



## ENVIRONMENTAL SITE ASSESSMENT

Prepared For:

Indian River Drive Properties:

401 S. Indian River Drive  
411 S. Indian River Drive  
426 S. Indian River Drive  
500 S. Indian River Drive  
507 S. Indian River Drive  
509 S. Indian River Drive  
519 S. Indian River Drive

Fort Pierce, Florida

Property Tax ID Numbers:

2410-808-0017-000-7  
2410-808-0019-000-1  
2410-808-0020-010-4  
2410-809-0001-000-5  
2410-809-0002-000-2  
2410-809-0004-000-6  
2410-810-0001-000-9

Prepared by:

DLS Environmental Services, Inc.  
1901 SW Yellowtail Avenue  
Port St. Lucie, Florida 34953  
(772)215-3997

Fax: (772)879-4520

Email: [danna@dlsenvironmentalservices.com](mailto:danna@dlsenvironmentalservices.com)

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## ENVIRONMENTAL SITE ASSESSMENT

### 1.0 LOCATION

An environmental assessment of the 401 S. Indian River Drive, 411 S. Indian River Drive, 426 S. Indian River Drive, 500 S. Indian River Drive, 507 S. Indian River Drive, 509 S. Indian River Drive, and 519 S. Indian River Drive was conducted by DLS Environmental Services, Inc. The project area associated with the seven parcels totals 3.27 acres which are located on the east and west side of South Indian River Drive in Fort Pierce in Section 10, Township 35 South, Range 40 East (**Figure 1 – Location Map**). Field data was collected on April 10, 2015. The following are the methodologies and results of the environmental assessment conducted at the project site.

### 2.0 SOILS

Project soils were mapped according to the *Soil Survey of St. Lucie County Area, Florida*, March 1981, United States Department of Agriculture, Soil Conservation Service. A copy of the Soil Survey Map depicting the project boundaries and soil type(s) is included as **Figure 2**. The project site contained two soil mapping units. A general description of the soil types are as follows:

#### **Arents, 0 to 5 percent slopes (4)**

This soil consists of soil material dug from several areas that have different kinds of soil. It is used to fill such areas as low sloughs, marshes, shallow depressions, and swamps above their natural ground levels. Depth of fill material ranges from about 20 to 50 inches. Several kinds of mineral soils underlie the fill material. The water table in this Arents soil is between depths of 20 and 50 inches most of the year.

#### **Paola Sand (28)**

This nearly level to sloping soil is excessively drained. It is on high dune-like ridges and in undulating areas. Slopes are smooth to convex or concave. Included in this mapping layer of Paola soil are small areas of Astatula, St. Lucie, and Welaka Variant soils. This soil does not have a water table within a depth of 80 inches, and usually it is not within a depth of 120 inches annually and permeability is very rapid. Typical natural vegetative associations include sand pine, scrub live oak, rosemary, and cabbage palms.

### **3.0 HABITATS**

#### **3.1 GOPHER TORTOISE AND OTHER BURROW COMMENSALS**

##### **3.1.1 Objective**

Conduct a systematic survey to locate gopher tortoises (*Gopherus polyphemus*), Florida mouse (*Podomys floridamus*), Florida gopher frogs (*Rana capito*), and eastern indigo snake (*Drymarchon corais couperi*) which may be present within the project area.

##### **3.1.2 Methodology**

Biologist followed the survey protocol as recommended in *Ecology and Habitat Protection Needs of Gopher Tortoise (Gopher polyphemus) Populations Found on Lands Slated for Large-scale Development in Florida*; Non-game Wildlife Program, Technical Report #5, Florida Game and Fresh Water Fish Commission (FGFWFG) [now known as FFWCC], Tallahassee, Florida, December 1987.

- Biologist conducted parallel transects 10 meters (32± feet) apart;
- Biologist conducted serpentine search patterns between the parallel transects;
- All gopher tortoise burrows located will be flagged as either active or inactive;
- All gopher tortoise burrows located will be assigned an identification number and recorded;
- Biologist will field locate all gopher tortoise burrows on a 1" = 100' scale aerial.
- Additional data and notes will be collected by biologists for the occurrence of the eastern indigo snake, Florida gopher frog, and the Florida mouse.

##### **3.1.3 Conclusion**

No gopher tortoise or other commensal species such as eastern indigo snake, Florida mouse, or Florida gopher frog were observed by the biologist during this environmental assessment.

