SAILFISH COVE

Project No. 1941

CITY OF STUART, FLORIDA

TRAFFIC STATEMENT

Prepared for:

By

Engineering Business No. EB-0007657

CAPTEC ENGINEERING, INC.
301 NW FLAGLER AVENUE
STUART, FLORIDA 34994
(772) 692-4344 OFFICE
(772) 692-4341 FAX

April 29, 2020

JOSEPH W. CAPRA, P.E.
FLORIDA P.E. LICENSE NO. 37638

Table of Contents

Introduction 1
Site Data 1
Trip Generation 1
  Daily Weekday 1
  AM Peak Hour of Adjacent Street 1
  PM Peak Hour of Adjacent Street 1
Trip Distribution 2
  Background Traffic 2
  Future Traffic 3
Results 3
Conclusion 3

Introduction

The SAILFISH COVE project is located in the heart of Downtown Stuart 100 feet east of St. Lucie Avenue on the north side of Seminole Street in the City of Stuart, Florida. CAPTEC Engineering, Inc. (CAPTEC) has prepared this updated traffic statement for the City of Stuart to determine the impact associated with the current project.

Site Data

The existing site consists of 4 lots:

- Parcel ID 05-38-41-004-000-00040-1 FEROE Lots 4 & 5 mixed use/store/office
- Parcel ID 05-38-41-004-000-00060-6 FEROE Lots 6 & 7 single family transitional

The proposed site is a residential condominium with 30 Dwelling Units. The proposed revised site plan depicts a four-story apartment building overlooking the St Lucie River. The site previously existed as two single family residential homes.

Trip Generation

The daily, AM peak-hour and PM peak hour trips for this site were derived from the Institute of Transportation Engineers (ITE) Trip Generation Manual 10th Edition

- Multifamily Housing (Mid-Rise): Land Use #221

Daily Weekday

ITE Land Use Code	Units		ITE Rate	AM Peak Hour	Pass-By		Entering Site		Exiting Site	
223: Mid-Rise Apartment	30	Dwelling Units	T = 5.45(X) - 1.75	162	0%	0	50%	81	50%	81

