FLORIDA ENGINEERING GROUP
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Engineering the Future

Parking Justification Study

ATLANTIC DRIVE SELF STORAGE

150 ATLANTIC DRIVE, MAITLAND

SEMINOLE COUNTY, FLORIDA

Samir J Sebaali

Digitally signed by Samir J Sebaali
Date: 2023.02.08 15:03:10 -05'00'

Prepared for Nuvo Development Partners, LLC
February 8, 2023

Sam J. Sebaali, P.E. 42075
Florida Engineering Group, Inc.
Certificate No. EB-0006595

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A. Project Site Location

The project site is located at 150 Atlantic Drive, which is at the southwest corner of the intersection of Atlantic Drive and U.S. Highway 17-92 in Seminole County, Florida.

The site is in Section 19, Township 21S, and Range 30E and has a parcel ID No. 19-21-30-514-0B00-0080. A Site Location Map is provided in **Appendix A** of this report.

B. Development Description

The project site is approximately 1.42 acres. The site is proposed to be developed for an 89,481 S.F. of Mini- Warehouse/Self-Storage building with related parking and other related site infrastructure. Ten (10) parking spaces are proposed to serve the proposed project. A Site Plan is presented in **Appendix B** of this report.

C. Purpose of the Study

This study is intended to evaluate the anticipated parking demand for the proposed development and provide justification for the number of off-street parking, which is being proposed to serve the proposed development. Specifically, Seminole County Code requires one (1) parking space for each one thousand (1,000) square feet of building plus one (1) space for each two (2) employees on the largest shift for Warehouse. The code does not distinguish between "Mini-Warehouse/Self-Storage" use (ITE Code 151) and "Warehousing" use (ITE Code 150).

As such, the total number of parking spaces required by the code for this project would be 91 parking spaces based on the proposed building size of 89,481 S.F. and a maximum of two (2) employees on the largest shift. This required number of parking spaces is not, however, supported by actual parking needs for self-storage facilities based on 1.) review of similar facilities including facilities, which we have designed, facilities completed by the applicant, and facilities completed by other users in various jurisdictions; and 2.) review of published technical data.

D. Methodology

To evaluate the parking needs for the proposed self-storage development, FEG has reviewed trip generation and parking generation using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th. Edition and ITE *Parking Generation*, 5th. Edition, respectively. In addition, FEG has reviewed parking requirements for three (3) similar developments in other neighboring local jurisdictions including City of Orlando, Orange County, and City of Ocoee. All these projects have been completed by FEG. One (1) of them is currently under construction and two (2) of them have been operational for numerous years without any parking concerns or problems.

E. Traffic Generation and Parking Needs Assessment

Trip generation and parking generation using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th. Edition* and ITE *Parking Generation, 5th. Edition* are being presented below for the proposed self-storage development. The self-storage use falls under ITE under Land Use Code 151 (Mini-Warehouse). Per the ITE *Parking Generation, 5th. Edition*, "a mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as "self-storage" facilities.

Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point." This Land Use description along with the Time-of-Day Distribution for Parking Demand is included **in Appendix C.**

1. TRIP GENERATION

The trip generation for the proposed project has been calculated using the *ITE Trip Generation Manual*, *11th. Edition*. **Table 1** below provides a summary of the average daily and P.M. Peak Hour trips anticipated from the project.

Table 1 – ITE Trip Generation Summary – 11th. Edition

ITE Code	Land Use	Size	Daily Trips		P.M. Peak Hour of Generator			
			Rate	Trips	Rate	Enter	Exit	Total
151	Mini-Warehouse	89.48 KSF	1.45	130	0.18	8	8	16

As can be seen from the table above, the average daily trips total 130 with 65 entering and 65 exiting for the entire day. During the P.M. Peak Hour of Generator, it is estimated that a maximum of 8 vehicles would enter the site and 8 vehicles would exit the site. Based on the *ITE Trip Generation Manual*, *11th. Edition*, the same number of vehicles would enter and exit the site during the A.M. Peak Hour of Generator as the P.M. Peak Hour of Generator.

Although the trip generation does not necessarily provide the parking requirements, the number of vehicles entering the site during the Peak Hour of Generator gives an order of magnitude of the parking needs for the project. **Appendix D** provides Data Plot and Equation charts for the average daily, P.M. Peak Hour of Generator, and A.M. peak Hour of Generator.

2. PARKING GENERATION

The parking generation for the proposed development has been calculated using the *ITE Parking Generation Manual, 5th. Edition*. For each land use defined in this publication, empirical parking data that has been collected on sites throughout the country is compiled to develop rates and/or equations to estimate parking demand at similar sites. **Table 2** below provides the Peak Parking Demand anticipated for the project. We have evaluated both the Weekday and Saturday demands, since this use can generate peak demands during weekdays and on Saturday.

Table 2 – ITE Parking Generation Summary – 5th. Edition

ITE Code	Land Use	Size (KSF)	Peak Parking Demand (Weekday)	Peak Period of Parking Demand (Weekday)	Peak Parking Demand (Saturday)	Peak Period of Parking Demand (Saturday)
151	Mini-Warehouse	89.48	9	4:00 – 6:00 P.M.	9	1:00 – 5:00 P.M.

As can be seen from the table above, the peak parking demand for the proposed development would be 9 parking spaces during weekdays and 9 parking spaces on Saturday. **Appendix E** provides charts for the Weekday and Saturday Peak Period Parking Demand based on the *ITE Parking Generation Manual, 5th. Edition*.

F. Review of Similar Developments

FEG has reviewed parking requirements for three (3) similar developments in other neighboring local jurisdictions including City of Orlando, Orange County, and City of Ocoee. All these projects have been completed by FEG. One (1) of them is currently under construction and two (2) of them have been operational for numerous years without any parking concerns or problems. **Table 3** below provides a summary of these requirements.

Table 3 – Summary of Parking Requirements for Similar Self-Storage Projects in Neighboring Jurisdictions

Project Location	Building GFA (S.F.)	Required Parking	Provided Parking	Jurisdiction	Status
1600 Sun Life Path	90,625	6	7	Orange County	In operation since 2017
3820 S. Orange Avenue	99,123	3	6	City of Orlando	In operation since 2018
Tomyn Boulevard	103,788	10	13	City of Ocoee	Under Construction

Avg. Required Parking for above listed Similar Projects: 19 Spaces/293,536 S.F. = 0.0647 spaces per 1000 S.F. or approximately 1 space per approximately 15,000 S.F. Based on the average required parking for the above listed similar projects, the proposed development would require 6 parking spaces.

Avg. Provided Parking for above Listed Similar Projects: 26 spaces/293,536 S.F. = 0.0886 spaces per 1000 S.F. or approximately 1 space per 11,300 S.F. Based on the average parking provided for the above listed similar projects, the proposed development would require 8 parking spaces.

Appendix F provides copies of the approved site plan for each of the above listed developments.

E. Conclusion and Recommendations

The proposed development consists of a self-storage facility with a total gross floor area of 89,481 square feet. Based on our review of *ITE Trip Generation Manual*, *11th. Edition* and *ITE Parking Generation, 5th. Edition; and* review of parking requirements for similar developments in other neighboring local jurisdictions, we offer the following conclusions and recommendations:

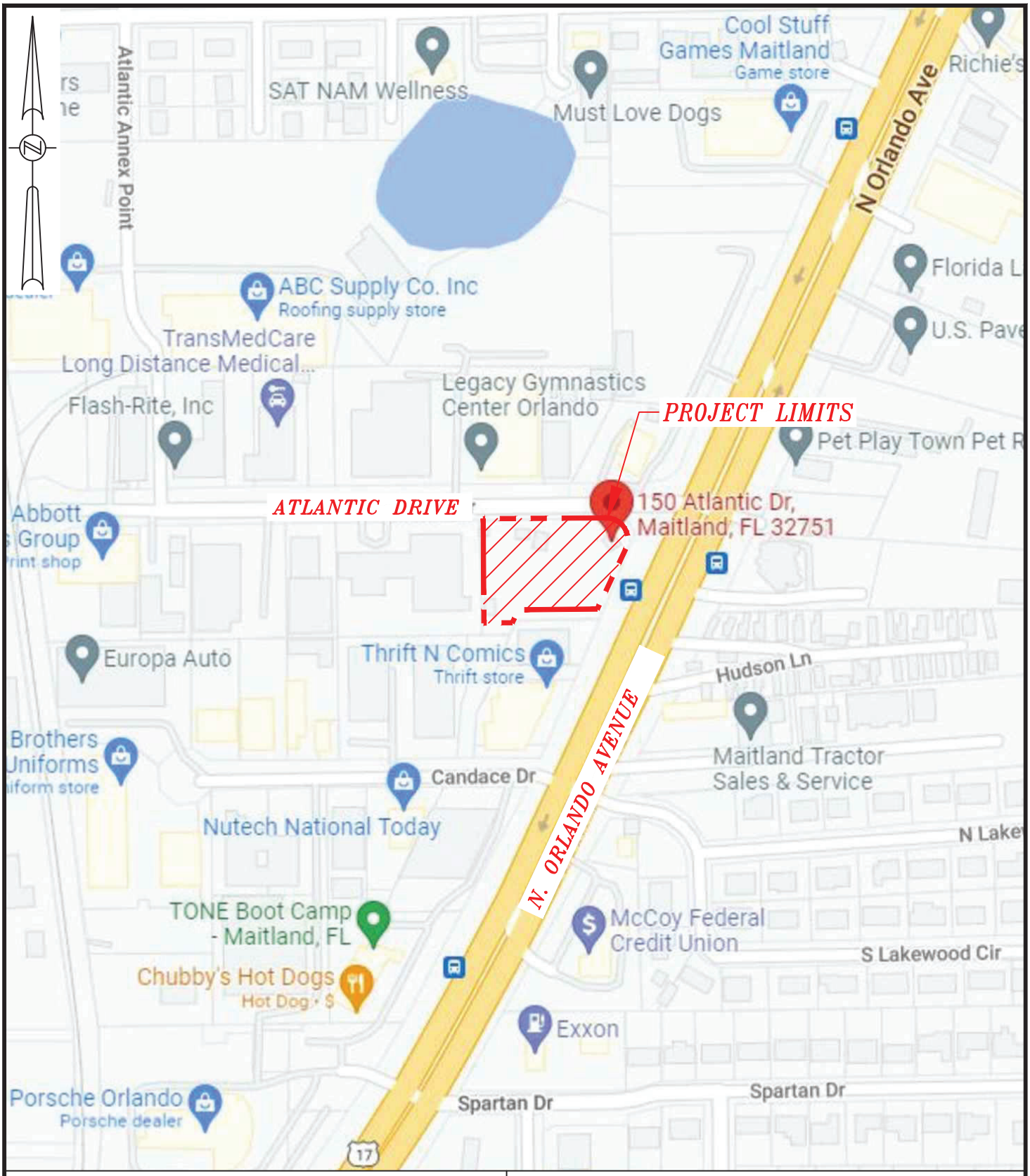
1. The proposed project will generate a total of eight trips in the weekday morning peak hour and eight trips in the weekday evening peak hour per the *ITE Trip Generation Manual, 11th. Edition*.
2. The peak period parking demand occurs on weekdays in the afternoon between the hours of 4:00 and 6:00 PM and on Saturday between the hours of 1:00 and 5:00 PM, and a maximum of 9 parking spaces would be required for the proposed development per the *ITE Parking Generation, 5th. Edition.*

3. Based on review of similar developments in neighboring jurisdictions, 6 parking spaces would be required for the proposed development.
4. Based on review of similar projects in neighboring jurisdictions, an average of 8 parking spaces were provided for similar developments.

