



MEMORANDUM

March 23, 2018

Re: East Orlando Community Center
Traffic Review
Project № 18033

Introduction

This analysis was prepared in support of a proposed development application for a religious based community center located on Hancock Lone Palm Road, south of Colonial Drive, in Orange County, as illustrated in **Figure 1**



Figure 1 – Site Location

Existing Site

The applicant is proposing to use the property as a community center. The 6-acre property is currently improved with a 4,000 square foot building, which was previously used as a commercial nursery. The existing property condition is illustrated in **Figure 2**.



Figure 2 – Existing Property Condition

Proposed Development

The proposed application will add 750 square feet of additional building space on the property and improve the parking facilities and other property features for the proposed community center use. The proposed community center will not hold prayer services, which are typically held at a local area mosque. The purpose of the community center is to provide an area to serve and support the congregation and the community at large, with activities typical of religious based community centers, such as tutoring services, youth programs, and “Sunday School” religious learning. The proposed site plan is illustrated in **Figure 3**.

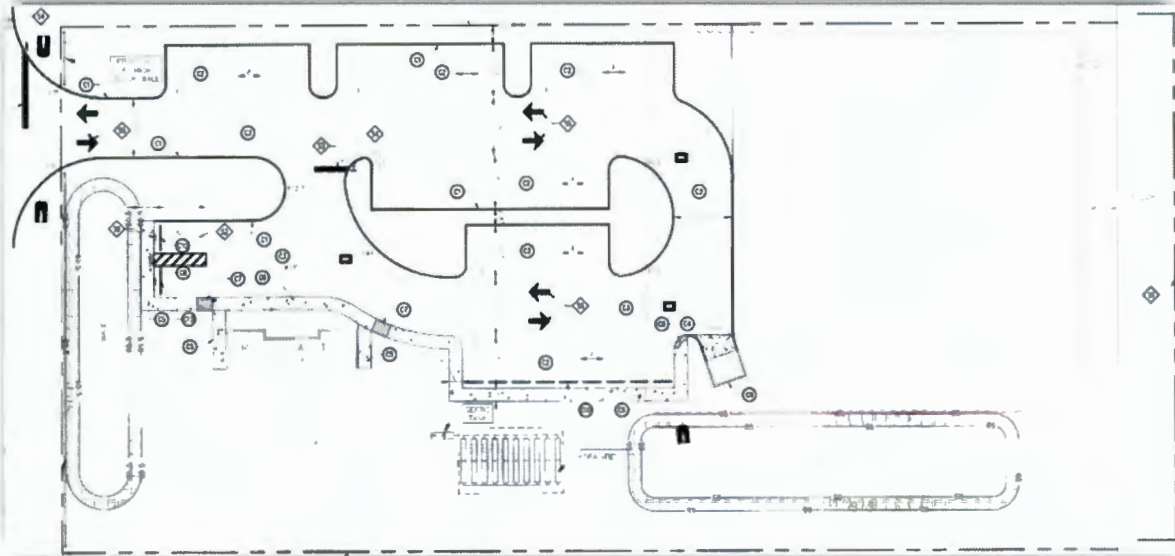


Figure 3 – Proposed Site Plan

Trip Generation Analysis

A comparative trip generation analysis was calculated using information published in the ITE *Trip Generation Manual*, 10th Edition, as summarized in **Table 1**.

Table 1
Trip Generation Analysis

Trip Generation Analysis												
ITE			Daily		AM Peak Hour				PM Peak Hour			
Code	Land Use	Size	Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
Previous Use												
818	Wholesale Nursery	4.00 KSF	39.00	156	2.4	10	5	5	5.18	21	11	10
Proposed Use												
495	Community Center	4.75 KSF	28.82	137	1.72	8	5	3	2.31	11	5	6
Net Increase/(Decrease) in Traffic				(19)		(2)	0	(2)		(10)	(6)	(4)

Source: ITE *Trip Generation Manual*, 10th Edition

It is evident from the analysis above that the proposed development will generate an insignificant number of trips during the typical weekday. The previously existing use on the property generated approximately 15% more daily trips than the proposed use.

Hancock Lone Palm Road Traffic

Traffic volume counts were obtained on Hancock Lone Palm Road to determine the level of traffic currently experienced on this public two-lane roadway and to evaluate the additional potential traffic resulting from the proposed community center. A 24-hour traffic count obtained on the roadway on March 1, 2018 indicates that the roadway currently serves 1,580 vehicles per day (vpd). With a capacity of approximately 11,000 vpd, the roadway operates at a volume to capacity (v/c) ratio of 0.14, which is 14% of the roadway's capacity.

The proposed development would add 137 trips per day to the roadway, which would increase the v/c ratio is 0.15, which indicates that the project would consume about 1% of the capacity on Hancock Lone Palm Road.

Hancock Lone Palm Intersection Traffic

Additionally, intersection volume counts were performed at the intersection of Hancock Lone Palm Road and Colonial Drive during the morning and evening peak hours. The intersection provides full access from Hancock Lone Palm Road to Colonial Drive stop control on the minor approach. The counts are illustrated in **Figure 4**.

