



Revised April 13, 2021  
February 5, 2021

Sent via e-mail: Andrew.Maxey@PulteGroup.com

Andrew Maxey  
VP of Land Acquisition  
PulteGroup, Inc  
4400 PGA Blvd, Suite 700  
Palm Beach Gardens, FL 33410

**Re: Sherwood Park – Traffic Concurrency  
PCN 12-42-46-13-25-007-0030**

JFO Group Inc. has been retained to evaluate a traffic impact analysis to determine compliance with *Palm Beach County (PBC) - Traffic Performance Standards (TPS) - Article 12 of the PBC Unified Land Development Code (ULDC)*. This traffic statement is associated with Land Use Amendment/Rezoning/Site Plan/Platting applications for the Sherwood Park property. The site is located just south of W Atlantic Avenue, ±½-mile east of Military Trail in the City of Delray Beach, Florida.

Figure 1 shows the project location in relation to the transportation network. Parcel Control Number associated with this project is 12-42-46-13-25-007-0030. A copy of the property appraiser information for the site is included as Exhibit 1. The Sherwood Park property is proposing 79 Single Family homes on the subject site. Exhibit 2 includes a copy of a preliminary site plan.



Figure 1 : Project Location

Project trip generation rates used for this analysis were based on *PBC Trip Generation Rates* dated March 2, 2020. Table 1 shows the rates used in order to determine the trip generation for Daily, AM, and PM peak hour conditions. Project buildout is expected in the year 2026.

According to provisions in *Article 12 of the PBC ULDC – Section 3.B*, if a structure or building has not been discontinued or abandoned for five (5) or more years prior to the time of the application, then the project is eligible for an existing use credit against project traffic. See Exhibit 3 for a layout of the 18-hole golf course and Exhibit 4 for a 2016 aerial of the site.

**Table 1: Trip Generation Rates**

Land Use	ITE Code	Daily Trip Gen.	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Golf Course	430	30.38	79%	21%	1.76	53%	47%	2.91
Single Family	210	10	25%	75%	0.74	63%	37%	Ln(T)=0.96 Ln(X)+0.2

Table 2 summarizes the net Daily, AM, and PM peak trips potentially generated by the existing and proposed development. According to Table 2, the additional net Daily, AM and PM peak hour trips potentially generated due to the proposed changes to the site are 243, 26 and 29 trips respectively.

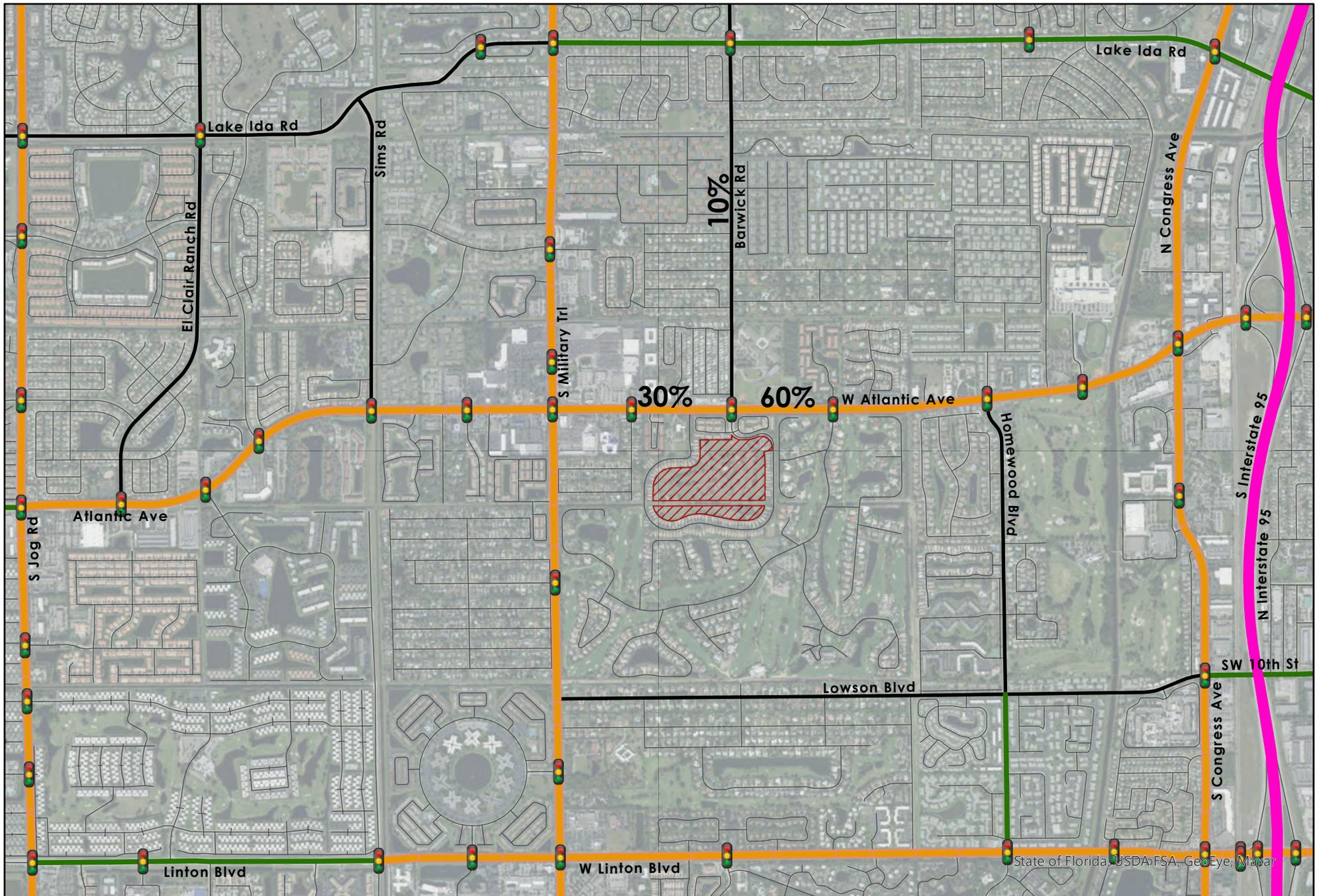
**Table 2: Trip Generation**

Land Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
<b>Vested Development</b>								
Golf Course	18 Holes	547	25	7	32	28	24	52
<b>Net Vested Traffic</b>		<b>547</b>	<b>25</b>	<b>7</b>	<b>32</b>	<b>28</b>	<b>24</b>	<b>52</b>
<b>Proposed Development</b>								
Single Family	79 DUs	790	15	43	58	51	30	81
<b>Net Proposed Traffic</b>		<b>790</b>	<b>15</b>	<b>43</b>	<b>58</b>	<b>51</b>	<b>30</b>	<b>81</b>
<b>Net Traffic</b>		<b>243</b>	<b>(10)</b>	<b>36</b>	<b>26</b>	<b>23</b>	<b>6</b>	<b>29</b>

Based on *Table 12.b.2.D-7 3A* from the *Palm Beach County Traffic Performance Standards* and given the trip generation characteristics from Table 2, a 1/2-mile Radius of Development Influence (RDI) needs to be considered for traffic impact analysis. Table 3 includes the traffic assignment within Test 1 RDI while Figure 2 shows the project trip distribution as well as the signalized intersections and roadway geometry within the RDI used to determine the functional classification of the impacted roadways.

**Table 3: Project Impact**

Roadway	From	To	Ln	Number of Existing and Proposed Traffic Signals - 1	Length (miles)	Signalized Intersections per mile	Class	LOS Capacity	Traffic Assignment	Project Traffic	Traffic Impact
Atlantic Ave	Military Tr	Barwick Rd	6D	3	0.51	5.88	II	2,680	30%	11	0.41%
Atlantic Ave	Barwick Rd	Homewood Blvd	6D	2	0.73	2.74	II	2,680	60%	22	0.82%
Barwick Rd	Atlantic Ave	Lake Ida Rd	2	1	1.03	0.97	I	880	10%	4	0.45%



**Figure 2:**  
**Traffic Assignment**  
**Sherwood Park Golf Club**



According to the *PBC - TPS* and the *Land Development Design Standards Manual*, a left-turn lane is required at each driveway where inbound peak hour left-turning traffic is equal or greater than 30 vehicles. A right-turn lane is required at each driveway where street Average Daily Traffic (ADT) volumes exceed 10,000 vehicles per day, and driveway daily volume is greater than 1,000 trips, with inbound peak hour right-turning traffic being at least 75 vehicles.

Figure 3 provides Daily, AM and PM peak hour driveway volumes for the Sherwood Park property. Based on the information presented in Figure 2, *PBC - TPS*, and the *Land Development Design Standards Manual*, turn lanes are not warranted at the project driveway.

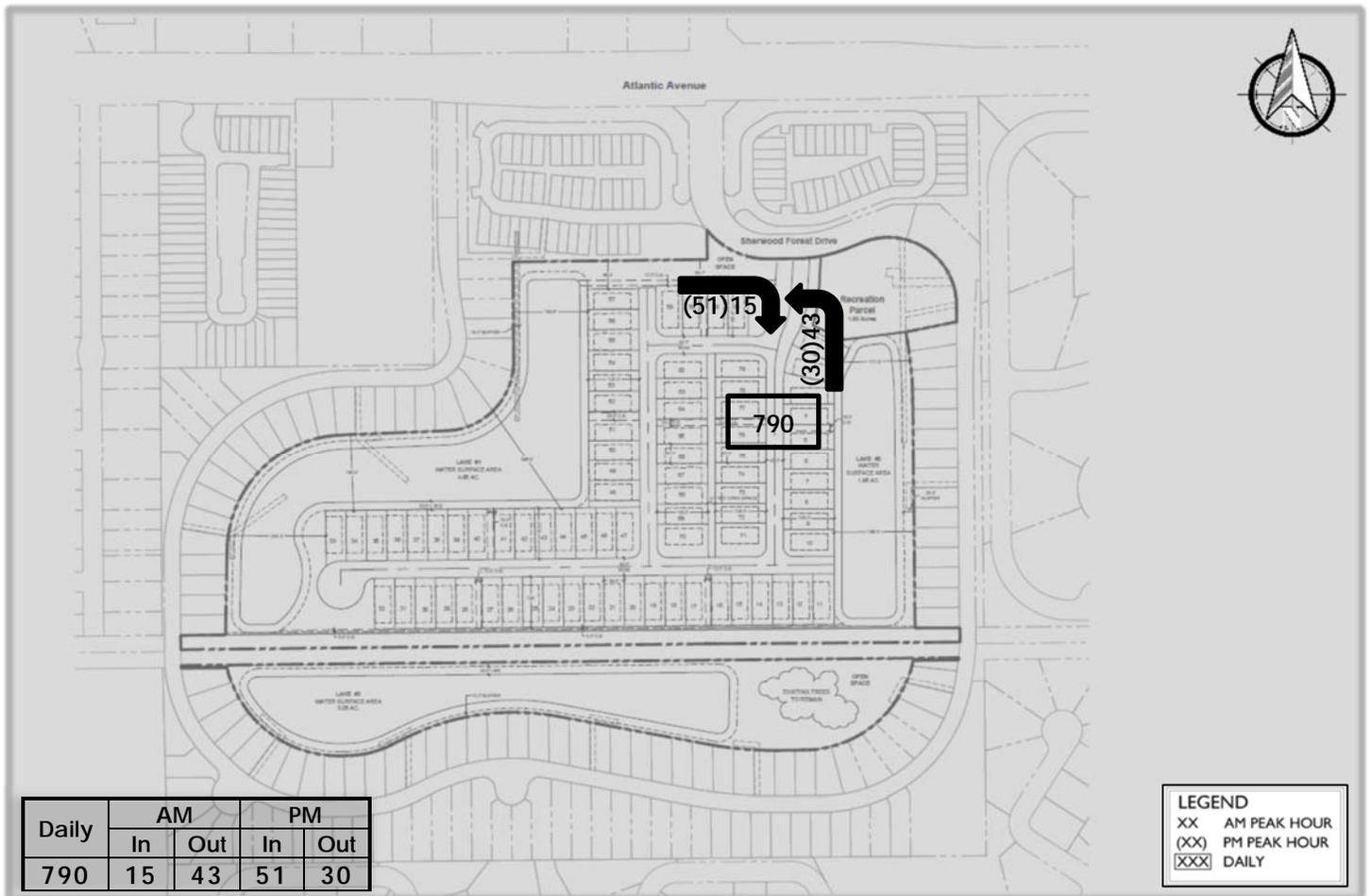


Figure 3: Driveway Volumes

Sherwood Park project connects to the throughfare network at the signalized intersection of Atlantic Ave and Barwick Rd/Sherwood Forest Dr. Therefore, CMA and HCS analyses at this intersection are included in Exhibit 5 and summarized in Table 4. As shown in Table 4, Atlantic Ave and Barwick Rd/Sherwood Forest Dr will operate at Level of Service 'D' or better at project buildout where the westbound left turn lane will be able to accommodate background and future traffic at project buildout in the year 2026.

**Table 4: 10<sup>th</sup> CMA/HCS Summary**

	Eastbound			Westbound			Northbound			Southbound		
	LT	Thru	RT	LT <sup>1</sup>	Thru	RT	LT	Thru	RT	LT	Thru	RT
<b>AM</b>												
Volume (veh/h)	131	1,648	14	19	1,058	204	42	5	57	387	5	302
95 <sup>th</sup> Percentile Queue Length (ft/ln)	116.1	554.1	562.6	17.5	363.8	217.4	-	93.7	112.7	731.1	7.6	451.5
Intersection Delay, s/veh / LOS	36.4/D											
CMA	769											
<b>PM</b>												
Volume (veh/h)	254	1,510	42	74	1,562	333	18	12	29	261	8	223
95 <sup>th</sup> Percentile Queue Length (ft/ln)	285.8	450.7	452.5	60.9	525	325	-	64.8	59.6	494.8	14.1	355.5
Intersection Delay, s/veh / LOS	28.0/C											
CMA	910											

<sup>1</sup> Storage Length = 200 Feet

Furthermore, as requested by City of Delray Beach staff, Table 5 summarizes the net Daily, AM, and PM peak trips potentially generated by the existing and a maximum allowable potential of 5 DU/acre. According to Table 5, the additional net Daily, AM and PM peak hour trips potentially generated due to the theoretical maximum potential would be 1,303, 105 and 131 trips respectively.

