



Regular

Brevard County Board Of County Commissioners Governing Board Of The Brevard Mosquito Control District Governing Board Of The Barefoot Bay Water And Sewer District

2725 Judge Fran Jamieson Way

Viera, FL 32940

Agenda

Tuesday, February 9, 2021

If you wish to speak to any item on the agenda, please fill out a speaker card. Persons addressing the Board shall have three minutes to complete his/her comments on each public hearing agenda item for which he/she has filled out a card.

The Board of County Commissioners requests that speakers appearing under the Public Comment section of the agenda limit their comments and/or presentations to matters under the Board's jurisdiction. It is the responsibility of the Chair to determine the time limit on comments under Public Comment and other agenda items that are not Quasi-Judicial Public Hearings. In Quasi-Judicial proceedings, fifteen (15) minutes shall be allowed for applicants and five (5) minutes for other speakers.

A. CALL TO ORDER 5:00 PM

B. INTENTIONALLY OMITTED

C. PLEDGE OF ALLEGIANCE: COMMISSIONER BRYAN LOBER, DISTRICT 2

D. MINUTES FOR APPROVAL: July 7, 2020 Regular; August 11, 2020 Melbourne Tillman; October 6, 2020 Regular; October 27, 2020 Regular

E. RESOLUTIONS, AWARDS AND PRESENTATIONS

E.1. Resolution acknowledging Kyle Hecky for obtaining the rank of Eagle Scout

E.2. Resolution acknowledging Thomas Wyman for obtaining the rank of Eagle Scout

E.3. Resolution Honoring the Distinguished Service of Scott Ellis, Retired Brevard County Clerk of Court

E.4. Resolution honoring Florida Today Reporter Isadora Rangel

F. CONSENT AGENDA (The entire Consent Agenda will be passed in one motion to include everything under Section F.)

Development and Environmental Services Group

Planning and Development

- F.1.** Final Plat Approval, Re: Amazing Explorers Academy at Viera (20FM00004) (District 4)
Developer: AEA Viera, LLC.
- F.2.** Final Plat and Contract Approval, Re: Hickory Ridge Phase 2
Developer: Granite Property Development, Inc. District 1
- F.3.** Waiver Request, Re: Waiver of Wall Requirement for Fraternal Order of Eagles
(20SP00008)(District 3)
- F.4.** Waiver Request, Re: Waiver of Wall Requirement for Hampton Manor of Merritt Island
(20SP00032)(District 2)

Public Works Department

- F.5.** Approval, Re: Dedication of Drainage Easement and Warranty Deed from Heritage
Lakes of West Melbourne, Inc. - District 5.
- F.6.** Approval, Re: Donation of Warranty Deed from Sheldon Cove, LLLP for the Riomar
Drive Bus Stop Project - District 4.
- F.7.** Approval, Re: Dedication of Warranty Deeds from 1) S&A Minton Road Corp. and 2)
YL-West Melbourne Development, LLC for Right of Way Dedication for the Yourlife of
West Melbourne Project - District 3.

Valkaria Airport

- F.8.** Public Transportation Grant Agreement, Airfield Equipment at Valkaria Airport

Community Services Group

Parks and Recreation Department

- F.9.** Approval, Re: Property Access License Contract with Jesse O. Duenas-Fay Lake
Wilderness Park (District 1)

Public Safety Group

Fire Rescue

- F.10.** Request to Write-Off Uncollectible Ambulance Fees FY 19/20

Support Services Group

Central Services

- F.11.** Request Approval to Accept the High Bid for Public Sale of Surplus Property 2021-2538438 and Authorization for Chair to Execute All Necessary Documents

Administrative Services Group

County Attorney

- F.12.** Brevard County v. Altman - Approval of Stipulated Final Judgment for Attorney's Fees and Costs at trial for BRP Parcel 174 Alex B. Altman, Roberta M. Altman and Thad Altman
- F.13.** Brevard County v. Altman - Approval of Stipulated Final Judgment for Attorney's Fees and Costs at trial for BRP Parcels 172 and 173 Daniel Hasratian and Karine Melkounian

Miscellaneous

- F.14.** Annual Investment Performance Report Year Ended September 30, 2020

- F.15.** Appointment(s) / Reappointment(s)

G. PUBLIC COMMENTS

H. PUBLIC HEARINGS

- H.1.** Proposed Amendments to Chapter 2, Article VIII, Code of Ordinances of Brevard County, Florida
- H.2.** Petition to Vacate, Re: Public Utility Easements - 917 & 919 Cashew Circle - "Barefoot Bay Unit Two Part Twelve" Plat Book 22, Page 79 - Barefoot Bay - Barry Southard and Valerie Gallo - District 3
- H.3.** Approval Re: Second Amendment to Developer's Agreement with Benchmark Melbourne 35 Associates, Limited Partnership and the City of West Melbourne
- H.4.** Approval, Re: Renewal of Lease with the North Brevard Senior Center, Inc. (District 1)

I. UNFINISHED BUSINESS

J. NEW BUSINESS

Development and Environmental Services Group

- J.1.** Adoption of the Save Our Indian River Lagoon Project Plan 2021 Update unanimously recommended by the Save Our Indian River Lagoon Citizens Oversight Committee

Community Services Group

- J.2.** Amendment #10 to Management Lease Agreement #4263 between Brevard County Environmentally Endangered Lands (EEL) Program and the State of Florida and Partial Release from Lease Agreement #4263

Miscellaneous

- J.3.** Legislative Intent and Permission to Advertise an Ordinance Repealing Section 6-2, Brevard County Code of Ordinances

Add Ons

K. PUBLIC COMMENTS

L. BOARD REPORTS

- L.1. Frank Abbate, County Manager
- L.2. Eden Bentley, County Attorney
- L.3. Rita Pritchett, Commissioner District 1, Chair
- L.4. Bryan Lober, Commissioner District 2
- L.5. John Tobia, Commissioner District 3
- L.6. Curt Smith, Commissioner District 4
- L.7. Kristine Zonka, Commissioner District 5, Vice Chair

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons needing special accommodations or an interpreter to participate in the proceedings, please notify the County Manager's Office no later than 48 hours prior to the meeting at (321) 633-2010.

Assisted listening system receivers are available for the hearing impaired and can be obtained from SCGTV staff at the meeting. We respectfully request that ALL ELECTRONIC ITEMS and CELL PHONE REMAIN OFF while the County Commission is in session. Thank You.

This meeting will be broadcast live on Space Coast Government Television (SCGTV) on Spectrum Cable Channel 499, Comcast (North Brevard) Cable Channel 51, and Comcast (South Brevard) Cable Channel 13 and AT&T U-verse Channel 99. SCGTV will also replay this meeting during the coming month on its 24-hour video server nights, weekends, and holidays. Check the SCGTV website for daily program updates at <http://www.brevardfl.gov>. The Agenda may be viewed at: <http://www.brevardfl.gov/Board Meetings>

In accordance with Resolution 2014-219 Section VIII (8.1) the agenda shall provide a section for public comment limited to thirty (30) minutes following approval of the consent agenda during each regular County Commission meeting. The purpose of public comment is to allow individuals to comment on any topic relating to County business which is not on the meeting agenda. Individuals delivering public comment shall be restricted to a three-minute time limit on their presentation. During this thirty (30) minute segment of public comment, speakers will be heard in the order in which they turned in a speaker card asking to be heard. Any speaker not heard during the first thirty (30) minute segment will be heard during a second public comment segment held at the conclusion of business specified on the regular Commission agenda. With the exception of emergency items, the Board will take no action under the Public Comment section, but can refer the matter to another meeting agenda.

Any invocation that may be offered before the official start of the Commission meeting shall be the voluntary offering of a private citizen, to and for the benefit of the Commission. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the Commission, and the Commission is not allowed by law to endorse the religious beliefs or views of this, or any other speaker.



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Resolution/Award/Presentation

E.1.

2/9/2021

Subject:

Resolution acknowledging Kyle Hecky for obtaining the rank of Eagle Scout

Fiscal Impact:

None

Dept/Office:

District 1 Commission Office

Requested Action:

It is requested the Board approve a Resolution recognizing Kyle Hecky for obtaining the rank of Eagle Scout

Summary Explanation and Background:

Kyle Hecky has completed the requirements and has achieved the rank of Eagle Scout.
Mr. Hecky will be present to accept the Resolution.

Clerk to the Board Instructions:

1 framed resolution

RESOLUTION

WHEREAS, Kyle Hecky has achieved the rank of Eagle Scout, the highest rank awarded to a Boy Scout, by completing the demanding requirements of personal development, leadership, and community service; and

WHEREAS, Kyle has worked hard towards his Eagle Scout Award by obtaining the 13 required Eagle badges and an additional 29 merit badges, earning him two Bronze Palms, one Silver Palm and one Gold Palm, as well as the BSA Mile Swim Award and the National Outdoor Achievement Awards for Camping and Hiking; and

WHEREAS, only five percent of all Boy Scouts earn the Eagle Scout Award, a performance-based achievement with standards that have been well-maintained over the years; and

WHEREAS, Kyle is currently a Junior attending Space Coast Jr. Sr. High School, and also attends Eastern Florida State College to earn his Associates in Arts degree. He is a five-year Letterman Varsity swimmer for the Space Coast Vipers; and

WHEREAS, for his eagle project, Kyle developed, planned, and led a project to benefit the community and the LaGrange Cemetery. His work involved designing, creating, organizing, and leading a team of scouts to install new section markers; and

WHEREAS, the lessons learned by obtaining the Eagle Scout Award are important to not only the life of the Scout, but also to enhance the future development of leadership in our nation;

NOW THEREFORE BE IT RESOLVED THAT THE BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS, does hereby recognize and congratulate

Kyle Steven Hecky

For his outstanding efforts in obtaining his Eagle Scout Award and offers congratulations and best wishes for a successful future.

DONE, ORDERED AND ADOPTED, in regular session, this 9 day of February 2021, A.D.



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Resolution/Award/Presentation

E.2.

2/9/2021

Subject:

Resolution acknowledging Thomas Wyman for obtaining the rank of Eagle Scout

Fiscal Impact:

None

Dept/Office:

District 1 Commission Office

Requested Action:

It is requested the Board approve a Resolution recognizing Thomas Wyman for obtaining the rank of Eagle Scout

Summary Explanation and Background:

Thomas Wyman has completed the requirements and has achieved the rank of Eagle Scout.
Mr. Wyman will be present to accept the resolution.

Clerk to the Board Instructions:

1 framed resolution

RESOLUTION

WHEREAS, Thomas Wyman has achieved the rank of Eagle Scout, the highest rank awarded to a Boy Scout, by completing the demanding requirements of personal development, leadership, and community service; and

WHEREAS, Thomas has worked hard towards his Eagle Scout Award by obtaining the 13 required Eagle badges and an additional 27 merit badges, earning bronze, silver and gold palms, as well as the 50 Miler Award and the National Outdoor Achievement Award for Hiking and Camping. Thomas has become one of the youngest scouts to achieve the rank of Eagle in his troop's history; and

WHEREAS, only five percent of all Boy Scouts earn the Eagle Scout Award, a performance-based achievement with standards that have been well-maintained over the years; and

WHEREAS, Thomas is an eighth grader at Space Coast Jr Sr High School, a Varsity Viper Swimmer and is a Brotherhood member of the Order of the Arrow; and

WHEREAS, for his Eagle project, Thomas developed, planned, and led a project to benefit the hiking community on the Florida Trail by replacing two rotting bridges. His work involved designing, planning, constructing and leading a team to make the bridges safer for all who cross; and

WHEREAS, the lessons learned by obtaining the Eagle Scout Award are important to not only the life of the Scout, but also to enhance the future development of leadership in our nation;

NOW THEREFORE BE IT RESOLVED THAT THE BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS, does hereby recognize and congratulate

Thomas Michael Wyman

For his outstanding efforts in obtaining his Eagle Scout Award and offers congratulations and best wishes for a successful future.

DONE, ORDERED AND ADOPTED, in regular session, this 9th day of February, 2021 A.D.



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Resolution/Award/Presentation

E.3.

2/9/2021

Subject:

Resolution Honoring the Distinguished Service of Scott Ellis, Retired Brevard County Clerk of Court

Fiscal Impact:

None

Dept/Office:

District 3

Requested Action:

Board Passage of Attached Resolution

Summary Explanation and Background:

See Resolution

Clerk to the Board Instructions:

Please Frame Attached Resolution

RESOLUTION 21-_____

RESOLUTION HONORING SCOTT ELLIS, RETIRED CLERK OF THE COURT

WHEREAS, Scott Ellis was born in Charleston, West Virginia; and

WHEREAS, Mr. Ellis graduated from Eau Gallie High School in 1976; and

WHEREAS, Mr. Ellis is a veteran of the United States Air Force, having served honorably until 1980; and

WHEREAS, in 1992, Mr. Ellis ran for and won a seat on the Brevard County Board of County Commissioners, whereby he immediately became a staunch advocate for accountability in Government; and

WHEREAS, he was a key supporter of the Charter Cap, ensuring limits on run-away budgetary growth; and

WHEREAS, throughout his career, Mr. Ellis was a harsh critic of the Environmentally Endangered Lands Program; and

WHEREAS, Mr. Ellis began his most recent term as Clerk of the Court during a tumultuous time, in which his predecessor was facing felony corruption charges for which he was later convicted; and

WHEREAS, throughout his career, Mr. Ellis has attracted superb talent to his staff, including a highly qualified and gifted in-house counsel; and

WHEREAS, during his most recent tenure, Mr. Ellis continued his long tradition of ensuring accountability when he challenged the Board's decision to take out a bond for a cash handout to Blue Origin; and

WHEREAS, Mr. Ellis will be remembered always as an advocate for transparency, accountability, and efficiency in government.

NOW, THEREFORE, BE IT RESOLVED THAT SCOTT ELLIS, RETIRED CLERK OF THE COURT OF BREVARD COUNTY, WILL ALWAYS BE FONDLY REMEMBERED AND CELEBRATED IN BREVARD COUNTY.

DONE, ORDERED AND ADOPTED, in regular session, this 9TH Day of February, 2021.

RITA PRITCHETT, CHAIR
BOARD OF COUNTY COMMISSIONERS
BREVARD COUNTY, FL

ATTEST:

RACHEL M. SADOFF, CLERK



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Resolution/Award/Presentation

E.4.

2/9/2021

Subject:

Resolution honoring Florida Today Reporter Isadora Rangel

Fiscal Impact:

n/a

Dept/Office:

District 3

Requested Action:

It is requested the Board of County Commissioners approve the Resolution

Summary Explanation and Background:

Clerk to the Board Instructions:

Please frame

RESOLUTION 21-_____

RESOLUTION HONORING FLORIDA TODAY REPORTER ISADORA RANGEL

WHEREAS, Isadora Rangel has served Brevard County's citizens as the Public Affairs and Engagement Editor at the FLORIDA TODAY since 2017; and

WHEREAS, she has her Bachelor's degree in Journalism from Florida International University, and also was selected to attend a workshop for the New York Times Student Journalism Institute; and

WHEREAS, Ms. Rangel oversaw the FLORIDA TODAY's opinion pages, wrote columns and editorials as well as coordinated engagement efforts in Brevard County including the project Civility Brevard; and

WHEREAS, because of her eloquent prose, the circulation of the FLORIDA TODAY dropped only 16% during her tenure, according to Dan Christensen of the Florida Bulldog; and

WHEREAS, she selflessly advocated for public notice in newspapers despite the fact that it is rarely read, costs taxpayers millions, and would benefit her employer's pocket; and

WHEREAS, her dedication to Brevard is exemplified by her accepting a position with The Miami Herald a mere 3 years after coming here; and

WHEREAS, her liberal views will be sorely missed by the Brevard Democrats.

NOW, THEREFORE, BE IT RESOLVED THAT THE BREVARD COUNTY COMMISSION WISHES ISADORA MUCH SUCCESS IN HER FUTURE ENDEAVORS.

DONE, ORDERED AND ADOPTED, in regular session, this 9TH Day of February, 2021.

RITA PRITCHETT, CHAIR
BOARD OF COUNTY COMMISSIONERS
BREVARD COUNTY, FL

ATTEST:

RACHEL M. SADOFF, CLERK



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.1.

2/9/2021

Subject:

Final Plat Approval, Re: Amazing Explorers Academy at Viera (20FM00004) (District 4)
Developer: AEA Viera, LLC.

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

In accordance with Section 62-2841(i), it is requested that the Board of County Commissioners grant final plat approval and authorize the Chair to sign the final plat for Amazing Explorers Academy at Viera.

Summary Explanation and Background:

There are three stages of review for subdivision plan approval: the pre-application conference, the preliminary plat/final engineering plan review, and the final plat review. The pre-application conference for the above project was held on May 2, 2019 along with the site plan for the Amazing Explorer's Academy at Viera. The preliminary plat and final engineering plans, which is the second stage of approval, was approved on August 29, 2019. The third stage of review is the final plat approval for recordation.

Staff has reviewed the final plat for Amazing Explorers Academy at Viera, and has determined that it is in compliance with the applicable ordinances.

Amazing Explorers Academy at Viera is located within the Viera DRI, at the southwest corner of Ivanhoe Drive and Trafford Drive. The proposed subdivision contains 1 lot on 3.67 acres.

This approval is subject to minor engineering changes as applicable. Board approval of this project does not relieve the developer from obtaining all other necessary jurisdictional permits.

Reference: 20FM00004, 19SP00009

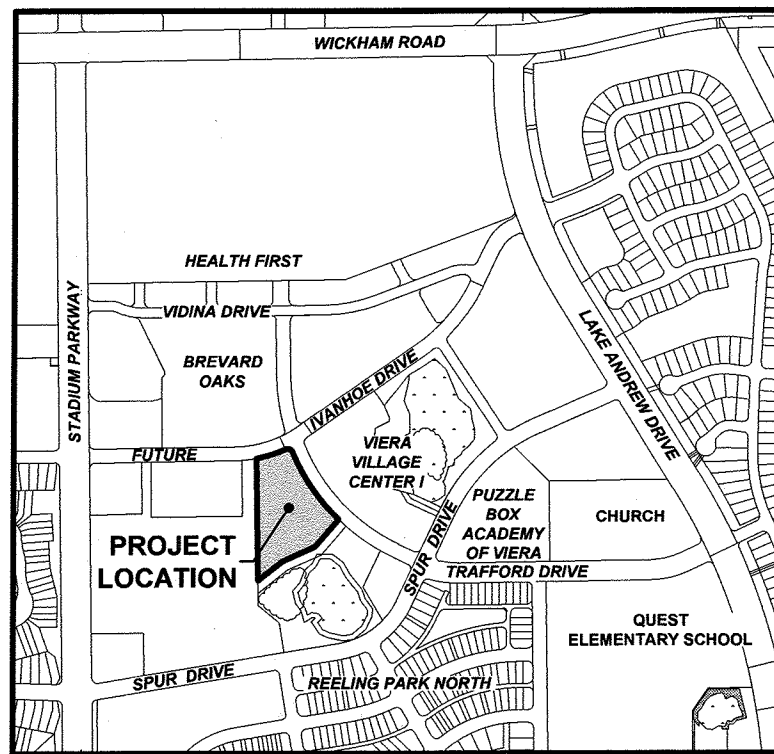
Contact: Amanda Elmore, Assistant Director, Ext. 58996

Clerk to the Board Instructions:

Please have the plat mylar signed and return to Planning and Development.

AMAZING EXPLORERS ACADEMY AT VIERA

SECTION 16, TOWNSHIP 26 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA



ABBREVIATIONS

MINUTES/FEET	
SECONDS/INCHES	
DEGREES	
(NR)	NOT RADIAL
AC	ACRE
AL	ARC LENGTH
AVE	AVENUE
BLVD	BOULEVARD
BOC	BEGINNING OF CURVE
CB	CHORD BEARING
CH	CHORD LENGTH
CM	CONCRETE MONUMENT
CONC	CONCRETE
COR	CORNER
DEL	DELTA / CENTRAL ANGLE
DRI	DEVELOPMENT OF REGIONAL IMPACT
E	EAST/EASTING
FD	FOUND
FH	FIRE HYDRANT
FP&L	FLORIDA POWER AND LIGHT
FT	FOOT/FEET
HWY	HIGHWAY
ID#	IDENTIFICATION NUMBER
IR	IRON ROD
IRC	IRON ROD AND CAP
LB	LICENSED BUSINESS
N	NORTH/NORTHING
N&D	NAIL AND DISK
NTI	NON-TANGENT INTERSECTION
NTL	NON-TANGENT LINE
NTS	NOT TO SCALE
OR/ORB	OFFICIAL RECORDS BOOK
PB	PLAT BOOK
PCC	POINT OF COMPOUND CURVATURE
PCP	PERMANENT CONTROL POINT
PG(S)	PAGE(S)
PKD	PARKER-KALEN NAIL AND DISK
POB	POINT OF BEGINNING
POC	POINT OF COMPOUND CURVATURE
PRM	PERMANENT REFERENCE MONUMENT
PUD	PLANNED UNIT DEVELOPMENT
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS
R/W	RIGHT-OF-WAY
S	SOUTH
ST	STREET
TYP	TYPICAL
W	WEST

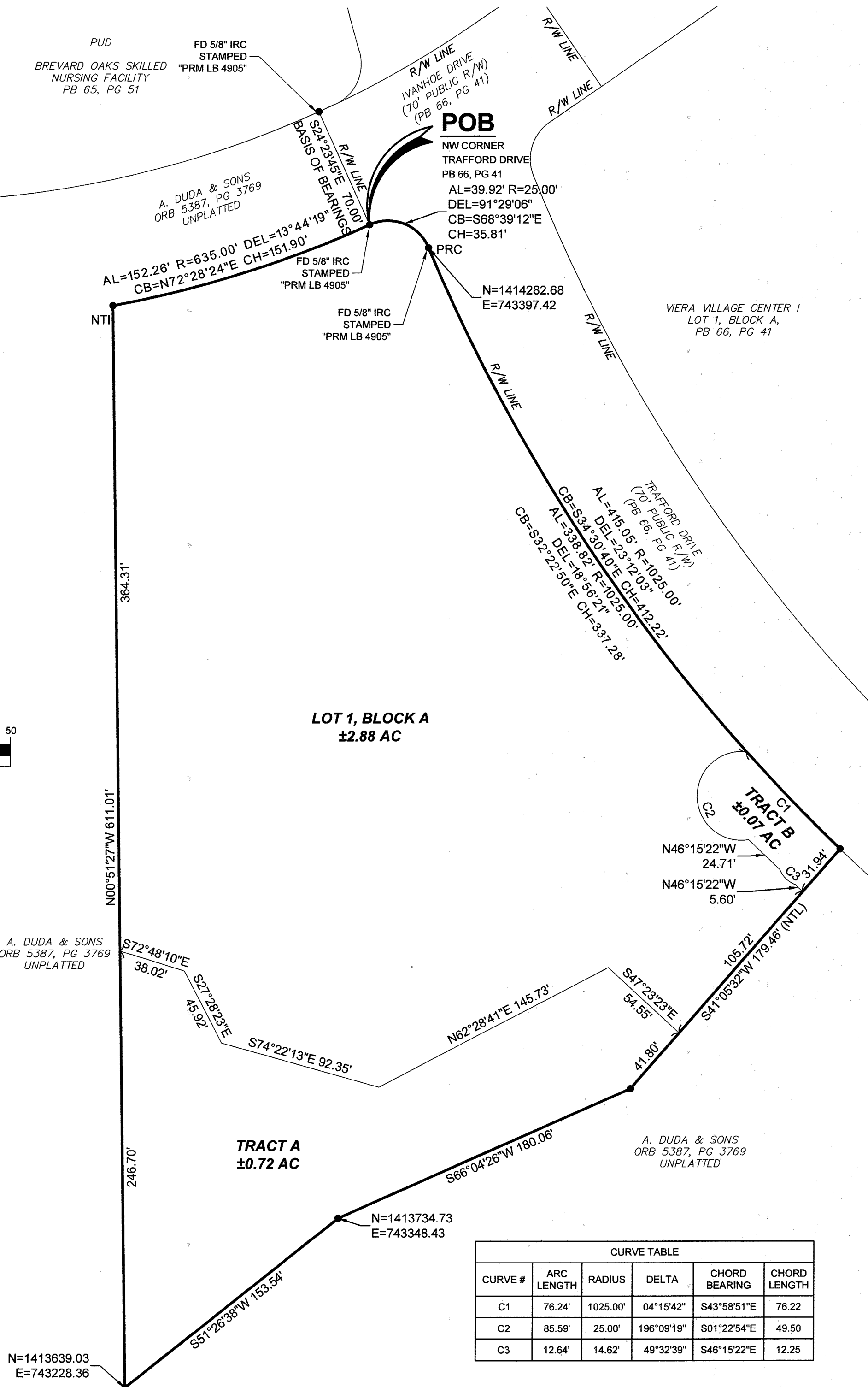
SURVEY SYMBOL LEGEND

- SET 5/8" IRON ROD AND CAP; STAMPED "PRM LB4905", UNLESS OTHERWISE NOTED

DESCRIPTION:

A PARCEL OF LAND LOCATED IN SECTION 16, TOWNSHIP 26 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHWEST CORNER OF TRAFFORD DRIVE (A 70' WIDE PUBLIC RIGHT-OF-WAY) ACCORDING TO THE PLAT OF VIERA VILLAGE CENTER I, AS RECORDED IN PLAT BOOK 66, PAGE 41, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AND RUN ALONG THE ARC OF THE CURVED WESTERLY RIGHT-OF-WAY LINE OF SAID TRAFFORD DRIVE, (SAID CURVE BEING CURVED CONCAVE TO THE SOUTHWEST, AND HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 91°29'06", A CHORD BEARING OF S68°39'12"E, AND A CHORD LENGTH OF 35.81 FEET), A DISTANCE OF 39.92 FEET TO A POINT OF REVERSE CURVATURE, THENCE CONTINUING ALONG SAID WESTERLY RIGHT-OF-WAY LINE AND ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHEAST, AND HAVING A RADIUS OF 1025.00 FEET, A CENTRAL ANGLE OF 23°12'03", A CHORD BEARING OF S34°30'40"E, AND A CHORD LENGTH OF 412.22 FEET), A DISTANCE OF 415.05 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE TO THE SOUTHWEST; THENCE S41°05'32"W ALONG SAID NON-TANGENT LINE, A DISTANCE OF 179.46 FEET; THENCE S66°04'26"W, A DISTANCE OF 180.06 FEET; THENCE S51°26'38"W, A DISTANCE OF 153.54 FEET; THENCE N00°51'27"W, A DISTANCE OF 611.01 FEET TO A NON-TANGENT INTERSECTION WITH A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTH, AND HAVING A RADIUS OF 835.00 FEET, A CENTRAL ANGLE OF 13°44'19", A CHORD BEARING OF N72°28'24"E, AND A CHORD LENGTH OF 151.90 FEET), A DISTANCE OF 152.26 FEET TO THE POINT OF BEGINNING, CONTAINING 3.67 ACRES, MORE OR LESS.



TRACT AREA SUMMARY TABLE			
TRACT	AREA (ACRES)	TRACT USE	OWNERSHIP AND MAINTENANCE ENTITY
TRACT A	0.72	CANOPY PRESERVATION AREA	AEA VIERA, LLC, ITS SUCCESSORS AND/OR ASSIGNS
TRACT B	0.07	CANOPY PRESERVATION AREA	AEA VIERA, LLC, ITS SUCCESSORS AND/OR ASSIGNS

STATE PLANE COORDINATE NOTES:
THE COORDINATES SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM FOR FLORIDA'S EAST ZONE, NORTH AMERICAN DATUM OF 1983 AND READJUSTED IN 1999 (NAD83/99).

A GPS CONTROL SURVEY UTILIZING THREE ASHTECH PROMARK 2 GPS RECEIVERS WAS PERFORMED ON 12/04/04. THE NETWORK VECTOR DATA WAS ADJUSTED BY LEAST SQUARES METHOD UTILIZING ASHTECH SOLUTIONS VERSION 2.7. THE STATIONS SHOWN BELOW WERE HELD FIXED IN THE NETWORK ADJUSTMENT.

DESIGNATION	PID	NORTHING	N METERS	EASTING	E METERS	N. LATITUDE	W. LONGITUDE	COMBINED SCALE FACTOR	CONVERGENCE ANGLE
DURAN AZ MK 6	AK7519	1,426,329.224	434,746.017	738,933.411	225,227.354	28°15'26.19982"	080°44'34.43002"	0.99994903	(+0°07' 18.2"
BREVARD GPS 1090	AK7524	1,422,840.468	433,682.642	740,680.093	225,759.744	28°14'51.61826"	080°44'14.98184"	0.99994936	(+0°07' 27.3"
I 95 73A64	AK2846	1,416,452.318	431,735.530	746,854.0344	227,641.565	28°13'48.22765"	080°43'06.11244"	0.99995250	(+0°07' 59.6"

THE COORDINATE VALUES SHOWN ON THE PLAT BOUNDARY AND THE SURROUNDING SECTION CORNERS WERE COMPUTED USING AUTODESK LAND DEVELOPMENT DESKTOP. A PROJECT SCALE FACTOR OF 0.99995030 WAS USED TO CONVERT GROUND DISTANCE TO GRID DISTANCE. THE DISTANCES SHOWN ON THIS PLAT ARE GROUND DISTANCES. THE PROJECT SCALE FACTOR CAN BE APPLIED TO CONVERT THE GROUND DISTANCE TO GRID DISTANCE. ALL OF THE VALUES SHOWN ARE EXPRESSED IN U.S. SURVEY FEET.

PLAT NOTES

- BEARINGS SHOWN HEREON ARE BASED ON THE WESTERLY RIGHT-OF-WAY LINE OF IVANHOE DRIVE AS RECORDED IN PLAT BOOK 66, PAGE 41, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, BEING ASSUMED AS S24°23'45"E.
- SURVEY MONUMENTATION WITHIN THE PLATTED LANDS SHALL BE SET IN ACCORDANCE WITH FLORIDA STATUTES CHAPTER 177.091(9).
- ALL LINES ARE NON-RADIAL UNLESS NOTED OTHERWISE.
- BREVARD COUNTY SURVEY CONTROL MARK G6851 IS LOCATED NEAR THE LIMITS OF THIS PLAT BOUNDARY. FOR VERTICAL CONTROL DATA CONTACT THE BREVARD COUNTY SURVEYING AND MAPPING DEPARTMENT.
- BREVARD COUNTY MANDATORY PLAT NOTES:
 - AN INGRESS AND EGRESS EASEMENT IS HEREBY DEDICATED TO BREVARD COUNTY OVER AND ACROSS ALL PRIVATE DRAINAGE EASEMENTS, PRIVATE STORMWATER TRACTS AND PRIVATE ROADWAYS FOR LAW ENFORCEMENT, EMERGENCY ACCESS AND EMERGENCY MAINTENANCE.
 - EACH LOT OWNER PURCHASING A LOT SHOWN ON THIS PLAT CONSENTS TO THE IMPOSITION OF A MUNICIPAL SERVICE BENEFIT UNIT OR MUNICIPAL SERVICE TAXING UNIT BY BREVARD COUNTY OR OTHER GOVERNMENTAL ENTITY FOR MAINTENANCE OF COMMON AREAS IN THE EVENT OF THE FAILURE OF THE PROPERTY OWNERS' ASSOCIATION TO MAINTAIN PROPERLY THE COMMON AREAS IN CONFORMANCE WITH THE APPLICABLE REGULATORY PERMITS OR OTHER APPLICABLE REGULATIONS. AN EASEMENT TO THE COMMON AREA MUST BE GRANTED TO BREVARD COUNTY PRIOR TO ESTABLISHMENT OF AN MSBU.
 - ALL LOT DRAINAGE IS PRIVATE AND IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNER AND/OR THE PROPERTY OWNERS' ASSOCIATION TO MAINTAIN.
- ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION OR INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES. THIS SECTION SHALL NOT APPLY TO THOSE PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
- THERE IS HEREBY DEDICATED OVER AND ACROSS THE FRONT OF ALL LOTS AND TRACTS, ABUTTING AND COINCIDENT WITH THE PUBLIC STREET RIGHTS OF WAY, A 10' PUBLIC UTILITY EASEMENT (UNLESS OTHERWISE NOTED) FOR USE BY PUBLIC AND PRIVATE UTILITY COMPANIES IN CONNECTION WITH PROVIDING SERVICE TO THE LANDS PLATTED HEREUNDER. FOR PURPOSES OF THIS PLAT, THE TERM "PUBLIC AND PRIVATE UTILITY COMPANIES" SHALL INCLUDE, BUT NOT BE LIMITED TO, FLORIDA POWER & LIGHT CO., SOUTHERN BELL, AND CV OF VIERA LLP (A CABLE TELEVISION AND TELECOMMUNICATION SERVICE PROVIDER).
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND PROVISIONS OF THAT CERTAIN SPECIAL WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 8524, PAGE 2832, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- TRACTS A & B ARE HEREBY RESERVED FOR CANOPY PRESERVATION AREAS AND SHALL BE OWNED AND MAINTAINED BY AEA VIERA, LLC, A FLORIDA LIMITED LIABILITY COMPANY, ITS SUCCESSORS AND/OR ASSIGNS. ACTIVITIES THAT ARE DETRIMENTAL TO THE PERPETUAL PRESERVATION OF THESE AREAS SHALL BE PROHIBITED.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THOSE CERTAIN MINERAL RIGHTS RESERVED BY CONSOLIDATED NAVAL STORES COMPANY, IN DEED RECORDED IN DEED BOOK 270 PAGE 409, AS AFFECTED BY WARRANTY DEED FROM CONSOLIDATED FINANCIAL CORPORATION (F/K/A CONSOLIDATED NAVAL STORES COMPANY) TO CONSOLIDATED-TOMOKA LAND CO., RECORDED IN OFFICIAL RECORDS BOOK 1097, PAGE 684 AND PARTIALLY RELEASED BY THE RELEASE OF SURFACE, ENTRY RIGHTS WITH RESPECT TO OIL, GAS AND MINERAL INTEREST, DATED 9/30/1987, BY CONSOLIDATED-TOMOKA LAND CO. IN OFFICIAL RECORDS BOOK 2852, PAGE 1304, WHICH RELEASES "ALL OF THE RIGHTS OF THE RELEASOR TO EXPLORE FOR, DRILL FOR, DEVELOP, MINE AND REMOVE OIL, GAS AND OTHER MINERALS, OR OTHERWISE TO ENTER UPON, USE OCCUPY, DISRUPT OR DAMAGE THE SURFACE ...", SAID MINERAL RIGHTS FURTHER CONVEYED BY CONSOLIDATED-TOMOKA LAND CO. TO INDIGO GROUP, INC. BY WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 5387, PAGE 3769.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN NOTICE OF AGREEMENT BETWEEN A. DUDA & SONS, INC. AND THE FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS RECORDED JULY 7, 1989 IN OFFICIAL RECORDS BOOK 3005, PAGE 3575, TOGETHER WITH FIRST AMENDMENT TO AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 3951, PAGE 1404.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN AGREEMENT COVERING WATER SERVICE BETWEEN THE VIERA COMPANY AND THE CITY OF COCOA, FLORIDA DATED AUGUST 28, 1988, AS AMENDED BY THAT CERTAIN AMENDMENT #1 TO AGREEMENT DATED MAY 27, 1994 AS RECORDED IN OFFICIAL RECORDS BOOK 3404, PAGE 0853, AND RE-RECORDED IN OFFICIAL RECORDS BOOK 3407, PAGE 3452, TOGETHER WITH THIRD AMENDMENT TO AGREEMENT RECORDED AUGUST 16, 2017 IN OFFICIAL RECORDS BOOK 7962, PAGE 1632 AND FOURTH AMENDMENT TO AGREEMENT RECORDED AUGUST 16, 2017 IN OFFICIAL RECORDS BOOK 7962, PAGE 1655.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS FOR CENTRAL VIERA COMMUNITY, WHICH CONTAINS PROVISIONS FOR (I) AN EASEMENT ON THE LAND; (II) A PRIVATE CHARGE OR ASSESSMENTS, AS RECORDED IN OFFICIAL RECORDS BOOK 3408, PAGE 0824, AS MODIFIED BY THE FIRST AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 3813, PAGE 3987, THE SECOND AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 3882, PAGE 2349, THE THIRD AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 4065, PAGE 2855, AMENDMENT NUMBER FOUR RECORDED IN OFFICIAL RECORDS BOOK 4209, PAGE 2335, THE FOURTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 4297, PAGE 0372, AMENDMENT NUMBER FIVE RECORDED IN OFFICIAL RECORDS BOOK 4303, PAGE 0571, THE SIXTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 4718, PAGE 1926, (NUMBER SEQUENCE SKIPS "SEVENTH" AMENDMENT), THE EIGHTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 5103, PAGE 0827, THE NINTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 5333, PAGE 1015, THE TENTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 5369, PAGE 4776, THE ELEVENTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 5806, PAGE 8129 AND THE TWELFTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 6278, PAGE 1612, AND THIRTEENTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 6359, PAGE 1905, AND FOURTEENTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 6871, PAGE 630, FIFTEENTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 7828, PAGE 1083, SIXTEENTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 8114, PAGE 2777, SEVENTEENTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 8130, PAGE 63, EIGHTEENTH AMENDMENT RECORDED IN OFFICIAL RECORDS BOOK 8242, PAGE 2738, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN NOTICE OF CREATION AND ESTABLISHMENT OF THE VIERA STEWARDSHIP DISTRICT RECORDED AUGUST 10, 2006 IN OFFICIAL RECORDS BOOK 5683, PAGE 2029, AMENDED BY THE CERTAIN NOTICE OF BOUNDARY AMENDMENT FOR THE VIERA STEWARDSHIP DISTRICT RECORDED IN OFFICIAL RECORDS BOOK 6081, PAGE 1341 AND IN OFFICIAL RECORDS BOOK 6081, PAGE 1354, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN THIRD AMENDED AND RESTATED DECLARATION OF RESTRICTIVE COVENANTS (HOSPITAL RESTRICTION) RECORDED SEPTEMBER 5, 2008, IN OFFICIAL RECORDS BOOK 5885, PAGE 8902.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN DISCLOSURE OF PUBLIC FINANCING AND MAINTENANCE OF IMPROVEMENTS TO REAL PROPERTY UNDERTAKEN BY VIERA STEWARDSHIP DISTRICT RECORDED MAY 20, 2013 IN OFFICIAL RECORDS BOOK 6879, PAGE 1970, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN RIGHT OF FIRST OFFER AGREEMENT RECORDED JUNE 11, 2013, IN OFFICIAL RECORDS BOOK 6897, PAGE 187.
- THE LANDS PLATTED HEREUNDER ARE SUBJECT TO THE TERMS AND CONDITIONS OF THAT CERTAIN AMENDED AND RESTATED DEVELOPMENT ORDER VIERA DEVELOPMENT OF REGIONAL IMPACT APPROVED BY RESOLUTION 16-126 ADOPTED BY THE BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS ON AUGUST 23, 2016, RECORD NOTICE OF WHICH WAS PROVIDED BY THAT CERTAIN NOTICE OF MODIFICATION OF A DEVELOPMENT ORDER DATED AS OF OCTOBER 31, 2016 AND RECORDED IN OFFICIAL RECORDS BOOK 7743, PAGE 1605, NOTICE OF THE MODIFICATION OF A DEVELOPMENT ORDER RECORDED DECEMBER 22, 2017 IN OFFICIAL RECORDS BOOK 8055, PAGE 1380, AMENDED AND RESTATED DEVELOPMENT ORDER VIERA DEVELOPMENT OF REGIONAL IMPACT, AS APPROVED BY THAT CERTAIN RESOLUTION 19-134 ADOPTED BY THE BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS ON AUGUST 20, 2019 AND AS EVIDENCED BY NOTICE OF MODIFICATION OF A DEVELOPMENT ORDER RECORDED SEPTEMBER 23, 2019 IN OFFICIAL RECORDS BOOK 8545, PAGE 418, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH MEMORANDUM OF AGREEMENT RECORDED AUGUST 3, 2017 IN OFFICIAL RECORDS BOOK 7953, PAGE 138, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- FOR JOINDER IN DEDICATION SEE OFFICIAL RECORDS BOOK _____, PAGE _____, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA

NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL, IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

- THIS PLAT PREPARED BY -



B.S.E. CONSULTANTS, INC.
CONSULTING - ENGINEERING - LAND SURVEYING
312 SOUTH HARBOR CITY BOULEVARD, SUITE 1400, MELBOURNE, FL 32901
PHONE: (321) 755-8624 FAX: (321) 724-1154
CERTIFICATE OF BUSINESS AUTHORIZATION: 0005
CERTIFICATE OF LAND SURVEYING BUSINESS AUTHORIZATION: LB00000460

DATE: 08/13/2020
DESIGN/DRAWN: HK/LEH/IT
DRAWING#11508_000_003
PROJECT#11508

PLAT BOOK _____, PAGE _____

SHEET 1 OF 1
SECTION 16, TOWNSHIP 26 SOUTH, RANGE 36 EAST

DEDICATION

KNOW ALL MEN BY THESE PRESENTS, AEA VIERA, LLC, a Florida Limited Liability Company, being the owner in fee simple of the lands described in:

AMAZING EXPLORERS ACADEMY AT VIERA

Hereby dedicates said lands and plat for the uses and purposes therein expressed in the plat notes.

AEA VIERA LLC

IN WITNESS WHEREOF, _____ has caused these presents to be signed and attested to by the officer named below and its corporate seal to be affixed hereto

AEA VIERA, LLC, a Florida Limited Liability Company

By: _____
Manager

Witness: _____

Printed Name: **Kelsey Chaban**

Witness: _____

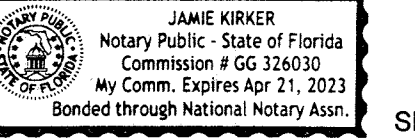
Printed Name: **Daniela Gutierrez**

STATE OF FLORIDA COUNTY OF **Orange**

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this _____ by _____
Manager of the above named company under the laws of State of Florida, on behalf of the company, who is personally known to me ☒ or has produced _____ as identification.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the above date.

NOTARY PUBLIC



SEAL

CERTIFICATE OF SURVEYOR

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, being a licensed professional surveyor and mapper, does hereby certify that on 07/09/2020 he completed the boundary survey of the lands shown on the foregoing plat, and that said plat was prepared under his direction and supervision and that said plat complies with all of the survey requirements of Chapter 177, part 1, Florida Statutes, and County Ordinance 62-2841 (c)(d) as amended, and that said lands are located in Brevard County, Florida.

Registration Number: 8621
Leslie E. Hoyer
B.S.E. Consultants, Inc.
312 South Harbor City Boulevard, Suite #4
Melbourne, Fla. 32901
Certificate of Authorization Number: LB-0004905

CERTIFICATE OF COUNTY SURVEYOR

I HEREBY CERTIFY, That I have reviewed the foregoing plat and find that it is in conformity with Chapter 177, part 1, Florida Statutes and County Ordinance 62-2841(c)(d) as amended.

Michael J. Sweeney, Professional Surveyor & Mapper No. 4870

CERTIFICATE OF ACCEPTANCE OF DEDICATION BY BOARD OF COUNTY COMMISSIONERS

THIS IS TO CERTIFY, That the Board of County Commissioners hereby accepts utility easements, ingress and egress easements for emergency vehicles and areas dedicated for the public use on this plat.

Rita Pritchett, Chair

ATTEST: _____
Clerk of the Board

CERTIFICATE OF APPROVAL BY BOARD OF COUNTY COMMISSIONERS

THIS IS TO CERTIFY, That on _____, the foregoing plat was approved by the Board of County Commissioners of Brevard County, Florida.

Bryan Andrew Lober Chairman of the Board

ATTEST: _____
Clerk of the Board

CERTIFICATE OF CLERK

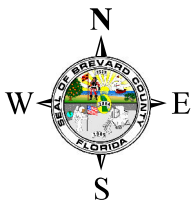
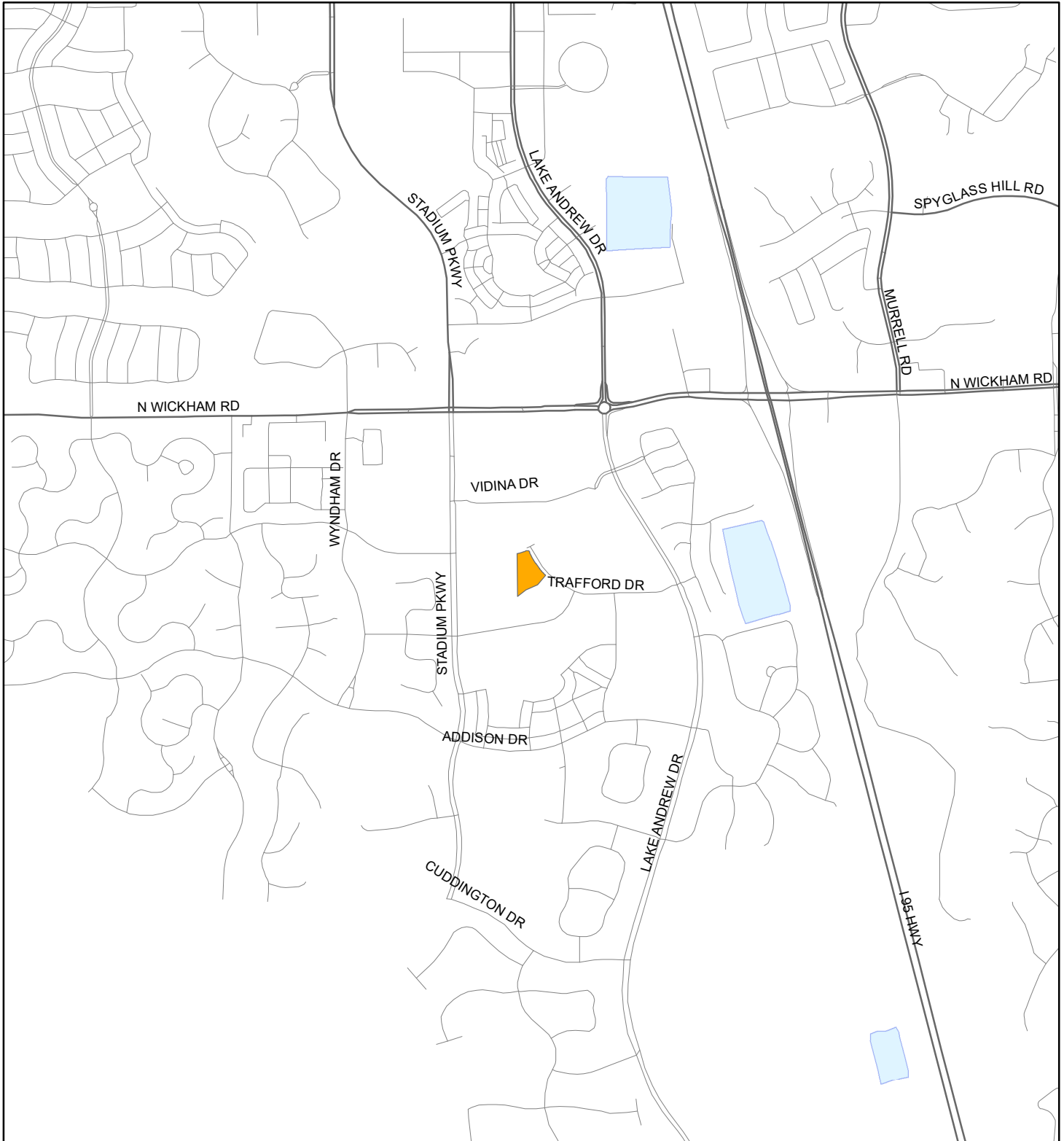
I HEREBY CERTIFY, That I have examined the foregoing plat and find that it complies in form with all the requirements of Chapter 177, part 1 Florida Statutes, and was filed for record on _____ at _____ File No. _____

ATTEST: _____
Clerk of the Circuit Court in and for Brevard County, Fla.

