17	258	19	25	7	5	1,313	121	580	1,397	44
Approved Projects	78	0	32	0	0	0	0	299	97	40	276	0
% Project Traffic	5%	0%	0%	0%	0%	1%	1%	54%	5%	0%	54%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	47	0	0	0	0	9	6	301	28	0	510	0
Total	**203**	**17**	**290**	**19**	**25**	**16**	**11**	**1,913**	**246**	**620**	**2,183**	**44**
Critical Volume Analysis												
No. of Lanes	0 >	1	2	1	1	< 0	1	2	1	2	2	1
Per Lane Volume	184	220	145	19	41	n/a	11	957	246	310	1092	44
Right Turn on Red			60			10			60			44
Right Turn Resultant			-225			-21			2			-19
North-South Critical	NB LT + SB TH =			215			SB LT + NB TH =			239		
East-West Critical	EB LT + WB TH =			1103			WB LT + EB TH =			1267		
Maximum Critical Sum	**239**			**+**	**1267**		**=**		**1,506**			
STATUS ?	**OVER**											

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Big Blue Trace*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - 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*	*1*	*2*	*2*	*1*	*0*	*1*	*2*	*1*	*1*	*0*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*		*LT*	*R*	*L*	*TR*	
Volume (vph)	*16*	*2154*	*147*	*249*	*1507*	*22*	*203*	*14*	*766*	*20*	*30*	*11*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	
Arrival Type	*3*	*4*	*3*	*3*	*4*	*3*		*3*	*3*	*3*	*3*	
Unit Extension	*3.0*	*3.0*	*3.0*	*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*	*60*	*0*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	WB Only	Thru & RT	EB Only	04	SB Only	NS Perm	07	08
Timing	G = *14.0*	G = *66.0*	G = *9.0*	G = *0.0*	G = *9.0*	G = *20.0*	G = *0.0*	G = *0.0*
	Y = *6*	Y = *7*	Y = *6*	Y = *0*	Y = *6*	Y = *7*	Y = *0*	Y = *0*
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *150.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*17*	*2267*	*155*	*262*	*1586*	*23*		*229*	*743*	*21*	*44*	
Lane Group Capacity	*106*	*2036*	*865*	*330*	*2136*	*1003*		*176*	*866*	*106*	*417*	
v/c Ratio	*0.16*	*1.11*	*0.18*	*0.79*	*0.74*	*0.02*		*1.30*	*0.86*	*0.20*	*0.11*	
Green Ratio	*0.06*	*0.55*	*0.55*	*0.09*	*0.57*	*0.63*		*0.13*	*0.27*	*0.06*	*0.23*	
Uniform Delay d_1	*66.9*	*34.0*	*17.1*	*66.6*	*23.8*	*10.2*		*65.0*	*51.7*	*67.1*	*45.2*	
Delay Factor k	*0.11*	*0.50*	*0.11*	*0.34*	*0.30*	*0.11*		*0.50*	*0.39*	*0.11*	*0.11*	
Incremental Delay d_2	*0.7*	*58.6*	*0.1*	*12.6*	*1.4*	*0.0*		*170.6*	*8.6*	*0.9*	*0.1*	
PF Factor	*1.000*	*0.688*	*1.000*	*1.000*	*0.635*	*1.000*		*1.000*	*1.000*	*1.000*	*1.000*	
Control Delay	*67.6*	*82.0*	*17.2*	*79.1*	*16.5*	*10.2*		*235.6*	*60.3*	*68.0*	*45.3*	
Lane Group LOS	*E*	*F*	*B*	*E*	*B*	*B*		*F*	*E*	*E*	*D*	
Approach Delay	*77.8*			*25.2*			*101.6*			*52.6*		
Approach LOS	*E*			*C*			*F*			*D*		
Intersection Delay	*63.4*			Intersection LOS						*E*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Big Blue Trace*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Prop. Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - Prop. 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*	*3*	*1*	*2*	*3*	*1*	*0*	*1*	*2*	*1*	*1*	*0*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*		*LT*	*R*	*L*	*TR*	
Volume (vph)	*16*	*2154*	*147*	*249*	*1507*	*22*	*203*	*14*	*766*	*20*	*30*	*11*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	
Arrival Type	*3*	*4*	*3*	*3*	*4*	*3*		*3*	*3*	*3*	*3*	
Unit Extension	*3.0*	*3.0*	*3.0*	*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*	*60*	*0*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	WB Only	Thru & RT	EB Only	04	SB Only	NB Only	07	08
Timing	G = *20.0*	G = *50.0*	G = *9.0*	G = *0.0*	G = *15.0*	G = *24.0*	G = *0.0*	G = *0.0*
	Y = *6*	Y = *7*	Y = *6*	Y = *0*	Y = *6*	Y = *7*	Y = *0*	Y = *0*

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *150.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*17*	*2267*	*155*	*262*	*1586*	*23*		*229*	*743*	*21*	*44*	
Lane Group Capacity	*106*	*2459*	*950*	*472*	*2831*	*960*		*285*	*1077*	*177*	*179*	
v/c Ratio	*0.16*	*0.92*	*0.16*	*0.56*	*0.56*	*0.02*		*0.80*	*0.69*	*0.12*	*0.25*	
Green Ratio	*0.06*	*0.44*	*0.60*	*0.13*	*0.51*	*0.61*		*0.16*	*0.34*	*0.10*	*0.10*	
Uniform Delay d_1	*66.9*	*39.6*	*13.3*	*60.8*	*25.5*	*11.8*		*60.7*	*42.7*	*61.5*	*62.3*	
Delay Factor k	*0.11*	*0.44*	*0.11*	*0.15*	*0.16*	*0.11*		*0.35*	*0.26*	*0.11*	*0.11*	
Incremental Delay d_2	*0.7*	*6.4*	*0.1*	*1.4*	*0.3*	*0.0*		*15.3*	*1.9*	*0.3*	*0.7*	
PF Factor	*1.000*	*0.849*	*1.000*	*1.000*	*0.756*	*1.000*		*1.000*	*1.000*	*1.000*	*1.000*	
Control Delay	*67.6*	*40.0*	*13.4*	*62.3*	*19.5*	*11.8*		*76.0*	*44.6*	*61.8*	*63.0*	
Lane Group LOS	*E*	*D*	*B*	*E*	*B*	*B*		*E*	*D*	*E*	*E*	
Approach Delay	*38.5*			*25.4*			*52.0*			*62.6*		
Approach LOS	*D*			*C*			*D*			*E*		
Intersection Delay	*36.7*			Intersection LOS						*D*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Big Blue Trace*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - 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*	*1*	*2*	*2*	*1*	*0*	*1*	*2*	*1*	*1*	*0*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*		*LT*	*R*	*L*	*TR*	
Volume (vph)	*11*	*1913*	*246*	*620*	*2183*	*44*	*203*	*17*	*290*	*19*	*25*	*16*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	
Arrival Type	*3*	*4*	*3*	*3*	*4*	*3*		*3*	*3*	*3*	*3*	
Unit Extension	*3.0*	*3.0*	*3.0*	*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*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	EB Only	Thru & RT	WB Only	04	SB Only	NS Perm	07	08
Timing	G = *9.0*	G = *56.0*	G = *34.0*	G = *0.0*	G = *9.0*	G = *20.0*	G = *0.0*	G = *0.0*
	Y = *6*	Y = *7*	Y = *6*	Y = *0*	Y = *6*	Y = *7*	Y = *0*	Y = *0*

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *160.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*12*	*2014*	*259*	*653*	*2298*	*46*		*232*	*305*	*20*	*43*	
Lane Group Capacity	*100*	*1653*	*702*	*752*	*2258*	*1108*		*166*	*1069*	*100*	*383*	
v/c Ratio	*0.12*	*1.22*	*0.37*	*0.87*	*1.02*	*0.04*		*1.40*	*0.29*	*0.20*	*0.11*	
Green Ratio	*0.06*	*0.44*	*0.44*	*0.21*	*0.61*	*0.70*		*0.13*	*0.34*	*0.06*	*0.22*	
Uniform Delay d_1	*71.7*	*44.5*	*29.6*	*60.8*	*31.5*	*7.4*		*70.0*	*38.9*	*72.1*	*50.1*	
Delay Factor k	*0.11*	*0.50*	*0.11*	*0.40*	*0.50*	*0.11*		*0.50*	*0.11*	*0.11*	*0.11*	
Incremental Delay d_2	*0.5*	*104.0*	*0.3*	*10.6*	*23.5*	*0.0*		*211.2*	*0.1*	*1.0*	*0.1*	
PF Factor	*1.000*	*0.844*	*1.000*	*1.000*	*0.560*	*1.000*		*1.000*	*1.000*	*1.000*	*1.000*	
Control Delay	*72.3*	*141.6*	*29.9*	*71.5*	*41.1*	*7.4*		*281.2*	*39.0*	*73.1*	*50.2*	
Lane Group LOS	*E*	*F*	*C*	*E*	*D*	*A*		*F*	*D*	*E*	*D*	
Approach Delay	*128.6*			*47.2*			*143.6*			*57.4*		
Approach LOS	*F*			*D*			*F*			*E*		
Intersection Delay	*87.7*			Intersection LOS						*F*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Big Blue Trace*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC -Prop. Timing*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - Prop. 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*	*3*	*1*	*2*	*3*	*1*	*0*	*1*	*2*	*1*	*1*	*0*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*		*LT*	*R*	*L*	*TR*	
Volume (vph)	*11*	*1913*	*246*	*620*	*2183*	*44*	*203*	*17*	*290*	*19*	*25*	*16*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	
Arrival Type	*3*	*4*	*3*	*3*	*4*	*3*		*3*	*3*	*3*	*3*	
Unit Extension	*3.0*	*3.0*	*3.0*	*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*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	EB Only	Thru & RT	WB Only	04	SB Only	NB Only	07	08
Timing	G = *9.0*	G = *45.0*	G = *33.0*	G = *0.0*	G = *15.0*	G = *26.0*	G = *0.0*	G = *0.0*
	Y = *6*	Y = *7*	Y = *6*	Y = *0*	Y = *6*	Y = *7*	Y = *0*	Y = *0*

