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Traffic Impact Study
2202 LAKE WORTH ROAD
COMMERCIAL AND OFFICE/WAREHOUSE

Lake Worth Road and Boutwell Road

July 2019

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Introduction

This is intended to be the site of a proposed Commercial and Office/Warehouse facility located on the north east corner of Lake Worth Road and Boutwell Road, The site will have two entrance exits onto Boutwell Road. This site is located in Lake Worth Beach.

Proposed site plan for this site identifies the following planning data:

- Building 1 - Office/Warehouse6264 sf
1566 sf office/4698 sf Warehouse

- Building 2 - Commercial/Retail.....5312 sf
5312 sf Commercial/Retail

- Building 3 - Commercial/Retail.....4892 sf..
4892 sf Commercial/Retail

TOTALS:

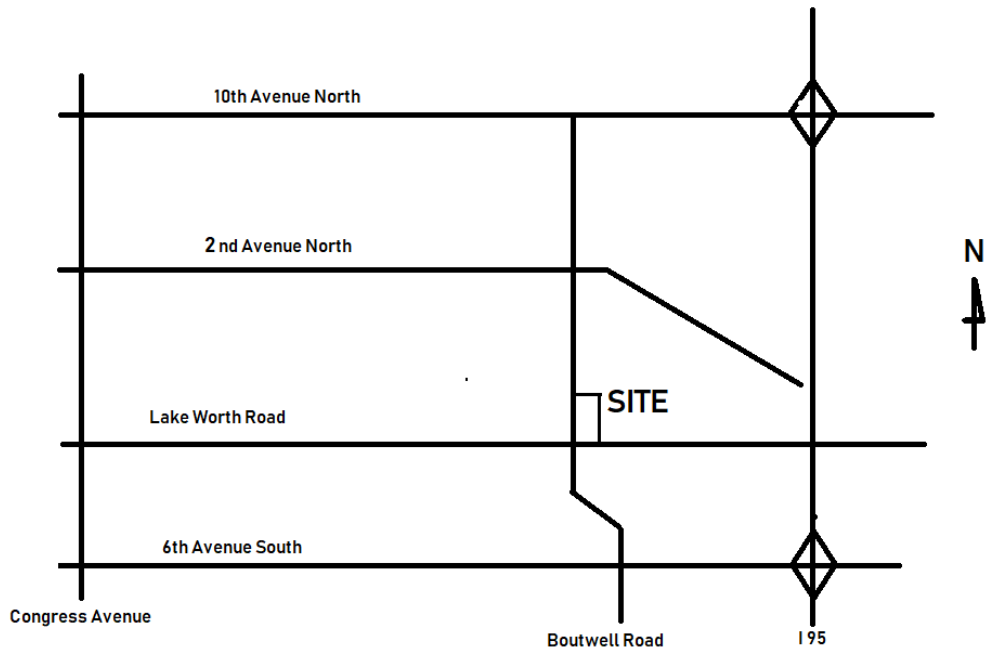
1566 sf office/4698 sf Warehouse
10204 sf Commercial

General Planning Data:

- Property Control Number 38434420011170020
- Size1.8 acres
- Address.....2022 Lake Worth Road
- Municipality Lake Worth Beach

Purpose

The purpose of this study is to review daily and peak hour traffic from the site. Traffic from the AM peak hour and the PM peak hour will then be reviewed for compliance with Palm Beach County's Traffic Performance Standards.



LOCATION MAP

Proposed Daily Traffic Generation

Land use	Intensity/Gross Trips	Generation Rates	Passby	Net External Trips
Office	1566 square feet 25 gross trips/day	ITE Code 712 16.19 t/1000 sf	-10%	23 t/d
Warehouse	4698 square feet 8 gross t/day	ITE Code 150 1.74 t/1000 sf	- 10%	7 t/d
Commercial	10204 square feet 1273 gross t/day	ITE Code 820 $\text{Ln}(T) = .68 \text{Ln}(X) + 5.57$	-62%	489 t/d
Totals	16468 sq ft 1306 gross trips/day			519 t/d