**Table 5: Trip Generation Maximum Potential**

Land Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
<b>Vested Development</b>								
Golf Course	18 Holes	547	25	7	32	28	24	52
<b>Net Vested Traffic</b>		<b>547</b>	<b>25</b>	<b>7</b>	<b>32</b>	<b>28</b>	<b>24</b>	<b>52</b>
<b>Maximum Potential Development</b>								
Single Family	185 <sup>2</sup> DUs	1,850	34	103	137	115	68	183
<b>Net Proposed Traffic</b>		<b>1,850</b>	<b>34</b>	<b>103</b>	<b>137</b>	<b>115</b>	<b>68</b>	<b>183</b>
<b>Net Traffic Max Potential</b>		<b>1,303</b>	<b>9</b>	<b>96</b>	<b>105</b>	<b>87</b>	<b>44</b>	<b>131</b>

<sup>2</sup> 37.1 Acres X 5 DU/Ac

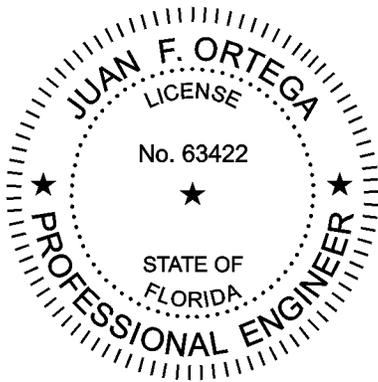
The Site currently has a Land Use designation of Open Space (OS), as well as Zoning designation of Open Space and Recreation (OSR). These designations do not allow for redevelopment of the site for the purposes of density or intensity, requiring a modification to both. The applicant is proposing to rezone the Site to the PRD zoning designation, consistent with the Sherwood Forest and Legacy at Sherwood Forest developments, and has filed a companion Land Use Map Amendment request to amend the Land Use to Low Density (LD), also consistent with the Sherwood Forest and Legacy at Sherwood Forest developments.

Furthermore, the applicant is requesting a Master Development Plan Modification, a Waiver, and a Class II Site Plan Review that will limit the proposed development to a maximum of 79 single-family modified zero lot line residential lots with a clubhouse facility and other recreation amenities, such as fitness center, pool, and tot lot, along with passive park areas and other open spaces and extended lakes. The applicant will Plat the property as required, establishing the required Home Owners Association. Consequently, Exhibit 6 includes a copy of the PBC TPS approval for the proposed project with a maximum density of 79 single-family homes. Any changes to the proposed intensity of 79 dwelling units will require the applicant to obtain a new Traffic Concurrency determination.

The proposed changes to the Sherwood Park property have been evaluated following *PBC TPS - Article 12 of the PBC ULDC*. This analysis shows that the proposed request to reconfigure the site to accommodate 79 Single Family homes will generate less than one percent (1%) of the adjacent roadway peak-hour peak-direction LOS in all links included within the PBC RDI. Therefore, the proposed development will be in compliance with *PBC TPS - Article 12 of the PBC ULDC*. Project build-out is expected in the year 2026.

Sincerely,

**JFO GROUP INC**  
COA Number 32276



- Enclosures:
- Exhibit 1: Property Appraiser Information
  - Exhibit 2: Conceptual Site Plan
  - Exhibit 3: Sherwood Park Golf Course
  - Exhibit 4: 2016 Aerial
  - Exhibit 5: CMA/HCS Intersection Analysis
  - Exhibit 6: Traffic Concurrency Approval – 79 DUs

**Property Detail**

Location Address 170 SHERWOOD FOREST DR  
 Municipality DELRAY BEACH  
 Parcel Control Number 12-42-46-13-25-007-0030  
 Subdivision SHERWOOD FOREST PL 1  
 Official Records Book 14410 Page 559  
 Sale Date NOV-2002  
 Legal Description SHERWOOD FOREST PL 1 TRS G-3 & G-4 K/A GOLF COURST TRS

**Owner Information**

Owners	Mailing address
SHERWOOD PARK GOLF CLUB INC	49 SW FLAGLER AVE STE 201 STUART FL 34994 2148

**Sales Information**

Sales Date	Price	OR Book/Page	Sale Type	Owner
NOV-2002	\$225,000	14410 / 00559	QUIT CLAIM	SHERWOOD PARK GOLF CLUB INC
MAY-2000	\$1,600,000	11845 / 00030	WARRANTY DEED	PARKER BRADENTON CORP

**Exemption Information**

No Exemption information available

**Property Information**

Number of Units 0  
 \*Total Square Feet 6730  
 Acres 37.31  
 Use Code 3800 - GOLF COURSE  
 Zoning OSR - OSR - OPEN SPACE & RECREATION ( 12-DELRAY BEACH )

**Appraisals**

Tax Year	2020	2019	2018
Improvement Value	\$100,413	\$103,264	\$0
Land Value	\$373,100	\$373,100	\$0
Total Market Value	\$473,513	\$476,364	\$475,000

All values are as of January 1st each year

**Assessed and Taxable Values**

Tax Year	2020	2019	2018
Assessed Value	\$473,513	\$476,364	\$475,000
Exemption Amount	\$0	\$0	\$0
Taxable Value	\$473,513	\$476,364	\$475,000

**Taxes**

Tax Year	2020	2019	2018
Ad Valorem	\$9,635	\$9,801	\$9,564
Non Ad Valorem	\$4,208	\$4,344	\$4,344
Total tax	\$13,843	\$14,145	\$13,908

Dorothy Jacks, CFA, AAS PALM BEACH COUNTY PROPERTY APPRAISER www.pbcgov.org/PAPA

**Property Detail**

Parcel Control Number: 12-42-46-13-25-007-0030 Location Address: 170 SHERWOOD FOREST DR  
 Owners: SHERWOOD PARK GOLF CLUB INC  
 Mailing Address: 49 SW FLAGLER AVE STE 201,STUART FL 34994 2148  
 Last Sale: NOV-2002 Book/Page#: 14410 / 559 Price: \$225,000  
 Property Use Code: 3800 - GOLF COURSE Zoning: OSR - OSR - OPEN SPACE & RECREATION ( 12-DELRAY BEACH )  
 Legal Description: SHERWOOD FOREST PL 1 TRS G-3 & G-4 K/A GOLF COURST TRS Total SF: 6730 Acres 37.31

**2020 Values (Current)**

Improvement Value \$100,413  
 Land Value \$373,100  
 Total Market Value \$473,513  
 Assessed Value \$473,513  
 Exemption Amount \$0  
 Taxable Value \$473,513

**2020 Taxes**

Ad Valorem \$9,635  
 Non Ad Valorem \$4,208  
 Total Tax \$13,843

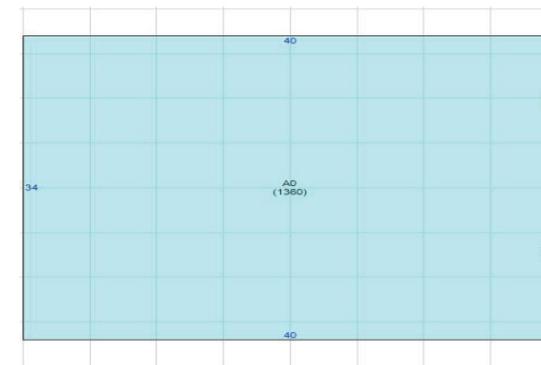
**2020 Qualified Exemptions**

No Details Found

**Applicants**

No Details Found

**Building Footprint (Building 1)**



**Subarea and Square Footage (Building 1)**

Description	Area Sq. Footage
WAREHOUSE	1360
Total Square Footage : 1360	

**Extra Features**

Description	Year Built	Unit
Wall	1990	152
Paving- Asphalt	1990	36539
Walkway-Concrete	1990	670
Walkway-Concrete	1990	450

Unit may represent the perimeter, square footage, linear footage, total number or other measurement.

**Structural Details (Building 1)**

Description	Year Built	Unit
1. Year Built	1960	
2. WAREHOUSE STORAGE	1360	

**MAP**



Dorothy Jacks, CFA, AAS PALM BEACH COUNTY PROPERTY APPRAISER www.pbcgov.org/PAPA

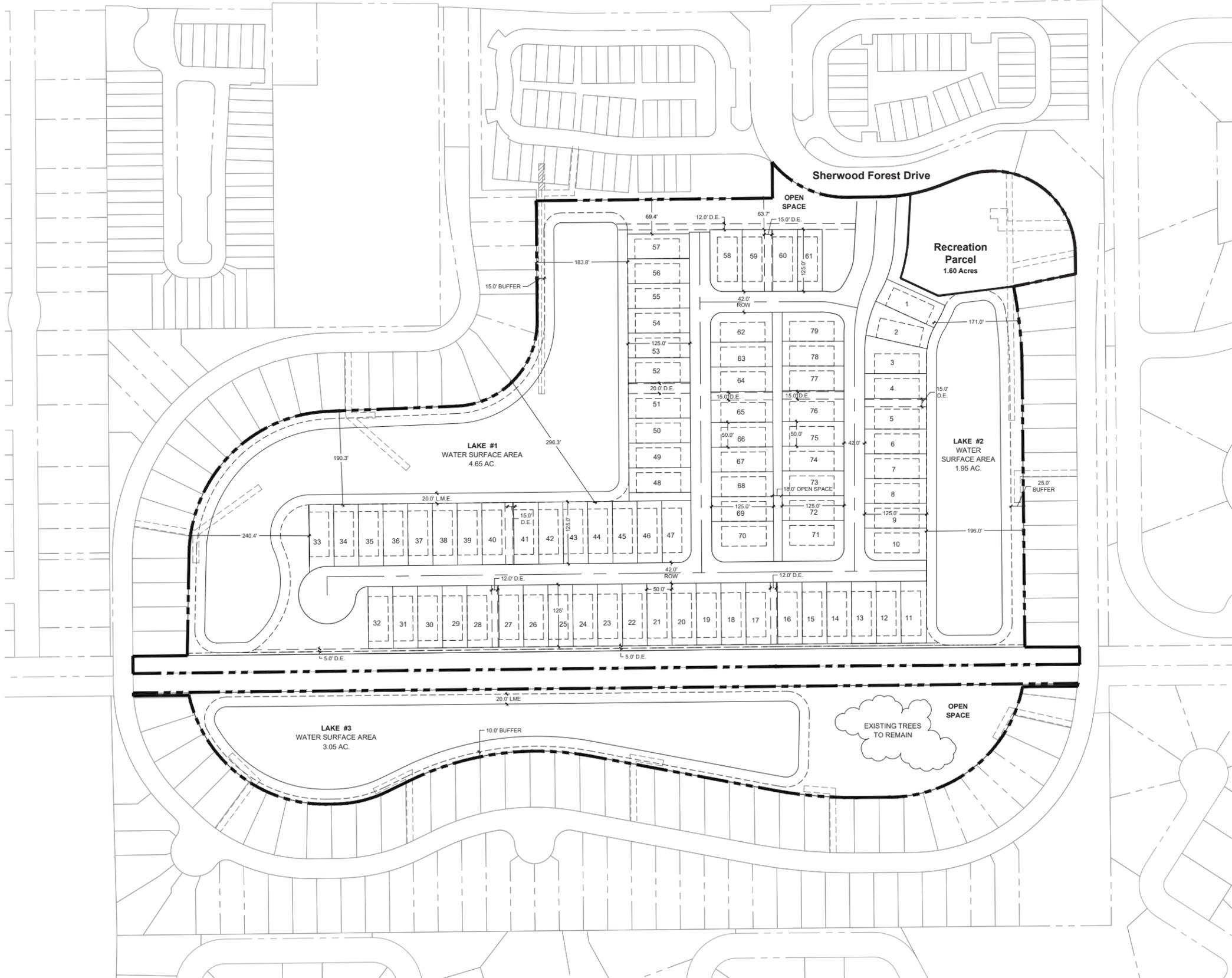
12/26/2020

Owner: SHERWOOD PARK GOLF CLUB INC PCN: 12424613250070030 1 of 1

This Page Intentionally Left Blank

Atlantic Avenue

Sherwood Forest Drive

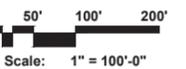


**Sherwood Park Golf Club  
Residential Redevelopment**  
City of Delray Beach, Florida  
Conceptual Site Plan

Drawings were created using AutoCAD 2018. All dimensions are in feet and inches. The drawing is a conceptual site plan and is not to be used for construction purposes.