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *160.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*12*	*2014*	*259*	*653*	*2298*	*46*		*232*	*305*	*20*	*43*	
Lane Group Capacity	*100*	*2096*	*920*	*730*	*2969*	*1049*		*289*	*1168*	*166*	*164*	
v/c Ratio	*0.12*	*0.96*	*0.28*	*0.89*	*0.77*	*0.04*		*0.80*	*0.26*	*0.12*	*0.26*	
Green Ratio	*0.06*	*0.38*	*0.58*	*0.21*	*0.53*	*0.66*		*0.16*	*0.37*	*0.09*	*0.09*	
Uniform Delay d_1	*71.7*	*48.9*	*16.8*	*61.8*	*29.9*	*9.4*		*64.5*	*35.3*	*66.5*	*67.4*	
Delay Factor k	*0.11*	*0.47*	*0.11*	*0.42*	*0.32*	*0.11*		*0.35*	*0.11*	*0.11*	*0.11*	
Incremental Delay d_2	*0.5*	*11.8*	*0.2*	*13.6*	*1.3*	*0.0*		*15.0*	*0.1*	*0.3*	*0.9*	
PF Factor	*1.000*	*0.920*	*1.000*	*1.000*	*0.716*	*1.000*		*1.000*	*1.000*	*1.000*	*1.000*	
Control Delay	*72.3*	*56.8*	*16.9*	*75.4*	*22.7*	*9.4*		*79.5*	*35.4*	*66.8*	*68.2*	
Lane Group LOS	*E*	*E*	*B*	*E*	*C*	*A*		*E*	*D*	*E*	*E*	
Approach Delay	*52.4*			*34.0*			*54.5*			*67.8*		
Approach LOS	*D*			*C*			*D*			*E*		
Intersection Delay	*43.3*			Intersection LOS			*D*					

See 13-3006

Palm Beach County **Signal Timing Sheet** **2/29/2012**

30726 : 2200 - Southern Bl and Big Blue Trace (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7	8 (ST)	9	10	11	12	13	14	15	16
Walk						7		5								
Ped Clearance						29		29								
Min Green	4	20	4	6	4	20		6	5	5	5	5	5	5	5	5
Passage	2	4	2	2	2	4		2	1	1	1	1	1	1	1	1
Max1	15	55	15	25	45	55		25	25	25	25	25	25	25	25	25
Max2									50	50	50	50	50	50	50	50
Yellow	4	5	4	4	4	5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2	2	2	3	2	2		3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7	8 (ST)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON		ON							ON	ON
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall		ON		ON		ON										
Ped Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (WBT1)	3 (SBL1)	4 (NBT1)	5 (WBL1)	6 (EBT1)	7	8 (SBT1)	9	10	11	12	13	14	15	16
Call Phase	1	2	3	4	5	6	7	8								
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Approved By: Stephen Shreve **Date:** _____

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		1	5	6	9	11	15	19	22							
Minute																
Action	7	7	7	2	4	1	3	5	7							

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		2	5	7	10	19	22									
Minute																
Action	7	7	7	5	6	5	7									

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		2	6	7	10	18	22									
Minute																
Action	7	7	7	5	6	5	7									

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	150	160	120	120	140	90									
Offset Time	21	62	87	71	78	21	39									
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	3	3	2	3	2	3	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt	1	2	1	1	1	1	5									

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	83	15	27	25	73		42								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	93	15	27	20	88		42								
Mode	MAX	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	103	15	27	40	78		42								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	63	15	27	20	58		42								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	63	15	27	20	58		42								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	83	15	27	25	73		42								
Mode	MAX	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **2/29/2012**

30726 : 2200 - Southern Bl and Big Blue Trace (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash		ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	5					
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	RAIL	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow	5					
Red	3					
Max Green						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifer Phases	Type	Green	Yellow	Red
Overlap 1			NORMAL		3.5	1.5
Overlap 2	4 5		NORMAL		3.5	1.5
Overlap 3			NORMAL		3.5	1.5
Overlap 4			NORMAL		3.5	1.5
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5

Overlap 7	NORMAL	3.5	1.5
Overlap 8	NORMAL	3.5	1.5
Overlap 9	NORMAL	3.5	1.5
Overlap 10	NORMAL	3.5	1.5
Overlap 11	NORMAL	3.5	1.5
Overlap 12	NORMAL	3.5	1.5
Overlap 13	NORMAL	3.5	1.5
Overlap 14	NORMAL	3.5	1.5
Overlap 15	NORMAL	3.5	1.5
Overlap 16	NORMAL	3.5	1.5

Approved By: Stephen Shreve **Date:** ______________

Palm Beach County **Alternate Timing Sheet** **2/29/2012**

30726 : 2200 - Southern Bl and Big Blue Trace (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max 1	Max 2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4			6	2	13		4	3	4	
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max 1	Max 2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4			6	2	17		4	3	4	
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max 1	Max 2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max 1	Max 2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3			4	2	10		4	2	3	
4			6	2	10		4	3	4	
5										
6										
7										
8	5	29	6	2	9		4	3	8	

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **2/29/2012**

30726 : 2200 - Southern Bl and Big Blue Trace (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	16	41	16	17	16	41		33								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Forest Hill Blvd
(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)	356	375	1092	508	570	262	223	1647	280	379	915	165
Peak Season Volume	356	375	1,092	508	570	262	223	1,647	280	379	915	165
Bkgd (Growth + Exist)	372	392	1,142	531	596	274	233	1,723	293	396	957	173
Approved Projects	43	1	38	21	1	41	7	39	8	22	63	12
% Project Traffic	10%	0%	0%	0%	0%	5%	5%	39%	10%	0%	39%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	44	0	0	0	0	22	54	422	108	0	170	0
Total	**459**	**393**	**1,180**	**552**	**597**	**337**	**294**	**2,184**	**409**	**418**	**1,190**	**185**
Critical Volume Analysis												
No. of Lanes	2	2	2	2	3	1	2	3	1	2	3	1
Approach Volume		2,032			1,486			2,887			1,793	
Per Lane Volume	230	197	590	276	199	337	147	728	409	209	397	185
Right Turn on Red			60			60			60			60
Right Turn Resultant			321			130			119			-151
North-South Critical	NB LT + SB TH =			429			SB LT + NB RT =			597		
East-West Critical	EB LT + WB TH =			544			WB LT + EB TH =			937		
Maximum Critical Sum	**597**			**+**	**937**			**=**	**1,534**			
STATUS ?	**OVER**											

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)	330	629	605	275	584	203	379	1129	331	873	1509	450
Peak Season Volume	330	629	605	275	584	203	379	1,129	331	873	1,509	450
Bkgd (Growth + Exist)	345	658	633	288	611	212	396	1,181	346	913	1,578	471
Approved Projects	81	2	63	37	3	57	67	152	95	80	143	44
% Project Traffic	10%	0%	0%	0%	0%	5%	5%	39%	10%	0%	39%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	95	0	0	0	0	47	28	217	56	0	369	0
Total	**521**	**660**	**696**	**325**	**614**	**316**	**491**	**1,550**	**497**	**993**	**2,090**	**515**
Critical Volume Analysis												
No. of Lanes	2	2	2	2	3	1	2	3	1	2	3	1
Approach Volume		1,877			1,255			2,538			3,598	
Per Lane Volume	261	330	348	163	205	316	246	517	497	497	697	515
Right Turn on Red			60			60			60			60
Right Turn Resultant			-209			10			176			292
North-South Critical	NB LT + SB TH =			466			SB LT + NB TH =			493		
East-West Critical	EB LT + WB TH =			943			WB LT + EB TH =			1014		
Maximum Critical Sum	**493**			**+**	**1014**			**=**	**1,507**			
STATUS ?	**OVER**											

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Forest Hill*
Agency or Co.	*#13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - 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*	*3*	*1*	*2*	*3*	*1*	*2*	*2*	*2*	*2*	*3*	*1*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
Volume (vph)	*294*	*2184*	*409*	*418*	*1190*	*185*	*459*	*393*	*1180*	*552*	*597*	*337*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Arrival Type	*3*	*4*	*3*	*3*	*4*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
Unit Extension	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*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*	*60*	*0*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	*0*	*0*
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	Excl. Left	WB Only	Thru & RT	04	Excl. Left	SB Only	Thru & RT	08
Timing	G = *13.0*	G = *5.0*	G = *47.0*	G = *0.0*	G = *20.0*	G = *8.0*	G = *30.0*	G = *0.0*
	Y = *7*	Y = *0*	Y = *7*	Y = *0*	Y = *7*	Y = *0*	Y = *6*	Y = *0*