#### **3.2 PROTECTED SPECIES/WILDLIFE SURVEYS**

##### **3.2.1 Objective**

Conduct a systematic survey for flora and fauna that may occur on-site and note the presence of any endangered, threatened and species of special concern as identified by Florida Fish and Wildlife Conservation Commission and the Florida Department of Agriculture and Consumer Services.

### 3.2.2 Methodology

Biologist used the following methodology to conduct wildlife/protected species surveys.

- Biologist conducted a survey on April 10, 2015;
- The survey meandered through the property however none of the property appeared to be suitable habitat for most protected species;
- Biologist recorded and noted sightings, tracks, scat, tree markings, nests, cavities, and burrows;

### 3.2.3 Conclusion

During the pedestrian survey, biologist did not observe any endangered, threatened, or species of special concern as identified by Florida Fish and Wildlife Conservation Commission and the Florida Department of Agriculture and Consumer Services. No tree markings, nests, cavities, or burrows (active or inactive) were observed. No scrub jays or red-cockaded woodpeckers were observed or called on-site. See **Table 1** for wildlife observed during the pedestrian transects. In addition, the habitat on-site was reviewed to determine the likelihood of occurrence for the following federal/state listed species:

#### Amphibians

Gopher frog (*Rana capito*) not likely

#### Reptiles

American alligator (*Alligator mississippiensis*) not likely

Eastern indigo snake (*Drymarchon corais couperi*) not likely

Gopher tortoise (*Gopherus polyphemus*) not likely

#### Birds

Roseate spoonbill (*Ajaia ajaia*) not likely

Florida scrub jay (*Aphelocoma coerulescens*) not likely

Limpkin (*Aramus guarauna*) not likely

Piping plover (*Charadrius melodus*) not likely

Least tern (*Sterna antillarum*) not likely

Little blue heron (*Egretta caerulea*) not likely

Snowy egret (*Egretta thula*) not likely

Snowy plover (*Charadrius nivosus*) not likely

Tri-colored heron (*Egretta tricolor*) not likely

White ibis (*Eudocimus albus*) not likely

Peregrine falcon (*Falco peregrines*) not likely

Southeastern American kestrel (*Falco sparverius paulus*) not likely

Florida sandhill crane (*Grus Canadensis protensis*) not likely

Bald eagle (*Haliaeetus leucocephalus*) not likely

Wood stork (*Mycteria Americana*) not likely

Osprey ( <i>Pandion haliaetus</i> )	likely
Roseate tern ( <i>Sterna dougallii dougallii</i> )	not likely
Snail kite ( <i>Rostrhamus sociabilis plumbeus</i> )	not likely
Florida burrowing owl ( <i>Athene cunicularia floridana</i> )	not likely

### **Mammals**

Florida panther ( <i>Felis concolor coryt</i> )	not likely
Florida mouse ( <i>Podomys floridana</i> )	not likely
Sherman's fox squirrel ( <i>Sciurus niger shermani</i> )	not likely

### **Vascular plants**

Sea lavender ( <i>Argusia gnaphalodes</i> )	not likely
Curtiss' milkweed ( <i>Asclepias curtissii</i> )	not likely
Four-petal pawpaw ( <i>Asimina tetramera</i> )	not likely
Sand-dune spurge ( <i>Chamaesyce cumulicola</i> )	not likely
Hand fern ( <i>Cheiroglossa palmata</i> )	not likely
Large-flowered rosemary ( <i>Conradina grandiflora</i> )	not likely
Florida tree fern ( <i>Ctenitis sloanei</i> )	not likely
Dollar orchid ( <i>Encyclia boothiana var. erthonioides</i> )	not likely
Night-scented orchid ( <i>Epidendrum nocturnum</i> )	not likely
Tropical ironwood ( <i>Eugenia confusa</i> )	not likely
Coastal vervain ( <i>Glandularia maritime</i> )	not likely
Beach jacquemontia ( <i>Jacquemontia reclinata</i> )	not likely
Atlantic Coast Florida lantana ( <i>Lantana depressa var floridana</i> )	not likely
Nodding pinweed ( <i>Lechea cernua</i> )	not likely
Pine pinweed ( <i>Lechea divaricata</i> )	not likely
Carter's large-flowered flax ( <i>Linum carteri var sinallii</i> )	not likely
Burrowing four o'clock ( <i>Okenia hypogaea</i> )	not likely
Dancing-lady orchid ( <i>Oncidium bahamense</i> )	not likely
Terrestrial peperomia ( <i>Peperomia humilis</i> )	not likely
Blunt-leaved peperomia ( <i>Peperomia obtusifolia</i> )	not likely
Scrub bay ( <i>Persea humilis</i> )	not likely
Tiny polygala ( <i>Polygala smallii</i> )	not likely
Wild coco ( <i>Pteroglossaspis ecristata</i> )	not likely
Green ladies'-tresses ( <i>Spiranthes polyantha</i> )	not likely
Banded wild-pine ( <i>Tillandsia flexuosa</i> )	not likely
Scentless vanilla ( <i>Vanilla mexicana</i> )	not likely
Rain lily ( <i>Zephyranthes simpsonii</i> )	not likely