LOCATION MAP

AMAZING EXPLORERS ACADEMY AT VIERA

20FM00004



1:24,000 or 1 inch = 2,000 feet

 Subject Property

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

Produced by BoCC - GIS Date: 1/21/2021



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.2.

2/9/2021

Subject:

Final Plat and Contract Approval, Re: Hickory Ridge Phase 2
Developer: Granite Property Development, Inc. District 1

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

In accordance with Section 62-2841(i) and Section 62-2844, it is requested that the Board of County Commissioners grant final plat approval and authorize the Chair to sign the final plat and contract for Hickory Ridge Phase 2.

Summary Explanation and Background:

There are three stages of review for subdivision plan approval: the pre-application conference, the preliminary plat/final engineering plan review, and the final plat review. The pre-application conference for the above project was held on June 15, 2017. The preliminary plat and final engineering plans, which is the second stage of approval, was approved on December 8, 2017. The third stage of review is the final plat approval for recordation. The applicant is posting a performance bond and contract for guarantee of the completion of the infrastructure improvements.

Staff has reviewed the final plat and contract for the Hickory Ridge Phase 2 subdivision, and has determined that it is in compliance with the applicable ordinances.

Hickory Ridge Phase 2 is located on the west side of U.S. Highway 1, north of Pam Lem Street in Sharpes. The proposed subdivision contains 47 single family lots on 10.199 acres.

This approval is subject to minor engineering changes as applicable. Board approval of this project does not relieve the developer from obtaining all other necessary jurisdictional permits.

Reference: 20FM00009, 17SD00015

Contact: Amanda Elmore, Assistant Director Ext. 58996

Clerk to the Board Instructions:

Please have the contract signed and return the original and a certified copy to Planning and Development.

Subdivision No. 20FM00009

Project Name Hickory Ridge
of Brevard

**Subdivision Infrastructure
Contract**

THIS CONTRACT entered into this 9th day of FEB 2021, by and between the Board of County Commissioners of Brevard County, Florida, hereinafter referred to as "COUNTY," and Granite Property Development, hereinafter referred to as "PRINCIPAL."

WITNESSETH:

IN CONSIDERATION of the mutual covenants and promises herein contained, the parties hereto agree as follows:

1. The PRINCIPAL agrees to construct the improvements described below:

and all other improvements depicted in subdivision number 20FM00009
(17SD00015). A copy of said plat to be recorded in the Plat Books of the Public Records of Brevard County.

2. Principal agrees to construct the improvements strictly in accordance with the plans and specifications on file in the Land Development Division (which construction is hereinafter referred to as the "Work"). Such plans and specifications (hereinafter referred to as the "Plans") are hereby incorporated into this Agreement by reference and made a part hereof. Principal warrants to County that the Work will conform to the requirements of the Plans and other requirements specified in the County's approval of the Work. Principal also warrants to County that the Work will be free from faults and defects. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered to be defective. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this paragraph 2.

If within two (2) years after approval and acceptance of the improvements by County, any Work is found to be defective, Principal shall promptly, without cost to County, either correct such defective Work, or, if it has been rejected by County, remove it from the site and replace it with nondefective Work. If Principal does not promptly comply with the terms of such instructions, County may elect any of the remedies provided for in paragraph 6 herein below. Corrective Work shall be warranted to be free from defects for a period of six (6) months. Any defect in such Work shall be corrected again by Principal promptly upon notice of the defect from County. In the event the maintenance bond given by Principal in connection with County's acceptance of the improvements is extended, the two (2) year warranty period provided for herein shall be extended for a like period.

To the extent assignable, Principal assigns to County all of Principal's warranty rights under its construction contract with the contractor constructing the improvements (including all warranties provided by law of in equity with respect to such construction contract), which warranties may be asserted by County on behalf of Principal in the event Principal fails to perform its warranty obligations hereunder. Where warranties granted hereunder overlap, the more stringent requirement shall control."

3. The PRINCIPAL agrees to complete said construction on or before the 20th day of January, 2022.

4. In order to guarantee performance of PRINCIPAL'S obligations herein contained, PRINCIPAL shall furnish cash, letter of credit, certificate of deposit or surety bond in a form approved by the COUNTY, in the amount of \$ 747,626.50. If such bond is a cash bond or a certificate of deposit, said amount shall be deposited with the Board of County Commissioners within five (5) business days of the County's acceptance of this contract. Said bond shall be 125% of the estimated cost of construction, as determined by the Land Development Division. PRINCIPAL shall maintain such records and accounts, including property, personnel, financial records, as are deemed necessary by the COUNTY to ensure proper accounting for all funds expended under the agreement. Said records shall be made available upon request for audit purposes to Brevard County and its auditors.
5. The COUNTY agrees to accept said plat above described for recording in the public records of Brevard County, Florida and to accept the areas depicted thereon as dedicated for public use, including but not limited to streets and parks, at such time as said improvements are satisfactorily completed. Satisfactory completion in accordance with the plans and specifications shall be determined by written approval of the County Development Engineer or designated assistant.
6. In the event, PRINCIPAL fails to complete said improvements within the time prescribed, the COUNTY may elect to take all or any of the following actions:
 - A. Vacate all or part of such recorded plat where improvements have not been completed in accordance with the plans and specifications,
 - B. Complete the improvements utilizing COUNTY employees and materials and request payment from the bond or the PRINCIPAL,
 - C. Request the surety on said performance bond to complete such improvements, or
 - D. Contract for completion of said improvements.
7. The PRINCIPAL and Surety on said performance bond shall be liable for all costs, expenses, and damages incurred by the COUNTY, including attorney's fees, in the event the PRINCIPAL defaults on this contract.
8. In the performance of this Agreement, the PRINCIPAL shall keep books, records, and accounts of all activities, related to the agreement, in compliance with generally accepted accounting procedures. Books, records and accounts related to the performance of this agreement shall be open to inspection during regular business hours by an authorized representative of the Office and shall be retained by the PRINCIPAL for a period of three years after termination of this agreement. All records, books and accounts related to the performance of this agreement shall be subject to the applicable provisions of the Florida Public Records Act, Chapter 119 of the Florida Statutes.
9. No reports, data, programs or other materials produced, in whole or in part for the benefit and use of the County, under this agreement shall be subject to copyright by PRINCIPAL in the United States or any other country.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the day and year first above written.

ATTEST:

**BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA**

Rachel M. Sadoff, Clerk

Rita Pritchett, Chair

As approved by the Board on: _____, 20____.

WITNESSES:

Theresa Goodrich
Theresa Goodrich

Miguel Santos
Miguel Santos

PRINCIPAL:

Melinda Duke
Granite Property Development Inc, as President
Director

DATE January 19, 2021

State of: Florida

County of: Martin

The foregoing instrument was acknowledged before me this 19 day of January 2021, by Mary Duke who is personally known to me or who has produced FLDE as identification and who did (did not) take an oath.

My commission expires:

S E A L

Commission Number: 25505

Theresa Goodrich
Notary Public

Theresa Goodrich

Notary Name printed, typed or stamped



SURETY PERFORMANCE BOND

Bond #: 21BCSIP2308

KNOW ALL MEN BY THESE PRESENTS:

That we, Granite Property Development Inc., hereinafter referred to as "Owner" and, Hartford Accident and Indemnity Company, hereinafter referred to as "Surety", are held and firmly bound unto the BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA, hereinafter referred to as "County", in the sum of \$ 747,626.50, for the payment of which we bind ourselves, our heirs, executors, successors and assigns, jointly and severally, firmly by these presents:

WHEREAS, Owner has entered into a contract with the County dated the 9th day of February, 2021, which contract is made a part hereof by reference.

NOW THEREFORE, the condition of this obligation is such that if Owner shall promptly and faithfully perform said contract and complete the work contemplated therein by January 20th, 2022, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

If the Owner shall be declared in default of said contract by the County, the Surety shall have sixty (60) days from the date of said default within which to take whatever action it deems necessary in order to insure performance. If, at the expiration of sixty (60) days from the date of said default, no arrangements have been made by the Owner or surety satisfactory to the County for the completion of said contract, then the County shall have the right to complete said contract and the Owner and Surety jointly and severally, shall pay all costs of completing said contract to the County, including but not limited to engineering, legal and other costs, together with any damages, either direct or consequential, which the County may sustain on account of the Owner's default of said contract. After the expiration of the aforesaid grace period, the County shall have the additional right to contract for the completion of said contract upon which the Owner has defaulted and upon the County's acceptance of the lowest responsible bid for the completion of said contract, the Owner and Surety shall become immediately liable for the amount of said bid and in the event the County is required to commence legal proceedings for the collection thereof, interest shall accrue at the rate of six percent (6%) per annum beginning with the commencement of such legal proceedings. The County, in its discretion, may permit the Surety to complete said contract, in the event of Owner's default.

In the event that the County commences suit for the collection of any sums due hereunder, the obligors and each of them agree to pay all costs incurred by the County, including attorney's fees.

EXECUTED this 21st day of January, 2021.

OWNER: Melinda Duke
Melinda Duke, Director

SURETY: Jennie Lanman
Jennie N. Lanman, Attorney-In-Fact

Pre-approved Form reviewed for
Legal form and content: 12/18/07

POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

BOND, T-12

One Hartford Plaza

Hartford, Connecticut 06155

bond.claims@thehartford.com

call: 888-266-3488 or fax: 860-757-5835

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Name:

HALCYON UNDERWRITERS

Agency Code:

21-224119

- ☒ Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- ☒ Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
- ☒ Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
- ☐ Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- ☐ Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
- ☐ Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
- ☐ Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
- ☐ Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, up to the amount of \$15,000,000:

Jennie N. Lanman
of
Maitland, FL

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by X, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



John Gray

John Gray, Assistant Secretary

M. Ross Fisher

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT

COUNTY OF HARTFORD

ss. Hartford

On this 11th day of January 2016, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

Kathleen T. Maynard

Kathleen T. Maynard

Notary Public

My Commission Expires July 31, 2021

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of January 21, 2016.

Signed and sealed at the City of Hartford.

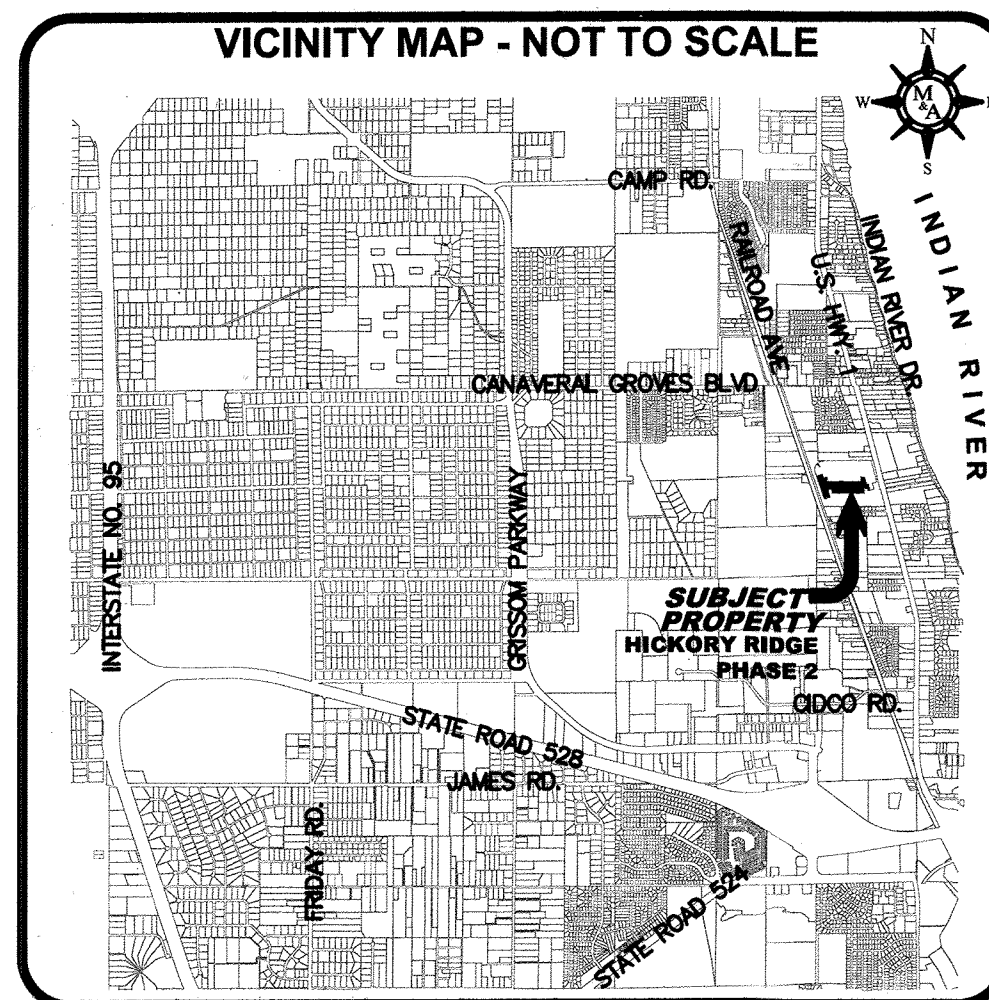


Kevin Heckm

Kevin Heckm

HICKORY RIDGE - PHASE 2

A SUBDIVISION LYING IN SECTION 6, TOWNSHIP 24 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA



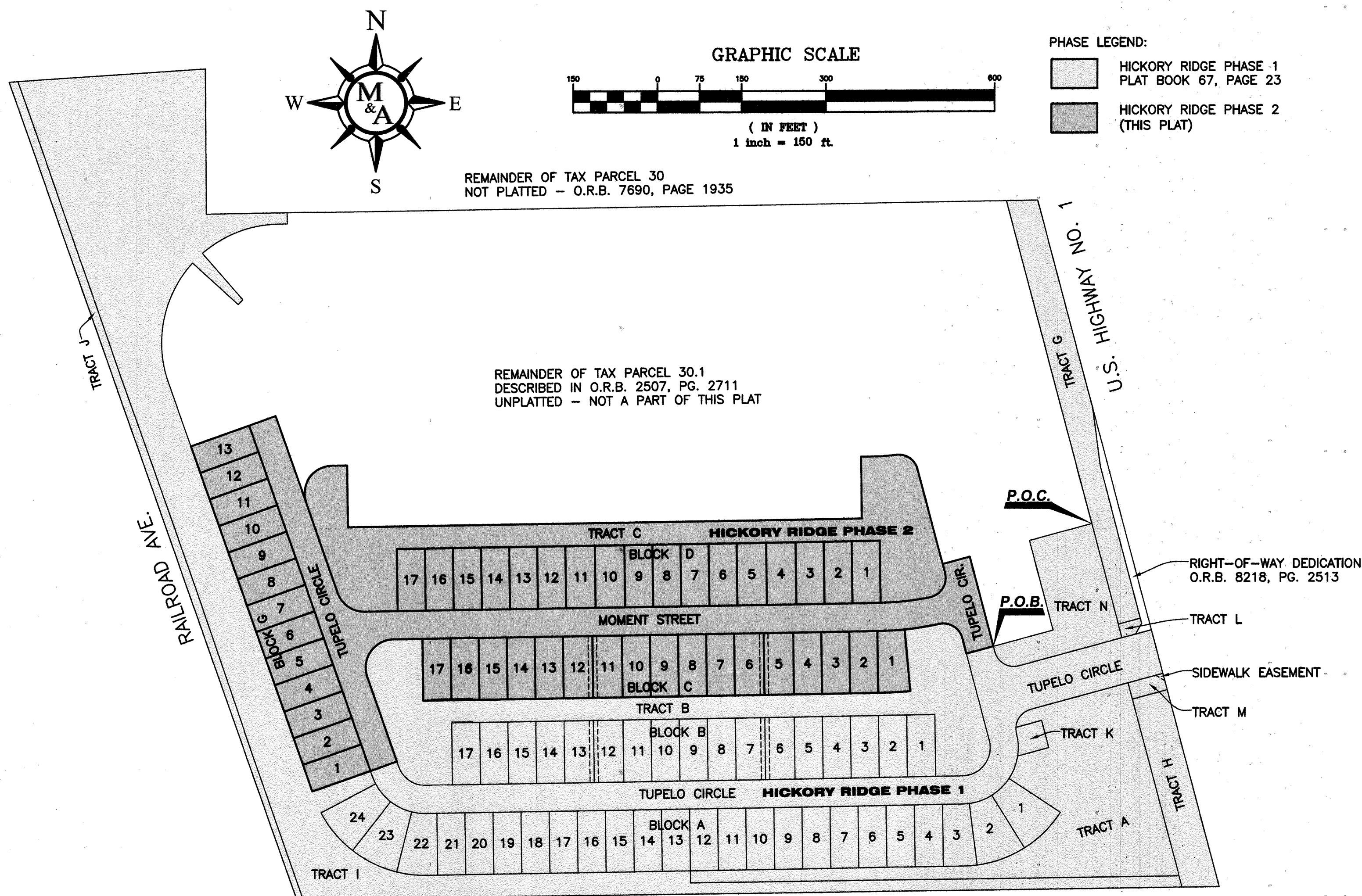
LEGAL DESCRIPTION:

A PARCEL OF LAND LYING IN SECTION 6, TOWNSHIP 24 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT THE NORTHEAST CORNER OF TRACT N, PLAT OF HICKORY RIDGE PHASE 1, AS RECORDED IN PLAT BOOK 67, PAGE 23. PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AND RUN S75°01'47"W ALONG THE NORTHERLY LINE OF TRACT N OF SAID PLAT A DISTANCE OF 115.00 FEET; THENCE S14°58'13"E A DISTANCE OF 165.00 FEET; THENCE S75°01'47"W A DISTANCE OF 110.00 FEET TO THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL (SAID POINT BEING THE INTERSECTION OF THE NORTHERLY LINE OF TRACT N OF SAID PLAT WITH THE EASTERLY RIGHT-OF-WAY OF TUPELO CIRCLE, A PUBLIC RIGHT-OF-WAY 50 FEET IN WIDTH ACCORDING TO SAID PLAT):

THENCE CONTINUE S75°01'47"W A DISTANCE OF 50.00 FEET TO THE WESTERLY RIGHT-OF-WAY OF TUPELO CIRCLE; THENCE N14°58'13"W A DISTANCE OF 28.45 FEET TO THE POINT OF CURVATURE OF A CIRCULAR CURVE TO THE LEFT, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 35.00 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 87°02'38" AN ARC LENGTH OF 53.17 FEET TO THE POINT OF REVERSE CURVATURE OF A CIRCULAR CURVE TO THE RIGHT, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 535.00 FEET; THENCE RUN SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 6°38'48" AN ARC LENGTH OF 62.06 FEET TO THE POINT OF INTERSECTION WITH A NON-TANGENT LINE; THENCE RUN S05°22'04"E A DISTANCE OF 110.00 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENT CURVE TO THE RIGHT, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 645.00 FEET; THENCE RUN SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 4°29'57" AN ARC LENGTH OF 50.65 FEET (SAID ARC SUBTENDED BY A CHORD BEARING OF S86°52'55"W, AND A CHORD LENGTH OF 50.64 FEET) TO THE POINT OF TANGENCY; THENCE RUN S89°07'53"W A DISTANCE OF 816.43 FEET; THENCE N05°52'07"W A DISTANCE OF 110.00 FEET; THENCE S89°07'53"W A DISTANCE OF 51.87 FEET TO THE POINT OF CURVATURE OF A CIRCULAR CURVE TO THE LEFT, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 50.00 FEET; THENCE RUN SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 108°40'01" AN ARC LENGTH OF 94.83 FEET TO THE POINT OF TANGENCY; THENCE S19°32'08"E A DISTANCE OF 159.07 FEET TO A POINT LYING ON THE EASTERLY RIGHT-OF-WAY OF TUPELO CIRCLE, A PUBLIC RIGHT-OF-WAY 50 FEET IN WIDTH, AS RECORDED IN SAID PLAT; THENCE RUN S70°27'52"W A DISTANCE OF 160.00 FEET TO A POINT LYING ON THE EASTERLY LINE OF TRACT I OF SAID PLAT OF HICKORY RIDGE PHASE 1; THENCE RUN N19°32'08"W ALONG SAID EASTERLY LINE OF TRACT I A DISTANCE OF 650.00 FEET; THENCE DEPARTING SAID EASTERLY LINE RUN N70°27'52"E A DISTANCE OF 160.00 FEET; THENCE S19°32'08"E A DISTANCE OF 163.72 FEET TO A POINT OF CUSP WITH A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 50.00 FEET; THENCE RUN NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 108°40'01" AN ARC LENGTH OF 94.83 FEET (SAID ARC SUBTENDED BY A CHORD BEARING OF N34°47'52"E AND A CHORD LENGTH OF 81.24 FEET) TO THE POINT OF TANGENCY; THENCE RUN N89°07'53"E A DISTANCE OF 26.52 FEET; THENCE S00°52'07"E A DISTANCE OF 110.00 FEET; THENCE N89°07'53"E A DISTANCE OF 915.00 FEET; THENCE N00°52'07"W A DISTANCE OF 110.00 FEET; THENCE N89°07'53"E A DISTANCE OF 31.52 FEET TO THE POINT OF CURVATURE OF A CIRCULAR CURVE TO THE LEFT, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 225.00 FEET; THENCE RUN NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 7°36'37" AN ARC LENGTH OF 29.89 FEET TO THE POINT OF REVERSE CURVATURE OF A CIRCULAR CURVE TO THE RIGHT, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 35.00 FEET; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 83°30'31" AN ARC LENGTH OF 51.01 FEET TO THE POINT OF TANGENCY; THENCE RUN S14°58'13"E A DISTANCE OF 174.36 FEET; THENCE N75°01'47"E A DISTANCE OF 50.00 FEET; THENCE S14°58'13"E A DISTANCE OF 165.00 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINING 10.199 ACRES, MORE OR LESS.

PHASE 2 KEY MAP



REMAINDER OF TAX PARCEL 30.1
DESCRIBED IN O.R.B. 2507, PG. 2711
UNPLATTED - NOT A PART OF THIS PLAT

PHASE LEGEND:

- HICKORY RIDGE PHASE 1
PLAT BOOK 67, PAGE 23
- HICKORY RIDGE PHASE 2
(THIS PLAT)

PLAT NOTES:

- THE BEARINGS SHOWN HEREON ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA'S EAST ZONE, NORTH AMERICAN DATUM OF 1983, READJUSTED IN 1990. THE MONUMENTATION UTILIZED IS BREVARD COUNTY "GPS ZACK" AND BREVARD COUNTY "195 73 A84" WHICH BEARS N77°21'33"E.
- BREVARD COUNTY VERTICAL CONTROL MARK E6A56 IS LOCATED WITHIN THE LIMITS OF HICKORY RIDGE PHASE 1 PLAT (PLAT BOOK 63, PAGE 23). FOR VERTICAL CONTROL DATA CONTACT THE BREVARD COUNTY SURVEYING AND MAPPING DEPARTMENT.
- SURVEY MONUMENTATION WITHIN THE SUBDIVISION SHALL BE SET IN ACCORDANCE WITH FLORIDA STATUTE CHAPTERS 177.091(8) AND 177.091(9).
- LANDS PLATTED SHOWN HEREON ARE SUBJECT TO RESTRICTIONS, COVENANTS, CONDITIONS, EASEMENTS, AND ALL OTHER MATTERS RECORDED IN O.R.B. 8448, PAGE 1731, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- THE H.O.A. ("HICKORY RIDGE ASSOCIATION OF BREVARD, INC.") SHALL BE RESPONSIBLE FOR THE OWNERSHIP AND MAINTENANCE OF ALL COMMON AREAS INCLUDING STORMWATER MANAGEMENT, AND AMENITY IMPROVEMENTS, SIDEWALKS, LANDSCAPE, IRRIGATION, DRAINAGE, BUFFERS, WALLS, OR FENCES, AND STORMWATER MANAGEMENT FACILITIES LOCATED IN COMMON TRACT "C".
- BREVARD COUNTY NOTES:

- AN INGRESS AND EGRESS EASEMENT IS HEREBY DEDICATED TO BREVARD COUNTY OVER AND ACROSS ALL PRIVATE DRAINAGE EASEMENTS, PRIVATE STORMWATER TRACTS, AND PRIVATE ROADWAYS FOR LAW ENFORCEMENT, EMERGENCY ACCESS, AND EMERGENCY MAINTENANCE.
- EACH LOT OWNER PURCHASING A LOT SHOWN ON THIS PLAT CONSENTS TO THE IMPOSITION OF A MUNICIPAL SERVICE BENEFIT UNIT BY BREVARD COUNTY OR OTHER GOVERNMENTAL ENTITY FOR MAINTENANCE OF COMMON AREAS IN THE EVENT OF THE FAILURE OF THE HOMEOWNER'S ASSOCIATION TO MAINTAIN PROPERLY THE COMMON AREAS IN CONFORMANCE WITH THE APPLICABLE REGULATIONS. AN EASEMENT TO THE COMMON AREAS MUST BE GRANTED TO BREVARD COUNTY PRIOR TO ESTABLISHMENT OF A MUNICIPAL SERVICE BENEFIT UNIT.
- ALL LOT DRAINAGE IS PRIVATE AND IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNER AND/OR THE H.O.A. (HICKORY RIDGE ASSOCIATION OF BREVARD, INC.) TO MAINTAIN.
- NOTWITHSTANDING OTHER PROVISIONS HEREIN, THE VOTE OF 50 PERCENT PLUS ONE OF THE LOT OWNERS SHALL CONSTITUTE A DEDICATION OF THE COMMON AREA TO THE COUNTY. AN ADOPTION OF A MUNICIPAL SERVICE BENEFIT UNIT ORDINANCE TO PROVIDE MAINTENANCE TO THE COMMON AREA SHALL BE DEEMED ACCEPTANCE OF THE DEDICATION TO THE COUNTY.

- ALL ELECTRIC, GAS, TELEPHONE, AND TV CABLE UTILITIES SHALL BE UNDERGROUND.
- ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES. THIS SECTION SHALL NOT APPLY TO THOSE PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
- "TREE PRESERVATION AREAS" SHALL MEAN THOSE TRACTS OR EASEMENTS DESIGNATED FOR PERPETUAL PRESERVATION OF EXISTING NATURAL CONDITIONS. TRACT "C" IS A TREE PRESERVATION AREA THAT IS RESERVED FOR THE PRESERVATION AND PROTECTION OF TREE CANOPY. THIS TRACT SHALL BE OWNED AND MAINTAINED BY THE H.O.A. (HICKORY RIDGE ASSOCIATION OF BREVARD, INC.) IN ACCORDANCE WITH THE APPLICABLE ORDINANCES OF BREVARD COUNTY. SAID H.O.A. SHALL NOT REMOVE, ALTER, OR DISTURB THE TREE CANOPY LOCATED WITHIN TRACT C WITH THE EXCEPTION OF THE REMOVAL OF SELECTED DEAD OR DISEASED VEGETATION POSING A RISK TO THE PUBLIC SAFETY OF RESIDENTS OR FOR THE REMOVAL OF NON-NATIVE INVASIVE PLANTS IN ACCORDANCE WITH BREVARD COUNTY CODE. REMOVED CANOPY, FOR ANY REASON, SHALL BE REPLACED WITH IN-KIND CANOPY.
- A 10 FEET IN WIDTH EASEMENT IS HEREBY DEDICATED AND CONVEYED ON THE FRONT OF ALL TRACTS AND LOTS PARALLEL WITH ALL ROAD RIGHTS OF WAY FOR THE PURPOSE OF CONSTRUCTION, INSTALLATION, OPERATION, AND MAINTENANCE OF PRIVATE AND PUBLIC UTILITIES.

- ALL DRAINAGE AND STORMWATER INFRASTRUCTURE SHALL BE OWNED AND MAINTAINED BY THE H.O.A. (HICKORY RIDGE ASSOCIATION OF BREVARD, INC.)
- PRIVATE DRAINAGE & STORMWATER / RECREATION "TRACT C" IS HEREBY DEDICATED AND CONVEYED TO THE H.O.A. (HICKORY RIDGE ASSOCIATION OF BREVARD, INC.)
- FOR JOINDERS IN DEDICATION SEE O.R.B. _____, PAGE _____, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
- ENCUMBRANCES SHOWN ON THE OPINION OF TITLE DATED JANUARY 18, 2021, PREPARED BY THE LAW OFFICES OF CANTWELL & GOLDMAN, P.A. ARE AS FOLLOWS:

MORTGAGE RECORDED MARCH 9, 2020, IN OFFICIAL RECORDS BOOK 8685, PAGE 2112, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH AN ASSIGNMENT OF LEASE, RENTS AND OTHER PROPERTY RECORDED IN OFFICIAL RECORDS BOOK 8685, PAGE 2137, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA (COLLECTIVELY, "MORTGAGE")

- NOTICE OF COMMENCEMENT RECORDED ON FEBRUARY 24, 2020, IN OFFICIAL RECORDS BOOK 8672, PAGE 497, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

RESTRICTIONS PER SAID TITLE OPINION:

- BINDING DEVELOPMENT PLAN RECORDED JULY 26, 2017, IN OFFICIAL RECORDS BOOK 7946, PAGE 389.
- BINDING DEVELOPMENT PLAN RECORDED JULY 26, 2017, IN OFFICIAL RECORDS BOOK 7946, PAGE 490.
- CITY OF COCOA ANNEXATION AGREEMENT RECORDED MARCH 6, 2018, IN OFFICIAL RECORDS BOOK 8107, PAGE 249.
- NOTICE OF ENVIRONMENTAL RESOURCE PERMIT RECORDED OCTOBER 5, 2017, IN OFFICIAL RECORDS BOOK 7997, PAGE 2279.

- ALL LOT LINES IN CURVILINEAR LOTS ARE RADIAL UNLESS DESIGNATED NR (NON-RADIAL)

DESIGNATION	PID	NORTHING	N METERS	EASTING	E METERS	N. LATITUDE	W. LATITUDE	COMBINED SCALE FACTOR	CONVERGENCE ANGLE
GPS ZACK	DG8709	1490381.74	454268.3544	733166.39	223469.1157	28°26'00.53457"	80°45'37.49932"	0.99995154	(+) 0°06'50.7"
195 73 A84	AK2111	1489947.72	454136.0651	731231.28	222879.2941	28°25'56.27482"	80°45'59.18445"	0.99995048	(+) 0°06'40.3"
VIERA	FLVR	1422460.369	433566.7876	740758.388	225783.608	28°14'47.85298"	80°44'14.11560"	0.99995033	(+) 0°06'44.6"

THE COORDINATE VALUES SHOWN ON THE PLAT BOUNDARY AND THE SECTION CORNER WERE COMPUTED USING AUTODESK CIVIL3D. A PROJECT SCALE FACTOR OF 0.99995411 WAS USED TO CONVERT GROUND DISTANCE TO GRID DISTANCE. THE COORDINATES AND DISTANCES SHOWN ON THIS PLAT ARE GROUND DISTANCES. THE PROJECT SCALE FACTOR CAN BE APPLIED TO CONVERT THE GROUND DISTANCE TO GRID DISTANCE. ALL OF THE VALUES EXPRESSED ARE IN U.S. SURVEY FEET.

TRACT	TRACT USE	OWNERSHIP & MAINTENANCE ENTITY	AREA
C	PRIVATE DRAINAGE STORMWATER / RECREATION	H.O.A. (HICKORY RIDGE ASSOCIATION OF BREVARD, INC.)	1.991 AC

PLAT BOOK _____ PAGE _____
SHEET 1 OF 2
SECTION 6, TOWNSHIP 24 SOUTH, RANGE 36 EAST

DEDICATION

KNOW ALL MEN BY THESE PRESENTS, THE LIMITED LIABILITY COMPANY NAMED BELOW, THE OWNER IN FEE SIMPLE OF THE LANDS DESCRIBED IN:

HICKORY RIDGE - PHASE 2

HEREBY DEDICATES SAID LANDS AND PLAT FOR THE USES AND PURPOSES THEREIN EXPRESSED IN THE PLAT NOTES AND HEREBY DEDICATES AND CONVEYS THE RIGHTS-OF-WAY FOR TUPELO CIRCLE, MOMENT STREET, AND ALL PUBLIC UTILITY EASEMENTS TO BREVARD COUNTY. NO OTHER EASEMENTS ARE HEREBY DEDICATED OR GRANTED TO THE PUBLIC, EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THE PLAT NOTES. IT BEING THE INTENTION OF THE UNDERSIGNED THAT ALL OTHER EASEMENTS AND COMMON AREAS SHOWN HEREON BE OWNED AND MAINTAINED PRIVATELY OR BY THE HICKORY RIDGE HOMEOWNERS ASSOCIATION.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS CAUSED THESE PRESENTS TO BE EXECUTED ON THE DATE SET FORTH BELOW SIGNED AND SEALED IN THE PRESENCE OF:

WITNESSES: Shea Blumauer (SHEA BLUMAUER) (SHEA BLUMAUER)
WITNESS 2: Shea Blumauer (SHEA BLUMAUER) (SHEA BLUMAUER)

STATE OF FLORIDA COUNTY OF BREVARD
THIS IS TO CERTIFY, THAT ON JANUARY 20, 2021
BEFORE ME, AN OFFICER DULY AUTHORIZED TO TAKE
ACKNOWLEDGMENTS IN THE STATE AND COUNTY AFORESAID,
PERSONALLY APPEARED:

BY: DANNY DUKE
DANNY DUKE, AS AUTHORIZED REPRESENTATIVE AND
MANAGER

RESPECTIVELY AS AUTHORIZED REPRESENTATIVE AND MANAGER
OF GRANITE PROPERTY DEVELOPMENT, INC., A FLORIDA
CORPORATION, WHO IS PERSONALLY KNOWN TO ME OR HAS
PRODUCED _____ AS IDENTIFICATION.

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME
BY MEANS OF A PHYSICAL PRESENCE OR ONLINE NOTARIZATION,
THIS 20 DAY OF JANUARY 2021 BY DANNY DUKE

NOTARY PUBLIC,
STATE OF FLORIDA
MY COMMISSION EXPIRES 2/10/2022
COMMISSION NO. 6690628

CERTIFICATE OF SURVEYOR:

KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED,
BEING A LICENSED AND REGISTERED SURVEYOR AND MAPPER,
DOES HEREBY CERTIFY THAT ON JANUARY 18, 2021 HE
COMPLETED THE BOUNDARY SURVEY OF THE LANDS AS SHOWN
ON THE FOREGOING PLAT; AND THAT SAID PLAT WAS
PREPARED UNDER HIS DIRECTION AND SUPERVISION AND THAT
SAID PLAT COMPLIES WITH ALL THE SURVEY REQUIREMENTS OF
CHAPTER 177, PART 1, FLORIDA STATUTES AND BREVARD
COUNTY CODE SECTION 62-2841 (C)(D); AND THAT
PERMANENT REFERENCE MONUMENTS ("P.R.M.s") PERMANENT
CONTROL POINTS ("P.C.P.s") AND MONUMENTS SHALL BE
PLACED AS REQUIRED BY LAW.

CHRISTOPHER S. BOWERS, P.S.M.
FLORIDA PROFESSIONAL SURVEYOR & MAPPER NO. 5990
MORGAN & ASSOCIATES CONSULTING ENGINEERS, INC.
504 N. HARBOR CITY BLVD.
MELBOURNE, FLORIDA 32935
FLORIDA CORPORATE CERTIFICATE NO. 7040

CERTIFICATE OF REVIEWING SURVEYOR FOR BREVARD COUNTY

I HEREBY CERTIFY, THAT I HAVE REVIEWED THE FOREGOING PLAT
AND FIND THAT IT IS IN CONFORMITY WITH CHAPTER 177, PART
1, FLORIDA STATUTES AND BREVARD COUNTY ORDINANCE
62-2841 (C)(D).

MICHAEL J. SWEENEY
PROFESSIONAL SURVEYOR AND MAPPER
NO. 4870

CERTIFICATE OF ACCEPTANCE OF DEDICATION BY BOARD OF COUNTY COMMISSIONERS

THIS IS TO CERTIFY, THAT THE BOARD OF COUNTY
COMMISSIONERS HEREBY ACCEPTS PUBLIC RIGHTS-OF-WAY OF
TUPELO CIRCLE, MOMENT STREET, AND PUBLIC UTILITY
EASEMENTS DEDICATED FOR PUBLIC USE ON THIS PLAT.

CHAIR _____
CLERK OF THE BOARD _____

CERTIFICATE OF APPROVAL BY BOARD OF COUNTY COMMISSIONERS

ATTEST:
THIS IS TO CERTIFY, THAT ON _____
THE BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY,
FLORIDA APPROVED THE FOREGOING PLAT.

CHAIR _____
CLERK OF THE BOARD _____

CERTIFICATE OF CLERK

THIS IS TO CERTIFY, THAT I HAVE EXAMINED THE FOREGOING
PLAT, AND FIND THAT IT COMPLIES IN FORM WITH ALL THE
REQUIREMENTS OF CHAPTER 177, PART 1 FLORIDA STATUTES
AND WAS FILED FOR RECORD ON _____ AT _____ FILE NO. _____

RACHEL M. SADOFF
CLERK OF THE CIRCUIT COURT
IN AND FOR BREVARD COUNTY, FLORIDA

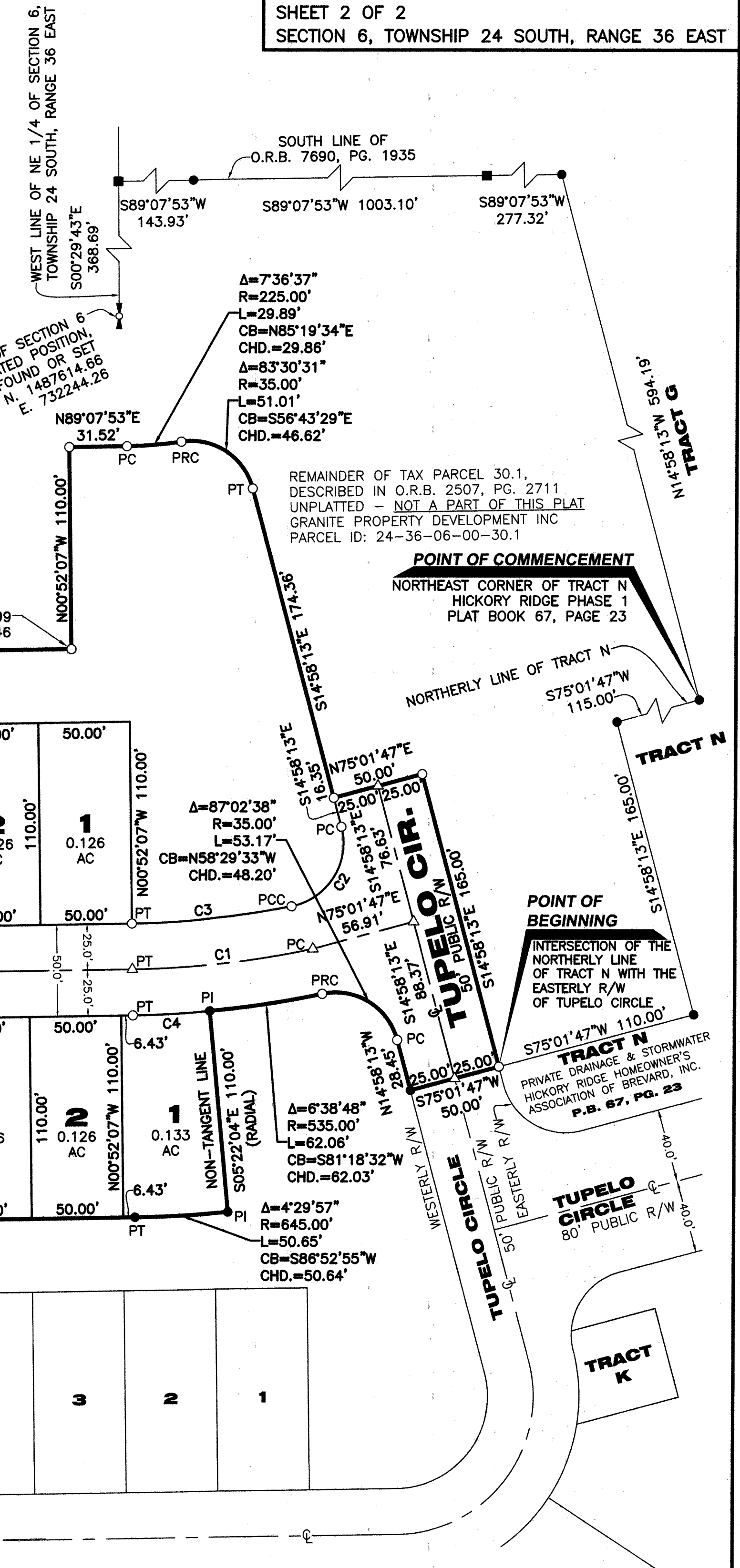
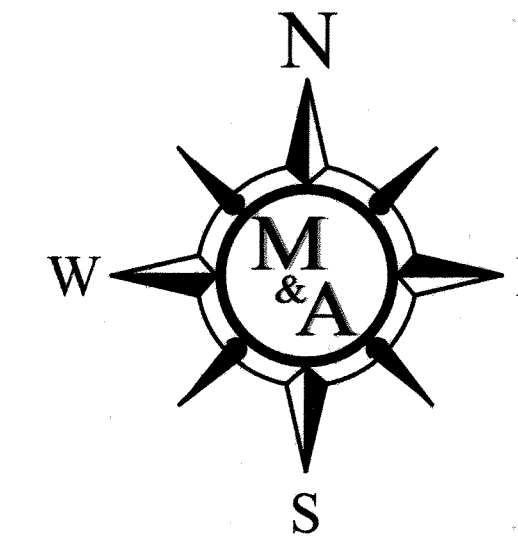
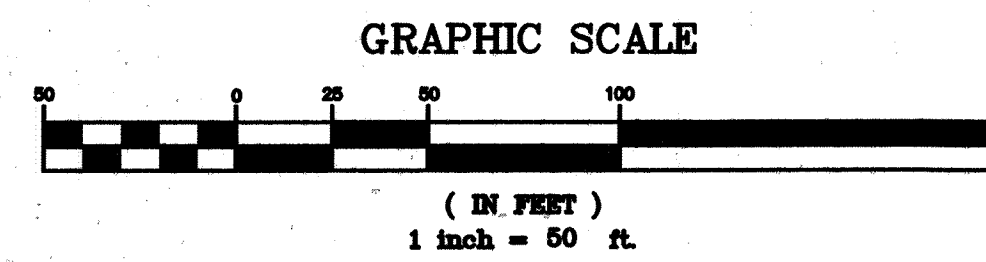
Prepared By:
MORGAN & Associates
Consulting Engineers, Inc.
504 N. Harbor City Blvd. Melbourne, FL 32935
Phone (321) 751-6088 Fax (321) 751-6089
112 E. 70th St.
Drawn By: JTH Checked By: Christopher S. Bowers

HICKORY RIDGE - PHASE 2

A SUBDIVISION LYING IN SECTION 6, TOWNSHIP 24 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA

PLAT BOOK _____ PAGE _____
SHEET 2 OF 2
SECTION 6, TOWNSHIP 24 SOUTH, RANGE 36 EAST

CURVE TABLE				
CURVE NO.	RADIUS	DELTA	ARC LENGTH	CHORD BEARING
C1	510.00'	11°08'45"	99.21'	N83°33'31"E
C2	35.00'	93°44'43"	57.27'	S31°54'08"W
C3	485.00'	10°21'23"	87.67'	N83°57'11"E
C4	535.00'	4°29'57"	42.01'	S86°52'55"W



SURVEYOR'S LINETYPE

———— = PLAT BOUNDARY

———— = CENTERLINE

----- = EASEMENT

SURVEYOR'S LEGEND

● = CENTER OF SECTION, MARKED AS NOTED

■ = FOUND 4"x4" CONCRETE MONUMENT, MARKED: "PRM LB 6360"

● = FOUND 5/8" IRON ROD & CAP, MARKED: "HORIZON PRM LB 6360"

○ = SET 5/8" IRON ROD & CAP, MARKED: "PRM PSM 5990"

△ = SET NAIL & DISK, MARKED: "PCP PSM 5990"

— = BREAKLINE

NOTE: SET 5/8" IRON ROD & CAP, MARKED: "M&A LB 7040" FOR THE REMAINDER OF ALL LOT CORNERS & TRACT CORNERS NOT BEARING A PERMANENT REFERENCE MONUMENT

SURVEYOR'S ABBREVIATIONS

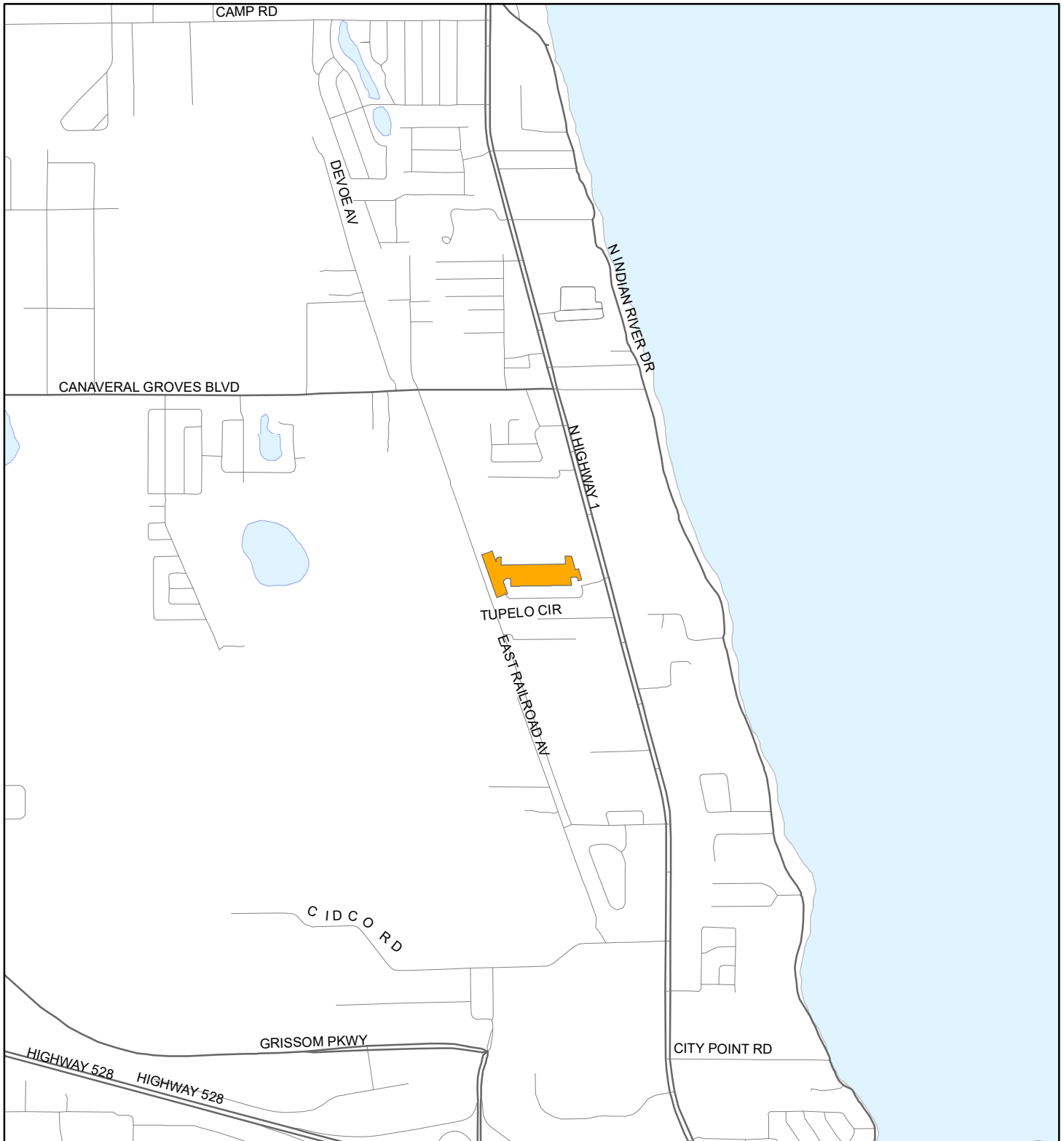
°	= DEGREES	N.T.S.	= NOT TO SCALE
'	= ARC MINUTES OR FEET	O.R.B.	= OFFICIAL RECORDS BOOK
"	= ARC SECONDS OR INCHES	PG.	= PAGE
N	= NORTH OR NORTHING	P.B.	= PLAT BOOK
E	= EAST OR EASTING	PC	= POINT OF CURVATURE
S	= SOUTH	PCC	= POINT OF COMPOUND CURVATURE
W	= WEST	PCP	= PERMANENT CONTROL POINT
(P)	= PLAT	P.D.E.	= PRIVATE DRAINAGE EASEMENT
Δ	= DELTA OR CENTRAL ANGLE OF CURVE	PI	= POINT OF INTERSECTION
℄	= CENTERLINE	PLS	= PROFESSIONAL LAND SURVEYOR
CB	= CHORD BEARING	P.O.B.	= POINT OF BEGINNING
CHD.	= CHORD LENGTH	P.O.C.	= POINT OF COMMENCEMENT
ESMT.	= EASEMENT	PRC	= POINT OF REVERSE CURVATURE
H.O.A.	= HOME OWNERS' ASSOCIATION	PRM	= PERMANENT REFERENCE MONUMENT
ID	= IDENTIFICATION	PSM	= PROFESSIONAL SURVEYOR & MAPPER
INC.	= INCORPORATION	PT	= POINT OF TANGENCY
L	= ARC LENGTH	R	= RADIUS
LB	= LICENSED BUSINESS	R/W	= RIGHT-OF-WAY
		TYP.	= TYPICAL

Prepared By:
MORGAN & Associates
Consulting Engineers, Inc.
504 N. Harbor City Blvd. Melbourne, FL 32935
Phone (321) 751-6088 Fax (321) 751-6089
L.B. # 7040
Drawn By: JTH
Checked By: Christopher S. Bowers

LOCATION MAP

HICKORY RIDGE - PHASE 2

20FM00009



1:24,000 or 1 inch = 2,000 feet

 Subject Property

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

Produced by BoCC - GIS Date: 1/21/2021



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.3.