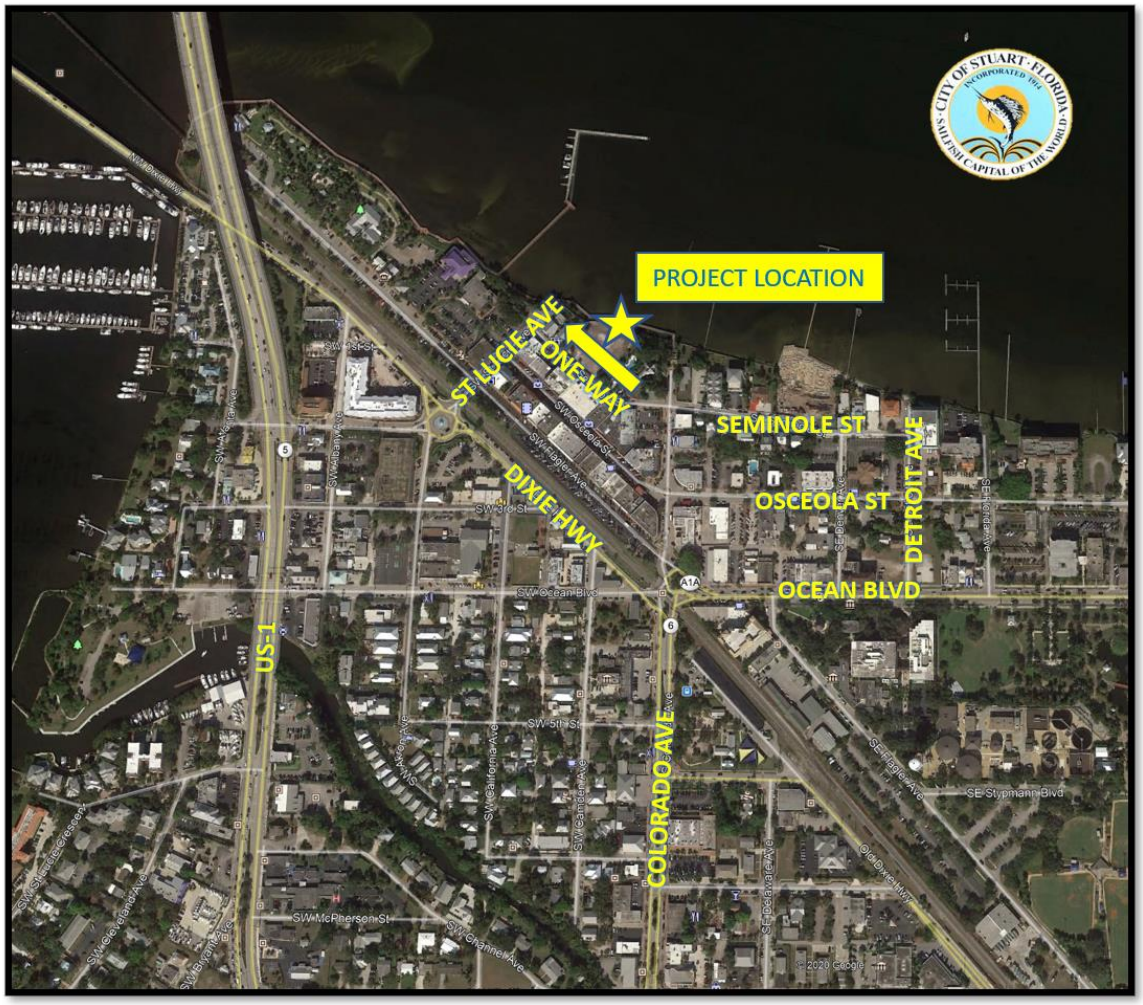
AM Peak Hour of Adjacent Street

ITE Land Use Code	Units		ITE Rate	AM Peak Hour	Pass-By		Entering Site		Exiting Site	
223: Mid-Rise Apartment	30	Dwelling Units	Ln(T) = 0.98 Ln(X) - 0.98	11	0%	0	26%	3	74%	8

PM Peak Hour of Adjacent Street

ITE Land Use Code	Units		ITE Rate	PM Peak Hour	Pass-By		Entering Site		Exiting Site	
223: Mid-Rise Apartment	30	Dwelling Units	Ln(T) = 0.96 Ln(X) - 0.63	14	0%	0	61%	9	39%	5

The greatest peak hour peak direction trips to be analyzed for distribution in this report are the (9) PM entering trips.



Trip Distribution

The project traffic will utilize the one-way street circulation found in the downtown City of Stuart area to enter and exit the site. Entering trips will arrive via Colorado Ave (north of Confusion Corner) to Seminole Street (one-way). Exiting trips will utilize Seminole St (one-way) to St Lucie Ave. Regional trips will first utilize Dixie Hwy (north-south) and Ocean Blvd (east-west). Local destinations are available within downtown Stuart can but were not counted in the trip distribution analysis.

Background Traffic

Road Name	From	To	2019 LOS Capacity	Peak Hour Directional	Annual Growth	2024 Background Traffic
Dixie Hwy	Joan Jefferson Way	Wright Blvd	750	605	0.5%	617
Ocean Blvd	Flagler Ave	Palm Beach Rd	790	565	0.5%	576
Colorado Ave	Confusion Corner (Dixie/Ocean)	Seminole St	575	n/a	n/a	n/a

Future Traffic

Road Name	From	To	Direction	LOS Capacity	2019 Background Traffic	ProjectTrips	Distribution Percent	Project vs. Capacity	Total Traffic Volume
Dixie Hwy	Joan Jefferson Way	Wright Blvd	NB/SB	750	490	5	50%	0.67%	495
Ocean Blvd	Flagler Ave	Palm Beach Rd	EB/WB	790	565	4	50%	0.51%	569
Colorado Ave	Confusion Corner (Dixie/Ocean)	Seminole St	NB Entering	575	n/a	9	100%	1.57%	n/a

The peak hour peak direction trips have been equally distributed:

- Dixie Hwy Northbound/Southbound 5 trips
- Ocean Blvd Eastbound/Westbound 4 trips
- Colorado Avenue Total Entering Trips 9 trips

The percent impact upon the generalized service capacity:

- Dixie Hwy 0.67% Impact upon LOS
- Ocean Blvd 0.51% Impact upon LOS
- Colorado Avenue 1.57% Impact upon LOS

Results

The worst-case percent impact upon the existing LOS is the section of Colorado Avenue from Confusion Corner to Seminole Street with a 1.57% impact of 9 peak hour distributed trips (14 net peak hour trips). The traffic analysis results have found there is no significant impact upon the existing level of service (LOS) capacity for any of the adjoining roadway segments.

Conclusion

Based upon the above calculations, CAPTEC Engineering, Inc. considers the traffic impact of SAILFISH COVE to be insignificant and concurrency is requested with this traffic statement per the City of Stuart Land Development Code (Section 4.00.00).