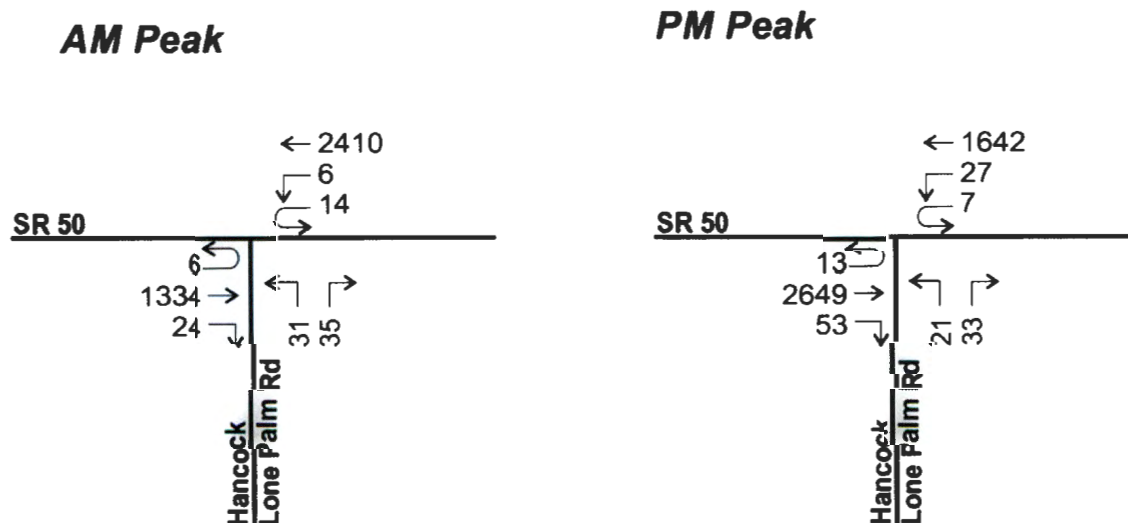


Figure 4 – Existing Intersection Volumes

The additional trips from the proposed community center would increase the trips at the intersection by 5% and would not materially impact the existing operation of the intersection. Furthermore, it should be noted that the proposed community center would result in less traffic at the intersection during the peak hours than the previously existing use of the property.

Conclusion

Therefore, based on this traffic review and the conditions of Hancock Lone Palm Road, the proposed development of a community center on the subject site will not materially or adversely impact the surrounding transportation network.

ATTACHMENTS

Recreational Community Center (495)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 4
1000 Sq. Ft. GFA: 78
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

