



Transportation Consultants



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West Palm Beach, FL 33411-6700
(561) 296-9698 Fax (561) 684-6336
Certificate of Authorization Number: 7989

April 21, 2017

Mr. Kori Benton
City of Ft. Pierce Planning Department
100 N. US Highway 1
Ft. Pierce, FL 34950

Re: Tropic Supply Ft. Pierce - #PTC17-026

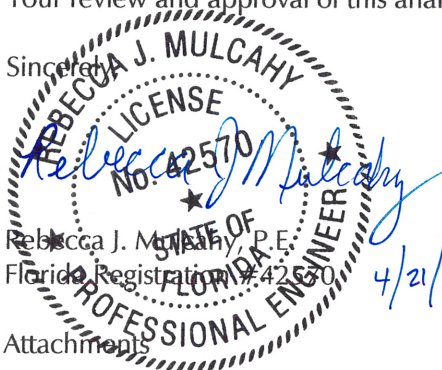
Dear Mr. Benton:

The purpose of this letter is to provide a traffic statement for the above referenced project to determine if the proposed warehouse expansion meets the requirements of the City's Land Development Standards. The site is located on the south side of South Market Avenue, east of Oleander Avenue as shown on Attachment 1. There is an existing 14,583 SF warehouse/office building on the site. It is now proposed to increase the building to 41,989 SF.

A trip generation analysis is provided on Attachments 2A and 2B for Daily, AM Peak Hour and PM Peak Hour. Based on the net increase in trip generation of 8 peak hour trips, a Traffic Impact Study is not required. As we discussed on March 8, 2017, only a traffic assignment and significance level are required. Attachment 3 provides the project traffic distribution. The project trip assignment and significance level are shown on Attachment 4. The impacts are all under 1% of the service volume. Therefore, the project has an insignificant impact on the surrounding roadway network. Attachment 5 provides the projected driveway volumes.

Your review and approval of this analysis is appreciated.

Sincerely,


Rebecca J. Mulcahy, P.E.
Florida Registration #42570
4/21/17

Attachments

cc: Jeff Falkanger



TROPIC SUPPLY
FT. PIERCE

ATTACHMENT 1
PROJECT LOCATION

17-026
4-11-17

PTC

**Attachment 2A
Tropic Supply Ft. Pierce
Trip Generation - Daily**

Existing

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips	External Trips	Pass-by Trips (1)	New External Trips
Warehouse	150	12,774 SF	3.56 /1000 SF	45	5	40	4	36
Office	710	1,809 SF	Ln (T) = 0.76Ln (X)+3.68	62	5	57	6	51
TOTALS		14,583 SF		107	10	97	10	87

Proposed

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips	External Trips	Pass-by Trips (1)	New External Trips
Warehouse	150	39,674 SF	3.56 /1000 SF	141	8	133	13	120
Office	710	2,315 SF	Ln (T) = 0.76Ln (X)+3.68	75	8	67	7	60
TOTALS		41,989 SF		216	16	200	20	180

Net New Trips 93

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.

Attachment 2B
Tropic Supply Ft. Pierce
Trip Generation - Peak Hour

AM PEAK HOUR

Existing

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips		Internal Trips		External Trips		Pass-by Trips (1)	New Trips			
				In	Out	In	Out	In	Out		In	Out	Total	
Warehouse	150	12,774 SF	0.30 /1,000 SF (79/21)	3	1	4	-	10.0%	3	1	4	3	1	4
Office	710	1,809 SF	Ln (T) = 0.8Ln (X)+1.57 (88/12)	7	1	8	-	4.0%	7	1	8	6	1	7
TOTALS		14,583 SF		10	2	12	-	0.0%	10	2	12	9	2	11

Proposed

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips		Internal Trips		External Trips		Pass-by Trips (1)	New Trips			
				In	Out	In	Out	In	Out		In	Out	Total	
Warehouse	150	39,674 SF	0.30 /1,000 SF (79/21)	9	3	12	1	5.0%	9	2	11	8	2	10
Office	710	2,315 SF	Ln (T) = 0.8Ln (X)+1.57 (88/12)	8	1	9	1	10.0%	7	1	8	6	1	7
TOTALS		41,989 SF		17	4	21	2	9.5%	16	3	19	14	3	17