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *150.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*309*	*2299*	*431*	*440*	*1253*	*195*	*483*	*414*	*1179*	*581*	*628*	*355*
Lane Group Capacity	*307*	*1751*	*781*	*590*	*1937*	*992*	*472*	*745*	*1288*	*826*	*1416*	*602*
v/c Ratio	*1.01*	*1.31*	*0.55*	*0.75*	*0.65*	*0.20*	*1.02*	*0.56*	*0.92*	*0.70*	*0.44*	*0.59*
Green Ratio	*0.09*	*0.31*	*0.49*	*0.17*	*0.35*	*0.63*	*0.13*	*0.20*	*0.41*	*0.23*	*0.25*	*0.38*
Uniform Delay d_1	*68.5*	*51.5*	*26.5*	*59.5*	*41.3*	*11.9*	*65.0*	*54.0*	*42.1*	*52.7*	*47.1*	*37.2*
Delay Factor k	*0.50*	*0.50*	*0.15*	*0.30*	*0.22*	*0.11*	*0.50*	*0.15*	*0.43*	*0.27*	*0.11*	*0.18*
Incremental Delay d_2	*53.0*	*145.0*	*0.9*	*5.2*	*0.8*	*0.1*	*47.5*	*0.9*	*10.3*	*2.7*	*0.2*	*1.5*
PF Factor	*1.000*	*0.975*	*1.000*	*1.000*	*0.947*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*
Control Delay	*121.5*	*195.2*	*27.3*	*64.6*	*39.8*	*12.0*	*112.5*	*54.9*	*52.4*	*55.5*	*47.3*	*38.7*
Lane Group LOS	*F*	*F*	*C*	*E*	*D*	*B*	*F*	*D*	*D*	*E*	*D*	*D*
Approach Delay	*163.9*			*42.7*			*66.9*			*48.4*		
Approach LOS	*F*			*D*			*E*			*D*		
Intersection Delay	*92.6*			Intersection LOS						*F*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Forest Hill*
Agency or Co.	*PTC13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Proposed Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - Proposed 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*	*4*	*1*	*3*	*4*	*1*	*2*	*2*	*2*	*2*	*3*	*1*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
Volume (vph)	*294*	*2184*	*409*	*418*	*1190*	*185*	*459*	*393*	*1180*	*552*	*597*	*337*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Arrival Type	*3*	*4*	*3*	*3*	*4*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
Unit Extension	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*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*	*60*	*0*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	*0*	*0*
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	Excl. Left	WB Only	Thru & RT	04	Excl. Left	SB Only	Thru & RT	08
Timing	G = *18.0*	G = *5.0*	G = *47.0*	G = *0.0*	G = *24.0*	G = *4.0*	G = *25.0*	G = *0.0*
	Y = *7*	Y = *0*	Y = *7*	Y = *0*	Y = *7*	Y = *0*	Y = *6*	Y = *0*
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *150.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*309*	*2299*	*431*	*440*	*1253*	*195*	*483*	*414*	*1179*	*581*	*628*	*355*
Lane Group Capacity	*425*	*2335*	*823*	*1062*	*2583*	*992*	*566*	*621*	*1288*	*826*	*1080*	*559*
v/c Ratio	*0.73*	*0.98*	*0.52*	*0.41*	*0.49*	*0.20*	*0.85*	*0.67*	*0.92*	*0.70*	*0.58*	*0.64*
Green Ratio	*0.12*	*0.31*	*0.52*	*0.20*	*0.35*	*0.63*	*0.16*	*0.17*	*0.41*	*0.23*	*0.19*	*0.35*
Uniform Delay d_1	*63.6*	*51.1*	*23.7*	*52.3*	*38.5*	*11.9*	*61.3*	*58.6*	*42.1*	*52.7*	*55.0*	*40.4*
Delay Factor k	*0.29*	*0.49*	*0.13*	*0.11*	*0.11*	*0.11*	*0.39*	*0.24*	*0.43*	*0.27*	*0.17*	*0.22*
Incremental Delay d_2	*6.2*	*15.1*	*0.6*	*0.3*	*0.1*	*0.1*	*12.1*	*2.7*	*10.3*	*2.7*	*0.8*	*2.4*
PF Factor	*1.000*	*0.975*	*1.000*	*1.000*	*0.947*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*
Control Delay	*69.8*	*65.0*	*24.4*	*52.6*	*36.6*	*12.0*	*73.4*	*61.3*	*52.4*	*55.5*	*55.8*	*42.8*
Lane Group LOS	*E*	*E*	*C*	*D*	*D*	*B*	*E*	*E*	*D*	*E*	*E*	*D*
Approach Delay	*59.7*			*37.8*			*59.0*			*52.7*		
Approach LOS	*E*			*D*			*E*			*D*		
Intersection Delay	*53.4*			Intersection LOS						*D*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Forest Hill*
Agency or Co.	*PTC13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - 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*	*3*	*1*	*2*	*3*	*1*	*2*	*2*	*2*	*2*	*3*	*1*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
Volume (vph)	*491*	*1550*	*497*	*993*	*2090*	*515*	*521*	*660*	*696*	*325*	*614*	*316*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Arrival Type	*3*	*4*	*3*	*3*	*4*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
Unit Extension	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*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*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	*0*	*0*
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	WB Only	Thru & RT	EB Only	04	Excl. Left	Thru & RT	07	08
Timing	G = *39.0*	G = *7.0*	G = *26.0*	G = *0.0*	G = *20.0*	G = *40.0*	G = *0.0*	G = *0.0*
	Y = *7*	Y = *7*	Y = *0*	Y = *0*	Y = *7*	Y = *7*	Y = *0*	Y = *0*

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *160.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*517*	*1632*	*523*	*1045*	*2200*	*542*	*548*	*695*	*733*	*342*	*646*	*333*
Lane Group Capacity	*575*	*1397*	*594*	*863*	*1851*	*722*	*442*	*931*	*1702*	*442*	*1397*	*653*
v/c Ratio	*0.90*	*1.17*	*0.88*	*1.21*	*1.19*	*0.75*	*1.24*	*0.75*	*0.43*	*0.77*	*0.46*	*0.51*
Green Ratio	*0.16*	*0.25*	*0.38*	*0.24*	*0.33*	*0.46*	*0.13*	*0.25*	*0.54*	*0.13*	*0.25*	*0.41*
Uniform Delay d_1	*65.7*	*60.0*	*46.7*	*60.5*	*53.5*	*36.0*	*70.0*	*55.3*	*22.3*	*67.8*	*50.9*	*35.0*
Delay Factor k	*0.42*	*0.50*	*0.41*	*0.50*	*0.50*	*0.31*	*0.50*	*0.30*	*0.11*	*0.32*	*0.11*	*0.12*
Incremental Delay d_2	*17.1*	*83.8*	*14.3*	*105.7*	*90.6*	*4.4*	*126.0*	*3.3*	*0.2*	*8.3*	*0.2*	*0.7*
PF Factor	*1.000*	*1.000*	*1.000*	*1.000*	*0.960*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*
Control Delay	*82.8*	*143.8*	*61.0*	*166.2*	*142.0*	*40.4*	*196.0*	*58.7*	*22.4*	*76.1*	*51.1*	*35.6*
Lane Group LOS	*F*	*F*	*E*	*F*	*F*	*D*	*F*	*E*	*C*	*E*	*D*	*D*
Approach Delay	*115.8*			*134.1*			*83.3*			*53.7*		
Approach LOS	*F*			*F*			*F*			*D*		
Intersection Delay	*107.9*			Intersection LOS						*F*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Forest Hill*
Agency or Co.	*PTC13-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Proposed Timing*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - Proposed 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	4	1	3	4	1	2	2	2	2	3	1
Lane Group	L	T	R	L	T	R	L	T	R	L	T	R
Volume (vph)	491	1550	497	993	2090	515	521	660	696	325	614	316
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	0.95	0.95	0.95	0.95	0.95	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	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0
Arrival Type	3	4	3	3	4	3	3	3	3	3	3	3
Unit Extension	3.0	3.0	3.0	3.0	3.0	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	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	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	0	0	0	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	WB Only	Thru & RT	EB Only	04	Excl. Left	NB Only	Thru & RT	08
Timing	G = 40.0	G = 11.0	G = 28.0	G = 0.0	G = 20.0	G = 5.0	G = 28.0	G = 0.0
	Y = 7	Y = 7	Y = 0	Y = 0	Y = 7	Y = 0	Y = 7	Y = 0
Duration of Analysis (hrs) = 0.25						Cycle Length C = 160.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	517	1632	523	1045	2200	542	548	695	733	342	646	333
Lane Group Capacity	619	2142	772	1327	2701	772	708	768	1584	442	978	554
v/c Ratio	0.84	0.76	0.68	0.79	0.81	0.70	0.77	0.90	0.46	0.77	0.66	0.60
Green Ratio	0.17	0.29	0.49	0.25	0.36	0.49	0.20	0.21	0.50	0.13	0.17	0.35
Uniform Delay d_1	63.8	52.0	31.4	56.0	46.1	31.9	60.6	62.0	26.0	67.8	61.6	42.8
Delay Factor k	0.37	0.31	0.25	0.33	0.36	0.27	0.32	0.43	0.11	0.32	0.24	0.19
Incremental Delay d_2	9.7	1.7	2.4	3.2	2.0	2.9	5.4	14.3	0.2	8.3	1.7	1.8
PF Factor	1.000	0.995	1.000	1.000	0.932	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Control Delay	73.5	53.4	33.8	59.3	45.0	34.8	65.9	76.2	26.2	76.1	63.2	44.6
Lane Group LOS	E	D	C	E	D	C	E	E	C	E	E	D
Approach Delay	53.5			47.5			54.8			61.9		
Approach LOS	D			D			D			E		
Intersection Delay	52.6			Intersection LOS						D		

See 13-006

Palm Beach County | Signal Timing Sheet | 9/16/2011

60735 : 2210 - Southern Bl and Forest Hill Bl (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		5				5		5								
Ped Clearance		32				27		32								
Min Green	4	20	4	10	4	20	4	10								
Passage	2	4	2	2	4	4	2	2								
Max1	20	50	30	40	40	50	25	40								
Max2																
Yellow	4	5	4	4	4	5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	3	2	3	2	3	2	3	2								

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (WBT1)	3 (SBL1)	4 (NBT1)	5 (WBL1)	6 (EBT1)	7 (NBL1)	8 (SBT1)	9	10	11	12	13	14	15	16
Call Phase	1	2	3	4	5	6	7	8								
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County | System Timing Sheet | 9/16/2011