As part of the permitting for the proposed development, the following computation was used to determine the parking needs for the project: *1 parking space per 10,000 S.F. plus 1 parking space for each 2 employees*. Based on this computation, a total of 10 parking spaces would be required, and a total of 10 parking spaces are proposed for the development.

The proposed 10 parking spaces exceeds the number of parking spaces (i.e.; 9 parking spaces), which would be required per the *ITE Parking Generation, 5th. Edition.* This number also significantly exceeds the average parking (i.e.; 6 parking spaces), which would be required based on review of parking requirements for three (3) neighboring jurisdictions. As such, it is our opinion and conclusion that 10 parking spaces for the proposed development would be more than adequate to meet the parking needs for the proposed development.

Appendix A – Site Location Map



PROJECT NAME: ATLANTIC DRIVE SELF STORAGE 150 ATLANTIC DRIVE, MAITLAND, FL	**SITE LOCATION MAP (GOOGLE MAPS)**
CLIENT: NUVO DEVELOPMENT PARTNERS, LLC	
S. T. R. S19, T21E, R30S / **F.E.G. PROJECT NO.:** 21-181	
DATE: JANUARY 16, 2023 / **SCALE:** 1" = 300'	

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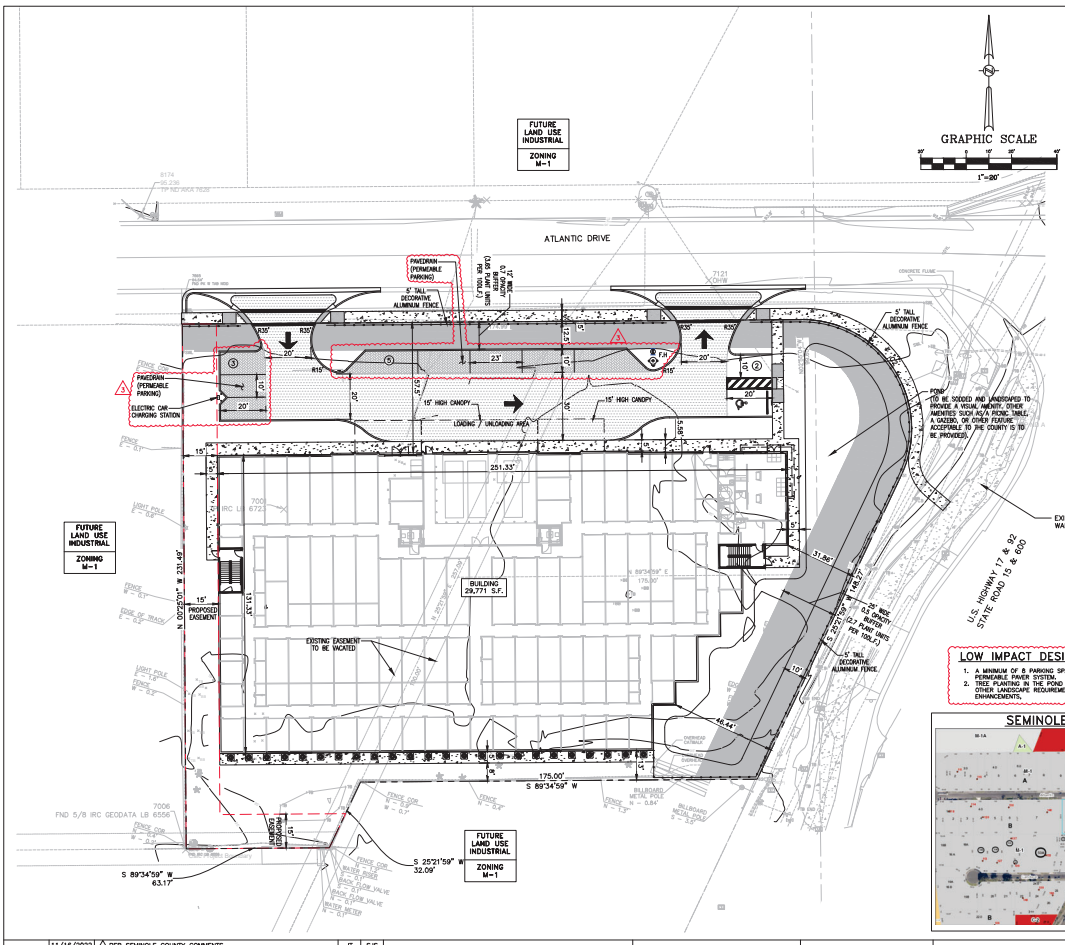
Appendix B – Site Plan



SITE DATA

PROPERTY LOCATION: 150 ATLANTIC DRIVE, MAITLAND, FLORIDA

PARCEL I.D.: 19-21-30-514-0B00-0080

PROPERTY EXISTING FUTURE LAND USE DESIGNATION: INDUSTRIAL
PROPERTY EXISTING ZONING: M-1

PROPERTY PROPOSED FUTURE LAND USE DESIGNATION: PLANNED DEVELOPMENT
PROPERTY PROPOSED ZONING: PD

EXISTING USE: AMUSEMENT PARK
PROPOSED USE: MINI WAREHOUSE / SELF STORAGE
PROJECT AREA: 1.42 ACRES

PROPOSED GROSS FLOOR AREA: 89,481 S.F.

MAXIMUM ALLOWED FLOOR AREA RATIO: 1.45

PROPOSED BUILDING SETBACKS

FRONT (NORTH)	23'
SIDE (EAST)	31'
SIDE (WEST)	15'
REAR (SOUTH)	11'

MAXIMUM BUILDING HEIGHT: 3 STORIES – 40 FT. MAIN BUILDING; 45 FT. PARAPET AND TOWER.
PROPOSED BUILDING HEIGHT: 3 STORIES – 40 FT. TO TOP OF ROOF FOR MAIN BUILDING; 45 FT. TO HIGHEST PARAPET WALL.

PARKING

PARKING REQUIRED

SELF STORAGE	89,481 S.F. x (1 SPACE PER 10,000 S.F.) + 2 EMPLOYEES x (1 SPACE PER 2 EMPLOYEES)	10 SPACES
TOTAL PARKING REQUIRED		10 SPACES
SPACES REQUIRED TO BE RESERVED FOR HANDICAP		1 SPACES

PARKING PROVIDED

STANDARD PARKING SPACES	9 SPACES
HANDICAP PARKING	1 SPACES
TOTAL PARKING PROVIDED	10 SPACES

PARKING IS TO BE PROVIDED AT THE MINIMUM RATE OF 1 PARKING SPACE PER 10,000 S.F. OF SELF STORAGE AREA PLUS 1 SPACE PER 2 EMPLOYEES.

SITE AREA CALCULATIONS

BUILDING FOOTPRINT	29,771 S.F.	0.683 AC.	48.28 %
PAVING	9,037 S.F.	0.207 AC.	14.65 %
SIDEWALK	3,163 S.F.	0.074 AC.	5.13 %
IMPERVIOUS AREA	41,971 S.F.	0.964 AC.	68.06 %
PERVIOUS AREA	19,696 S.F.	0.452 AC.	31.94 %
TOTAL SITE AREA	61,667 S.F.	1.42 AC.	100.00 %
REQUIRED OPEN SPACE (PD)			25%
PROPOSED OPEN SPACE			31%
OPEN SPACE (REDEVELOPMENT)			
LANDSCAPE BUFFERS:	12,696 S.F.	0.29 AC.	20.59 %
INTERIOR LANDSCAPE AND PERVIOUS AREA:	4,570 S.F.	0.10 AC.	7.41 %
LANDSCAPED STORMWATER POND OUTSIDE BUFFER ZONE:	2,428 S.F.	0.06 AC.	3.94 %
TOTAL OPEN SPACES	19,694 S.F.	0.45 AC.	31.94 %

NO WETLANDS OR FLOODPLAIN AREAS WITHIN THIS SITE

ITE TRIP GENERATION TABLE – 11TH. EDITION

ITE CODE	LAND USE	SIZE	DAILY TRIPS RATE	DAILY TRIPS	P.M. PEAK HOUR GENERATION RATE	ENTER	EXIT	TOTAL
151	MINI WAREHOUSE	89.48 KSF	1.45	(130)	0.14	6	7	13

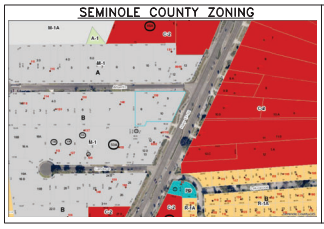
DEVELOPMENT STANDARDS:

1. MAXIMUM FLOOR AREA RATIO (FAR) 1.45.
2. THE SELF STORAGE PROJECT SHALL BE DEVELOPED WITH A MINIMUM OPEN SPACE OF 25%.
3. ALL PARKING SPACES SHALL HAVE A MINIMUM DIMENSION OF 10 FEET WIDE BY 20 FEET DEEP.
4. THE MAXIMUM BUILDING HEIGHT SHALL BE 3 STORIES WITH A MAXIMUM HEIGHT OF 40 FT. TO THE MAIN ROOF AND 45 FT. TO THE PARAPET.
5. PARKING IS TO BE PROVIDED AT THE MINIMUM RATE OF 1 PARKING SPACE PER 10,000 S.F. OF SELF STORAGE AREA PLUS 1 SPACE PER 2 EMPLOYEES.
6. THE FOLLOWING MINIMUM LANDSCAPE BUFFERS SHALL APPLY:
   a. NORTH (ADJACENT TO ATLANTIC BOULEVARD): 12FT. LANDSCAPE BUFFER WITH A 0.7 OPACITY CONSISTING OF 3.65 PLANT UNITS PER 100LF AND A 5' TALL DECORATIVE ALUMINUM FENCE.
   b. EAST (ADJACENT TO US HWY 17-92): 15 FT. LANDSCAPE BUFFER WITH A 0.5 OPACITY CONSISTING OF 2.7 PLANT UNITS PER 100LF AND A 5' TALL DECORATIVE ALUMINUM FENCE.
   c. WEST (ADJACENT TO M1 ZONED PROPERTY): N/A.
7. PARKING LOT LANDSCAPING IS TO BE PROVIDED IN ACCORDANCE WITH SCLDC SEC. 30.1292.
8. FOUNDATION LANDSCAPING IS TO BE PROVIDED ALONG THE FRONT OF THE BUILDING OUTSIDE THE AREAS PROVIDED FOR LOADING AND UNLOADING.
9. THE EXISTING BUILDING AND IMPERVIOUS COVERAGE WILL REQUIRE A BUILDING PERMIT TO DEMOLISH BEFORE CONSTRUCTION.
10. OUTDOOR STORAGE ON SITE SHALL BE PROHIBITED.
11. A/C UNITS SHALL BE SHIELDED FROM RESIDENTIAL VIEW OR PUBLIC RIGHT OF WAYS. HOWEVER, A LANDSCAPE HEDGE IS TO BE PROVIDED ALONG THE SOUTH SIDE OF THE A/C UNITS TO SCREEN THEM FROM ADJACENT PROPERTY ON THE SOUTH SIDE.
12. SITE LIGHTING SHALL BE FULLY SHIELDED.
13. ALL SIGNAGE SHALL BE CONSISTENT WITH SEMINOLE COUNTY LDC.
14. HOURS OF OPERATION: MONDAY–FRIDAY: 9:00 A.M. TO 6:00 P.M., SATURDAY: 9:00 A.M. TO 5:00 P.M.
15. A/C SCREENING ON SOUTH SIDE: A LANDSCAPE HEDGE IS TO BE PROVIDED ALONG THE SOUTH SIDE OF THE A/C UNITS TO SCREEN THEM FROM ADJACENT PROPERTY ON THE SOUTH SIDE. THE HEDGE MATERIAL SHALL BE A MINIMUM 24" TALL AT PLANTING AND SPACED A MAXIMUM 30" ON CENTER. A MINIMUM OF 100 HEDGE PLANTS SHALL BE PROVIDED.

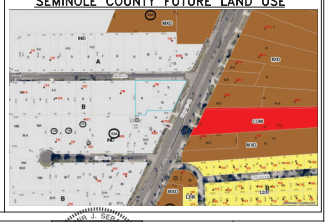
LOW IMPACT DESIGN CONSIDERATIONS:

1. A MINIMUM OF 8 PARKING SPACES SHALL BE CONSTRUCTED USING A PERMEABLE PAVER SYSTEM.
2. TREE PLANTING IN THE POND SHALL BE PROVIDED IN ADDITION TO OTHER LANDSCAPE REQUIREMENTS AS PART OF THE LANDSCAPE ENHANCEMENTS.

SEMINOLE COUNTY ZONING



SEMINOLE COUNTY FUTURE LAND USE



DATE	REVISIONS	BY	CHECKED
11/16/2022	1 PER SEMINOLE COUNTY COMMENTS	JT	SJS
12/28/2022	2 PER SEMINOLE COUNTY COMMENTS	JT	SJS
01/31/2023	3 PER SEMINOLE COUNTY COMMENTS DATED 01/18/2023	JT	SJS

MASTER DEVELOPMENT PLAN
ATLANTIC DRIVE SELF STORAGE
150 ATLANTIC DRIVE
SEMINOLE COUNTY, FLORIDA

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MASTER DEVELOPMENT PLAN

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

PROJECT NO. 21-181
SCALE 1"=20'
DATE AUGUST 26, 2022
SHEET NO. C-5
SHEET 5 OF 6

SCOTT J. SMITH
LICENSED PROFESSIONAL ENGINEER
No 42075
STATE OF FLORIDA
THIS ITEM, INCLUDING ANY BOUND SHEETS, WAS DIGITALLY SIGNED AND SEALED BY SAM J. MOSHIN, P.E. ON AUGUST 26, 2022 USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

21-181_MasterPlan.dwg

Appendix C – ITE Land Use Description and Time of Day Distribution

Land Use: 151 Mini-Warehouse

Description

A mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as “self-storage” facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point.

Time of Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday (nine study sites) and a Saturday (one study site) in a general urban/suburban setting.

	Percent of Peak Parking Demand	
Hour Beginning	**Weekday**	**Saturday**
12:00–4:00 a.m.	0	–
5:00 a.m.	0	–
6:00 a.m.	0	–
7:00 a.m.	0	–
8:00 a.m.	14	–
9:00 a.m.	71	–
10:00 a.m.	50	–
11:00 a.m.	79	–
12:00 p.m.	57	–
1:00 p.m.	64	91
2:00 p.m.	64	27
3:00 p.m.	79	55
4:00 p.m.	71	100
5:00 p.m.	100	91
6:00 p.m.	14	27
7:00 p.m.	0	0
8:00 p.m.	0	–
9:00 p.m.	0	–
10:00 p.m.	0	–
11:00 p.m.	0	–

Additional Data

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Massachusetts, Minnesota, and Texas.

Source Numbers

37, 314, 415, 556, 562

Appendix D – ITE Data Plot and Equation for Trip Generation

Mini-Warehouse
(151)

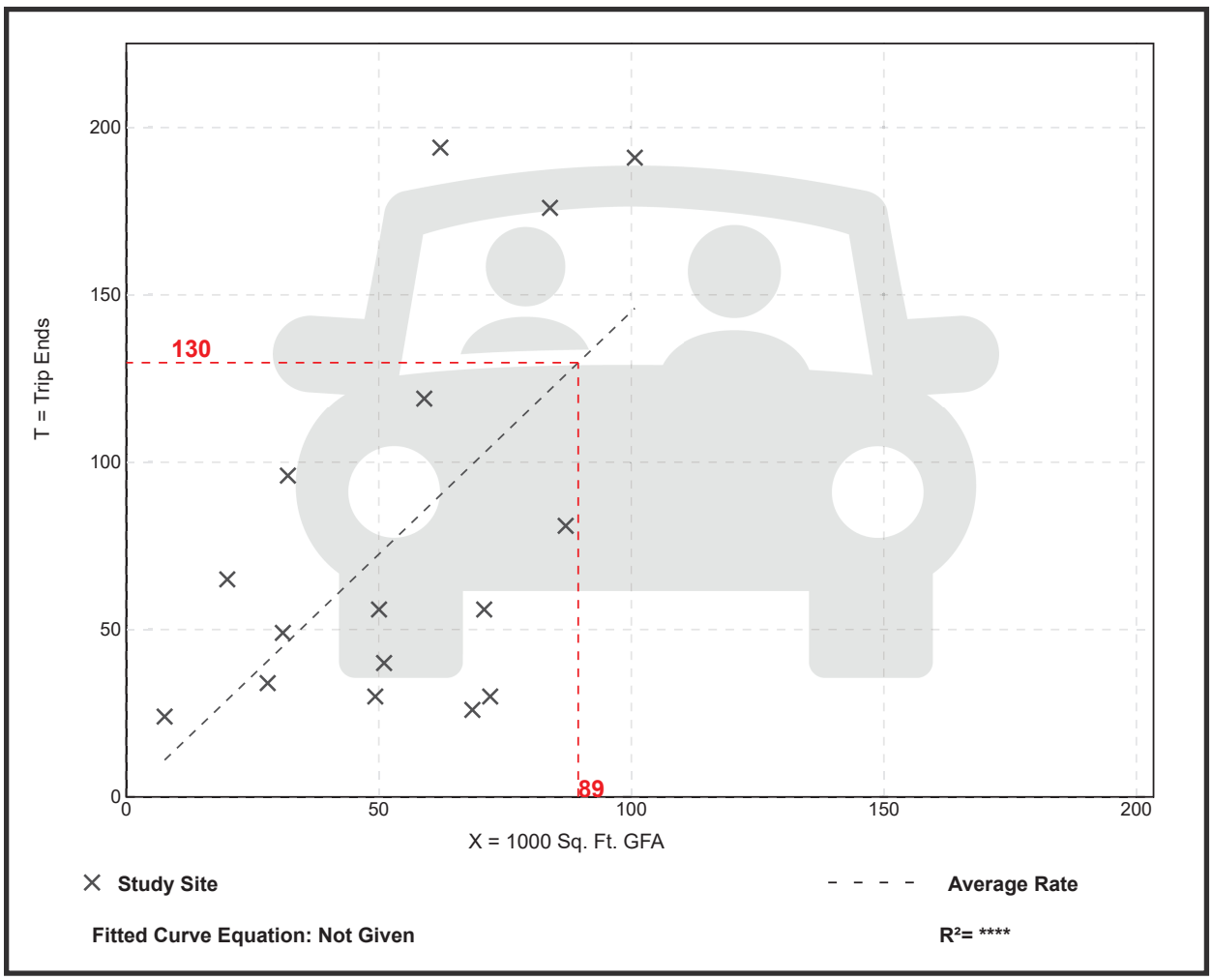
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 55
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.45	0.38 - 3.25	0.92

Data Plot and Equation



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Mini-Warehouse
(151)