Net New Trips 5 1 6

PM PEAK HOUR

Existing

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips		Internal Trips		External Trips		Pass-by Trips (1)	New Trips			
				In	Out	In	Out	In	Out		In	Out	Total	
Warehouse	150	12,774 SF	0.32 /1,000 SF (25/75)	1	3	4	-	10.0%	1	3	4	1	3	4
Office	710	1,809 SF	1.49 /1,000 SF (17/83)	1	2	3	-	10.0%	1	2	3	1	2	3
TOTALS		14,583 SF		2	5	7	-	0.0%	2	5	7	2	5	7

Proposed

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips		Internal Trips		External Trips		Pass-by Trips (1)	New Trips			
				In	Out	In	Out	In	Out		In	Out	Total	
Warehouse	150	39,674 SF	0.32 /1,000 SF (25/75)	3	10	13	-	3.0%	3	10	13	3	9	12
Office	710	2,315 SF	1.49 /1,000 SF (17/83)	1	2	3	-	10.0%	1	2	3	1	2	3
TOTALS		41,989 SF		4	12	16	-	0.0%	4	12	16	4	11	15

Net New Trips 2 6 8

(1) Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.



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TROPIC SUPPLY
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ATTACHMENT 3
PROJECT TRAFFIC DISTRIBUTION