### **Non-Vascular Plants**

Perforate reindeer lichen ( <i>Cladonia perforata</i> )	not likely
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**Table 1. Wildlife Observed on the Property During the Pedestrian Surveys**

**A. Birds**

COMMON NAME	SCIENTIFIC NAME	PROTECTED SPECIES	
		STATE	FEDERAL
Blue jay	<i>Cyanocitta cristata</i>	----	----

**B. Mammals – none observed**

**C. Reptiles – none observed**

**3.3 VEGETATION SURVEY (FLUCFCS)**

**3.3.1 Objective**

To map vegetation on-site according to the Florida Land Use, Cover, and Forms Classification System.

**3.3.2 Methodology**

Biologist used the following methodology to conduct the vegetation survey.

- Biologist used the *Florida Land Use, Cover, and Forms Classification System: A Technical Report (FLUCFCS)*, January 1999, State of Florida, Department of Transportation, Survey and Mapping, Geographic Mapping Section;
- Biologist based vegetative community descriptions on field surveys and Soil Conservation Service soil maps.
- Numerical community designations were carried to Level III, according to FLUCFCS.

**3.3.3 Conclusion**

The FLUCFCS map is depicted as **Figure 3** and contained the following community designations:

- **133 – Multiple dwelling units, low rise**  
This property is currently a 4-unit apartment complex. There is a narrow strip of wetlands adjacent to the shoreline associated with this property which has been assigned a different FLUCFCS number appropriate to that community.
- **143 – Professional services**  
This property is currently a mixed use with a residence and an attorney’s office.

- **191 – Undeveloped land in urban areas**  
It appears that the majority of the properties involved in this environmental assessment would fall into this category since there are no structures on most of them. The only remaining vegetation on these vacant parcels is mowed ground cover and some cabbage palms.
- **193 – Urban land in transition**  
This property contains an asphalt parking lot however the future use is unknown.
- **642 – Saltwater marshes**  
A narrow strip of property adjacent to the shoreline on the northern parcels contained cordgrass (*Spartina alterniflora*), three-square (*Scirpus americanus*), and salt grass (*Distichlis spicata*).
- **540 – Bays and estuaries**  
The properties involved in this site assessment all have frontage on the Indian River. This location of the Indian River does support seagrasses.

### **3.4 JURISDICTIONAL WETLANDS**

The project site was reviewed for potential wetlands based upon the methodologies identified in Chapter 62-340, Florida Administrative Code which consists of reviewing the area for vegetation, soils, and hydrologic indicators. Based upon this review, a strip of wetlands was identified adjacent to the shoreline on the northern parcels identified in this site assessment.