60735 : 2210 - Southern Bl and Forest Hill Bl (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		1	5	6	9	11	15	19	23							
Minute																

Action	7	100	7	2	4	1	3	5	7							

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		2	5	7	10	19	23									
Minute																
Action	7	100	7	5	6	5	7									

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		2	6	8	10	18	23									
Minute																
Action	7	100	7	5	6	5	7									

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	150	160	120	120	140	90									
Offset Time	72	94	74		118	77	73									
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	3	2	2	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	56	20	44	28	48	20	44								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	59	35	36	25	54	27	44								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	26	60	27	47	46	40	27	47								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	44	23	33	20	44	23	33								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	55	20	25	30	45	20	25								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	56	25	39	28	48	20	44								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve

Date: _____

Palm Beach County | Preempt & Overlap Timing Sheet | 9/16/2011

0735 : 2210 - Southern Bl and Forest Hill Bl (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6

Lock Input	ON	ON	ON	ON	ON	ON
Override Flash		ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Enable	ON	ON	ON	ON	ON	ON
Type	RAIL	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Max Green						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases		Modifer Phases		Type	Green	Yellow	Red
Overlap 1	4	5			NORMAL		3.5	1.5
Overlap 2					NORMAL		3.5	1.5
Overlap 3					NORMAL		3.5	1.5
Overlap 4					NORMAL		3.5	1.5
Overlap 5					NORMAL		3.5	1.5
Overlap 6					NORMAL		3.5	1.5
Overlap 7					NORMAL		3.5	1.5
Overlap 8					NORMAL		3.5	1.5
Overlap 9					NORMAL		3.5	1.5
Overlap 10					NORMAL		3.5	1.5
Overlap 11					NORMAL		3.5	1.5
Overlap 12					NORMAL		3.5	1.5
Overlap 13					NORMAL		3.5	1.5
Overlap 14					NORMAL		3.5	1.5
Overlap 15					NORMAL		3.5	1.5
Overlap 16					NORMAL		3.5	1.5

Approved By: Stephen Shreve **Date:**

Alternate Phase Program 1, Interval Times [1.1.6.1] **Alternate Phase Program 2, Interval Times [1.1.6.1]**

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

'B Coor, Day Plan [4.4]

ay Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

ay Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

ay Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

pproved By: Stephen Shreve **Date:** _____

alm Beach County **Special System Timing Sheet** **9/16/2011**

0735 : 2210 - Southern Bl and Forest Hill Bl (Standard File)

oordination, Splits [2.7.1]

lit Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	17	34	17	22	17	34	17	22								
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Coord-Ph		ON														

plit Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

plit Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

plit Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

plit Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

plit Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
ode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
ord-Ph		ON														

plit Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

lit Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

pproved By: Stephen Shreve **Date:** _____

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Royal Palm Beach Blvd

(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 (2/29/12)	30	7	33	600	5	166	191	2992	37	24	1300	226
Peak Season Volume	30	7	33	600	5	166	191	2,992	37	24	1,300	226
Bkgd (Growth + Exist)	31	7	35	628	5	174	200	3,129	39	25	1,360	236
Approved Projects	0	0	0	6	0	0	0	10	0	0	15	5
% Project Traffic	0%	0%	0%	0%	0%	2%	2%	35%	0%	0%	35%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	0	0	0	0	0	9	22	378	0	0	153	0
Total	**31**	**7**	**35**	**634**	**5**	**183**	**222**	**3,517**	**39**	**25**	**1,528**	**241**
Critical Volume Analysis												
No. of Lanes	1	1	< 0	2	< 0	1	2	4	< 0	1	3	1
Total Approach Volume		73			822			3,778			1,794	
Per Lane Volume	31	42	n/a	319.5	0	183	111	889	n/a	25	510	241
Right Turn on Red			10			60			10			60
Right Turn Resultant			-35			12			-41			-138.5
North-South Critical	NB LT + SB RT =			43			SB LT + NB TH =			351.5		
East-West Critical	EB LT + WB TH =			621			WB LT + EB TH =			904		
Maximum Critical Sum	**351.5**			**+**	**904**			**=**	**1,256**			
STATUS ?	**NEAR**											

PM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (2/29/12)	31	5	32	373	11	160	240	1965	32	44	2164	407
Peak Season Volume	31	5	32	373	11	160	240	1,965	32	44	2,164	407
Bkgd (Growth + Exist)	32	5	33	390	12	167	251	2,055	33	46	2,263	426
Approved Projects	0	0	0	52	0	4	5	165	0	0	153	55
% Project Traffic	0%	0%	0%	0%	0%	2%	2%	35%	0%	0%	35%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	0	0	0	0	0	19	11	195	0	0	331	0
Total	**32**	**5**	**33**	**442**	**12**	**190**	**267**	**2,415**	**33**	**46**	**2,747**	**481**
Critical Volume Analysis												
No. of Lanes	1	1	< 0	2	< 0	1	2	4	< 0	1	3	1
Total Approach Volume		70			644			2,715			3,274	
Per Lane Volume	32	38	n/a	221	0	190	134	612	n/a	46	916	481
Right Turn on Red			10			60			10			60
Right Turn Resultant			-56			-4			-42			200
North-South Critical	NB LT + SB TH =			32			SB LT + NB TH =			249		
East-West Critical	EB LT + WB TH =			1050			WB LT + EB TH =			648		
Maximum Critical Sum	**249**			**+**	**1050**			**=**	**1,299**			
STATUS ?	**NEAR**											

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & RPB Blvd.*
Agency or Co.	*#PTC3-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - 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	4	0	1	3	1	1	1	0	1	1	1
Lane Group	L	TR		L	T	R	L	TR		L	LT	R
Volume (vph)	222	3517	39	25	1528	241	31	7	35	634	5	183
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	0.95	0.95	0.95	0.95	0.95	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	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	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		2.0	2.0	2.0
Arrival Type	3	4		3	4	3	3	3		3	3	3
Unit Extension	3.0	3.0		3.0	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	0	0
Lane Width	12.0	12.0		12.0	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		0	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	NB Only	07	08
Timing	G = 8.0	G = 5.0	G = 58.0	G = 0.0	G = 36.0	G = 15.0	G = 0.0	G = 0.0
	Y = 7	Y = 0	Y = 7	Y = 0	Y = 7	Y = 7	Y = 0	Y = 0

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *150.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	234	3743		26	1608	254	33	44		334	338	193
Lane Group Capacity	458	2837		94	1962	612	177	163		425	426	591
v/c Ratio	0.51	1.32		0.28	0.82	0.42	0.19	0.27		0.79	0.79	0.33
Green Ratio	0.13	0.42		0.05	0.39	0.39	0.10	0.10		0.24	0.24	0.37
Uniform Delay d_1	60.5	43.5		68.2	41.3	33.6	61.9	62.4		53.4	53.5	33.5
Delay Factor k	0.12	0.50		0.11	0.36	0.11	0.11	0.11		0.33	0.34	0.11
Incremental Delay d_2	1.0	146.3		1.6	2.9	0.5	0.5	0.9		9.4	9.9	0.3
PF Factor	1.000	0.872		1.000	0.908	1.000	1.000	1.000		1.000	1.000	1.000
Control Delay	61.4	184.2		69.8	40.4	34.1	62.4	63.3		62.8	63.4	33.9
Lane Group LOS	E	F		E	D	C	E	E		E	E	C
Approach Delay	177.0			40.0			62.9			56.6		
Approach LOS	F			D			E			E		
Intersection Delay	122.4			Intersection LOS						F		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & RPB Blvd.*
Agency or Co.	*#PTC3-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Proposed Timing*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - Proposed 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	4	0	1	4	0	1	1	0	2	1	1
Lane Group	L	TR		L	TR		L	TR		L	LT	R
Volume (vph)	222	3517	39	25	1528	241	31	7	35	634	5	183
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	0.95	0.95	0.95	0.95	0.95	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	A	A	A	A	A
Startup Lost Time	2.0	2.0		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	2.0	2.0
Arrival Type	3	4		3	4		3	3		3	3	3
Unit Extension	3.0	3.0		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	0	0
Lane Width	12.0	12.0		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	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	NB Only	07	08
Timing	G = 8.0	G = 13.0	G = 69.0	G = 0.0	G = 22.0	G = 10.0	G = 0.0	G = 0.0
	Y = 7	Y = 0	Y = 7	Y = 0	Y = 7	Y = 7	Y = 0	Y = 0
Duration of Analysis (hrs) = 0.25						Cycle Length C = 150.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	234	3743		26	1862		33	44		460	212	193
Lane Group Capacity	642	4067		94	3048		118	109		519	260	528
v/c Ratio	0.36	0.92		0.28	0.61		0.28	0.40		0.89	0.82	0.37
Green Ratio	0.19	0.55		0.05	0.46		0.07	0.07		0.15	0.15	0.33
Uniform Delay d_1	53.2	31.0		68.2	30.4		66.6	67.1		62.8	62.0	38.0
Delay Factor k	0.11	0.44		0.11	0.20		0.11	0.11		0.41	0.36	0.11
Incremental Delay d_2	0.4	4.0		1.6	0.4		1.3	2.4		16.8	17.9	0.4
PF Factor	1.000	0.688		1.000	0.823		1.000	1.000		1.000	1.000	1.000
Control Delay	53.6	25.4		69.8	25.4		67.9	69.6		79.5	79.9	38.4
Lane Group LOS	D	C		E	C		E	E		E	E	D
Approach Delay	27.0			26.0			68.8			70.5		
Approach LOS	C			C			E			E		
Intersection Delay	32.7			Intersection LOS						C		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & RPB Blvd.*
Agency or Co.	*#PTC3-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Existing Timing*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - 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*	*4*	*0*	*1*	*3*	*1*	*1*	*1*	*0*	*1*	*1*	*1*
Lane Group	*L*	*TR*		*L*	*T*	*R*	*L*	*TR*		*L*	*LT*	*R*
Volume (vph)	*267*	*2415*	*33*	*46*	*2747*	*481*	*32*	*5*	*33*	*442*	*12*	*190*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*		*2.0*	*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*		*2.0*	*2.0*	*2.0*
Arrival Type	*3*	*4*		*3*	*4*	*3*	*3*	*3*		*3*	*3*	*3*
Unit Extension	*3.0*	*3.0*		*3.0*	*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*	*0*	*0*
Lane Width	*12.0*	*12.0*		*12.0*	*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*		*0*	*0*	*0*
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	NB Only	07	08
Timing	G = *8.0*	G = *7.0*	G = *69.0*	G = *0.0*	G = *36.0*	G = *12.0*	G = *0.0*	G = *0.0*
	Y = *7*	Y = *0*	Y = *7*	Y = *0*	Y = *7*	Y = *7*	Y = *0*	Y = *0*