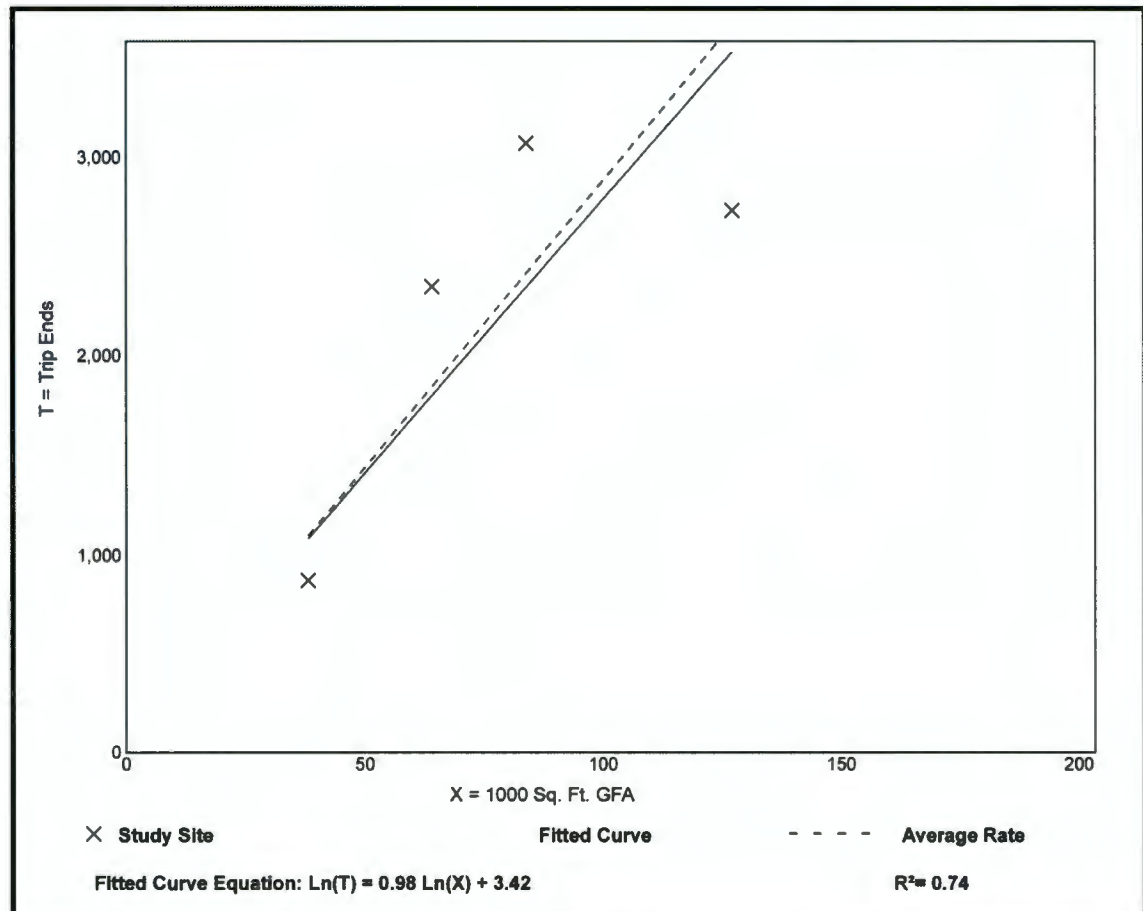
Average Rate
28.82

Range of Rates
21.49 - 36.71

Standard Deviation
8.56

Data Plot and Equation

Caution – Small Sample Size



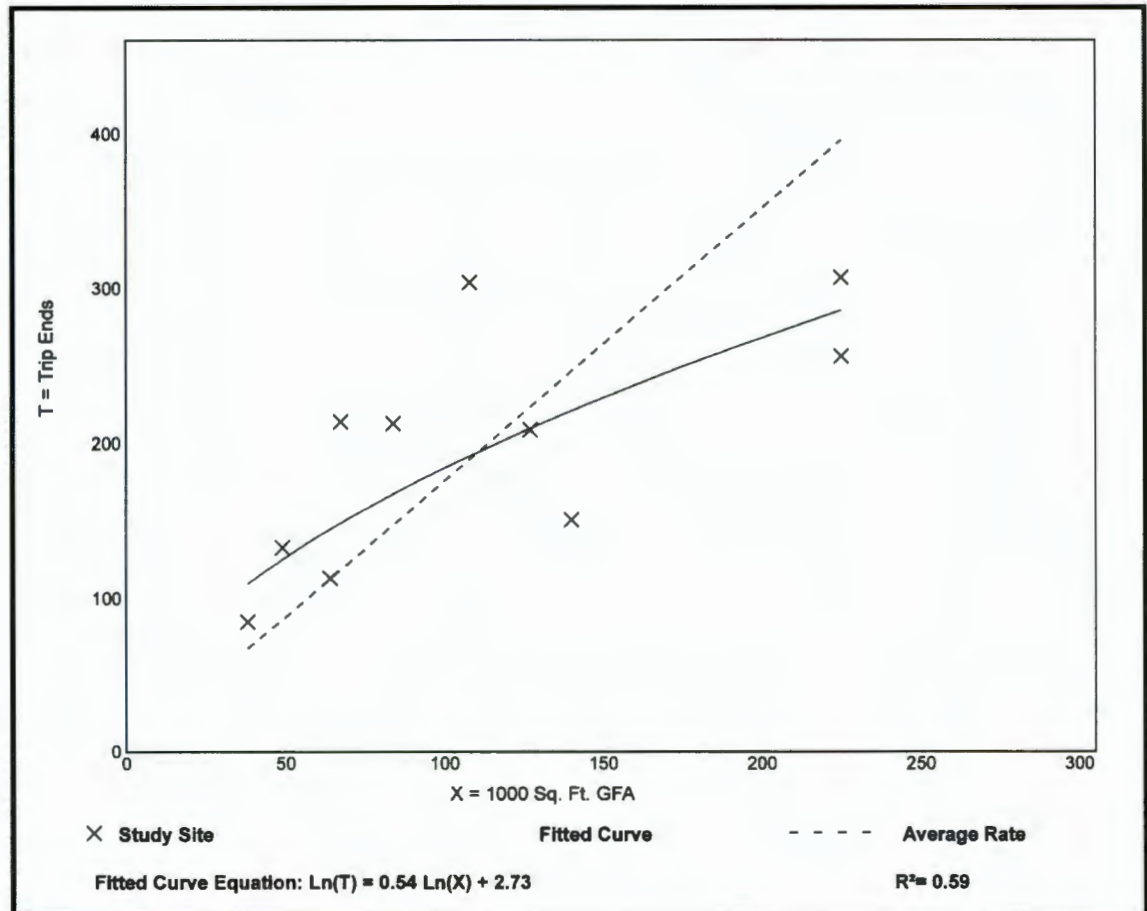
Recreational Community Center (495)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 10
1000 Sq. Ft. GFA: 113
Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.76	1.08 - 3.18	0.74

Data Plot and Equation



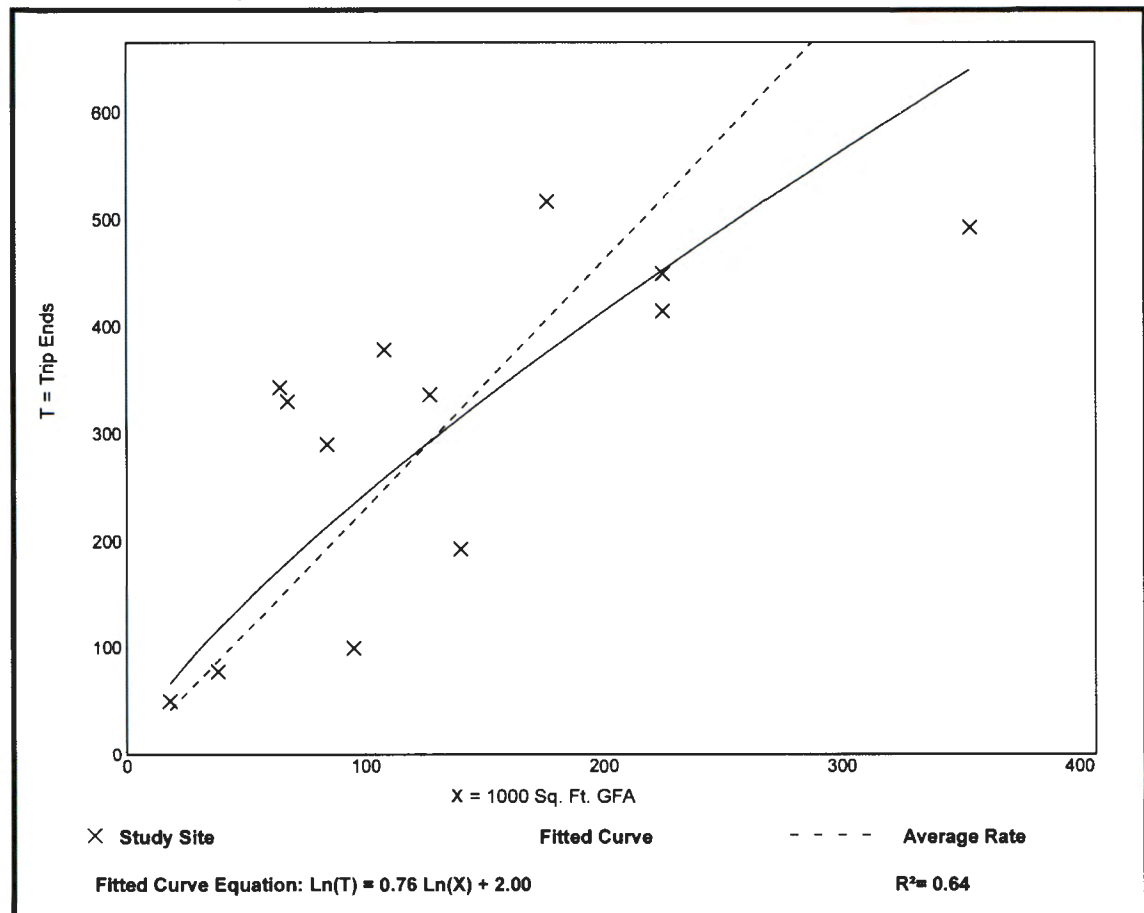
Recreational Community Center (495)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 13
1000 Sq. Ft. GFA: 132
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.31	1.05 - 5.37	1.14