2/9/2021

Subject:

Waiver Request, Re: Waiver of Wall Requirement for Fraternal Order of Eagles (20SP00008)(District 3)

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

The applicant is requesting that the Board of County Commissioners grant a waiver of Section 62-3202(h)(10) which requires a 6-foot masonry or solid wall when commercial developments within BU-1, BU-2, or industrial zoning classifications are adjacent to residential zoning.

Summary Explanation and Background:

Section 62-3202(h)(10) stipulates that site plans within BU-1, BU-2, or industrial zoning classifications shall construct a minimum of a six-foot high masonry or solid wall, including, but not limited to, concrete block walls, pre-cast (solid) walls, or foam core/steel support with stucco finish, when the subject property abuts a residential zoning classification.

The applicant states that the subject property that will be developed for a new Fraternal Order of Eagles clubhouse. The property is zoned BU-1 (General retail, commercial) and is abutted to the east by a property zoned AU (Agricultural residential) owned by Florida Power and Light Company and developed and operated as an electrical transformer substation. The FPL property is located 172 feet east of the proposed clubhouse, and contains improvements of an outbuilding, fencing, stabilized and paved surfaces, and numerous electrical transformers.

The applicant asserts that the granting of the waiver will not be injurious to the FPL property, and that the waiver is consistent with the intent and purpose of zoning regulations as well as the County's Comprehensive Plan to buffer any residential uses from a commercial use. In this case, the FPL property has an agriculture residential zoning designation, but is being used for a non-residential use. The applicant also asserts that it is unlikely that FPL will vacate the property and the site redeveloped for residential uses given that the properties surrounding the FPL property are zoned for commercial uses.

Clerk to the Board Instructions:

ZONING: TRC-1
FLU: RES-4

ZONING : BU-1
FLU: CC

S89°35'44"E 400.00'

FIND 4X4 CM
LB 6609

ZONING: AU
FLU: NC

PROJECT INFORMATION

SITE ADDRESS

MICCO ROAD
MICCO, FLORIDA 32976

OWNER/APPLICANT

KIPPS COMMERCIAL PROPERTY, INC.
12736 79TH AVENUE
SEBASTIAN, FLORIDA 32958
PHONE (607) 725-3135

ARCHITECT

STAFFAN H. LUNDBERG
ARCHITECT, LLC
1341 SEA HAWK LANE
VERO BEACH, FLORIDA 32963
PHONE (772) 538-5130

ENGINEER

MBV ENGINEERING, INC.
1835 20TH STREET
VERO BEACH, FLORIDA 32960
PHONE (772) 569-0035

SURVEYOR

INDIAN RIVER SURVEY, INC.
1835 20TH STREET
VERO BEACH, FLORIDA 32960
PHONE (772) 569-7880

TAX PARCEL I.D. NUMBER(S)

30-38-11-00-520

ZONING

BU-1

LAND USE

CC

LATITUDE LONGITUDE

27°52'52" N 80°30'29" W

GENERAL STATEMENT

THIS PROJECT PROPOSES TO UTILIZE 11,833 S.F. OF PREFABRICATED BUILDING(S) FOR THE NEW FRATERNAL ORDER OF THE EAGLES MEETING HALL AND A FUTURE 800 SF OUTDOOR PAVILION.

SITE DATA

EXISTING SITE DATA

	SF	AC	%
SITE AREA	110,000 SF	2.52 AC	100%
IMPERVIOUS AREA	0 SF	0.00 AC	0.00%
PERVIOUS AREA	110,000 SF	2.52 AC	100%

PROPOSED SITE DATA

	SF	AC	%
SITE AREA	110,000 SF	2.52 AC	100%
IMPERVIOUS AREA	46,188 SF	1.06 AC	41.99%
PROPOSED BUILDING	11,833 SF	0.27 AC	10.76%
PROPOSED CONCRETE	2,843 SF	0.07 AC	2.58%
PROPOSED PAVEMENT	31,512 SF	0.72 AC	28.65%
PERVIOUS AREA	63,814 SF	1.46 AC	58.01%
NET NEW IMPERVIOUS	(+) 46,188 SF	1.06 AC	

NET NEW IMPERVIOUS

ZONING DATA

BU-1 CRITERIA	REQUIRED	EXISTING	PROPOSED
LOT SIZE	7,500 SF	110,000 SF	110,000 SF
LOT WIDTH	NA	400'	400'
BUILDING SETBACKS			
FRONT	25'	NA	101'
SIDE	15'	NA	103.92'
REAR	15'	NA	171.08'
BUILDING COVERAGE	75% MAX.	0.0%	10.76%
OPEN SPACE	NA	100.0%	58.01%
BUILDING HEIGHT	35' MAX.	NA	35' MAX.

PARKING DATA

PARKING REQUIRED (PRIVATE CLUB) = 1 SP / 200 SF = 6,002 / 200 = 40 SPACES
PARKING REQUIRED (RESTAURANT) = 1 SP / 100 SF = 3,038 / 100 = 31 (30.38) SPACES
PARKING REQUIRED (TOTAL) = 71 SPACES

PARKING PROVIDED = 71 SPACES TOTAL
9 HANDICAPPED SPACES
62 STANDARD SPACES

TRAFFIC STATEMENT

PER ITE, 10TH EDITION:

560 (CHURCH) 6.95 TRIPS / 1,000 SF BLDG = 56 ADT (28 ENTRY / 28 EXIT)

931 (QUALITY RESTAURANT) 3,038 SF = 93.84 TRIPS / 1,000 SF = 254 ADT

(127 ENTRY / 127 EXIT)

TOTAL = 310 ADT (155 ENTRY / 155 EXIT)

DRAINAGE STATEMENT

THE PROJECT SHALL BE SERVED BY A COMBINATION STORMWATER MANAGEMENT SYSTEM CONSISTING OF A DRY RETENTION POND AND WET DETENTION FACILITY. UPON CONFORMANCE WITH TREATMENT / ATTENUATION REQUIREMENTS, THE SYSTEM SHALL DISCHARGE TO THE BREVARD COUNTY DITCH RUNNING ALONG THE WESTERN BOUNDARY OF THE PROJECT.

PERMITS REQUIRED

BREVARD COUNTY LAND DEVELOPMENT APPLICATION
BREVARD COUNTY CONDITIONAL USE PERMIT
BREVARD COUNTY CONCURRENCE
BREVARD COUNTY ZONING VERIFICATION
BREVARD COUNTY IMPACT FEE FORM A
BREVARD COUNTY ENGINEERING INSPECTION FEES FOR SITE PLAN RIGHT-OF-WAY CONSTRUCTION
SJRWMD ENVIRONMENTAL RESOURCES PERMIT
FDEP - WATER DISTRIBUTION
FDOH - BREVARD COUNTY ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
FDEP NPDES NOI PERMIT

FLOOD ZONE

THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE 'A' AND ZONE 'X' PER FLOOD INSURANCE RATE MAP #12009C0694 G, DATED MARCH, 17, 2014.

LEGAL DESCRIPTION

THE SOUTH 329 FEET OF GOVERNMENT LOT 3, SECTION 11, TOWNSHIP 30 SOUTH, RANGE 38 EAST LYING WEST OF THE RIGHT OF WAY LINE OF THE FLORIDA EAST COAST RAILROAD RIGHT OF WAY, LESS AND EXCEPT THAT PART CONTAINED IN OFFICIAL RECORDS BOOK 1177, PAGE 296 AND OFFICIAL RECORDS BOOK 1554, PAGE 73, PUBLIC RECORDS OF BREVARD COUNTY FLORIDA.

BEING THE SAME PROPERTY DESCRIBED IN THE DEED RECORDED IN OFFICIAL RECORDS BOOK 5533, PAGE 5994, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

(DESCRIPTION BY SURVEYOR)

THE NORTH 275.00 FEET OF THE SOUTH 329.00 FEET OF THE WEST 400.00 FEET OF GOVERNMENT LOT 3, SECTION 11, TOWNSHIP 30 SOUTH, RANGE 38 EAST, CONTAINS 2.53 ACRES MORE OR LESS, BEING SUBJECT TO EASEMENTS, RIGHT OF WAYS AND RESTRICTIONS OF RECORD.

WASTEWATER SOURCE

ON-SITE SEPTIC

POTABLE WATER SOURCE

BREVARD COUNTY UTILITIES

SITE PLAN

SCALE: 1" = 20'

NOTE:

CONTRACTOR SHALL CALL 321-633-2016 FOR TREE ROOT PROTECTION INSPECTION PRIOR TO ANY LAND CLEARING, ALTERATION OR COMMENCEMENT OF CONSTRUCTION, INCLUDING GRADING AND FILLING. FAILURE TO SCHEDULE AN INSPECTION MAY BE SUBJECT TO STOP WORK ORDER AND OTHER PENALTIES AND REMEDIES PURSUANT TO SECTION 62-4336.

SITE PLAN NOTES:

- THE DEVELOPMENT AND USE OF THIS SITE WILL COMPLY WITH BREVARD COUNTY'S PERFORMANCE STANDARDS DEFINED BY SECTIONS 62-2257 THROUGH 62-2272.
- ALL POSTS AND HARDWARE FOR ANY SIGNS INSTALLED ON THE SITE OR IN THE BREVARD COUNTY RIGHT-OF-WAY WILL ADHERE TO THE REQUIREMENTS SPELLED OUT IN BREVARD COUNTY EXHIBIT 26.
- THE USES PROPOSED AS PART OF THIS SITE PLAN DO NOT REQUIRE A SUBMITTAL OF A RISK MANAGEMENT PLAN PURSUANT TO U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGULATIONS AND SHALL NOT EXCEED EPA'S RISK MANAGEMENT PLAN (RMP) THRESHOLD QUANTITIES OF LISTED SUBSTANCES.

GRAPHIC SCALE

0 20 40
(IN FEET)
1 inch = 20 ft.

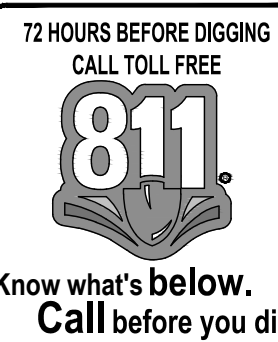
LEGEND

	EXISTING ASPHALT
	EXISTING CONCRETE
	PROPOSED ASPHALT
	PROPOSED CONCRETE

35
SPEED
LIMIT

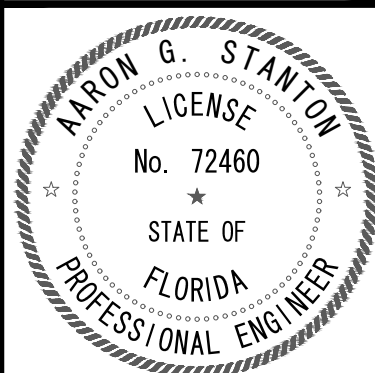
SIGNAGE & PAVEMENT MARKING SCHEDULE

SIGN ID NUMBER	SIZE	DESIGNATION / NOTES
(1)	30"	R1-1 "STOP" SIGN
(2)	24"	SOLID WHITE STOP BAR
(3)	12"	FTP-20-06 HC PARKING SIGN, SEE DETAIL SHEET C8
(4)		PAVEMENT MARKINGS PER FDOT INDEX #711-001
(5)	6"	25 LF DOUBLE YELLOW STRIPING
(6)		(3) TYPE 4 OBJECT MARKERS (OM-1) 6" O.C.
(7)		RELOCATED EXISTING SPEED LIMIT SIGN



SITE PLAN

FRATERNAL ORDER OF
THE EAGLES
MICCO, FLORIDA



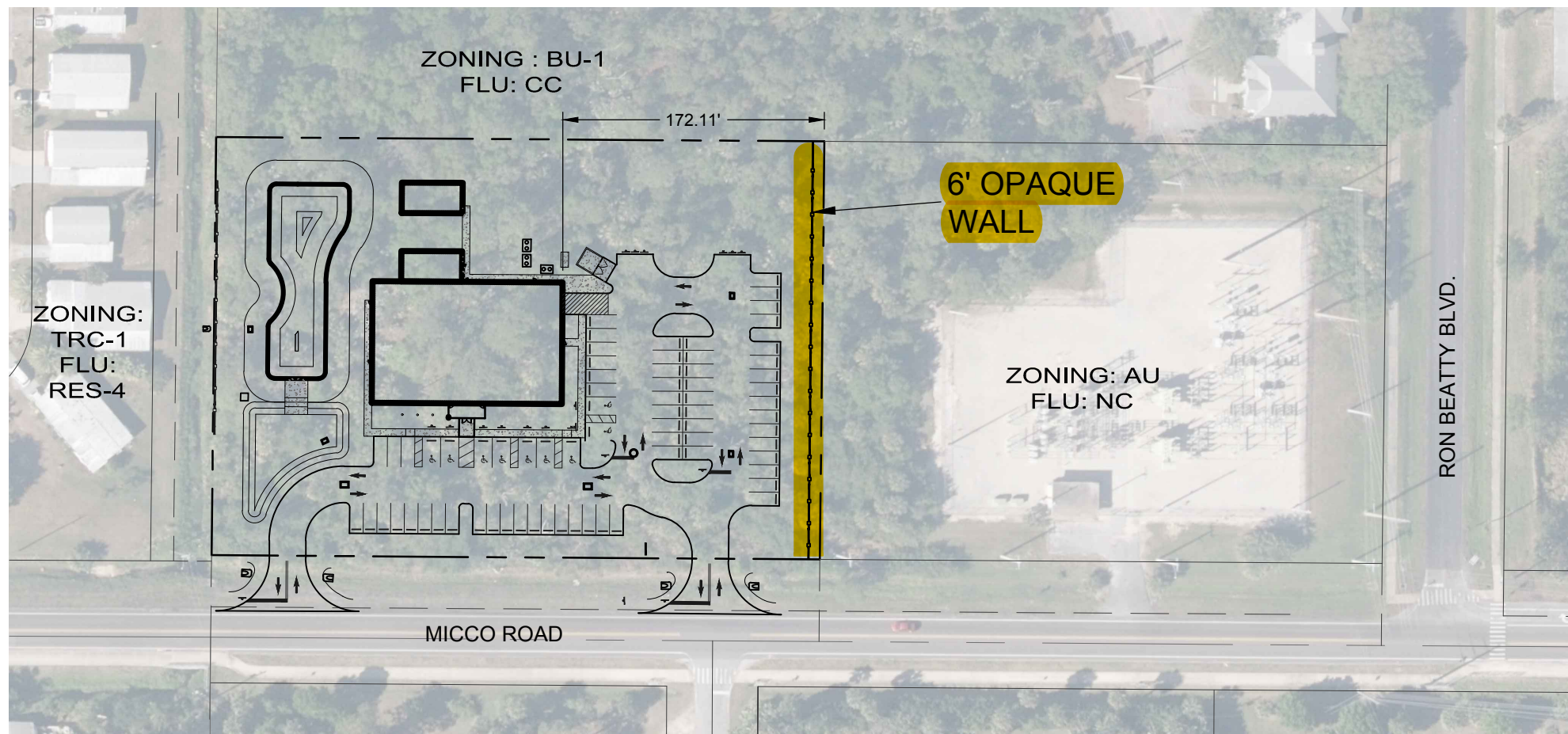
AARON G. STANTON
FL. P.E. #72460

SHEET

C4

OF 15

19-0391



VICINTY MAP

SCALE: 1" = 100'



MBV
ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728

1835 - 20TH STREET
VERO BEACH, FL 32960
PH. (772) 569-0035
FX. (772) 778-3617

MELBOURNE, FL - PH (321) 253-1510
FT. PIERCE, FL - PH (772) 468-9055

FRATERNAL ORDER OF THE EAGLES
MICCO, FLORIDA

JOB NO.	19-0391
DESIGNED	RG
DRAWN	GWR
CHECKED	JANUARY 2021
DATE	AJB
SCALE	1/14/2021

Site Address:N/A

<u>Street</u>	<u>City</u>	<u>State</u>	<u>Zip Code</u>
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CORRESPONDENCE TO BE PROVIDED TO APPLICANT AT THE ADDRESS BELOW:Mr. Mark KippKipp's Commercial Property, LLCApplicant NameCompany12736 79th AvenueSebastianFL32958StreetCityStateZip Code607-725-3135Phone NumberCell Phone NumberFax NumberEmail Address**ENGINEER/CONTRACTOR (if different from applicant)**MBV Engineering, Inc.Ms. Rebecca Grohall, AICPCompanyEngineer or Project Manager1835 20th StreetVero BeachFL32960StreetCityStateZip Code772-569-0035rebeccag@mbveng.comPhone NumberCell Phone NumberFax NumberEmail Address**DESCRIPTION OF WAIVER REQUEST AND CODE SECTION:**

We are seeking a waiver from Section 62-3202(h)(10) requiring a 6 foot tall masonry wall adjacent to residential zoning classification (which is the property that is to the east, which currently houses the FPL electric transformer substation).

Owner/Applicant SignatureMr. Mark KippPrint Name

If you wish to appeal any decision made by the county staff on the waiver, you may request the Board of County Commissioners to make a determination. The Board's decision approving or disapproving the waiver or interpretation is final.

LAND DEVELOPMENT APPLICATION DOCUMENT SUBMITTAL REQUIREMENTS

Waivers for Site Plans or Subdivisions require an application, waiver criteria (listed below), an 8 ½-inch x 11 inch vicinity map, and a fee of \$775.00.

WAIVER CRITERIA FOR SUBDIVISIONS AN SITE PLANS

For a waiver to be considered and approved by staff, your request must comply with all of the following criteria. Please explain, in detail, how your request meets the following conditions.

1. The particular physical conditions, shape, or topography of the specific property involved causes an undue hardship to the applicant if the strict letter of the code is carried out.

This site has the unique physical condition of being owned by Florida Power and Light Company (FPL) and operated as an electric transformer substation. This site contains improvements of an outbuilding, fence, stabilized and paved surfaces and numerous electrical transformers. It's use according to the Property Appraiser is 9120- Utility (Electric) Company Improved (Account 3006388). The structure proposed to be built is 172 feet away from the property line.

2. The granting of the waiver will not be injurious to the other adjacent property.

The granting of this waiver will not be injurious to other adjacent property as the waiver is requested for the parcel boundary that is shared entirely between the applicant and FPL. The parcel immediately to the east of the FPL station and Ron Beatty Boulevard is zoned Industrial, the property to the north of the FPL site is home to a variety of offices.

3. The conditions, upon which a request for waivers are based, are particular to the property for which the waiver is sought and are not generally applicable to other property and do not result from actions of the applicant.

This waiver is solely for the eastern edge of the applicant's parcel and seeks a waiver from the 6 foot opaque fence requirement of being adjacent to a residentially zoned parcel, which is being utilized as an electrical substation.

4. The waiver is consistent with the intent and purpose of the county zoning regulations, the county land use plan, and the requirements of this article.

The waiver is consistent with the intent and purpose of the zoning regulations as well as the County's Comprehensive Plan to buffer any externalities of a commercial use from a residential use. In this case, the property may have an underlying agricultural residential (AU) zoning classification but is being used for non-residential use. It is unlikely that FPL would vacate that parcel anytime in the future, and given that the properties that adjoin it to the north and west are zoned commercial and the properties to the east are zoned for industrial, the highest and best use of that property is not residential.

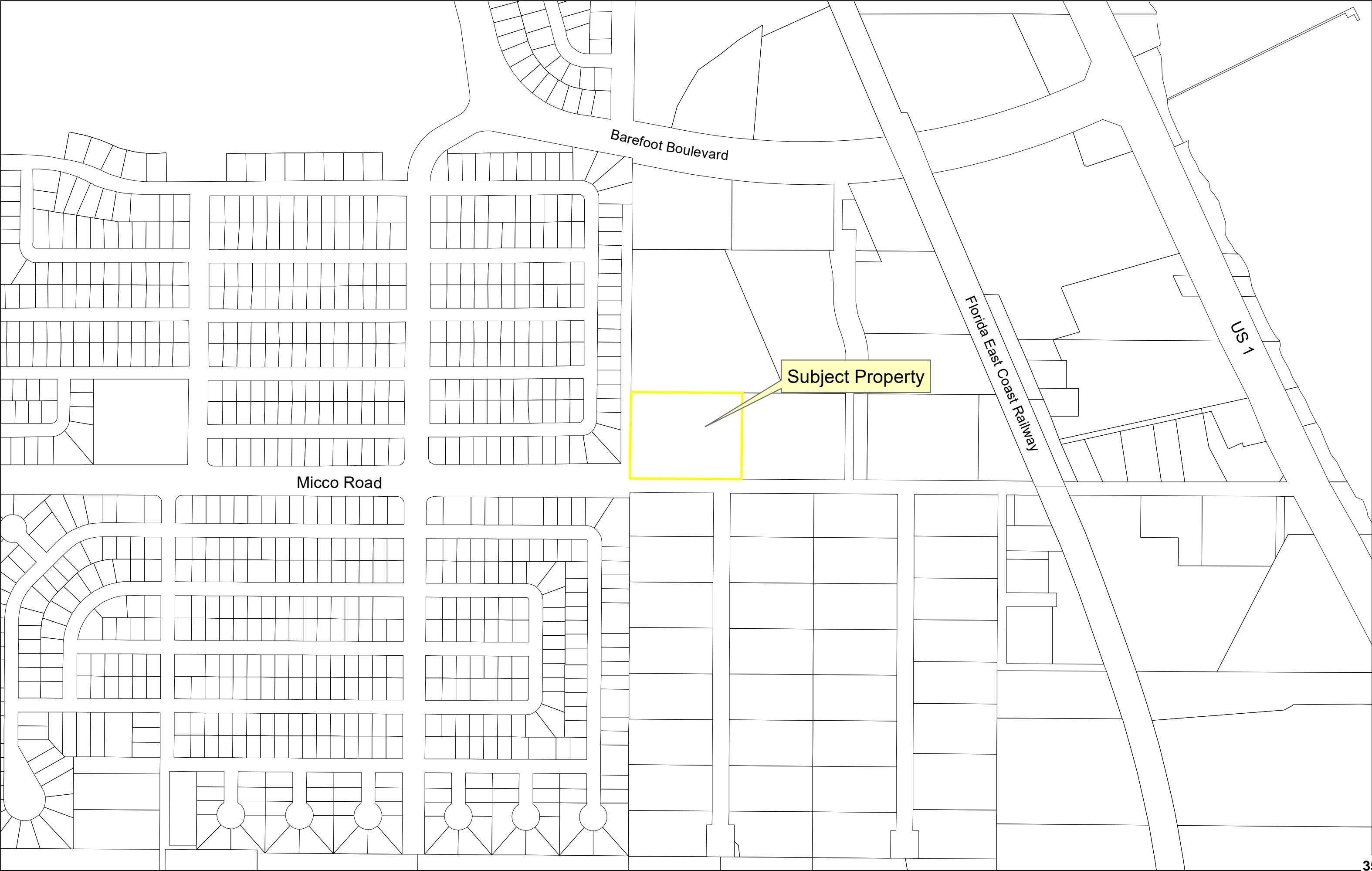
5. Delays attributed to state or federal permits.

None.

6. Natural disasters.

None. Although, there is an on going state of emergency due to COVID-19.

7. County development engineer and affected agencies concur that an undue hardship was placed on the applicant. (To be filled out by county staff)



Barefoot Boulevard

Micco Road

Florida East Coast Railway

US 1

Subject Property



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.4.

2/9/2021

Subject:

Waiver Request, Re: Waiver of Wall Requirement for Hampton Manor of Merritt Island (20SP00032)(District 2)

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

The applicant is requesting that the Board of County Commissioners grant a waiver of Section 62-3202(h)(10) which requires a 6-foot masonry or solid wall when commercial developments within BU-1, BU-2, or industrial zoning classifications are adjacent to residential zoning.

Summary Explanation and Background:

Clerk to the Board Instructions:

Section 62-3202(h)(10) stipulates that site plans within BU-1, BU-2, or industrial zoning classifications shall construct a minimum of a six-foot high masonry or solid wall, including, but not limited to, concrete block walls, pre-cast (solid) walls, or foam core/steel support with stucco finish, when the subject property abuts a residential zoning classification.

The applicant asserts that providing a six-foot solid wall will have a detrimental impact on the existing natural vegetation. The applicant is requesting a waiver from the wall requirement in order to preserve more existing large trees along the east property line. In lieu of the wall, the applicant is proposing to install a six-foot high opaque residential-style fence and maintains that the substitution will create a better overall buffer from residentially-zoned properties.

In this case, the subject property abuts one residentially-zoned, vacant property to the east under the same ownership, and three residentially zoned properties with existing single-family residences to the south. The applicant is not requesting a waiver from the wall requirement along the southern property line. The property to the east is preserved wetland that is not expected to be developed in the future. The proposed assisted living facility will be located 169.91 feet west of the eastern property line where the eastern required wall would be located.

The Natural Resources Management and Planning & Development Departments agree that a six-foot fence, in lieu of the required wall, would allow for reduced impact and additional preservation of the wetland and vegetation east of the subject property. The Board's waiver approval, if granted, will apply specifically to the

conditions of Site Plan application 20SP00032. Any future development, redevelopment, or land alteration of the subject property that modifies the aforementioned site plan or further reduces the vegetative buffer on the eastern portion of this site will void the wall waiver.



BOARD OF COUNTY COMMISSIONERS

Planning and Development
Planning and Zoning
2725 Judge Fran Jamieson Way
Building A, Room 114
Viera, Florida 32940
(321) 633-2070 Phone

LAND DEVELOPMENT WAIVER APPLICATION

This form should be used for all waiver requests or appeals associated with the Code of Ordinances, Section 62, as it relates to Subdivisions, Minor Subdivisions, and Site Plans. Fees for Waivers are \$775.00.

Office Use Only

Request Date	Fees	Board Date
Original Project Number	Waiver Number	
Coordinator Initials	Reference Files	
County Manager/Designee Approval		

APPLICATION TYPE: ☐ Subdivision Waiver ☒ Site Plan Waiver ☐ Other

If other, please indicate _____

Tax Parcel Identification:

24 36 14 _____
Township Range Section Subdivision Block/Parcel Lot

Tax Account Numbers (list all) 2412222 _____

Hampton Manor of Merritt Island Pioneer Pointe, LLC
Project Name Property Owner

Site Address:

Intersection of Pioneer Rd
and N Courtenay Pkwy
Street
Merritt Island
City
FL
State
32953
Zip Code

CORRESPONDENCE TO BE PROVIDED TO APPLICANT AT THE ADDRESS BELOW:

Jake Wise, PE
Applicant Name
Construction Engineering Group, LLC
Company

2651 W Eau Gallie Blvd;
Suite A;
Street
Melbourne
City
FL
State
32935
Zip Code

321-610-1760
Phone Number
321-427-7455
Cell Phone Number
Fax Number
jwise@cegengineering.com
Email Address

ENGINEER/CONTRACTOR (if different from applicant)

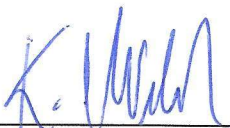
Same as Above
Company
Engineer or Project Manager

Street
City
State
Zip Code

Phone Number
Cell Phone Number
Fax Number
Email Address

DESCRIPTION OF WAIVER REQUEST AND CODE SECTION:

"Wall required where property abuts residential zoning per 63-3202(h)(10): Site plans within BU-1, BU-2, or industrial zoning classifications shall construct a minimum of a six-foot high masonry or solid wall, including, but not limited to, concrete block walls, pre-cast (solid) walls, or foam core/steel support with stucco finish, when the subject property abuts a residential zoning classification."


Owner/Applicant Signature
K.R. Welsh- Pioneer Pointe, LLC
Print Name

If you wish to appeal any decision made by the county staff on the waiver, you may request the Board of County Commissioners to make a determination. The Board's decision approving or disapproving the waiver or interpretation is final.

LAND DEVELOPMENT APPLICATION DOCUMENT SUBMITTAL REQUIREMENTS

Waivers for Site Plans or Subdivisions require an application, waiver criteria (listed below), an 8 ½-inch x 11 inch vicinity map, and a fee of \$775.00.

WAIVER CRITERIA FOR SUBDIVISIONS AND SITE PLANS

For a waiver to be considered and approved by staff, your request must comply with all of the following criteria. Please explain, in detail, how your request meets the following conditions.

1. The particular physical conditions, shape, or topography of the specific property involved causes an undue hardship to the applicant if the strict letter of the code is carried out.
See attached.

2. The granting of the waiver will not be injurious to the other adjacent property.
See attached.

3. The conditions, upon which a request for waivers are based, are particular to the property for which the waiver is sought and are not generally applicable to other property and do not result from actions of the applicant.
See attached.

4. The waiver is consistent with the intent and purpose of the county zoning regulations, the county land use plan, and the requirements of this article.
See attached.

5. Delays attributed to state or federal permits.

See attached.

6. Natural disasters.

See attached.

7. County development engineer and affected agencies concur that an undue hardship was placed on the applicant. (To be filled out by county staff)

SUMMARY OF WAIVER REQUEST

Per 63-3202(h)(10) of the Brevard County code our portion of the project currently proposed for site plan approval requires a minimum six-foot high masonry or solid wall when the property abuts a residential zoning classification. We are requesting a waiver from this requirement in order to preserve more existing large trees along the boundary to create a better overall buffer and instead install a six-foot high opaque residential style fence to save more existing mature trees.

The regulation is as follows:

- *“Wall required where property abuts residential zoning per 63-3202(h)(10): Site plans within BU-1, BU-2, or industrial zoning classifications shall construct a minimum of a six-foot high masonry or solid wall, including, but not limited to, concrete block walls, pre-cast (solid) walls, or foam core/steel support with stucco finish, when the subject property abuts a residential zoning classification.”*

Construction of a wall requires footings that will be dug much deeper into the ground impacting the ability to preserve existing trees. It requires the complete removal of more trees typically versus a fence as the wall has a larger footer and less flexibility to work around existing trees. They can impact the root system negatively causing them to die over time and potentially becoming a nuisance and danger by falling. In our experience, more of a concern comes with pine trees, and the site has pine trees we are proposing to preserve.

A six-foot tall opaque fence has much more flexibility to be installed around trees and not impact their root systems like a wall. The combined tree preservation with an attractive residential style fence creates an improved buffer, rather than clear cutting to install a wall and possibly plant smaller trees spaced equally creating the potential for large visual gaps along the boundary. As shown on the included waiver exhibit, the pond banks have been maneuvered around the boundary trees to further maximize preservation.

In addition, while this code is written for BU-1, BU-2 or industrial zonings, which typically have more intense commercial or industrial uses and allow for multiple story buildings, the proposed development is a single story assisted living facility (ALF). Many municipalities consider an ALF to be a residential use. In Brevard County it is still considered a commercial use, but it is in a residential setting with immaculately maintained amenities in order to be attractive to the families of the loved ones the facility cares for. In fact, a large, dense buffer is preferred to mutually benefit the ALF residents and any residential neighbors. The site has been designed with the solid waste collection far from the canopy covered drop-off/pick-up, parking buffered by the building, and points of ingress and egress to the site from the northwest corner or western boundaries of the property away from the residential to minimize any disturbances.



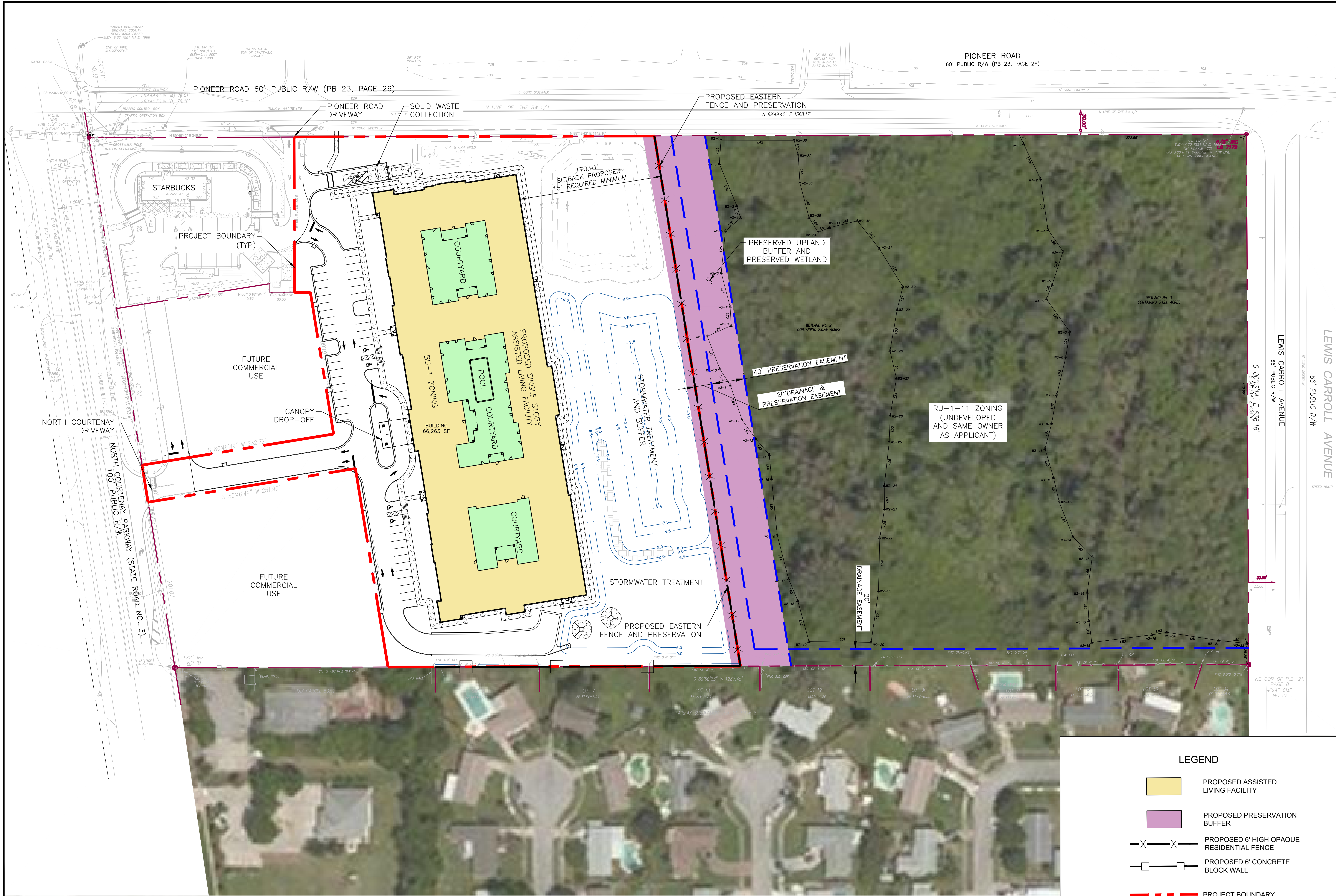
The residentially zoned properties adjacent to the east are undeveloped and owned by the applicant. The project proposes to preserve, in perpetuity, the healthy native canopy within the first 60' east of the property line of the proposed development in a 20' drainage easement and a 40' preservation easement for a total of 60' of tree preservation. The proposed preservation easement spans the entire length of the eastern boundary so any future residential development would be buffered by the proposed 6' high opaque fence, 60' of mature trees and the existing wetland, that varies in width between 75' to 225'. There are no plans at all by the applicant to develop the residentially zoned property to the east at this time.

WAIVER JUSTIFICATION

The following justifications follow the same numbering and order on the application for a waiver justification:

1. The particular physical conditions specific to this applicant and project along the east property line for the proposed waiver are unique for the following reasons:
 - Both sides of the zoning line (property line) where the fence is proposed are owned by the same entity, the applicant.
 - The project utilizes existing canopy 60' east of the eastern property line to meet canopy preservation requirements. This existing canopy, accompanied by a fence, will create a beautiful natural buffer between the ALF and future development of the parcel to the east. However, the installation of a wall could be detrimental to the root system of the existing trees in which the project proposes to preserve.
 - There is no proposed development to the east at this time.
2. The granting of the waiver will not be injurious to adjacent property it will be a benefit to both the proposed project and the adjacent properties.
3. The conditions of the zoning/property lines are not caused by the applicant, would not apply generally to other properties, and are unique to this waiver request.
4. The waiver is consistent with the intent and purpose of the county zoning regulations, the county land use plan, and the requirements of the article being requested for the waiver. In fact, it is an improvement to the code requirement to preserve more mature large trees and install a fence rather than clearing to install a wall.
5. There are no delays attributed to state or federal permits, this is not applicable.
6. There are no natural disasters related to this request, this is not applicable.





LEGEND

- PROPOSED ASSISTED LIVING FACILITY
- PROPOSED PRESERVATION BUFFER
- XX PROPOSED 6' HIGH OPAQUE RESIDENTIAL FENCE
- XX PROPOSED 6' CONCRETE BLOCK WALL
- PROJECT BOUNDARY

SCALE: 1"=50'

DATE: 01/22/2021

PROJ. NO.: 200229

DESIGNED BY: LDS

DRAWN BY: LDS

CHECKED BY: JTW

DRAWING NO.: W-1

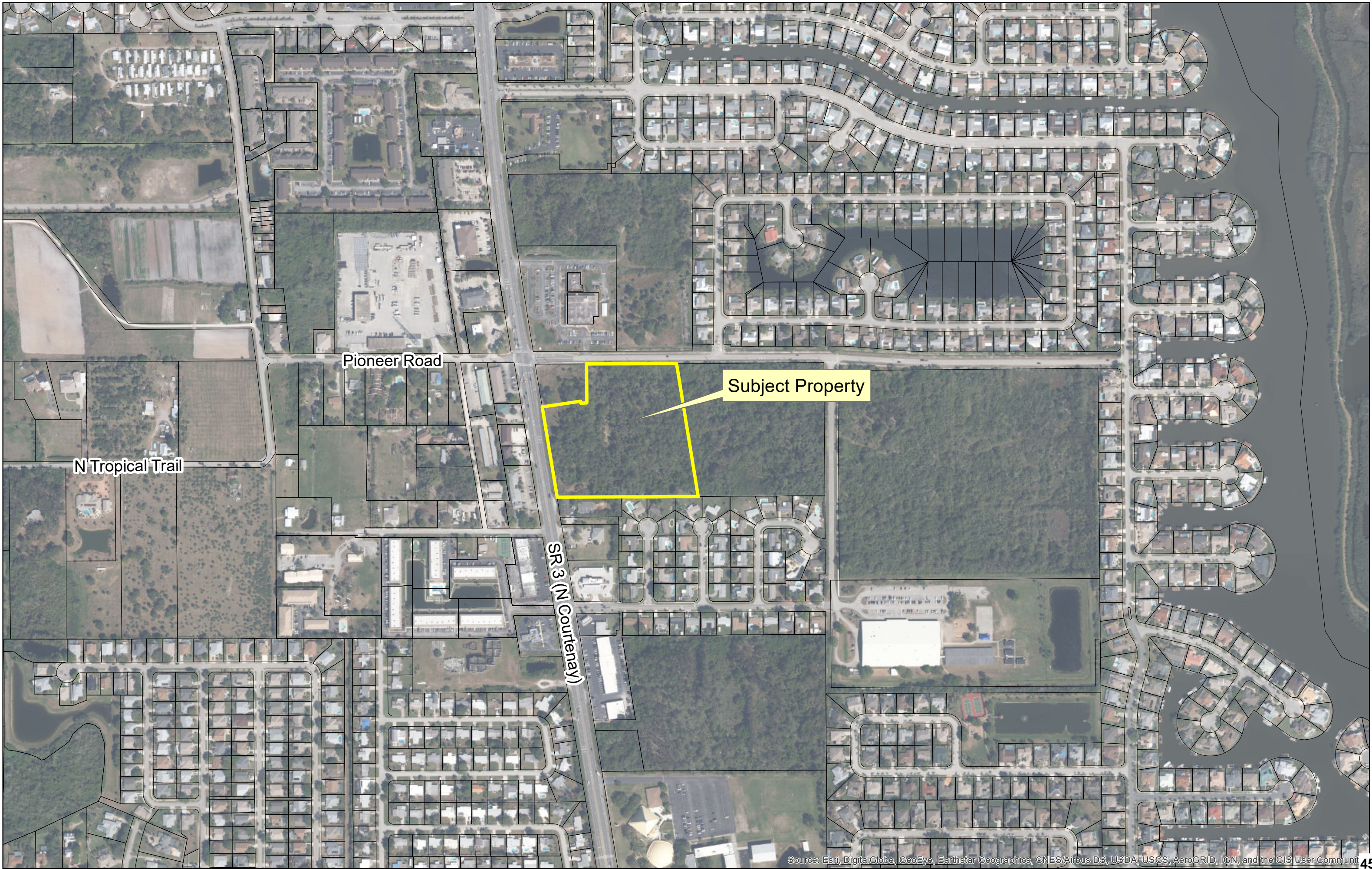
EAST PROPERTY LINE WAIVER EXHIBIT

REV#	DATE	REVISION

CONSTRUCTION ENGINEERING GROUP
Consulting Engineers

2681 Egu Galle Blvd., Suite A
Mableton, FL 32055
Tel: 321.253.1221
www.ceengineering.com
COA #008897

HAMPTON MANOR OF MERRITT ISLAND
BUILD SENIOR LIVING
2280 N COURTNEY PARKWAY, MERRITT ISLAND, FLORIDA 32953
DRAWING TITLE
EAST PROPERTY LINE WALL WAIVER EXHIBIT





Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.5.