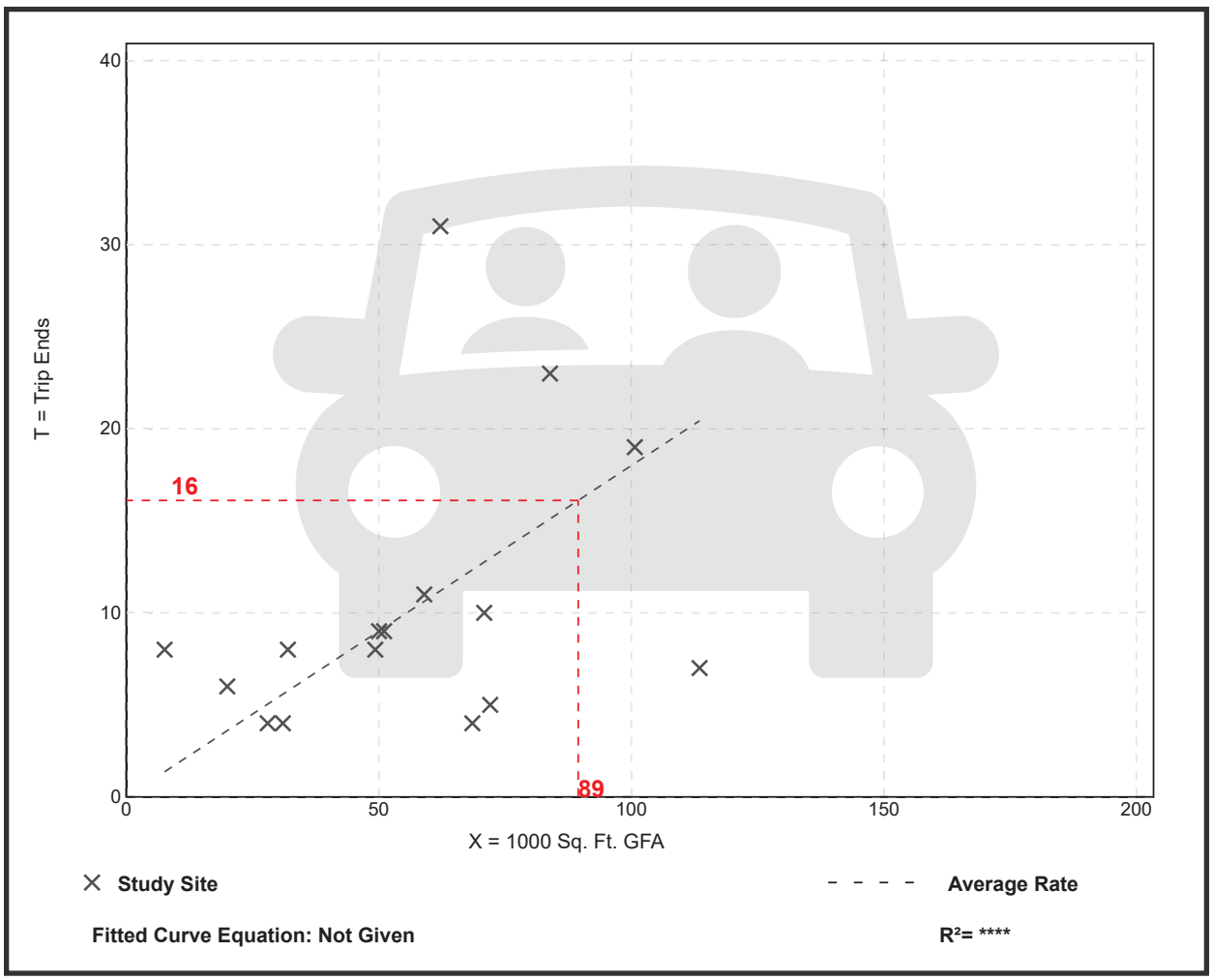
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 56
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.06 - 1.05	0.14

Data Plot and Equation



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Mini-Warehouse
(151)

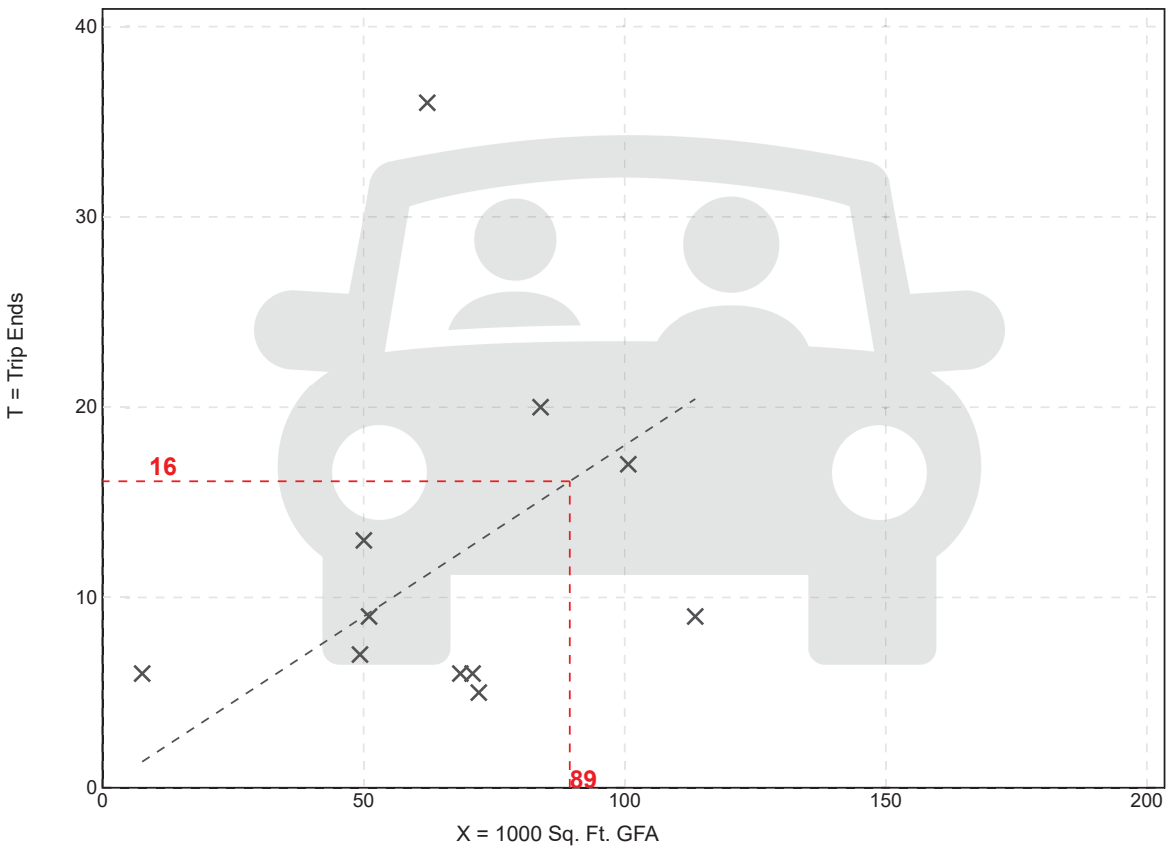
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
AP Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg1000 Sq. Ft. GFA: 89
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.07 - 0.79	0.16

Data Plot and Equation



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Appendix E - Weekday and Saturday Peak Period Parking Demand

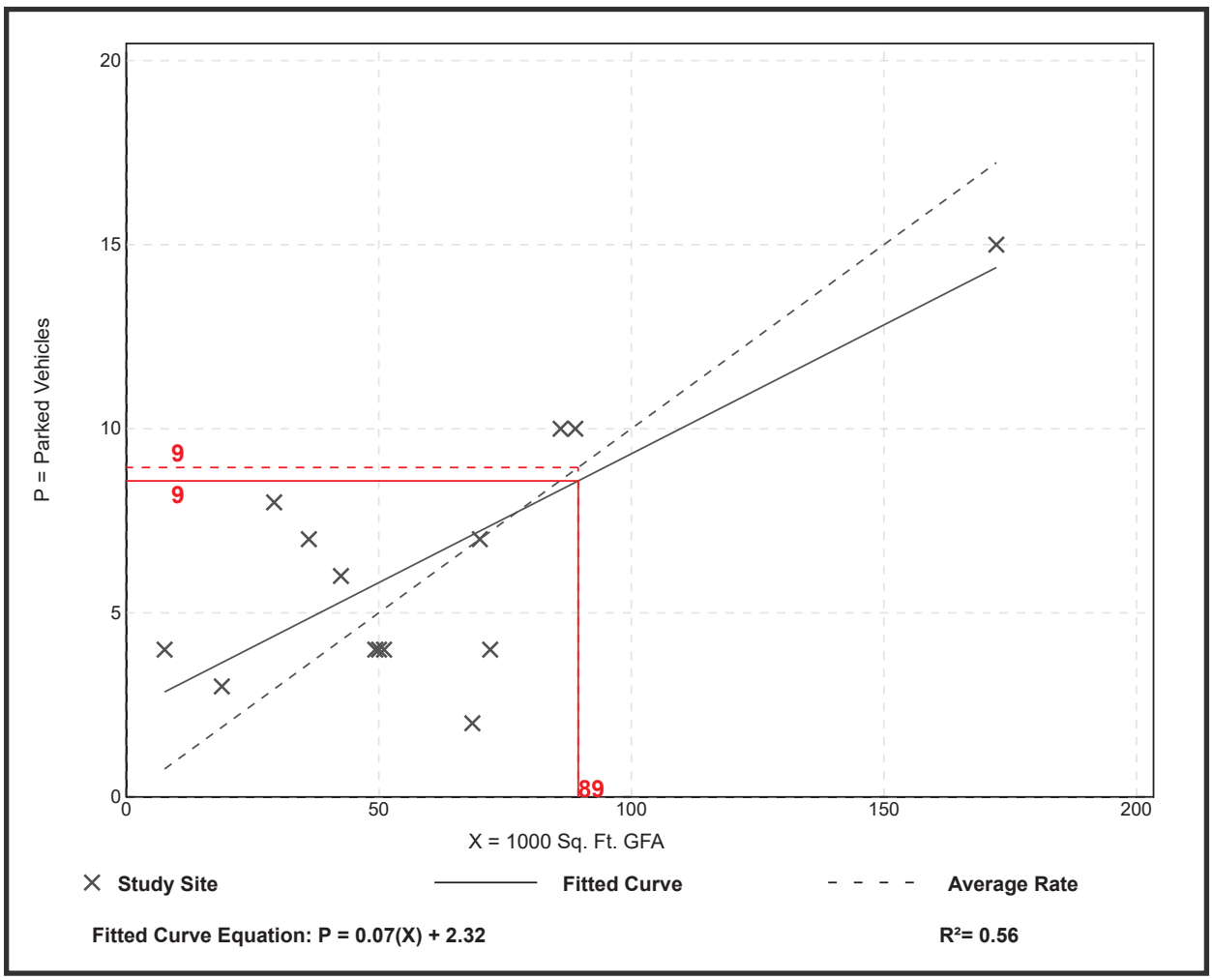
Mini-Warehouse
(151)

Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **4:00 - 6:00 p.m.**
Number of Studies: 14
Avg. 1000 Sq. Ft. GFA: 60

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.10	0.03 - 0.53	0.08 / 0.25	***	0.07 (70%)

Data Plot and Equation



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Mini-Warehouse
(151)