NORTH



Date: January 2018  
Project No.: 18-004.000  
Designed By: WJT  
Drawn By:  
Checked By:

Revision Dates:

03.01.2018	
03.05.2018	
04.27.2018	
07.09.2018	
08.12.2018	
09.18.2018	
10.16.2019	
10.17.2019	
12.10.2020	

SITE DATA  
SITE AREA: 37.31 ACRES  
TOTAL UNITS: 79 UNITS  
(50' X 125')  
\*ASSUMES 10' SIDE SETBACK  
DENSITY: 2.12 DU/ACRE  
LAKE AREA: 9.65 ACRES (26%)

This Page Intentionally Left Blank

# Sherwood Park Golf Course

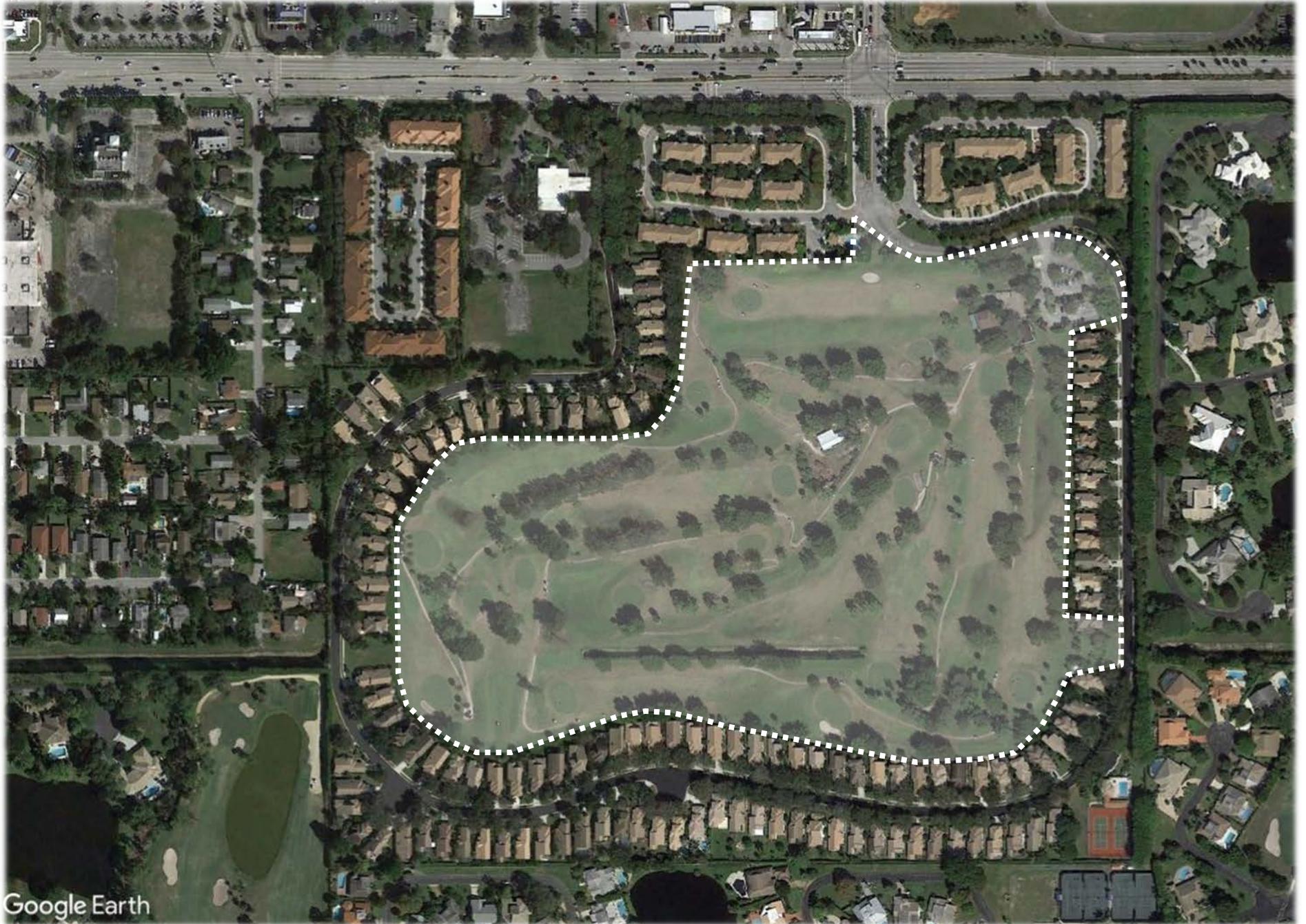
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18



Source: <https://www.golfpass.com/travel-advisor/courses/2001-sherwood-park-golf-course#layout>

This Page Intentionally Left Blank

2016 Aerial



Google Earth

This Page Intentionally Left Blank

### Critical Movement Analysis



**Atlantic Ave and Barwick Rd/Sherwood Forest Dr**  
**Sherwood Park Golf Club**

**Input Data**

GR	=	1.00%
Peak Season	=	1.00
Traffic Count Year	=	2019
Buildout Year	=	2026
Years	=	7

AM Peak Hour		PM Peak Hour		Proposed Development
In	Out	In	Out	
15	43	51	30	79 Single Family Homes

#### AM Peak Hour

AM	Eastbound			Westbound			Northbound			Southbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Volume 21-Feb-19	120	1,522	8	9	965	181	27	1	29	355	3	281
Peak Season Volume	120	1,522	8	9	965	181	27	1	29	355	3	281
2026 Historic Growth	129	1,632	9	10	1,035	194	29	1	31	381	3	301
Major Project Traffic	2	16	0	0	23	10	0	0	0	6	0	1
Major Project Traffic + 1% growth	131	1,648	9	10	1,058	204	29	1	31	387	3	302
% Project Traffic	-	-	30%	60%	-	-	30%	10%	60%	-	10%	-
Project Traffic Direction	-	-	IN	IN	-	-	OUT	OUT	OUT	-	IN	-
Project Traffic	-	-	5	9	-	-	13	4	26	-	2	-
2026 Total Traffic <sup>1</sup>	131	1,648	14	19	1,058	204	42	5	57	387	5	302
<b>Critical Volume</b>												
No. of Lanes	1	3	-	1	3	1	1	-	1	2	-	1
Approach Volume	1,793			-			104			694		
Per Lane Volume <sup>2</sup>	131	554	-	19	353	0	47	-	0	196	-	111
North-South Critical	EB LT + WB TH = 484			WB LT + EB TH = 573								
East-West Critical	NB LT + SB RT = 158			SB LT + NB RT = 196								
Maximum Critical Sum	573			196			= 769					
Status?	<b>OK</b>											

#### PM Peak Hour

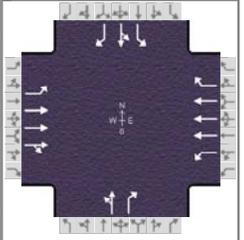
PM	Eastbound			Westbound			Northbound			Southbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Volume 21-Feb-19	235	1,346	25	40	1,400	296	8	8	10	227	3	207
Peak Season Volume	235	1,346	25	40	1,400	296	8	8	10	227	3	207
2026 Historic Growth	252	1,443	27	43	1,501	317	9	9	11	243	3	222
Major Project Traffic	2	67	0	0	61	16	0	0	0	18	0	1
Major Project Traffic + 1% growth	254	1,510	27	43	1,562	333	9	9	11	261	3	223
% Project Traffic	-	-	30%	60%	-	-	30%	10%	60%	-	10%	-
Project Traffic Direction	-	-	IN	IN	-	-	OUT	OUT	OUT	-	IN	-
Project Traffic	-	-	15	31	-	-	9	3	18	-	5	-
2026 Total Traffic <sup>1</sup>	254	1,510	42	74	1,562	333	18	12	29	261	8	223
<b>Critical Volume</b>												
No. of Lanes	1	3	-	1	3	1	1	-	1	2	-	1
Approach Volume	1,806			-			59			492		
Per Lane Volume <sup>2</sup>	254	517	-	74	521	138	30	-	0	135	-	0
North-South Critical	EB LT + WB TH = 775			WB LT + EB TH = 591								
East-West Critical	NB LT + SB RT = 30			SB LT + NB RT = 135								
Maximum Critical Sum	775			135			= 910					
Status?	<b>OK</b>											

<sup>1</sup> Build out year traffic was estimated using the greater of the historical growth rate and committed development traffic+1% historical growth rate. Then, existing traffic and development traffic were added to the growth in the build-out year.

<sup>2</sup> Right-turn volume was adjusted based on the right turns on red and the overlapping left turns

## HCS7 Signalized Intersection Input Data

General Information				Intersection Information			
Agency	JFO			Duration, h	0.250		
Analyst	JF	Analysis Date	Dec 26, 2020	Area Type	Other		
Jurisdiction	State of Florida	Time Period	AM	PHF	0.95		
Urban Street	Atlantic Ave	Analysis Year	2026	Analysis Period	1 > 7:00		
Intersection	Atlantic Ave and Barwic...	File Name	2026AM_Atlantic&Barwick.xus				
Project Description	Sherwood Park Golf Club						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	131	1648	14	19	1058	204	42	5	57	387	5	302

Signal Information				Signal Timing (s)								Signal Phases			
Cycle, s	160.0	Reference Phase	2												
Offset, s	0	Reference Point	End	Green	2.4	5.8	80.0	37.0	8.8	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	5.0	0.0	5.0	4.0	4.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	0.0	2.0	2.0	2.0	0.0					

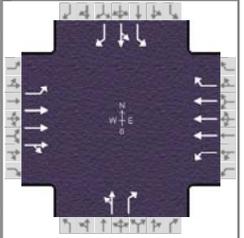
Traffic Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	131	1648	14	19	1058	204	42	5	57	387	5	302
Initial Queue (Q <sub>b</sub> ), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s <sub>0</sub> ), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N <sub>m</sub> ), man/h		None			None			None			None	
Heavy Vehicles (P <sub>HV</sub> ), %	2	2		2	2	2		2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N <sub>b</sub> ), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft	12.0	12.0		12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	0	0		200	0	0		0	0	0	0	0
Grade (P <sub>g</sub> ), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G <sub>max</sub> ) or Phase Split, s	25.0	50.0	18.0	43.0		49.0		43.0
Yellow Change Interval (Y), s	5.0	5.0	5.0	5.0		4.0		4.0
Red Clearance Interval (R <sub>c</sub> ), s	2.0	2.0	2.0	2.0		2.0		2.0
Minimum Green (G <sub>min</sub> ), s	4	20	4	20		6		6
Start-Up Lost Time (lt), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (Walk), s		7.0		7.0		7.0		7.0
Pedestrian Clearance Time (PC), s		27.0		25.0		35.0		29.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25									
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No									
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50										

# HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	JFO			Duration, h	0.250
Analyst	JF	Analysis Date	Dec 26, 2020	Area Type	Other
Jurisdiction	State of Florida	Time Period	AM	PHF	0.95
Urban Street	Atlantic Ave	Analysis Year	2026	Analysis Period	1 > 7:00
Intersection	Atlantic Ave and Barwic...	File Name	2026AM_Atlantic&Barwick.xus		
Project Description	Sherwood Park Golf Club				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand ( v ), veh/h	131	1648	14	19	1058	204	42	5	57	387	5	302

Signal Information				Phase Diagram											
Cycle, s	160.0	Reference Phase	2												
Offset, s	0	Reference Point	End												
Uncoordinated	No	Simult. Gap E/W	On												
Force Mode	Fixed	Simult. Gap N/S	On												
		Green		2.4	5.8	80.0	37.0	8.8	0.0						
		Yellow		5.0	0.0	5.0	4.0	4.0	0.0						
		Red		2.0	0.0	2.0	2.0	2.0	0.0						

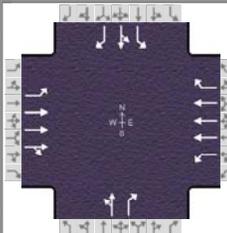
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	3.0		11.0		9.0
Phase Duration, s	15.2	92.8	9.4	87.0		14.8		43.0
Change Period, ( Y+R <sub>c</sub> ), s	7.0	7.0	7.0	7.0		6.8		6.0
Max Allow Headway ( MAH ), s	3.2	0.0	3.2	0.0		3.3		3.3
Queue Clearance Time ( g <sub>s</sub> ), s	8.0		2.9			7.9		38.5
Green Extension Time ( g <sub>e</sub> ), s	0.3	0.0	0.0	0.0		0.2		0.0
Phase Call Probability	1.00		0.59			0.99		1.00
Max Out Probability	0.00		0.00			0.00		1.00

Movement Group Results	EB			WB			NB			SB			
	L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14	
Adjusted Flow Rate ( v ), veh/h	138	1168	581	20	1114	215		49	60	407	5	318	
Adjusted Saturation Flow Rate ( s ), veh/h/ln	1781	1870	1862	1781	1698	1585		1790	1585	1781	1870	1585	
Queue Service Time ( g <sub>s</sub> ), s	6.0	33.7	33.7	0.9	22.4	6.7		4.3	5.9	36.5	0.3	28.8	
Cycle Queue Clearance Time ( g <sub>c</sub> ), s	6.0	33.7	33.7	0.9	22.4	6.7		4.3	5.9	36.5	0.3	28.8	
Green Ratio ( g/C )	0.56	0.54	0.54	0.51	0.50	0.73		0.05	0.06	0.23	0.23	0.28	
Capacity ( c ), veh/h	318	2006	999	157	2546	1159		90	103	412	433	448	
Volume-to-Capacity Ratio ( X )	0.433	0.582	0.582	0.127	0.437	0.185		0.550	0.583	0.989	0.012	0.710	
Back of Queue ( Q ), ft/ln ( 95 th percentile)	116.1	554.1	562.6	17.5	363.8	217.4		93.7	112.7	731.1	7.6	451.5	
Back of Queue ( Q ), veh/ln ( 95 th percentile)	4.6	21.8	22.2	0.7	14.3	8.6		3.7	4.4	28.8	0.3	17.8	
Queue Storage Ratio ( RQ ) ( 95 th percentile)	0.00	0.00	0.00	0.09	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay ( d <sub>1</sub> ), s/veh	19.4	25.0	25.0	22.1	25.6	6.7		74.2	72.7	61.3	47.4	51.5	
Incremental Delay ( d <sub>2</sub> ), s/veh	0.3	1.2	2.5	0.1	0.5	0.4		1.9	1.9	41.2	0.0	4.4	
Initial Queue Delay ( d <sub>3</sub> ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay ( d ), s/veh	19.7	26.3	27.5	22.2	26.2	7.0		76.2	74.6	102.5	47.4	56.0	
Level of Service ( LOS )	B	C	C	C	C	A		E	E	F	D	E	
Approach Delay, s/veh / LOS	26.2		C	23.1		C		75.3		E	81.9		F
Intersection Delay, s/veh / LOS	36.4						D						

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.91	B	2.11	B	2.76	C	2.62	C
Bicycle LOS Score / LOS	1.53	B	1.23	A	0.67	A	1.69	B

## HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	JFO			Duration, h	0.250
Analyst	JF	Analysis Date	Dec 26, 2020	Area Type	Other
Jurisdiction	State of Florida	Time Period	AM	PHF	0.95
Urban Street	Atlantic Ave	Analysis Year	2026	Analysis Period	1 > 7:00
Intersection	Atlantic Ave and Barwic...	File Name	2026AM_Atlantic&Barwick.xus		
Project Description	Sherwood Park Golf Club				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand ( v ), veh/h	131	1648	14	19	1058	204	42	5	57	387	5	302