Duration of Analysis (hrs) = *0.25* — Cycle Length C = *160.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*281*	*2577*		*48*	*2892*	*506*	*34*	*40*		*233*	*245*	*200*
Lane Group Capacity	*473*	*3207*		*89*	*2188*	*1108*	*133*	*121*		*398*	*400*	*574*
v/c Ratio	*0.59*	*0.80*		*0.54*	*1.32*	*0.46*	*0.26*	*0.33*		*0.59*	*0.61*	*0.35*
Green Ratio	*0.14*	*0.47*		*0.05*	*0.43*	*0.70*	*0.08*	*0.08*		*0.22*	*0.22*	*0.36*
Uniform Delay d_1	*64.8*	*35.7*		*74.2*	*45.5*	*10.6*	*69.8*	*70.2*		*55.3*	*55.7*	*37.2*
Delay Factor k	*0.18*	*0.35*		*0.14*	*0.50*	*0.11*	*0.11*	*0.11*		*0.18*	*0.20*	*0.11*
Incremental Delay d_2	*2.0*	*1.6*		*6.5*	*148.1*	*0.3*	*1.0*	*1.6*		*2.2*	*2.8*	*0.4*
PF Factor	*1.000*	*0.803*		*1.000*	*0.859*	*1.000*	*1.000*	*1.000*		*1.000*	*1.000*	*1.000*
Control Delay	*66.8*	*30.2*		*80.7*	*187.2*	*10.9*	*70.8*	*71.8*		*57.6*	*58.5*	*37.6*
Lane Group LOS	*E*	*C*		*F*	*F*	*B*	*E*	*E*		*E*	*E*	*D*
Approach Delay	*33.8*			*159.8*			*71.3*			*52.0*		
Approach LOS	*C*			*F*			*E*			*D*		
Intersection Delay	*97.5*			Intersection LOS						*F*		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & RPB Blvd.*
Agency or Co.	*#PTC3-006*	Area Type	*All other areas*
Date Performed	*5/7/13*	Jurisdiction	*PBC - Proposed Timing*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - Proposed 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	4	0	1	4	0	1	1	0	2	1	1
Lane Group	L	TR		L	TR		L	TR		L	LT	R
Volume (vph)	267	2415	33	46	2747	481	32	5	33	442	12	190
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	0.95	0.95	0.95	0.95	0.95	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	A	A	A	A	A
Startup Lost Time	2.0	2.0		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	2.0	2.0
Arrival Type	3	4		3	4		3	3		3	3	3
Unit Extension	3.0	3.0		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	0	0
Lane Width	12.0	12.0		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	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	NB Only	07	08
Timing	G = 10.0	G = 2.0	G = 85.0	G = 0.0	G = 23.0	G = 12.0	G = 0.0	G = 0.0
	Y = 7	Y = 0	Y = 7	Y = 0	Y = 7	Y = 7	Y = 0	Y = 0

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 160.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	281	2577		48	3398		34	40		321	157	200
Lane Group Capacity	408	3671		111	3514		133	121		494	256	416
v/c Ratio	0.69	0.70		0.43	0.97		0.26	0.33		0.65	0.61	0.48
Green Ratio	0.12	0.54		0.06	0.53		0.08	0.08		0.14	0.14	0.26
Uniform Delay d_1	67.7	26.9		72.3	36.1		69.8	70.2		64.7	64.3	49.8
Delay Factor k	0.26	0.27		0.11	0.47		0.11	0.11		0.23	0.20	0.11
Incremental Delay d_2	4.9	0.6		2.7	8.9		1.0	1.6		3.0	4.3	0.9
PF Factor	1.000	0.693		1.000	0.716		1.000	1.000		1.000	1.000	1.000
Control Delay	72.5	19.3		75.0	34.8		70.8	71.8		67.7	68.6	50.7
Lane Group LOS	E	B		E	C		E	E		E	E	D
Approach Delay	24.5			35.3			71.3			62.9		
Approach LOS	C			D			E			E		
Intersection Delay	34.0			Intersection LOS						C		

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **9/16/201**

30750 : 2215 - Southern Bl and Royal Palm Beach Bl (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		1	5	6	9	11	15	19	23							
Minute																
Action	7	100	7	2	4	1	3	5	7							

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		2	5	7	10	19	23									
Minute																
Action	7	100	7	5	6	5	7									

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		2	6	8	10	18	23									
Minute																
Action	7	100	7	5	6	5	7									

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	150	160	120	120	140	90									
Offset Time	2	45	10	76	80	2	85									
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	3	1	3	1	1	3	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt	1	2	3	1	1	3										

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	58		62	15	63	19	43								
Mode	MAX	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	65		65	15	70	22	43								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	76		62	15	83	19	43								
Mode	MAX	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	38		62	15	43	19	43								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	43		62	15	43	19	43								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

See #13-006

Palm Beach County **Signal Timing Sheet** **9/16/201**

30750 : 2215 - Southern Bl and Royal Palm Beach Bl (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3	4	5 (WL)	6 (ET)	7 (NT)	8 (ST)	9	10	11	12	13	14	15	16
Walk		5				5		5								
Ped Clearance		20				20		30								
Min Green	4	20			4	20	6	6								
Passage	3	4			3	4	3	3								
Max1	25	50			15	50	15	36								
Max2																
Yellow	4	5	4	4	4	5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	3	2			3	2	3	3								

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3	4	5 (WL)	6 (ET)	7 (NT)	8 (ST)	9	10	11	12	13	14	15	16
Enable	ON	ON			ON	ON	ON	ON								
Auto Entry								ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON				ON										
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (WBT1)	3	4	5 (WBL1)	6 (EBT1)	7 (NBT1)	8 (SBT1)	9	10	11	12	13	14	15	16
Call Phase	1	2	3	7	5	6	7	8								
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

INTERSECTION ANALYSIS SHEET
Highland Dunes

Okeechobee Blvd & Seminole Pratt Whitney Rd

(Existing Geometrics w/Project)

Growth Rate =	0.50%
Peak Season =	1.04
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 (4/26/12)	10	183	55	329	610	4	10	108	92	78	18	214
Peak Season Volume	10	190	57	342	634	4	10	112	96	81	19	223
Bkgd (Growth + Exist)	11	199	60	358	664	4	11	117	100	85	20	233
Approved Projects	0	16	0	5	31	0	0	0	0	0	0	2
% Project Traffic	0%	14%	5%	0%	14%	0%	0%	0%	0%	5%	0%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	0	151	54	0	61	0	0	0	0	22	0	0
Total	**11**	**366**	**114**	**363**	**756**	**4**	**11**	**117**	**100**	**107**	**20**	**235**
Critical Volume Analysis												
No. of Lanes	1	2	< 0	1	2	< 0	1	1	< 0	1	1	< 0
Approach Volume		491			1,123			228			362	
Per Lane Volume	11	240	n/a	363	380	n/a	11	217	n/a	107	255	n/a
Right Turn on Red			10			4			10			10
Right Turn Resultant			-117			-15			-21			-373
North-South Critical	NB LT + SB TH =			387			SB LT + NB TH =			593		
East-West Critical	EB LT + WB TH =			256			WB LT + EB TH =			314		
Maximum Critical Sum	**593**			**+**	**314**		**=**		**907**			
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 (4/26/12)	60	554	63	205	302	13	2	33	29	67	76	304
Peak Season Volume	62	576	66	213	314	14	2	34	30	70	79	316
Bkgd (Growth + Exist)	65	603	69	223	328	14	2	36	32	73	83	331
Approved Projects	0	77	0	9	64	0	0	0	0	0	0	10
% Project Traffic	0%	14%	5%	0%	14%	0%	0%	0%	0%	5%	0%	0%
Direction	in	out	out	in	in	in	out	out	out	in	in	in
Project Traffic	0	78	28	0	132	0	0	0	0	47	0	0
Total	**65**	**758**	**97**	**232**	**524**	**14**	**2**	**36**	**32**	**120**	**83**	**341**
Critical Volume Analysis												
No. of Lanes	1	2	< 0	1	2	< 0	1	1	< 0	1	1	< 0
Per Lane Volume	65	428	n/a	232	269	n/a	2	68	n/a	120	424	n/a
Right Turn on Red			10			10			10			10
Right Turn Resultant			-130			-12			-75			-242
North-South Critical	NB LT + SB TH =			324			SB LT + NB TH =			650		
East-West Critical	EB LT + WB TH =			416			WB LT + EB TH =			178		
Maximum Critical Sum	**650**			**+**	**416**		**=**		**1,066**			
STATUS ?	**UNDER**											

INTERSECTION PROPORTIONATE SHARE CALCULATIONS

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Forest Hill Blvd

(Existing Geometrics including 8LD w/Project at LOS E point)

Growth Rate =	-1.20%
Peak Season =	1.00
Buildout Year =	2021
Years =	9

PM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound			Total
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	Trips
Existing Volume (3/5/12)	330	629	605	275	584	203	379	1129	331	873	1509	450	7297
Peak Season Volume	330	629	605	275	584	203	379	1,129	331	873	1,509	450	
Bkgd (Growth + Exist)	296	564	543	247	524	182	340	1,013	297	783	1,354	404	6547
Approved Projects	81	2	63	37	3	57	67	152	95	80	143	44	
% Project Traffic	10%	0%	0%	0%	0%	5%	5%	39%	10%	0%	39%	0%	
Direction	in	out	out	in	in	in	out	out	out	in	in	in	
Project Traffic	95	0	0	0	0	47	28	**217**	56	0	**369**	0	225
Total	**472**	**566**	**606**	**284**	**527**	**286**	**435**	**1,382**	**448**	**863**	**1,866**	**448**	8183
No. of Lanes	2	2	2	2	3	1	2	4	1	2	4	1	

Note: E/W Thru volume already contributed to Prop Share of Link (8LD).