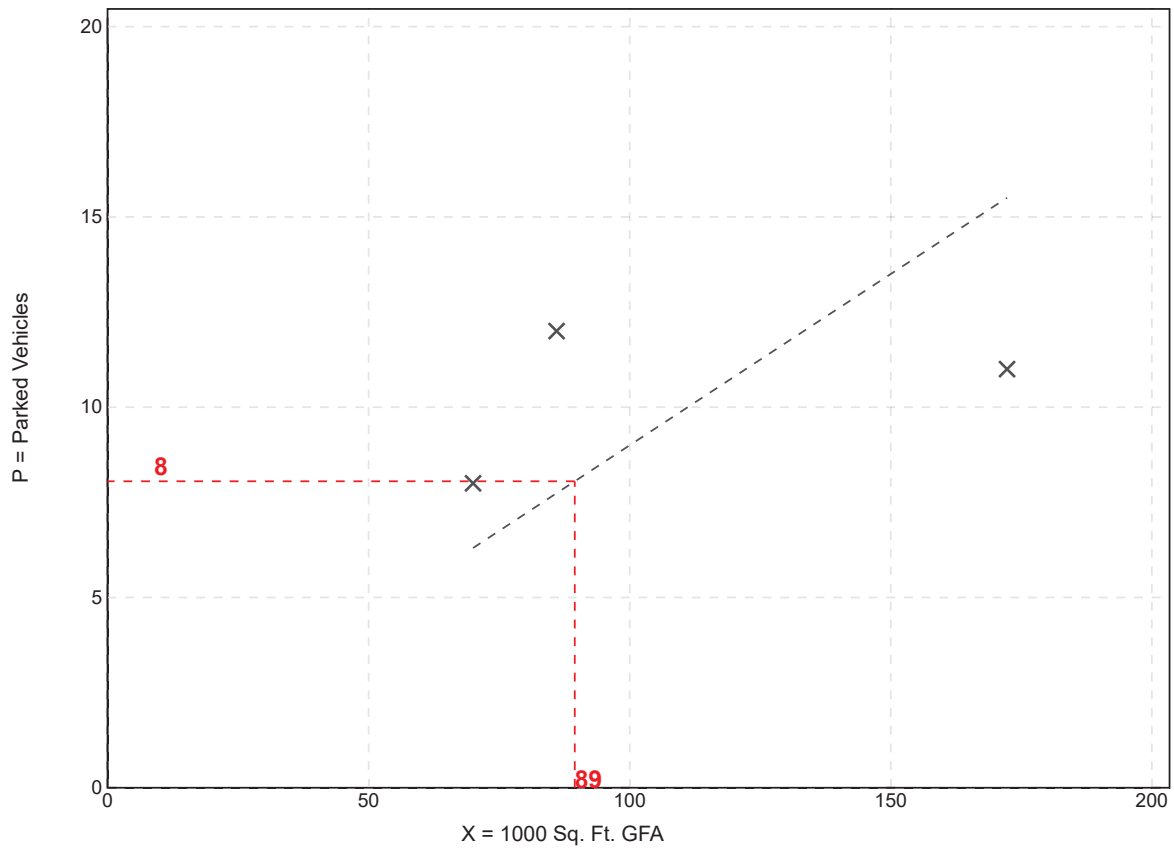
Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Saturday**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **1:00 - 5:00 p.m.**
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 109

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.09	0.06 - 0.14	0.08 / 0.14	***	0.04 (44%)

Data Plot and Equation

Caution – Small Sample Size



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Appendix F - Site Plans for Similar Developments

SITE STRIPING & SIGNAGE KEYNOTES

S1. PROPERTY BOUNDARY.

S2. HANDICAP PARKING STALL, TYPICAL.

S3. 24" THERMOPLASTIC STOP BAR. (4' BEHIND CROSSWALK) WITH 15 LF 6" DOUBLE YELLOW (THERMOPLASTIC)

S3A. 24" THERMOPLASTIC STOP BAR. ⚠1

S4. R1-1 HIGH INTENSITY REFLECTORIZED "STOP" SIGN.

S5. DIRECTIONAL ARROWS PER F.D.O.T. INDEX No. 17346, TYPICAL. (WHITE PAINT)

S6. HANDICAP SIGN.

S7. DO NOT ENTER SIGN.

S8. MONUMENT SIGN. (BY SEPARATE PERMIT) (MINIMUM 10' SETBACK) ⚠1

S9. 6" WIDE WHITE SPECIAL EMPHASIS CROSSWALK STRIPING (THERMOPLASTIC) PER FDOT # 17346

S9A. 5' WIDE WHITE STRIPING (PAINT) PER FDOT # 17346

S10. 6" WHITE THERMOPLASTIC EDGE LINE TO STRIPE DRIVEWAY 30' WIDE ⚠1

SITE CONSTRUCTION KEYNOTES

C1. 6" HEAD CURB, TYPICAL.

C1A. 6" FLUSH CURB, TYPICAL.

C2. F.D.O.T. TYPE "F" CURB & GUTTER PER INDEX No. 300, TYPICAL.

C3. F.D.O.T. 3' VALLEY GUTTER PER INDEX No. 300, TYPICAL.

C4. 3' CURB TRANSITION.

C5. ASPHALT PAVEMENT. LIGHT-DUTY IN PARKING SPACES.

C6. ASPHALT PAVEMENT. HEAVY-DUTY IN DRIVE AISLES.

C7. 6" CONCRETE PAVEMENT.

C8. 12'x10' DUMPSTER W/ 6" CONCRETE PAD & 6' HIGH BLOCK WALL ENCLOSURE ON 3 SIDES.

C9. MONOLITHIC CURB & SIDEWALK, TYPICAL MINIMUM 5' WIDE. ⚠1

C9A. 5' SIDEWALK, TYPICAL.

C10. HANDICAP ACCESS RAMP WITH A MAXIMUM 12:1 SLOPE, TYPICAL.

C11. DETECTABLE WARNING SURFACE PER FLORIDA BUILDING CODE, LATEST EDITION

C12. WHEELSTOP PER F.D.O.T. INDEX No. 300, TYPICAL.

C13. BOLLARD. 6" MIN. C.I.P.–D.I.P. OR STEEL, CONCRETE FILLED, & PAINTED OSHA YELLOW.

C14. FIRE HYDRANT ASSEMBLY, TYPICAL. DEVELOPER TO INSTALL TYPICAL FIRE HYDRANT ASSEMBLY PER O.U.C.'S WATER DETAIL SHEET.

C15. SANITARY CLEAN-OUT, TYPICAL.

C16. LIFT STATION.

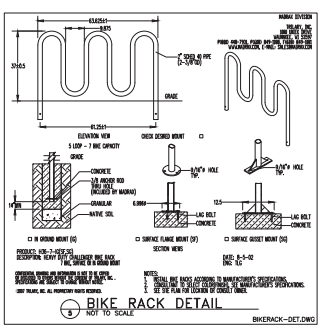
C17. PROPOSED TRANSFORMER.

C18. INSTALL BIKE RACK ON CONCRETE PAD

C19. INSTALL 6' HIGH CHAIN LINK FENCE

C20. INSTALL KEY PAD/CARD READER

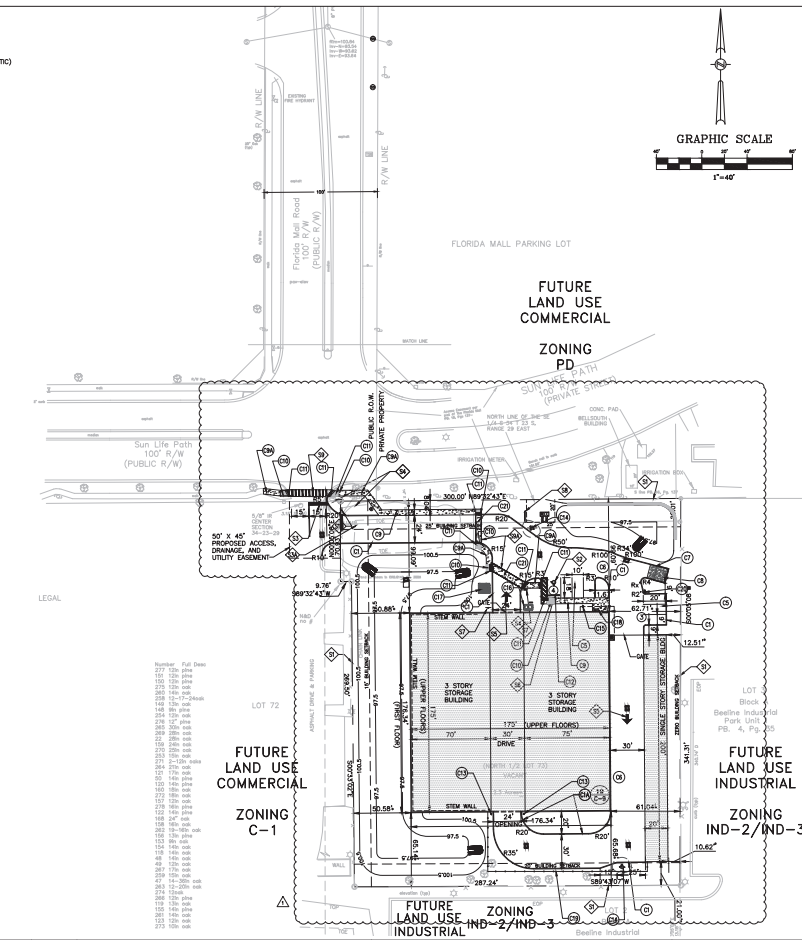
C21. CONSTRUCT PEDESTRIAN CROSSWALK OF CONTRASTING MATERIAL TO PAVEMENT. THIS CROSSING SHALL BE 6" THICK COLORED CONCRETE. ⚠1



BIKE RACK DETAIL

5 NOT TO SCALE

BIKERACK-DET.DWG



SITE DATA

PROPERTY LOCATION: 1600 SUN LIFE PATH, ⚠1 ORLANDO, FL 32809

PROPERTY ZONING: C-1

PROPERTY FUTURE LAND USE DESIGNATION: COMMERCIAL
EXISTING USE: VACANT
PROPOSED USE: COMMERCIAL
PROJECT AREA: 2.28± ACRES

PROPOSED GROSS FLOOR AREA: (3 STORY BLDG & 1 STORY BLDG)

THREE STORY BUILDING	86,625 S.F.
ONE STORY BUILDING	4,000 S.F.
TOTAL	90,625 S.F.
ALLOWABLE FLOOR AREA RATIO:	3.0
PROPOSED FLOOR AREA RATIO:	0.91

BUILDING SETBACKS (REQUIRED)

		BUILDING SETBACKS (PROPOSED)	
FRONT (NORTH)	25'	FRONT (NORTH)	99.09'
SIDE (EAST)	0'	SIDE (EAST)	10.7'
SIDE (WEST)	15'	SIDE (WEST)	50.6'
REAR (SOUTH)	20'	REAR (SOUTH)	21.0' ⚠1

MAXIMUM ALLOWABLE BUILDING HEIGHT 50'

BUILDING HEIGHT PROPOSED 45 ±

BUILDING CONSTRUCTION TYPE
TYPE II-B

BUFFER YARDS (REQUIRED)

FRONT (NORTH)	7'
SIDE (EAST)	7'
SIDE (WEST)	7'
REAR (SOUTH)	7'

BUFFER YARDS (PROPOSED)

FRONT (NORTH)	23'
SIDE (EAST)	12'
SIDE (WEST)	50'
REAR (SOUTH)	50'

PARKING

PARKING REQUIRED

MINI-WAREHOUSES (OVER 200 UNITES)	6 SPACES
TOTAL PARKING REQUIRED	6 SPACES
SPACES REQUIRED TO BE RESERVED FOR HANDICAP	1 SPACES

PARKING PROVIDED

STANDARD PARKING SPACES	6 SPACES
HANDICAP PARKING	1 SPACES
TOTAL PARKING PROVIDED	7 SPACES ⚠1

SITE AREA CALCULATIONS

BUILDING FOOTPRINT	35,098 ±S.F.		
PAVING	21,119 ±S.F.		
SIDEWALK	1,310 ±S.F.		
IMPERVIOUS AREA	57,525 ±S.F.	1.32 ±AC.	57.89 %
PERVIOUS AREA	41,694 ±S.F.	0.96 ±AC.	42.11 %
TOTAL SITE AREA	99,219 ±S.F.	2.28 ±AC.	100.00 %

MAXIMUM IMPERVIOUS COVER ALLOWED 80 %
IMPERVIOUS COVER PROPOSED 58 % ⚠1

MINIMUM OPEN SPACE REQUIRED 20 %
OPEN SPACE PROVIDED 42 %

FLOOD ZONE

FLOOD ZONE X PER FEMA F.I.R.M. PANEL 12095C0410F DATED: SEPTEMBER 25, 2009.