Signal Information				Signal Timing (s)									Signal Phases			
Cycle, s	160.0	Reference Phase	2	Green	2.4	5.8	80.0	37.0	8.8	0.0	1	2	3	4		
Offset, s	0	Reference Point	End	Yellow	5.0	0.0	5.0	4.0	4.0	0.0	5	6	7	8		
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	0.0	2.0	2.0	2.0	0.0						
Force Mode	Fixed	Simult. Gap N/S	On													

Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor ( $f_w$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor ( $f_{HVg}$ )	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984
Parking Activity Adjustment Factor ( $f_p$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor ( $f_{bb}$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor ( $f_a$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor ( $f_{LU}$ )	1.000	1.000	1.000	1.000	0.908	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor ( $f_{LT}$ )	0.952	0.000		0.952	0.000		0.957	0.957		0.952	0.000	
Right-Turn Adjustment Factor ( $f_{RT}$ )		0.995	0.995		0.000	0.847		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor ( $f_{LPB}$ )	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor ( $f_{RPB}$ )			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor ( $f_{wz}$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor ( $f_{DDI}$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1781	5555	47	1781	5095	1585	1600	190	1585	1781	1870	1585
Proportion of Vehicles Arriving on Green (P)	0.05	0.54	0.54	0.01	0.50	0.50	0.05	0.05	0.05	0.23	0.23	0.23
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50		0.04	0.04	0.49	0.04	0.23

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time ( $t_L$ )	7.0	7.0	7.0	7.0		6.0		4.0
Green Ratio ( $g/C$ )	0.56	0.54	0.51	0.50		0.05		0.23
Permitted Saturation Flow Rate ( $s_p$ ), veh/h/ln	506	0	275	0		0		1781
Shared Saturation Flow Rate ( $s_{sh}$ ), veh/h/ln								
Permitted Effective Green Time ( $g_p$ ), s	80.8	0.0	80.0	0.0		0.0		18.2
Permitted Service Time ( $g_u$ ), s	57.5	0.0	50.1	0.0		0.0		0.0
Permitted Queue Service Time ( $g_{ps}$ ), s	8.7		2.3					
Time to First Blockage ( $g_t$ ), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage ( $g_{ts}$ ), s								
Protected Right Saturation Flow ( $s_R$ ), veh/h/ln				1585		1585		1585
Protected Right Effective Green Time ( $g_R$ ), s				37.0		2.4		8.2

Multimodal	EB			WB			NB			SB		
Pedestrian $F_w / F_v$	1.198	0.000	1.389	0.000	1.983	0.000	1.852	0.000				
Pedestrian $F_s / F_{delay}$	0.000	0.114	0.000	0.120	0.000	0.179	0.000	0.171				
Pedestrian $M_{corner} / M_{cw}$												
Bicycle $c_b / d_b$	1072.62	17.20	999.58	20.02	-87.50	87.15	110.43	71.41				
Bicycle $F_w / F_v$	-3.64	1.04	-3.64	0.74	-3.64	0.18	-3.64	1.21				

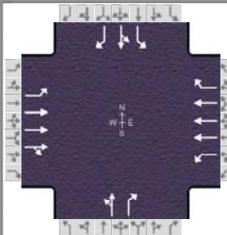
# HCS7 Signalized Intersection Results Graphical Summary

## General Information

Agency	JFO
Analyst	JF
Jurisdiction	State of Florida
Urban Street	Atlantic Ave
Intersection	Atlantic Ave and Barwic...
Project Description	Sherwood Park Golf Club

## Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.95
Analysis Period	1 > 7:00
File Name	2026AM_Atlantic&Barwick.xus



## Demand Information

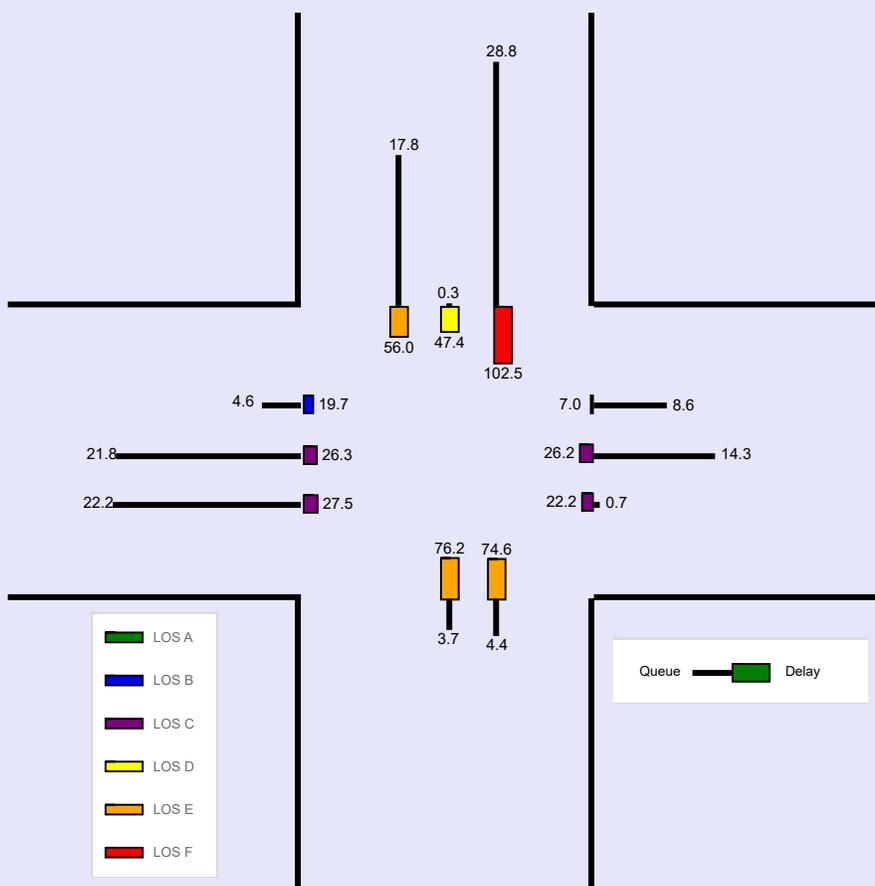
Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand ( v ), veh/h	131	1648	14	19	1058	204	42	5	57	387	5	302

## Signal Information

Cycle, s	160.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	2.4	5.8	80.0	37.0	8.8	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.0	0.0	5.0	4.0	4.0	0.0			
				Red	2.0	0.0	2.0	2.0	2.0	0.0			

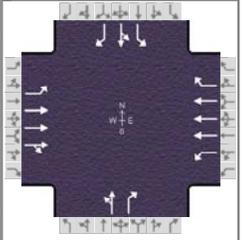
## Movement Group Results

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue ( Q ), ft/ln ( 95 th percentile)	116.1	554.1	562.6	17.5	363.8	217.4		93.7	112.7	731.1	7.6	451.5
Back of Queue ( Q ), veh/ln ( 95 th percentile)	4.6	21.8	22.2	0.7	14.3	8.6		3.7	4.4	28.8	0.3	17.8
Queue Storage Ratio ( RQ ) ( 95 th percentile)	0.00	0.00	0.00	0.09	0.00	0.00		0.00	0.00	0.00	0.00	0.00
Control Delay ( d ), s/veh	19.7	26.3	27.5	22.2	26.2	7.0		76.2	74.6	102.5	47.4	56.0
Level of Service ( LOS)	B	C	C	C	C	A		E	E	F	D	E
Approach Delay, s/veh / LOS	26.2	C		23.1	C			75.3	E		81.9	F
Intersection Delay, s/veh / LOS	36.4						D					



## HCS7 Signalized Intersection Input Data

General Information				Intersection Information			
Agency	JFO			Duration, h	0.250		
Analyst	JF	Analysis Date	Dec 26, 2020	Area Type	Other		
Jurisdiction	State of Florida	Time Period	PM	PHF	0.95		
Urban Street	Atlantic Ave	Analysis Year	2026	Analysis Period	1 > 7:00		
Intersection	Atlantic Ave and Barwic...	File Name	2026PM_Atlantic&Barwick.xus				
Project Description	Sherwood Park Golf Club						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	254	1510	42	74	1562	333	18	12	29	261	8	223

Signal Information				Signal Timing (s)									Signal Phases				
Cycle, s	170.0	Reference Phase	2														
Offset, s	0	Reference Point	End	Green	5.1	1.1	96.4	28.6	5.7	0.0							
Uncoordinated	No	Simult. Gap E/W	On	Yellow	5.0	5.0	5.0	4.0	4.0	0.0							
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.0	2.0	2.0	2.0	0.0							

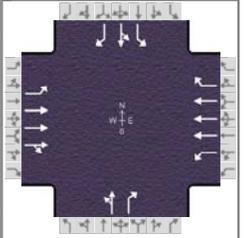
Traffic Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	254	1510	42	74	1562	333	18	12	29	261	8	223
Initial Queue (Q <sub>b</sub> ), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s <sub>0</sub> ), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N <sub>m</sub> ), man/h		None			None			None			None	
Heavy Vehicles (P <sub>HV</sub> ), %	2	2		2	2	2		2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N <sub>b</sub> ), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (AT)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (W), ft	12.0	12.0		12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	0	0		200	0	0		0	0	0	0	0
Grade (P <sub>g</sub> ), %		0			0			0			0	
Speed Limit, mi/h	30	30	30	30	30	30	30	30	30	30	30	30

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G <sub>max</sub> ) or Phase Split, s	25.0	60.0	18.0	53.0		49.0		43.0
Yellow Change Interval (Y), s	5.0	5.0	5.0	5.0		4.0		4.0
Red Clearance Interval (R <sub>c</sub> ), s	2.0	2.0	2.0	2.0		2.0		2.0
Minimum Green (G <sub>min</sub> ), s	4	20	4	20		6		6
Start-Up Lost Time (lt), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (PT), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (Walk), s		7.0		7.0		7.0		7.0
Pedestrian Clearance Time (PC), s		27.0		25.0		35.0		29.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25									
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No									
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50										

# HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	JFO			Duration, h	0.250
Analyst	JF	Analysis Date	Dec 26, 2020	Area Type	Other
Jurisdiction	State of Florida	Time Period	PM	PHF	0.95
Urban Street	Atlantic Ave	Analysis Year	2026	Analysis Period	1 > 7:00
Intersection	Atlantic Ave and Barwic...	File Name	2026PM_Atlantic&Barwick.xus		
Project Description	Sherwood Park Golf Club				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand ( v ), veh/h	254	1510	42	74	1562	333	18	12	29	261	8	223

Signal Information				Signal Timing (s)								Signal Phases					
Cycle, s	170.0	Reference Phase	2	Green	5.1	1.1	96.4	28.6	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Offset, s	0	Reference Point	End	Yellow	5.0	5.0	5.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On														

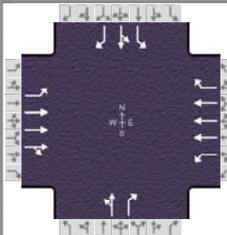
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	3.0		11.0		9.0
Phase Duration, s	20.3	111.5	12.1	103.4		11.7		34.6
Change Period, ( Y+R <sub>c</sub> ), s	7.0	7.0	7.0	7.0		6.0		6.0
Max Allow Headway ( MAH ), s	3.2	0.0	3.2	0.0		3.3		3.3
Queue Clearance Time ( g <sub>s</sub> ), s	12.7		5.1			5.1		27.8
Green Extension Time ( g <sub>e</sub> ), s	0.5	0.0	0.1	0.0		0.1		0.9
Phase Call Probability	1.00		0.97			0.95		1.00
Max Out Probability	0.00		0.00			0.00		0.04

Movement Group Results	EB			WB			NB			SB			
	L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14	
Adjusted Flow Rate ( v ), veh/h	267	1094	539	78	1644	351		32	31	275	8	235	
Adjusted Saturation Flow Rate ( s ), veh/h/ln	1781	1870	1843	1781	1698	1585		1816	1585	1781	1870	1585	
Queue Service Time ( g <sub>s</sub> ), s	10.7	27.1	27.1	3.1	35.1	12.8		2.9	3.1	25.8	0.6	22.3	
Cycle Queue Clearance Time ( g <sub>c</sub> ), s	10.7	27.1	27.1	3.1	35.1	12.8		2.9	3.1	25.8	0.6	22.3	
Green Ratio ( g/C )	0.66	0.61	0.61	0.60	0.57	0.74		0.03	0.06	0.17	0.17	0.25	
Capacity ( c ), veh/h	291	2300	1133	233	2887	1165		61	101	300	315	391	
Volume-to-Capacity Ratio ( X )	0.918	0.476	0.476	0.335	0.570	0.301		0.520	0.302	0.915	0.027	0.600	
Back of Queue ( Q ), ft/ln ( 95 th percentile)	285.8	450.7	452.5	60.9	525	325		64.8	59.6	494.8	14.1	355.5	
Back of Queue ( Q ), veh/ln ( 95 th percentile)	11.3	17.7	17.8	2.4	20.7	12.8		2.6	2.3	19.5	0.6	14.0	
Queue Storage Ratio ( RQ ) ( 95 th percentile)	0.00	0.00	0.00	0.30	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay ( d <sub>1</sub> ), s/veh	28.6	17.8	17.8	16.2	23.6	7.7		80.8	76.0	69.5	59.0	56.6	
Incremental Delay ( d <sub>2</sub> ), s/veh	4.9	0.7	1.4	0.3	0.8	0.7		2.5	0.6	19.8	0.0	0.6	
Initial Queue Delay ( d <sub>3</sub> ), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay ( d ), s/veh	33.5	18.5	19.3	16.5	24.4	8.3		83.4	76.6	89.3	59.0	57.1	
Level of Service ( LOS )	C	B	B	B	C	A		F	E	F	E	E	
Approach Delay, s/veh / LOS	20.9		C	21.4		C		80.0		F	74.2		E
Intersection Delay, s/veh / LOS	28.0						C						