2/9/2021

Subject:

Approval, Re: Dedication of Drainage Easement and Warranty Deed from Heritage Lakes of West Melbourne, Inc. - District 5.

Fiscal Impact:

None

Dept/Office:

Public Works Department / Land Acquisition

Requested Action:

It is requested that the Board of County Commissioners approve and accept the Drainage Easement and Warranty Deed.

Summary Explanation and Background:

The subject property is located in Section 34, Township 27 South, Range 36 East, on the east side of St. Johns Heritage Parkway in West Melbourne.

Heritage Lakes of West Melbourne, Inc., the owner, has obtained a Right of Way/Easement permit number 19RW00594 from the County for improvements within the St. John's Heritage Parkway for the single-family residential project known as Heritage Lakes. In accordance with County code and standards, the owner has agreed to dedicate the attached drainage easement and warranty deed for right of way turn lanes as a required condition of the permit.

The User Department approves this request.

This acquisition follows the policies and procedures as set forth in Administrative Order 37.

Clerk to the Board Instructions:

Prepared by and return to: Lucy Hamelers
Public Works Department, Land Acquisition
2725 Judge Fran Jamieson Way, A-204, Viera, Florida 32940
A portion of interest in Tax Parcel ID: 27-36-35-00-500 & 27-36-34-00-2

WARRANTY DEED

THIS INDENTURE is made this 15th day of January, 2021, by Heritage Lakes of West Melbourne, Inc., a Florida corporation, hereafter called the Grantor, whose mailing address is 304 S. Harbor City Boulevard, Suite 201, Melbourne, Florida 32901 to Brevard County, a political subdivision of the State of Florida, hereafter called the Grantee, whose mailing address is 2725 Judge Fran Jamieson Way, Viera, Florida 32940;

WITNESSETH that the Grantor, for and in consideration of the sum of One Dollar and No Cents (\$1.00) and other valuable considerations, paid, receipt of which is hereby acknowledged, does hereby grant, bargain, sell, and convey unto the Grantee, its successors and assigns the following described lands, situate, lying and being in the County of Brevard, State of Florida, to-wit:

SEE LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBITS "A AND B"

TO HAVE AND TO HOLD THE SAME, together with all and singular the appurtenances thereunto belonging or in anywise incident and/or appertaining thereto and all the estate, right, title & interest forever, and the Grantor does hereby fully warrant the title to said lands, and will defend the same against the lawful claims of all persons whomsoever.

(Signatures and Notary on next page)

IN WITNESS WHEREOF, the Grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

Witness

Dale H. DeHamer

Print Name

Witness

Stacy Horan

Print Name

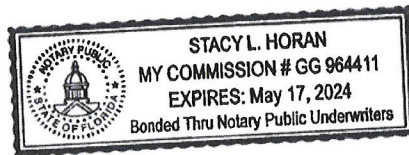
Heritage Lakes of West Melbourne, Inc.,
a Florida corporation

BY: [Signature]
It's President

(SEAL)

STATE OF FLORIDA
COUNTY OF BREVARD

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization on this 15 day of January, 2021, by Robert M. Renfro as President for Heritage Lakes of West Melbourne, Inc., a Florida corporation. Is personally known or produced _____ as identification.



[Signature]
Notary Signature
SEAL

Board Meeting Date: _____
Agenda Item # _____

LEGAL DESCRIPTION

PARCEL #100

PARENT PARCEL ID#: 27-36-34-00-500

PURPOSE: FEE SIMPLE RIGHT-OF-WAY

LEGAL DESCRIPTION: PARCEL #100, FEE SIMPLE RIGHT-OF-WAY (PREPARED BY SURVEYOR)

EXHIBIT "A"

SHEET 1 OF 3

NOT VALID WITHOUT SHEET 2&3 OF 3

THIS IS NOT A SURVEY

PART OF PARCEL 3 AS DESCRIBED IN OFFICIAL RECORDS BOOK 2982, PAGE 931, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, LYING IN SECTION 34, TOWNSHIP 27 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTH QUARTER SECTION CORNER OF SAID SECTION 34 AND RUN N89°26'29"E, ALONG THE NORTH LINE OF SAID SECTION 34, A DISTANCE OF 1950.89 FEET TO THE WEST RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY NO. 95 AS DESCRIBED IN OFFICIAL RECORDS BOOK 624, PAGE 204, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S00°01'54"E, ALONG SAID WEST RIGHT-OF-WAY LINE, A DISTANCE OF 4342.44 FEET; THENCE S89°31'12"W A DISTANCE OF 616.57 FEET TO THE EAST RIGHT-OF-WAY LINE OF COLUMBIA LANE AS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 624, PAGE 204; THENCE N00°01'54"W, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 128.18 FEET; THENCE N89°55'24"W A DISTANCE OF 80.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF SAID COLUMBIA LANE; THENCE N00°01'54"W A DISTANCE OF 453.60 FEET TO THE NORTH LINE OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SAID SECTION 34; THENCE S89°32'19"W, ALONG SAID NORTH LINE, A DISTANCE OF 1093.42 FEET TO THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE CONTINUE S89°32'19"W, ALONG SAID NORTH LINE, A DISTANCE OF 12.44 FEET TO A NON-TANGENT INTERSECTION WITH A CURVE TO THE LEFT, (SAID POINT ALSO BEING A POINT ON THE EAST RIGHT-OF-WAY LINE OF ST. JOHNS HERITAGE PARKWAY ACCORDING TO THE CONSTRUCTION PLANS FOR BREVARD COUNTY, FLORIDA FINANCIAL PROJECT NUMBER: 428346-4-54-01, DATED AUGUST, 2016); THENCE ALONG THE ARC OF SAID CURVE AND ALONG SAID EAST RIGHT-OF-WAY LINE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 2014.86 FEET, A CENTRAL ANGLE OF 07°45'29", A CHORD BEARING OF N10°57'23"E AND A CHORD LENGTH OF 272.61 FEET), A DISTANCE OF 272.82 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE TO THE SOUTHEAST; THENCE S82°55'21"E ALONG SAID NON-TANGENT LINE, A DISTANCE OF 12.00 FEET TO A NON-TANGENT INTERSECTION WITH A CURVE TO THE RIGHT; THENCE SOUTHERLY 12.00 FEET EAST OF, (AS MEASURED PERPENDICULARLY), AND PARALLEL TO SAID EAST RIGHT-OF-WAY LINE AND ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 2026.86 FEET, A CENTRAL ANGLE OF 07°39'55", A CHORD BEARING OF S10°54'36"W AND A CHORD LENGTH OF 270.96 FEET), A DISTANCE OF 271.16 FEET TO THE POINT OF BEGINNING. CONTAINING 0.07 ACRES, (3263.87 SQUARE FEET) MORE OR LESS.

SURVEYORS NOTES:

1. THIS IS NOT A BOUNDARY SURVEY, NOR IS IT INTENDED TO BE USED AS ONE.
2. BEARING REFERENCE: ASSUMED BEARING OF N89°26'29"E ON THE NORTH LINE OF SECTION 34, TOWNSHIP 27 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA.
3. THIS DESCRIPTION IS SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS-OF-WAY OF RECORD.
4. THIS DESCRIPTION WAS PREPARED WITH THE BENEFIT OF THAT CERTAIN FIDELITY NATIONAL TITLE INSURANCE COMPANY PROPERTY INFORMATION REPORT, ORDER NO.: 9019615, CUSTOMER REFERENCE NUMBER: 44098. NO EASEMENTS AFFECTING THE LANDS DESCRIBED HEREON WERE FOUND IN SAID REPORT.
5. THIS DESCRIPTION IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER UNLESS ELECTRONICALLY SIGNED AND SEALED IN ACCORDANCE WITH FLORIDA STATUTES CHAPTER 472.025.
6. THIS DESCRIPTION MEETS THE STANDARDS OF PRACTICE FOR SURVEYS AS REQUIRED BY FLORIDA STATUTES CHAPTER 472 AND THE MINIMUM TECHNICAL STANDARDS FOR SURVEYS AS REQUIRED BY CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE



Digitally signed by Leslie E Howard
DN: c=US, o=BSE CONSULTANTS INC.,
ou=A01410C0000016C70B79A9D000
08416, cn=Leslie E Howard
Date: 2021.01.05 14:17:13 -05'00'

PREPARED FOR AND CERTIFIED TO:
BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS

LESLIE E. HOWARD, PSM 5611
PROFESSIONAL SURVEYOR & MAPPER
NOT VALID UNLESS SIGNED AND SEALED

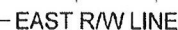
B.S.E.PREPARED BY: BSE CONSULTANTS, INC.
312 S. HARBOUR CITY BLVD., MELBOURNE, FLA 32901
321-725-3674

DRAWN BY: RMB	CHECKED BY: LEH	PROJECT NO. 87108.06			SECTION 34 TOWNSHIP 27 SOUTH RANGE 36 EAST
		REVISIONS	DATE	DESCRIPTION	
			12/15/2020	COUNTY COMMENTS	
DATE: 12/04/2020	DRAWING: 8710806_100_009		12/30/2020	COUNTY COMMENTS	

PARCEL #100

PURPOSE: FEE SIMPLE RIGHT-OF-WAY

THIS IS NOT A SURVEY



SECTION 34
TOWNSHIP 27 SOUTH
RANGE 36 EAST

SKETCH OF DESCRIPTION

PARCEL #100

PARENT PARCEL ID#: 27-36-34-00-500

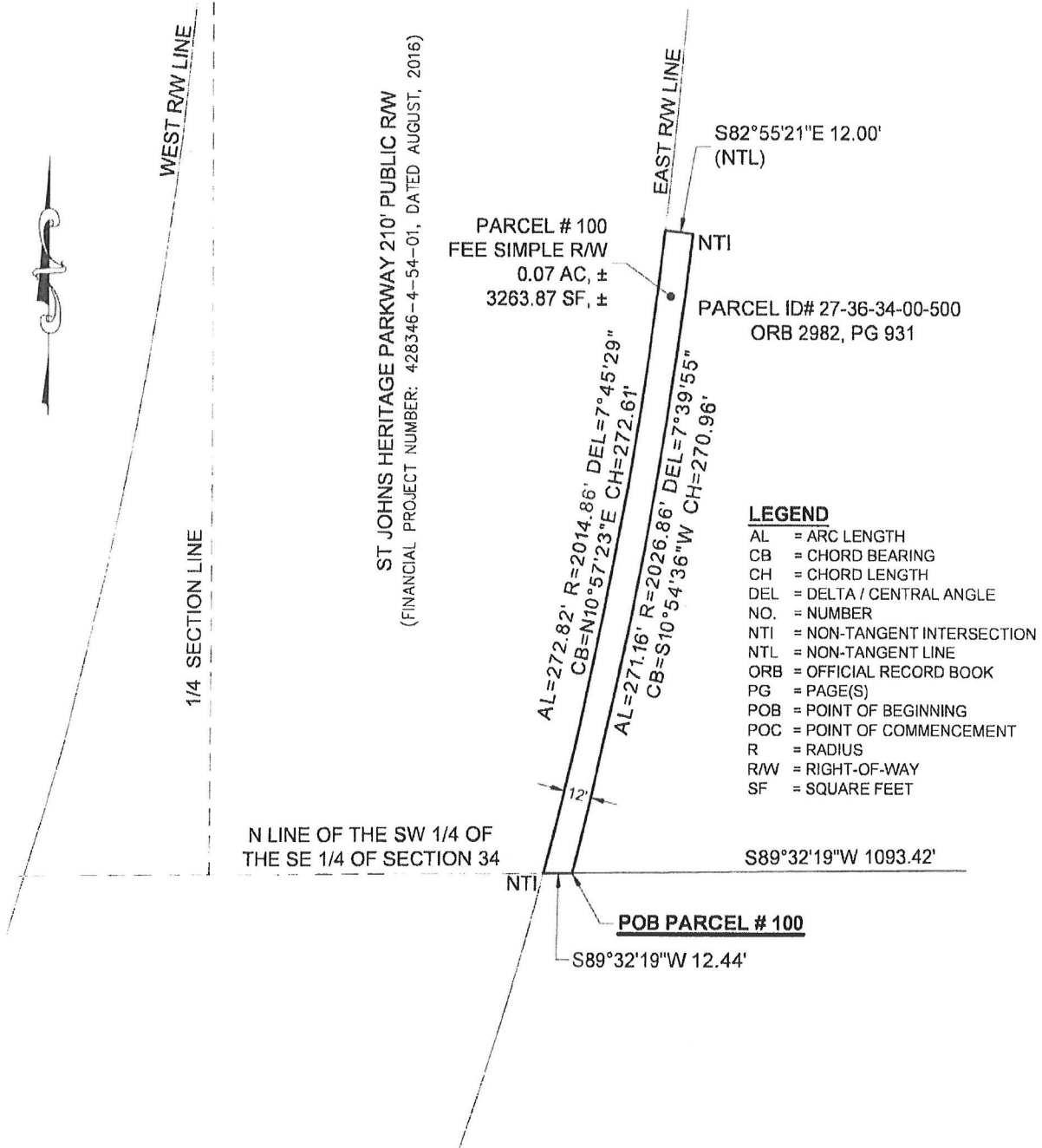
PURPOSE: FEE SIMPLE RIGHT-OF-WAY

EXHIBIT "A"

SHEET 3 OF 3

NOT VALID WITHOUT SHEET 1&2 OF 3

THIS IS NOT A SURVEY



PREPARED BY: BSE CONSULTANTS, INC.
312 S. HARBOUR CITY BLVD., MELBOURNE, FLA 32901
321-725-3674

SCALE:
1" = 60'

PROJECT NO.:
87108.06

SECTION 34
TOWNSHIP 27 SOUTH
RANGE 36 EAST

LEGAL DESCRIPTION

PARCEL #101

PARENT PARCEL ID#: 27-36-34-00-2

PURPOSE: FEE SIMPLE RIGHT-OF-WAY

LEGAL DESCRIPTION: PARCEL #101, FEE SIMPLE RIGHT-OF-WAY (PREPARED BY SURVEYOR)

EXHIBIT "B"

SHEET 1 OF 3

NOT VALID WITHOUT SHEET 2&3 OF 3

THIS IS NOT A SURVEY

PART OF PARCEL 2 AS DESCRIBED IN OFFICIAL RECORDS BOOK 2982, PAGE 931, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, LYING IN SECTION 34, TOWNSHIP 27 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTH QUARTER SECTION CORNER OF SAID SECTION 34 AND RUN N89°26'29"E, ALONG THE NORTH LINE OF SAID SECTION 34, A DISTANCE OF 1950.89 FEET TO THE WEST RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY NO. 95 AS DESCRIBED IN OFFICIAL RECORDS BOOK 624, PAGE 204, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S00°01'54"E, ALONG SAID WEST RIGHT-OF-WAY LINE, A DISTANCE OF 4342.44 FEET; THENCE S89°31'12"W A DISTANCE OF 616.57 FEET TO THE EAST RIGHT-OF-WAY LINE OF COLUMBIA LANE AS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 624, PAGE 204; THENCE N00°01'54"W, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 128.18 FEET; THENCE N89°55'24"W A DISTANCE OF 80.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF SAID COLUMBIA LANE; THENCE N00°01'54"W A DISTANCE OF 453.60 FEET TO THE NORTH LINE OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SAID SECTION 34; THENCE S89°32'19"W, ALONG SAID NORTH LINE, A DISTANCE OF 1105.86 FEET TO A NON-TANGENT INTERSECTION WITH A CURVE TO THE LEFT, (SAID POINT ALSO BEING A POINT ON THE EAST RIGHT-OF-WAY LINE OF ST. JOHNS HERITAGE PARKWAY ACCORDING TO THE CONSTRUCTION PLANS FOR BREVARD COUNTY, FLORIDA FINANCIAL PROJECT NUMBER: 428346-4-54-01, DATED AUGUST, 2016); THENCE ALONG THE ARC OF SAID CURVE AND ALONG SAID EAST RIGHT-OF-WAY LINE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 2014.86 FEET, A CENTRAL ANGLE OF 14°56'56", A CHORD BEARING OF N07°21'39"E AND A CHORD LENGTH OF 524.20 FEET), A DISTANCE OF 525.69 FEET TO THE END OF SAID CURVE; THENCE N00°06'47"W CONTINUING ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 771.81 FEET TO THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE N00°06'47"W CONTINUING ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 389.85 FEET; THENCE N89°53'13"E, A DISTANCE OF 12.00 FEET; THENCE S00°06'47"E, PARALLEL TO AND 12.00 FEET EAST OF, (AS MEASURED PERPENDICULARLY), SAID EAST RIGHT-OF-WAY LINE A DISTANCE OF 389.85 FEET; THENCE S89°53'13"W, A DISTANCE OF 12.00 FEET TO THE POINT OF BEGINNING. CONTAINING 0.11 ACRES, (4678.22 SQUARE FEET) MORE OR LESS.

SURVEYORS NOTES:

1. THIS IS NOT A BOUNDARY SURVEY, NOR IS IT INTENDED TO BE USED AS ONE.
2. BEARING REFERENCE: ASSUMED BEARING OF N89°26'29"E ON THE NORTH LINE OF SECTION 34, TOWNSHIP 27 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA.
3. THIS DESCRIPTION IS SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS-OF-WAY OF RECORD.
4. THIS DESCRIPTION WAS PREPARED WITH THE BENEFIT OF THAT CERTAIN FIDELITY NATIONAL TITLE INSURANCE COMPANY PROPERTY INFORMATION REPORT, ORDER NO.: 9019615, CUSTOMER REFERENCE NUMBER: 44098. NO EASEMENTS AFFECTING THE LANDS DESCRIBED HEREON WERE FOUND IN SAID REPORT.
5. THIS DESCRIPTION IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER UNLESS ELECTRONICALLY SIGNED AND SEALED IN ACCORDANCE WITH FLORIDA STATUTES CHAPTER 472.025.
6. THIS DESCRIPTION MEETS THE STANDARDS OF PRACTICE FOR SURVEYS AS REQUIRED BY FLORIDA STATUTES CHAPTER 472 AND THE MINIMUM TECHNICAL STANDARDS FOR SURVEYS AS REQUIRED BY CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE



Digitally signed by Leslie E Howard
DN: c US, o BSE CONSULTANTS INC,
ou /01410C000016C70879AVD00008416,
cn=Leslie E Howard
Date: 2021.01.05 16:36:25 -05'00'

PREPARED FOR AND CERTIFIED TO:
BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS

LESLIE E. HOWARD, PSM 5611
PROFESSIONAL SURVEYOR & MAPPER
NOT VALID UNLESS SIGNED AND SEALED

B.S.E. PREPARED BY: BSE CONSULTANTS, INC.
312 S. HARBOUR CITY BLVD., MELBOURNE, FLA 32901
321-725-3674

DRAWN BY: RMB	CHECKED BY: LEH	PROJECT NO. 87108.06			SECTION 34 TOWNSHIP 27 SOUTH RANGE 36 EAST	
		REVISIONS	DATE	DESCRIPTION		
DATE: 12/04/2020	DRAWING: 8710806_100_011		12/15/2020	COUNTY COMMENTS		
			12/30/2020	COUNTY COMMENTS		
			01/05/2021	COUNTY COMMENTS		

SKETCH OF DESCRIPTION

PARCEL #101

PARENT PARCEL ID#: 27-36-34-00-2

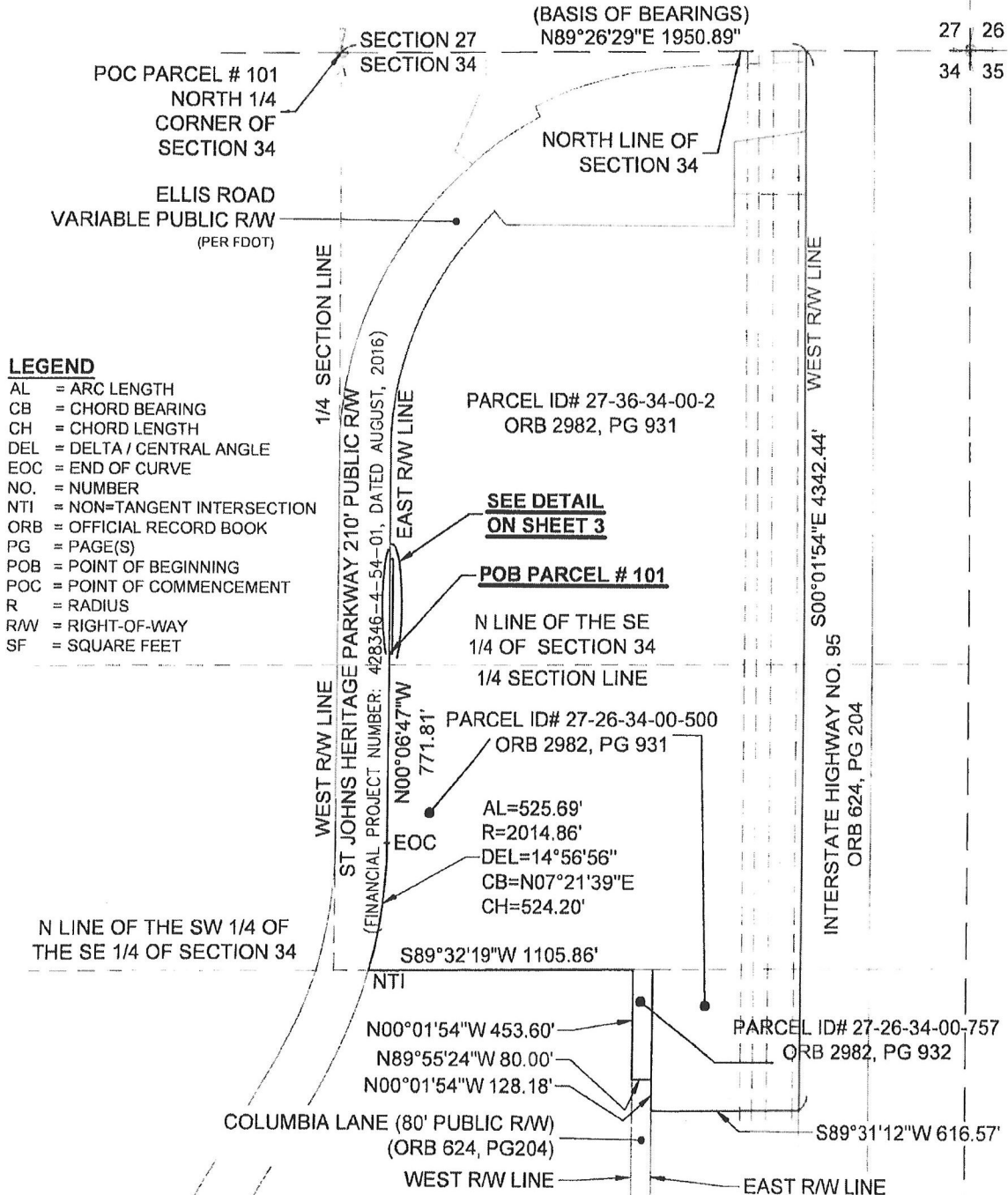
PURPOSE: FEE SIMPLE RIGHT-OF-WAY

EXHIBIT "B"

SHEET 2 OF 3

NOT VALID WITHOUT SHEET 1&3 OF 3

THIS IS NOT A SURVEY



PREPARED BY: BSE CONSULTANTS, INC.
312 S. HARBOUR CITY BLVD., MELBOURNE, FLA 32901
321-725-3674

SCALE:
1" = 600'
PROJECT NO.:
87108.06

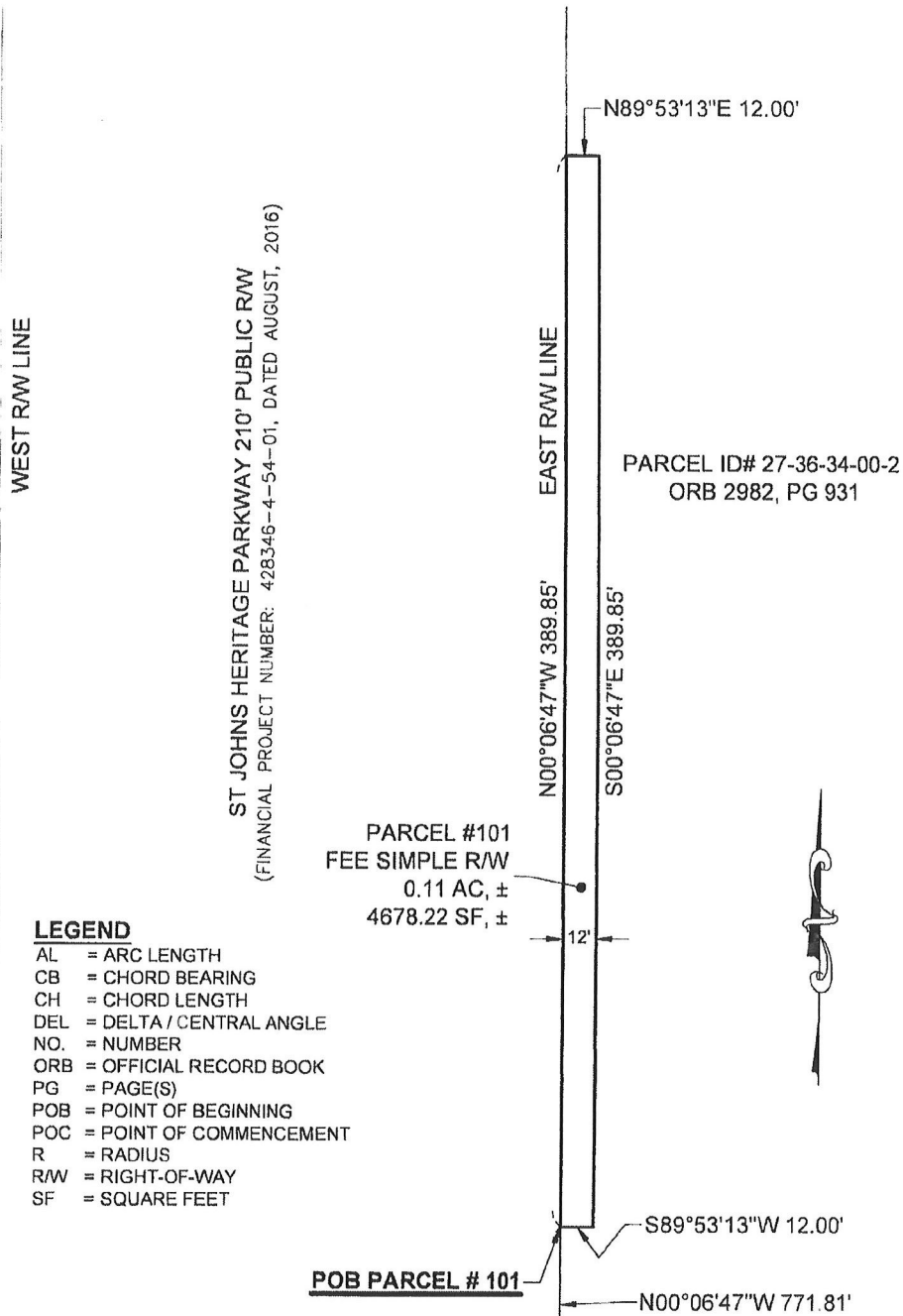
SECTION 34
TOWNSHIP 27 SOUTH
RANGE 36 EAST

PARCEL #101

PURPOSE: FEE SIMPLE RIGHT-OF-WAY

SHEET 3 OF 3

THIS IS NOT A SURVEY



SECTION 34
TOWNSHIP 27 SOUTH
RANGE 36 EAST

Prepared by and return to: Lucy Hamelers
Public Works Department, Land Acquisition
2725 Judge Fran Jamieson Way, A204, Viera, Florida 32940
A portion of Interest in Tax Parcel ID: 27-36-34-00-500

DRAINAGE EASEMENT

THIS INDENTURE, made this 15th day of January, 2021, between Heritage Lakes of West Melbourne, Inc., a Florida corporation, whose address is 304 S. Harbor City Boulevard, Suite 201, Melbourne, Florida 32901, as the first party, and Brevard County, a political subdivision of the State of Florida, whose address is 2725 Judge Fran Jamieson Way, Viera, Florida 32940, as the second party, for the use and benefit of Brevard County, Florida.

WITNESSETH that the first party, in consideration of One Dollar (\$1.00) and other valuable consideration paid, the receipt of which is acknowledged, grants unto the second party, its successors and assigns, a perpetual easement commencing on the above date for the purposes of operating, reconstructing, reconfiguring, and maintaining drainage facilities and other allied uses pertaining thereto, over, under, upon, above, and through the following lands:

The land affected by the granting of the easement is located in Section 34, Township 27 South, Range 36 East, Brevard County, Florida, and being more particularly described as follows:

SEE LEGAL DESCRIPTION ATTACHED HERETO AS "EXHIBIT A"

Including the right of ingress and egress onto the easement area as may be necessary for the full use and enjoyment by the second party of its easement. The first party shall have full use and enjoyment of the easement area but shall not make any improvements within the easement area which will conflict or interfere with the easement granted herein.

TO HAVE AND TO HOLD said easement unto Brevard County, a political subdivision of the State of Florida, and to its successors and/or assigns. The first party does covenant with the second party that it is lawfully seized and possessed of the lands above described and that it has a good and lawful right to convey it or any part thereof.

(Signatures and Notary on next page)

IN WITNESS WHEREOF, the first party has caused this easement to be executed,
the day and year first above written,

Signed, sealed and delivered in the presence of:

Witness

Dale A. Dettmer

Print Name

Stacy Horan

Witness

Stacy Horan

Print Name

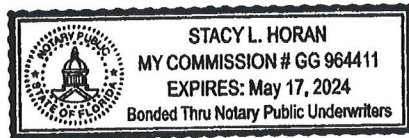
Heritage Lakes of West Melbourne, Inc.
a Florida corporation

BY: Robert M. Renfro

It's President

STATE OF FLORIDA
COUNTY OF BREVARD

The foregoing instrument was acknowledged before me by means of ☒ physical
presence or ☐ online notarization on this 15 day of January, 2021, by
Robert M. Renfro as President for Heritage Lakes of West Melbourne, Inc., a
Florida corporation. Is personally known or produced _____ as
identification.



Stacy L. Horan
Notary Signature
SEAL

Board Meeting Date: _____

Agenda Item # _____

LEGAL DESCRIPTION

PARCEL #801

PARENT PARCEL ID#: 27-36-34-00-500

PURPOSE: PUBLIC DRAINAGE EASEMENT

LEGAL DESCRIPTION: PARCEL #801, PUBLIC DRAINAGE EASEMENT (PREPARED BY SURVEYOR)

EXHIBIT "A"

SHEET 1 OF 3

NOT VALID WITHOUT SHEET 2&3 OF 3

THIS IS NOT A SURVEY

PART OF PARCEL 3 AS DESCRIBED IN OFFICIAL RECORDS BOOK 2982, PAGE 931, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, LYING IN SECTION 34, TOWNSHIP 27 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTH QUARTER SECTION CORNER OF SAID SECTION 34 AND RUN N89°26'29"E, ALONG THE NORTH LINE OF SAID SECTION 34, A DISTANCE OF 1950.89 FEET TO THE WEST RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY NO. 95 AS DESCRIBED IN OFFICIAL RECORDS BOOK 624, PAGE 204, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S00°01'54"E, ALONG SAID WEST RIGHT-OF-WAY LINE, A DISTANCE OF 4342.44 FEET; THENCE S89°31'12"W A DISTANCE OF 616.57 FEET TO THE EAST RIGHT-OF-WAY LINE OF COLUMBIA LANE AS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 624, PAGE 204; THENCE N00°01'54"W, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 128.18 FEET; THENCE N89°55'24"W A DISTANCE OF 80.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF SAID COLUMBIA LANE; THENCE N00°01'54"W A DISTANCE OF 453.60 FEET TO THE NORTH LINE OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SAID SECTION 34; THENCE S89°32'19"W, ALONG SAID NORTH LINE, A DISTANCE OF 1093.42 FEET TO A NON-TANGENT INTERSECTION WITH A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 2026.86 FEET, A CENTRAL ANGLE OF 01°04'10", A CHORD BEARING OF N14°12'29"E AND A CHORD LENGTH OF 37.83 FEET), A DISTANCE OF 37.83 FEET TO THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE CONTINUE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 2026.86 FEET, A CENTRAL ANGLE OF 00°38'44", A CHORD BEARING OF N13°21'02"E AND A CHORD LENGTH OF 22.83 FEET), A DISTANCE OF 22.83 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE TO THE EAST; THENCE N87°49'42"E ALONG SAID NON-TANGENT LINE, A DISTANCE OF 23.00 FEET; THENCE S02°10'18"E, A DISTANCE OF 22.00 FEET; THENCE S87°49'42"W, A DISTANCE OF 29.11 FEET TO THE POINT OF BEGINNING. CONTAINING 0.01 ACRES, (572.72 SQUARE FEET) MORE OR LESS.

SURVEYORS NOTES:

1. THIS IS NOT A BOUNDARY SURVEY, NOR IS IT INTENDED TO BE USED AS ONE.
2. BEARING REFERENCE: ASSUMED BEARING OF N89°26'29"E ON THE NORTH LINE OF SECTION 34, TOWNSHIP 27 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA.
3. THIS DESCRIPTION IS SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS-OF-WAY OF RECORD.
4. THIS DESCRIPTION WAS PREPARED WITH THE BENEFIT OF THAT CERTAIN FIDELITY NATIONAL TITLE INSURANCE COMPANY PROPERTY INFORMATION REPORT, ORDER NO.: 9019615, CUSTOMER REFERENCE NUMBER: 44098. NO EASEMENTS AFFECTING THE LANDS DESCRIBED HEREON WERE FOUND IN SAID REPORT.
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6. THIS DESCRIPTION MEETS THE STANDARDS OF PRACTICE FOR SURVEYS AS REQUIRED BY FLORIDA STATUTES CHAPTER 472 AND THE MINIMUM TECHNICAL STANDARDS FOR SURVEYS AS REQUIRED BY CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE



Digitally signed by Leslie E Howard
DN: c=US, o=BSE CONSULTANTS INC.,
ou=A01410C0000016C70B79A9D0000841
6, cn=Leslie E Howard
Date: 2021.01.05 14:18:13 -05'00'

PREPARED FOR AND CERTIFIED TO:
BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS

LESLIE E. HOWARD, PSM 5611
PROFESSIONAL SURVEYOR & MAPPER
NOT VALID UNLESS SIGNED AND SEALED

B.S.E. PREPARED BY: BSE CONSULTANTS, INC.
312 S. HARBOUR CITY BLVD., MELBOURNE, FLA 32901
321-725-3674

DRAWN BY: RMB	CHECKED BY: LEH	PROJECT NO. 87108.06			SECTION 34 TOWNSHIP 27 SOUTH RANGE 36 EAST
		REVISIONS	DATE	DESCRIPTION	
			12/15/2020	COUNTY COMMENTS	
DATE: 12/04/2020	DRAWING: 8710806_100_010		12/30/2020	COUNTY COMMENTS	

SKETCH OF DESCRIPTION

PARCEL #801

PARENT PARCEL ID#: 27-36-34-00-500

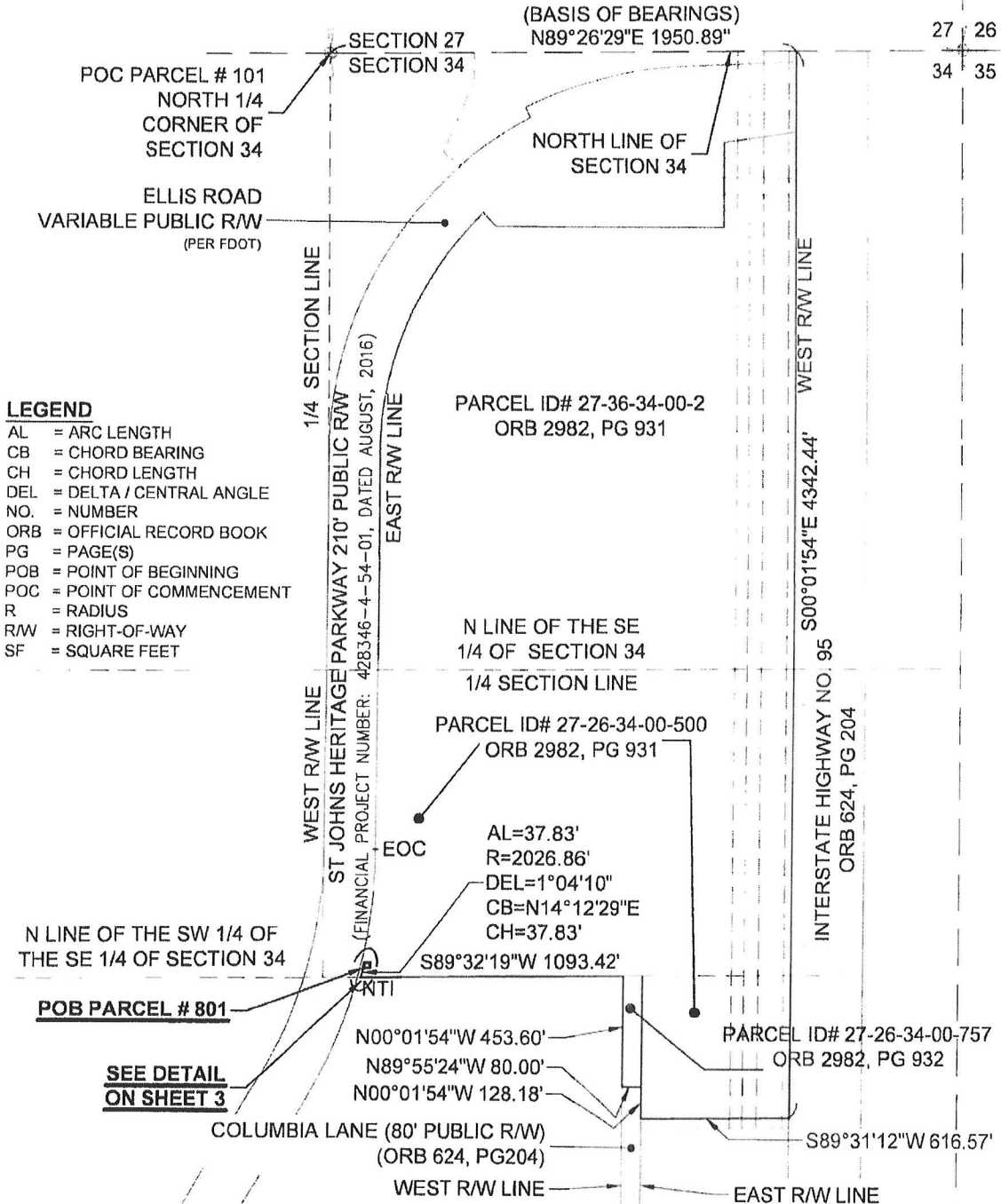
PURPOSE: PUBLIC DRAINAGE EASEMENT

EXHIBIT "A"

SHEET 2 OF 3

NOT VALID WITHOUT SHEET 1&3 OF 3

THIS IS NOT A SURVEY



PREPARED BY: BSE CONSULTANTS, INC.
312 S. HARBOUR CITY BLVD., MELBOURNE, FLA 32901
321-725-3674

SCALE:
1" = 600'
PROJECT NO.:
87108.06

SECTION 34
TOWNSHIP 27 SOUTH
RANGE 36 EAST

SKETCH OF DESCRIPTION

PARCEL #801

PARENT PARCEL ID#: 27-36-34-00-500

PURPOSE: PUBLIC DRAINAGE EASEMENT

EXHIBIT "A"

SHEET 3 OF 3

NOT VALID WITHOUT SHEET 1&2 OF 3

THIS IS NOT A SURVEY

PARCEL ID# 27-36-34-00-500
ORB 2982, PG 931

N LINE OF THE SW 1/4 OF
THE SE 1/4 OF SECTION 34

ST JOHNS HERITAGE PARKWAY 210' PUBLIC R/W
(FINANCIAL PROJECT NUMBER: 428346-4-54-01, DATED AUGUST, 2016)

PROPOSED PARCEL # 100,
FEE SIMPLE R/W

AL=22.83'
R=2026.86'
DEL=0°38'44"
CB=N13°21'02"E
CH=22.83'

AL=37.83'
R=2026.86'
DEL=1°04'10"
CB=N14°12'29"E
CH=37.83'

N87°49'42"E 23.00' (NTL)

PARCEL #801
DRAINAGE
EASEMENT
0.01 AC, ±
572.72 SF, ±

S87°49'42"W 29.11'

POB PARCEL # 801

S89°32'19"W 1093.42'

NTI

LEGEND

AL = ARC LENGTH
CB = CHORD BEARING
CH = CHORD LENGTH
DEL = DELTA / CENTRAL ANGLE
NO. = NUMBER
NTI = NON-TANGENT INTERSECTION
NTL = NON-TANGENT LINE
ORB = OFFICIAL RECORD BOOK
PG = PAGE(S)
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
R = RADIUS
R/W = RIGHT-OF-WAY
SF = SQUARE FEET

PREPARED BY: BSE CONSULTANTS, INC.
312 S. HARBOUR CITY BLVD., MELBOURNE, FLA 32901
321-725-3674

SCALE:

1" = 20'

PROJECT NO.:

87108.06

SECTION 34

TOWNSHIP 27 SOUTH

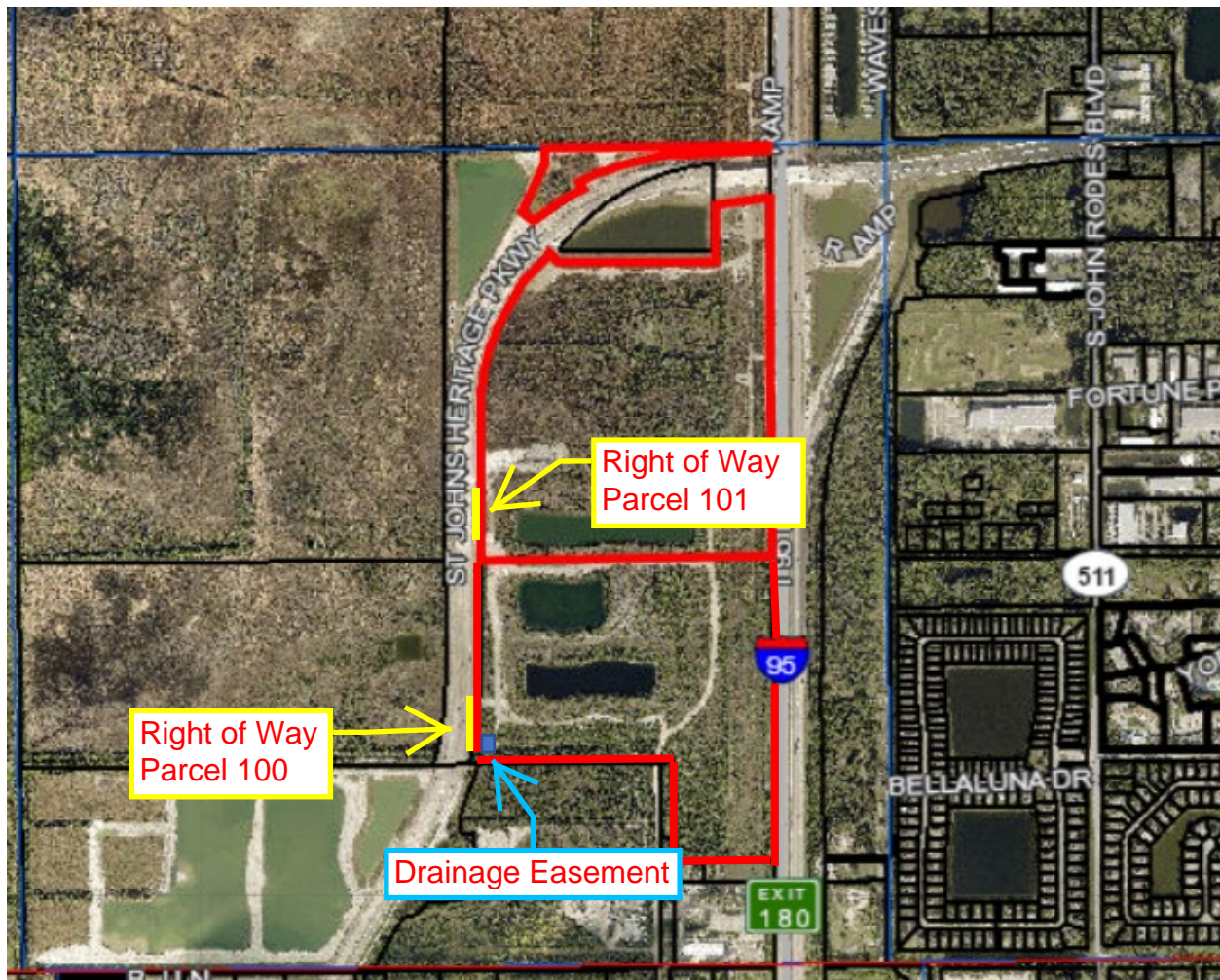
RANGE 36 EAST

LOCATION MAP

Section 34, Township 27 South, Range 36 East - District 5

PROPERTY LOCATION: East side of St. Johns Heritage Parkway

OWNERS NAME: Heritage Lakes of West Melbourne, Inc.