PTC

**Attachment 4
Tropic Supply Ft. Pierce
Project Traffic Assignment**

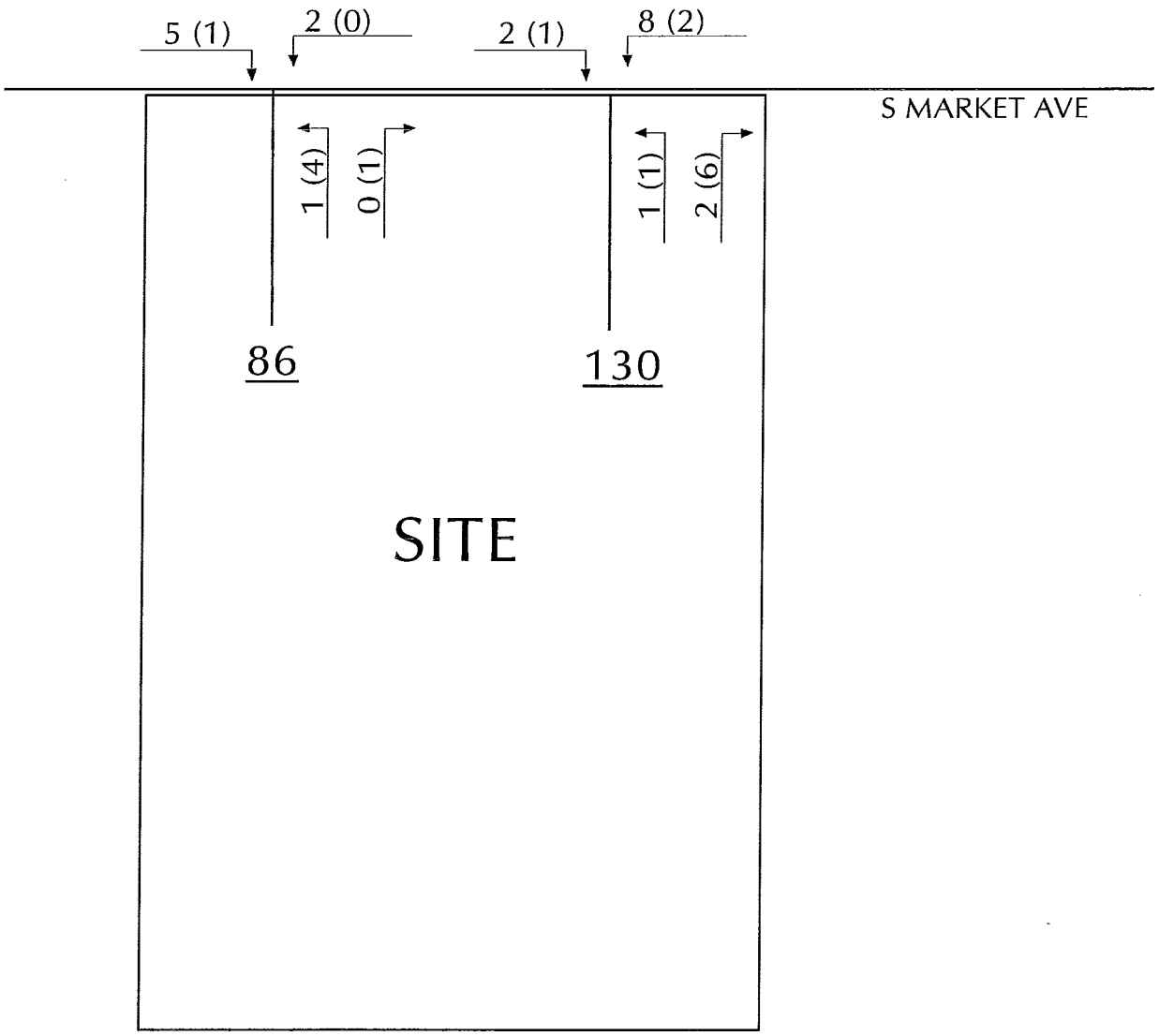
AM Peak

Roadway	Link	Existing Lanes	Dir	Project Traffic		Total Project Impact	Service Volume (1)	Significant Impact? (Yes/No)
				5	AM In			
				1	AM Out			
				% Dist	Trips			
Oleander Ave	Midway Rd to S. Market Ave	2L	NB	20%	1	0.13%	750	No
			SB	20%	0	0.00%	750	No
	S. Market Ave to Edwards Rd	2L	NB	20%	0	0.00%	750	No
			SB	20%	1	0.13%	750	No
S. Market Avenue	Oleander Ave to Site	2L	EB	40%	2	0.33%	600	No
			WB	40%	0	0.00%	600	No
	Site to US 1	2L	EB	60%	1	0.17%	600	No
			WB	60%	3	0.50%	600	No
US 1	Midway Rd to S. Market Ave	4LD	NB	20%	1	0.05%	2000	No
			SB	20%	0	0.00%	2000	No
	S. Market Ave to Edwards Rd	4LD	NB	40%	0	0.00%	2000	No
			SB	40%	2	0.10%	2000	No

PM Peak

Roadway	Link	Existing Lanes	Dir	Project Traffic		Total Project Impact	Service Volume (1)	Significant Impact? (Yes/No)
				2	AM In			
				6	AM Out			
				% Dist	Trips			
Oleander Ave	Midway Rd to S. Market Ave	2L	NB	20%	0	0.00%	750	No
			SB	20%	1	0.13%	750	No
	S. Market Ave to Edwards Rd	2L	NB	20%	1	0.13%	750	No
			SB	20%	0	0.00%	750	No
S. Market Avenue	Oleander Ave to Site	2L	EB	40%	1	0.17%	600	No
			WB	40%	2	0.33%	600	No
	Site to US 1	2L	EB	60%	4	0.67%	600	No
			WB	60%	1	0.17%	600	No
US 1	Midway Rd to S. Market Ave	4LD	NB	20%	0	0.00%	2000	No
			SB	20%	1	0.05%	2000	No
	S. Market Ave to Edwards Rd	4LD	NB	40%	2	0.10%	2000	No
			SB	40%	1	0.05%	2000	No

(1) Source: St. Lucie TPO, Traffic Counts and Level of Service Report, Fall 2015.



LEGEND
2 - AM PEAK HOUR
(6) - PM PEAK HOUR
130 - ADT

17-026
4/11/17

TROPIC SUPPLY
FT. PIERCE

ATTACHMENT 5
PROJECT DRIVEWAY VOLUMES





CAPACITY ANALYSIS

TROPIC SUPPLY
 WAREHOUSE ADDITION

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	NO BUILDINGS USE UNDETERMINED	INDUSTRIAL	Light INDUSTRIAL
South	VACANT	INDUSTRIAL	Light INDUSTRIAL
East	VACANT	INDUSTRIAL	Light INDUSTRIAL
West	Light COMMERCIAL Light INDUSTRIAL	INDUSTRIAL	Light INDUSTRIAL

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current			14,482 S.F.	4.4	X, AE9
**Proposed			27,504 S.F. Addition	4.4	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day - AS PER WATER BILL - 100 GPD (8 EMPLOYEES)
**Proposed Zoning/FLU	Total gallons per day 125 GPD (10 EMPLOYEES)
**Change in Demand	Total gallons per day 25 GPD.