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	2.10	B	2.76	C	2.63	C
Bicycle LOS Score / LOS	1.53	B	1.63	B	0.59	A	1.34	A

## HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	JFO			Duration, h	0.250
Analyst	JF	Analysis Date	Dec 26, 2020	Area Type	Other
Jurisdiction	State of Florida	Time Period	PM	PHF	0.95
Urban Street	Atlantic Ave	Analysis Year	2026	Analysis Period	1 > 7:00
Intersection	Atlantic Ave and Barwic...	File Name	2026PM_Atlantic&Barwick.xus		
Project Description	Sherwood Park Golf Club				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand ( v ), veh/h	254	1510	42	74	1562	333	18	12	29	261	8	223

Signal Information				Signal Timing / Movement Groups											
Cycle, s	170.0	Reference Phase	2												
Offset, s	0	Reference Point	End												
Uncoordinated	No	Simult. Gap E/W	On												
Force Mode	Fixed	Simult. Gap N/S	On												
		Green		5.1	1.1	96.4	28.6	5.7	0.0						
		Yellow		5.0	5.0	5.0	4.0	4.0	0.0						
		Red		2.0	2.0	2.0	2.0	2.0	0.0						

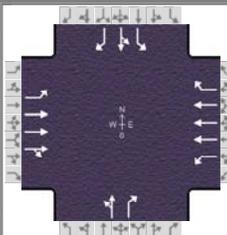
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor ( $f_w$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor ( $f_{HVg}$ )	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984
Parking Activity Adjustment Factor ( $f_p$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor ( $f_{bb}$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor ( $f_a$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor ( $f_{LU}$ )	1.000	1.000	1.000	1.000	0.908	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor ( $f_{LT}$ )	0.952	0.000		0.952	0.000		0.971	0.971		0.952	0.000	
Right-Turn Adjustment Factor ( $f_{RT}$ )		0.985	0.985		0.000	0.847		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor ( $f_{LPB}$ )	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor ( $f_{RPB}$ )			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor ( $f_{wz}$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor ( $f_{DDI}$ )	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1781	5433	151	1781	5095	1585	1090	726	1585	1781	1870	1585
Proportion of Vehicles Arriving on Green (P)	0.08	0.61	0.61	0.03	0.57	0.57	0.03	0.03	0.03	0.17	0.17	0.17
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50		0.04	0.04	0.23	0.04	0.04

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time ( $t_L$ )	7.0	7.0	7.0	7.0		6.0		4.0
Green Ratio ( $g/C$ )	0.66	0.61	0.60	0.57		0.03		0.17
Permitted Saturation Flow Rate ( $s_p$ ), veh/h/ln	304	0	308	0		0		1781
Shared Saturation Flow Rate ( $s_{sh}$ ), veh/h/ln								
Permitted Effective Green Time ( $g_p$ ), s	98.3	0.0	96.3	0.0		0.0		0.0
Permitted Service Time ( $g_u$ ), s	60.9	0.0	75.4	0.0		0.0		0.0
Permitted Queue Service Time ( $g_{ps}$ ), s	60.9		7.1					
Time to First Blockage ( $g_t$ ), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage ( $g_{ts}$ ), s								
Protected Right Saturation Flow ( $s_R$ ), veh/h/ln				1585		1585		1585
Protected Right Effective Green Time ( $g_R$ ), s				28.6		5.2		13.3

Multimodal	EB			WB			NB			SB		
Pedestrian $F_w / F_v$	1.198	0.000	1.389	0.000	1.983	0.000	1.852	0.000				
Pedestrian $F_s / F_{delay}$	0.000	0.102	0.000	0.111	0.000	0.181	0.000	0.175				
Pedestrian $M_{corner} / M_{cw}$												
Bicycle $c_b / d_b$	1229.70	12.61	1134.16	15.93	-82.35	92.14	66.84	79.41				
Bicycle $F_w / F_v$	-3.64	1.05	-3.64	1.14	-3.64	0.10	-3.64	0.85				

# HCS7 Signalized Intersection Results Graphical Summary

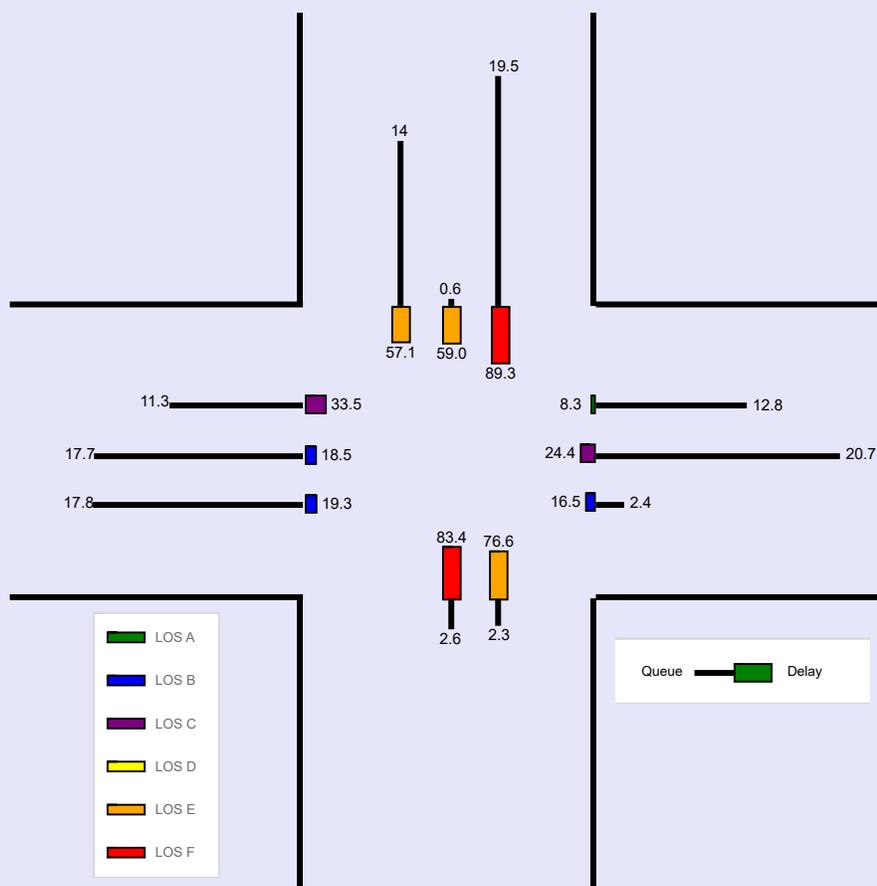
General Information				Intersection Information			
Agency	JFO			Duration, h	0.250		
Analyst	JF	Analysis Date	Dec 26, 2020	Area Type	Other		
Jurisdiction	State of Florida	Time Period	PM	PHF	0.95		
Urban Street	Atlantic Ave	Analysis Year	2026	Analysis Period	1 > 7:00		
Intersection	Atlantic Ave and Barwic...	File Name	2026PM_Atlantic&Barwick.xus				
Project Description	Sherwood Park Golf Club						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand ( v ), veh/h	254	1510	42	74	1562	333	18	12	29	261	8	223

Signal Information				Signal Timing (s)								Signal Phases			
Cycle, s	170.0	Reference Phase	2	Green	5.1	1.1	96.4	28.6	5.7	0.0	1	2	3	4	
Offset, s	0	Reference Point	End	Yellow	5.0	5.0	5.0	4.0	4.0	0.0	5	6	7	8	
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	2.0	2.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On												

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Back of Queue ( Q ), ft/ln ( 95 th percentile)	285.8	450.7	452.5	60.9	525	325		64.8	59.6	494.8	14.1	355.5
Back of Queue ( Q ), veh/ln ( 95 th percentile)	11.3	17.7	17.8	2.4	20.7	12.8		2.6	2.3	19.5	0.6	14.0
Queue Storage Ratio ( RQ ) ( 95 th percentile)	0.00	0.00	0.00	0.30	0.00	0.00		0.00	0.00	0.00	0.00	0.00
Control Delay ( d ), s/veh	33.5	18.5	19.3	16.5	24.4	8.3		83.4	76.6	89.3	59.0	57.1
Level of Service ( LOS)	C	B	B	B	C	A		F	E	F	E	E
Approach Delay, s/veh / LOS	20.9	C		21.4	C			80.0	F		74.2	E
Intersection Delay, s/veh / LOS	28.0						C					



SIGNAL ID	E-W STREET	N-S STREET	DATE	TIME	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
21081	W 13th St	Congress Ave	3/13/2019	4:30 PM	3	2	809	88	0	124	727	2	0	1	1	1	0	113	1	155	2027
21081	W 13th St	Congress Ave	9/16/2019	4:30 PM	5	3	772	74	51	88	663	3	0	0	0	1	0	96	2	129	1887
21081	W 13th St	Congress Ave	10/18/2016	7:00 AM	8	1	421	128	0	178	599	3	0	4	0	0	0	157	1	190	1690
21081	W 13th St	Congress Ave	10/18/2016	2:45 PM	5	2	572	91	0	127	594	2	0	3	0	1	0	220	3	238	1858
21081	W 13th St	Congress Ave	10/18/2016	4:30 PM	3	3	836	105	0	117	701	1	0	3	3	0	0	133	2	205	2112
53100	W Atlantic Ave	Barwick Rd/Sherwood	2/21/2019	7:45 AM	1	26	1	29	6	349	3	281	22	98	1522	8	2	7	965	181	3501
53100	W Atlantic Ave	Barwick Rd/Sherwood	2/21/2019	12:00 PM	0	18	2	17	7	147	6	204	49	156	1463	15	21	14	1183	183	3485
53100	W Atlantic Ave	Barwick Rd/Sherwood	2/21/2019	4:00 PM	0	8	8	10	3	224	3	207	47	188	1346	25	26	14	1400	296	3805
53100	W Atlantic Ave	Barwick Rd/Sherwood	11/30/2016	7:45 AM	0	24	5	20	2	332	14	261	17	99	1439	22	0	10	1015	121	3381
53100	W Atlantic Ave	Barwick Rd/Sherwood	11/30/2016	12:00 PM	0	17	6	14	9	142	2	155	49	128	1320	14	6	9	1143	88	3102
53100	W Atlantic Ave	Barwick Rd/Sherwood	11/30/2016	3:45 PM	0	15	6	16	3	215	8	210	38	184	1260	29	17	14	1518	224	3757
53150	W Atlantic Ave	Congress Ave	3/5/2018	7:45 AM	2	163	404	227	14	421	951	214	0	239	1119	470	13	323	947	306	5813
53150	W Atlantic Ave	Congress Ave	3/5/2018	12:00 PM	14	322	523	194	15	346	569	273	9	211	1076	273	14	209	964	276	5288
53150	W Atlantic Ave	Congress Ave	3/5/2018	4:45 PM	1	302	996	339	8	444	567	304	8	243	1138	207	10	163	1119	349	6198
53150	W Atlantic Ave	Congress Ave	9/28/2016	7:45 AM	6	166	423	210	14	406	1033	193	9	229	985	524	8	306	868	335	5715
53150	W Atlantic Ave	Congress Ave	9/28/2016	11:45 AM	11	258	535	209	15	342	491	212	16	191	888	228	13	208	883	264	4764
53150	W Atlantic Ave	Congress Ave	9/28/2016	4:45 PM	3	351	1114	396	11	367	566	275	7	245	1085	137	16	202	1165	320	6260
53046	W Atlantic Ave	Cumberland Dr	11/14/2017	7:30 AM	0	0	0	0	0	27	0	28	41	21	2394	0	0	0	1239	20	3770
53046	W Atlantic Ave	Cumberland Dr	11/14/2017	12:00 PM	0	0	0	0	0	56	0	41	36	28	1483	0	0	0	1465	41	3150
53046	W Atlantic Ave	Cumberland Dr	11/14/2017	4:30 PM	0	0	0	0	0	81	0	22	20	33	1548	0	0	0	1974	29	3707
53054	W Atlantic Ave	El Clair Ranch Rd	2/12/2019	7:45 AM	0	7	5	15	0	124	25	124	11	46	1689	27	4	18	1048	68	3211
53054	W Atlantic Ave	El Clair Ranch Rd	2/12/2019	12:00 PM	0	25	18	22	0	123	26	96	66	90	1515	26	7	36	1408	112	3570
53054	W Atlantic Ave	El Clair Ranch Rd	2/12/2019	4:45 PM	0	35	39	29	0	83	25	85	47	124	1507	12	6	20	1449	141	3602
53054	W Atlantic Ave	El Clair Ranch Rd	4/25/2016	8:00 AM	0	6	4	4	0	131	23	76	10	27	1723	16	7	21	948	37	3033
53054	W Atlantic Ave	El Clair Ranch Rd	4/25/2016	12:30 PM	0	26	15	18	0	99	28	76	25	46	1047	58	4	27	1210	83	2762
53054	W Atlantic Ave	El Clair Ranch Rd	4/25/2016	4:45 PM	0	32	28	10	0	91	16	46	19	117	958	11	8	29	1400	149	2914
53041	W Atlantic Ave	Fl Turnpike West	2/25/2020	7:30 AM	0	0	0	0	1	358	1	177	11	261	1072	0	0	0	1024	581	3486
53041	W Atlantic Ave	Fl Turnpike West	2/25/2020	12:15 PM	0	0	0	0	2	127	0	99	16	163	991	0	0	0	1142	414	2954
53041	W Atlantic Ave	Fl Turnpike West	2/25/2020	4:45 PM	0	0	0	0	1	129	0	182	5	214	1077	0	0	0	1206	771	3585
53041	W Atlantic Ave	Fl Turnpike West	2/20/2018	7:30 AM	0	0	0	0	0	394	0	147	8	280	1290	0	0	0	858	847	3824
53041	W Atlantic Ave	Fl Turnpike West	2/20/2018	12:15 PM	0	0	0	0	0	169	0	86	14	163	1071	0	0	0	1159	427	3089
53041	W Atlantic Ave	Fl Turnpike West	2/20/2018	4:45 PM	0	0	0	0	3	166	0	156	5	191	1203	0	0	0	1236	882	3842
53041	W Atlantic Ave	Fl Turnpike West	3/14/2017	7:30 AM	0	0	0	0	0	425	0	329	23	182	963	0	0	0	783	581	3286
53041	W Atlantic Ave	Fl Turnpike West	3/14/2017	12:00 PM	0	0	0	0	1	166	0	99	15	149	996	0	0	0	1021	451	2898
53041	W Atlantic Ave	Fl Turnpike West	3/14/2017	4:45 PM	0	0	0	0	0	165	0	96	5	137	952	0	0	0	891	714	2960
53041	W Atlantic Ave	Fl Turnpike West	2/24/2016	7:30 AM	0	0	0	0	0	360	0	142	5	215	1118	0	0	0	747	562	3149