Data Plot and Equation



Nursery (Wholesale) (818)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

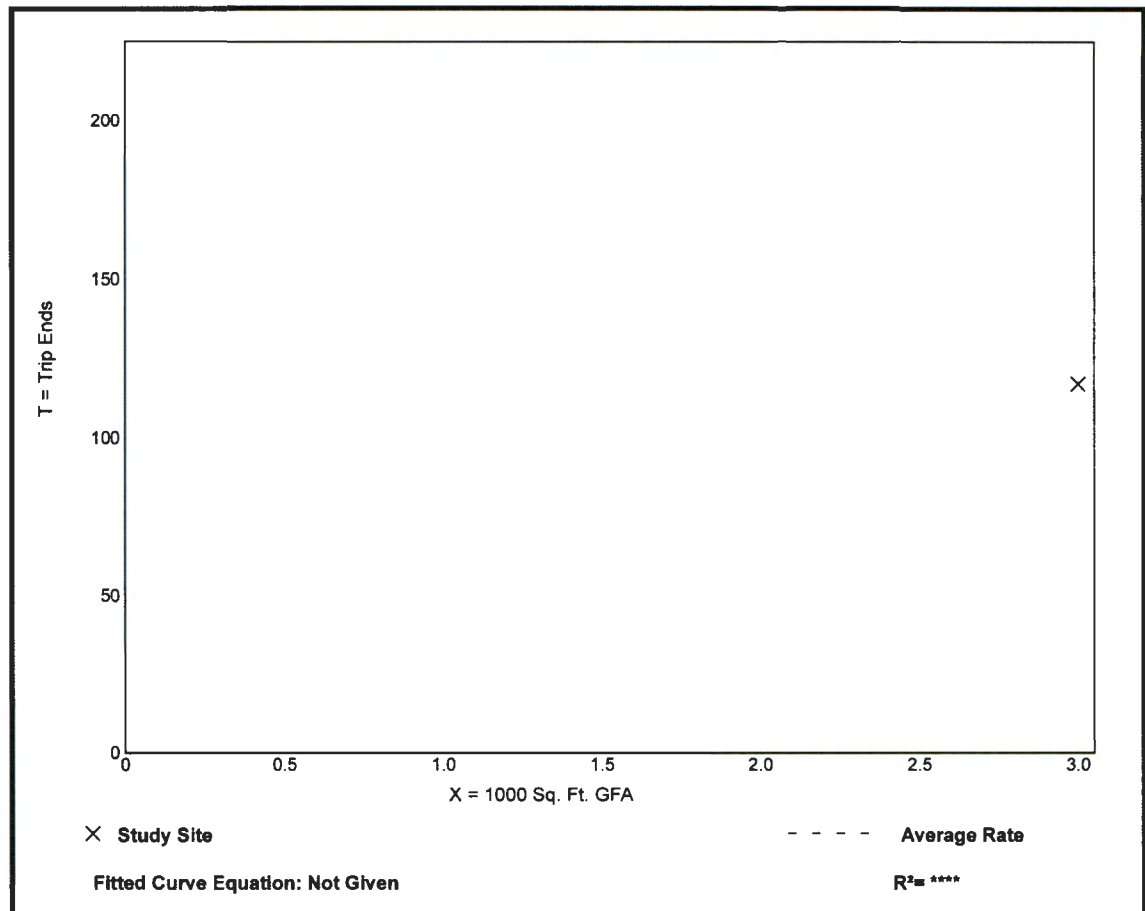
Setting/Location: General Urban/Suburban
Number of Studies: 1
1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
39.00	39.00 - 39.00	*

Data Plot and Equation

Caution – Small Sample Size



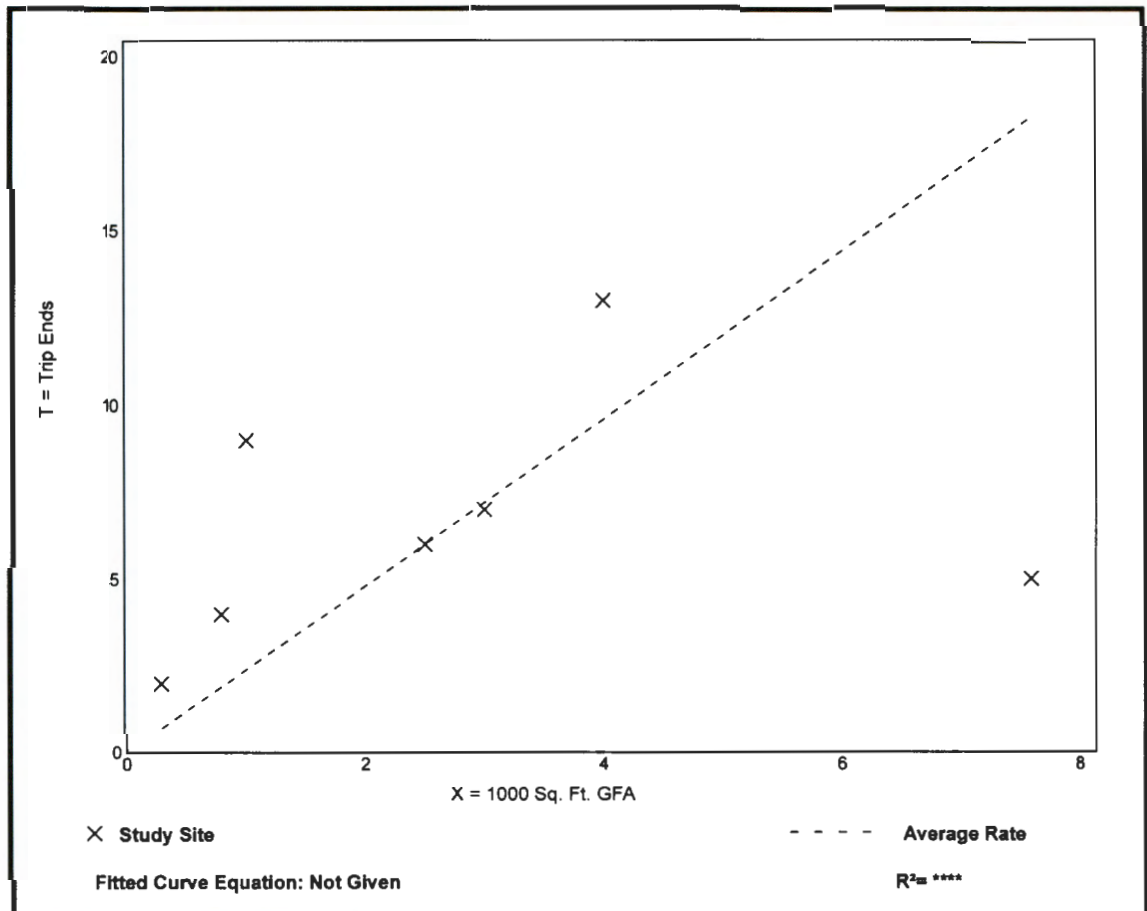
Nursery (Wholesale) (818)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 7
1000 Sq. Ft. GFA: 3
Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.40	0.66 - 9.00	2.22