Proposed AM Peak Hour Traffic

Land use	Intensity/Gross Trips	Generation Rates	Passby	Net External Trips
Office	1566 square feet 3 gross t/hr 83% in/ 18% out 2 in/ 1 out	ITE Code 712 1.92 t/1000 sf	-10%	3 t/hr 2 in/ 1 out
Warehouse	4698 square feet 1 gross t/hr 77% in/23% out 1 in/ 0 out	ITE Code 150 0.17 t/1000 sf	- 10%	1 t/hr 1 in/ 0 out
Commercial	10204 square feet 10 gross t/hr 62% in/38% out 6 in/ 4 out	ITE Code 820 .94 t/1000 sf	-62%	4 t/hr 2 in/ 2 out
Totals	16468 sq ft 14 gross t/hr 9 in/ 5 out			8 t/hr 5 in/ 3 out

Proposed PM Peak Hour Traffic

Land use	Intensity/Gross Trips	Generation Rates	Passby trips	Net External Trips
Office	1566 square feet 4 gross t/hr 32% in/ 68% out 1 in/ 3 out	ITE Code 712 2.45 t/1000 sf	-10%	3 t/hr 1 in/ 2 out
Warehouse	4698 square feet 1 gross t/hr 27% in/ 73% out 0 in/ 1 out	ITE Code 150 0.19 t/1000 sf	- 10%	1 t/hr 0 in/ 1 out
Commercial	10204 square feet 100 gross t/hr 48% in/ 52% out 48 in/ 52 out	ITE Code 820 $\text{Ln}(T) = .74 \text{Ln}(X) + 2.89$	-62%	38 t/hr 18 in/20 out
Totals	16468 sq ft 105 gross t/hr 49 in/ 56 out			42 t/h 19 in/ 23 out

East/west AM Roads - peak hour traffic distribution

Road laneage/% project dist.	Link/LOS Capacity	Project traffic
Lake Worth Road 4 lane/42%	Boutwell Road to A Street 1770 t/hr	Eastbound - 1* Westbound - 2*
Lake Worth Road 2 lane/42%	Boutwell Road to Congress 1770 t/hr	Eastbound- 2* Westbound - 1*
2nd Ave North 2 lane/5%	Boutwell Road to Congress 880 t/hr	Eastbound - 1* Westbound - 1*

North/south Roads AM - peak hour traffic distribution

Road laneage/% project dist.	Link/LOS Capacity	Project traffic
Boutwell Road 2 lane/ 15%	Lake Worth Road to 10th Av N 880 t/hr	Northbound - 1* Southbound - 1*
Boutwell Road 2 lane/1%	Lake Worth Road to 12th Av N Non thoroughfare plan road	Northbound- 1* Southbound - 1*
Congress Ave 6 lane/5%	Lake Worth Road to 2nd Av N 2940 t/hr	Eastbound - 1* Westbound - 1*
Congress Ave 6 lane/5%	Lake Worth Road to 6th Av S 2940 t/hr	Eastbound - 1* Westbound - 1*

East/west Roads PM peak hour traffic distribution

Road laneage/% project dist.	Link/LOS Capacity	Project traffic
Lake Worth Road 4 lane/42%	Boutwell Road to A Street 1770 t/hr	Eastbound - 10* Westbound - 8*
Lake Worth Road 2 lane/42%	Boutwell Road to Congress 1770 t/hr	Eastbound- 8* Westbound - 10*
2nd Ave North 2 lane/ 1%	Boutwell Road to Congress 880 t/hr	Northbound - 1* Southbound - 1*

North/south Roads PM peak hour traffic distribution

Road laneage/% project dist.	Link/LOS Capacity	Project traffic
Boutwell Road 2 lane/ 15%	Lake Worth Road to 10th Av N 880 t/hr	Northbound - 3* Southbound - 3*
Boutwell Road 2 lane/1%	Lake Worth Road to 12th Av S Non thoroughfare plan road	Northbound- 1* Southbound - 1*
Congress Ave 6 lane/1%	Lake Worth Road to 2nd Av N 2940 t/hr	Eastbound - 1* Westbound - 1*
Congress Ave 6 lane/1%	Lake Worth Road to 6th Av S 2940 t/hr	Eastbound - 1* Westbound - 1*

