## JFO GROUP INC

Traffic Engineering • Transportation Planning

www.jfogroupinc.com

Revised August 10, 2021 July 30, 2021 Sent via e-mail: rick@azurefl.com

Richard Caster | Principal 290 SE 6<sup>th</sup> Avenue, Suite #5 Delray Beach, FL 33483

Re: Cason Court - City of Delray Beach

PBC TPS Traffic Analysis & Delray LDR 2.4.3 Analysis

PCN: 12-43-46-16-01-041-0010

Dear Rick,

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) and with the City of Delray Beach LDR 2.4.3 (E) standards. This traffic statement is associated with a Site Plan amendment application for the Cason United Methodist Church property to add 10 single family homes to the subject site.

The site is located on the southwest corner of Swinton Avenue and Lake Ida Road in the City of Delray Beach, Florida within the *Coastal Residential Exception Area*. Figure 1 shows the project location in relation to the transportation network. Parcel Control Number associated with this project is 12-43-46-16-01-041-0010.

A copy of the property appraiser information for the site is included as Exhibit 1 while Exhibit 2 includes a copy of the project location within the *Coastal Residential Exception Area*. Exhibit 3 includes a conceptual site plan for the property. Project buildout is expected in the year 2024.

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. Exhibit 4 includes a 2016 aerial of the site.



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 while Table 2 summarizes the net Daily, AM, and PM peak trips potentially generated by the existing and proposed development. Exhibit 5 includes a copy of PBC trip generation rates. Exhibit 6 includes a copy of the latest TPS approval for the site.

According to Table 2, the net Daily and AM peak trips potentially generated due to the proposed development are 26 and 9 trips respectively. There is a reduction in trips during the PM peak hour. Therefore, the proposed changes to the Cason United Methodist Church property will not generate more than 20 gross peak hour trips.

2021-08-10\_Cason Court \_Traffic Statement\_1106.01

Page 1 of 3

**Table 1: Trip Generation Rates** 

Londilloo	ITE	Daily	A۱	/I Peak	Hour		PM I	Peak Hour	Weekend Peak H		k Hour
Land Use	Code	Trip Gen.	In	Out	Total	In	Out	Total	In Out Tota	Total	
Church	560	6.95	60%	40%	0.33	45%	55%	0.49	48%	52%	9.99
Day Care	565	4.09	53%	47%	0.78	47%	53%	0.79	-	-	-
Private School	534	2.48	55%	45%	0.91	46%	54%	0.26	-	-	-
Single Family Detached	210	10.0	25%	75%	0.74	63%	37%	Ln(T)= 0.96 Ln(X)+0.20	-	-	-

**Table 2: Trip Generation** 

Landling	lada aa iba	Daily		Peak H	lour		Peak H	our	Weeke	end Pea	k Hour
Land Use	Intensity	Traffic	offic In Out Total In Out To		Total	ln	Out	Total			
EXISTING DEVELOPMENT											
Church	19,580 SF	136	4	2	6	5	5	10	94	102	196
Day Care	80 Students	327	33	29	62	30	33	63	0	0	0
	Σ	463	37	31	68	35	38	73	94	102	196
Pass-By											
Church	5%	7	0	0	0	0	1	1	5	5	10
Day Care	50%	164	1 <i>7</i>	14	31	15	1 <i>7</i>	32	0	0	0
	Σ	171	17	14	31	15	18	33	5	5	10
Net Existing T	raffic	292	20	17	37	20	20	40	89	97	186
		P	ROPOS	ED <b>D</b> EV	/ELOPM	IENT					
Church	19,580 SF	136	4	2	6	5	5	10	94	102	196
Private School	36 Students	89	18	15	33	4	5	9	0	0	0
Single Family	10 DUs	100	2	5	7	7	4	11	-	-	-
	Σ	325	24	22	46	16	14	30	94	102	196
Pass-By											
Church	7	0	0	0	0	1	1	5	5	10	
Net Proposed	l Traffic	318	24	22	46	16	13	29	89	97	186
Net T	raffic	26	4	5	9	(4)	(7)	(11)	0	0	0

Based on 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 2 provides Daily, AM and PM peak hour driveway volumes for the Cason United Methodist Church 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 driveways.