BOARD OF COUNTY COMMISSIONERS



AGENDA REVIEW SHEET

AGENDA: Drainage Easement and Warranty Deed from Heritage Lakes of West Melbourne, Inc. – District 5.

AGENCY: Public Works Department / Land Acquisition

AGENCY CONTACT: Lucy Hamelers, Land Acquisition Specialist

CONTACT PHONE: 321-350-8336 extension 58336

	APPROVE	DISAPPROVE	DATE
LAND ACQUISITION Lucy Hamelers, Supervisor		_____	<u>1-19-2021</u>
COUNTY ATTORNEY Christine Schverak Assistant County Attorney		_____	<u>1-20-2021</u>



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.6.

2/9/2021

Subject:

Approval, Re: Donation of Warranty Deed from Sheldon Cove, LLLP for the Riomar Drive Bus Stop Project - District 4.

Fiscal Impact:

None

Dept/Office:

Public Works Department / Land Acquisition

Requested Action:

It is requested that the Board of County Commissioners approve and accept the attached Warranty Deed.

Summary Explanation and Background:

The subject property is located in Section 23, Township 25 South, Range 36 East, south of Barnes Boulevard on Riomar Drive in Rockledge.

Space Coast Area Transit has requested the assistance of the Facilities Department with overseeing the construction and installation of a bus shelter at the CareerSource Brevard administration offices located at Barnes Boulevard and Riomar Drive. Research generated by Land Acquisition revealed the property boundaries of the parcel owned by Sheldon Cove, LLLP included Riomar Drive, a County maintained roadway. The owners agreed to donate the right of way to provide deeded ownership of Riomar Drive to the County.

The User Department approves this request.

This acquisition follows the policies and procedures as set forth in Administrative Order 37.

Clerk to the Board Instructions:

BOARD OF COUNTY COMMISSIONERS

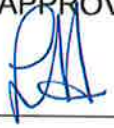

AGENDA REVIEW SHEET

AGENDA: Warranty Deed from Sheldon Cove, LLLP for the Riomar Bus Stop – District 4.

AGENCY: Public Works Department / Land Acquisition

AGENCY CONTACT: Lucy Hamelers, Land Acquisition Supervisor

CONTACT PHONE: 321-350-8336

	APPROVE	DISAPPROVE	DATE
LAND ACQUISITION Lucy Hamelers, Supervisor	 _____	_____	<u>1-19-2021</u>
COUNTY ATTORNEY Christine Schverak Assistant County Attorney	 _____	_____	<u>1-20-2021</u>

Prepared by and return to: Lucy Hamelers
Public Works Department, Land Acquisition
2725 Judge Fran Jamieson Way, A-204, Viera, Florida 32940
A portion of interest in Tax Parcel ID: 25-36-23-00-580

WARRANTY DEED

THIS INDENTURE is made this 23 day of December, 2020, by Sheldon Cove, Ltd., a Florida limited partnership, now known as Sheldon Cove, LLLP., a Florida limited liability limited partnership, hereafter called the Grantor, whose mailing address is 400 Imperial Boulevard, Cape Canaveral, Florida 32920, to Brevard County, a political subdivision of the State of Florida, hereafter called the Grantee, whose mailing address is 2725 Judge Fran Jamieson Way, Viera, Florida 32940;

WITNESSETH that the Grantor, for and in consideration of the sum of One Dollar and No Cents (\$1.00) and other valuable considerations, paid, receipt of which is hereby acknowledged, does hereby grant, bargain, sell, and convey unto the Grantee, its successors and assigns the following described lands, situate, lying and being in the County of Brevard, State of Florida, to-wit:

SEE LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBIT "A"

TO HAVE AND TO HOLD THE SAME, together with all and singular the appurtenances thereunto belonging or in anywise incident and/or appertaining thereto and all the estate, right, title & interest forever, and the Grantor does hereby fully warrant the title to said lands, and will defend the same against the lawful claims of all persons whomsoever.

(Signatures and Notary on next page)

IN WITNESS WHEREOF, the Grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

Witness

Dona Stamer

Print Name

Dana Jo McCauley

Witness

Dana Jo McCauley

Print Name

Sheldon Cove, Ltd., a Florida limited partnership, now known as Sheldon Cove, LLLP., a Florida limited liability limited partnership

Stephen C. Mays
Stephen C. Mays, General Partner

STATE OF FLORIDA
COUNTY OF BREVARD

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization on this 11th day of January, 2020, by Stephen C. Mays, General Partner of Sheldon Cove, Ltd., a Florida limited partnership, now know a Sheldon Cove, LLLP., a Florida limited liability limited partnership. Is personally known or produced _____ as identification.

Susan Lynn Chrostowski

Notary Signature

SEAL

Board Meeting Date: _____

Agenda Item # _____



SUSAN LYNN CHROSTOWSKI
Commission # GG 331418
Expires September 4, 2023
Bonded Thru Budget Notary Services

LEGAL DESCRIPTION:

PARCEL 100

SECTION 23, TOWNSHIP 25 SOUTH, RANGE 36 EAST

PARENT PARCEL NUMBER: 25-36-23-00-580

PURPOSE: FEE SIMPLE RIGHT OF WAY

SHEET 1 OF 5 SHEETS

EXHIBIT "A"

NOT VALID WITHOUT SHEETS 2-5

THIS IS NOT A SURVEY

LEGAL DESCRIPTION: PARCEL 100, FEE SIMPLE RIGHT OF WAY. (BY SURVEYOR)

A 66.00 FOOT WIDE STRIP OF LAND BEING A PORTION OF THOSE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 3781, PAGE 1946 AND LYING IN SECTION 23, TOWNSHIP 25 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA, MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 23; THENCE N.00°01'36"W., ALONG THE WEST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 23, A DISTANCE OF 1963.39 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF BARNES BOULEVARD, A 100.00 FOOT WIDE RIGHT-OF-WAY PER OFFICIAL RECORDS BOOK 139, PAGE 585; THENCE S.89°32'10"E., A DISTANCE OF 277.08 FEET TO THE POINT-OF BEGINNING OF THE LANDS HEREIN DESCRIBED; THENCE CONTINUE S.89°32'10"E., ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 66.00 FEET TO A POINT ON THE EAST LINE OF SAID DESCRIBED LANDS; THENCE S.00°27'50"W., ALONG SAID EAST LINE, A DISTANCE OF 357.50 FEET TO THE NORTH LINE OF RIOMAR DRIVE AS ESTABLISHED BY THE PLAT OF ROCKLEDGE III AS RECORDED IN PLAT BOOK 37, PAGE 24 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.89°32'10"W., ALONG SAID NORTH LINE OF RIOMAR AND PARALLEL WITH THE AFORESAID SOUTHERLY RIGHT-OF-WAY LINE OF BARNES BOULEVARD, A DISTANCE OF 66.00 FEET; THENCE N.00°27'50"E., A DISTANCE OF 357.50 FEET TO THE POINT OF BEGINNING. CONTAINING 0.54 ACRES OR 23,595 SQUARE FEET MORE OR LESS.

NOTES:

- 1) THE BEARINGS SHOWN HEREON ARE BASED ON AN ASSUMED BEARING OF N.00°01'36"W., AS SHOWN ALONG THE WEST LINE OF THE SW.1/4 OF SECTION 23, TWP.25 S., RGE. 36 E.

LEGEND

6614/0355 = Typical nomenclature for Official Records Book and Page.

P.O.B. = Point of Beginning

P.O.C. = Point of Commencement

P.R.C. = Point Of Reverse Curvature

R/W = Right-of-way

CL = Centerline

TWP = Township

RGE = Range

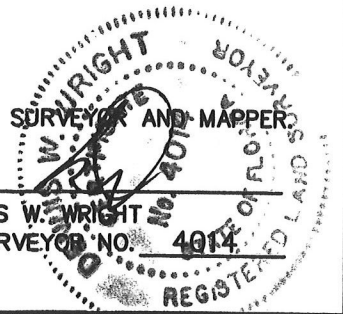
ORB._____, PG._____ = Official Records Book and Page.

PB._____, PG._____ = Plat Book and Page

NOT VALID WITHOUT SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

CERTIFIED TO: _____
BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS

CERTIFIED BY: _____
DENNIS W. WRIGHT
REGISTERED LAND SURVEYOR NO. 4014
STATE OF FLORIDA



DATE 8/31/20

ORDER NO. 25718

FB. NO.

SCALE 1" = 100'

DWG.NO. BREV BARNES-RIOMAR LEGAL.DWG

Honeycutt & Associates, Inc.

ENGINEERS • SURVEYORS • PLANNERS

3700 South Washington Avenue • Titusville, Florida 32780

(321) 267-6233 Fax (321) 269-7847

CERTIFICATE OF AUTHORIZATION NO. LB 6762

SECTION: 23

TOWNSHIP: 25

RANGE: 36

MAP OF DESCRIPTION

PARCEL 100

SECTION 23, TOWNSHIP 25 SOUTH, RANGE 36 EAST

PARENT PARCEL NUMBER: 25-36-23-00-580

PURPOSE: FEE SIMPLE RIGHT OF WAY

SHEET 2 OF 5 SHEETS

EXHIBIT "A"

NOT VALID WITHOUT SHEETS 1, 3, 4 AND 5

THIS IS NOT A SURVEY

BARNES BOULEVARD

(100' RIGHT OF WAY)
(PER ORB. 139, PG.585)

SOUTH R/W LINE BARNES BLVD.

S89°32'10"E

S89°32'10"E

277.08'

P.O.B.
PARCEL 100

66.00'

3781/1946

PARCEL ID: 25-36-23-00-580

PARCEL 100
(FEE SIMPLE RIGHT OF WAY)

357.50'

N00°27'50"E

357.50'

EAST LINE OF ORB.3781 PG. 1946

6614/355

PARCEL ID: 25-36-23-00-570

NORTH RIGHT OF WAY LINE
RIOMAR DR. PER PLAT
BOOK 37, PAGE 24

66.00'

TRACT B

PARCEL ID: 25-36-23-50-B

N89°32'10"W

RIOMAR DRIVE
(80' RIGHT OF WAY)
(PER PB.37, PG 24)

ROCKLEDGE III

PLAT BOOK 37, PAGE 24

PARCEL ID: 25-36-22-00-756

LOT 6

4099/2877

PARCEL ID: 25-36-23-00-572

P.O.C. PARCEL 100

SW. CORNER OF
SECTION 23, TWP.25 S., RGE.36 E.

22 23
27 26



GRAPHIC SCALE
1" = 100'

DATE 8/31/20

ORDER NO. 25718

FB. NO.

SCALE. 1" = 100'

DWG.NO. BREV BARNES-RIOMAR LEGAL.DWG

Honeycutt & Associates, Inc.

ENGINEERS • SURVEYORS • PLANNERS

3700 South Washington Avenue • Titusville, Florida 32780

(321) 267-6233 Fax (321) 269-7847

CERTIFICATE OF AUTHORIZATION NO. LB 6762

SECTION: 23

TOWNSHIP: 25

RANGE: 36

NOTES ADDRESSING O&E REPORT:

SHEET 3 OF 5 SHEETS

PARCEL 100

SECTION 23, TOWNSHIP 25 SOUTH, RANGE 36 EAST

PARENT PARCEL NUMBER: 25-36-23-00-580

PURPOSE: FEE SIMPLE RIGHT OF WAY

EXHIBIT "A"

NOT VALID WITHOUT SHEETS 1, 2, 4 AND 5

THIS IS NOT A SURVEY

EASEMENTS AND EXCEPTIONS LISTED IN NEW REVELATIONS, INC. O&E REPORT FILE NUMBER 20-1273, EFFECTIVE DATE 06/08/2020, ARE ADDRESSED AS FOLLOWS:

- 1) EASEMENT DESCRIBED IN O.R.B.2743, PAGE 111 DOES NOT AFFECT THIS PARCEL.
- 2) FP&L EASEMENT DESCRIBED IN O.R.B.2874, PAGE 1254 AFFECTS THE PROPERTY AND IS SHOWN PLOTTED HEREIN.
- 3) CITY OF COCOA WATER LINE AND INGRESS/EGRESS EASEMENT DESCRIBED IN O.R.B.2936, PAGE 1628 AFFECTS THE PROPERTY AND IS SHOWN PLOTTED HEREIN.
- 4) FP&L EASEMENT DESCRIBED IN O.R.B.3012, PAGE 2433 AFFECTS THE PROPERTY AND IS SHOWN PLOTTED HEREIN.
- 5) FP&L EASEMENT DESCRIBED IN O.R.B.3052, PAGE 3110 IS AN AMENDMENT TO CONDITIONS OF EASEMENTS RECORDED IN O.R.B.2874, PAGE 1254 AND O.R.B.3012, PAGE 2433 which ARE BOTH PLOTTED HEREON.
- 6) CITY OF COCOA BLANKET INGRESS/EGRESS EASEMENT AND PUBLIC WATER DISTRIBUTION EASEMENT DESCRIBED IN O.R.B. 3109, PG.2031 OVER THE RIGHTS OF WAY OF RIOMAR DRIVE AND YELLOW PLACE AS SHOWN ON THE PLAT OF ROCKLEDGE III, PLAT BOOK 37, PAGE 24 DO NOT DIRECTLY AFFECT THIS PROPERTY, BUT SAID RIGHT OF WAY OF RIOMAR DRIVE ABUTS THE PROPERTY AT ITS SOUTH BOUNDARY LINE.
- 7) EASEMENT RECORDED IN O.R.B.3831, PAGE 3186 DEFINES A 10 FOOT WIDE FP&L EASEMENT AS CENTERED ON FACILITIES EXISTING ON THE LAND LYING IMMEDIATELY WEST OF THE PROPERTY BUT DOES NOT DESCRIBE THE LOCATION OF THESE FACILITIES.

DATE 8/31/20

ORDER NO. 25718

FB. NO. _____

SCALE. 1" = 100'

DWG.NO. BREV BARNES-RIOMAR LEGAL.DWG

Honeycutt & Associates, Inc.

ENGINEERS • SURVEYORS • PLANNERS

3700 South Washington Avenue • Titusville, Florida 32780

(321) 267-6233 Fax (321) 269-7847

CERTIFICATE OF AUTHORIZATION NO. LB 6762

SECTION: 23

TOWNSHIP: 25

RANGE: 36

MAP OF DESCRIPTION SHOWING EASEMENTS:

PARCEL 100

SECTION 23, TOWNSHIP 25 SOUTH, RANGE 36 EAST

PARENT PARCEL NUMBER: 25-36-23-00-580

PURPOSE: FEE SIMPLE RIGHT OF WAY

SHEET 4 OF 5 SHEETS

EXHIBIT "A"

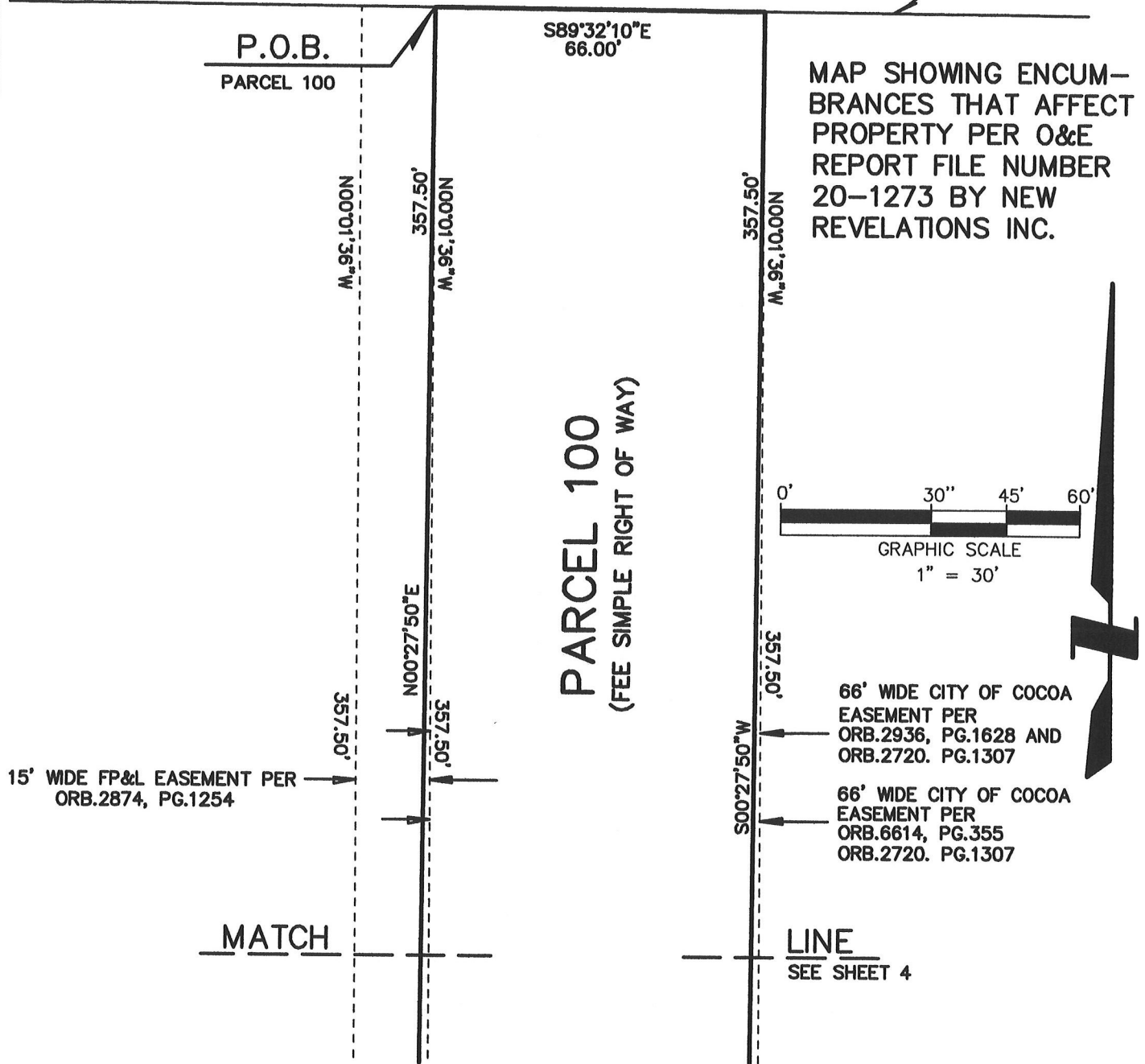
NOT VALID WITHOUT SHEETS 1-3 AND 5

THIS IS NOT A SURVEY

BARNES BOULEVARD

(100' RIGHT OF WAY)
(PER ORB. 139, PG.585)

R/W LINE



MAP SHOWING ENCUMBRANCES THAT AFFECT
PROPERTY PER O&E
REPORT FILE NUMBER
20-1273 BY NEW
REVELATIONS INC.

0' 30' 45' 60'
GRAPHIC SCALE
1" = 30'

66' WIDE CITY OF COCOA
EASEMENT PER
ORB.2936, PG.1628 AND
ORB.2720, PG.1307

66' WIDE CITY OF COCOA
EASEMENT PER
ORB.6614, PG.355
ORB.2720, PG.1307

LINE
SEE SHEET 4

DATE 8/31/20

ORDER NO. 25718

FB. NO.

SCALE. 1" = 100'

DWG.NO. BREV BARNES-RIOMAR LEGAL.DWG

Honeycutt & Associates, Inc.

ENGINEERS • SURVEYORS • PLANNERS

3700 South Washington Avenue • Titusville, Florida 32780

(321) 267-6233 Fax (321) 269-7847

CERTIFICATE OF AUTHORIZATION NO. LB 6762

SECTION: 23

TOWNSHIP: 25

RANGE: 36

MAP OF DESCRIPTION SHOWING EASEMENTS:

SHEET 5 OF 5 SHEETS

EXHIBIT "A"

NOT VALID WITHOUT SHEETS 1-4

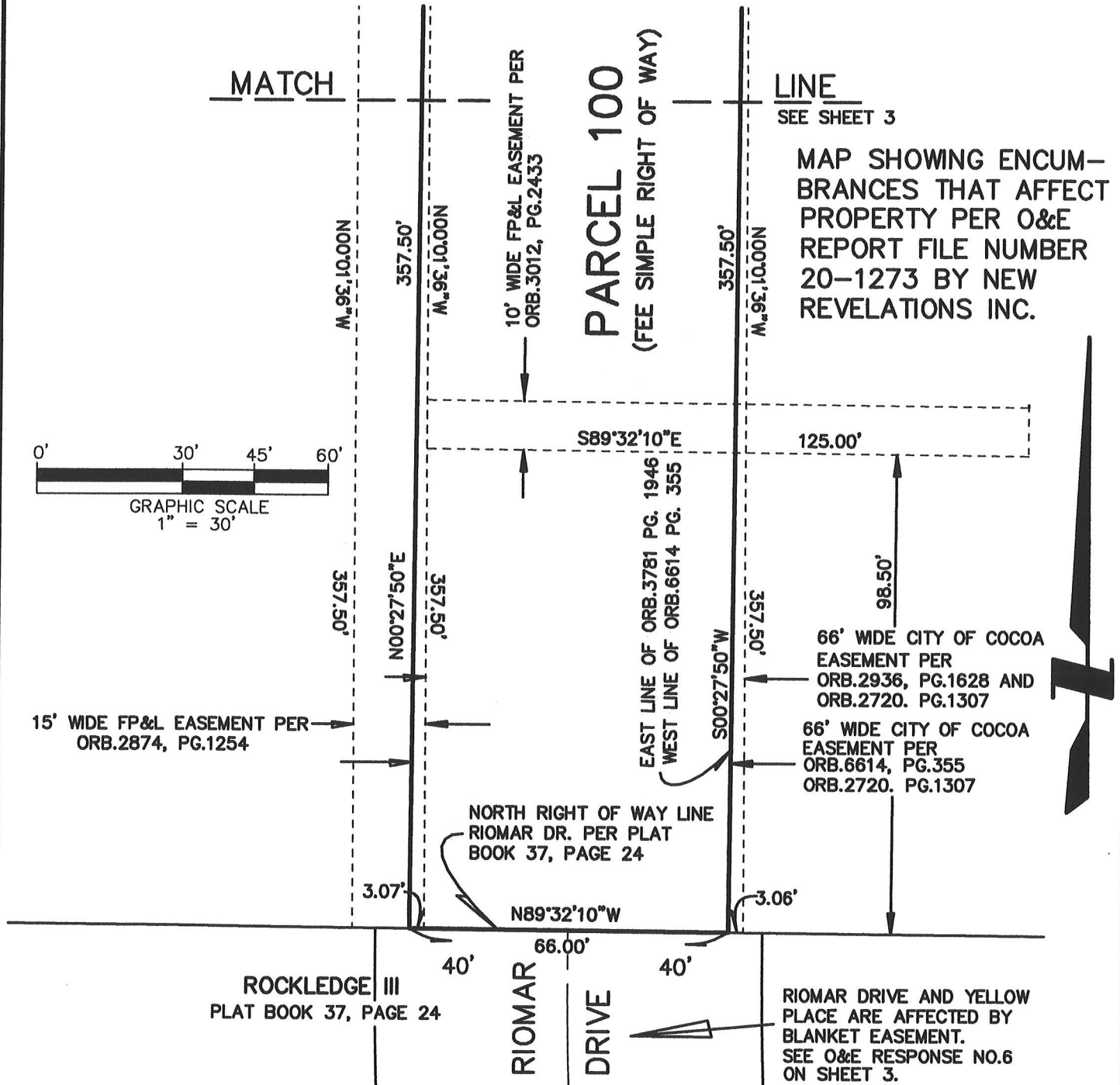
THIS IS NOT A SURVEY

PARCEL 100

SECTION 23, TOWNSHIP 25 SOUTH, RANGE 36 EAST

PARENT PARCEL NUMBER: 25-36-23-00-580

PURPOSE: FEE SIMPLE RIGHT OF WAY



DATE 8/31/20

ORDER NO. 25718

FB. NO.

SCALE. 1" = 100'

DWG. NO. BREV BARNES-RIOMAR LEGAL.DWG

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(321) 267-6233 Fax (321) 269-7847

CERTIFICATE OF AUTHORIZATION NO. LB 6762

SECTION: 23

TOWNSHIP: 25

RANGE: 36

LOCATION MAP

Section 23, Township 25 South, Range 36 East - District 4

PROPERTY LOCATION: South of Barnes Boulevard on Riomar Drive in Rockledge.

OWNERS NAME: Sheldon Cove, LLLP





Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.7.

2/9/2021

Subject:

Approval, Re: Dedication of Warranty Deeds from 1) S&A Minton Road Corp. and 2) YL-West Melbourne Development, LLC for Right of Way Dedication for the Yourlife of West Melbourne Project - District 3.

Fiscal Impact:

None

Dept/Office:

Public Works Department / Land Acquisition

Requested Action:

It is requested that the Board of County Commissioners approve and accept the attached two Warranty Deeds.

Summary Explanation and Background:

The subject property is located in Section 07, Township 28 South, Range 37 East, on the east side of Minton Road, south of Henry Avenue, north of Heritage Oaks Boulevard in West Melbourne.

S&A Minton Road Corp., as the original owner of the 13.8-acre site, has obtained Right of Way/Easement permit number 18RW00845 from the County for improvements within Minton Road for the development of an assisted living facility on the northern half of the site at Heritage Oaks Boulevard in West Melbourne. The northern half of the site was subsequently transferred to YL-West Melbourne Development, LLC, with ownership of the southern portion remaining with S&A Minton Road Corp for future plans to develop a commercial project. In accordance with County code and standards, the two parcel owners have agreed to dedicate the attached Warranty Deeds for right of way turn lanes as a required condition of the permit and for future development requirements.

The User Department approves this request.

This acquisition follows the policies and procedures as set forth in Administrative Order 37.

Clerk to the Board Instructions:

BOARD OF COUNTY COMMISSIONERS

AGENDA REVIEW SHEET

AGENDA: Warranty Deeds (2) for Right of Way Dedications for Yourlife West
Melbourne Project – District 3.

AGENCY: Public Works Department / Land Acquisition

AGENCY CONTACT: Lucy Hamelers, Land Acquisition Supervisor

CONTACT PHONE: 321-350-8336 extension 58336

	APPROVE	DISAPPROVE	DATE
LAND ACQUISITION Lucy Hamelers, Supervisor		_____	<u>1-20-21</u>
COUNTY ATTORNEY Christine Schverak Assistant County Attorney	<u>cms</u>	_____	<u>1-21-2021</u>

Prepared by and return to:

Page Whittle

Public Works Department, Land Acquisition

2725 Judge Fran Jamieson Way, A-204, Viera, Florida 32940

A portion of interest in Tax Parcel ID: 28-37-07-00-253

WARRANTY DEED

THIS WARRANTY DEED is made this 19 day of January, 2021 by S&A Minton Road Corp., a Florida corporation, hereafter called Grantor, whose mailing address is 184 Golf Village Boulevard, Jupiter, Florida 33458, to Brevard County, a political subdivision of the State of Florida, hereafter called the Grantee, whose mailing address is 2725 Judge Fran Jamieson Way, Viera, Florida 32940;

WITNESSETH: That the said Grantor, for and in consideration of the sum of One Dollar and No Cents (\$1.00) and other valuable considerations, paid, receipt of which is acknowledged, does grant, bargain, sell, and convey unto the Grantee, its successors and assigns the following described lands, lying and being in the Brevard County, Florida, to-wit:

SEE LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBIT "A" (the "Property")

TO HAVE AND TO HOLD THE SAME, together with all and singular the appurtenances thereunto belonging or in anywise incident and/or appertaining thereto and all the estate, right, title & interest forever, and the said Grantor does fully warrant the title to said lands, and will defend the same against the lawful claims of all persons whomsoever.

This conveyance is subject to covenants, restrictions, easements and encumbrances of record, if any, however this reference thereto shall not operate to re-impose same; subject to real estate taxes and assessments which are not yet due and payable for years subsequent to December 31, 2020; and subject to matters which would be disclosed by an accurate survey or inspection of the Property.

(Signatures and Notary on next page)

IN WITNESS WHEREOF, the Grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

Barbara Pearsall

Witness

BARBARA PEARSALL

(Print Name)

Phyllis Wilk

Witness

PHYLLIS WILK

(Print Name)

STATE OF NEW YORK
COUNTY OF NASSAU

The foregoing instrument was acknowledged before me by means of (x) physical presence or () online notarization on this 19th day of January, 2021 by Sylvester Catalanello as President of S&A Minton Road Corp., a Florida corporation, on behalf of the company, and () is personally known or (X) produced Sylvester Catalanello as identification.

[Signature]

Notary Signature

[SEAL]

Board Meeting Date: 12/29/20

Agenda Item# 1

NEIL S. LEVY
NOTARY PUBLIC State of New York
No. 10605240
Qualified in Suffolk County
Expiring 12/31/2022

[Signature]

EXHIBIT "A"

Parcel 101

[See attached]

LEGAL DESCRIPTION

PARCEL 101

PARENT PARCEL ID#: 28-37-07-00-253
SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA
PURPOSE: RIGHT OF WAY FEE SIMPLE

EXHIBIT "A"

SHEET 1 OF 3

NOT VALID WITHOUT SHEETS 2 & 3 OF 3

THIS IS NOT A SURVEY

LEGAL DESCRIPTION: PARCEL #101 (PREPARED BY SURVEYOR)

DESCRIPTION: PARCEL 101

A PORTION OF LOT 25, SECTION 7, FLORIDA INDIAN RIVER LAND COMPANY SUBDIVISION, AS RECORDED IN PLAT BOOK 1, PAGE 164, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, LYING IN THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA, BEING THE WEST 12.00 FEET OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5494, PAGE 8774, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS

COMMENCE AT THE NORTHWEST CORNER OF WOODFIELD AT HERITAGE OAKS, PHASE 2, AS RECORDED IN PLAT BOOK 49, PAGES 54-56, OF THE PUBLIC RECORDS OF BREVARD COUNTY FLORIDA; THENCE RUN SOUTH 00°19'40" WEST ALONG THE WEST LINE OF SAID WOODFIELD AT HERITAGE OAKS, PHASE 2 AND ALONG THE WEST LINE OF WOODFIELD AT HERITAGE OAKS, PHASE 1, AS RECORDED IN PLAT BOOK 47, PAGES 7-9, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 847.60 FEET; THENCE NORTH 89°40'20" WEST ALONG THE SOUTH LINE OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 8556, PAGE 1370, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 738.00 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE SOUTH 00°19'40" WEST PARALLEL TO AND 12.00 FEET EAST OF (BY PERPENDICULAR MEASUREMENT) THE EAST RIGHT OF WAY LINE OF MINTON ROAD (A PUBLIC RIGHT OF WAY), A DISTANCE OF 330.18 FEET TO A POINT ON THE NORTH LINE OF TRACT E, OF SAID WOODFIELD AT HERITAGE OAKS, PHASE 1; THENCE NORTH 89°40'20" WEST ALONG SAID NORTH LINE A DISTANCE OF 12.00 FEET TO THE SAID EAST RIGHT OF WAY LINE OF MINTON ROAD; THENCE NORTH 00°19'40" EAST, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 330.18 FEET TO THE SOUTHWEST CORNER OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 8556, PAGE 1370; THENCE SOUTH 89°40'20" EAST ALONG THE SOUTH LINE OF SAID OFFICIAL RECORDS BOOK 8556, PAGE 1370, A DISTANCE OF 12.00 FEET TO THE POINT OF BEGINNING.
CONTAINING 3,962 SQUARE FEET OR 0.09 ACRES MORE OR LESS.

SURVEYORS NOTES:

1. THIS SKETCH AND DRAWING HAVE BEEN PREPARED TO CONFORM WITH APPLICABLE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THIS SKETCH IS FOR THE SOLE BENEFIT OF THE PARTIES NAMED HEREON AND FOR THE SPECIFIC PURPOSE NOTED, AND SHOULD NOT BE RELIED UPON BY ANY OTHER ENTITY, AND IS NOT TRANSFERABLE UNDER ANY CIRCUMSTANCES.
3. THIS SKETCH IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR, AND REPRODUCTION OF THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE SURVEYOR IS HEREBY FORBIDDEN.
4. THIS SKETCH WAS PREPARED WITH THE BENEFIT OF PROPERTY INFORMATION REPORT PREPARED BY CHICAGO TITLE INSURANCE COMPANY, FILE NUMBER/COMMITMENT NO. 8317225 DATED MARCH 29, 2020.
5. THIS SKETCH WAS PREPARED FROM INFORMATION FURNISHED TO THE SURVEYOR BY THE CLIENT, AND MAY BE SUBJECT TO EASEMENTS OR LIMITATIONS EITHER RECORDED OR IMPLIED.
6. BEARINGS ARE BASED ON A ASSUMED BEARING OF S00°19'40"W FOR THE WEST LINE OF WOODFIELD AT HERITAGE OAKS, PHASE 2, AS RECORDED IN PLAT BOOK 49, PAGES 54-56, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, SHOWN AS BEING THE BASIS OF BEARINGS.

PREPARED FOR AND CERTIFIED TO:
BREVARD COUNTY BOARD OF
COUNTY COMMISSIONERS


ANDREW W. POWSHOK, PLS 5383
PROFESSIONAL LICENSED SURVEYOR

PREPARED BY: **AAL LAND SURVEYING SERVICES, INC.**
3970 MINTON ROAD, WEST MELBOURNE, FL 32904
PHONE: (321)768-8110 FAX: (321)952-9771 EMAIL: frontdesk@aalsurvey.com LICENSE BUSINESS #6623

DRAWN BY: DOUG W. GUARE	CHECKED BY: ANDREW W. POWSHOK	REVISION: _____	SECTION 07, TOWNSHIP 28 SOUTH, RANGE 37 EAST
DATE: 05-07-20	PROJECT # 42101	REVISION: _____	
		REVISION: COUNTY COMMENTS 08-12-20	

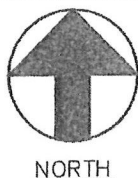
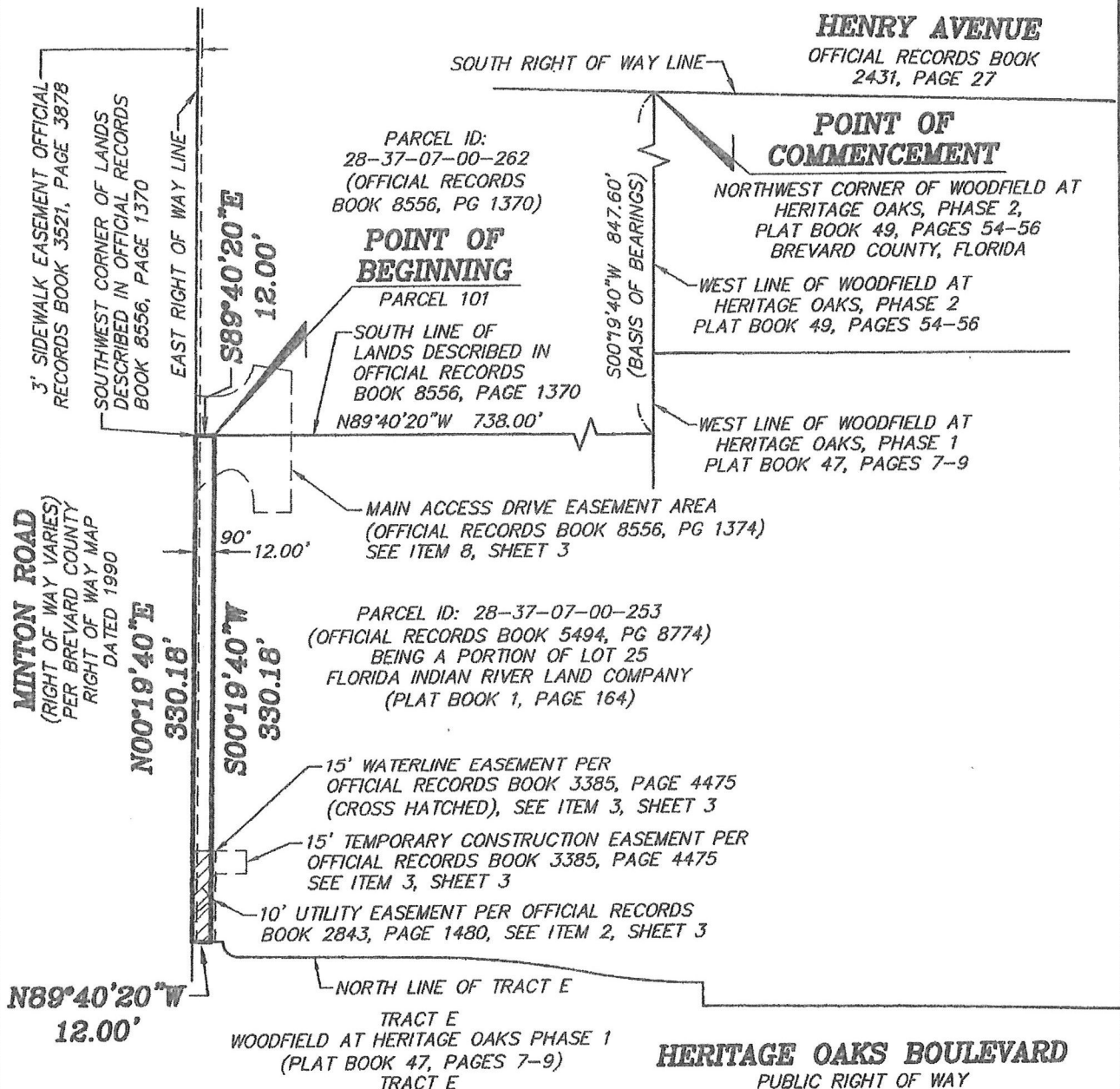
SKETCH OF DESCRIPTION

PARCEL ID# 101

PARENT PARCEL ID#: 28-37-07-00-253
SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA
PURPOSE: RIGHT OF WAY FEE SIMPLE

EXHIBIT "A"

SHEET 2 OF 3
NOT VALID WITHOUT SHEETS 1 & 3 OF 3
THIS IS NOT A SURVEY



PREPARED BY: **AAL LAND SURVEYING SERVICES, INC.**
3970 MINTON ROAD, WEST MELBOURNE, FL 32904
PHONE: (321) 768-8110 FAX: (321) 952-9771 EMAIL: frontdesk@aalsurvey.com

SCALE: 1" = 100'

PROJECT # 42101

REVISION:

REVISION:

REVISION: COUNTY COMMENTS

08-12-20

SECTION 07,
TOWNSHIP 28 SOUTH,
RANGE 37 EAST

LEGAL DESCRIPTION

PARCEL 101

PARENT PARCEL ID#: 28-37-07-00-253

SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA

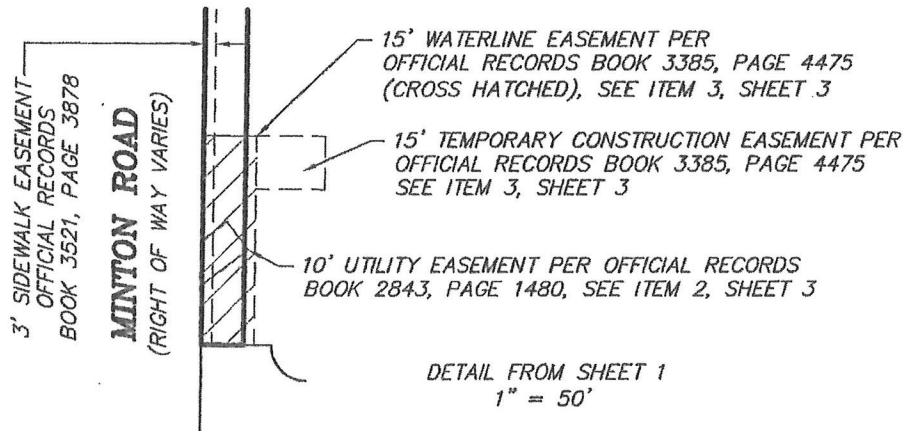
PURPOSE: RIGHT OF WAY FEE SIMPLE

EXHIBIT "A"

SHEET 3 OF 3

NOT VALID WITHOUT SHEETS 1 & 2 OF 3

THIS IS NOT A SURVEY



SCHEDULE BII ITEMS:

- ITEM 1, PUBLIC UTILITIES EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 2431, PAGE 27, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 2, EASEMENT IN FAVOR OF BREVARD COUNTY RECORDED IN OFFICIAL RECORDS BOOK 2843, PAGE 1480, AS SHOWN.
- ITEM 3, EASEMENT IN FAVOR OF CITY OF WEST MELBOURNE RECORDED IN OFFICIAL RECORDS BOOK 3385, PAGE 4475, AS SHOWN.
- ITEM 4, SIDEWALK EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 3521, PAGE 3878, AS SHOWN.
- ITEM 5, NOTICE OF COVENANTS, AGREEMENTS AND OTHER PROVISIONS RECORDED IN OFFICIAL RECORDS BOOK 4254, PAGE 3457, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 6, EASEMENT AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 4254, PAGE 3465, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 7, UTILITY EASEMENT AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 4254, PAGE 3476, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 8, AGREEMENT FOR EASEMENTS, CONSTRUCTION AND MAINTENANCE RECORDED IN OFFICIAL RECORDS BOOK 8556, PAGE 1374, AS SHOWN.
- ITEM 9, RESTRICTION AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 8556, PAGE 1393, DOES AFFECT THE SUBJECT PROPERTY BUT IS NOT PLOTTABLE.
- ITEM 10, MORTGAGE, ASSIGNMENT OF LEASES AND RENTS, SECURITY AGREEMENT AND FIXTURE FILING IN FAVOR OF FIRSTBANK PUERTO RICO DBA FIRSTBANK FLORIDA RECORDED IN OFFICIAL RECORDS BOOK 8556, PAGE 1406, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 11, UCC FINANCING STATEMENT AMENDMENT IN FAVOR OF FIRSTBANK PUERTO RICO DBA FIRSTBANK FLORIDA RECORDED IN OFFICIAL RECORDS BOOK 8556, PAGE 1426, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 12, NOTICE OF COMMENCEMENT RECORDED OCTOBER 11, 2019 IN OFFICIAL RECORDS BOOK 8561, PAGE 1409, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 13, BINDING DEVELOPMENT PLAN RECORDED IN OFFICIAL RECORDS BOOK 8566, PAGE 1209, DOES NOT AFFECT THE SUBJECT PROPERTY.

PREPARED FOR AND CERTIFIED TO:

BREVARD COUNTY BOARD OF
COUNTY COMMISSIONERS

PREPARED BY:

AAL LAND SURVEYING SERVICES, INC.

3970 MINTON ROAD, WEST MELBOURNE, FL 32904

PHONE: (321)788-8110 FAX: (321)952-9771 EMAIL: frontdesk@aalsurvey.com LICENSE BUSINESS #6623

DRAWN BY:
DOUG W. GUARE

CHECKED BY:
ANDREW W. POWSHOK

REVISION:

REVISION:

SECTION 07,
TOWNSHIP 28 SOUTH,
RANGE 37 EAST

DATE: 05-07-20

PROJECT # 42101

REVISION: COUNTY COMMENTS

08-12-20

Prepared by and return to:
Page Whittle
Public Works Department, Land Acquisition
2725 Judge Fran Jamieson Way, A-204 Viera, Florida 32940
A portion of interest in Tax Parcel ID: 28-37-07-00-262

WARRANTY DEED

THIS WARRANTY DEED is made this 15th day of December, 2020, by
YL - West Melbourne Development, LLC, a Delaware limited liability company, hereinafter called
Grantor, whose mailing address is 4300 Legendary Drive, Ste. 234, Destin, Florida 32541, to
Brevard County, a political subdivision of the State of Florida, as Grantee, whose mailing address
is 2725 Judge Fran Jamieson Way, Viera, Florida 32940;

(Whenever used herein, the term "Grantor" and "Grantee" include all the parties to this
instrument and the heirs, legal representatives and assigns of individuals, and the successors and
assigns of corporations)

WITNESSETH, that the said Grantor, for and in consideration of the sum of One Dollar and No
Cents (\$1.00) and other valuable considerations, paid, receipt of which is acknowledged, does
grant, bargain, sell, and convey unto the Grantee, its successors and assigns the following
described lands, lying and being in Brevard County, Florida, to-wit:

SEE LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBIT "A" (the "Property")

TO HAVE AND TO HOLD THE SAME, together with all and singular the appurtenances thereunto
belonging or in anywise incident and/or appertaining thereto and all the estate, right, title and
interest forever, and the said Grantor does fully warrant the title to said lands, and will defend
the same against the lawful claims of all persons whomsoever.

This conveyance is subject to covenants, restrictions, easements and encumbrances of record, if
any, however this reference thereto shall not operate to re-impose same; subject to real estate
taxes and assessments which are not yet due and payable for years subsequent to December 31,
2020; and subject to matters which would be disclosed by an accurate survey or inspection of
the Property.

(Signatures and Notary on next page)

A circular notary seal, likely for a Florida notary public, is located in the bottom right corner of the page. The seal is partially obscured and the text within it is difficult to read, but it appears to contain a name and the word "NOTARY".