Data Plot and Equation



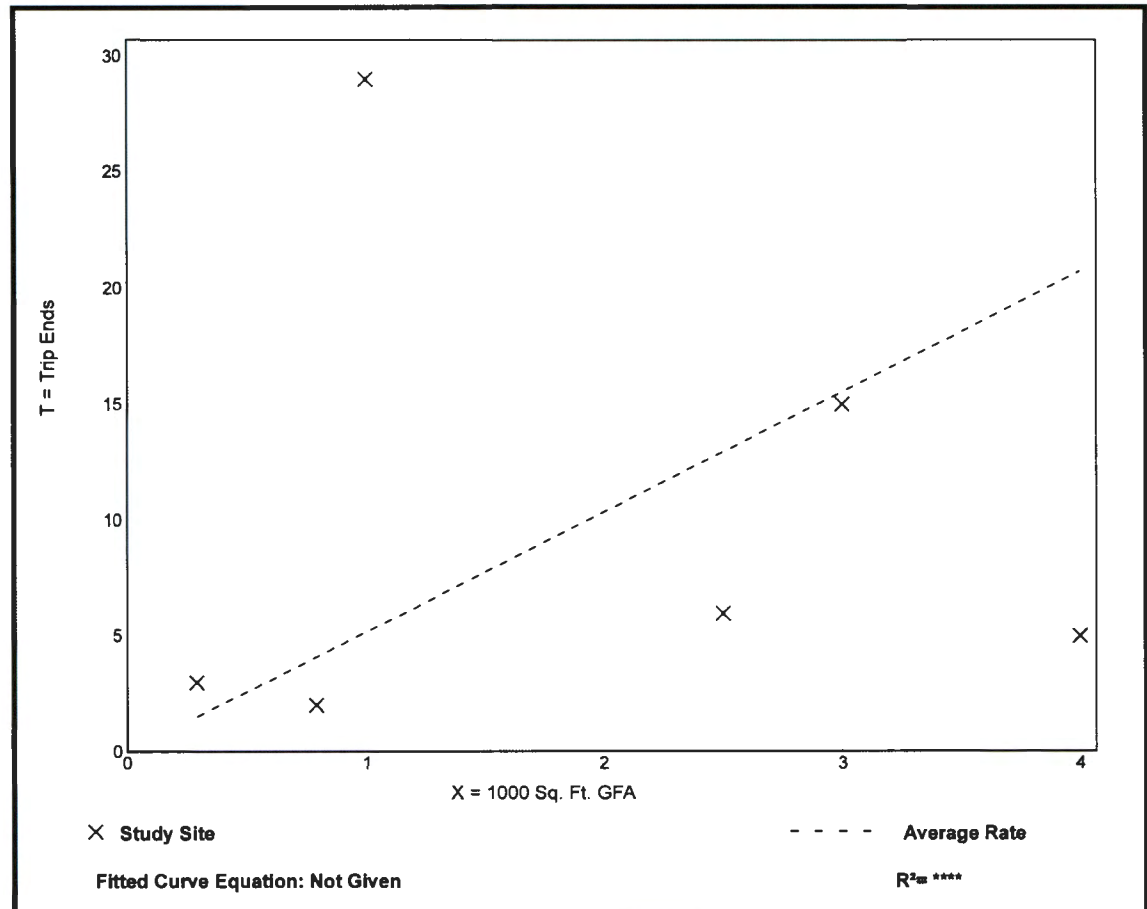
Nursery (Wholesale) (818)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 6
1000 Sq. Ft. GFA: 2
Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
5.18	1.25 - 29.00	8.28

Data Plot and Equation



ADT TARRIFIC SERVICES
4807 FISKE CIR
ORLANDO, FL 32826
(407)310-5264

Page 1

Site Code:
Station ID:

Latitude: 0' 0.0000 Undefined

Start Time	01-Mar-18 Thu	Southbound		Hour Totals		Northbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	10			0	4				
12:15		4	11			1	15				
12:30		3	10			1	8				
12:45		1	12	8	43	1	9	3	36	11	79
01:00		3	5			1	6				
01:15		0	10			0	7				
01:30		3	5			0	11				
01:45		1	4	7	24	0	11	1	35	8	59
02:00		1	11			1	12				
02:15		0	14			0	10				
02:30		0	14			1	12				
02:45		0	12	1	51	1	15	3	49	4	100
03:00		0	15			0	11				
03:15		1	15			1	9				
03:30		1	18			1	11				
03:45		2	21	4	69	1	15	3	46	7	115
04:00		4	17			1	7				
04:15		1	14			3	17				
04:30		3	12			3	8				
04:45		2	16	10	59	4	13	11	45	21	104
05:00		1	19			8	13				
05:15		0	23			8	12				
05:30		1	24			2	20				
05:45		0	24	2	90	5	12	23	57	25	147
06:00		2	18			4	10				
06:15		12	20			7	9				
06:30		7	28			19	9				
06:45		6	19	27	85	21	11	51	39	78	124
07:00		8	22			20	7				
07:15		9	15			13	3				
07:30		17	15			16	7				
07:45		12	16	46	68	24	8	73	25	119	93
08:00		8	11			13	8				
08:15		8	15			16	5				
08:30		15	10			12	6				
08:45		12	12	43	48	13	7	54	26	97	74
09:00		14	12			9	1				
09:15		8	5			10	8				
09:30		5	13			9	5				
09:45		14	11	41	41	15	3	43	17	84	58
10:00		7	8			8	1				
10:15		8	5			4	1				
10:30		3	5			14	2				
10:45		7	8	25	26	6	2	32	6	57	32
11:00		6	6			8	2				
11:15		12	2			12	0				
11:30		14	3			10	0				
11:45		4	1	36	12	5	0	35	2	71	14
Total		250	616			332	383			582	999
Percent		28.9%	71.1%			46.4%	53.6%			36.8%	63.2%
Grand Total		250	616			332	383			582	999
Percent		28.9%	71.1%			46.4%	53.6%			36.8%	63.2%