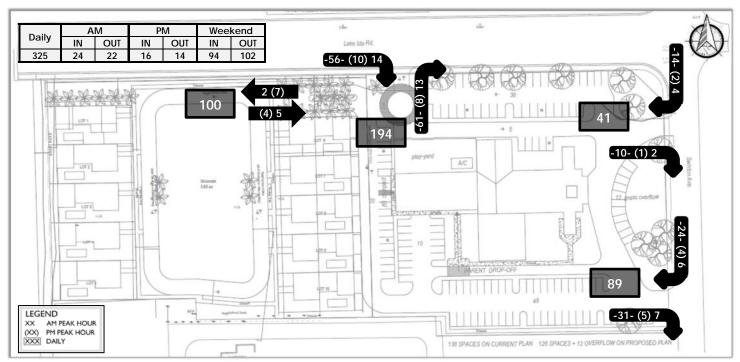


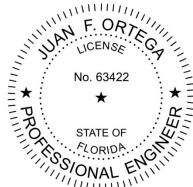
Figure 2: Project Driveway Volumes

The proposed changes to the Cason United Methodist Church property have been evaluated following PBC TPS - Article 12 of the PBC ULDC. This analysis shows that the proposed request to add 10 single family homes will generate less than 20 peak hour trips. Furthermore, project is located within the Coastal Residential Exception Area. In addition, the proposed project has been evaluated following City of Delray Beach LDR 2.4.3 (E) standards. This analysis shows that the proposed request will generate less than 201 ADT. This analysis shows that the proposed development will be in compliance with PBC TPS - Article 12 of the PBC ULDC and with City of Delray Beach LDR 2.4.3 (E) standards. Project build-out is expected in 2024.

Sincerely,

## JFO GROUP INC

COA Number 32276



Enclosures: Exhibit 1: Property Appraiser Information

Exhibit 2: Coastal Residential Exception Area

Exhibit 3: Conceptual Site Plan

Exhibit 4: 2016 Aerial

Exhibit 5: PBC Trip Generation Rates Exhibit 6: 07/27/21 TPS Approval



**Property Detail** 

Location Address 342 N SWINTON AVE

Municipality DELRAY BEACH

Parcel Control Number 12-43-46-16-01-041-0010

Subdivision DELRAY TOWN OF

Official Records Book Page

Sale Date

TOWN OF DELRAY LT 1 (LESS N 15 FT LAKE IDA RD R/W), LTS 2 THRU 6 BLK 41 & 50 FT ABND PT OF NW 2ND AVE LYG E OF & ADJ TO, N 1/2 OF BLK 49 (LESS N 15 FT LAKE IDA RD R/W) & N 1/2 OF BLK 57 (LESS N 15 FT & TRGLR PAR LAKE IDA RD

Legal Description

R/W)

**Owner Information** 

**Mailing address Owners** 342 N SWINTON AVE CASON UNITED METHODIST CHURCH INC

DELRAY BEACH FL 33444 2726

Sales Information

No Sales Information Available.

**Exemption Information** 

Applicant/Owner	Year	Detail
	2021	

**Property Information** 

Number of Units 0

\*Total Square Feet 19580

Acres 5.8885

Use Code 7100 - RELIGIOUS

Zoning CF - CF - COMMUNITY FACILITIES (12-DELRAY BEACH)

**Appraisals** 

Tax Year	2020	2019	2018
Improvement Value	\$1,244,559	\$1,185,310	\$1,195,767
Land Value	\$2,693,271	\$2,565,020	\$1,282,510
Total Market Value	\$3,937,830	\$3,750,330	\$2,478,277
Allace	aluas are as of lanuary 1st each year		

All values are as of January 1st each year

Assessed and Taxable Values—			
Tax Year	2020	2019	2018
Assessed Value	\$2,998,716	\$2,726,105	\$2,478,277
Exemption Amount	\$2,998,716	\$2,726,105	\$2,478,277
Taxable Value	\$0	\$0	\$0

Taxes			
Tax Year	2020	2019	2018
Ad Valorem	\$0	\$0	\$0
Non Ad Valorem	\$3,027	\$3,134	\$3,134
Total tax	\$3,027	\$3,134	\$3,134

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

5.8885

Acres

0

**Property Detail** 

Legal Description:

2020 Values (Current)

Location Address: 342 N SWINTON AVE Parcel Control Number: 12-43-46-16-01-041-0010

CASON UNITED METHODIST CHURCH INC Owners:

342 N SWINTON AVE, DELRAY BEACH FL 33444 2726 Mailing Address:

Not available Book/Page#: Last Sale: Not available Price:

Property Use Code: 7100 - RELIGIOUS Zoning: CF - CF - COMMUNITY FACILITIES (12-DELRAY BEACH)

Total SF:

TOWN OF DELRAY LT 1 (LESS N 15 FT LAKE IDA RD R/W), LTS 2 THRU 6 BLK

41 & 50 FT ABND PT OF NW 2ND AVE LYG E OF & ADJ TO, N 1/2 OF BLK 49

(LESS N 15 FT LAKE IDA RD R/W) & N

1/2 OF BLK 57 (LESS N 15 FT & TRGLR

PAR LAKE IDA RD R/W)

#### 2020 Taxes

19580

Improvement Value \$1,244,559 Ad Valorem \$0 \$3,027 Non Ad Valorem Land Value \$2,693,271 Total Tax \$3,027 Total Market Value \$3,937,830 2021 Qualified Exemptions

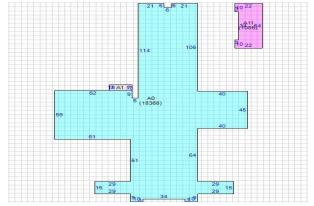
Assessed Value \$2,998,716

\$2,998,716 **Exemption Amount** 

Applicants Taxable Value

#### All values are as of January 1st each year.

#### **Building Footprint (Building 1)**



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

Description Area Sq. Footage RELIGIOUS 18368 RELIGIOUS 126 RELIGIOUS 1086 Total Square Footage: 19580

#### **Extra Features**

Description Year Built Unit Walkway-Concrete 1970 710 67250 Paving- Asphalt 1970 Fence- Chain Link 6ft #11 Gaug 2009 492

Unit may represent the perimeter, square footage, linear footage, total

number or other measurement.