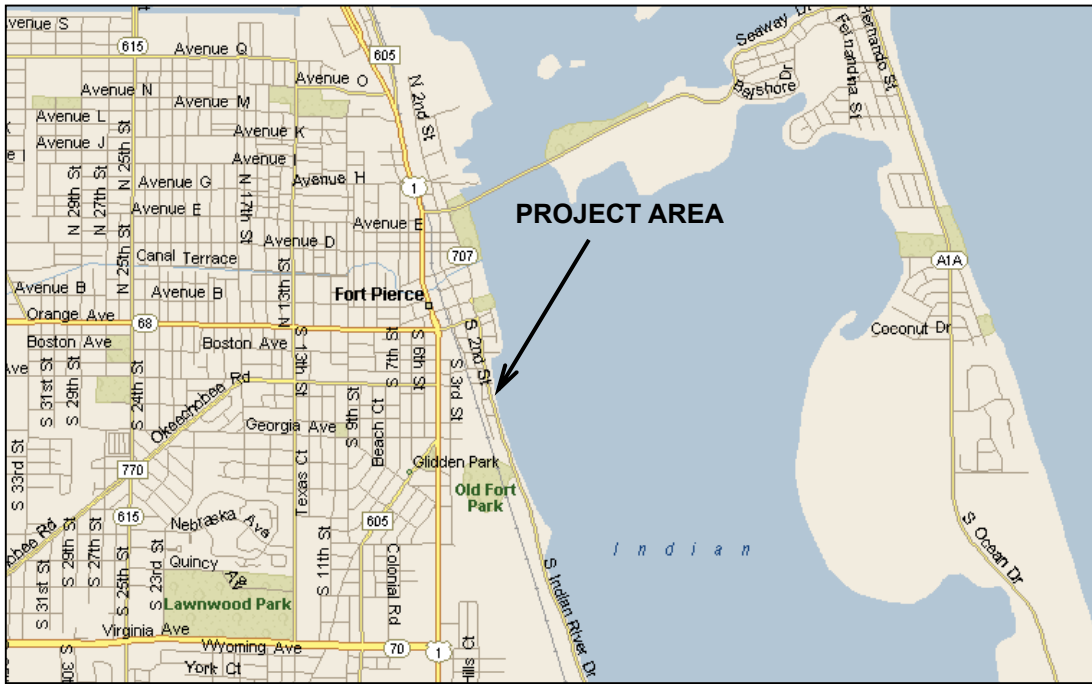
### **4.0 PREVIOUS IMPACTS**

Based upon a review of aerials from 2000, all of the currently vacant properties within the project area had structures at that time. The majority of these structures appear to be residential except for the parcel at the southwest corner of Citrus and Indian River Drive. It appears that these structures were removed between 2007 and 2011 and the properties remain vacant.

### **5.0 SUMMARY**

Based upon the historic use and the current use of these properties, the proposed change of the future land use from Office Professional (OP) to Central Business District (CBD) would not result in additional environmental impacts. The majority of the properties involved in this request are currently vacant uplands which were previously developed.

Any impacts to the wetland area or any proposed docking facilities would require authorizations from both the Florida Department of Environmental Protection and the U.S. Army Corps of Engineers regardless of the land use assigned to the properties.



**ST. LUCIE COUNTY**



SECTION 10, TOWNSHIP 35 SOUTH, RANGE 40 EAST



1901 SW Yellowtail Avenue  
Port Saint Lucie, FL 34953

Phone: 772-215-3997 Fax: 772-879-4520  
www.dsenvironmentalservices.com

**Location Map**

**Indian River Drive Properties  
South Indian River Drive  
Fort Pierce, Florida**

SCALE: **N.T.S.**

APRIL 2015

**FIGURE 1**



Source: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> Viewed on April 12, 2015

**SOILS:**  
 ARENTS, 0 TO 5 PERCENT SLOPES (4)  
 PAOLA SAND (28)

**DS Environmental Services, Inc.**

1901 SW Yellowtail Avenue  
 Port Saint Lucie, FL 34953

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[www.dsenvironmentalservices.com](http://www.dsenvironmentalservices.com)

**Soils Map**

**Indian River Drive Properties  
 South Indian River Drive  
 Fort Pierce, Florida**

SCALE: N.T.S.

APRIL 2015

FIGURE 2



**FLUCFCS CODES:**

- MULTIPLE DWELLING UNITS, LOW RISE (133)
- PROFESSIONAL SERVICES (143)
- UNDEVELOPED LAND IN URBAN AREAS (191)
- URBAN LAND IN TRANSITION (193)
- SALTWATER MARSHES (642)
- BAYS AND ESTUARIES (540)

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**FLUCFCS Map**

Indian River Drive Properties  
South Indian River Drive  
Fort Pierce, Florida

SCALE: N.T.S.

APRIL 2015

FIGURE 3

**APPENDIX A**  
**SITE PHOTOGRAPHS**



Photo looking north at wetland area in the northeast corner of 401 S. Indian River Drive.  
Mangroves in the background are off-site.



Photo looking south at strip of wetlands along shoreline of 401, 411, and 426 S. Indian River Drive.

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1901 SW Yellowtail Avenue  
Port Saint Lucie, FL 34953

Phone: 772-215-3997 Fax: 772-879-4520  
www.dlsevenvironmentalservices.com

**Photos of Site**

**Indian River Drive Properties  
South Indian River Drive  
Fort Pierce, Florida**

SCALE:

APRIL 2015



Photo looking south along area on east side of Indian River Drive for 500, 507, 509, and 519 S. Indian River Drive.