SOILS

44 – SMYRNA–SMYRNA, WET, FINE SAND
45 – SMYRNA–URBAN LAND COMPLEX

WETLAND STATEMENT

THERE ARE NO JURISDICTIONAL WETLANDS WITHIN THE PROJECT SITE.

HAZARDOUS MATERIALS STATEMENT

DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ONTO THE SITE IN SUCH QUANTITIES AS DEEMED HAZARDOUS 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 XVI OF CHAPTER 9.

COMMERCIAL DESIGN STANDARDS NOTE

THE PROJECT SHALL COMPLY WITH THE COMMERCIAL DESIGN STANDARDS SET FORTH IN ARTICLE XVI OF CHAPTER 9.

DUMPSTER NOTE

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

SIGNAGE NOTE

BILLBOARDS & POLE SIGNS SHALL BE PROHIBITED. GROUND & FASCIA SIGNS SHALL BE PER CHAPTER 31.5.

SITE NOTES

1. ALL CURB RADII ARE TO BE 5.0', TYPICAL. UNLESS NOTED OTHERWISE. EXCEPTION: RADII @ ISLANDS ARE TO FIT ISLAND WIDTHS, UNLESS NOTED OTHERWISE.
2. LANDSCAPE ISLAND NOSE NOT TO EXCEED THE PARKING STALL DEPTH &/OR PROTRUDE INTO DRIVE ISLES, TYPICAL.
3. ALL DIMENSIONS ARE PARALLEL & PERPENDICULAR TO A BEARING OF S89°32'43"W, UNLESS OTHERWISE INDICATED WITH A "~" OR BEARING.
4. LOWER CASE TEXT DENOTES SURVEY &/OR EXISTING CONDITION INFORMATION.

GATES

1. ALL ELECTRIC GATES SHALL BE EQUIPPED WITH SIREN OPERATED OPENERS WITH BATTERY BACKUP FOR EMERGENCY ACCESS AND AN APPROVED KEY SWITCH. ⚠1

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

DATE	REVISIONS	BY	CHECKED
1/05/2016	⚠1 REVISED PER ORANGE COUNTY COMMENTS DATED 12/13/2015.	WRH	WRH
11/6/2015	⚠1 REVISED PER ORANGE COUNTY COMMENTS DATED 10/30/2015.	KS	WRH

CONSTRUCTION PLANS
STORAGE FACILITY
1600 SUN LIFE PATH
ORLANDO, FLORIDA 32809

FEG FLORIDA ENGINEERING GROUP
Engineering the Future
5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE GEOMETRY PLAN

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
SJS	JT	WRH	WRH

PROJECT NO. 15-052
SCALE 1"=40'
DATE SEPTEMBER 24, 2015
DRAWING NO. C-5
SHEET 6 OF 17

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE No. EB4000595
WILLIAM R. HOCHENSMITH, P.E.
LICENSE No. 39540

15-052_Plans.dwg

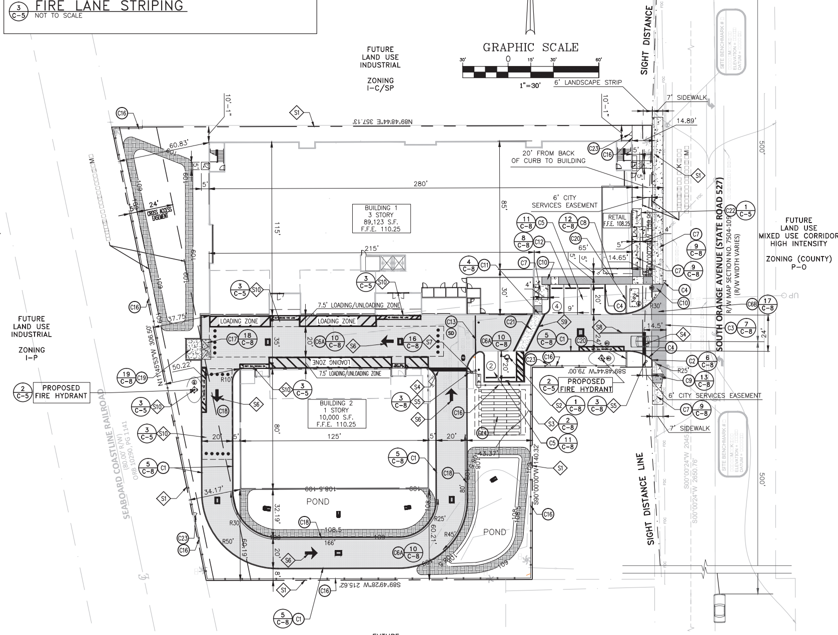
SITE STRIPING & SIGNAGE KEYNOTES

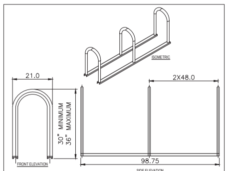
S1. PROPERTY BOUNDARY.
S2. HANDICAP PARKING STALL, TYPICAL.
S3. HANDICAP SIGN.
S4. 24" THERMOPLASTIC STOP BAR.
S5. 30"X30" R1-1 HIGH INTENSITY REFLECTORIZED "STOP" SIGN.
S6. DIRECTIONAL ARROWS PER F.D.O.T. INDEX No. 17346, TYPICAL.
S7. "DO NOT ENTER" SIGN.
S8. 30 FT. LONG 6" DOUBLE YELLOW STRIPING.
S9. CROSSWALK STRIPING.
S10. FIRE LANE STRIPING.

SITE CONSTRUCTION KEYNOTES

C1. 6" HEAD CURB, TYPICAL.
C2. F.D.O.T. TYPE "F" CURB & GUTTER PER INDER No. 300, TYPICAL.
C3. 3' VALLEY GUTTER.
C4. 3' CURB TRANSITION.
C5. ASPHALT PAVEMENT. LIGHT-DUTY IN PARKING SPACES.
C6A. ASPHALT PAVEMENT. HEAVY-DUTY IN DRIVE AISLES.
C6B. ASPHALT PAVEMENT WITHIN F.D.O.T. R.O.W.
C7. CONCRETE SIDEWALK, TYPICAL.
C8. MONOLITHIC CURB & SIDEWALK, TYPICAL.
C9. F.D.O.T. CURB CUT RAMPS PER INDEX No. 304, FOR HANDICAP ACCESS. ROADWAY @ ALL SIDEWALK CROSSINGS NOT TO EXCEED 2% CROSS SLOPE, TYPICAL.
C10. HANDICAP ACCESS RAMP WITH A MAXIMUM 12:1 SLOPE WHERE LENGTH IS LESS THAN 6 FT. AND A MAXIMUM 20:1 SLOPE WHEN LENGTH EXCEEDS 6FT.
C11. DETECTABLE WARNING SURFACE PER FLORIDA BUILDING CODE 2004.
C12. WHEELSTOP PER F.D.O.T. INDEX No. 300, TYPICAL.
C13. GATE SHALL BE PROVIDED WITH OPTICAL SENSOR (3M OPTICAL COMPATIBLE) FOR FIRE DEPARTMENT ACCESS.
C14. SEPTIC TANK AND DRAINFIELD SYSTEM.
C15. NOT USED.
C16. 6' HIGH BLACK VINYL COAT CHAIN LINK FENCE, MIN. 6 GAGE WITH TOP & BOTTOM RAILS.
C17. 6" THICK CONCRETE PAVEMENT.
C18. 24" DEEP CURB.
C19. 12'x10' INTERNAL MINIMUM CLEARANCE DUMPSTER WITH 6' CONCRETE PAD, 6' HIGH BLOCK WALL ENCLOSURE ON 3 SIDES AND OPAQUE DECORATIVE GATE.
C20. 4' HIGH STREET WALL (BY OTHERS).
C21. COLORED STAMPED ASPHALT PAVEMENT.
C22. BICYCLE RACK.
C23. PEDESTRIAN GATE.

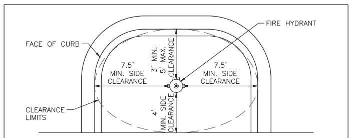
3/C-5 FIRE LANE STRIPING
NOT TO SCALE





NOTES:
1. BICYCLE RACKS SHALL HAVE A MINIMUM TUBE DIAMETER OF 1.9 INCHES AND BE POWDER COATED OR COATED WITH ANOTHER WEATHER PROOF SURFACE AS MAY BE APPROVED BY THE ZONING MANAGER.
2. BICYCLE RACKS SHALL BE A MAXIMUM HEIGHT OF 36 INCHES, A MINIMUM OF 30 INCHES AN CENTER BETWEEN HORIZONTAL ROWS, AND A MINIMUM OF 24 INCHES FROM ANY BUILDING WALL.