#### Structural Details (Building 1)

Description

1. Year Built 1970

2. RELIGIOUS 19580

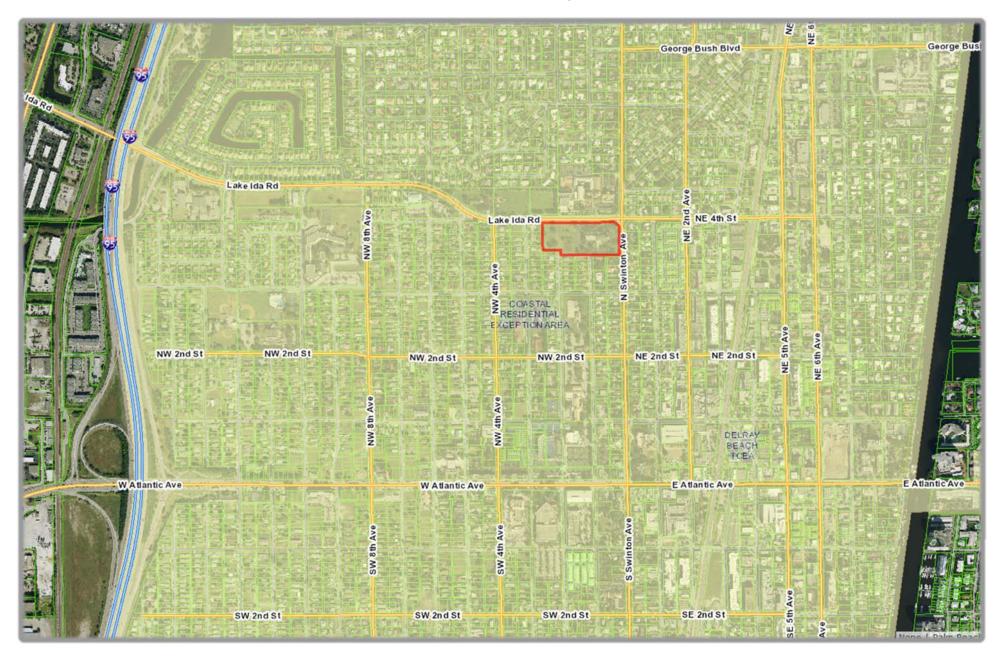
#### MAP



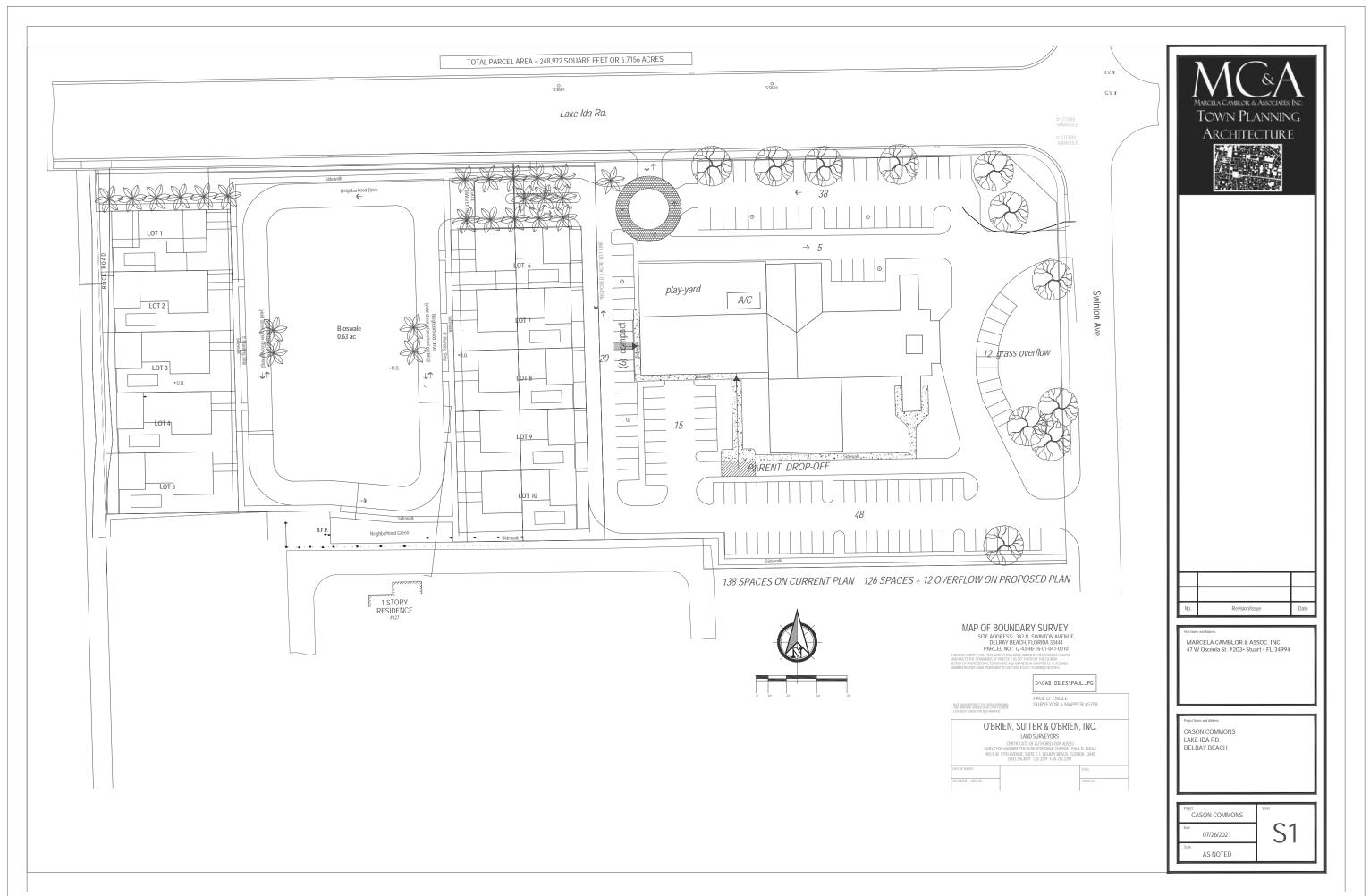
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7/27/2021