STN#	ROAD	FROM	TO	LANES	PK HR LOS	DAILY TRAFFIC VOLUMES					2019 DAILY		18-19 GR	3YR GR	2019 AM PEAK HOUR			2019 PM PEAK HOUR		
						2014	2015	2016	2017	2018	VOL	DATE			2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
3665	45TH ST	Military Tr	Village Blvd	6D	2680	39648	42966	44770		46220	45923	3/6/2019	-0.64%	0.85%	3335	1852	1483	3480	1699	1916
3843	45TH ST	Congress Ave	Australian Ave	6D	2680	44996	43748	46301	48381	48274	49232	3/13/2019	1.98%	2.07%	3902	2287	1626	3370	1699	1755
3845	45TH ST	Greenwood Ave	Broadway (WPB)	3	810	13442	13429	14079	15021	16145	17253	3/13/2019	6.86%	7.01%	1279	714	577	1353	647	706
1809	A1A	Jupiter Inlet Colony	US 1	2	880	5082	7322	7802		7957	7860	4/1/2019	-1.22%	0.25%	715	347	376	708	288	424
1804	A1A	US 1	Indiantown Rd	2	880	7924	9079	9866	10122	10172	9228	4/1/2019	-9.28%	-2.20%	789	449	349	807	417	390
1812	A1A	Indiantown Rd	Ocean Way	2	1140	7382	6475	7037		6789	6222	1/29/2019	-8.35%	-4.02%	515	250	265	608	305	303
1818	A1A	Ocean Way	Marcinski Rd	2	880	3735	4867	5526	5002	5339	5250	2/25/2019	-1.67%	-1.69%	319	145	174	425	224	216
1314	A1A	Marcinski Rd	Donald Ross Rd	2	880	5286	4210	4623		4257	4411	2/25/2019	3.62%	-1.55%	255	118	137	345	196	161
4808	A1A	Phipps Ocean Park Ent	Lake Worth Rd	2	1140		12405				9880	3/13/2019			576	436	149	863	372	514
4812	A1A	Palm Beach limits	E Ocean Ave	2	1140		10897			9727	10401	3/13/2019	6.93%		521	281	245	911	467	461
6308	A1A	Delray Beach	Highland Beach	2	880	10565	11042	12263	11650	12229	11388	3/11/2019	-6.88%	-2.44%	802	314	488	962	542	450
6800	A1A	Palmetto Park Rd	Camino Real	2	880	12002	11093			14640	12650	3/11/2019	-13.59%		762	470	292	1009	447	569
5403	ATLANTIC AVE	SR 7	Lyons Rd	2	880	14753	16435	16276		18896	18839	2/6/2019	-0.30%	5.00%	1679	1030	724	1503	726	781
5101	ATLANTIC AVE	Lyons Rd	Turnpike	4D	1960	25759	29886	29311		34770	33103	2/11/2019	-4.79%	4.14%	2630	1481	1181	2614	1348	1268
5209	ATLANTIC AVE	Turnpike	Hagen Ranch Rd	4D	1770	37269		39788		45436	44988	2/11/2019	-0.99%	4.18%	3826	2288	1563	3489	1690	1808
5643	ATLANTIC AVE	Hagen Ranch Rd	Jog Rd	4D	1770	32810	36572	34880	39932	39360	38678	2/11/2019	-1.73%	3.51%	3138	2035	1207	3046	1473	1573
5631	ATLANTIC AVE	Jog Rd	El Clair Ranch Rd	6D	2680	37396	40737	40190	42203	42426	41026	2/11/2019	-3.30%	0.69%	2914	1710	1432	3128	1569	1571
5637	ATLANTIC AVE	El Clair Ranch Rd	Military Tr	6D	2940	41135	44644	45021		46963	43896	2/11/2019	-6.53%	-0.84%	3030	1865	1446	3350	1646	1704
5609	ATLANTIC AVE	Military Tr	Barwick Rd	6D	2680	40150	41810	43662		43458	40602	2/11/2019	-6.57%	-2.39%	2790	1603	1295	3022	1543	1516

STN#	ROAD	FROM	TO	LANES	PK HR LOS	DAILY TRAFFIC VOLUMES					2019 DAILY		18-19 GR	3YR GR	2019 AM PEAK HOUR			2019 PM PEAK HOUR		
						2014	2015	2016	2017	2018	VOL	DATE			2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
5659	ATLANTIC AVE	Barwick Rd	Congress Ave	6D	2680	42167	44038		45219	44682	41132	2/11/2019	-7.95%		2910	1751	1256	3027	1445	1582
2834	AUSTRALIAN AVE	Blue Heron Blvd	Beeline Hwy (SR 710)	4D	1770	13358	13636	14436	14810	14015	13481	3/11/2019	-3.81%	-2.26%	1019	458	574	1156	699	474
2306	AUSTRALIAN AVE	Beeline Hwy (SR 710)	45th St	4D	1960		16813	17266			18133	3/11/2019		1.65%	1350	646	704	1746	960	833
3802	AUSTRALIAN AVE	45th St	36th St	4D	1960	25480	24939	26363	27424	30097	26227	4/1/2019	-12.86%	-0.17%	2145	1097	1063	2363	1022	1341
3810	AUSTRALIAN AVE	36th St	25th St	4D	1960	23382	23335	23315	24661	27618	24384	4/1/2019	-11.71%	1.51%	2104	1001	1103	2217	940	1284
3816	AUSTRALIAN AVE	25th St	15th St	4D	1770	24977	27149	27604	28591	28549	28116	1/28/2019	-1.52%	0.61%	2285	1148	1137	2598	1099	1499
3820	AUSTRALIAN AVE	15th St	Palm Beach Lakes Bl	4D	1860	24287	27794	25652	26783	29366	29178	1/28/2019	-0.64%	4.39%	2255	1125	1149	2569	1083	1497
3924	AUSTRALIAN AVE	Palm Beach Lakes Blvd	Banyan Blvd	4D	1770	22341	23397	25273	27253	28700	28951	1/28/2019	0.87%	4.63%	2367	1189	1196	2678	971	1722
3850	AUSTRALIAN AVE	Banyan Blvd	Okeechobee Bl	6D	2940	34271	33703	36743			43867	5/29/2019		6.09%	3796	2452	1362	4280	1243	3037
3309	AUSTRALIAN AVE	Okeechobee Bl	Belvedere Rd	4D	1960	25609	28309	27771	30897	33481	30915	2/19/2019	-7.66%	3.64%	2650	1790	860	3175	1023	2195
3610	AUSTRALIAN AVE	Belvedere Rd	PBIA (Turnage Blvd)	6D	2940	31947	33550	35908	36790	40365	42125	2/19/2019	4.36%	5.47%	3759	2673	1086	4071	1411	2701
3658	AUSTRALIAN AVE	PBIA (Turnage Blvd)	Southern Blvd	6D	2940	32646	34707	35292	38312	33411	36886	2/19/2019	10.40%	1.48%	3575	2561	1014	3611	1028	2583
1101	BEELINE HWY	Martin County Line	Indiantown Rd	2	1140	8031	8186	8503		12168	10438	4/1/2019	-14.22%	7.07%	955	635	341	734	305	473
1401	BEELINE HWY	Indiantown Rd	Pratt-Whitney Rd	2	1140	6454	6604	8842			8394	1/14/2019		-1.72%	729	434	308	578	244	334
1411	BEELINE HWY	Pratt-Whitney Rd	Caloosa	4D	3320	12038	13905	17076	15832	16687	17827	4/1/2019	6.83%	1.45%	1916	954	976	1140	594	550
2109	BEELINE HWY	Caloosa	N County Airport	4D	3320	13719	14160	17216	18089	18838	18199	1/14/2019	-3.39%	1.87%	1901	859	1042	1583	1066	519
2101	BEELINE HWY	N County Airport	PGA Blvd	4D	3320	14542	14459	14393		17888	17097	2/5/2019	-4.42%	5.91%	1562	603	977	1429	947	499
2403	BEELINE HWY	PGA Blvd	Northlake Blvd	4D	3320	13686	15237	13737		16143	15219	2/5/2019	-5.72%	3.47%	1326	529	812	1303	857	458
2419	BEELINE HWY	Northlake Blvd	Jog Rd	4D	1960	27018	21969	22626	26014	27414	27564	4/3/2019	0.55%	6.80%	2490	1737	790	2389	944	1445

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>	<b>O</b>
Input Data														
E-W Street: W Atlantic Ave							COUNT DATE: 2/21/2019			Report				
N-S STREET: Barwick Rd							CURRENT YEAR: 2019			2/4/2021				
TIME PERIOD: AM							ANALYSIS YEAR: 2026							
GROWTH RATE: -2.39%							PSF: 1							
SIGNAL ID: 53100														

	Intersection Volume Development												Type	% Complete
	Eastbound			Westbound			Northbound			Southbound				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Diversions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Peak Season Volume	0	0	0	0	0	0	0	0	0	0	0	0		
Committed Developments														
Delray Medical Center Expansion	0	3	0	0	5	0	0	0	0	0	0	0	NR	76%
1690-2350 South Congress Avenue	0	5	0	0	8	8	0	0	0	5	0	0	Res	15%
Banyan Creek Elem.	2	0	0	0	0	2	0	0	0	1	0	1	NR	75.80%
Delray Square outparcel	0	9	0	0	11	0	0	0	0	0	0	0	Res	82%
Total Committed Developments	2	17	0	0	24	10	0	0	0	6	0	1		
Total Committed Residential	0	14	0	0	19	8	0	0	0	5	0	0		
Total Committed Non-Residential	2	3	0	0	5	2	0	0	0	1	0	1		
Double Count Reduction	0	1	0	0	1	0	0	0	0	0	0	0		
Total Discounted Committed	2	16	0	0	23	10	0	0	0	6	0	1		
Historical Growth	0	0	0	0	0	0	0	0	0	0	0	0		
Comm Dev+1% Growth	0	0	0	0	0	0	0	0	0	0	0	0		
Growth Volume Used	0	0	0	0	0	0	0	0	0	0	0	0		
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0		

Input Data														
E-W Street: W Atlantic Ave							COUNT DATE: 2/21/2019			Report				
N-S STREET: Barwick Rd							CURRENT YEAR: 2019			2/4/2021				
TIME PERIOD: PM							ANALYSIS YEAR: 2026							
GROWTH RATE: -2.39%							PSF: 1							
SIGNAL ID: 53100														

	Intersection Volume Development												Type	% Complete
	Eastbound			Westbound			Northbound			Southbound				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Diversions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Peak Season Volume	0	0	0	0	0	0	0	0	0	0	0	0		
Committed Developments														
Delray Medical Center Expansion	0	5	0	0	3	0	0	0	0	0	0	0	NR	76%
1690-2350 South Congress Avenue	0	18	0	0	16	16	0	0	0	18	0	0	Res	15%
Spaulding	1	0	0	0	0	0	0	0	0	0	0	0	NR	85%
Delray Square outparcel	1	45	0	0	43	0	0	0	0	0	0	1	Res	82%
Total Committed Developments	2	68	0	0	62	16	0	0	0	18	0	1		
Total Committed Residential	1	63	0	0	59	16	0	0	0	18	0	1		
Total Committed Non-Residential	1	5	0	0	3	0	0	0	0	0	0	0		
Double Count Reduction	0	1	0	0	1	0	0	0	0	0	0	0		
Total Discounted Committed	2	67	0	0	61	16	0	0	0	18	0	1		
Historical Growth	0	6E+33	0	0	3.6E+33	0	0	0	0	0	0	0		
Comm Dev+1% Growth	0	6E+33	0	0	3.6E+33	0	0	0	0	0	0	0		
Growth Volume Used	0	0	0	0	0	0	0	0	0	0	0	0		
Total Volume	0	5	0	0	3	0	0	0	0	0	0	0		

## CONTROLLER TIME SHEET

DATE TIMING INSTALLED: \_\_\_\_\_

INTERSECTION:	WEST ATLANTIC AVENUE & BARWICK RD/SHERWOOD FOREST DR	CONTROLLER TYPE:	NAZTEC
SIGNAL #	53100	SYSTEM #	4710

PHASE NUMBER	BOUND	TIMING INTERVAL													DETECTOR SETTINGS
		MIN GREEN	GAP EXT	MAX 1	MAX 2	YEL CLR	RED CLR	WALK	PED CLR	MIN RCL	MAX RCL	PED RCL	PHASE ENABLE	LOCKED CALLS	
1	EBLT	4.0	2.0	25.0		5.0	2.0	0.0	0.0	0			1	0	L1=NORMAL
2	WB	20.0	4.0	45.0		5.0	2.0	7.0	25.0	1			1	1	ADV=NORMAL
3	SB	6.0	2.0	30.0		4.0	2.0	7.0	29.0	0			1	0	L3=D/N(5) L8=D/N(5) L8R=D/N(10)
4	NB	6.0	2.0	15.0		4.0	2.0	7.0	35.0	0			1	0	L4=D/N(5)
5	WBLT	4.0	2.0	20.0		5.0	2.0	0.0	0.0	0			1	0	L5=NORMAL
6	EB	20.0	4.0	45.0		5.0	2.0	7.0	27.0	1			1	1	ADV=NORMAL
7															
8															