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Forest Hill Blvd

(Proposed Geometrics w/Project at LOS E point)

Growth Rate =	1.18%
Peak Season =	1.00
Buildout Year =	2021
Years =	9

PM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound			Total
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	Trips
Existing Volume (3/5/12)	330	629	605	275	584	203	379	1129	331	873	1509	450	7297
Peak Season Volume	330	629	605	275	584	203	379	1,129	331	873	1,509	450	
Bkgd (Growth + Exist)	367	699	672	306	649	226	421	1,255	368	970	1,677	500	8110
Approved Projects	81	2	63	37	3	57	67	152	95	80	143	44	
% Project Traffic	10%	0%	0%	0%	0%	5%	5%	39%	10%	0%	39%	0%	
Direction	in	out	out	in	in	in	out	out	out	in	in	in	
Project Traffic	95	0	0	0	0	47	28	217	56	0	369	0	225
Total	**543**	**701**	**735**	**343**	**652**	**330**	**516**	**1,624**	**519**	**1,050**	**2,189**	**544**	9746
No. of Lanes	2	2	2	2	3	1	2	4	1	3	4	1	

Note: E/W Thru volume already contributed to Prop Share of Link (8LD).

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Forest Hill*
Agency or Co.	*PTC13-006*	Area Type	*All other areas*
Date Performed	*5/8/13*	Jurisdiction	*PBC - Prop Share Calc*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - 8LD, No Add'l Improve.*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2	4	1	2	4	1	2	2	2	2	3	1
Lane Group	L	T	R	L	T	R	L	T	R	L	T	R
Volume (vph)	435	1382	448	863	1866	448	472	566	606	284	527	286
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	0.95	0.95	0.95	0.95	0.95	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	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0
Arrival Type	3	4	3	3	4	3	3	3	3	3	3	3
Unit Extension	3.0	3.0	3.0	3.0	3.0	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	0	0
Lane Width	12.0	12.0	12.0	12.0	12.0	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	0	0	0	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	WB Only	Thru & RT	EB Only	04	Excl. Left	NB Only	Thru & RT	08
Timing	G = 38.0	G = 12.0	G = 29.0	G = 0.0	G = 20.0	G = 5.0	G = 28.0	G = 0.0
	Y = 7	Y = 7	Y = 0	Y = 0	Y = 7	Y = 0	Y = 7	Y = 0
Duration of Analysis (hrs) = 0.25						Cycle Length C = 160.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	458	1455	472	908	1964	472	497	596	638	299	555	301
Lane Group Capacity	641	2235	792	841	2654	762	708	768	1544	442	978	564
v/c Ratio	0.71	0.65	0.60	1.08	0.74	0.62	0.70	0.78	0.41	0.68	0.57	0.53
Green Ratio	0.18	0.30	0.50	0.24	0.36	0.48	0.20	0.21	0.49	0.13	0.17	0.36
Uniform Delay d_1	61.6	48.7	28.5	61.0	45.0	30.7	59.6	60.0	26.3	66.9	60.5	40.9
Delay Factor k	0.28	0.23	0.18	0.50	0.30	0.20	0.27	0.33	0.11	0.25	0.16	0.14
Incremental Delay d_2	3.8	0.7	1.2	54.8	1.1	1.5	3.1	5.0	0.2	4.1	0.8	1.0
PF Factor	1.000	0.986	1.000	1.000	0.938	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Control Delay	65.4	48.7	29.7	115.8	43.4	32.2	62.7	65.0	26.5	71.0	61.2	41.9
Lane Group LOS	E	D	C	F	D	C	E	E	C	E	E	D
Approach Delay	48.1			61.5			50.2			58.7		
Approach LOS	D			E			D			E		
Intersection Delay	55.1			Intersection LOS						E		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & Forest Hill*
Agency or Co.	*PTC13-006*	Area Type	*All other areas*
Date Performed	*5/8/13*	Jurisdiction	*PBC - Prop Share Calc*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - Prop. 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*	*4*	*1*	*3*	*4*	*1*	*2*	*2*	*2*	*2*	*3*	*1*
Lane Group	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*LT*	*R*	*L*	*T*	*R*
Volume (vph)	*516*	*1624*	*519*	*1050*	*2189*	*544*	*543*	*701*	*735*	*343*	*652*	*330*
% Heavy Vehicles	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*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*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*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*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Arrival Type	*3*	*4*	*3*	*3*	*4*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
Unit Extension	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*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*	*0*	*0*
Lane Width	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*	*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*	*0*	*0*	*0*	*0*	*0*
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	WB Only	Thru & RT	EB Only	04	Excl. Left	NB Only	Thru & RT	08
Timing	G = *38.0*	G = *12.0*	G = *29.0*	G = *0.0*	G = *20.0*	G = *5.0*	G = *28.0*	G = *0.0*
	Y = *7*	Y = *7*	Y = *0*	Y = *0*	Y = *7*	Y = *0*	Y = *7*	Y = *0*

Duration of Analysis (hrs) = *0.25* | Cycle Length C = *160.0*

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*543*	*1709*	*546*	*1105*	*2304*	*573*	*572*	*738*	*774*	*361*	*686*	*347*
Lane Group Capacity	*641*	*2235*	*792*	*1261*	*2654*	*762*	*708*	*768*	*1544*	*442*	*978*	*564*
v/c Ratio	*0.85*	*0.76*	*0.69*	*0.88*	*0.87*	*0.75*	*0.81*	*0.96*	*0.50*	*0.82*	*0.70*	*0.62*
Green Ratio	*0.18*	*0.30*	*0.50*	*0.24*	*0.36*	*0.48*	*0.20*	*0.21*	*0.49*	*0.13*	*0.17*	*0.36*
Uniform Delay d_1	*63.4*	*50.9*	*30.5*	*58.7*	*48.0*	*33.7*	*61.1*	*62.9*	*27.8*	*68.2*	*62.1*	*42.5*
Delay Factor k	*0.38*	*0.32*	*0.26*	*0.40*	*0.40*	*0.31*	*0.35*	*0.47*	*0.11*	*0.36*	*0.27*	*0.20*
Incremental Delay d_2	*10.3*	*1.6*	*2.6*	*7.2*	*3.4*	*4.2*	*6.9*	*23.3*	*0.3*	*11.4*	*2.3*	*2.0*
PF Factor	*1.000*	*0.986*	*1.000*	*1.000*	*0.938*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*	*1.000*
Control Delay	*73.7*	*51.8*	*33.1*	*66.0*	*48.4*	*38.0*	*68.0*	*86.2*	*28.1*	*79.6*	*64.3*	*44.5*
Lane Group LOS	*E*	*D*	*C*	*E*	*D*	*D*	*E*	*F*	*C*	*E*	*E*	*D*
Approach Delay	*52.4*			*51.8*			*59.6*			*63.3*		
Approach LOS	*D*			*D*			*E*			*E*		
Intersection Delay	*55.1*			Intersection LOS						*E*		

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Royal Palm Beach Blvd

(Existing Geometrics including 8LD w/Project at LOS E point)

Growth Rate =	0.57%
Peak Season =	1.00
Buildout Year =	2021
Years =	9

AM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound			Total
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	Trips
Existing Volume (2/29/12)	30	7	33	600	5	166	191	2992	37	24	1300	226	5611
Peak Season Volume	30	7	33	600	5	166	191	2,992	37	24	1,300	226	
Bkgd (Growth + Exist)	32	7	35	631	5	175	201	3,149	39	25	1,368	238	5905
Approved Projects	0	0	0	6	0	3	0	10	0	0	15	5	
Diversions	0	0	0	0	0	0	0	0	0	0	0	0	
% Project Traffic	0%	0%	0%	0%	0%	2%	2%	35%	0%	0%	35%	0%	
Direction	in	out	out	in	in	in	out	out	out	in	in	in	
Project Traffic	0	0	0	0	0	9	22	378	0	0	153	0	30
Total	**32**	**7**	**35**	**637**	**5**	**187**	**223**	**3,537**	**39**	**25**	**1,536**	**243**	6506
No. of Lanes	1	1	< 0	2	< 0	1	2	4	< 0	1	4	< 0	

Note: E/W Thru volume already contributed to Prop Share of Link (8LD).