Photo showing bank and existing vegetation associated with 507, 509, and 519 S. Indian River Drive.

**DLS Environmental Services, Inc.**  
 1901 SW Yellowtail Avenue  
 Port Saint Lucie, FL 34953

Phone: 772-215-3997 Fax: 772-879-4520  
[www.dlsevenvironmentalservices.com](http://www.dlsevenvironmentalservices.com)

**Photos of Site**

**Indian River Drive Properties  
 South Indian River Drive  
 Fort Pierce, Florida**

SCALE:

APRIL 2015



Photo looking north along east side of Indian River Drive.



Photo of 519 S. Indian River Drive – law office and possibly residence.

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 1901 SW Yellowtail Avenue  
 Port Saint Lucie, FL 34953

Phone: 772-215-3997 Fax: 772-879-4520  
[www.dlsevenvironmentalservices.com](http://www.dlsevenvironmentalservices.com)

**Photos of Site**

**Indian River Drive Properties  
 South Indian River Drive  
 Fort Pierce, Florida**

SCALE:

APRIL 2015



Photo looking at vacant parcels 500, 507, and 509 S. Indian River Drive.



Photo looking at vacant parcel with parking area at 401 S. Indian River Drive.

**DLS Environmental Services, Inc.**  
 1901 SW Yellowtail Avenue  
 Port Saint Lucie, FL 34953

Phone: 772-215-3997 Fax: 772-879-4520  
[www.dlsevenvironmentalservices.com](http://www.dlsevenvironmentalservices.com)

**Photos of Site**

**Indian River Drive Properties  
 South Indian River Drive  
 Fort Pierce, Florida**

SCALE:

APRIL 2015

November 1, 2015

Rebecca Grohall  
City of Fort Pierce  
Planning Department  
100 N. US 1  
Fort Pierce, FL 34954

Re: **Environmental Statement/Assessment**  
Indian River Commerce Center PD  
Parcel ID: 2410-808-0017-000-7 and 2410-808-0019-000-1

Dear Ms. Grohall:

Schulke, Bittle & Stoddard, LLC has reviewed the following parcels depicted above in preparation of this Environmental Assessment for the impacts of the site from the zoning change of R-4A to PD.

History of the site:

The site was previously developed with a commercial building with parking lot. The building was demolished. The current site is vacant with mostly grass, trees and the old parking lot.

Existing Zoning:

The current zoning of Office Commercial (C-1) is primarily for a commercial or mixed use. C-1 zoning allows for a maximum 60% lot coverage and a minimum 25% open space.

Proposed Zoning:

The proposed Zoning is Planned Development (PD). This zoning allows for flexibility in the code to satisfy the needs of the development. The submittal states that we are submitting for the same maximum 60% lot coverage and the same minimum 25% open space. The code actually allows for the PD Zone to have a 20% open space.

Impacts of the Zoning Change and the Proposed Development:

We feel that the Zoning change and Proposed Development will have no anticipated impacts to the environment for the following reasons:

1. The Zoning change and Proposed Development have the same lot coverage and open space as the existing zoning.
2. The parcels do not contain native habitat.
3. The stormwater system has the same requirements for either zoning.

If you have any questions or require additional information, please feel free to contact me.

Sincerely,

  
Jodah B. Bittle, P.E.

November 1, 2015

Rebecca Grohall  
City of Fort Pierce  
Planning Department  
100 N. US 1  
Fort Pierce, FL 34954

Re: Map Amendment to the Zoning Atlas Map  
Indian River Commerce Center PD  
Parcel ID: 2410-808-0017-000-7 and 2410-808-0019-000-1  
**Drainage Analysis**

Dear Ms. Grohall:

Schulke, Bittle & Stoddard, LLC has reviewed the following parcels depicted above in preparation of this Drainage Analysis as part of the application for Map Amendment to the Zoning Atlas Map. The Map Amendment to the Zoning Atlas Map proposes changing the current zoning from Office Commercial (C-1) to Planned Development (PD). The Land Use will remain Central Business District (CBD).