PRE-EMPTION TIMING									SPECIAL FUNCTIONS					
	DELAY BEFORE	GREEN BEFORE	PRE-EMPT 1 LOCK MEMORY	TRACK CLR $\Phi$	TRACK CLR GREEN	DWELL $\Phi$	MIN DWELL	EXIT $\Phi$	START $\Phi$	DUAL ENTRY	DET SWITCH	OUT OF FLASH	INTO FLASH	
R/R									2,6	2,6	NO	2,6	4	
BRIDGE									Notes: 1. REFER TO SYSTEM TIMING AND ALT TIMING PLANS 2. PROGRAMMED FOR FP USING PHASE TIMES ALT 3. 4.					
FIRE STN														
BUS														
TIMING DESIGNED BY: SCOTT E. ORNITZ, P.E.			DATE:			APPROVED BY: LEE GAO, P.E PTOE			DATE: 7/6/18					

## SYSTEM TIMING SHEET

DATE TIMING INSTALLED: \_\_\_\_\_

INTERSECTION:	WEST ATLANTIC AVENUE & BARWICK RD/SHERWOOD FOREST DR				CONTROLLER TYPE:	NAZTEC
SYSTEM:	WEST ATLANTIC AVENUE				SIGNAL #	53100
					SYSTEM #	4710

TOD SCHEDULER											
WEEKDAY				WEEKEND							
				SATURDAY				SUNDAY			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00	100	6:30	2	0:00	100	7:00	5	0:00	100	9:00	5
10:00	1	15:30	3	9:00	1	18:30	5	11:00	1	18:00	5
18:30	1	20:00	5	22:30	100			21:30	100		
23:00	100										

TIMING PLANS													
PATTERN	1		2		3		4		5		6		
CYCLE LENGTH (SEC)	160		160		170		130		120		160		
OFFSET (SEC)	90		114		3		25		90		91		
COORDINATED PHASE	2		2		2		2		2		2		
SEQUENCE	10		10		10		2		9		1		
ALT TIMING PLAN	1		2		3				5				
	SPLIT	MODE											
FORCE-OFF 1 (SEC)	EBLT	25	NON	25	NON	25	NON	20	NON	22	NON	30	NON
FORCE-OFF 2 (SEC)	WB	43	MAX	43	MAX	53	MAX	59	MAX	56	MAX	40	MAX
FORCE-OFF 3 (SEC)	SB	43	NON	43	NON	43	NON	33	NON	22	NON	40	NON
FORCE-OFF 4 (SEC)	NB	49	NON	49	NON	49	NON	18	NON	20	NON	50	NON
FORCE-OFF 5 (SEC)	WBLT	18	NON	18	NON								
FORCE-OFF 6 (SEC)	EB	50	MAX	50	MAX	60	MAX	61	MAX	60	MAX	52	MAX
FORCE-OFF 7 (SEC)			NON		NON								
FORCE-OFF 8 (SEC)		92	NON	92	NON	92	NON	51	NON	42	NON	90	NON

Special Features:

1)	
2)	
3)	

TIMING DESIGNED BY:	SCOTT E. ORNITZ, P.E.	DATE:	
APPROVED BY:	LEE GAO, P.E PTOE	DATE:	7/6/2018

[1.1.6.1] ALTERNATE TIMING SHEET

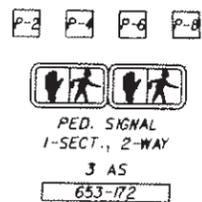
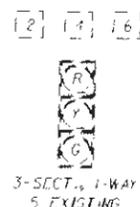
INTERSECTION: WEST ATLANTIC AVENUE & BARWICK RD/SHERWOOD FOREST DR											SIGNAL # 53100				SYSTEM # 4710						
	MIN GREEN	GAP TIME	MAX 1	MAX 2	YELLOW	RED CLEAR	WALK	PED CLEAR	ASSIGNED PHASE	BIKE CLEAR		MIN GREEN	GAP TIME	MAX 1	MAX 2	YELLOW	RED CLEAR	WALK	PED CLEAR	ASSIGNED PHASE	BIKE CLEAR
ALT TIMING PLAN 1											ALT TIMING PLAN 2										
1	4.0	2.0	25.0	22.0	5.0	2.0	0.0	0.0	1		1	4.0	2.0	25.0	16.0	5.0	2.0	0.0	0.0	1	
2	20.0	4.0	45.0	45.0	5.0	2.0	7.0	25.0	2		2	20.0	4.0	45.0	45.0	5.0	2.0	7.0	25.0	2	
3	6.0	2.0	30.0	14.0	4.0	2.0	7.0	29.0	3		3	6.0	2.0	30.0	20.0	4.0	2.0	7.0	29.0	3	
4	6.0	2.0	15.0	8.0	4.0	2.0	7.0	35.0	4		4	6.0	2.0	15.0	12.0	4.0	2.0	7.0	35.0	4	
5	4.0	2.0	20.0	8.0	5.0	2.0	0.0	0.0	5		5	4.0	2.0	20.0	8.0	5.0	2.0	0.0	0.0	5	
6	20.0	4.0	45.0	45.0	5.0	2.0	7.0	27.0	6		6	20.0	4.0	45.0	45.0	5.0	2.0	7.0	27.0	6	
7											7										
8											8										

	MIN GREEN	GAP TIME	MAX 1	MAX 2	YELLOW	RED CLEAR	WALK	PED CLEAR	ASSIGNED PHASE	BIKE CLEAR		MIN GREEN	GAP TIME	MAX 1	MAX 2	YELLOW	RED CLEAR	WALK	PED CLEAR	ASSIGNED PHASE	BIKE CLEAR	
ALT TIMING PLAN 3											ALT TIMING PLAN 4											
1	4.0	2.0	25.0	24.0	5.0	2.0	0.0	0.0	1		1											
2	20.0	4.0	45.0	45.0	5.0	2.0	7.0	25.0	2		2											
3	6.0	2.0	30.0	17.0	4.0	2.0	7.0	29.0	3		3											
4	6.0	2.0	15.0	10.0	4.0	2.0	7.0	35.0	4		4											
5	4.0	2.0	20.0	8.0	5.0	2.0	0.0	0.0	5		5											
6	20.0	4.0	45.0	45.0	5.0	2.0	7.0	27.0	6		6											
7											7											
8											8											

	MIN GREEN	GAP TIME	MAX 1	MAX 2	YELLOW	RED CLEAR	WALK	PED CLEAR	ASSIGNED PHASE	BIKE CLEAR	ALT TIMING PLAN ASSIGNMENTS	
ALT TIMING PLAN 5												
1	4.0	2.0	25.0	12.0	5.0	2.0	0.0	0.0	1		ALT TIMING PLAN 1	PATTERN 1 AND PREEMPT
2	20.0	4.0	45.0	45.0	5.0	2.0	7.0	25.0	2		ALT TIMING PLAN 2	PATTERN 2 AND PREEMPT
3	6.0	2.0	30.0	8.0	4.0	2.0	7.0	29.0	3		ALT TIMING PLAN 3	PATTERN 3 AND PREEMPT
4	6.0	2.0	15.0	8.0	4.0	2.0	7.0	35.0	4		ALT TIMING PLAN 4	
5	4.0	2.0	20.0	8.0	5.0	2.0	0.0	0.0	5		ALT TIMING PLAN 5	PATTERN 5 AND PREEMPT
6	20.0	4.0	45.0	45.0	5.0	2.0	7.0	27.0	6			
7												
8												

NOTES:

TIMING DESIGNED BY:	SCOTT E. ORNITZ, P.E.	DATE	
APPROVED BY:	LEE GAO, P.E PTOE 	DATE	7/6/2018



BARWICK ROAD →  
← SHERWOOD FOREST

W ATLANTIC  
4400 AVE 4500

SHERWOOD FOREST →  
← BARWICK ROAD

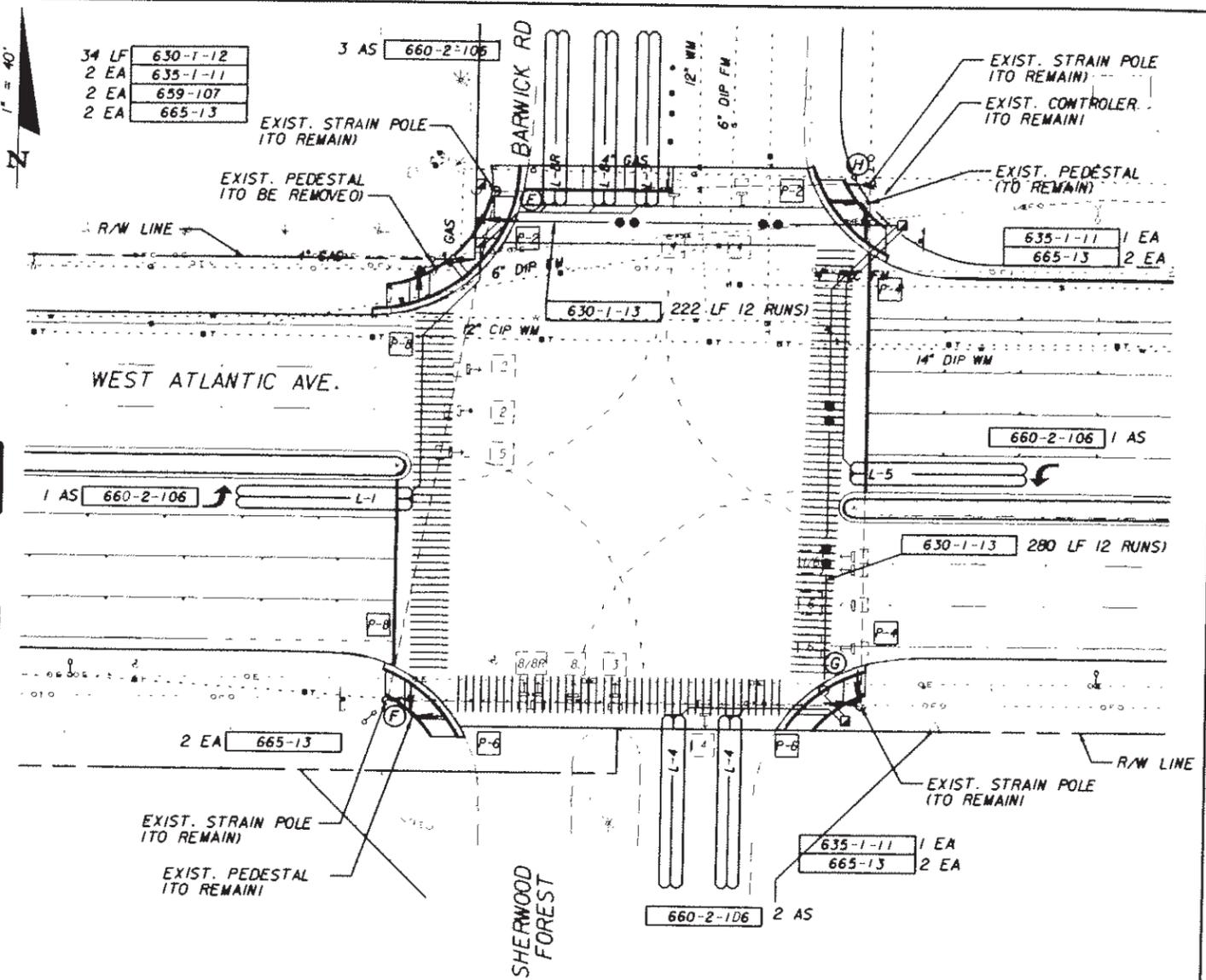
W ATLANTIC  
4500 AVE 4400

699-1-1 4 EA  
SEE GUIDE SIGN WORKSHEET  
FOR SIGN DETAILS.

DETECTORS FOR LOOPS				
LOOP	NO. OF LOOPS	NO. OF NEW DETS.	NO. OF EXIST. DETS.	DELAY TIME (SEC)
L-1	1	-	1	-
L-3	1	-	1	-
L-4	2	-	1	-
L-5	1	-	1	-
L-B	1	-	1	6
L-BR	1	-	1	6

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

REMOVAL ITEMS		
PAY ITEM	UNIT	QTY
690-20	EA	6
690-60	EA	5
690-70	EA	6
690-90	PI	1
690-100	PI	1

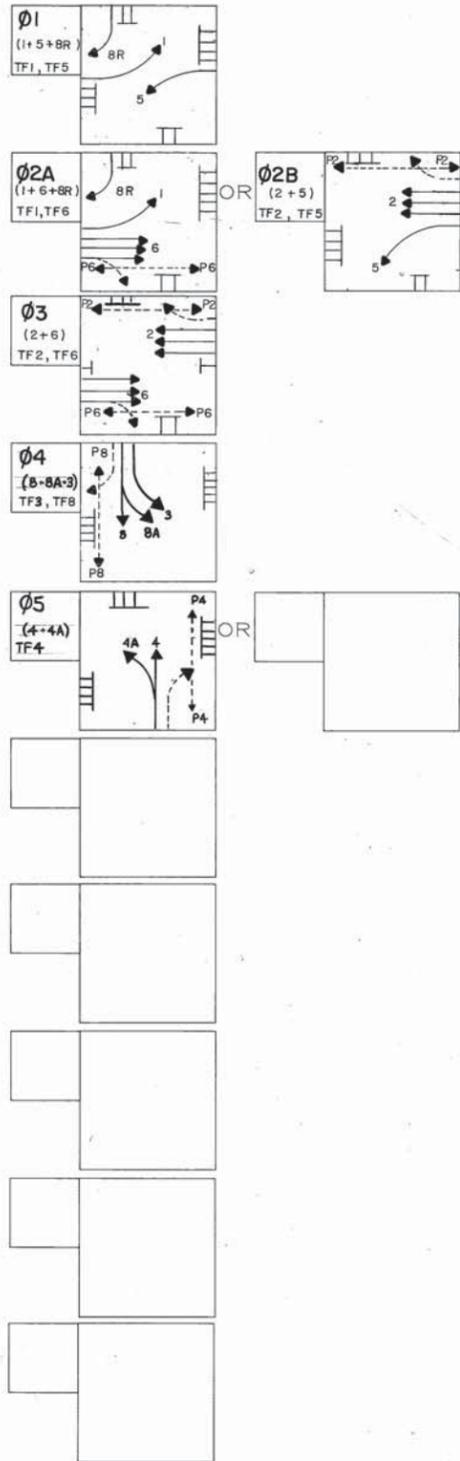


53100A

REVISIONS						R.J. Behar & Company, Inc. Engineers & Planners 1001 E.W. 176 Street, Suite 102 Palm Beach, FL 33480 P.O. Box 10470, Palm Beach, FL 33408 Tel: 561-832-1111	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. T-9
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
						806	PALM BEACH	413841-1-52-01		

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6805-23.003, F.A.C.