1/C-5 INVERTED U BIKE RACK



2/C-5 FIRE HYDRANT CLEARANCE DETAIL
NOT TO SCALE
FIRE-HYD-CLEARANCE-DET.dwg

SIGHT DISTANCE
DESIGN SPEED: 40 MPH
SIGHT DISTANCE: 500 FT.
*PER F.D.O.T. INDEX 546

M.O.T. & F.D.O.T. GENERAL NOTES

1. MAINTENANCE OF TRAFFIC (M.O.T.) RELATED TO WORK IMPACTING SR 527 SHALL BE PROVIDED BY CONTRACTOR PURSUANT TO F.D.O.T. INDEX No. 613 AND INDEX NO. 660. M.O.T. SETUP TO BE SUPERVISED BY A CERTIFIED PERSON.
2. ALL AREAS WITHIN THE R.O.W. AFFECTED BY UTILITY CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL OR BETTER THAN EXISTING CONDITION.
3. ALL DISTURBED DIRT AREAS ARE TO BE SODDED.
4. TEST RESULTS ARE REQUIRED TO BE SUBMITTED TO ENGINEER & F.D.O.T. UPON REQUEST.
5. CONTRACTOR SHALL NOTIFY F.D.O.T. OFFICE 48 HOURS PRIOR TO WORK IN THE F.D.O.T. R.O.W. OR LANE CLOSURE.
6. SIGNING & STRIPING SHALL BE PER F.D.O.T. INDEX 17346.
7. CONTRACTOR SHALL SUBMIT TO F.D.O.T. A COPY OF THEIR CERTIFICATE OF LIABILITY INSURANCE PRIOR TO START OF CONSTRUCTION IN F.D.O.T. R.O.W.
8. THE ENGINEERS CERTIFICATION ALONG WITH AS-BUILT PLANS MUST BE SUBMITTED TO F.D.O.T. WITHIN 30 DAYS OF COMPLETION OF PROJECT.
9. ALL WORKS WITHIN THE FDOT RIGHT-OF-WAY TO BE IN ACCORDANCE WITH LATEST EDITION OF F.D.O.T. DESIGN STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE.
10. ALL SIDEWALKS SHOULD CONFORM TO CURRENT ADA REQUIREMENTS.
11. PRIOR TO ANY WORK REQUIRING LANE CLOSURES, MOBILE OPERATIONS OR TRAFFIC PACING OPERATIONS, THE CONTRACTOR OR PERMITTEE SHALL SUBMIT A REQUEST TO THE DEPARTMENT THAT INCLUDES THE TIME, LOCATION, AND DESCRIPTION OF WORK BEING PERFORMED. THE LANE CLOSURE REQUEST SHALL BE SUBMITTED TO THE DEPARTMENT A MINIMUM OF 2 WEEKS PRIOR TO THE PROPOSED CLOSURE DATE AND MUST BE APPROVED BY THE DEPARTMENT BEFORE WORK REQUIRING THE CLOSURE MAY BEGIN WITHIN THE FDOT RIGHT OF WAY. SUBMIT LANE CLOSURE REQUESTS THROUGH THE LANE CLOSURE INFORMATION SYSTEM (LCIS), FOUND AT THE FOLLOWING WEBSITE: HTTPS://LCIS.DOT.STATE.FL.US/
12. NO LANE CLOSURES ALLOWED SOUTHBOUND SR 527 BETWEEN 7 AM TO 9 PM.

SITE DATA

PROPERTY LOCATION:	3854 S. ORANGE AVE. ORLANDO, FL 32806
PROJECT AREA:	2.0± ACRE
EXISTING ZONING:	MU-1/SP
SPECIALLY PLANNED OVERLAY	ORANGE/ MICHIGAN SPECIAL OVERLAY
PROPERTY FUTURE LAND USE:	MIXED USE CORRIDOR HIGH INTESITY
EXISTING USE:	WAREHOUSE/ PACKING PLANT
PROPOSED USE:	STORAGE FACILITY/ RETAIL
ALLOWABLE FAR:	0.50
*PROPOSED FAR:	*0.45

* PER CITY OF ORLANDO CODE FIGURE 2D.LDC FOOTNOTE 31 FOR PERSONAL STORAGE FACILITIES IN THE MU-1 DISTRICT, THE FAR CALCULATION SHALL INCLUDE THE FIRST FLOOR ONLY.

PROPOSED BUILDING 1 GROSS FLOOR AREA (INCLUDING 1,100 S.F. RETAIL): 89,123 S.F.
PROPOSED BUILDING 2 GROSS FLOOR AREA: 10,000 S.F.

TOTAL PROPOSED BUILDING AREA FOR F.A.R. CALCULATION: (29,363 S.F. + 10,000 S.F.) 39,363 S.F.

BUILDING SETBACKS (REQUIRED)

FRONT	(EAST)	0'(MIN.)/ 15'(MAX.)
SIDE	(NORTH)	0'
SIDE	(SOUTH)	0'
REAR	(WEST)	20'

BUILDING SETBACKS (PROPOSED)

FRONT	(EAST)	14.6'
SIDE	(NORTH)	10'-1"
SIDE	(SOUTH)	60'
REAR	(WEST)	34'

MAXIMUM ALLOWABLE BUILDING HEIGHT
35' (3-STORIES); 75' CONDITIONAL

BUILDING HEIGHT PROPOSED
BUILDING 1: 3-STORIES < 35'
BUILDING 2: 1-STORY <35'

BUFFER YARDS

PROPOSED USE			INTENSITY CLASS	ABUTTING USE	INTENSITY CLASS	REQUIRED BUFFER	PROPOSED BUFFER
STORAGE FACILTY	FRONT	(EAST)	V	OFFICE	III	B	B
STORAGE FACILTY	SIDE	(NORTH)	V	STORAGE	V	NONE	10'-1"
STORAGE FACILTY	SIDE	(SOUTH)	V	VEHICLE REPAIR	VI	NONE	5'
STORAGE FACILTY	REAR	(WEST)	V	WAREHOUSE	V	NONE	8'

PARKING

PARKING REQUIRED

STORAGE FACILITY	(OFFICE 3 SPACES)	3 SPACES
RETAIL*		0 SPACE
TOTAL PARKING REQUIRED		3 SPACES
SPACES REQUIRED TO BE RESERVED FOR HANDICAP		1 SPACES

* PER CITY OF ORLANDO CODE SECTION 58.774.1. THE FIRST 1,500 SQUARE FEET OF ADDITIONAL PRINCIPAL USE SHALL BE EXEMPT FROM THE MINIMUM AND MAXIMUM PARKING SPACE REQUIREMENTS.

PARKING PROVIDED

STANDARD PARKING SPACES	5 SPACES
HANDICAP PARKING	1 SPACES
TOTAL PARKING PROVIDED	6 SPACES
TOTAL BICYCLE SPACES PROVIDED	6 SPACES

SITE AREA CALCULATIONS (PROPOSED)

BUILDING FOOTPRINT	39,363 S.F.		
PAVING	18,625 S.F.		
SIDEWALK	920 S.F.		
IMPERVIOUS AREA	58,908 S.F.	1.35 AC.	67.64 %
PERVIOUS AREA	28,183 S.F.	0.65 AC.	32.36 %
TOTAL SITE AREA	87,091 S.F.	2.00 AC.	100.00 %

MAXIMUM IMPERVIOUS COVER ALLOWED 85 %
IMPERVIOUS COVER PROPOSED 68 %

FLOOD ZONE
FLOOD ZONE X PER FEMA F.I.R.M. PANEL 12095C0245F DATED: 09/25/2009

SOILS
50-URBAN LAND 7-CANDLER-URBAN LAND COMPLEX

WETLAND STATEMENT
THERE ARE NO JURISDICTIONAL WETLANDS WITHIN THE PROJECT SITE.

HAZARDOUS MATERIALS STATEMENT
DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ONTO THE SITE IN SUCH QUANTITIES AS DEEMED HAZARDOUS 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 CITY OF ORLANDO LAND DEVELOPMENT CODE EXCEPT AS OTHERWISE APPROVED BY THIS CONDITIONAL USE PLAN.

SIGNAGE NOTE
SIGNAGE SHALL COMPLY WITH CITY OF ORLANDO LAND DEVELOPMENT CODE DESIGN STANDARDS EXCEPT AS OTHERWISE APPROVED BY THIS CONDITIONAL USE PLAN.

SITE NOTES

1. ALL CURB RADII ARE TO BE 5.0', TYPICAL. UNLESS NOTED OTHERWISE. EXCEPTION: RADII @ ISLANDS ARE TO FIT ISLAND WIDTHS, UNLESS NOTED OTHERWISE.
2. LANDSCAPE ISLAND NOSE NOT TO EXCEED THE PARKING STALL DEPTH &/OR PROTRUDE INTO DRIVE ISLES, TYPICAL.
3. LOWER CASE TEXT DENOTES SURVEY &/OR EXISTING CONDITION INFORMATION.
4. PARKING STRIPES SHALL BE 6" WHITE STRIPING.
5. ALL AFFECTED SIDEWALKS, RAMPS AND CROSSWALKS SHALL BE BUILT AND INSPECTED TO MEET CURRENT ADA REQUIREMENTS.

NOTE:
ALL PLANT MATERIALS WITHIN SIGHT DISTANCE TRIANGLES SHALL BE MAINTAINED TO CREATE A CLEAR ZONE BETWEEN 2' AND 6' ABOVE GRADE.

DATE		REVISIONS	BY	CHECKED
07/15/16	1	REVISED PER O.U.C. COMMENTS DATED 07/06/16	JT	SJS
08/11/16	2	REVISED PER F.D.O.T COMMENTS DATED 06/13/16	SHP	SJS
09/16/16	3	REVISED PER CITY COMMENTS DATED 08/22/16	JT	SJS
10/21/16	4	REVISED PER CITY & FDOT COMMENTS	JT	SJS
11/28/16	5	REVISED PER CITY COMMENTS DATED 11/18/16	JT	SJS
01/10/17	6	FIELD REVISION FOR SEPTIC TANK CONSTRUCTION	SHP	SJS
11/15/17	7	FOR FIELD CONDITIONS	JT	SJS
01/30/18	8	REVISED PER FDOT COMMENTS DATED 01/25/18		SJS

CONSTRUCTION PLANS
STORAGE FACILTY
3854 S. ORANGE AVE.
ORLANDO, FL 32806

FEG FLORIDA ENGINEERING GROUP
Engineering the Future
5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
Fax: 407-895-0325
www.feg-inc.us

SITE GEOMETRY PLAN

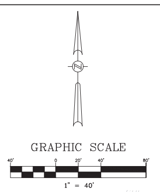
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
SJS	JT	SJS	SJS

PROJECT NO. 15-097
SCALE 1"=30'
DATE MAY 23, 2016
SHEET NO. C-5
SHEET 5 OF 13

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE No. EB-0006505
SAMIR J. SEBAALI, P.E.
LICENSE NO. 42075
STATE OF FLORIDA PROFESSIONAL ENGINEER No 42075

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (ENGINEER), P.E. ON (DATE) USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGANTURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

15-097_Plans.dwg



SITE CONSTRUCTION KEYNOTES

C1. 6" HEAD CURB.
C1A. RIBBON CURB.
C2. PERVIOUS CONCRETE.
C3. HEAVY-DUTY ASPHALT PAVEMENT IN DRIVE AISLES.
C4. LIGHT-DUTY ASPHALT PAVEMENT IN PARKING SPACES.
C5. CONCRETE SIDEWALK, TYPICAL. (5' MINIMUM)
C6. MONOLITHIC CURB & SIDEWALK, TYPICAL.
C7. HANDICAP ACCESS RAMP WITH A MAXIMUM 12:1 SLOPE, TYPICAL.
C8. 54" HIGH WOODEN SPLIT RAIL FENCE.
C9. DETECTABLE WARNING SURFACE PER FLORIDA BUILDING CODE.
C10. SANITARY LIFT STATION.
C11. SANITARY CLEANOUT.
C12. BIKE RACK.
C13. DUMPSTER.