INTERSECTION ANALYSIS SHEET
Highland Dunes

Southern Blvd & Royal Palm Beach Blvd

(Proposed Geometrics w/Project at LOS E point)

Growth Rate =	1.436%
Peak Season =	1.00
Buildout Year =	2021
Years =	9

AM Peak Hour

Intersection Volume Development

	Northbound			Southbound			Eastbound			Westbound			Total
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	Trips
Existing Volume (2/29/12)	30	7	33	600	5	166	191	2992	37	24	1300	226	5611
Peak Season Volume	30	7	33	600	5	166	191	2,992	37	24	1,300	226	
Bkgd (Growth + Exist)	34	8	38	682	6	189	217	3,402	42	27	1,478	257	6380
Approved Projects	0	0	0	6	0	3	0	10	0	0	15	5	
Diversions	0	0	0	0	0	0	0	0	0	0	0	0	
% Project Traffic	0%	0%	0%	0%	0%	2%	2%	35%	0%	0%	35%	0%	
Direction	in	out	out	in	in	in	out	out	out	in	in	in	
Project Traffic	0	0	0	0	0	9	22	378	0	0	153	0	30
Total	**34**	**8**	**38**	**688**	**6**	**201**	**239**	**3,790**	**42**	**27**	**1,646**	**262**	6981
No. of Lanes	1	1	< 0	3	< 0	1	2	4	< 0	1	4	< 0	

Note: E/W Thru volume already contributed to Prop Share of Link (8LD).

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & RPB Blvd.*
Agency or Co.	*#PTC3-006*	Area Type	*All other areas*
Date Performed	*5/8/13*	Jurisdiction	*PBC - Prop Share Calc*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - 8LD, No Add'l Improve.*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	2	4	0	1	4	0	1	1	0	1	1	1
Lane Group	L	TR		L	TR		L	TR		L	LT	R
Volume (vph)	223	3537	39	25	1536	243	32	7	35	637	5	187
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	0.95	0.95	0.95	0.95	0.95	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	A	A	A	A	A
Startup Lost Time	2.0	2.0		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	2.0	2.0
Arrival Type	3	4		3	4		3	3		3	3	3
Unit Extension	3.0	3.0		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	0	0
Lane Width	12.0	12.0		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	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	NB Only	07	08
Timing	G = 8.0	G = 13.0	G = 63.0	G = 0.0	G = 28.0	G = 10.0	G = 0.0	G = 0.0
	Y = 7	Y = 0	Y = 7	Y = 0	Y = 7	Y = 7	Y = 0	Y = 0

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 150.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	235	3764		26	1873		34	44		463	213	197
Lane Group Capacity	642	3769		94	2783		118	109		330	332	591
v/c Ratio	0.37	1.00		0.28	0.67		0.29	0.40		1.40	0.64	0.33
Green Ratio	0.19	0.51		0.05	0.42		0.07	0.07		0.19	0.19	0.37
Uniform Delay d_1	53.3	36.9		68.2	35.2		66.6	67.1		61.0	56.4	33.6
Delay Factor k	0.11	0.50		0.11	0.24		0.11	0.11		0.50	0.22	0.11
Incremental Delay d_2	0.4	14.3		1.6	0.6		1.4	2.4		198.7	4.2	0.3
PF Factor	1.000	0.756		1.000	0.872		1.000	1.000		1.000	1.000	1.000
Control Delay	53.6	42.3		69.8	31.3		68.0	69.6		259.7	60.5	34.0
Lane Group LOS	D	D		E	C		E	E		F	E	C
Approach Delay	43.0			31.9			68.9			160.2		
Approach LOS	D			C			E			F		
Intersection Delay	55.1			Intersection LOS						E		

SHORT REPORT

General Information		Site Information	
Analyst	*PTC*	Intersection	*Southern Blvd & RPB Blvd.*
Agency or Co.	*#PTC3-006*	Area Type	*All other areas*
Date Performed	*5/8/13*	Jurisdiction	*PBC - Prop Share Calc*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - Prop. 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	4	0	1	4	0	1	1	0	2	1	1
Lane Group	L	TR		L	TR		L	TR		L	LT	R
Volume (vph)	239	3790	42	27	1646	262	34	8	38	688	6	201
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
PHF	0.95	0.95	0.95	0.95	0.95	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	A	A	A	A	A
Startup Lost Time	2.0	2.0		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	2.0	2.0
Arrival Type	3	4		3	4		3	3		3	3	3
Unit Extension	3.0	3.0		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	0	0
Lane Width	12.0	12.0		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	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EB Only	Thru & RT	04	SB Only	NB Only	07	08
Timing	G = 8.0	G = 13.0	G = 63.0	G = 0.0	G = 28.0	G = 10.0	G = 0.0	G = 0.0
	Y = 7	Y = 0	Y = 7	Y = 0	Y = 7	Y = 7	Y = 0	Y = 0

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 150.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	252	4033		28	2009		36	48		500	230	212
Lane Group Capacity	642	3769		94	2783		118	109		661	332	591
v/c Ratio	0.39	1.07		0.30	0.72		0.31	0.44		0.76	0.69	0.36
Green Ratio	0.19	0.51		0.05	0.42		0.07	0.07		0.19	0.19	0.37
Uniform Delay d_1	53.5	37.0		68.3	36.2		66.7	67.3		57.8	57.0	34.0
Delay Factor k	0.11	0.50		0.11	0.28		0.11	0.11		0.31	0.26	0.11
Incremental Delay d_2	0.4	37.6		1.8	0.9		1.5	2.8		5.0	6.1	0.4
PF Factor	1.000	0.756		1.000	0.872		1.000	1.000		1.000	1.000	1.000
Control Delay	53.9	65.6		70.1	32.5		68.2	70.1		62.8	63.1	34.4
Lane Group LOS	D	E		E	C		E	E		E	E	C
Approach Delay	64.9			33.0			69.3			56.5		
Approach LOS	E			C			E			E		
Intersection Delay	55.1			Intersection LOS						E		

APPENDIX E

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**											

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	*3/20/13*	Jurisdiction	*PBC*
Time Period	*AM Peak Hour*	Analysis Year	*2021 - 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)	*55*	*428*			*1082*	*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*	*451*			*1139*	*345*				*1035*		*102*
Lane Group Capacity	*199*	*1828*			*1325*	*1248*				*1190*		*773*
v/c Ratio	*0.29*	*0.25*			*0.86*	*0.28*				*0.87*		*0.13*
Green Ratio	*0.52*	*0.53*			*0.38*	*0.79*				*0.35*		*0.49*
Uniform Delay d_1	*22.5*	*16.5*			*36.8*	*3.7*				*39.8*		*18.2*
Delay Factor k	*0.11*	*0.11*			*0.39*	*0.11*				*0.40*		*0.11*
Incremental Delay d_2	*0.8*	*0.1*			*5.9*	*0.1*				*7.2*		*0.1*
PF Factor	*1.000*	*1.000*			*1.000*	*1.000*				*1.000*		*1.000*
Control Delay	*23.3*	*16.5*			*42.7*	*3.8*				*46.9*		*18.3*
Lane Group LOS	*C*	*B*			*D*	*A*				*D*		*B*
Approach Delay	*17.3*			*33.7*						*44.4*		
Approach LOS	*B*			*C*						*D*		
Intersection Delay	*34.9*			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	*3/21/13*	Jurisdiction	*PBC*
Time Period	*PM Peak Hour*	Analysis Year	*2021 - 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*	*861*			*456*	*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*	*906*			*480*	*864*				*622*		*60*
Lane Group Capacity	*540*	*1957*			*1112*	*1072*				*984*		*835*
v/c Ratio	*0.19*	*0.46*			*0.43*	*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*	*13.9*			*29.3*	*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*	*14.1*			*29.6*	*17.2*				*35.5*		*12.8*
Lane Group LOS	*B*	*B*			*C*	*B*				*D*		*B*
Approach Delay	*13.9*			*21.6*						*33.5*		
Approach LOS	*B*			*C*						*C*		
Intersection Delay	*21.8*			Intersection LOS						*C*		

APPENDIX F

Highland Dunes
Trip Generation Phasing - 1

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips
Residential Single Family	210	752 DUs	10 /DU	7,520	-	0.0%	7,520
Residential Multi Family	230	120 DUs	7 /DU	840	-	0.0%	840
School - Elementary	520	- Students	1.29 /Student	-	-	0.0%	-
Specialty Retail	826	- SF	T = 42.78(X)+37.66	-	-	0.0%	-
TOTALS				8,360	-	0.0%	8,360

AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	752 DUs	T = 0.70(X)+9.74 (25/75)	134	402	536	-	0.0%	134	402	536
Residential Multi Family	230	120 DUs	Ln (T) = 0.80Ln (X)+0.26 (17/83)	10	50	60	-	0.0%	10	50	60
School - Elementary	520	- Students	0.45 /Student (55/45)	-	-	-	-	0.0%	-	-	-
Specialty Retail (4)	826	- SF	0.96 /1000SF (62/38)	-	-	-	-	0.0%	-	-	-
TOTALS				144	452	596	-	0.0%	144	452	596

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	752 DUs	Ln (T) = 0.90Ln (X)+0.51 (63/37)	407	239	646	-	0.0%	407	239	646
Residential Multi Family	230	120 DUs	Ln (T) = 0.82Ln (X)+0.32 (67/33)	47	23	70	-	0.0%	47	23	70
School - Elementary	520	- Students	0.15 /Student (49/51)	-	-	-	-	0.0%	-	-	-
Specialty Retail	826	- SF	T = 2.40(X)+21.48 (44/56)	-	-	-	-	0.0%	-	-	-
TOTALS				454	262	716	-	0.0%	454	262	716

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.
(4) No AM peak hour data available for Specialty Retail. Used ITE Code 820.