IN WITNESS WHEREOF, the Grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

YL - West Melbourne Development, LLC, a
Delaware limited liability company

By: YL West Melbourne OpAd Member, LLC, a
Delaware limited liability company, its
Administrative Member

By: YourLife Development Partners, LLC,
a Florida limited liability company, its
Managing Member



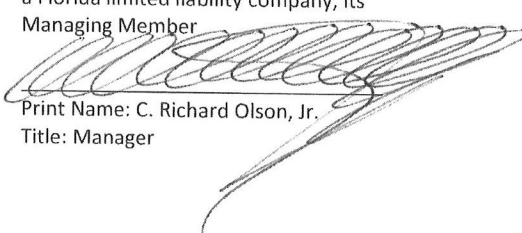
Witness

Luke Miller
(Print Name)



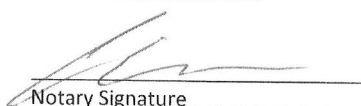
Witness

Lee Miller
(Print Name)


Print Name: C. Richard Olson, Jr.
Title: Manager

STATE OF FLORIDA
COUNTY OF BREVARD

The foregoing instrument was acknowledged before me by means of (✓) physical presence or () online notarization on this 15 day of December, 2020, by C. Richard Olson, Jr. as Manager of YourLife Development Partners, LLC, a Florida limited liability company, which is Managing Member of YL West Melbourne Op Ad Member, LLC, a Delaware limited liability company, which is Administrative Member of YL - West Melbourne Development, LLC, a Delaware limited liability company, on behalf of the company, and (✓) is personally known or () produced _____ as identification.


Notary Signature
[SEAL]

Board Meeting Date: _____
Agenda Item# _____

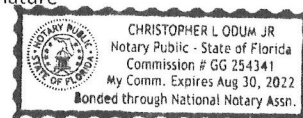


EXHIBIT "A"

Parcel 102

[See Attached]

(W)

LEGAL DESCRIPTION

PARCEL 102

PARENT PARCEL ID#: 28-37-07-00-262
SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA
PURPOSE: RIGHT OF WAY FEE SIMPLE

EXHIBIT "A"

SHEET 1 OF 3

NOT VALID WITHOUT SHEETS 2 & 3 OF 3

THIS IS NOT A SURVEY

LEGAL DESCRIPTION: PARCEL #102 (PREPARED BY SURVEYOR)

DESCRIPTION: PARCEL 102

A PORTION OF LOT 25, SECTION 7, FLORIDA INDIAN RIVER LAND COMPANY SUBDIVISION, AS RECORDED IN PLAT BOOK 1, PAGE 164, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, LYING IN THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA, BEING A PORTION OF THE WEST 12.00 FEET OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 8556, PAGE 1370, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS

COMMENCE AT THE NORTHWEST CORNER OF WOODFIELD AT HERITAGE OAKS, PHASE 2, AS RECORDED IN PLAT BOOK 49, PAGES 54-56, OF THE PUBLIC RECORDS OF BREVARD COUNTY FLORIDA; THENCE RUN SOUTH 00°19'40" WEST ALONG THE WEST LINE OF SAID WOODFIELD AT HERITAGE OAKS, PHASE 2 AND ALONG THE WEST LINE OF WOODFIELD AT HERITAGE OAKS, PHASE 1, AS RECORDED IN PLAT BOOK 47, PAGES 7-9, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 847.60 FEET; THENCE NORTH 89°40'20" WEST ALONG THE NORTH LINE OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5494, PAGE 8774, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 738.00 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE CONTINUE NORTH 89°40'20" WEST, A DISTANCE OF 12.00 FEET TO THE NORTHWEST CORNER OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5494, PAGE 8774, SAID POINT ALSO BEING ON THE EAST RIGHT OF LINE OF MINTON ROAD (A PUBLIC RIGHT OF WAY); THENCE NORTH 00°19'40" EAST, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 44.64 FEET; THENCE SOUTH 89°40'20" EAST, A DISTANCE OF 12.00 FEET; THENCE SOUTH 00°19'40" WEST PARALLEL TO AND 12.00 FEET EAST OF (BY PERPENDICULAR MEASUREMENT) THE SAID EAST RIGHT OF WAY LINE OF MINTON ROAD A DISTANCE OF 44.64 FEET TO THE POINT OF BEGINNING.
CONTAINING 536 SQUARE FEET OR 0.01 ACRES MORE OR LESS.

SURVEYORS NOTES:

1. THIS SKETCH AND DRAWING HAVE BEEN PREPARED TO CONFORM WITH APPLICABLE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THIS SKETCH IS FOR THE SOLE BENEFIT OF THE PARTIES NAMED HEREON AND FOR THE SPECIFIC PURPOSE NOTED, AND SHOULD NOT BE RELIED UPON BY ANY OTHER ENTITY, AND IS NOT TRANSFERABLE UNDER ANY CIRCUMSTANCES.
3. THIS SKETCH IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR, AND REPRODUCTION OF THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE SURVEYOR IS HEREBY FORBIDDEN.
4. THIS SKETCH WAS PREPARED WITH THE BENEFIT OF PROPERTY INFORMATION REPORT PREPARED BY CHICAGO TITLE INSURANCE COMPANY, FILE NUMBER/COMMITMENT NO. 8317225 DATED MARCH 29, 2020.
5. THIS SKETCH WAS PREPARED FROM INFORMATION FURNISHED TO THE SURVEYOR BY THE CLIENT, AND MAY BE SUBJECT TO EASEMENTS OR LIMITATIONS EITHER RECORDED OR IMPLIED.
6. BEARINGS ARE BASED ON A ASSUMED BEARING OF S00°19'40"W FOR THE WEST LINE OF WOODFIELD AT HERITAGE OAKS, PHASE 2, AS RECORDED IN PLAT BOOK 49, PAGES 54-56, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, SHOWN AS BEING THE BASIS OF BEARINGS.

PREPARED FOR AND CERTIFIED TO:
BREVARD COUNTY BOARD OF
COUNTY COMMISSIONERS


ANDREW W. POWSHOK, PLS 5383
PROFESSIONAL LICENSED SURVEYOR

PREPARED BY:

AAL LAND SURVEYING SERVICES, INC.

3970 MINTON ROAD, WEST MELBOURNE, FL 32904

PHONE: (321)768-8110 FAX: (321)952-9771 EMAIL: frontdesk@aalsurvey.com LICENSE BUSINESS #6623

DRAWN BY: DOUG W. GUARE	CHECKED BY: ANDREW W. POWSHOK	REVISION: REVISION: REVISION: COUNTY COMMENTS	SECTION 07, TOWNSHIP 28 SOUTH, RANGE 37 EAST
DATE: 05-07-20	PROJECT # 42101	08-12-20	

SKETCH OF DESCRIPTION

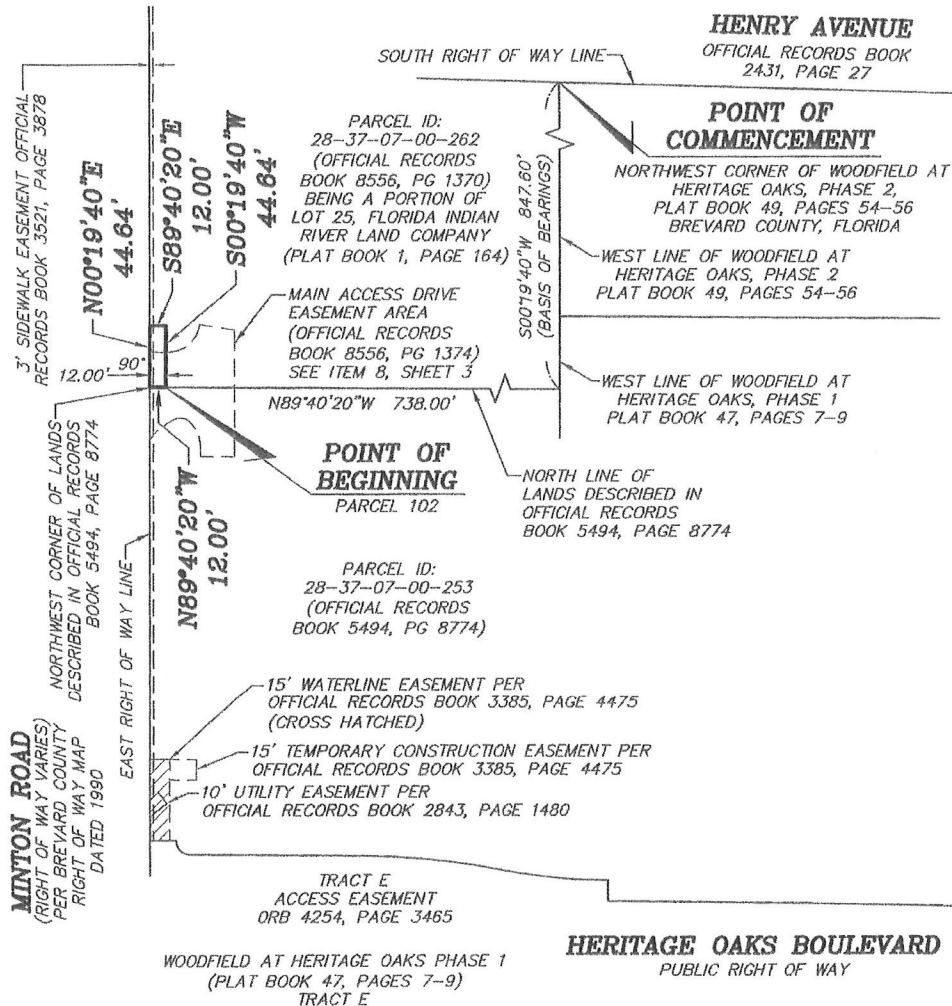
PARCEL ID# 102

PARENT PARCEL ID#: 28-37-07-00-262
SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA
PURPOSE: RIGHT OF WAY FEE SIMPLE

EXHIBIT "A"

SHEET 2 OF 3

NOT VALID WITHOUT SHEETS 1 & 3 OF 3
THIS IS NOT A SURVEY



NORTH

PREPARED BY: **AAL LAND SURVEYING SERVICES, INC.**
3970 MINTON ROAD, WEST MELBOURNE, FL 32904
PHONE: (321)768-8110 FAX: (321)952-9771 EMAIL: frontdesk@aalsurvey.com

SCALE: 1" = 100'

PROJECT # 42101

REVISION:

REVISION:

REVISION: COUNTY COMMENTS

08-12-20

SECTION 07,
TOWNSHIP 28 SOUTH,
RANGE 37 EAST

LEGAL DESCRIPTION

PARCEL 102

PARENT PARCEL ID#: 28-37-07-00-262
SECTION 7, TOWNSHIP 28 SOUTH, RANGE 37 EAST, BREVARD COUNTY, FLORIDA
PURPOSE: RIGHT OF WAY FEE SIMPLE

EXHIBIT "A"

SHEET 3 OF 3

NOT VALID WITHOUT SHEETS 1 & 2 OF 3

THIS IS NOT A SURVEY

SCHEDULE BII ITEMS:

- ITEM 1, PUBLIC UTILITIES EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 2431, PAGE 27, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 2, EASEMENT IN FAVOR OF BREVARD COUNTY RECORDED IN OFFICIAL RECORDS BOOK 2843, PAGE 1480, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 3, EASEMENT IN FAVOR OF CITY OF WEST MELBOURNE RECORDED IN OFFICIAL RECORDS BOOK 3385, PAGE 4475, DOES NOT AFFECT THE SUBJECT PROPERTY.
- ITEM 4, SIDEWALK EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 3521, PAGE 3878, AS SHOWN.
- ITEM 5, NOTICE OF COVENANTS, AGREEMENTS AND OTHER PROVISIONS RECORDED IN OFFICIAL RECORDS BOOK 4254, PAGE 3457, DOES NOT AFFECT THE SUBJECT PROPERTY.
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PREPARED FOR AND CERTIFIED TO:
BREVARD COUNTY BOARD OF
COUNTY COMMISSIONERS

PREPARED BY:

AAL LAND SURVEYING SERVICES, INC.

3970 MINTON ROAD, WEST MELBOURNE, FL 32904

PHONE: (321)768-8110 FAX: (321)952-9771 EMAIL: frontdesk@aaleurvey.com LICENSE BUSINESS #6623

DRAWN BY: DOUG W. GUARE	CHECKED BY: ANDREW W. POWSHOK	REVISION: REVISION: REVISION: COUNTY COMMENTS	SECTION 07, TOWNSHIP 28 SOUTH, RANGE 37 EAST
DATE: 05-07-20	PROJECT # 42101	08-12-20	

LOCATION MAP

Section 07, Township 28 South, Range 37 East - District 3

PROPERTY LOCATION: Along the east side of Minton Road, south of Henry Avenue, North of Heritage Oaks Boulevard, in West Melbourne

OWNERS NAME: (1) S&A Minton Road Corp. (2) YL-West Melbourne Development, LLC.





Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.8.

2/9/2021

Subject:

Public Transportation Grant Agreement, Airfield Equipment at Valkaria Airport

Fiscal Impact:

General Fund: None.

\$25,000 Airport Charges for Services

Dept/Office:

Valkaria Airport

Requested Action:

It is requested the Board approve, adopt and authorize the Chair to sign the attached FDOT Public Transportation Grant Agreement (PTGA) for Airfield Equipment at Valkaria Airport and authorize all necessary budget change requests associated with this PTGA.

Summary Explanation and Background:

The Intent of this grant is to acquire the equipment outlined below and as Identified in "Exhibit A" pages 17-18 of the attachment for maintenance of the airports runway, and taxiway safety areas; object free areas, and aircraft operational areas:

- Tractor with bucket attachment
- Rotary Mower
- Boom Mower and Zero Turn Mower
- Brush Attachment

This PTGA is 80% funded by the FDOT and 20% funded by Valkaria Airport as outlined below:

- FDOT (80%) = \$100,000
- Valkaria Airport (20%) = \$25,000
- Total Cost = \$125,000

All Valkaria Airport match funds come from airport "Charges for Services."
No General Funds are required for the acquisition of this equipment.

Clerk to the Board Instructions:

PUBLIC TRANSPORTATION GRANT AGREEMENT

Financial Project Number(s): (item-segment-phase-sequence) 448850-1-94-01	Fund(s): Work Activity Code/Function: 215 Federal Number/Federal Award Identification Number (FAIN) – Transit only: N/A Federal Award Date: N/A	DPTO 00-828-2936	FLAIR Category: 088719 Object Code: 751000 Org. Code: 55052000531 Vendor Number: VF596000523008
Contract Number:	Agency DUNS Number:		
CFDA Number: N/A	CFDA Title: N/A		
CSFA Number: 55.004	CSFA Title: Aviation Grant Program		

THIS PUBLIC TRANSPORTATION GRANT AGREEMENT ("Agreement") is entered into _____, by and between the State of Florida, Department of Transportation, ("Department"), and Brevard County Board of County Commissioners., ("Agency"). The Department and the Agency are sometimes referred to in this Agreement as a "Party" and collectively as the "Parties."

NOW, THEREFORE, in consideration of the mutual benefits to be derived from joint participation on the Project, the Parties agree to the following:

1. **Authority.** The Agency, by Resolution or other form of official authorization, a copy of which is attached as **Exhibit "D", Agency Resolution** and made a part of this Agreement, has authorized its officers to execute this Agreement on its behalf. The Department has the authority pursuant to Section(s) 332.007, Florida Statutes, to enter into this Agreement.
2. **Purpose of Agreement.** The purpose of this Agreement is to provide for the Department's participation in Airfield Equipment at Valkaria Airport, as further described in **Exhibit "A", Project Description and Responsibilities**, attached and incorporated into this Agreement ("Project"), to provide Department financial assistance to the Agency, state the terms and conditions upon which Department funds will be provided, and to set forth the manner in which the Project will be undertaken and completed.
3. **Program Area.** For identification purposes only, this Agreement is implemented as part of the Department program area selected below (select all programs that apply):

- ☒ **Aviation**
- ☐ **Seaports**
- ☐ **Transit**
- ☐ **Intermodal**
- ☐ **Rail Crossing Closure**
- ☐ **Match to Direct Federal Funding** (Aviation or Transit)
- (Note: Section 15 and Exhibit G do not apply to federally matched funding)
- ☐ **Other**

4. **Exhibits.** The following Exhibits are attached and incorporated into this Agreement:

- ☒ Exhibit A: Project Description and Responsibilities
- ☒ Exhibit B: Schedule of Financial Assistance
- ☐ *Exhibit B1: Deferred Reimbursement Financial Provisions
- ☐ *Exhibit B2: Advance Payment Financial Provisions
- ☐ *Exhibit C: Terms and Conditions of Construction
- ☒ Exhibit D: Agency Resolution
- ☒ Exhibit E: Program Specific Terms and Conditions
- ☒ Exhibit F: Contract Payment Requirements
- ☒ *Exhibit G: Audit Requirements for Awards of State Financial Assistance
- ☐ *Exhibit H: Audit Requirements for Awards of Federal Financial Assistance

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**PUBLIC TRANSPORTATION
GRANT AGREEMENT**

Form 725-000-01
STRATEGIC
DEVELOPMENT
OGC 02/20

___ *Additional Exhibit(s):

*Indicates that the Exhibit is only attached and incorporated if applicable box is selected.

5. **Time.** Unless specified otherwise, all references to “days” within this Agreement refer to calendar days.

6. **Term of Agreement.** This Agreement shall commence upon full execution by both Parties (“Effective Date”) and continue through June 1, 2022. If the Agency does not complete the Project within this time period, this Agreement will expire unless an extension of the time period is requested by the Agency and granted in writing by the Department prior to the expiration of this Agreement. Expiration of this Agreement will be considered termination of the Project. The cost of any work performed prior to the Effective Date or after the expiration date of this Agreement will not be reimbursed by the Department.

a. ___ If this box is checked the following provision applies:

Unless terminated earlier, work on the Project shall commence no later than the ___ day of ___, or within ___ days of the issuance of the Notice to Proceed for the construction phase of the Project (if the Project involves construction), whichever date is earlier. The Department shall have the option to immediately terminate this Agreement should the Agency fail to meet the above-required dates.

7. **Amendments, Extensions, and Assignment.** This Agreement may be amended or extended upon mutual written agreement of the Parties. This Agreement shall not be renewed. This Agreement shall not be assigned, transferred, or otherwise encumbered by the Agency under any circumstances without the prior written consent of the Department.

8. **Termination or Suspension of Project.** The Department may, by written notice to the Agency, suspend any or all of the Department’s obligations under this Agreement for the Agency’s failure to comply with applicable law or the terms of this Agreement until such time as the event or condition resulting in such suspension has ceased or been corrected.

a. Notwithstanding any other provision of this Agreement, if the Department intends to terminate the Agreement, the Department shall notify the Agency of such termination in writing at least thirty (30) days prior to the termination of the Agreement, with instructions to the effective date of termination or specify the stage of work at which the Agreement is to be terminated.

b. The Parties to this Agreement may terminate this Agreement when its continuation would not produce beneficial results commensurate with the further expenditure of funds. In this event, the Parties shall agree upon the termination conditions.

c. If the Agreement is terminated before performance is completed, the Agency shall be paid only for that work satisfactorily performed for which costs can be substantiated. Such payment, however, may not exceed the equivalent percentage of the Department’s maximum financial assistance. If any portion of the Project is located on the Department’s right-of-way, then all work in progress on the Department right-of-way will become the property of the Department and will be turned over promptly by the Agency.

d. In the event the Agency fails to perform or honor the requirements and provisions of this Agreement, the Agency shall promptly refund in full to the Department within thirty (30) days of the termination of the Agreement any funds that were determined by the Department to have been expended in violation of the Agreement.

e. The Department reserves the right to unilaterally cancel this Agreement for failure by the Agency to comply with the Public Records provisions of Chapter 119, Florida Statutes.

9. **Project Cost:**

**PUBLIC TRANSPORTATION
GRANT AGREEMENT**

- a. The estimated total cost of the Project is \$125,000. This amount is based upon **Exhibit "B", Schedule of Financial Assistance**. The timeline for deliverables and distribution of estimated amounts between deliverables within a grant phase, as outlined in **Exhibit "B", Schedule of Financial Assistance**, may be modified by mutual written agreement of the Parties and does not require execution of an **Amendment to the Public Transportation Grant Agreement**. The timeline for deliverables and distribution of estimated amounts between grant phases requires an amendment executed by both Parties in the same form as this Agreement.
- b. The Department agrees to participate in the Project cost up to the maximum amount of \$100,000 and, the Department's participation in the Project shall not exceed 80.00% of the total eligible cost of the Project, and as more fully described in **Exhibit "B", Schedule of Financial Assistance**. The Agency agrees to bear all expenses in excess of the amount of the Department's participation and any cost overruns or deficits involved.

10. Compensation and Payment:

- a. **Eligible Cost.** The Department shall reimburse the Agency for allowable costs incurred as described in **Exhibit "A", Project Description and Responsibilities**, and as set forth in **Exhibit "B", Schedule of Financial Assistance**.
- b. **Deliverables.** The Agency shall provide quantifiable, measurable, and verifiable units of deliverables. Each deliverable must specify the required minimum level of service to be performed and the criteria for evaluating successful completion. The Project and the quantifiable, measurable, and verifiable units of deliverables are described more fully in **Exhibit "A", Project Description and Responsibilities**. Modifications to the deliverables in **Exhibit "A", Project Description and Responsibilities** requires a formal written amendment.
- c. **Invoicing.** Invoices shall be submitted no more often than monthly by the Agency in detail sufficient for a proper pre-audit and post-audit, based on the quantifiable, measurable, and verifiable deliverables as established in **Exhibit "A", Project Description and Responsibilities**. Deliverables and costs incurred must be received and approved by the Department prior to reimbursement. Requests for reimbursement by the Agency shall include an invoice, progress report, and supporting documentation for the deliverables being billed that are acceptable to the Department. The Agency shall use the format for the invoice and progress report that is approved by the Department.
- d. **Supporting Documentation.** Supporting documentation must establish that the deliverables were received and accepted in writing by the Agency and must also establish that the required minimum standards or level of service to be performed based on the criteria for evaluating successful completion as specified in **Exhibit "A", Project Description and Responsibilities** has been met. All costs invoiced shall be supported by properly executed payrolls, time records, invoices, contracts, or vouchers evidencing in proper detail the nature and propriety of charges as described in **Exhibit "F", Contract Payment Requirements**.
- e. **Travel Expenses.** The selected provision below is controlling regarding travel expenses:
 - ☒ Travel expenses are NOT eligible for reimbursement under this Agreement.
 - ☐ Travel expenses ARE eligible for reimbursement under this Agreement. Bills for travel expenses specifically authorized in this Agreement shall be submitted on the Department's Contractor Travel Form No. 300-000-06 and will be paid in accordance with Section 112.061, Florida Statutes, and the most current version of the Department's Disbursement Handbook for Employees and Managers.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**PUBLIC TRANSPORTATION
GRANT AGREEMENT**

Form 725-000-01
STRATEGIC
DEVELOPMENT
OGC 02/20

f. **Financial Consequences.** Payment shall be made only after receipt and approval of deliverables and costs incurred unless advance payments are authorized by the Chief Financial Officer of the State of Florida under Chapters 215 and 216, Florida Statutes, or the Department's Comptroller under Section 334.044(29), Florida Statutes. If the Department determines that the performance of the Agency is unsatisfactory, the Department shall notify the Agency of the deficiency to be corrected, which correction shall be made within a time-frame to be specified by the Department. The Agency shall, within thirty (30) days after notice from the Department, provide the Department with a corrective action plan describing how the Agency will address all issues of contract non-performance, unacceptable performance, failure to meet the minimum performance levels, deliverable deficiencies, or contract non-compliance. If the corrective action plan is unacceptable to the Department, the Agency will not be reimbursed. If the deficiency is subsequently resolved, the Agency may bill the Department for the amount that was previously not reimbursed during the next billing period. If the Agency is unable to resolve the deficiency, the funds shall be forfeited at the end of the Agreement's term.

g. **Invoice Processing.** An Agency receiving financial assistance from the Department should be aware of the following time frames. Inspection or verification and approval of deliverables shall take no longer than 20 days from the Department's receipt of the invoice. The Department has 20 days to deliver a request for payment (voucher) to the Department of Financial Services. The 20 days are measured from the latter of the date the invoice is received or the deliverables are received, inspected or verified, and approved.

If a payment is not available within 40 days, a separate interest penalty at a rate as established pursuant to Section 55.03(1), Florida Statutes, will be due and payable, in addition to the invoice amount, to the Agency. Interest penalties of less than one (1) dollar will not be enforced unless the Agency requests payment. Invoices that have to be returned to an Agency because of Agency preparation errors will result in a delay in the payment. The invoice payment requirements do not start until a properly completed invoice is provided to the Department.

A Vendor Ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for Agency who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 413-5516.

h. **Records Retention.** The Agency shall maintain an accounting system or separate accounts to ensure funds and projects are tracked separately. Records of costs incurred under the terms of this Agreement shall be maintained and made available upon request to the Department at all times during the period of this Agreement and for five years after final payment is made. Copies of these records shall be furnished to the Department upon request. Records of costs incurred include the Agency's general accounting records and the Project records, together with supporting documents and records, of the Contractor and all subcontractors performing work on the Project, and all other records of the Contractor and subcontractors considered necessary by the Department for a proper audit of costs.

i. **Progress Reports.** Upon request, the Agency agrees to provide progress reports to the Department in the standard format used by the Department and at intervals established by the Department. The Department will be entitled at all times to be advised, at its request, as to the status of the Project and of details thereof.

j. **Submission of Other Documents.** The Agency shall submit to the Department such data, reports, records, contracts, and other documents relating to the Project as the Department may require as listed in **Exhibit "E", Program Specific Terms and Conditions** attached to and incorporated into this Agreement.

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- k. Offsets for Claims.** If, after Project completion, any claim is made by the Department resulting from an audit or for work or services performed pursuant to this Agreement, the Department may offset such amount from payments due for work or services done under any agreement that it has with the Agency owing such amount if, upon written demand, payment of the amount is not made within 60 days to the Department. Offsetting any amount pursuant to this paragraph shall not be considered a breach of contract by the Department.
- l. Final Invoice.** The Agency must submit the final invoice on the Project to the Department within 120 days after the completion of the Project. Invoices submitted after the 120-day time period may not be paid.
- m. Department's Performance and Payment Contingent Upon Annual Appropriation by the Legislature.** The Department's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Legislature. If the Department's funding for this Project is in multiple fiscal years, a notice of availability of funds from the Department's project manager must be received prior to costs being incurred by the Agency. See **Exhibit "B", Schedule of Financial Assistance** for funding levels by fiscal year. Project costs utilizing any fiscal year funds are not eligible for reimbursement if incurred prior to funds approval being received. The Department will notify the Agency, in writing, when funds are available.
- n. Limits on Contracts Exceeding \$25,000 and Term more than 1 Year.** In the event this Agreement is in excess of \$25,000 and has a term for a period of more than one year, the provisions of Section 339.135(6)(a), Florida Statutes, are hereby incorporated:
- "The Department, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Department shall require a statement from the comptroller of the Department that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding 1 year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the Department which are for an amount in excess of \$25,000 and which have a term for a period of more than 1 year."
- o. Agency Obligation to Refund Department.** Any Project funds made available by the Department pursuant to this Agreement that are determined by the Department to have been expended by the Agency in violation of this Agreement or any other applicable law or regulation shall be promptly refunded in full to the Department. Acceptance by the Department of any documentation or certifications, mandatory or otherwise permitted, that the Agency files shall not constitute a waiver of the Department's rights as the funding agency to verify all information at a later date by audit or investigation.
- p. Non-Eligible Costs.** In determining the amount of the payment, the Department will exclude all Project costs incurred by the Agency prior to the execution of this Agreement, costs incurred after the expiration of the Agreement, costs that are not provided for in **Exhibit "A", Project Description and Responsibilities**, and as set forth in **Exhibit "B", Schedule of Financial Assistance**, costs agreed to be borne by the Agency or its contractors and subcontractors for not meeting the Project commencement and final invoice time lines, and costs attributable to goods or services received under a contract or other arrangement that has not been approved

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in writing by the Department. Specific unallowable costs may be listed in **Exhibit "A", Project Description and Responsibilities**.

11. General Requirements. The Agency shall complete the Project with all practical dispatch in a sound, economical, and efficient manner, and in accordance with the provisions in this Agreement and all applicable laws.

- a. **Necessary Permits Certification.** The Agency shall certify to the Department that the Agency's design consultant and/or construction contractor has secured the necessary permits.
- b. **Right-of-Way Certification.** If the Project involves construction, then the Agency shall provide to the Department certification and a copy of appropriate documentation substantiating that all required right-of-way necessary for the Project has been obtained. Certification is required prior to authorization for advertisement for or solicitation of bids for construction of the Project, even if no right-of-way is required.
- c. **Notification Requirements When Performing Construction on Department's Right-of-Way.** In the event the cost of the Project is greater than \$250,000.00, and the Project involves construction on the Department's right-of-way, the Agency shall provide the Department with written notification of either its intent to:
 - i. Require the construction work of the Project that is on the Department's right-of-way to be performed by a Department prequalified contractor, or
 - ii. Construct the Project utilizing existing Agency employees, if the Agency can complete said Project within the time frame set forth in this Agreement.
- d. ☐ If this box is checked, then the Agency is permitted to utilize its own forces and the following provision applies: **Use of Agency Workforce.** In the event the Agency proceeds with any phase of the Project utilizing its own forces, the Agency will only be reimbursed for direct costs (this excludes general overhead).
- e. ☐ If this box is checked, then the Agency is permitted to utilize **Indirect Costs: Reimbursement for Indirect Program Expenses** (select one):
 - i. ☐ Agency has selected to seek reimbursement from the Department for actual indirect expenses (no rate).
 - ii. ☐ Agency has selected to apply a de minimus rate of 10% to modified total direct costs. Note: The de minimus rate is available only to entities that have never had a negotiated indirect cost rate. When selected, the de minimus rate must be used consistently for all federal awards until such time the agency chooses to negotiate a rate. A cost policy statement and de minimis certification form must be submitted to the Department for review and approval.
 - iii. ☐ Agency has selected to apply a state or federally approved indirect cost rate. A federally approved rate agreement or indirect cost allocation plan (ICAP) must be submitted annually.
- f. **Agency Compliance with Laws, Rules, and Regulations, Guidelines, and Standards.** The Agency shall comply and require its contractors and subcontractors to comply with all terms and conditions of this Agreement and all federal, state, and local laws and regulations applicable to this Project.
- g. **Claims and Requests for Additional Work.** The Agency shall have the sole responsibility for resolving claims and requests for additional work for the Project. The Agency will make

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best efforts to obtain the Department's input in its decisions. The Department is not obligated to reimburse for claims or requests for additional work.

12. Contracts of the Agency:

- a. Approval of Third Party Contracts.** The Department specifically reserves the right to review and approve any and all third party contracts with respect to the Project before the Agency executes or obligates itself in any manner requiring the disbursement of Department funds, including consultant and purchase of commodities contracts, or amendments thereto. If the Department chooses to review and approve third party contracts for this Project and the Agency fails to obtain such approval, that shall be sufficient cause for nonpayment by the Department. The Department specifically reserves unto itself the right to review the qualifications of any consultant or contractor and to approve or disapprove the employment of the same. If Federal Transit Administration (FTA) funds are used in the Project, the Department must exercise the right to third party contract review.
- b. Procurement of Commodities or Contractual Services.** It is understood and agreed by the Parties hereto that participation by the Department in a project with the Agency, where said project involves the purchase of commodities or contractual services where purchases or costs exceed the Threshold Amount for CATEGORY TWO per Section 287.017, Florida Statutes, is contingent on the Agency complying in full with the provisions of Section 287.057, Florida Statutes. The Agency's Authorized Official shall certify to the Department that the Agency's purchase of commodities or contractual services has been accomplished in compliance with Section 287.057, Florida Statutes. It shall be the sole responsibility of the Agency to ensure that any obligations made in accordance with this Section comply with the current threshold limits. Contracts, purchase orders, task orders, construction change orders, or any other agreement that would result in exceeding the current budget contained in **Exhibit "B", Schedule of Financial Assistance**, or that is not consistent with the Project description and scope of services contained in **Exhibit "A", Project Description and Responsibilities** must be approved by the Department prior to Agency execution. Failure to obtain such approval, and subsequent execution of an amendment to the Agreement if required, shall be sufficient cause for nonpayment by the Department, in accordance with this Agreement.
- c. Consultants' Competitive Negotiation Act.** It is understood and agreed by the Parties to this Agreement that participation by the Department in a project with the Agency, where said project involves a consultant contract for professional services, is contingent on the Agency's full compliance with provisions of Section 287.055, Florida Statutes, Consultants' Competitive Negotiation Act. In all cases, the Agency's Authorized Official shall certify to the Department that selection has been accomplished in compliance with the Consultants' Competitive Negotiation Act.
- d. Disadvantaged Business Enterprise (DBE) Policy and Obligation.** It is the policy of the Department that DBEs, as defined in 49 C.F.R. Part 26, as amended, shall have the opportunity to participate in the performance of contracts financed in whole or in part with Department funds under this Agreement. The DBE requirements of applicable federal and state laws and regulations apply to this Agreement. The Agency and its contractors agree to ensure that DBEs have the opportunity to participate in the performance of this Agreement. In this regard, all recipients and contractors shall take all necessary and reasonable steps in accordance with applicable federal and state laws and regulations to ensure that the DBEs have the opportunity to compete for and perform contracts. The Agency and its contractors and subcontractors shall not discriminate on the basis of race, color, national origin or sex in the award and performance of contracts, entered pursuant to this Agreement.

- 13. Maintenance Obligations.** In the event the Project includes construction or the acquisition of commodities then the following provisions are incorporated into this Agreement:

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- a. The Agency agrees to accept all future maintenance and other attendant costs occurring after completion of the Project for all improvements constructed or commodities acquired as part of the Project. The terms of this provision shall survive the termination of this Agreement.

14. Sale, Transfer, or Disposal of Department-funded Property:

- a. The Agency will not sell or otherwise transfer or dispose of any part of its title or other interests in real property, facilities, or equipment funded in any part by the Department under this Agreement without prior written approval by the Department.
- b. If a sale, transfer, or disposal by the Agency of all or a portion of Department-funded real property, facilities, or equipment is approved by the Department, the following provisions will apply:
 - i. The Agency shall reimburse the Department a proportional amount of the proceeds of the sale of any Department-funded property.
 - ii. The proportional amount shall be determined on the basis of the ratio of the Department funding of the development or acquisition of the property multiplied against the sale amount, and shall be remitted to the Department within ninety (90) days of closing of sale.
 - iii. Sale of property developed or acquired with Department funds shall be at market value as determined by appraisal or public bidding process, and the contract and process for sale must be approved in advance by the Department.
 - iv. If any portion of the proceeds from the sale to the Agency are non-cash considerations, reimbursement to the Department shall include a proportional amount based on the value of the non-cash considerations.
- c. The terms of provisions "a" and "b" above shall survive the termination of this Agreement.
 - i. The terms shall remain in full force and effect throughout the useful life of facilities developed, equipment acquired, or Project items installed within a facility, but shall not exceed twenty (20) years from the effective date of this Agreement.
 - ii. There shall be no limit on the duration of the terms with respect to real property acquired with Department funds.

- 15. Single Audit.** The administration of Federal or State resources awarded through the Department to the Agency by this Agreement may be subject to audits and/or monitoring by the Department. The following requirements do not limit the authority of the Department to conduct or arrange for the conduct of additional audits or evaluations of Federal awards or State financial assistance or limit the authority of any state agency inspector general, the State of Florida Auditor General, or any other state official. The Agency shall comply with all audit and audit reporting requirements as specified below.

Federal Funded:

- a. In addition to reviews of audits conducted in accordance with 2 CFR Part 200, Subpart F – Audit Requirements, monitoring procedures may include but not be limited to on-site visits by Department staff and/or other procedures, including reviewing any required performance and financial reports, following up, ensuring corrective action, and issuing management decisions on weaknesses found through audits when those findings pertain to Federal awards provided through the Department by this Agreement. By entering into this Agreement, the Agency agrees to comply and cooperate fully with any monitoring procedures/processes deemed appropriate by the Department. The Agency further agrees to comply and cooperate with any

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inspections, reviews, investigations, or audits deemed necessary by the Department, State of Florida Chief Financial Officer (CFO), or State of Florida Auditor General.

- b. The Agency, a non-Federal entity as defined by 2 CFR Part 200, Subpart F – Audit Requirements, as a subrecipient of a Federal award awarded by the Department through this Agreement, is subject to the following requirements:
- i. In the event the Agency expends a total amount of Federal awards equal to or in excess of the threshold established by 2 CFR Part 200, Subpart F – Audit Requirements, the Agency must have a Federal single or program-specific audit conducted for such fiscal year in accordance with the provisions of 2 CFR Part 200, Subpart F – Audit Requirements. **Exhibit “H”, Audit Requirements for Awards of Federal Financial Assistance**, to this Agreement provides the required Federal award identification information needed by the Agency to further comply with the requirements of 2 CFR Part 200, Subpart F – Audit Requirements. In determining Federal awards expended in a fiscal year, the Agency must consider all sources of Federal awards based on when the activity related to the Federal award occurs, including the Federal award provided through the Department by this Agreement. The determination of amounts of Federal awards expended should be in accordance with the guidelines established by 2 CFR Part 200, Subpart F – Audit Requirements. An audit conducted by the State of Florida Auditor General in accordance with the provisions of 2 CFR Part 200, Subpart F – Audit Requirements, will meet the requirements of this part.
 - ii. In connection with the audit requirements, the Agency shall fulfill the requirements relative to the auditee responsibilities as provided in 2 CFR Part 200, Subpart F – Audit Requirements.
 - iii. In the event the Agency expends less than the threshold established by 2 CFR Part 200, Subpart F – Audit Requirements, in Federal awards, the Agency is exempt from Federal audit requirements for that fiscal year. However, the Agency must provide a single audit exemption statement to the Department at FDOTSingleAudit@dot.state.fl.us no later than nine months after the end of the Agency’s audit period for each applicable audit year. In the event the Agency expends less than the threshold established by 2 CFR Part 200, Subpart F – Audit Requirements, in Federal awards in a fiscal year and elects to have an audit conducted in accordance with the provisions of 2 CFR Part 200, Subpart F – Audit Requirements, the cost of the audit must be paid from non-Federal resources (*i.e.*, the cost of such an audit must be paid from the Agency’s resources obtained from other than Federal entities).
 - iv. The Agency must electronically submit to the Federal Audit Clearinghouse (FAC) at <https://harvester.census.gov/facweb/> the audit reporting package as required by 2 CFR Part 200, Subpart F – Audit Requirements, within the earlier of 30 calendar days after receipt of the auditor’s report(s) or nine months after the end of the audit period. The FAC is the repository of record for audits required by 2 CFR Part 200, Subpart F – Audit Requirements. However, the Department requires a copy of the audit reporting package also be submitted to FDOTSingleAudit@dot.state.fl.us within the earlier of 30 calendar days after receipt of the auditor’s report(s) or nine months after the end of the audit period as required by 2 CFR Part 200, Subpart F – Audit Requirements.
 - v. Within six months of acceptance of the audit report by the FAC, the Department will review the Agency’s audit reporting package, including corrective action plans and management letters, to the extent necessary to determine whether timely and appropriate action on all deficiencies has been taken pertaining to the Federal award provided through the Department by this Agreement. If the Agency fails to have an

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audit conducted in accordance with 2 CFR Part 200, Subpart F – Audit Requirements, the Department may impose additional conditions to remedy noncompliance. If the Department determines that noncompliance cannot be remedied by imposing additional conditions, the Department may take appropriate actions to enforce compliance, which actions may include but not be limited to the following:

1. Temporarily withhold cash payments pending correction of the deficiency by the Agency or more severe enforcement action by the Department;
 2. Disallow (deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance;
 3. Wholly or partly suspend or terminate the Federal award;
 4. Initiate suspension or debarment proceedings as authorized under 2 C.F.R. Part 180 and Federal awarding agency regulations (or in the case of the Department, recommend such a proceeding be initiated by the Federal awarding agency);
 5. Withhold further Federal awards for the Project or program;
 6. Take other remedies that may be legally available.
- vi. As a condition of receiving this Federal award, the Agency shall permit the Department or its designee, the CFO, or State of Florida Auditor General access to the Agency's records, including financial statements, the independent auditor's working papers, and project records as necessary. Records related to unresolved audit findings, appeals, or litigation shall be retained until the action is complete or the dispute is resolved.
- vii. The Department's contact information for requirements under this part is as follows:

Office of Comptroller, MS 24
605 Suwannee Street
Tallahassee, Florida 32399-0450
FDOTSingleAudit@dot.state.fl.us

State Funded:

- a. In addition to reviews of audits conducted in accordance with Section 215.97, Florida Statutes, monitoring procedures to monitor the Agency's use of state financial assistance may include but not be limited to on-site visits by Department staff and/or other procedures, including reviewing any required performance and financial reports, following up, ensuring corrective action, and issuing management decisions on weaknesses found through audits when those findings pertain to state financial assistance awarded through the Department by this Agreement. By entering into this Agreement, the Agency agrees to comply and cooperate fully with any monitoring procedures/processes deemed appropriate by the Department. The Agency further agrees to comply and cooperate with any inspections, reviews, investigations, or audits deemed necessary by the Department, the Department of Financial Services (DFS), or State of Florida Auditor General.
- b. The Agency, a "nonstate entity" as defined by Section 215.97, Florida Statutes, as a recipient of state financial assistance awarded by the Department through this Agreement, is subject to the following requirements:
 - i. In the event the Agency meets the audit threshold requirements established by Section 215.97, Florida Statutes, the Agency must have a State single or project-specific audit conducted for such fiscal year in accordance with Section 215.97, Florida Statutes; applicable rules of the Department of Financial Services; and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. **Exhibit "G", Audit Requirements for Awards of State Financial Assistance**, to this Agreement indicates state financial

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assistance awarded through the Department by this Agreement needed by the Agency to further comply with the requirements of Section 215.97, Florida Statutes. In determining the state financial assistance expended in a fiscal year, the Agency shall consider all sources of state financial assistance, including state financial assistance received from the Department by this Agreement, other state agencies, and other nonstate entities. State financial assistance does not include Federal direct or pass-through awards and resources received by a nonstate entity for Federal program matching requirements.

- ii. In connection with the audit requirements, the Agency shall ensure that the audit complies with the requirements of Section 215.97(8), Florida Statutes. This includes submission of a financial reporting package as defined by Section 215.97(2)(e), Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.
- iii. In the event the Agency does not meet the audit threshold requirements established by Section 215.97, Florida Statutes, the Agency is exempt for such fiscal year from the state single audit requirements of Section 215.97, Florida Statutes. However, the Agency must provide a single audit exemption statement to the Department at FDOTSingleAudit@dot.state.fl.us no later than nine months after the end of the Agency's audit period for each applicable audit year. In the event the Agency does not meet the audit threshold requirements established by Section 215.97, Florida Statutes, in a fiscal year and elects to have an audit conducted in accordance with the provisions of Section 215.97, Florida Statutes, the cost of the audit must be paid from the Agency's resources (*i.e.*, the cost of such an audit must be paid from the Agency's resources obtained from other than State entities).
- iv. In accordance with Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, copies of financial reporting packages required by this Agreement shall be submitted to:

Florida Department of Transportation
Office of Comptroller, MS 24
605 Suwannee Street
Tallahassee, Florida 32399-0405
FDOTSingleAudit@dot.state.fl.us

And

State of Florida Auditor General
Local Government Audits/342
111 West Madison Street, Room 401
Tallahassee, FL 32399-1450
Email: flaudgen_localgovt@aud.state.fl.us

- v. Any copies of financial reporting packages, reports, or other information required to be submitted to the Department shall be submitted timely in accordance with Section 215.97, Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, as applicable.
- vi. The Agency, when submitting financial reporting packages to the Department for audits done in accordance with Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, should indicate the date the reporting package was delivered to the Agency in correspondence accompanying the reporting package.

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- vii. Upon receipt, and within six months, the Department will review the Agency's financial reporting package, including corrective action plans and management letters, to the extent necessary to determine whether timely and appropriate corrective action on all deficiencies has been taken pertaining to the state financial assistance provided through the Department by this Agreement. If the Agency fails to have an audit conducted consistent with Section 215.97, Florida Statutes, the Department may take appropriate corrective action to enforce compliance.
- viii. As a condition of receiving state financial assistance, the Agency shall permit the Department or its designee, DFS, or the Auditor General access to the Agency's records, including financial statements, the independent auditor's working papers, and project records as necessary. Records related to unresolved audit findings, appeals, or litigation shall be retained until the action is complete or the dispute is resolved.
- c. The Agency shall retain sufficient records demonstrating its compliance with the terms of this Agreement for a period of five years from the date the audit report is issued and shall allow the Department or its designee, DFS, or State of Florida Auditor General access to such records upon request. The Agency shall ensure that the audit working papers are made available to the Department or its designee, DFS, or State of Florida Auditor General upon request for a period of five years from the date the audit report is issued, unless extended in writing by the Department.

16. Notices and Approvals. Notices and approvals referenced in this Agreement must be obtained in writing from the Parties' respective Administrators or their designees.

17. Restrictions, Prohibitions, Controls and Labor Provisions:

- a. **Convicted Vendor List.** A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity; may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.
- b. **Discriminatory Vendor List.** In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the Discriminatory Vendor List, kept by the Florida Department of Management Services, may not submit a bid on a contract to provide goods or services to a public entity; may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.
- c. **Non-Responsible Contractors.** An entity or affiliate who has had its Certificate of Qualification suspended, revoked, denied, or have further been determined by the Department to be a non-responsible contractor, may not submit a bid or perform work for the construction or repair of a public building or public work on a contract with the Agency.