ADT

ADT 1,581

AADT 1,581

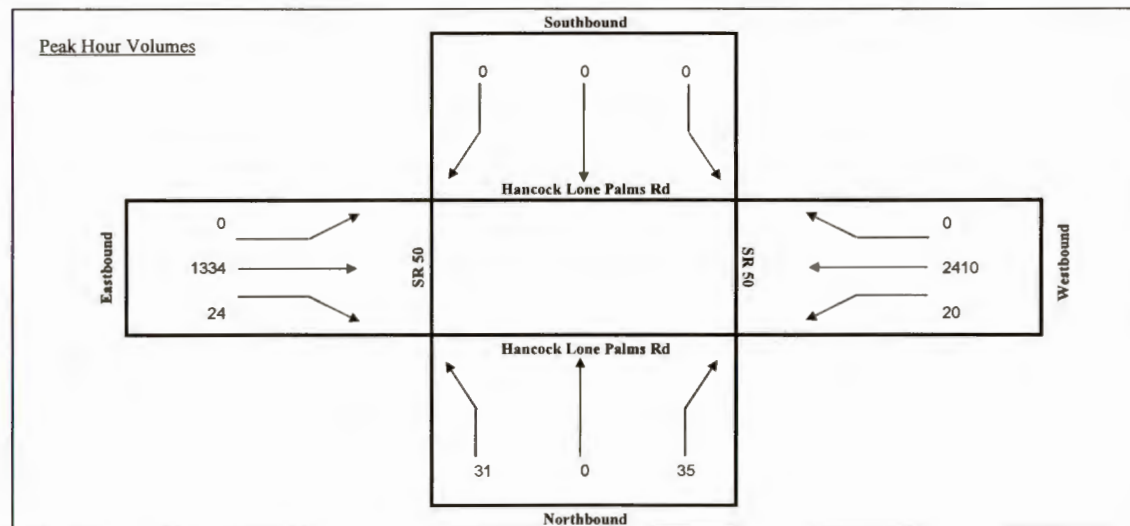
TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Hancock Lone Palms Rd
 Intersection (E/W): SR 50
 Date: 3/1/2018

Hancock Lone Palms Rd				Hancock Lone Palms Rd				SR 50			SR 50			TOTAL
Start	End	NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	10	0	13	0	0	0	0	277	3	5	502	0	810
7:15 AM	7:30 AM	8	0	6	0	0	0	0	293	1	7	525	0	840
7:30 AM	7:45 AM	5	0	15	0	0	0	0	300	12	5	574	0	911
7:45 AM	8:00 AM	10	0	15	0	0	0	0	345	5	7	603	0	985
8:00 AM	8:15 AM	8	0	4	0	0	0	0	387	4	4	642	0	1049
8:15 AM	8:30 AM	5	0	10	0	0	0	0	302	8	1	570	0	896
8:30 AM	8:45 AM	8	0	6	0	0	0	0	300	7	8	595	0	924
8:45 AM	9:00 AM	7	0	5	0	0	0	0	318	7	4	588	0	929

Total for:	7:00 AM	8:00 AM	33	0	49	0	0	0	0	1215	21	24	2204	0	3546
Total for:	8:00 AM	9:00 AM	28	0	25	0	0	0	0	1307	26	17	2395	0	3798
Tota Peak Hour:	7:45 AM	8:45 AM	31	0	35	0	0	0	0	1334	24	20	2410	0	3854
Overall PHF:	0.92														



TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

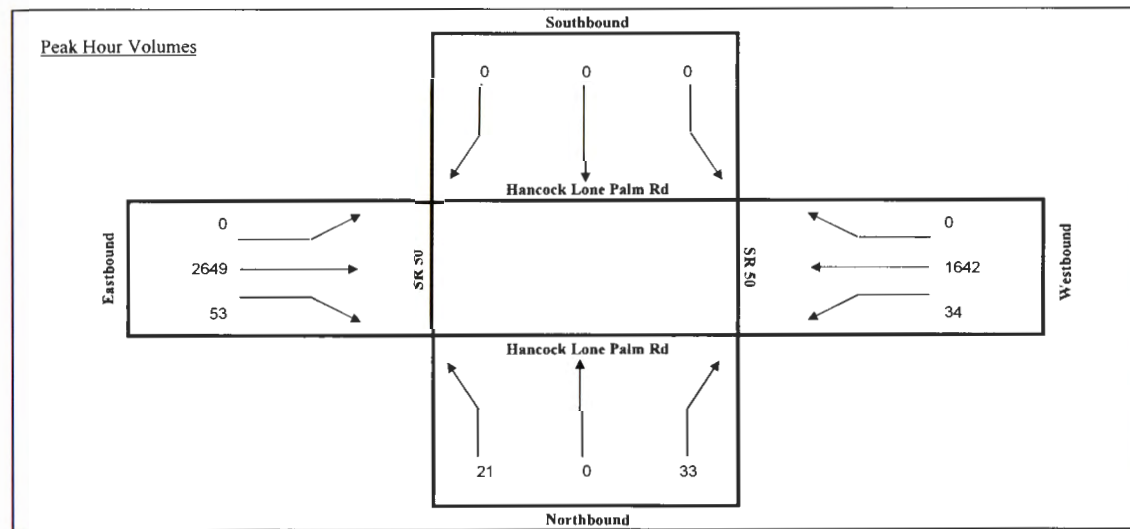
Intersection (N/S): Hancock Lone Palm Rd