***Current Future Land Use: Central Business District (CBD):***

*Central Business District (CBD): The CBD designation mixed-use high-rise development and single-use or mixed-use development that includes ground floor office/retail beneath residential apartments and condominiums. The CBD is intended to provide higher density mixed-use development within downtown Fort Pierce. Uses within the CBD shall include residential (condominiums and apartments); office including artist work and sales space; retail including boutiques, cafes, and restaurants; fuel sales; hotels/motels; parks and recreation; governmental facilities; complementary parks and parking facilities. This land use designation allows a maximum density of 30 dwelling units per acre and a maximum FAR of 3.0. Key characteristics of CBD shall include:*

- Compact and intensive development pattern on a pedestrian scale;*
- Buildings oriented to the street and define the streetscape and civic spaces;*
- Development design that encourages pedestrian-oriented activities with plazas, cafes, bookstores, and restaurants that draw a variety of people; Vertical and horizontal integration of residential and on-residential uses;*
- Good connection to transit and pedestrian facilities;*
- Public parks and open space areas within walking distance of development;*
- Parking that is integrated into street design and buildings or places in separate structures; and wide sidewalks with appropriate pedestrian amenities.*

*Residential uses shall comprise a minimum of 25% of the total floor area of the Central Business District future land use designation.*

**Current Zoning District:**

**Sec. 22-29. - Office Commercial Zone (C-1).**

(a) Purpose. This commercial classification is intended primarily for uses involving business and institutional uses which do not involve the direct sale or display of goods, the production of goods or the storage or shipment of bulk or large volume materials. Convenience commercial facilities, restaurants and certain other uses are allowed when appropriate conditions and safeguards indicated in this section are fulfilled. Uses in this district should have good access to arterial or collector streets. This district is sometimes suitable for use as a buffer separating other commercial zones from residential districts.

Code requirements:

- a. Lot coverage. Buildings shall not cover more than sixty (60) percent of the lot area.
- b. Open space. No minimum requirements.

**Proposed Zoning District:**

**Section 22-40 – Planned Development Zone (PD)**

(a) Purpose. The PD District is intended to provide a process for the evaluation of individually Planned Developments which are not otherwise permitted in the zoning districts established by this Chapter. The PD District is to be a voluntary process commenced by an applicant for such zoning designation. The standards and procedures of this district are intended to promote flexibility of design and permit planned diversification and integration of uses and structures, while at the same time granting the City Commission the absolute authority to establish such limitations and regulations as it deems necessary to protect the public health, safety, and general welfare. In so doing, the PD district is designed to:

A stormwater management system is required to be designed in accordance with Sections 17-27 and 17-28 of the City of Fort Pierce Code of Ordinances and is required for all site plan application submittals. It is not anticipated that the proposed change in Zoning District will have an adverse impact on the City of Fort Pierce public stormwater system for the following reasons:

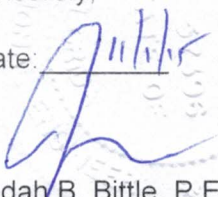
1. The allowable building lot coverage under the proposed zoning district C-1 is 60%. We are proposing the same allowable lot coverage for the PD rezoning. The actual site plan shows a lot coverage of 23.0%.
2. The PD Zoning allows for a minimum of 20% open space. We are proposing the PD with a minimum of 25%. The actual submitted site plan shows open space at 28.0%.

It is reasonable to conclude that the proposed change will result in equal or less stormwater runoff than the existing zoning.

If you have any questions or require additional information, please feel free to contact me.

Sincerely,

Date:

  
Jodah B. Bittle, P.E.  
FL. Reg. No. 57396

JOSEPH W. SCHULKE, P.E.  
JODAH B. BITTLE, P.E.  
WILLIAM P. STODDARD, Ph.D., P.E.

# SCHULKE, BITTLE & STODDARD, L.L.C.

CIVIL & STRUCTURAL ENGINEERING • LAND PLANNING • ENVIRONMENTAL PERMITTING

November 1, 2015

Rebecca Grohall  
City of Fort Pierce  
Planning Department  
100 N. US 1  
Fort Pierce, FL 34954

Re: **Historical Report**  
Indian River Commerce Center PD  
Parcel ID: 2410-808-0017-000-7 and 2410-808-0019-000-1

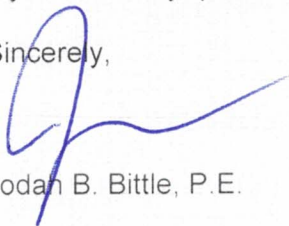
Dear Ms. Grohall:

Schulke, Bittle & Stoddard, LLC has reviewed the above parcels in preparation of this Historical Report as part of the application for Zoning Atlas Map Amendment.

The two vacant parcels at 401 and 411 Indian River Drive have no historical significance to the City of Ft. Pierce.

If you have any questions or require additional information, please feel free to contact me.

Sincerely,



Jodah B. Bittle, P.E.