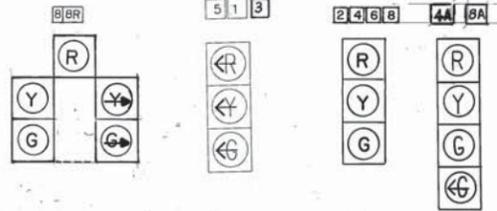
**ASSOCIATED PHASE MOVEMENTS**



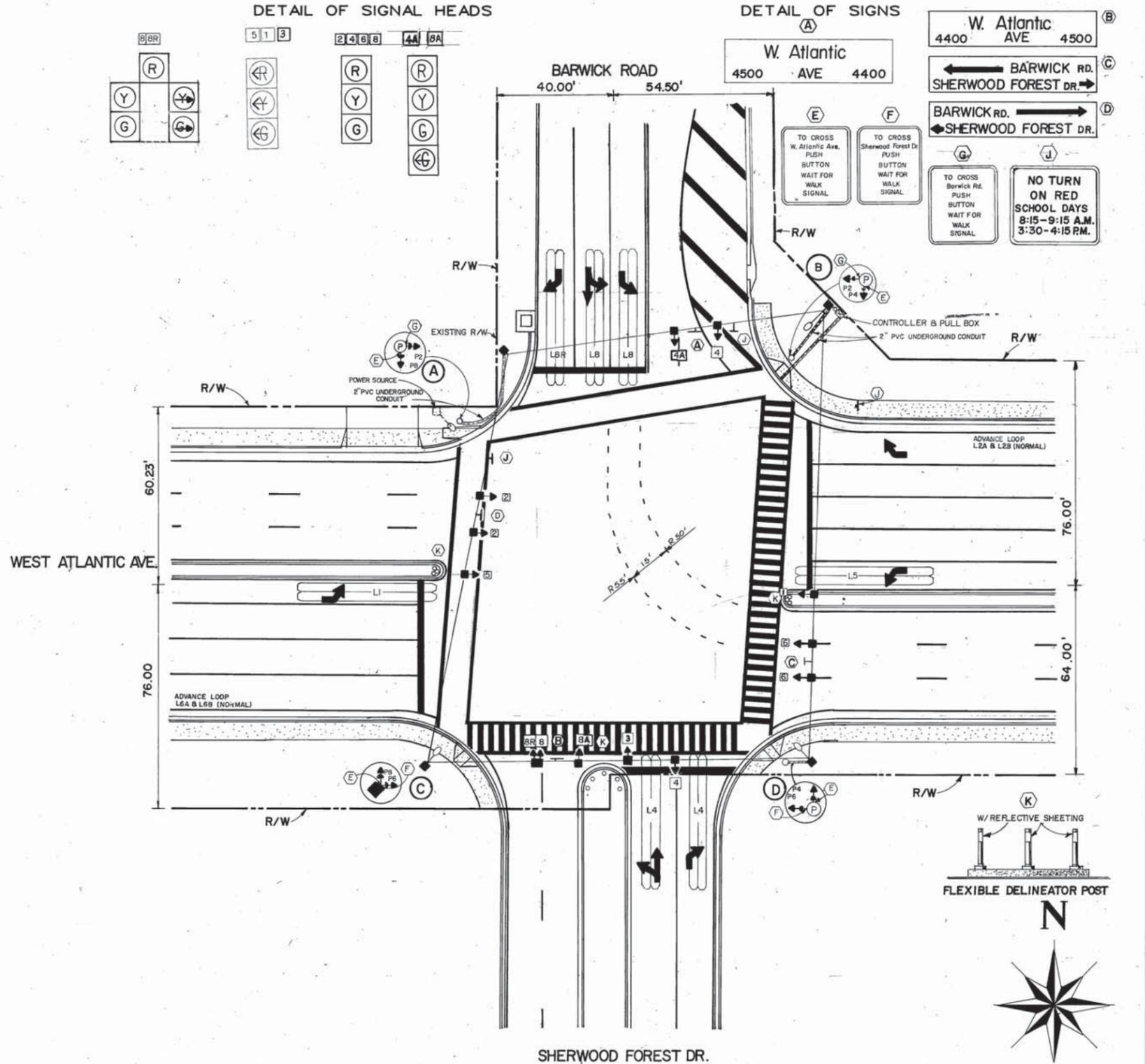
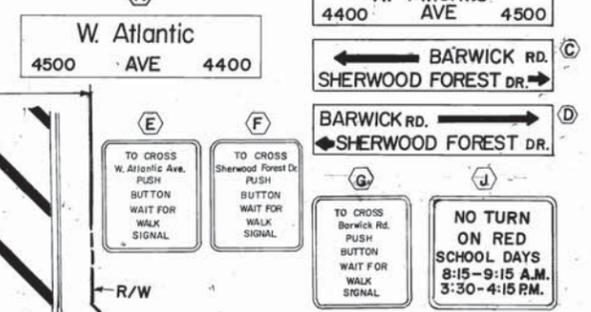
**NOTES:**

1. ADVANCE LOOP DISTANCE FROM STOP BAR:  
L2A & L6A ---- 255 FEET  
L2B & L6B ---- 355 FEET
2. LUMINAIRE LOCATION:  
NE, NW, SE, SW (PBC)
3. FLASHING OPERATION:  
YELLOW ---- 2 AND 6  
RED ---- 1, 4, 5 AND 8
4. SPEED LIMIT:  
BARWICK ROAD - 35 MPH  
W. ATLANTIC AVE - 45 MPH

**DETAIL OF SIGNAL HEADS**



**DETAIL OF SIGNS**



POLE TABULATION											
POLE I.D.	UPPER TE-INTO TOP OF POLE	LOWER TE-INTO TOP OF POLE	SPAN	POLE LENGTH	UPPER TE-INTO GROUND LEVEL	LOWER TE-INTO GROUND LEVEL	LOWER TE IN TO CROWN LEVEL	TYPE	CLASS	ROAD-CROWN TO GROUND LEVEL	DEPTH BELOW GROUND
A	4'	13'	140'	44'	32'	23'	23'	CONC	VI	0'	8'
B	4'	13'	109'	44'	32'	23'	23'	CONC	VI	0'	8'
C	4'	13'	130'	44'	32'	23'	23'	CONC	VI	0'	8'
D	4'	13'	152'	44'	32'	23'	23'	CONC	VI	0'	8'

LOOP DETECTOR CONNECTION			
DETECTOR UNIT NO.	DETECTOR OPERATION	CONNECTED TO LOOP	CONNECTED TO TIMING FUNCTION
1	DELAY/NORMAL	L8	TF8
2	NORMAL	L2A, L2B	TF2
3	NORMAL	L5	TF5
4	DELAY/NORMAL	L4	TF4
5	NORMAL	L6A, L6B	TF6
6	NORMAL	L1	TF1
7	DELAY/NORMAL	L8R	TF8

TRAFFIC VOLUMES			
666	321	190	127
345	4	317	4
1390	159	1000	1169
6	6	6	6
242	141	1075	1246
12	9	12	9
7	3	10	10
20	21	21	21

A.M. PEAK HOUR TOTAL-3245 DATE: 9/19/2000 TIME: 7:45-8:45  
P.M. PEAK HOUR TOTAL-2917 DATE: 9/19/2000 TIME: 3:00-4:00

NO.	DATE	REVISIONS	BY	APP.	NO.	DATE	REVISIONS	BY	APP.
4	1-25-2001	CHANGED E/W LEFT TURN SIGNAL FROM 5 SEC HEADS TO 3 SEC. PROTECTED HEADS, LOOPS L1 & L5 TO 46 STOP BAR LOOPS, MODIFIED L1 & L5 FROM "DELAY/NORMAL" TO "NORMAL" OPERATION. ADDED (B5 TO RED FLASH OPERATION. REMOVED SSD. UPDATED TRAFFIC VOLUMES.	J.P.	J.P.	6/21/95	MOD. STRIPING, REALIGNED SIGNAL HEADS ("AS BUILT"). ADDED FDP'S ON EAST & WEST APPROACHES. REPLACE SIGN "H" WITH SIGN "J". ADD SIGN "J" TO THE SOUTH APPROACH.	J.P.	J.P.	J.P.
5	04-22-05	REPLACED 3 SEC HEAD "4" WITH A 4 SEC HEAD "2A" & 3 SEC HEAD "8" WITH A 4 SEC HEAD "8A". ADDED 3 SEC HEAD "3". CHANGED MID-LANE ON N/A TO LEFT/THRU. SPLIT PHASE N & S APP PHASES.	J.P.	J.P.	4/27/94	ADDED 5 SEC. CLUSTER [B] ON THE NORTH APP.	J.P.	J.P.	J.P.
	7/29/91	ADDED P8, AND ADDITIONAL SIGNAL HEADS 2 & 6. CHANGED ALL LOOPS.	J.P.	J.P.		ADDED 5 SEC. CLUSTER [B] ON THE NORTH APP.	J.P.	J.P.	J.P.
		REDRAWN PER 6 LANE WIDENING OF ATLANTIC AVE.	J.P.	J.P.			J.P.	J.P.	J.P.
		REFERENCE DWG. T-3-88-161-S	J.P.	J.P.			J.P.	J.P.	J.P.

PALM BEACH COUNTY, FLORIDA  
**TRAFFIC DIVISION**  
SIGNALIZATION PLAN  
**W. ATLANTIC AVE AND BARWICK RD./SHERWOOD FOREST DR.**

REGISTERED ENGINEER: *John P. ...*  
SUPERVISING ENGINEER: *...*

DRAWN BY	J.P.	DATE	3-07-91	SCALE	1" = 20'	CONTRACT NO.	91-20
TRACED BY				DRAWING	T-3-91-027-S		
CHECKED BY	S.R.R.	DATE	4-2-91	SHEET		OF	SHEETS



March 9, 2021

Dr. Juan F. Ortega, PE  
JFO Group Inc.  
6671 W Indiantown Road, Suite 50-324  
Jupiter, FL 33458

**RE: Sherwood Park Golf Club  
Project #: 210301  
Traffic Performance Standards Review**

Dear Dr. Ortega:

The Palm Beach County Traffic Division has reviewed the **Sherwood Park Golf Club** Traffic Impact Statement, dated February 5, 2021, pursuant to the Traffic Performance Standards in Article 12 of the Palm Beach County Unified Land Development Code (ULDC). The project is summarized as follows:

<b>Municipality:</b>	Delray Beach
<b>Location:</b>	South side of Atlantic Avenue and Sherwood Forest Drive intersection
<b>PCN:</b>	12-42-46-13-25-007-0030
<b>Access:</b>	Full access driveway connection onto Sherwood Forest Drive <u>(As used in the study and is NOT an approval by the County through this letter)</u>
<b>Existing Uses:</b>	Golf Course = 18 Holes
<b>Proposed Uses:</b>	Redevelop the site with: Single Family Homes = 79 DUs
<b>New Daily Trips:</b>	243
<b>New Peak Hour Trips:</b>	26 (-10/36) AM; 29 (23/6) PM
<b>Build-out:</b>	December 31, 2026

Based on our review, the Traffic Division has determined the proposed development does not have significant peak hour traffic impact (as defined in PBC TPS) on the roadway network and therefore, **meets** the Traffic Performance Standards of Palm Beach County.

Please note the receipt of a Traffic Performance Standards (TPS) approval letter does not constitute the review and issuance of a Palm Beach County Right-of-Way (R/W) Construction Permit nor does it eliminate any requirements that may be deemed as site related. For work within Palm Beach County R/W, a detailed review of the project will be provided upon submittal for a R/W permit application. The project is required to comply with all Palm Beach County standards and may include R/W dedication.

No building permits are to be issued by the City after the build-out date specified above. The County traffic concurrency approval is subject to the Project Aggregation Rules set forth in the Traffic Performance Standards Ordinance.

**Department of Engineering  
and Public Works**  
P.O. Box 21229  
West Palm Beach, FL 33416-1229  
(561) 684-4000  
FAX: (561) 684-4050  
www.pbcgov.com



**Palm Beach County  
Board of County  
Commissioners**

Dave Kerner, Mayor

Robert S. Weinroth, Vice Mayor

Maria G. Marino

Gregg K. Weiss

Maria Sachs

Melissa McKinlay

Mack Bernard

**County Administrator**

Verdenia C. Baker

*"An Equal Opportunity  
Affirmative Action Employer"*



Dr. Juan F. Ortega, P.E.  
March 9, 2021  
Page 2

The approval letter shall be valid no longer than one year from date of issuance, unless an application for a Site Specific Development Order has been approved, an application for a Site Specific Development Order has been submitted, or the approval letter has been superseded by another approval letter for the same property.

If you have any questions regarding this determination, please contact me at 561-684-4030 or email [QBari@pbcgov.org](mailto:QBari@pbcgov.org).

Sincerely,

Quazi Bari, P.E., PTOE  
Manager – Growth Management  
Traffic Division

QB:HA:jc

cc: Addressee

Anthea Giannotes, AICP, Director of Development Services, City of Delray Beach  
Hanane Akif, E.I., Project Coordinator II, Traffic Division  
Steve Bohovsky, Technical Assistant III, Traffic Division

File: General - TPS - Mun - Traffic Study Review

F:\TRAFFIC\HA\MUNICIPALITIES\APPROVALS\2021\210301 - SHERWOOD PARK GOLF CLUB.DOCXN