Intersection (E/W): SR 50

Date: 3/1/2018

Hancock Lone Palm Rd				Hancock Lone Palm Rd				SR 50			SR 50			TOTAL
Start	End	NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	4	0	3	0	0	0	0	546	15	4	432	0	1004
4:15 PM	4:30 PM	4	0	12	0	0	0	0	593	8	5	421	0	1043
4:30 PM	4:45 PM	8	0	2	0	0	0	0	652	9	4	400	0	1075
4:45 PM	5:00 PM	5	0	10	0	0	0	0	693	10	5	398	0	1121
5:00 PM	5:15 PM	2	0	8	0	0	0	0	683	11	8	403	0	1115
5:15 PM	5:30 PM	6	0	9	0	0	0	0	676	12	11	393	0	1107
5:30 PM	5:45 PM	8	0	6	0	0	0	0	597	20	10	448	0	1089
5:45 PM	6:00 PM	6	0	7	0	0	0	0	589	10	14	414	0	1040

Total for:	4:00 PM	5:00 PM	21	0	27	0	0	0	0	2484	42	18	1651	0	4243
Total for:	5:00 PM	6:00 PM	22	0	30	0	0	0	0	2545	53	43	1658	0	4351
Total Peak Hour:	4:45 PM	5:45 PM	21	0	33	0	0	0	0	2649	53	34	1642	0	4432
Overall PHF:	0.99														

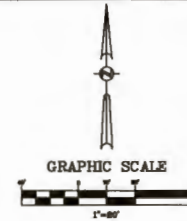


① SITE STRIPING & SIGNAGE KEYNOTES

- S1. PROPERTY BOUNDARY.
- S2. HANDICAP PARKING STALL, TYPICAL.
- S3. 24" THERMOPLASTIC STOP BAR WITH R1-1 HIGH INTENSITY REFLECTORIZED "STOP" SIGN.
- S4. R1-1 HIGH INTENSITY REFLECTORIZED "STOP" SIGN.
- S5. DIRECTIONAL ARROWS PER F.O.D.T. INDEX No. 17344, TYPICAL.
- S6. HANDICAP SIGN.

② SITE CONSTRUCTION KEYNOTES

- C1. 6" HEAD CURB, TYPICAL.
- C2. ASPHALT PAVEMENT LIGHT-DUTY IN PARKING SPACES.
- C3. ASPHALT PAVEMENT, HEAVY-DUTY IN DRIVE ASLES.
- C4. CONCRETE PAVEMENT.
- C5. CONCRETE SIDEWALK, TYPICAL.
- C6. MONOLITHIC CURB & SIDEWALK, TYPICAL.
- C7. HANDICAP ACCESS RAMP WITH A MAXIMUM 1:21 SLOPE, TYPICAL.
- C8. DETECTABLE WARNING SURFACE PER FLORIDA BUILDING CODE 2004.
- C9. 15"x16" DUMPSTER 8/ 6' CONCRETE PAD & 6' HIGH BLOCK WALL ENCLOSURE ON 3 SIDES.
- C10. WHEELSTOP PER F.O.D.T. INDEX No. 300, TYPICAL.



SITE DATA

PROPERTY LOCATION: 1311 HANCOCK LONE PALM RD. ORLANDO, FL.
 PROPERTY ZONING: A-2 WITH A SPECIAL EXCEPTION
 EXISTING USE: NURSERY / WAREHOUSE
 PROPOSED USE: RELIGIOUS INSTITUTION
 PROJECT AREA: 6.01 AC.
 EXISTING GROSS FLOOR AREA: 4,000 S.F.
 PROPOSED BUILDING HEIGHT: < 25'
 BUILDING SETBACKS (REQUIRED):
 FRONT (WEST) 25'
 SIDE (NORTH) 10'
 SIDE (SOUTH) 10'
 REAR (EAST) 50'
 BUILDING SETBACKS (PROPOSED/EXISTING):
 FRONT (WEST) >25'
 SIDE (NORTH) >10'
 SIDE (SOUTH) >10'
 REAR (EAST) >1,000'

PARKING

PARKING REQUIRED
 NUMBER OF MEMBERS 120 MEMBERS
 PARKING SPACES REQUIRED 40 SPACES PER 120 MEMBERS
 TOTAL PARKING REQUIRED 40 SPACES
 SPACES REQUIRED TO BE RESERVED FOR HANDICAP 2 SPACES
 PARKING PROVIDED
 STANDARD PARKING SPACES 44 SPACES
 HANDICAP PARKING 2 SPACES
 TOTAL PARKING PROVIDED 46 SPACES

SITE AREA CALCULATIONS

	EXISTING	PROPOSED
EXISTING BUILDING	4,000 S.F.	
BUILDING ADDITION	750 S.F.	
PARKING	21,500 S.F.	
SEWERAGE	1,382 S.F.	0.84 AC. 10,817 S.F.
PERVIOUS AREA	27,333 S.F.	9.38 AC. 89,383 S.F.
TOTAL SITE AREA	34,715 S.F.	8.00 AC. 100,000 S.F.

FLOOD ZONE

FLOOD ZONE - PER FEMA F.I.M. PANEL 12005C0295F DATED: 9/25/2008.

SOILS

22 SANDRA-SANDRA FINE SAND, HSG: A/D
 34 POMELO FINE SAND, HSG: A
 3 BRONX FINE SAND, HSG: A/D

HAZARDOUS MATERIALS STATEMENT

THESE CONDITIONS, TYPES, QUANTITIES AND LOCATIONS OF THE SITE IN SUCH QUANTITIES AS DETERMINED BY THE FIRE OFFICIAL, ACCESS ROADS & A SUITABLE TEMPORARY SUPPLY OF WATER ACCEPTABLE TO THE FIRE DEPARTMENT SHALL BE PROVIDED & MAINTAINED.

LIGHTING NOTE

LIGHTING SHALL COMPLY WITH ARTICLE XXV OF CHAPTER 8.

DUMPSTER NOTE

THE DUMPSTER SHALL HAVE OPAQUE GATING AND THE WALL SHALL HAVE A DECORATIVE CONCRETE CAP. WALL SHALL BE ARCHITECTURALLY COMPATIBLE MATERIALS TO THE PRINCIPLE BUILDING.

SIGNAGE NOTE

BELOWGROUND & POLE SIGNS SHALL BE PROHIBITED. GROUND & Pylon SIGNS SHALL BE PER CHAPTER 31.5.