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- d. Prohibition on Using Funds for Lobbying.** No funds received pursuant to this Agreement may be expended for lobbying the Florida Legislature, judicial branch, or any state agency, in accordance with Section 216.347, Florida Statutes.
- e. Unauthorized Aliens.** The Department shall consider the employment by any contractor of unauthorized aliens a violation of Section 274A(e) of the Immigration and Nationality Act. If the contractor knowingly employs unauthorized aliens, such violation will be cause for unilateral cancellation of this Agreement.
- f. Procurement of Construction Services.** If the Project is procured pursuant to Chapter 255, Florida Statutes, for construction services and at the time of the competitive solicitation for the Project, 50 percent or more of the cost of the Project is to be paid from state-appropriated funds, then the Agency must comply with the requirements of Section 255.0991, Florida Statutes.
- g. E-Verify.** The Agency shall:
 - i.** Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Agency during the term of the contract; and
 - ii.** Expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.
- h. Design Services and Construction Engineering and Inspection Services.** If the Project is wholly or partially funded by the Department and administered by a local governmental entity, except for a seaport listed in Section 311.09, Florida Statutes, the entity performing design and construction engineering and inspection services may not be the same entity.

18. Indemnification and Insurance:

- a.** It is specifically agreed between the Parties executing this Agreement that it is not intended by any of the provisions of any part of this Agreement to create in the public or any member thereof, a third party beneficiary under this Agreement, or to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement. The Agency guarantees the payment of all just claims for materials, supplies, tools, or labor and other just claims against the Agency or any subcontractor, in connection with this Agreement. Additionally, the Agency shall indemnify and hold harmless the State of Florida, Department of Transportation, including the Department's officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Agency and persons employed or utilized by the Agency in the performance of this Agreement. This indemnification shall survive the termination of this Agreement. Additionally, the Agency agrees to include the following indemnification in all contracts with contractors/subcontractors and consultants/subconsultants who perform work in connection with this Agreement:

"To the fullest extent permitted by law, the Agency's contractor/consultant shall indemnify and hold harmless the Agency and the State of Florida, Department of Transportation, including the Department's officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness or intentional wrongful misconduct of the contractor/consultant and

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persons employed or utilized by the contractor/consultant in the performance of this Agreement.

This indemnification shall survive the termination of this Agreement.”

- b. The Agency shall provide Workers' Compensation Insurance in accordance with Florida's Workers' Compensation law for all employees. If subletting any of the work, ensure that the subcontractor(s) and subconsultant(s) have Workers' Compensation Insurance for their employees in accordance with Florida's Workers' Compensation law. If using “leased employees” or employees obtained through professional employer organizations (“PEO's”), ensure that such employees are covered by Workers' Compensation Insurance through the PEO's or other leasing entities. Ensure that any equipment rental agreements that include operators or other personnel who are employees of independent contractors, sole proprietorships, or partners are covered by insurance required under Florida's Workers' Compensation law.
- c. If the Agency elects to self-perform the Project, then the Agency may self-insure. If the Agency elects to hire a contractor or consultant to perform the Project, then the Agency shall carry, or cause its contractor or consultant to carry, Commercial General Liability insurance providing continuous coverage for all work or operations performed under this Agreement. Such insurance shall be no more restrictive than that provided by the latest occurrence form edition of the standard Commercial General Liability Coverage Form (ISO Form CG 00 01) as filed for use in the State of Florida. The Agency shall cause, or cause its contractor or consultant to cause, the Department to be made an Additional Insured as to such insurance. Such coverage shall be on an “occurrence” basis and shall include Products/Completed Operations coverage. The coverage afforded to the Department as an Additional Insured shall be primary as to any other available insurance and shall not be more restrictive than the coverage afforded to the Named Insured. The limits of coverage shall not be less than \$1,000,000 for each occurrence and not less than a \$5,000,000 annual general aggregate, inclusive of amounts provided by an umbrella or excess policy. The limits of coverage described herein shall apply fully to the work or operations performed under the Agreement, and may not be shared with or diminished by claims unrelated to the Agreement. The policy/ies and coverage described herein may be subject to a deductible and such deductibles shall be paid by the Named Insured. No policy/ies or coverage described herein may contain or be subject to a Retention or a Self-Insured Retention unless the Agency is a state agency or subdivision of the State of Florida that elects to self-perform the Project. Prior to the execution of the Agreement, and at all renewal periods which occur prior to final acceptance of the work, the Department shall be provided with an ACORD Certificate of Liability Insurance reflecting the coverage described herein. The Department shall be notified in writing within ten days of any cancellation, notice of cancellation, lapse, renewal, or proposed change to any policy or coverage described herein. The Department's approval or failure to disapprove any policy/ies, coverage, or ACORD Certificates shall not relieve or excuse any obligation to procure and maintain the insurance required herein, nor serve as a waiver of any rights or defenses the Department may have.
- d. When the Agreement includes the construction of a railroad grade crossing, railroad overpass or underpass structure, or any other work or operations within the limits of the railroad right-of-way, including any encroachments thereon from work or operations in the vicinity of the railroad right-of-way, the Agency shall, or cause its contractor to, in addition to the insurance coverage required above, procure and maintain Railroad Protective Liability Coverage (ISO Form CG 00 35) where the railroad is the Named Insured and where the limits are not less than \$2,000,000 combined single limit for bodily injury and/or property damage per occurrence, and with an annual aggregate limit of not less than \$6,000,000. The railroad shall also be added along with the Department as an Additional Insured on the policy/ies procured pursuant to the paragraph above. Prior to the execution of the Agreement, and at all renewal periods which occur prior to final acceptance of the work, both the Department and the railroad

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shall be provided with an ACORD Certificate of Liability Insurance reflecting the coverage described herein. The insurance described herein shall be maintained through final acceptance of the work. Both the Department and the railroad shall be notified in writing within ten days of any cancellation, notice of cancellation, renewal, or proposed change to any policy or coverage described herein. The Department's approval or failure to disapprove any policy/ies, coverage, or ACORD Certificates shall not relieve or excuse any obligation to procure and maintain the insurance required herein, nor serve as a waiver of any rights the Department may have.

- e. When the Agreement involves work on or in the vicinity of utility-owned property or facilities, the utility shall be added along with the Department as an Additional Insured on the Commercial General Liability policy/ies procured above.

19. Miscellaneous:

- a. **Environmental Regulations.** The Agency will be solely responsible for compliance with all applicable environmental regulations and for any liability arising from non-compliance with these regulations, and will reimburse the Department for any loss incurred in connection therewith.
- b. **Non-Admission of Liability.** In no event shall the making by the Department of any payment to the Agency constitute or be construed as a waiver by the Department of any breach of covenant or any default which may then exist on the part of the Agency and the making of such payment by the Department, while any such breach or default shall exist, shall in no way impair or prejudice any right or remedy available to the Department with respect to such breach or default.
- c. **Severability.** If any provision of this Agreement is held invalid, the remainder of this Agreement shall not be affected. In such an instance, the remainder would then continue to conform to the terms and requirements of applicable law.
- d. **Agency not an agent of Department.** The Agency and the Department agree that the Agency, its employees, contractors, subcontractors, consultants, and subconsultants are not agents of the Department as a result of this Agreement.
- e. **Bonus or Commission.** By execution of the Agreement, the Agency represents that it has not paid and, also agrees not to pay, any bonus or commission for the purpose of obtaining an approval of its application for the financing hereunder.
- f. **Non-Contravention of State Law.** Nothing in the Agreement shall require the Agency to observe or enforce compliance with any provision or perform any act or do any other thing in contravention of any applicable state law. If any of the provisions of the Agreement violate any applicable state law, the Agency will at once notify the Department in writing so that appropriate changes and modifications may be made by the Department and the Agency to the end that the Agency may proceed as soon as possible with the Project.
- g. **Execution of Agreement.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall constitute the same Agreement. A facsimile or electronic transmission of this Agreement with a signature on behalf of a party will be legal and binding on such party.
- h. **Federal Award Identification Number (FAIN).** If the FAIN is not available prior to execution of the Agreement, the Department may unilaterally add the FAIN to the Agreement without approval of the Agency and without an amendment to the Agreement. If this occurs, an

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updated Agreement that includes the FAIN will be provided to the Agency and uploaded to the Department of Financial Services' Florida Accountability Contract Tracking System (FACTS).

- i. **Inspector General Cooperation.** The Agency agrees to comply with Section 20.055(5), Florida Statutes, and to incorporate in all subcontracts the obligation to comply with Section 20.055(5), Florida Statutes.
- j. **Law, Forum, and Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. In the event of a conflict between any portion of the contract and Florida law, the laws of Florida shall prevail. The Agency agrees to waive forum and venue and that the Department shall determine the forum and venue in which any dispute under this Agreement is decided.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year written above.

AGENCY Brevard County Board of County Commissioners.

By: _____

Name: Rita Pritchett

Title: Chair

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

By: _____

Name: Loreen Bobo, P.E.

Title: Director of Transportation Development

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION
Legal Review:

Daniel L. McDermott

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
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EXHIBIT A

Project Description and Responsibilities

A. Project Description (description of Agency's project to provide context, description of project components funded via this Agreement (if not the entire project)): Airfield Equipment at Valkaria Airport - Acquisition of new airfield equipment to insure the airfield is maintained in compliance with the wildlife hazard management plan. The current equipment is beyond its useful life and can no longer be maintained in a cost effective manner. Due to breakdowns the airfield is unable to be consistently maintained in compliance with the wildlife hazard management plan.

B. Project Location (limits, city, county, map): Valkaria Airport/Valkaria, FL/Brevard

C. Project Scope (allowable costs: describe project components, improvement type/service type, approximate timeline, project schedule, project size): The intent of this project is to acquire the following equipment for airfield maintenance purposes:

1- Tractor with bucket attachment.

2- Rotary mower with a 15ft wide cutting area

3- Boom mower

4- Sweeper attachment

The Tractor with bucket attachment, Rotary Mower, and Boom mower will be used to ensure the airport is consistently in compliance with the wildlife hazard management plan with a particular emphasis on the safety, and object free areas around runways, taxiways, and aprons. The sweeper attachment will be used for the removal of foreign object and debris to ensure the safety of all aircraft movement areas. Following Board acceptance of a grant offer, equipment acquisition is anticipated to take 90 days with a total acquisition cost of \$ 125,000.

D. Deliverable(s): Final close out documents to be uploaded into JACIP

The project scope identifies the ultimate project deliverables. Deliverables for requisition, payment and invoice purposes will be the incremental progress made toward completion of project scope elements. Supporting documentation will be quantifiable, measurable, and verifiable, to allow for a determination of the amount of incremental progress that has been made, and provide evidence that the payment requested is commensurate with the accomplished incremental progress and costs incurred by the Agency.

E. Unallowable Costs (including but not limited to): Stored Material

F. Transit Operating Grant Requirements (Transit Only):

Transit Operating Grants billed as an operational subsidy will require an expenditure detail report from the Agency that matches the invoice period. The expenditure detail, along with the progress report, will be the required deliverables for Transit Operating Grants. Operating grants may be issued for a term not to exceed three years from execution. The original grant agreement will include funding for year one. Funding for years two and three will be added by amendment as long as the grantee has submitted all invoices on schedule and the project deliverables for the year have been met.



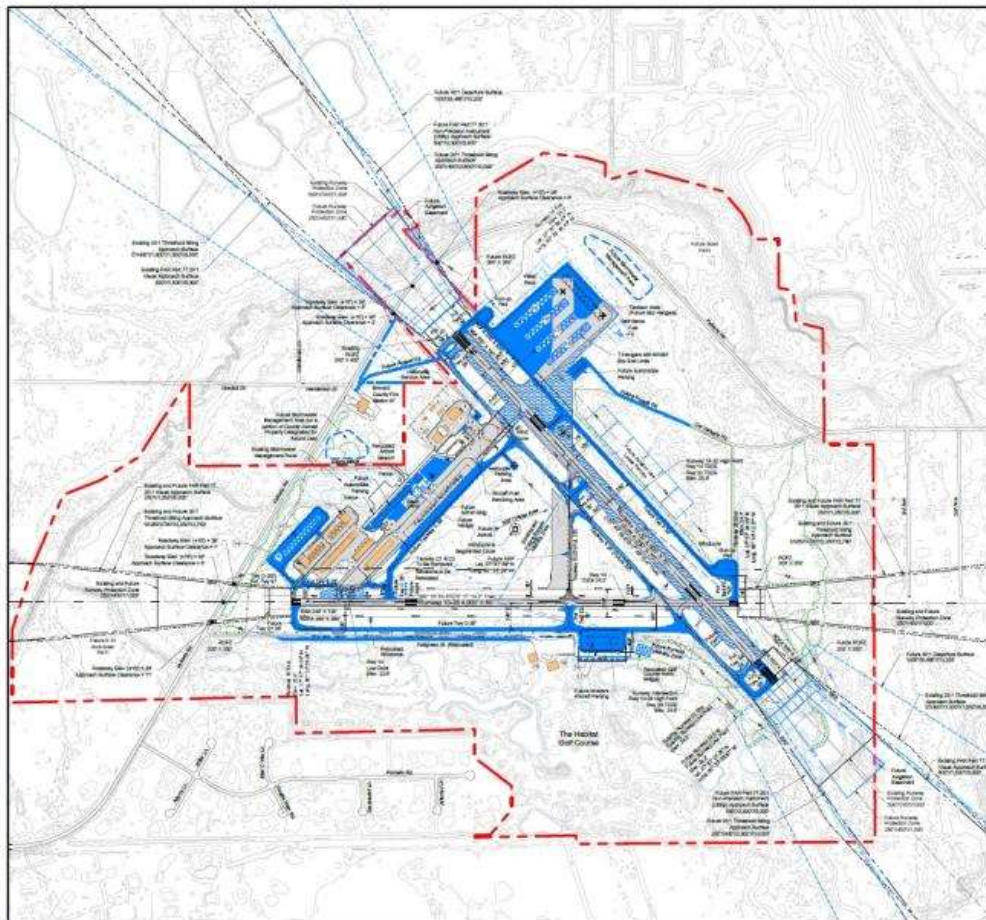
BREVARD COUNTY, FLORIDA
2725 Judge Fred Jamieson Way
Maita, Florida 32940
Phone: (321) 633-2000

VALKARIA AIRPORT
AIRPORT LAYOUT PLAN

NO	DATE	DESCRIPTION		
		ISS	OWN	REV

SHEET NO. APRIL 4, 2015
 PROJECT NO. 12A0001
 CAD FILE: 84-ALD-F.DWG
 DESIGN BY: MLH 03/04/2015
 DRAWN BY: MLH 03/04/2015
 REVIEWED BY: TSH 04/04/2015
 SHEET TITLE

FUTURE AIRPORT
LAYOUT DRAWING



0 200 400 600
SCALE: 1"=400'

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- [illegible]

REFERENCES

1. LATITUDE AND LONGITUDE ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83). AN APPLICATION CORRECTION WHICH SHOWS FLORIDA STATE PLANE COORDINATE SYSTEM, EARTH ZONE.
2. VERTICAL CONTROL IS REFERENCED TO THE NORTH AMERICAN MEAN SEA LEVEL (1983 DATUM).
3. SURVEYING DATA ARE IN METRIC UNITS (METERS). CURVES ARE NOTED OTHERWISE, AND ARE NOT INTERFERED FOR CURVED PLANS.
4. ALL ALLEGATIONS AND CORRECTIONS MUST BE MADE BY THE NOTARY.

[illegible]

EXISTING	SEVERED	STATUS
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EXHIBIT B

Schedule of Financial Assistance

FUNDS AWARDED TO THE AGENCY AND REQUIRED MATCHING FUNDS PURSUANT TO THIS AGREEMENT
CONSIST OF THE FOLLOWING:

A. Fund Type and Fiscal Year:

Financial Management Number	Fund Type	FLAIR Category	State Fiscal Year	Object Code	CSFA/CFDA Number	CSFA/CFDA Title or Funding Source Description	Funding Amount
448850-1-94-01	DPTO	088719	2021	751000	55.004	Aviation Grant Program	\$100,000
448850-1-94-01	LF	088719	2021	751000	55.004	Aviation Grant Program	\$25,000
Total Financial Assistance							\$125,000

B. Estimate of Project Costs by Grant Phase:

Phases*	State	Local	Federal	Totals	State %	Local %	Federal %
Land Acquisition	\$0	\$0	\$0	\$0	0.00	0.00	0.00
Planning	\$0	\$0	\$0	\$0	0.00	0.00	0.00
Environmental/Design/Construction	\$0	\$0	\$0	\$0	0.00	0.00	0.00
Capital Equipment	\$100,000	\$25,000	\$0	\$125,000	80.00	20.00	0.00
Match to Direct Federal Funding	\$0	\$0	\$0	\$0	0.00	0.00	0.00
Mobility Management (Transit Only)	\$0	\$0	\$0	\$0	0.00	0.00	0.00
Totals	\$100,000	\$25,000	\$0	\$125,000			

*Shifting items between these grant phases requires execution of an Amendment to the Public Transportation Grant Agreement.

BUDGET/COST ANALYSIS CERTIFICATION AS REQUIRED BY SECTION 216.3475, FLORIDA STATUTES:

I certify that the cost for each line item budget category (grant phase) has been evaluated and determined to be allowable, reasonable, and necessary as required by Section 216.3475, Florida Statutes. Documentation is on file evidencing the methodology used and the conclusions reached.

Joseph A Jerkins

Department Grant Manager Name

Signature 

January 27, 2021

Date

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EXHIBIT D

AGENCY RESOLUTION

PLEASE SEE ATTACHED

EXHIBIT E

**PROGRAM SPECIFIC TERMS AND CONDITIONS - AVIATION
AVIATION PROGRAM ASSURANCES**

A. General.

1. The assurances herein shall form an integral part of the Agreement between the Department and the Agency.
2. These assurances delineate the obligations of the Parties to this Agreement to ensure their commitment and compliance with specific provisions of **Exhibit “A”, Project Description and Responsibilities**, and **Exhibit “B”, Schedule of Financial Assistance**, as well as serving to protect public investment in public-use airports and the continued viability of the Florida Aviation System.
3. The Agency shall comply with the assurances as specified in this Agreement.
4. The terms and assurances of this Agreement shall remain in full force and effect throughout the useful life of a facility developed; equipment acquired; or Project items installed within a facility for an airport development or noise compatibility program project, but shall not exceed 20 years from the effective date of this Agreement.
5. There shall be no limit on the duration of the terms and assurances of this Agreement regarding Exclusive Rights and Airport Revenue so long as the property is used as a public airport.
6. There shall be no limit on the duration of the terms and assurances of this Agreement with respect to real property acquired with funds provided by this Agreement.
7. Subject to appropriations, the Department shall continue to comply with its financial commitment to this Project under the terms of this Agreement, until such time as the Department may determine that the Agency has failed to comply with the terms and assurances of this Agreement.
8. An Agency that has been determined by the Department to have failed to comply with either the terms of these Assurances, or the terms of the Agreement, or both, shall be notified, in writing, by the Department, identifying the specifics of the non-compliance and any corrective action by the Agency to remedy the failure.
9. Failure by the Agency to satisfactorily remedy the non-compliance shall absolve the Department's continued financial commitment to this Project and immediately require the Agency to repay the Department the full amount of funds expended by the Department on this Project.
10. Any history of failure to comply with the terms and assurances of an Agreement will jeopardize the Agency's eligibility for further state funding of airport projects by the Department.

B. Agency Compliance Certification.

1. **General Certification.** The Agency hereby certifies, with respect to this Project, it will comply, within its authority, with all applicable, current laws and rules of the State of Florida and applicable local governments, as well as Department policies, guidelines, and requirements, including but not limited to, the following (latest version of each document):
 - a. **Florida Statutes (F.S.)**
 - Chapter 163, F.S., Intergovernmental Programs
 - Chapter 329, F.S., Aircraft: Title; Liens; Registration; Liens
 - Chapter 330, F.S., Regulation of Aircraft, Pilots, and Airports
 - Chapter 331, F.S., Aviation and Aerospace Facilities and Commerce
 - Chapter 332, F.S., Airports and Other Air Navigation Facilities
 - Chapter 333, F.S., Airport Zoning

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b. Florida Administrative Code (FAC)

- Chapter 73C-41, FAC, Community Planning; Governing the Procedure for the Submittal and Review of Local Government Comprehensive Plans and Amendments
- Chapter 14-60, FAC, Airport Licensing, Registration, and Airspace Protection
- Section 62-256.300, FAC, Open Burning, Prohibitions
- Section 62-701.320(13), FAC, Solid Waste Management Facility Permit Requirements, General, Airport Safety

c. Local Government Requirements

- Airport Zoning Ordinance
- Local Comprehensive Plan

d. Department Requirements

- Eight Steps of Building a New Airport
- Florida Airport Revenue Use Guide
- Florida Aviation Project Handbook
- Guidebook for Airport Master Planning
- Airport Compatible Land Use Guidebook

- 2. Construction Certification.** The Agency hereby certifies, with respect to a construction-related project, that all design plans and specifications will comply with applicable federal, state, local, and professional standards, as well as Federal Aviation Administration (FAA) Advisory Circulars (AC's) and FAA issued waivers thereto, including but not limited to, the following:

a. Federal Requirements

- FAA AC 70/7460-1, Obstruction Marking and Lighting
- FAA AC 150/5300-13, Airport Design
- FAA AC 150/5370-2, Operational Safety on Airports During Construction
- FAA AC 150/5370-10, Standards for Specifying Construction of Airports

b. Local Government Requirements

- Local Building Codes
- Local Zoning Codes

c. Department Requirements

- Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Commonly Referred to as the "Florida Green Book")
- Manual on Uniform Traffic Control Devices
- Section 14-60.007, FAC, Airfield Standards for Licensed Airports
- Standard Specifications for Construction of General Aviation Airports
- Design Guidelines & Minimum Standard Requirements for T-Hangar Projects

- 3. Land Acquisition Certification.** The Agency hereby certifies, regarding land acquisition, that it will comply with applicable federal and/or state policies, regulations, and laws, including but not limited to the following:

a. Federal Requirements

- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
- National Environmental Policy of 1969
- FAA Order 5050.4, National Environmental Policy Act Implementing Instructions for Airport Projects
- FAA Order 5100.37B, Land Acquisition and Relocation Assistance for Airport Projects

b. Florida Requirements

- Chapter 73, F.S., Eminent Domain (re: Property Acquired Through Condemnation)
- Chapter 74, F.S., Proceedings Supplemental to Eminent Domain (re: Condemnation)
- Section 286.23, F.S., Public Business: Miscellaneous Provisions

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C. Agency Authority.

1. **Legal Authority.** The Agency hereby certifies, with respect to this Agreement, that it has the legal authority to enter into this Agreement and commit to this Project; that a resolution, motion, or similar action has been duly adopted or passed as an official act of the airport sponsor's governing body authorizing this Agreement, including assurances contained therein, and directing and authorizing the person identified as the official representative of the governing body to act on its behalf with respect to this Agreement and to provide any additional information as may be required.
2. **Financial Authority.** The Agency hereby certifies, with respect to this Agreement, that it has sufficient funds available for that portion of the Project costs which are not paid by the U.S. Government or the State of Florida; that it has sufficient funds available to assure future operation and maintenance of items funded by this Project, which it will control; and that authority has been granted by the airport sponsor governing body to commit those funds to this Project.

D. Agency Responsibilities. The Agency hereby certifies it currently complies with or will comply with the following responsibilities:

1. Accounting System.

- a. The Agency shall create and maintain a separate account to document all of the financial transactions related to the airport as a distinct entity.
- b. The accounting records shall be kept by the Agency or its authorized representative in accordance with Generally Accepted Accounting Principles and in an accounting system that will facilitate an effective audit in accordance with the 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards and Section 215.97, F.S., Florida Single Audit Act.
- c. The Department has the right to audit and inspect all financial records of the Agency upon reasonable notice.

2. Good Title.

- a. The Agency holds good title, satisfactory to the Department, to the airport or site thereof, or gives assurance, satisfactory to the Department, that good title will be obtained.
- b. For noise compatibility program projects undertaken on the airport sponsor's property, the Agency holds good title, satisfactory to the Department, to that portion of the property upon which state funds will be expended, or gives assurance, satisfactory to the Department, that good title will be obtained.

3. Preserving Rights and Powers.

- a. The Agency shall not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms and assurances of this Agreement without the written approval of the Department. Further, the Agency shall act promptly to acquire, extinguish, or modify, in a manner acceptable to the Department, any outstanding rights or claims of right of others which would interfere with such performance by the Agency.
- b. If an arrangement is made for management and operation of the airport by any entity or person other than the Agency or an employee of the Agency, the Agency shall reserve sufficient rights and authority to ensure that the airport will be operated and maintained in accordance with the terms and assurances of this Agreement.

4. Hazard Removal and Mitigation.

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- a. For airport hazards located on airport controlled property, the Agency shall clear and protect terminal airspace required for instrument and visual operations at the airport (including established minimum flight altitudes) by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.
- b. For airport hazards not located on airport controlled property, the Agency shall work in conjunction with the governing public authority or private land owner of the property to clear and protect terminal airspace required for instrument and visual operations at the airport (including established minimum flight altitudes) by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards. The Agency may enter into an agreement with surrounding property owners or pursue available legal remedies to remove potential hazards to air navigation.

5. Airport Compatible Land Use.

- a. The Agency assures that appropriate airport zoning ordinances are in place consistent with Section 333.03, F.S., or if not in place, that it will take appropriate action necessary to ensure local government adoption of an airport zoning ordinance or execution of an interlocal agreement with another local government body having an airport zoning ordinance, consistent with the provisions of Section 333.03, F.S.
- b. The Agency assures that it will disapprove or oppose any attempted alteration or creation of objects, natural or man-made, dangerous to navigable airspace or that would adversely affect the current or future levels of airport operations.
- c. The Agency assures that it will disapprove or oppose any attempted change in local land use development regulations that would adversely affect the current or future levels of airport operations by creation or expansion of airport incompatible land use areas.

6. Consistency with Local Government Plans.

- a. The Agency assures the Project is consistent with the currently existing and planned future land use development plans approved by the local government having jurisdictional responsibility for the area surrounding the airport.
- b. The Agency assures that it has given fair consideration to the interest of local communities and has had reasonable consultation with those parties affected by the Project.
- c. The Agency shall consider and take appropriate actions, if deemed warranted by the Agency, to adopt the current, approved Airport Master Plan into the local government comprehensive plan.

7. Consistency with Airport Master Plan and Airport Layout Plan.

- a. The Agency assures that the project, covered by the terms and assurances of this Agreement, is consistent with the most current Airport Master Plan.
- b. The Agency assures that the Project, covered by the terms and assurances of this Agreement, is consistent with the most current, approved Airport Layout Plan (ALP), which shows:
 - 1) The boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the Agency for airport purposes and proposed additions thereto;
 - 2) The location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars, and roads), including all proposed extensions and reductions of existing airport facilities; and
 - 3) The location of all existing and proposed non-aviation areas on airport property and of all existing improvements thereon.

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- c. The Agency assures that it will not make or permit any changes or alterations on the airport or any of its facilities that are not consistent with the Airport Master Plan and the Airport Layout Plan, as approved by the Department.
- d. Original Airport Master Plans and Airport Layout Plans and each amendment, revision, or modification thereof, will be subject to the approval of the Department.

8. Airport Financial Plan.

- a. The Agency assures that it will develop and maintain a cost-feasible Airport financial plan to accomplish the projects necessary to achieve the proposed airport improvements identified in the Airport Master Plan and depicted in the Airport Layout Plan, and any updates thereto. The Agency's Airport financial plan must comply with the following conditions:
 - 1) The Airport financial plan will be a part of the Airport Master Plan.
 - 2) The Airport financial plan will realistically assess project phasing considering availability of state and local funding and likelihood of federal funding under the FAA's priority system.
 - 3) The Airport financial plan will not include Department funding for projects that are inconsistent with the local government comprehensive plan.
- b. All Project cost estimates contained in the Airport financial plan shall be entered into and kept current in the Florida Aviation Database (FAD) Joint Automated Capital Improvement Program (JACIP) website.

- 9. Airport Revenue.** The Agency assures that all revenue generated by the airport will be expended for capital improvement or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the air transportation of passengers or property, or for environmental or noise mitigation purposes on or off the airport.

10. Fee and Rental Structure.

- a. The Agency assures that it will maintain a fee and rental structure for facilities and services at the airport that it will make the airport as self-sustaining as possible under the circumstances existing at the particular airport.
- b. If this Agreement results in a facility that will be leased or otherwise produce revenue, the Agency assures that the price charged for that facility will be based on the market value.

11. Public-Private Partnership for Aeronautical Uses.

- a. If the airport owner or operator and a person or entity that owns an aircraft or an airport tenant or potential tenant agree that an aircraft hangar or tenant-specific facility, respectively, is to be constructed on airport property for aircraft storage or tenant use at the expense of the aircraft owner or tenant, the airport owner or operator may grant to the aircraft owner or tenant of the facility a lease that is subject to such terms and conditions on the facility as the airport owner or operator may impose, subject to approval by the Department.
- b. The price charged for said lease will be based on market value, unless otherwise approved by the Department.

12. Economic Nondiscrimination.

- a. The Agency assures that it will make the airport available as an airport for public use on reasonable terms without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public.
 - 1) The Agency may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.

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- 2) The Agency may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

- b. The Agency assures that each airport Fixed-Based Operator (FBO) shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other FBOs making the same or similar uses of such airport and utilizing the same or similar facilities.

13. Air and Water Quality Standards. The Agency assures that all projects involving airport location, major runway extension, or runway location will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards.

14. Operations and Maintenance.

- a. The Agency assures that the airport and all facilities, which are necessary to serve the aeronautical users of the airport, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable federal and state agencies for maintenance and operation, as well as minimum standards established by the Department for State of Florida licensing as a public-use airport.
 - 1) The Agency assures that it will not cause or permit any activity or action thereon which would interfere with its use for airport purposes.
 - 2) Except in emergency situations, any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Department.
 - 3) The Agency assures that it will have arrangements for promptly notifying airmen of any condition affecting aeronautical use of the airport.
- b. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when adverse weather conditions interfere with safe airport operations.

15. Federal Funding Eligibility.

- a. The Agency assures it will take appropriate actions to maintain federal funding eligibility for the airport and it will avoid any action that renders the airport ineligible for federal funding.
- b. If the Agency becomes ineligible for federal funding of airport projects, such determination will render the Agency ineligible for state funding of airport projects.

16. Project Implementation.

- a. The Agency assures that it will begin making expenditures or incurring obligations pertaining to this Project within one year after the effective date of this Agreement.
- b. The Agency may request a one-year extension of this one-year time period, subject to approval by the Department District Secretary or designee.
- c. Failure of the Agency to make expenditures, incur obligations or receive an approved extension may allow the Department to terminate this Agreement.

17. Exclusive Rights. The Agency assures that it will not permit any exclusive right for use of the airport by any person providing, or intending to provide, aeronautical services to the public.

18. Airfield Access.

- a. The Agency assures that it will not grant or allow general easement or public access that opens onto or crosses the airport runways, taxiways, flight line, passenger facilities, or any area used for emergency

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equipment, fuel, supplies, passengers, mail and freight, radar, communications, utilities, and landing systems, including but not limited to flight operations, ground services, emergency services, terminal facilities, maintenance, repair, or storage, except for those normal airport providers responsible for standard airport daily services or during special events at the airport open to the public with limited and controlled access.

- b. The Agency assures that it will not grant or allow general easement or public access to any portion of the airfield from adjacent real property which is not owned, operated, or otherwise controlled by the Agency without prior Department approval.

19. Retention of Rights and Interests. The Agency will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the real property shown as airport owned or controlled on the current airport layout plan without prior written approval by the Department. It will not sell, lease, encumber, terminate, waive, or otherwise transfer or dispose of any part of its title, rights, or other interest in existing noise easements or aviation easements on any property, airport or non-airport, without prior written approval by the Department. These assurances shall not limit the Agency's right to lease airport property for airport-compatible purposes.

20. Consultant, Contractor, Scope, and Costs.

- a. The Department has the right to disapprove the Agency's employment of consultants, contractors, and subcontractors for all or any part of this Project if the specific consultants, contractors, or subcontractors have a record of poor project performance with the Department.
- b. Further, the Department maintains the right to disapprove the proposed Project scope and cost of professional services.

21. Planning Projects. For all planning projects or other aviation studies, the Agency assures that it will:

- a. Execute the project per the approved project narrative or with approved modifications.
- b. Furnish the Department with such periodic project and work activity reports as indicated in the approved scope of services.
- c. Make such project materials available for public review, unless exempt from public disclosure.
 - 1) Information related to airport security is considered restricted information and is exempt from public dissemination per Sections 119.071(3) and 331.22 F.S.
 - 2) No materials prepared under this Agreement shall be subject to copyright in the United States or any other country.
- d. Grant the Department unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this Agreement.
- e. If the Project involves developing an Airport Master Plan or an Airport Layout Plan, and any updates thereto, it will be consistent with provisions of the Florida Aviation System Plan, will identify reasonable future growth of the airport and the Agency will comply with the Department airport master planning guidebook, including:
 - 1) Provide copies, in electronic and editable format, of final Project materials to the Department, including computer-aided drafting (CAD) files of the Airport Layout Plan.
 - 2) Develop a cost-feasible financial plan, approved by the Department, to accomplish the projects described in the Airport Master Plan or depicted in the Airport Layout Plan, and any updates thereto. The cost-feasible financial plan shall realistically assess Project phasing considering availability of state and local funding and federal funding under the FAA's priority system.
 - 3) Enter all projects contained in the cost-feasible plan in the Joint Automated Capital Improvement Program (JACIP).

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- f. The Agency understands and agrees that Department approval of this Agreement or any planning material developed as part of this Agreement does not constitute or imply any assurance or commitment on the part of the Department to approve any pending or future application for state aviation funding.
- g. The Agency will submit master planning draft and final deliverables for Department and, if required, FAA approval prior to submitting any invoices to the Department for payment.

22. Land Acquisition Projects. For the purchase of real property, the Agency assures that it will:

- a. **Laws.** Acquire the land in accordance with federal and/or state laws governing such action.
- b. **Administration.** Maintain direct control of Project administration, including:
 - 1) Maintain responsibility for all related contract letting and administrative procedures related to the purchase of real property.
 - 2) Secure written Department approval to execute each agreement for the purchase of real property with any third party.
 - 3) Ensure a qualified, State-certified general appraiser provides all necessary services and documentation.
 - 4) Furnish the Department with a projected schedule of events and a cash flow projection within 20 calendar days after completion of the review appraisal.
 - 5) Establish a Project account for the purchase of the land.
 - 6) Collect and disburse federal, state, and local project funds.
- c. **Reimbursable Funds.** If funding conveyed by this Agreement is reimbursable for land purchase in accordance with Chapter 332, F.S., the Agency shall comply with the following requirements:
 - 1) The Agency shall apply for a FAA Airport Improvement Program grant for the land purchase within 60 days of executing this Agreement.
 - 2) If federal funds are received for the land purchase, the Agency shall notify the Department, in writing, within 14 calendar days of receiving the federal funds and is responsible for reimbursing the Department within 30 calendar days to achieve normal project federal, state, and local funding shares per Chapter 332, F.S.
 - 3) If federal funds are not received for the land purchase, the Agency shall reimburse the Department within 30 calendar days after the reimbursable funds are due in order to achieve normal project state and local funding shares as described in Chapter 332, F.S.
 - 4) If federal funds are not received for the land purchase and the state share of the purchase is less than or equal to normal state and local funding shares per Chapter 332, F.S., when reimbursable funds are due, no reimbursement to the Department shall be required.
- d. **New Airport.** If this Project involves the purchase of real property for the development of a new airport, the Agency assures that it will:
 - 1) Apply for federal and state funding to construct a paved runway, associated aircraft parking apron, and connecting taxiway within one year of the date of land purchase.
 - 2) Complete an Airport Master Plan within two years of land purchase.
 - 3) Complete airport construction for basic operation within 10 years of land purchase.
- e. **Use of Land.** The Agency assures that it shall use the land for aviation purposes in accordance with the terms and assurances of this Agreement within 10 years of acquisition.
- f. **Disposal of Land.** For the disposal of real property the Agency assures that it will comply with the following:
 - 1) For land purchased for airport development or noise compatibility purposes, the Agency shall, when the land is no longer needed for such purposes, dispose of such land at fair market value and/or make available to the Department an amount equal to the state's proportionate share of its market value.

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- 2) Land will be considered to be needed for airport purposes under this assurance if:
 - a) It serves aeronautical purposes such as a runway protection zone or as a noise buffer.
 - b) Revenue from uses of such land contributes to airport financial self-sufficiency.
- 3) Disposition of land under Sections D.22.f.1. or D.22.f.2. of this Exhibit, above, shall be subject to retention or reservation of any interest or right therein needed to ensure such land will only be used for purposes compatible with noise levels related to airport operations.
- 4) Revenues from the sale of such land must be accounted for as outlined in Section D.1. of this Exhibit, and expended as outlined in Section D.9. of this Exhibit.

23. Construction Projects. The Agency assures that it will:

a. Project Certifications. Certify Project compliances, including:

- 1) Consultant and contractor selection comply with all applicable federal, state and local laws, rules, regulations, and policies.
- 2) All design plans and specifications comply with federal, state, and professional standards and applicable FAA advisory circulars, as well as the minimum standards established by the Department for State of Florida licensing as a public-use airport.
- 3) Completed construction complies with all applicable local building codes.
- 4) Completed construction complies with the Project plans and specifications with certification of that fact by the Project Engineer.

b. Design Development. For the plans, specifications, construction contract documents, and any and all other engineering, construction, and contractual documents produced by the Engineer, which are hereinafter collectively referred to as "plans", the Engineer will certify that:

- 1) The plans shall be developed in accordance with sound engineering and design principles, and with generally accepted professional standards.
- 2) The plans shall be consistent with the intent of the Project as defined in Exhibit A and Exhibit B of this Agreement.
- 3) The Project Engineer shall perform a review of the certification requirements listed in Section B.2. of this Exhibit, Construction Certification, and make a determination as to their applicability to this Project.
- 4) Development of the plans shall comply with all applicable laws, ordinances, zoning and permitting requirements, public notice requirements, and other similar regulations.

c. Inspection and Approval. The Agency assures that:

- 1) The Agency will provide and maintain competent technical supervision at the construction site throughout the Project to assure that the work conforms to the plans, specifications, and schedules approved by the Department, as applicable, for the Project.
- 2) The Agency assures that it will allow the Department to inspect the work and that it will provide any cost and progress reporting, as may be required by the Department.
- 3) The Agency assures that it will take the appropriate corrective action necessary, as required by the Department, for work which does not conform to the Department standards.

d. Pavement Preventive Maintenance. The Agency assures that for a project involving replacement or reconstruction of runway or taxiway pavement it has implemented an airport pavement maintenance management program and that it will use such program for the useful life of any pavement constructed, reconstructed, or repaired with state financial assistance at the airport.

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24. Noise Mitigation Projects. The Agency assures that it will:

- a. Government Agreements.** For all noise compatibility projects that are carried out by another unit of local government or are on property owned by a unit of local government other than the Agency, the Agency shall enter into an agreement with that government body.
 - 1) The local agreement, satisfactory to the Department, shall obligate the unit of local government to the same terms and assurances that apply to the Agency.
 - 2) The Agency assures that it will take steps to enforce the local agreement if there is substantial non-compliance with the terms of the local agreement.
- b. Private Agreements.** For noise compatibility projects on privately owned property:
 - 1) The Agency shall enter into an agreement with the owner of that property to exclude future actions against the airport.
 - 2) The Agency assures that it will take steps to enforce such agreement if there is substantial non-compliance with the terms of the agreement.

- End of Exhibit E -

EXHIBIT F

Contract Payment Requirements
Florida Department of Financial Services, Reference Guide for State Expenditures
Cost Reimbursement Contracts

Invoices for cost reimbursement contracts must be supported by an itemized listing of expenditures by category (salary, travel, expenses, etc.). Supporting documentation shall be submitted for each amount for which reimbursement is being claimed indicating that the item has been paid. Documentation for each amount for which reimbursement is being claimed must indicate that the item has been paid. Check numbers may be provided in lieu of copies of actual checks. Each piece of documentation should clearly reflect the dates of service. Only expenditures for categories in the approved agreement budget may be reimbursed. These expenditures must be allowable (pursuant to law) and directly related to the services being provided.

Listed below are types and examples of supporting documentation for cost reimbursement agreements:

(1) Salaries: A payroll register or similar documentation should be submitted. The payroll register should show gross salary charges, fringe benefits, other deductions and net pay. If an individual for whom reimbursement is being claimed is paid by the hour, a document reflecting the hours worked times the rate of pay will be acceptable.

(2) Fringe Benefits: Fringe Benefits should be supported by invoices showing the amount paid on behalf of the employee (e.g., insurance premiums paid). If the contract specifically states that fringe benefits will be based on a specified percentage rather than the actual cost of fringe benefits, then the calculation for the fringe benefits amount must be shown.

Exception: Governmental entities are not required to provide check numbers or copies of checks for fringe benefits.

(3) Travel: Reimbursement for travel must be in accordance with Section 112.061, Florida Statutes, which includes submission of the claim on the approved State travel voucher or electronic means.

(4) Other direct costs: Reimbursement will be made based on paid invoices/receipts. If nonexpendable property is purchased using State funds, the contract should include a provision for the transfer of the property to the State when services are terminated. Documentation must be provided to show compliance with Department of Management Services Rule 60A-1.017, Florida Administrative Code, regarding the requirements for contracts which include services and that provide for the contractor to purchase tangible personal property as defined in Section 273.02, Florida Statutes, for subsequent transfer to the State.

(5) In-house charges: Charges which may be of an internal nature (e.g., postage, copies, etc.) may be reimbursed on a usage log which shows the units times the rate being charged. The rates must be reasonable.

(6) Indirect costs: If the contract specifies that indirect costs will be paid based on a specified rate, then the calculation should be shown.

Contracts between state agencies, and/or contracts between universities may submit alternative documentation to substantiate the reimbursement request that may be in the form of FLAIR reports or other detailed reports.

The Florida Department of Financial Services, online Reference Guide for State Expenditures can be found at this web address <https://www.myfloridacfo.com/Division/AA/Manuals/documents/ReferenceGuideforStateExpenditures.pdf>.

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EXHIBIT G

AUDIT REQUIREMENTS FOR AWARDS OF STATE FINANCIAL ASSISTANCE

THE STATE RESOURCES AWARDED PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

SUBJECT TO SECTION 215.97, FLORIDA STATUTES:~

Awarding Agency: Florida Department of Transportation
State Project Title: Aviation Grant Program
CSFA Number: 55.004
***Award Amount:** \$100,000

*The award amount may change with amendments

Specific project information for CSFA Number 55.004 is provided at: <https://apps.fldfs.com/fsaa/searchCatalog.aspx>

COMPLIANCE REQUIREMENTS APPLICABLE TO STATE RESOURCES AWARDED PURSUANT TO THIS AGREEMENT:

State Project Compliance Requirements for CSFA Number 55.004 are provided at:
<https://apps.fldfs.com/fsaa/searchCompliance.aspx>

The State Projects Compliance Supplement is provided at: <https://apps.fldfs.com/fsaa/compliance.aspx>

CONTRACT REVIEW AND APPROVAL FORM

SECTION I - GENERAL INFORMATION

1. Contractor:		2. Amount:	
3. Fund/Account #:		4. Department Name:	
5. Contract Description:			
6. Contract Monitor:		8. Contract Type:	
7. Dept/Office Director:			
9. Type of Procurement:			

SECTION II - REVIEW AND APPROVAL TO ADVERTISE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

Purchasing

Risk Management

County Attorney

SECTION III - REVIEW AND APPROVAL TO EXECUTE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

Purchasing

Risk Management

County Attorney

SECTION IV - CONTRACTS MANAGEMENT DATABASE CHECKLIST

CM DATABASE REQUIRED FIELDS	Complete ✓
Department Information	
Department	
Program	
Contact Name	
Cost Center, Fund, and G/L Account	
Vendor Information (SAP Vendor #)	
Contract Status, Title, Type, and Amount	
Storage Location (SAP)	
Contract Approval Date, Effective Date, and Expiration Date	
Contract Absolute End Date (No Additional Renewals/Extensions)	
Material Group	
Contract Documents Uploaded in CM database (Contract Form with County Attorney/ Risk Management/ Purchasing Approval; Signed/Executed Contract)	
"Right To Audit" Clause Included in Contract	
Monitored items: Uploaded to database (Insurance, Bonds, etc.)	



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.9.

2/9/2021

Subject:

Approval, Re: Property Access License Contract with Jesse O. Duenas-Fay Lake Wilderness Park (District 1)

Fiscal Impact:

There is no fiscal impact

Dept/Office:

Parks and Recreation Department

Requested Action:

It is requested the Board of County Commissioners approve and authorize the Parks and Recreation Director to execute a Property Access License Contract and any renewals with Jesse O. Duenas.

Summary Explanation and Background:

Fay Lake Wilderness Park is located at 6300 Fay Boulevard in Port St. John, FL. Mr. Duenas owns property located at 6030 Baltimore Avenue which abuts the fire road of the Park.

The Property Access License Contract will grant temporary access to Mr. Duenas to remove an existing storage unit and replace it with a new unit on his property. The existing fire road at the Park can be used for this access.

The term of the Property Access License Contract is three months with two renewal options of three months but not to exceed nine months.

Clerk to the Board Instructions:

Please send the Clerk to the Board Memo to Parks and Recreation Administration 321-633-2046



Brevard County
Parks and Recreation Department



Property Access

License Contract

Jesse O. Duenas

Fay Lake Wilderness Park
6300 Fay Boulevard, Cocoa, Florida 32927

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Property Access License Contract



This Contract, made by and between the **Board of County Commissioners of Brevard County, Florida**, a political subdivision of the State of Florida, hereinafter referred to as “County”, and **Jesse O. Duenas** hereinafter referred to as “Licensee”.