## **Coastal Residential Exception Area**









### 2016 Aerial





# Palm Beach County Trip Generation Rates (Effective with traffic studies submited to the County on or after 4/15/2019)

		IΤΈ		amo otaaloo oabiiiloa k			AM Peak Hour		PM Peak Hour
Gr	Landuse	Code	Unit	<b>Daily Rate/Equation</b>	Pass-By %		Rate/Equation	In/Out	Rate/Equation
	Light Industrial	110	1000 S.F.	4.96	10%	88/12	0.7	13/87	0.63
ial	Warehouse	150	1000 S.F.	1.74	10%	77/23	0.17	27/73	0.19
Industrial	Flex Space - IND FLU	PBC	1000 S.F.	7.86	10%	64/36	1.53	40/60	1.21
<u>l</u> ud	Flex Space - COM FLU	PBC	1000 S.F.	29.67	45%	72/28	2.12	40/60	2.67
	Mini-Warehouse/SS	151	1000 S.F.	1.51	10%	60/40	0.1	47/53	0.17
	Single Family Detached	210	<b>Dwelling Unit</b>	(10)	0%	25/75	(0.74)	63/37	Ln(T) = 0.96 Ln(X) + 0.20
_	Multifamily Low-Rise Housing upto 2 story (Apartment/Condo/TH)	220	Dwelling Unit	7.32	0%	23/77	0.46	63/37	0.56
Residential	Multifamily Mid-Rise Housing 3-10 story (Apartment/Condo/TH)	221	Dwelling Unit	5.44	0%	26/74	0.36	61/39	0.44
esi	55+ SF Detached	251	Dwelling Unit	4.27	0%	33/67	0.24	61/39	0.30
<u>~</u>	55+ SF Attached	252	Dwelling Unit	3.7	0%	35/65	0.2	55/45	0.26
	Congregate Care Facility	253	Dwelling Unit	2.02	0%	60/40	0.07	53/47	0.18
	Assisted Living Facility	254	Beds	2.6	0%	63/37	0.19	38/62	0.26
Ldg	Hotel	310	Rooms	8.36	10%	59/41	0.47	51/49	0.6
Rec	Movie Theater	444	Seats	1.76	5%	N/A	0	55/45	0.09
Ř	Health Club	492	1000 S.F.	32.93	5%	50/50	1.41	57/43	3.53
	Elementary School	520	Students	1.89	0%	54/46	0.67	48/52	0.17
	Middle/Junior School	522	Students	2.13	0%	54/46	0.58	49/51	0.17
la	High School	530	Students	2.03	0%	67/33	0.52	48/52	0.14
tior	Private School (K-8)	534	Students	Use Private K-12 rate	<mark>0%</mark>	55/45	0.91	46/54	0.26
Institutional	Private School (K-12)*	536	Students	2.48	0%	61/39	0.80	43/57	0.17
<u>lu</u>	Church/Synagogue <sup>a</sup>	560	1000 S.F.	(6.95)	<mark>5%</mark>	60/40	0.33	45/55	0.49
	Day Care	<b>565</b>	Students	4.09	50%	53/47	0.78	47/53	0.79
	Library	590	1000 S.F.	72.05	10%	71/29	1	48/52	8.16
Med	Hospital	610	1000 S.F.	10.72	10%	68/32	0.89	32/68	0.97
ž	Nursing Home	620	Beds	3.06	10%	72/28	0.17	33/67	0.22
	General Office (>5,000 SF GFA)	710	1000 S.F.	Ln(T) = 0.97 Ln(X) + 2.50	10%	86/14	T = 0.94(X) + 26.49	16/84	1.15
ģ	Small Office Building (<=5,000 SF GFA)	712	1000 S.F.	16.19	10%	83/18	1.92	32/68	2.45
Office	Medical Office	720	1000 S.F.	34.8	10%	78/22	2.78	28/72	3.46
	Medical Office (Reduced) <sup>b</sup>	PBC	1000 S.F.	17.4	10%	78/22	1.39	28/72	1.73
	Government Office	730	1000 S.F.	22.59	10%	75/25	3.34	25/75	1.71

## Palm Beach County Trip Generation Rates

(Effective with traffic studies submited to the County on or after 4/15/2019)

		ITE					AM Peak Hour		PM Peak Hour
Gr	Landuse	Code	Unit	<b>Daily Rate/Equation</b>	Pass-By %	In/Out	Rate/Equation	In/Out	Rate/Equation
	Nursery (Garden Center)	817	Acre	108.1	0%	N/A'	2.82	N/A'	8.06
	Nursery (Wholesale)	818	Acre	19.5°	0%	N/A <sup>I</sup>	0.26	N/A <sup>I</sup>	0.45
	Landscape Services	PBC	Acre <sup>m</sup>	121.70	0%	40/60	34.4	58/42	15.1
Retail	Gen. Commercial	820	1000 S.F.	$Ln(T) = 0.68 Ln(X) + 5.57^d$	Note e	62/38	0.94	48/52	$Ln(T) = 0.74 Ln(X) + 2.89^{f}$
Re	Automobile Sales (New)	840	1000 S.F.	27.84	15%	73/27	1.87	40/60	2.43
	Automobile Parts Sales	843	1000 S.F.	55.34	28%	55/45	2.59	48/52	4.91
	Tire Store	848	1000 S.F.	28.52	28%	64/36	2.72	43/57	3.98
	Pharmacy + DT	881	1000 S.F.	109.16	50%	53/47	3.84	50/50	10.29
	Drive-In Bank <sup>g</sup>	912	1000 S.F.	100.03	47%	58/42	9.5	50/50	20.45
	Quality Restaurant	931	1000 S.F.	83.84	44%	50/50	0.73	67/33	7.8
	High Turnover Sit-Down Rest.	932	1000 S.F.	112.18	43%	55/45	9.94	62/38	9.77
es	Fast Food Restaurant w/o DT	933	1000 S.F.	346.23	45%	60/40	25.1	50/50	28.34
Services	Fast Food Restaurant + DT	934	1000 S.F.	470.95	49%	51/49	40.19	52/48	32.67
Se	Coffee/Donut Shop w/o DT	936	1000 S.F.	686.67 <sup>h</sup>	45%	51/49	101.14	50/50	36.31
	Coffee/Donut Shop + DT	937	1000 S.F.	820.38	49%	51/49	88.99	50/50	43.38
	Gas Station w/Convenience Store <sup>i</sup>	FDOT	FP, 1000 S.F.	14.3*PM Trips	61%	50/50	Note j	50/50	12.3*FP+15.5*(X)
	Carwash (Automated) <sup>k</sup>	PBC	Lane	166.00	0%	50/50	11.97	50/50	13.65