* less than 1%

Table 12.B.2.D-7.3A – Radius of Development Influence

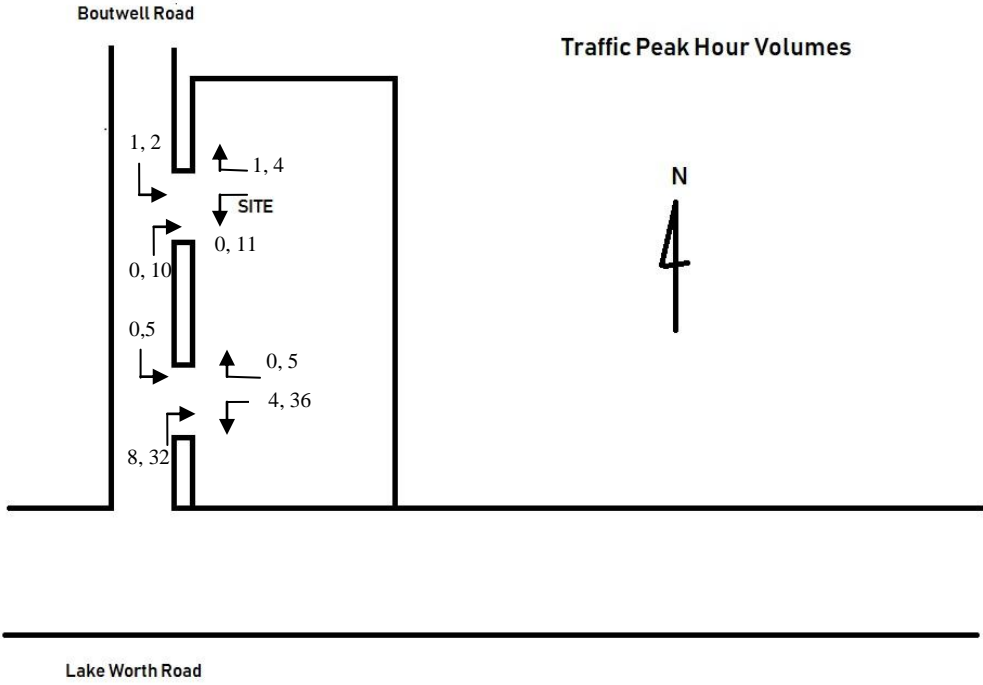
Net External Peak Hour		Two-Way Trip Generation	Radius
1	thru	20	Directly accessed link(s)
21	thru	50	0.5 miles
51	thru	100	1 mile
101	thru	500	2 miles
501	thru	1,000	3 miles
1,001	thru	2,000	4 miles
2,001	and	Up	5 miles

[Ord. 2005-002] [Ord. 2006-043] [Ord. 2007-013] [Ord. 2010-022]

Radius of Development influence is 1/2 mile.

TPS Review

Net traffic for the proposed use during the AM peak hour is 5 v/hr for entering traffic and 3 v/hr for exiting traffic. Net traffic for the proposed use during the PM peak hour is 19 v/hr for entering traffic and 23 v/hr for exiting traffic. Both the AM traffic and PM traffic shows project impact of less than 1% of the level of service volume for the surrounding roadways.



Site Related improvements

The intersection of Boutwell Road and Lake Worth Road is controlled by an existing traffic signal.

The north approach of this intersection has an existing 285 foot left turn lane and a existing 285 foot right turn lane.

The south approach of this intersection has an existing 240 foot left turn lane.

The east approach of this intersection has an existing 250 foot left turn lane.

The west approach of this intersection has an existing 240 foot left turn lane.

A review of the total am and pm peak hour volumes from the site are identified as 14 net AM peak hour trips and 105 net PM peak hour trips. As turning movements are relatively low, no additional turn lanes or improvements are recommended.

Conclusion

Net traffic for the proposed use during the AM peak hour is 5 v/hr for entering traffic and 3 v/hr for exiting traffic. Net traffic for the proposed use during the PM peak hour is 19 v/hr for entering traffic and 23 v/hr for exiting traffic. Both the AM traffic and PM traffic shows project impact of less than 1% of the level of service volume for the surrounding roadways.

A review of the gross AM peak hour volumes from the site are identified as 9 AM entering peak hour trips and 5 exiting PM peak hour trips. A review of the gross PM entering peak hour volumes from the site is identified as 49 PM peak hour trips and 56 exiting PM peak hour trips. As turning movements are relatively low, no additional turn lanes or improvements are recommended.