Highland Dunes
Trip Generation Phasing - 2

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips
Residential Single Family	210	276 DUs	10 /DU	2,760	-	0.0%	2,760
Residential Multi Family	230	- DUs	7 /DU	-	-	0.0%	-
School - Elementary	520	- Students	1.29 /Student	-	-	0.0%	-
Specialty Retail	826	- SF	T = 42.78(X)+37.66	-	-	0.0%	-
TOTALS				2,760	-	0.0%	2,760

AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	276 DUs	T = 0.70(X)+9.74 (25/75)	51	152	203	-	0.0%	51	152	203
Residential Multi Family	230	- DUs	Ln (T) = 0.80Ln (X)+0.26 (17/83)	-	-	-	-	0.0%	-	-	-
School - Elementary	520	- Students	0.45 /Student (55/45)	-	-	-	-	0.0%	-	-	-
Specialty Retail (4)	826	- SF	0.96 /1000SF (62/38)	-	-	-	-	0.0%	-	-	-
TOTALS				51	152	203	-	0.0%	51	152	203

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	276 DUs	Ln (T) = 0.90Ln (X)+0.51 (63/37)	165	97	262	-	0.0%	165	97	262
Residential Multi Family	230	- DUs	Ln (T) = 0.82Ln (X)+0.32 (67/33)	-	-	-	-	0.0%	-	-	-
School - Elementary	520	- Students	0.15 /Student (49/51)	-	-	-	-	0.0%	-	-	-
Specialty Retail	826	- SF	T = 2.40(X)+21.48 (44/56)	-	-	-	-	0.0%	-	-	-
TOTALS				165	97	262	-	0.0%	165	97	262

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.
(4) No AM peak hour data available for Specialty Retail. Used ITE Code 820.

Highland Dunes
Trip Generation Phasing - 3

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips
Residential Single Family	210	1,665 DUs	10 /DU	16,650	-	0.0%	16,650
Residential Multi Family	230	120 DUs	7 /DU	840	-	0.0%	840
School - Elementary	520	- Students	1.29 /Student	-	-	0.0%	-
Specialty Retail	826	- SF	T = 42.78(X)+37.66	38	-	0.0%	38
TOTALS				17,528	-	0.0%	17,528

AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	1,665 DUs	T = 0.70(X)+9.74 (25/75)	294	881	1,175	-	0.0%	294	881	1,175
Residential Multi Family	230	120 DUs	Ln (T) = 0.80Ln (X)+0.26 (17/83)	10	50	60	-	0.0%	10	50	60
School - Elementary	520	- Students	0.45 /Student (55/45)	-	-	-	-	0.0%	-	-	-
Specialty Retail (4)	826	- SF	0.96 /1000SF (62/38)	-	-	-	-	0.0%	-	-	-
TOTALS				304	931	1,235	-	0.0%	304	931	1,235

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	1,665 DUs	Ln (T) = 0.90Ln (X)+0.51 (63/37)	832	489	1,321	-	0.0%	832	489	1,321
Residential Multi Family	230	120 DUs	Ln (T) = 0.82Ln (X)+0.32 (67/33)	47	23	70	-	0.0%	47	23	70
School - Elementary	520	- Students	0.15 /Student (49/51)	-	-	-	-	0.0%	-	-	-
Specialty Retail	826	- SF	T = 2.40(X)+21.48 (44/56)	-	-	-	-	0.0%	-	-	-
TOTALS				879	512	1,391	-	0.0%	879	512	1,391

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.
(4) No AM peak hour data available for Specialty Retail. Used ITE Code 820.

Highland Dunes
Trip Generation Phasing - 4

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips
Residential Single Family	210	596 DUs	10 /DU	5,960	-	0.0%	5,960
Residential Multi Family	230	120 DUs	7 /DU	840	-	0.0%	840
School - Elementary	520	- Students	1.29 /Student	-	-	0.0%	-
Specialty Retail	826	- SF	T = 42.78(X)+37.66	-	-	0.0%	-
TOTALS				6,800	-	0.0%	6,800

AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	596 DUs	T = 0.70(X)+9.74 (25/75)	107	320	427	-	0.0%	107	320	427
Residential Multi Family	230	120 DUs	Ln (T) = 0.80Ln (X)+0.26 (17/83)	10	50	60	-	0.0%	10	50	60
School - Elementary	520	- Students	0.45 /Student (55/45)	-	-	-	-	0.0%	-	-	-
Specialty Retail (4)	826	- SF	0.96 /1000SF (62/38)	-	-	-	-	0.0%	-	-	-
TOTALS				117	370	487	-	0.0%	117	370	487

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	596 DUs	Ln (T) = 0.90Ln (X)+0.51 (63/37)	330	194	524	-	0.0%	330	194	524
Residential Multi Family	230	120 DUs	Ln (T) = 0.82Ln (X)+0.32 (67/33)	47	23	70	-	0.0%	47	23	70
School - Elementary	520	- Students	0.15 /Student (49/51)	-	-	-	-	0.0%	-	-	-
Specialty Retail	826	- SF	T = 2.40(X)+21.48 (44/56)	-	-	-	-	0.0%	-	-	-
TOTALS				377	217	594	-	0.0%	377	217	594

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.
(4) No AM peak hour data available for Specialty Retail. Used ITE Code 820.

Highland Dunes
Trip Generation Phasing - 5

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips
Residential Single Family	210	636 DUs	10 /DU	6,360	-	0.0%	6,360
Residential Multi Family	230	120 DUs	7 /DU	840	-	0.0%	840
School - Elementary	520	- Students	1.29 /Student	-	-	0.0%	-
Specialty Retail	826	- SF	T = 42.78(X)+37.66	-	-	0.0%	-
TOTALS				7,200	-	0.0%	7,200

AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	636 DUs	T = 0.70(X)+9.74 (25/75)	114	341	455	-	0.0%	114	341	455
Residential Multi Family	230	120 DUs	Ln (T) = 0.80Ln (X)+0.26 (17/83)	10	50	60	-	0.0%	10	50	60
School - Elementary	520	- Students	0.45 /Student (55/45)	-	-	-	-	0.0%	-	-	-
Specialty Retail (4)	826	- SF	0.96 /1000SF (62/38)	-	-	-	-	0.0%	-	-	-
TOTALS				124	391	515	-	0.0%	124	391	515

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	636 DUs	Ln (T) = 0.90Ln (X)+0.51 (63/37)	350	205	555	-	0.0%	350	205	555
Residential Multi Family	230	120 DUs	Ln (T) = 0.82Ln (X)+0.32 (67/33)	47	23	70	-	0.0%	47	23	70
School - Elementary	520	- Students	0.15 /Student (49/51)	-	-	-	-	0.0%	-	-	-
Specialty Retail	826	- SF	T = 2.40(X)+21.48 (44/56)	-	-	-	-	0.0%	-	-	-
TOTALS				397	228	625	-	0.0%	397	228	625

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.
(4) No AM peak hour data available for Specialty Retail. Used ITE Code 820.

Highland Dunes
Trip Generation Phasing - 6

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips
Residential Single Family	210	910 DUs	10 /DU	9,100	-	0.0%	9,100
Residential Multi Family	230	120 DUs	7 /DU	840	-	0.0%	840
School - Elementary	520	- Students	1.29 /Student	-	-	0.0%	-
Specialty Retail	826	- SF	T = 42.78(X)+37.66	-	-	0.0%	-
TOTALS				9,940	-	0.0%	9,940

AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	910 DUs	T = 0.70(X)+9.74 (25/75)	162	485	647	-	0.0%	162	485	647
Residential Multi Family	230	120 DUs	Ln (T) = 0.80Ln (X)+0.26 (17/83)	10	50	60	-	0.0%	10	50	60
School - Elementary	520	- Students	0.45 /Student (55/45)	-	-	-	-	0.0%	-	-	-
Specialty Retail (4)	826	- SF	0.96 /1000SF (62/38)	-	-	-	-	0.0%	-	-	-
TOTALS				172	535	707	-	0.0%	172	535	707

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	910 DUs	Ln (T) = 0.90Ln (X)+0.51 (63/37)	483	284	767	-	0.0%	483	284	767
Residential Multi Family	230	120 DUs	Ln (T) = 0.82Ln (X)+0.32 (67/33)	47	23	70	-	0.0%	47	23	70
School - Elementary	520	- Students	0.15 /Student (49/51)	-	-	-	-	0.0%	-	-	-
Specialty Retail	826	- SF	T = 2.40(X)+21.48 (44/56)	-	-	-	-	0.0%	-	-	-
TOTALS				530	307	837	-	0.0%	530	307	837

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.
(4) No AM peak hour data available for Specialty Retail. Used ITE Code 820.

Highland Dunes
Trip Generation Phasing - 7

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips
Residential Single Family	210	1,815 DUs	10 /DU	18,150	2,014	11.1%	16,136
Residential Multi Family	230	120 DUs	7 /DU	840	93	11.1%	747
School - Elementary	520	970 Students	1.29 /Student	1,251	408	32.6%	843
Specialty Retail	826	50,000 SF	T = 42.78(X)+37.66	2,177	1,830	84.1%	347
TOTALS				22,418	4,345	19.4%	18,073

AM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	1,815 DUs	T = 0.70(X)+9.74 (25/75)	320	960	1,280	159	12.5%	280	841	1,121
Residential Multi Family	230	120 DUs	Ln (T) = 0.80Ln (X)+0.26 (17/83)	10	50	60	7	12.5%	9	44	53
School - Elementary	520	970 Students	0.45 /Student (55/45)	240	197	437	137	31.5%	165	135	300
Specialty Retail (4)	826	50,000 SF	0.96 /1000SF (62/38)	30	18	48	44	91.5%	2	2	4
TOTALS				600	1,225	1,825	347	19.0%	456	1,022	1,478

PM Peak Hour

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips		
				In	Out	Total			In	Out	Total
Residential Single Family	210	1,815 DUs	Ln (T) = 0.90Ln (X)+0.51 (63/37)	899	528	1,427	150	10.5%	805	472	1,277
Residential Multi Family	230	120 DUs	Ln (T) = 0.82Ln (X)+0.32 (67/33)	47	23	70	7	10.5%	42	21	63
School - Elementary	520	970 Students	0.15 /Student (49/51)	72	74	146	48	33.1%	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
TOTALS				1,080	704	1,784	323	18.1%	905	556	1,461

(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.