SITE STRIPING & SIGNAGE KEYNOTES

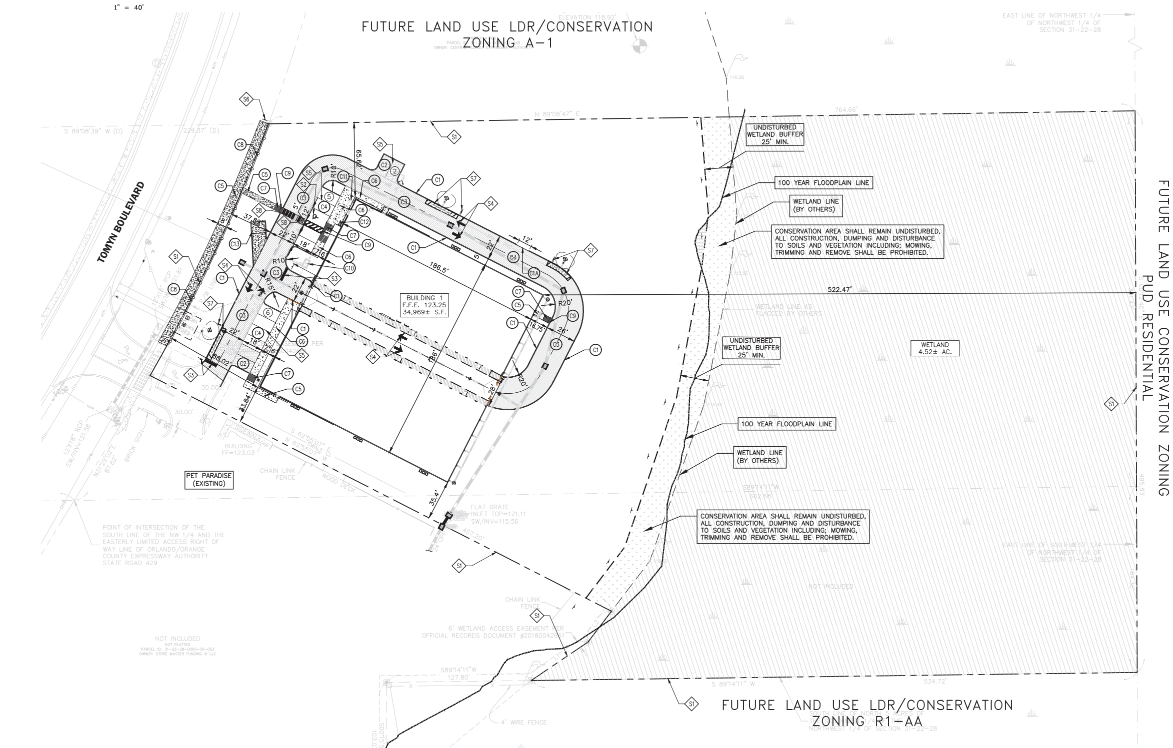
S1. PROPERTY BOUNDARY.
S2. HANDICAP PARKING STALL, TYPICAL.
S3. 24" THERMOPLASTIC STOP BAR WITH R1-1 HIGH INTENSITY REFLECTORIZED "STOP" SIGN.
S4. DIRECTIONAL ARROWS PER F.D.O.T. INDEX No. 711-001, TYPICAL. (WHITE THERMOPLASTIC)
S5. 4" WIDE WHITE PAINTED STRIPING, TYPICAL.
S6. INSTALL "END OF SIDEWALK" SIGN.
S7. "NO PARKING, FIRE LANE" STRIPING AND SIGNAGE PER DETAIL ON SHEET C-13 AND IN ACCORDANCE WITH NFPA 1 CHAPTER 18.
S8. CROSSWALK STRIPING PER LATEST F.D.O.T. STANDARD PLANS INDEX 711-001, TYPICAL.

FENCE NOTE

INSTALL 54" HIGH WOODEN SPLIT RAIL FENCE ALONG ENTIRE FRONTAGE. FENCE SHALL MATCH STYLE AND COLOR OF ADJACENT PET PARADISE FENCE. SEE DETAIL SHEET.

SITE LEGEND

- PROPERTY LINE
- CONCRETE PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- CONSERVATION AREAS
- WETLAND BUFFER AREAS
- PERVIOUS CONCRETE



SITE DATA

PROPERTY LOCATION	TOMYN BLVD., OCOEE, FL 34787
PARCEL NUMBER:	31-22-28-0000-00-050
EXISTING PROPERTY ZONING:	PUD-COMM
EXISTING PROPERTY USE:	COMM VACANT LAND
FUTURE LAND USE:	COMM
PROPOSED USE:	SELF STORAGE FACILITY W/727 UNITS
TOTAL SITE AREA:	8.09± ACRES
WETLAND AREA:	4.52±
WETLAND BUFFER AREA:	0.26±
NET DEVELOPABLE AREA:	3.31±
PROPOSED GROSS FLOOR AREA	103,788 S.F.

MAXIMUM ALLOWABLE BUILDING HEIGHT

HABITABLE SPACE	45'-0"
NON-HABITABLE SPACE	49'-5"
PROPOSED BUILDING HEIGHT	49'-5"

BUILDING CONSTRUCTION TYPE

TYPE II-B FULLY SPRINKLERED

PARKING

PARKING REQUIRED	
SELF STORAGE FACILITY (727 UNITS @ 1 SPACE PER 75 UNITS)	10 SPACES
SELF STORAGE FACILITY (1 EMPLOYEE @ 1 SPACE PER 1 EMPLOYEE)	1 SPACE
SELF STORAGE FACILITY (2 CUSTOMER SPACES)	2 SPACES
TOTAL PARKING REQUIRED	13 SPACES
PARKING PROVIDED	
SELF STORAGE FACILITY STANDARD SPACES	12 SPACES
SELF STORAGE FACILITY HANDICAP SPACES	1 SPACES
TOTAL PARKING PROVIDED	13 SPACES

SITE AREA CALCULATIONS

SELF STORAGE FACILITY (FOOTPRINT)	34,596 ±S.F.		
ASPHALT PAVEMENT	15,617 ±S.F.		
SIDEWALK & CONCRETE PAVEMENT	2,362 ±S.F.		
IMPERVIOUS AREA	52,575 ±S.F.	1.21 ±AC.	36.56 %
PERVIOUS AREA	91,609 ±S.F.	2.10 ±AC.	63.44 %
TOTAL SITE AREA	144,184 ±S.F.	3.31 ±AC.	100.00 %
MAXIMUM IMPERVIOUS COVER ALLOWED (NET DEVELOPABLE)			**37 %**
IMPERVIOUS COVER PROPOSED			**36.56 %**
MINIMUM OPEN SPACE REQUIRED (NET DEVELOPABLE)			**20 %**
PERVIOUS AREA COVER PROPOSED			**63.44 %**

BUILDING SETBACKS (REQUIRED) / **BUILDING SETBACK (PROPOSED)**

SELF STORAGE FACILITY

FRONT	(WEST)(TOMYN ROAD)	35'	FRONT	(WEST)(TOMYN ROAD)	88'
REAR	(EAST)(WETLAND)	25'	REAR	(EAST)(WETLAND)	522'
SIDE	(NORTH)	10'	SIDE	(NORTH)	66'
SIDE	(SOUTH)(PET RESORT)	10'	SIDE	(SOUTH)(PET RESORT)	36'

LANDSCAPE BUFFERS (REQUIRED) / **LANDSCAPE BUFFERS (PROPOSED)**

SELF STORAGE FACILITY

FRONT	(WEST)(TOMYN ROAD)	15'*	FRONT	(WEST)(TOMYN ROAD)	37'
REAR	(EAST)(WETLAND)	NONE	REAR	(EAST)(WETLAND)	NONE
SIDE	(NORTH)	10'	SIDE	(NORTH)	10'
SIDE	(SOUTH)(PET RESORT)	10'*	SIDE	(SOUTH)(PET RESORT)	10'

* BUFFER WIDTHS WERE APPROVED AS PART OF THE PUD APPROVAL.

FLOOD ZONE

FLOOD ZONE A PER FEMA F.I.R.M. PANEL 12095C0220F DATE: 09/25/09. BASED ON THE LAKE ROBERTS DRAINAGE STUDY UNDERTAKEN BY ORANGE COUNTY, THE 100 YEAR FLOOD ELEVATION IS ESTIMATED AT ELEVATION 116.31' NAVD 1988.

SOILS

ZOLFO FINE SAND, SMYRNA FINE SAND, SANIBEL MUCK.

SITE NOTES

1. ALL CURB RADII ARE TO BE 5.0', TYPICAL UNLESS NOTED OTHERWISE. EXCEPTION: RADII @ ISLANDS ARE TO FIT ISLAND WIDTHS, UNLESS NOTED OTHERWISE.
2. LANDSCAPE ISLAND NOSE NOT TO EXCEED THE PARKING STALL DEPTH &/OR PROTRUDE INTO DRIVE ISLES, TYPICAL.
3. ALL DIMENSIONS ARE PARALLEL & PERPENDICULAR TO BEARING S62° 56' 10.87"E UNLESS OTHERWISE INDICATED WITH A '*' OR BEARING.
4. LOWER CASE TEXT DENOTES SURVEY &/OR EXISTING CONDITION INFORMATION.
5. ALL DIMENSIONS ARE MEASURED FROM EDGE OF PAVEMENT.

DATE		REVISIONS	BY	CHECKED
12/14/2021	1	REVISED PER SJRWMD COMMENTS DATED 11/12/2021	WA	JAA
12/14/2021	2	REVISED PER CITY OF OCOEE COMMENTS DATED 11/29/2021	WA	JAA
02/02/2022	3	REVISED PER CITY OF OCOEE COMMENTS DATED 01/28/2022	WA	JAA
03/18/2022	4	REVISED PER CITY OF OCOEE UTILITY COMMENTS DATED 03/16/2022	WA	JAA
04/12/2022	5	REVISED PER FDEP - ADD LIFT STATION BACKFLOW	WRH	WRH
09/27/2022	6	REVISED PER CONTRACTOR RFI	WA	WRH

BARKARITAVILLE PUD
OCOEE-TOMYN SELF STORAGE FACILITY
FINAL CONSTRUCTION PLANS
OCOEE, FLORIDA

FEG FLORIDA ENGINEERING GROUP
Engineering the Future
5127 S. Orange Avenue, Suite 200
Orlando, FL 32809
Phone: 407-895-0324
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www.feg-inc.us

SITE GEOMETRY PLAN

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
JAA	WA	JAA	JAA

PROJECT NO. 20-172
SCALE 1"=40'
DATE AUGUST 06, 2021
SHEET NO. C-7
SHEET 7 OF 21

FLORIDA ENGINEERING GROUP, INC.
CERTIFICATE No. EB-0006595
No 45128
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (ENGINEER), P.E. ON (DATE) USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

20-172_Geometry.dwg