SITE NOTES

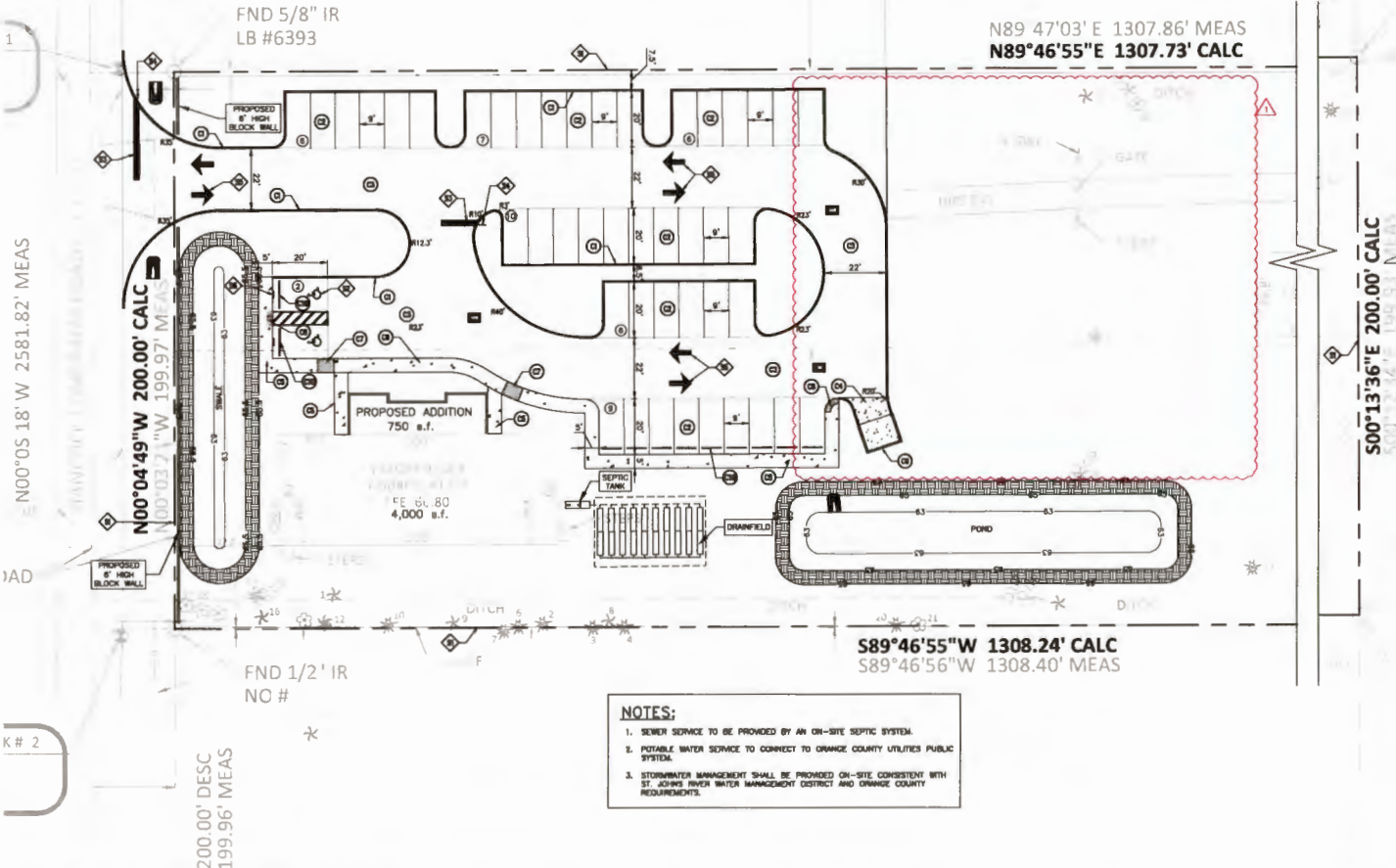
1. ALL CURB RACK ARE TO BE 5.0', TYPICAL UNLESS NOTED OTHERWISE. EXCEPTION: RACK @ ISLANDS ARE TO FIT ISLAND WIDTHS, UNLESS NOTED OTHERWISE.
2. LANDSCAPE ISLAND ROSE NOT TO EXCEED THE PARKING STALL DEPTH &/OR PROTRUDE INTO DRIVE WELLS, TYPICAL.
3. ALL DIMENSIONS ARE PARALLEL & PERPENDICULAR TO A BEARING OF 188°±30'±, UNLESS OTHERWISE INDICATED WITH A "±" OR BEARING.
- LOW CASE TEXT DENOTES SURVEY &/OR EXISTING CONDITION INFORMATION.

SITE NOTE:

ALL CONSTRUCTION DETAILS ARE CONCEPTUAL AND SUBJECT TO REVIEW AND MODIFICATION DURING THE APPROVAL OF FINAL CONSTRUCTION PLANS.

NOTES:

1. SEWER SERVICE TO BE PROVIDED BY AN ON-SITE SEPTIC SYSTEM.
2. POTABLE WATER SERVICE TO CONNECT TO ORANGE COUNTY UTILITIES PUBLIC SYSTEM.
3. STORMWATER MANAGEMENT SHALL BE PROVIDED ON-SITE CONSISTENT WITH ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT AND ORANGE COUNTY REQUIREMENTS.



DATE	REVISIONS	BY	CHKD
02/15/2018	REMOVED OVERFLOW PARKING PER CLIENT'S REQUEST	JT	SJS

SPECIAL EXCEPTION SITE PLAN
 EAST ORLANDO RELIGIOUS INSTITUTION
 1311 HANCOCK LONE PALM ROAD
 ORLANDO, FLORIDA

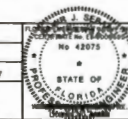


5127 S. Orange Avenue, Suite 200
 Orlando, FL 32809
 Phone: 407-895-0324
 Fax: 407-895-0325
 www.feg-inc.us

ENLARGED SITE PLAN

DESIGNED BY: SJS
 DRAWN BY: JT
 CHECKED BY: SJS
 APPROVED BY: SJS

PROJECT NO: 17-080
 DATE: 1-1-20
 DATE: OCTOBER 16, 2017
 SHEET NO: C-5
 SHEET 5 OF 7



THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ENGINEER J.S. J. (SJS) UNDER A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VIEWED ON ANY ELECTRONIC COPY.