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 100 GPD
**Proposed Zoning/FLU	Total gallons per day 125 GPD
**Change in Demand	Total gallons per day 25 GPD

C. Parks and Recreation (Residential Classifications Only): (Du x 2.6 = persons + 44,227 = population /LOS)				
Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people			
Urban District	5 acres per 1,000 people			
Community	2.5 acres per 1,000 people			
Neighborhood	1.36 acres per 1,000 people			

D. Public Schools (Residential Classifications Only): Single Family: (du x 0.405 = students/70% K-8/30% High) Multi-family: (du x 0.207 = students/70% K-8/30% High)		
	K-8	High
School Name		
City		
Distance		
Current Zoning/FLU	Enrollment	
**Proposed Zoning/FLU	Enrollment	
**Change in Demand		

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)	
Demand Analysis	Maximum CURRENTLY - 2-4 YARD DUMPSTERS
Current Zoning/FLU	1 FOR TRASH, 1 FOR RECYCLED CARDBOARD
**Proposed Zoning/FLU	PICKED UP ONCE A WEEK
*Change in Demand	AFTER Addition - pick up twice a week

F. Stormwater:
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year - 1 day storm event)

Impact	THERE WILL BE NO INCREASE FROM THE 25 YR 3 DAY STORM PRE VS. POST RUNOFF. THE POST RUNOFF WILL BE COMPENSATED BY ONSITE RETENTION AND EXFILTRATION TRENCH.
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III. Transportation Analysis: Complete ITE Trip Generation Form (Attached)

G. Transportation Analysis: Complete ITE Trip Generation Data Form		
Most recent ITE Code for use; HCM Roadway Capacity <i>SEE SUBMITTED TRAFFIC STATEMENT</i>		
	AADT	AM/PM Peak Hour Trips
Demand Analysis	Maximum	Maximum
Current Zoning/FLU		
**Proposed Zoning/FLU		
*Change in Demand	Trips	Trips
Impact to Capacity		

IV. Project Description

PHASING		
Is this project (phase) part of a larger project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.		
Total Project: Residential Units:	Single Family:	Multifamily:
Non-residential (square footage): <i>27,507 S.F. ADDITION, 41,989 S.F. TOTAL</i>		
Mixed-use (describe use):		
(If this is a single phase project, name it Phase I – Total)		

RESIDENTIAL DATA					
Type	Phase	Number of Units	Acres	Expected beginning date	Expected completion date
Single-family, detached					
Single-family, attached					
Multi-family					
Other (specify) <i>WAREHOUSE</i>	<i>I</i>			<i>10/17</i>	<i>5/18</i>

NON-RESIDENTIAL DATA					
Type(s) specify	Phase	Square footage	Acres	Expecting beginning date	Expected completion date

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. Yes No

- B. 1. Does this application involve demolition or re-use of any structure(s)? Yes No
If yes, what is the size of the structure(s) to be demolished or re-used? _____
2. What is the current use of the structure to be demolished or re-used? _____
3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? Yes No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

** Complete section if requesting a change in zoning, future land use, or expanding



FORT PIERCE UTILITIES AUTHORITY
 PO BOX 3191
 FORT PIERCE FL 34948-3191
 WWW.FPUA.COM

Penalty charges, late fees, or reconnect charges may apply to any unpaid portion of the New Charges if paid after the due date. See Reverse side of the bill for more details. Copies of the Customer Service Policies and Service Charges may be obtained in FPUA's lobby or at WWW.FPUA.COM. For questions about your bill, please call FPUA at (772)466-1600. (CALL 811 OR 1-800-432-4770 - 48 HOURS BEFORE DIGGING.)

Statement Date: 6/14/2017

Service Address: 903 S MARKET AVE

Account Number	Amount of Last Bill	Payments Received	Previous Balance	New Charges	New Charges Due Date	Total Due
10005877-232200	\$26.98	(\$26.98)	\$0.00	\$26.98	7/5/2017	\$26.98

WATER METER	W91450150	DATE READ
Current Read	220	06/07/17
Previous Read	217	05/04/17
K Gals Used	3	

WATER SERVICE	RATE	CHARGE
CUSTOMER CHARGE		\$ 13.88
WATER USAGE	3 K GALS @	\$ 10.65
CITY UTILITY TAX WATER		\$ 2.45
	W91450150	\$ 26.98
TOTAL WATER SERVICE:		\$ 26.98

May17	3 Jan17	2 Sep16	6
Apr17	3 Dec16	4 Aug16	20
Mar17	3 Nov16	2 Jul16	3
Feb17	9 Oct16	3 Jun16	3

TOTAL BILLING: \$ 26.98

PAID

JUN 13 2017

JUN 5 2017

CM41268