#### a) Weekend peak hour rate = 9.99 per 1,000 s.f. with a 48/52 directional split

- b) To be used only when adjacent to hospital, for Med. Office square footage not to exceed 44% of the hospital square footage
- c) Use caution when using because of very low sample data. Consult with the County before using.
- d) For intensities under 10,000 s.f., use a rate of 125.61 / 1,000 S.F. instead of the equation.
- e) Pass-by percent = 62% for 10,000 s.f. or less, otherwise = 83.18 9.30 \* Ln(A) where A is 1,000 s.f. of leasable area
- f) For intensities under 10,000 s.f., use a rate of 9.9 / 1,000 s.f. instead of the equation.
- g) Use these rates for a drive-in bank with up to 4 drive-thru lanes (excl. ATM lane). For additional drive-thru lanes, use per lane rates from ITE Code 912 (124.76 daily, 8.83 AM, 27.15 PM. Use same in/out splits)
- h) ITE rate NA. Rate derived using PM to Daily ratio for ITE Code 937
- i) FP=Fueling Position. Use both FP and Convenience Store size in estimating trips using the provided equation. Note that no internalization between the gas pumps and convenience store, as per ULDC Artice 12, should be applied to estimate the net trips.
- j) Use PM rates
- k) Daily rate taken from PBC trip gen. study. Peak hour rates derived by applying peak to daily ratios for gas station to daily carwash rate
- Assume 50/50
- m) Landscape Services acreage consists of overnight vehicle and equipment storage as well as areas (covered or uncovered) for chemicals, fertilizers, landscape materials (excluding plants) and other items needed for day-to-day operations. Not included are drive aisles, customer/employee parking, structures shared by nursery and landscape services, facilities that solely serve the onsite landscape activities or any nursery growing areas.

Modification History 3/26/2019: First published

**3/2/2020**: Added Landscape Services, modification history, edited formatting,



# 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" July 27, 2021

Meaghan Capuano, P.E. T.Y. Lin International 255 East Avenue Rochester, NY 14604

RE: CocoPlum Nature School Project #: 210704

Traffic Performance Standards (TPS) Review

Dear Ms. Capuano:

The Palm Beach County Traffic Division has reviewed the above referenced project Traffic Impact Statement, dated May 6, 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:

Municipality:

Delray Beach

Location:

SWC of Lake Ida Road and Swinton Avenue

PCN:

12-43-46-16-01-041-0010

Access:

Three right-in/right-out access driveway connections: one onto Lake Ida Road and two onto Swinton Avenue (As used in the study and is NOT necessarily an

approval by the County through this TPS letter)

**Existing Uses:** 

Church/Synagogue = 19,580 SF

Day Care = 80 Students

**Proposed Uses:** 

Replace existing day care with: Private School (K-2) = 36 Students

(74)

New Daily Trips:

New Peak Hour Trips: 2 (2/0) AM; -23 (-11/-12) PM

**Build-out:** 

December 31, 2023

Based on our review, the Traffic Division has determined the proposed development generates less than 20 peak hour trips; therefore, the project <u>meets</u> the TPS of Palm Beach County.

Please note the receipt of a 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.



Meaghan Capuano, P.E. July 27, 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.

Sincerely,

Quazi Bari, P.E., PTOE

beigi Somar bar,

Manager - Growth Management

Traffic Division

QB:HA:rb

ec: Addressee

Anthea Gianniotes, 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\210704 - COCOPLUM NATURE SCHOOL.DOCX