Witnesseth

Whereas, the County is the owner, lessee, or authorized administrator of certain real property located in Brevard County, Florida, commonly known as **Fay Lake Wilderness Park**, located at 6300 Fay Boulevard, Cocoa, Florida 32927 hereinafter referred to as “Park” (attached hereto as Exhibit A) and

Whereas, the Licensee is the owner of certain real property located at 6030 Baltimore Avenue, Cocoa, Florida 32927 hereinafter referred to as “Property” (attached hereto as Exhibit B); and

Whereas, the Licensee has expressed a need for temporary access to the Park; and

Whereas, a fire line exists at the Park which allows Licensee access to the Property.

Now, Therefore, in consideration of the covenants herein contained, it is mutually agreed between the parties as follows:

Recitals. The foregoing recitals are true and are incorporated herein by reference.

Section 1. License.

The County hereby grants a temporary, non-exclusive, personal and revocable License to the Licensee at the Park solely for the purpose of allowing Licensee ingress and egress to the Property by use of the fire line for the term of this Contract. This License shall not be interpreted or construed as granting the right to the ingress, egress, or use of the fire line by any other person, third party, or property owner other than Licensee, except for invited guests of the Licensee. Licensee shall be present at any and at all times guests are accessing the fire line. This License shall not be construed or interpreted as granting or attempting to grant the Licensee ingress or egress across property owned by any other person or legal entity. This Contract does not operate or confer on, or vest in, the Licensee any title, interest or estate in the Park. This License may be revoked at any time.

Section 2. Term.

This Contract shall be effective from the date of the last signature for a period of three months. Licensee may request an extension of this Contract for an additional three-month term and two

subsequent extensions for additional three-month terms upon written notice to the County received at least thirty days prior to the date of termination of the current term.

Section 3. Americans with Disabilities Act Compliance.

The County and Licensee shall conform to current requirements of the Americans with Disabilities Act in the performance of this Contract, and shall not cause or place on the Park any condition causing the Park to become non-compliant. The parties shall work together to remedy any known violations of the Americans with Disabilities Act that may occur.

Section 4. Alterations, Changes, and Additions.

No structural changes, alteration or additions shall be made by the Licensee to the Park without the prior written consent of the county.

Section 5. Assignment.

This Contract may not be assigned, transferred, conveyed or devised to any other person, corporation, partnership or other entity.

Section 6. Attorney's Fees.

In the event of any legal action to enforce the terms of this Contract each party shall bear its own attorney's fees and costs.

Section 7. Construction of Contract.

The parties hereby acknowledge that they have fully reviewed this Contract and its attachments and have had the opportunity to consult with legal counsel of their choice, and that this Contract shall not be construed against any party as if they were the drafter of this Contract.

Section 8. Counterparts.

This Contract may be executed in several counterparts, each of which so executed shall be deemed to be an original, and such counterparts together shall constitute but one and the same instrument. The parties agree that executed counterparts may be transmitted by e-mail and that such counterparts shall be treated as originally executed instruments. Each party undertakes to provide the other with a copy of the original Contract bearing actual original signatures and initials within a reasonable period of time following the execution of this contract.

Section 9. Entire Contract.

This Contract shall constitute the entire Contract between the Parties with respect to the matters addressed herein and supersedes any prior Contracts or understandings. Any prior understanding or representation of any kind, relating to the matters addressed herein, preceding the date of this Contract shall not be binding upon either party and is expressly terminated by the execution of this Contract.

Section 10. E-Verify.

- A.** The County shall not enter into, or renew, a contract for goods or services with a Licensee that is not enrolled in E-Verify. Any Licensee providing goods or services to the County shall be contractually required to utilize E-Verify to confirm the employment eligibility of any employee hired during the contract term.
- B.** The County shall verify the Licensee's participation in E-verify Program by confirming their enrollment on the Department of Homeland Security E-verify Website. Licensee's whose participation cannot be verified on the Department of Homeland Security's E-verify Website shall provide acceptable evidence of their enrollment prior to award and the execution of a contract. Acceptable evidence shall include, but not be limited to, a copy of the fully executed E-Verify Memorandum of Understanding for the business.
- C.** The Licensee shall expressly require any subcontractor performing work or providing services pursuant to this Contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.
- D.** The Licensee must meet this requirement, unless:
 - 1.)** the contract is solely for goods-based procurement where no services are provided; or
 - 2.)** where the requirement is waived by the Board of County Commissioners;
 - 3.)** the contract is being executed with a Sole Proprietor who does not hire employees and therefore not required to file a Department of Homeland Security Form I-9 (which is the necessary document used for performing an E-Verify search); or
 - 4.)** the contract is being executed with a company based outside of the United States of America and does not have a corporation or office located within the United States of America and does not employ any United States of America citizens.
- E.** The Licensee's compliance with the terms of this section is made an express condition of this Contract and the County may treat a failure to comply as a material breach of this Contract.

Nothing in this section may be construed to allow intentional discrimination of any class protected by law.

Section 11. Florida Public Records Law.

Pursuant to Section 119.0701, Florida Statutes, a request to inspect or copy public records relating to this Contract must be made directly to the County. If the County does not possess the requested records, the County shall immediately notify the Licensee of the request and the Licensee shall provide the records to the County or allow the records to be inspected or copied within twenty-four hours (not including weekends or legal holidays) of the request so the County can comply with the requirements of Chapter 119, Florida Statutes, Florida Public Records Law. The Licensee may also provide a cost estimate to produce the requested documents consistent with the policy set forth in Brevard County Administrative Order AO-47, incorporated herein by this reference. A copy of AO-47 is available upon request from the County's public records custodian designated below.

If Licensee fails to provide the requested public records to the County within a reasonable time, the Licensee may face civil liability for the reasonable cost of enforcement incurred by the party requesting the records and may be subject to criminal penalties pursuant to Section 119.10, Florida Statutes. Licensee's failure to comply with public records requests is considered a material breach of this Contract and grounds for termination. If Licensee claims certain information is exempt and/or confidential, it must cite to specific statutory provisions or case law in order to justify removal or redaction of said information.

Should the County face any legal action to enforce inspection or production of the records within the Licensee's possession and control, the Licensee agrees to indemnify the County for all damages and expenses, including attorney's fees and costs. The Licensee shall hire and compensate attorneys to represent the Licensee and County in defending such action. The Licensee shall pay all costs to defend such action and any costs and attorney's fees awarded pursuant to Section 119.12, Florida Statutes.

If the Licensee has questions regarding the application of Chapter 119, Florida Statutes, to the Licensee's duty to provide Public Records relating to this contract, contact the custodian of Public Records: Misty Adams, Administrative Assistant, 2725 Judge Fran Jamieson Way, Building B, Suite 203, Viera, Florida 32940; [Email the Records Custodian](#); (321) 633-2046.

Section 12. Governing Law.

This Contract shall be deemed to have been executed and entered into within the State of Florida and this Contract, and any dispute arising hereunder, shall be governed, interpreted and construed according to the laws of the State of Florida.

Section 13. Illegal, Unlawful or Improper Use.

The Licensee shall not make any unlawful, immoral, improper, or offensive use of the Park nor allow said Park to be utilized for any purpose other than that hereinabove set forth. Failure of the Licensee to comply with this provision shall be considered a material breach of this Contract and subject same to immediate termination by the County, where upon the County shall be entitled to immediately re-enter and retake possession of the Park and terminate this Contract.

Section 14. Indemnification and Insurance.

The Licensee and their contractor(s) shall indemnify and hold harmless the County, and its agents, officers, and employees from any and all liability, claims, damages, losses, and expenses (including attorney's fees and costs), proceedings and causes of action of every kind and nature, arising out of, connected with or resulting from the Licensee or Licensee's employees, Licensees contractor(s) and subcontractors, agents, representatives or volunteer's use, occupation, management or control of the Park or any improvements thereon or any furniture, furnishings, equipment and fixtures utilized in connection therewith where such claim, damage, loss, or expense is caused, in whole or in part, by the act or omission of the Licensee or their contractor(s),

or anyone acting directly or indirectly for the Licensee, or anyone for show acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified thereunder. Licensee shall be solely responsible for any liability, damages, costs, fines, and administrative or criminal enforcement actions resulting from their activities on the County's Property. Nothing contained herein shall be construed or interpreted as a waiver of the County's sovereign immunity protections or limitations on damages provided for in Section 768.28, Florida Statutes, as amended. Nothing in this Contract is intended to inure to the benefit of any third party for the purpose of allowing any claim which would otherwise be barred under the doctrine of sovereign immunity or by operation of law. Licensee acknowledges specific consideration has been received for this hold harmless/indemnification provision. The duties and responsibilities established in this paragraph shall survive expiration or termination of this Contract.

The Licensee or their contractor(s) agree that they will, at their own expense, defend any and all actions, suits or proceedings which may be brought against the County arising from the Licensee's or their contractor(s) activities and that it will satisfy, pay, and discharge any and all judgments that may be entered against the County in any such action or proceeding. It is agreed by the parties hereto that specific consideration has been paid under this Contract for this indemnification and hold harmless provision.

The Licensee or their contractor(s) agree to provide and maintain at all times during the term of this Contract, without cost or expense to the County, policies of insurance generally known as comprehensive general liability policies insuring the Licensee or their contractor(s) against any and all claims, demands, and causes of action whatsoever for injuries received and damage to property and any improvements thereon by the Licensee. Such policies of insurance shall insure that either the Licensee or their contractor(s) provide coverage in the amount of not less than One Million Dollars per occurrence to cover any and all claims and costs arising in connection with any and all liability claims arising in connection with any particular accident or occurrence, and fire damage liability coverage with limits sufficient to provide for the replacement cost of any structure damaged due to fire. Said insurance policies shall provide that Brevard County Board of County Commissioners is named as an additional insured and shall be entitled to thirty-day prior notice of any changes or cancellation in said policies.

The Licensee shall notify the County immediately in writing and by phone or email of any potentially hazardous condition existing on or about the premises utilized in conjunction of said activities. The Licensee or their contractor(s) shall provide the described insurance on policies and with insurers acceptable to the County. These insurance requirements shall not relieve or limit the liability of the Licensee. The County does not in any way represent that these types or amounts of insurance are sufficient or adequate to protect the Licensee or their contractor(s) interests or liabilities, but are merely minimums. A certificate of insurance indicating that the Licensee or their contractor(s) have coverage in accordance with the requirements of this Contract and shall be furnished by the Licensee to North Area Parks Operations, 475 North Williams Avenue, Titusville, Florida 32796 prior to execution of this Contract.

Section 15. Interest in the Property.

This Contract is the grant of a personal right to the Licensee. This Contract shall not be construed to create any real property interest in the County's Property.

Section 16. Maintenance.

The County represents that it has the right to grant the License herein described. The County shall not bear any responsibility for the maintenance of the Park, including the fire line, and shall have no duty to keep the Park in a condition passable by the Licensee. Licensee shall not undertake any maintenance or improvement of the Park without the expressed written permission of the County, which permission may be withheld at the County's sole discretion. Licensee shall have the right, after obtaining written approval from the County, to maintain but not improve the fire line. Maintenance includes trimming of trees and brush that restrict travel along the fire line and removal of the tire ruts and tire tracks so as to keep the fire line in condition to support travel on it. No maintenance may be conducted outside the boundaries of the fire line.

Section 17. Modification.

No modification of this Contract shall be binding on the County or the Licensee unless reduced to writing and signed by a duly authorized representative of County and the Licensee.

Section 18. Notice.

Notice under this Contract shall be given to the County by mailing written notice postage prepaid, to: North Area Parks Operations, 1515 Sarno Road, Building A, Melbourne, Florida 32935 and notice shall be given to the Licensee by mailing written notice; postage prepaid, to Jesse O. Duenas, 6030 Baltimore Avenue, Cocoa, Florida 32927.

Section 19. Recording.

This Contract shall not be recorded in the official records of Brevard County, Florida, by either party.

Section 20. Revocation.

This Contract may be revoked or terminated by the County upon fifteen days written notice to the Licensee, upon one or more of the following occurrences:

- A. Licensee transfers ownership of all or any part of the Licensees' Property. In the event of transfer of ownership of all or any part of the Licensee's Property, Licensee agrees to make a condition of the sale that the new owner applies thirty days prior to the transfer of title to the County for a Property Access License Contract, which shall not be unreasonably withheld by the County. In the event the County has reason not to enter into a contract with the new owner, the County will notify Licensee within this thirty-day period of the reasons why a Property Access License Contract should not be issued to the prospective new owner.
- B. Licensee obtains alternate access for ingress and egress to Licensee's Property.
- C. Licensee violates any law, rule, regulation, or management plan applicable to the County's

Property, as promulgated by the State of Florida, or any of its agencies; the County; or any other governmental agency with jurisdiction.

- D. Licensee Engages in any hunting activity at the Park.
- E. Licensee discharges any firearms on or across any portion of the Park.
- F. Licensee conducts any illegal or unauthorized activity at the Park.
- G. Licensee enters upon or conducts activity at the Park for uses other than use of the fire line for ingress and/or egress during the term of this Contract.
- H. Licensee violates any term, provision, or condition of this License Agreement.

If, in the sole discretion of the County, Licensee's continued use of the Park for the specific purposes outlined herein interfere with the County's management of the Park; the County has the discretion to provide alternate access for ingress and/or egress if possible.

Section 22. Responsibility.

The Licensee shall be responsible for abiding by the terms of this Contract. The Area Manager shall be responsible for assuring the terms of this Contract are enforced.

Section 23. Right of Entry by County.

The County or its agents may at any time enter in and on the referenced Park for the purpose of inspection of same and performing such other duties as are required by the terms of this Contract and the rules, regulations, ordinances and laws of any government body.

Section 24. Right to Audit Records.

In the performance of this Contract, the Licensee shall keep books, records, and accounts of all activities related to this Contract in compliance with generally accepted accounting procedures. All documents, papers, books, records and accounts made or received by the Licensee in conjunction with this Contract and the performance of this Contract shall be open to inspection during regular business hours by an authorized representative of the County. The Licensee shall retain all documents, books and records for a period of five years after termination of this Contract, unless such records are exempt from section 24(a) of Article I of the State Constitution and chapter 119, Florida Statutes. All records or documents created by or provided to the Licensee by the County in connection with this Contract are public records subject to Florida Public Records Law, Chapter 119, Florida Statutes. All records stored electronically must be provided to the County in a format compatible with the information technology systems of the County.

The Licensee shall ensure that public records which are exempt or confidential and exempt from public records disclosure requirements are not disclosed, except as authorized by law, for the duration of the Contract and following termination of the Contract if the Licensee does not transfer the records to the public agency. In lieu of retaining all public records upon termination of this Contract, the Licensee may transfer, at no cost to the County, all public records in possession of the Licensee. If the Licensee transfers all public records to the County upon termination of the Contract, the Licensee shall destroy any duplicate public records that are

exempt or confidential and exempt from public records disclosure requirements.

Section 25. Severability.

If any provision of this Contract is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provision shall nevertheless continue in full force without being impaired or invalidated in any way.

Section 26. Statutes, Laws, Rules and Regulations.

The Licensee's use of the Park will be in accordance with all applicable laws, rules, regulations, policies and procedures approved by the Department and/or the County including but not limited to: Department Policy PRP-1 Prohibiting Smoking at Brevard County Youth Athletic Facilities, PRD-4 Background Screening for Volunteers and Contracted Services, and prescribed safety rules and regulations. The County reserves the right to disapprove any and all programs held at the Park, which may be in conflict with the Department's and/or the County's Policies and Administrative Orders, and agrees to furnish the Licensee with a copy of such rules, regulations, policies, procedures, and amendments.

It shall be the Licensee's responsibility to be aware of and comply with all statutes, ordinances, rules, orders, regulations and requirements of all local, state, and federal agencies as applicable.

Section 27. Termination.

This Contract may be terminated by either party upon thirty days written notice to the other party. Upon termination of this Contract, the Licensee shall have fifteen days from the date of termination within which to remove any personal property or equipment from any Park. Any personal property or equipment not removed within said fifteen-day period shall become the property of the County.

Section 28. Venue.

Venue for any legal action brought by any party to this Contract to interpret, construe or enforce this Contract shall be in court of competent jurisdiction in and for Brevard County, Florida, and any trial shall be non-jury.

In Witness Whereof, the parties have hereunto set their hands and seals on the day and year written herein below.

Reviewed for legal form and content:

**Board of County Commissioners
of Brevard County, Florida**

Robin Rogers 12/15/2020
Robin B. Rogers
Assistant County Attorney

By: _____
Mary Ellen Donner, Date
Parks and Recreation Department Director

Licensee:

By: Jesse O. Duenas 1/4/2021
Jesse O. Duenas Date

STATE OF Florida
COUNTY OF Brevard

The foregoing instrument was acknowledged before me by means of ☒ physical presence or
☐ online notarization, this _____ by Jesse O. Duenas. He/she is personally known to me or
has produced D.C. as identification.

[Notary Seal]

Notary Public



Lisa Marie Calderon
Commission # GG050324
Expires: Feb. 21, 2021
Bonded thru Aaron Notary

Lisa Marie Calderon

Name typed, printed or stamped

My Commission Expires: 2/21/2021

Exhibit A



Fay Lake Wilderness Park outlined in red.

6030 Baltimore Avenue outlined in yellow.

Exhibit B

Port St. John Unit Five

A Subdivision of Portions of Sections 214~28 South Range 35 East

A Re-subdivision of Portions of Map of Delspine Plat Book 2, PAGE 2

Brevard County, Florida

23 3521 JN 168 4 6300 Baltimore Avenue, Port St. John

Parcel ID# 23-35-28-JN-00168.0-0004.00

Lot 4, Block 168, PORT ST. JOHN UNIT – FIVE, according to the plat thereof recorded at Plat Book 22, Pages 46 through 50, Public Records of Brevard County, Florida

CONTRACT REVIEW AND APPROVAL FORM

SECTION I - GENERAL INFORMATION

1. Contractor:		2. Amount:	
3. Fund/Account #:		4. Department Name:	
5. Contract Description:			
6. Contract Monitor:		8. Contract Type:	
7. Dept/Office Director:			
9. Type of Procurement:			

SECTION II - REVIEW AND APPROVAL TO ADVERTISE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

Purchasing

Risk Management

County Attorney

SECTION III - REVIEW AND APPROVAL TO EXECUTE

APPROVAL

COUNTY OFFICE

YES

NO

SIGNATURE

User Agency

Purchasing

Risk Management

County Attorney

SECTION IV - CONTRACTS MANAGEMENT DATABASE CHECKLIST

CM DATABASE REQUIRED FIELDS	Complete ✓
Department Information	
Department	
Program	
Contact Name	
Cost Center, Fund, and G/L Account	
Vendor Information (SAP Vendor #)	
Contract Status, Title, Type, and Amount	
Storage Location (SAP)	
Contract Approval Date, Effective Date, and Expiration Date	
Contract Absolute End Date (No Additional Renewals/Extensions)	
Material Group	
Contract Documents Uploaded in CM database (Contract Form with County Attorney/ Risk Management/ Purchasing Approval; Signed/Executed Contract)	
"Right To Audit" Clause Included in Contract	
Monitored items: Uploaded to database (Insurance, Bonds, etc.)	



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.10.

2/9/2021

Subject:

Request to Write-Off Uncollectible Ambulance Fees FY 19/20

Fiscal Impact:

The removal of receivables in the amount of \$15,372,286.61 from the financial statements does not preclude continuing efforts to collect the receivables in future years. In accordance with County Policy BCC-37, Fire Rescue sends appropriate uncollected accounts to a collection agency for further action. The Medicare/Medicaid/Champus \$12,791,335.02 is not forwarded to the collection agency as it is the contractual write off amount.

Annually, during BCFR's budget development process, EMS billing revenue is forecasted based on historical net revenue received from EMS account receivables. Revenue forecasting in this manner takes into consideration the write-offs from contractual adjustments and uncollected billing charges.

Dept/Office:

Fire Rescue Department

Requested Action:

The Fire Rescue Department requests, in accordance with Ordinance No. 79-21, the Board approve the FY 2019-2020 uncollectible EMS accounts receivable write-off as noted below.

Summary Explanation and Background:

The removal of these Emergency Medical Services (EMS) accounts receivable is in accordance with Ordinance 79-21 and generally accepted accounting principles. A specific listing of each account is available from Fire Rescue upon request. A file containing all the County's uncollectible receivables shall be maintained by the Clerk of the Circuit Court, as required by ordinance.

Emergency Medical Services (EMS):

Appropriate Accounts for a Financial Write-Off

The EMS write-off is a balance sheet financial write-off only. Even though this write-off occurs annually, the County, through the actions of its billing service providers and the County's collection agency, continues to pursue collections of these accounts. This portion of the write-off consists of accounts that were appropriate for referral for a financial write-off after up to five attempts to collect were made. The write-off amount of \$15,372,286.61 reflects those accounts that are no longer current (older than 1 year) have been sent to a collection agency or are otherwise uncollectible. This allows EMS to update receivable reporting for patients that are current only.

Medicare/Medicaid/Champus Contractual Write-Off

The EMS write-off is a balance sheet financial write-off only. The Medicare/Medicaid/Champus write-offs are based upon required contractual adjustments. These write-offs are the difference in what BCFR bills for service and what Medicare, Medicaid and Champus agree to pay contractually. The annual write-off figures for these accounts are the

annual total (through September 2019) of the amounts of mandatory write-offs applied to Medicare, Medicaid or Champus accounts. The amount of \$12,791,335.02 is the contractual write-off figure from the monthly R1/Intermedix and Change Healthcare reports "Management Summary Report".

Clerk to the Board Instructions:

FIRE RESCUE DEPARTMENT

Fiscal Year 2019-2020 Uncollectible Ambulance Write-Off

Appropriate Accounts for a Financial Write-Off

	Amount
Medicare/Medicaid/Champus Contractual writeoffs	\$ 12,791,335.02
Accounts Sent to Collection Agencies during FY 2109-2020	\$ 3,367,970.48
ADPI Accounts older than one year	\$ 11,292,806.36
Accounts with missing or incorrect addresses	\$ 705,385.79
Miscellaneous writeoffs (closed accounts, small balances etc)	\$ 6,123.98
Fiscal Year 2019-2020 Uncollectible Ambulance Write-Off	\$ 28,163,621.63

Approved by ;


Mark Schollmeyer,
Fire Rescue Chief

01-21-21
Date


Kathleen Prothman
Assistant County Finance Director

1-21-21
Date



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.11.

2/9/2021

Subject:

Request Approval to Accept the High Bid for Public Sale of Surplus Property 2021-2538438 and Authorization for Chair to Execute All Necessary Documents

Fiscal Impact:

Fiscal Impact FY2021 Revenue from the sale of the property less advertising and administration fees will be returned to Fund 0001/R30086 and the parcel will be re-inserted on the tax rolls.

Dept/Office:

Central Services / Asset Management

Requested Action:

It is requested that the Board of County Commissioners:

- Approve the sale of a surplus parcel of property pursuant to Florida Statute 125.35 (1)(a) by accepting the high bid received in the amount of \$230,000.00 received from Aquarius Equity, LLC; and
- Authorize the BoCC Chair to execute all contracts and contract related documents upon review and approval by the County Attorney's Office, Risk Management, and Purchasing Services.

Summary Explanation and Background:

On Tuesday September 15, 2020 the Board authorized the surplus of 1.37 acres of land located at 350 Gus Hipp Boulevard, Rockledge Florida (Brevard County Property Appraiser Parcel ID #25-36-15-794, Tax ID 2538438). The Board also authorized Asset Management to develop bid documents to advertise the surplus parcel for sale via sealed bidding. The Board set a minimum acceptable bid amount of \$225,000.00 for the parcel. An independent appraisal was completed in September 2020 and appraised the parcel at \$180,000.00. The parcel is currently assessed at \$53,710.00 and was acquired by the County October 2007.

A public auction was conducted and sealed bids were opened on January 20, 2021. The County received one bid in response to the Invitation to Bid. The bid received was in the amount of \$230,000.00 exceeding the minimum bid requirement established by the Board. The bid response was received from Aquarius Equity, LLC,. The bid response also included the required bid deposit in the amount of \$23,000.00.

It is requested that the Board accept the bid received, authorizing the sale of this property and authorize the Chair to execute all contracts and contract related documents upon review and approval from the County Attorney's Office, Risk Management, and Purchasing Services.

Clerk to the Board Instructions:

Asset Management
Finance

Budget

PAO detail sheet Parcel 25-36-15-00-794



Account: 2538438 Parcel ID: 25-36-15-00-794

Sale: 10/18/2007 \$308,700

BCPAO Market Value: \$53,710

Owners: BREVARD COUNTY

Address: 350 GUS HIPP BLVD UNIT NURSRY ROCKLEDGE FL 32955

[Details](#) | [Hide Info](#)

[Disclaimer](#)

AN APPRAISAL OF
**THE 1.37 ACRES OF
VACANT INDUSTRIAL LAND
LOCATED AT 350 GUS HIPP BOULEVARD
ROCKLEDGE, FL 32955**
FILE # 20-81157

PREPARED FOR

BREVARD COUNTY
PUBLIC WORKS DEPARTMENT

WORK ORDER 2017-3988-A-006

AS OF

SEPTEMBER 1, 2020

BY

CURTIS L. PHILLIPS, MAI
CALLAWAY & PRICE, INC.



Callaway & Price, Inc.

Real Estate Appraisers & Consultants

Licensed Real Estate Brokers

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Stuart
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Fax (772) 461-0809

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Fax (321) 726-0384

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Cert Gen RZ2085
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Orlando, FL 32803
Phone (321) 726-0970
Fax (321) 726-0384

Curtis L. Phillips, MAI
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c.phillips@callawayandprice.com

September 4, 2020

Ms. Lucy Hamelers
Brevard County
Public Works Department
2725 Judge Fran Jamieson Way,
Building A, Room 201
Viera, FL 32940

Dear Ms. Lucy Hamelers:

We have made an investigation and analysis of the 1.37 acres of vacant industrial land located at 350 Gus Hipp Boulevard in Rockledge, FL. The Subject Property will be further described both in narrative and legally within the following appraisal report. The purpose of this investigation and analysis was to provide our opinion of Market Value of the Fee Simple Estate of the Subject Property as of September 1, 2020.

This report has been prepared for our client, Brevard County Public Works Department. The intended use of this appraisal is to assist the client in possible sale of the property. The scope of work performed is specific to the needs of the intended user and the intended use. No other use or users is intended, and the scope of work may not be appropriate for other uses.

The scope of work performed included a complete analysis of the Subject Property with no omitted applicable approaches to value. A detailed scope of work decision can be found in the body of this report.

Ms. Lucy Hamelers
Brevard County
Public Works Department
September 4, 2020
Page 2

Based upon the scope of the assignment, our investigation and analysis of the information contained within this report, as well as our general knowledge of real estate valuation procedures and market conditions, it is our opinion that the Market Value of the Fee Simple Estate of the Subject Property as of September 1, 2020 was:

\$180,000

The global outbreak of a "novel coronavirus" known as COVID-19 was officially declared a pandemic by the World Health Organization (WHO). It is currently unknown what direct or indirect effect, if any, this event may have on the national economy, the local economy or the market in which the subject property is located. The reader is cautioned and reminded that the data presented in this appraisal report is considered the most relevant as of the date of value, however in most cases occurred before this outbreak. The appraiser makes no representation as to the effect on the subject property, if any, due to outbreak of COVID-19 until the real estate market has time to reflect changes that may occur. Given the unknown future impact that COVID-19 might have on the real estate market, we recommend that our client keep the valuation of this property under frequent review. Further, as such, less certainty and a higher degree of caution should be attached to our valuation than would normally be the case.

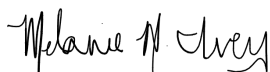
A description of the property appraised, together with an explanation of the valuation procedures utilized, is contained in the body of the attached report. For your convenience, an Executive Summary follows this letter. Your attention is directed to the Limiting Conditions and underlying assumptions upon which the value conclusions are contingent.

Respectfully submitted,

CALLAWAY & PRICE, INC.



Curtis L. Phillips, MAI
Cert Gen RZ2085



Melanie M. Ivey
Cert Gen RZ3241

CLP/MMI/clw:20-81157



EXECUTIVE SUMMARY

PROPERTY TYPE	: Vacant Industrial Land
LOCATION	: The Subject Property is located at 350 Gus Hipp Boulevard, within the City of Rockledge.
DATE OF VALUATION	: September 1, 2020
DATE OF REPORT	: September 4, 2020
OWNER OF RECORD	: Brevard County
PURPOSE OF APPRAISAL	: The purpose of this investigation and analysis was to estimate the Market Value of the Fee Simple Estate of the Subject Property as of the appraisal date in an appraisal report.
PROPERTY DESCRIPTION:	
LAND	: The Subject Property consists of one legal parcel of record which totals 1.37 acres, or approximately 59,677 square feet, per the Broward County Property Appraiser.
BUILDING	: None
ZONING	: IP, Industrial Park, by the City of Rockledge
LAND USE PLAN	: Industrial, by the City of Rockledge
HIGHEST AND BEST USE:	
AS VACANT	: Industrial development
THE MARKET VALUE OF THE FEE SIMPLE ESTATE OF THE SUBJECT PROPERTY AS OF SEPTEMBER 1, 2020 WAS	: \$180,000



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Qualifications:	
Curtis L. Phillips, MAI	
Melanie M. Ivey	



CERTIFICATION

We certify that, to the best of our knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. We have no present or prospective interest in the property that is the subject of this report, and we have no personal interest with respect to the parties involved.
4. We have not performed services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
8. The analyses, opinions, and conclusion were developed, and this report was prepared, in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP) and The Interagency Appraisal and Evaluation Guidelines, December 10, 2010.
9. Curtis L. Phillips, MAI has made a personal inspection of the property that is the Subject of this report. Melanie M. Ivey is signing this report not having inspected the Subject Property.
10. No one provided significant real property appraisal assistance to the persons signing this certification.
11. The use of this report is subject to the requirements of the State of Florida relating to review by the Florida Real Estate Appraisal Board.



Certification

12. This appraisal assignment was not based on a requested minimum valuation, a specific valuation, or the approval of a loan.
13. The reported analyses, opinions and conclusions were developed, and this report was prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
14. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
15. As of the date of this report, Curtis L. Phillips, MAI has completed the continuing education program for Designated Members of the Appraisal Institute.

A handwritten signature in black ink, reading "Curtis L. Phillips".

Curtis L. Phillips, MAI
Cert Gen RZ2085

A handwritten signature in black ink, reading "Melanie M. Ivey".

Melanie M. Ivey
Cert Gen RZ3241

CLP/MMI/clw:20-81157



GENERAL ASSUMPTIONS

1. Unless otherwise stated, the value appearing in this appraisal represents the opinion of the Market Value or the Value Defined AS OF THE DATE SPECIFIED. Market Value of real estate is affected by national and local economic conditions and consequently will vary with future changes in such conditions.
2. The value opinion in this appraisal report is gross, without consideration given to any encumbrance, restriction or question of title, unless specifically defined.
3. It is assumed that the title to the premises is good; that the legal description is correct; that the improvements are entirely and correctly located on the property described and that there are no encroachments on this property, but no investigation or survey has been made.
4. No responsibility is assumed for matters legal in nature, nor is any opinion of title rendered. No right to expert testimony is included, unless other arrangements have been completed. In the performance of our investigation and analysis leading to the conclusions reached herein, the statements of others were relied on. No liability is assumed for the correctness of these statements; and, in any event, the appraiser's total liability for this report is limited to the actual fee charged.
5. No rights to expert witness testimony, pre-trial or other conferences, depositions, or related services are included with this appraisal. If as a result of this appraisal process Callaway and Price, Inc., or any of its principals, its appraisal consultants or experts are requested or required to provide any litigation services, such shall be subject to the provisions of the engagement letter or, if not specified therein, subject to the reasonable availability of Callaway and Price, Inc. and/or said principals or appraisers at the time and shall further be subject to the party or parties requesting or requiring such services paying the then applicable professional fees and expenses of Callaway and Price, Inc. either in accordance with the engagement letter or arrangements at the time, as the case may be.
6. Any material error in any of the data relied upon herein could have an impact on the conclusions reported. We reserve the right to amend conclusions reported if made aware of such error. Accordingly, the client-addressee should carefully review all assumptions, data, relevant calculations, and conclusion with 30 days of delivery of this report and should immediately notify us of any questions or errors.
7. The market value reported herein assumes that all taxes and assessments have been paid and assumes a fee simple interest unless otherwise reported. The body of the report will define the interest appraised if it differs.



General Assumptions & Limiting Conditions

8. Neither all nor any part of the contents of this report (especially any conclusions, the identity of the appraiser or the firm with which he is connected, or any reference to the Appraisal Institute or any of its designations) shall be disseminated to the public through advertising media, public relations media, news media, sales media or any other public means of communication without our prior written consent and approval.
9. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures which would render it more or less valuable. The appraiser assumes no responsibility for such conditions or the engineering which might be required to discover these factors.
10. Our opinion of value was based on the assumption of competent marketing and management regarding the property. If there is no competent marketing and management, then the market value opinion herein may not apply.



LIMITING CONDITIONS

1. No hypothetical conditions are part of this appraisal assignment.
2. No extraordinary assumptions are part of this assignment.
3. Unless otherwise stated in this report, the existence of hazardous substances, including without limitation stachybotrys chartarum (mold), asbestos, polychlorinated biphenyls, petroleum leakage, or agricultural chemicals, which may or may not be present on the property, or other environmental conditions, was not called to the attention of, nor did the appraisers become aware of such during their inspection. The appraisers have no knowledge of the existence of such materials on or in the property unless otherwise stated. The appraisers, however, are not qualified to test for such substances or conditions. If the presence of such substances, such as asbestos, urea formaldehyde foam insulation, or other hazardous substances or environmental conditions, may affect the value of the property, the value estimated is predicated on the assumption that there is no such proximity thereto that would cause a loss in value. We are unaware of very wet conditions that may have existed for days or weeks which are required to grow mold. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them.
4. The Americans with Disabilities Act ("ADA") became effective January 26, 1992. The appraisers have not made a specific compliance survey and analysis of this property to determine whether or not it is in conformity with the various detailed requirements of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could reveal that the property is not in compliance with one or more of the requirements of the Act. If so, this fact could have a negative effect upon the value of the property. Since the appraisers have no direct evidence relating to this issue, possible noncompliance with the requirements of ADA in estimating the value of the property has not been considered.



SUBJECT PHOTOS



SUBJECT AERIAL



VIEW OF THE SUBJECT



VIEW OF THE SUBJECT



VIEW OF GUS HIPPI BOULEVARD FROM THE SUBJECT



VIEW OF THE SUBJECT



DEFINITION OF THE APPRAISAL PROBLEM

Purpose, Date of Value, and Interest Appraised

The purpose of this investigation and analysis was to estimate the Market Value of the Fee Simple Estate of the Subject Property as of September 1, 2020.

Intended Use and User of Appraisal

This report has been prepared for our client, Brevard County Public Works Department. The intended use of this appraisal is to assist the client in possible sale of the property. The scope of work performed is specific to the needs of the intended user and the intended use. No other use or users is intended, and the scope of work may not be appropriate for other uses.

Legal Description

That portion of the following described land lying West of the 30 foot prescribed right of way of North Tropical Trail Part of the Southwest 1/4 of the Southeast 1/4 and part of Government Lot 4, in Section 15, Township 25 South, Range 36 East, Brevard County, Florida, described as follows

The South 1/2 of the following described property

Beginning at the Northwest corner of the land of E. Bergmann, as described in Deed Book C, Page 147, Public Records of Brevard County, Florida, in Section 15, Township 24 South, Range 36 East, thence run North along the bank of the Indian River, 344 feet, thence East to the West Line of B F Jordan land, as described in Patent Certificate No 8140, recorded in Deed Book F, page 320, Public Records of Brevard County, Florida, in Section 15, Township 24 South, Range 36 East, thence South along said line, 344 feet to the Northeast corner of E. Bergmann land, thence West along the North line of E. Bergmann land to the East bank of the Indian River to the place of beginning

Source: Official Records Book 6056 and Page 1624 of Brevard County

Market Value

"As defined in the Agencies' appraisal regulations, the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a. Buyer and seller are typically motivated;
- b. Both parties are well informed or well advised, and acting in what they consider their own best interests;
- c. A reasonable time is allowed for exposure in the open market;



Definition of the Appraisal Problem

- d. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- e. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."

Source: The Interagency Appraisal and Evaluation Guidelines, Federal Register, Volume 75, No. 237, December 10, 2010, Pgs. 61-62.

Fee Simple Estate

The Dictionary of Real Estate Appraisal, Sixth Edition 2015, by the Appraisal Institute, defines Fee Simple Estate on page 90 as follows:

"Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat."

Exposure Time

The Dictionary of Real Estate Appraisal, Sixth Edition 2015, by the Appraisal Institute, defines Exposure Time on page 83 as follows:

1. "The time a property remains on the market."
2. "The estimated length of time that the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal. Exposure time is a retrospective opinion based on an analysis of past events assuming a competitive and open market."

There is a requirement under Standard Two to report exposure time according to the latest USPAP publication. "Exposure Time" is different for various types of property under different market conditions.

We have reviewed the exposure time on the sales contained in the Sales Comparison Approach in this appraisal. Based on that data and the current market, it is our opinion that the Subject Property would have had an exposure time of 12 to 18 months.



Marketing Time

The Dictionary of Real Estate Appraisal, Sixth Edition 2015, by the Appraisal Institute, defines Marketing Time on page 140 as follows:

"An opinion of the amount of time it might take to sell a real or personal property interest at the concluded market value level during the period immediately after the effective date of an appraisal. Marketing time differs from exposure time, which is always presumed to precede the effective date of an appraisal."

"Advisory Opinion 7 of the Appraisal Standards Board of The Appraisal Foundation and Statement on Appraisal Standards No. 6, "Reasonable Exposure Time in Real Property and Personal Property Market Value Opinions" address the determination of reasonable exposure and marketing time."

As in most markets, properties that are priced competitively and marketed professionally will sell before others which are not. Based on this, the Subject should have a marketing time of 12 to 18 months, provided adequate financing is available, the property is listed for sale at market value and is marketed by a competent brokerage firm.

The date of value was after the global outbreak of a "novel coronavirus" known as COVID-19 was officially declared a pandemic by the World Health Organization (WHO). This recent pandemic could possibly affect marketing time going forward. Again, it is currently unknown what direct, or indirect, effect, if any, this event may have on the national economy, the local economy, or the market in which the subject property is located.



SCOPE OF WORK

According to the 14th Edition of The Appraisal of Real Estate, the Scope of Work is the amount, type, and extent of research needed to solve an appraisal problem. Generally this includes a detailed outline of the steps performed to complete the appraisal assignment and more importantly any ***steps that were not performed*** per request of the client. In the case of the Subject Property, all appropriate valuation techniques were performed. Located below is a summary of the scope work performed.

The first step in the appraisal process involved defining the appraisal problem which included the purpose and date of value, determining the interest being appraised, intended use and user of the appraisal, and identifying the real estate (legal description). This appraisal is reported in an appraisal format as defined by Uniform Standards of Professional Appraisal Practice (USPAP). This step also determined if the appraisal was subject to any extraordinary assumptions or hypothetical conditions. No hypothetical or extraordinary assumptions are part of this appraisal.

The next step involved the inspection of the Subject Property on September 1, 2020 by Curtis L. Phillips, MAI. The effective date of this appraisal is the date of the inspection. The inspection allowed us to understand the physical components of the Subject Property. In addition to the inspection of the Subject Property, we also began the data-collection process and, subsequently, an analysis of the factors that affect the Market Value of the Subject Property including a neighborhood analysis and property data analysis. We gathered and reviewed information from the client, Brevard County Property Appraiser's records, our physical inspection, and the City of Rockledge Planning and Zoning Department as well as other government offices and secondary data sources to understand and describe the Subject Property.

Comparable data was gathered from our files, MLS, LoopNet, CoStar, Public Records, and various sources noted throughout this report. The different publications utilized and persons and titles of persons contacted are listed along with the information given within this appraisal. Confirmation of all sales used within this appraisal was made by contacting local brokers, investors, owners and through physical inspection. Confirmations were with buyers, sellers, property managers, brokers, or attorneys involved with or who had knowledge of the transaction or leasing information. This information is retained in our files and available if necessary.

The third step in the process was to determine the Highest and Best Use of the Subject Property. Through the Highest and Best Use analysis, we determined the issues that have an effect on the final opinion of value. To determine the Highest and Best Use, we relied on information obtained from the data-collection process. In this case the Highest and Best Use of the Subject Property is for the development of an industrial use.

The fourth step was the application of the appropriate method of valuation for vacant land. *No approaches were specifically omitted from this appraisal either by the client*



Scope of Work

or the appraiser. The most reliable way to estimate land value is by the Sales Comparison Approach. When few sales are available or when the value indications produced through sales comparison need additional support, alternative techniques like extraction or allocation may be applied. In the case of the Subject Property, the only approach that was market was the Sales Comparison Approach. Since only one approach to value was used, no reconciliation was needed.



NEIGHBORHOOD ANALYSIS

The relationship of the Subject Property with surrounding properties forms the basis of neighborhood analysis. The Appraisal of Real Estate, 14th Edition on page 165 states: "The boundaries of market areas, neighborhoods, and districts identify the areas that influence a subject property's value. These boundaries may coincide with observable changes in land use or demographic characteristics. Physical features such as structure types, street patterns, terrain, vegetation, and lot sizes help to identify land use districts. Transportation arteries (highways, major streets, and railroads), bodies of water (rivers, lakes, and streams), and changing elevation (hills, mountains, cliffs, and valleys) can also be significant boundaries."

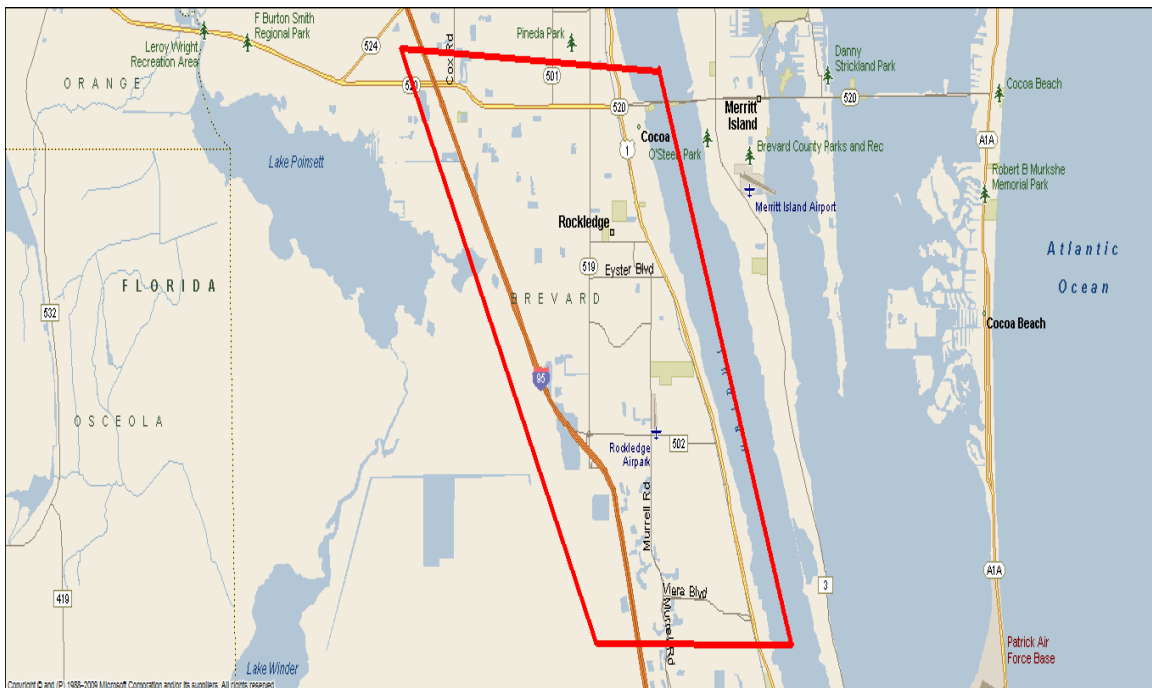
In the case of this appraisal assignment neighborhood boundaries are identified by the physical boundaries and surrounding land uses.

Neighborhood Boundaries

Neighborhood boundaries, as shown on the map below are:

- | | | |
|-------|---|----------------------------------|
| North | - | SR 520 (Merritt Island Causeway) |
| South | - | Viera Boulevard |
| East | - | Indian River |
| West | - | Interstate 95 |

Neighborhood Map





Neighborhood Characteristics

This neighborhood consists of the City of Rockledge and the transition area between Rockledge and Suntree/Viera to the South. Historic Cocoa Village is located at the northeast corner of the neighborhood. The City of Rockledge abuts the Town of Viera to the south. As a result this area has benefited from the growth from that new development. The City of Rockledge is 11 square miles, and is the fourth largest city in Brevard County. It had a population of approximately 26,626 residents in 2015. This is a 31% increase from 2000 when the population was 20,381. The neighborhood is approximately 75% built out. Uses are 60% residential, 20% industrial and 20% commercial.

Major Neighborhood Arteries

The major east/west traffic artery is SR 520 (Merritt Island Causeway). SR 520 in Merritt Island has some of the highest traffic counts in the county at 48,000 average trips per day. SR 520 links the mainland areas of the county to the barrier island areas of Merritt Island and Cape Canaveral/Cocoa Beach, and has an interchange at Interstate 95 before it extends west to Orlando. Secondary east/west traffic arteries in the area include Barton Boulevard, Viera Boulevard, and Barnes Boulevard. These roads originate from US Highway 1 and travel west to connect with Fiske Boulevard, Murrell Road, and Interstate 95. The second I-95 access point to the Subject neighborhood is the Barnes and Fiske Boulevard intersection. Viera Boulevard is planned to have an interchange in the future. Barnes Boulevard is still under construction and being widened.

The major north-south thoroughfares through the Subject neighborhood are U.S. Highway 1, Interstate 95, Murrell Road and Fiske Boulevard. US Highway 1 (known as Rockledge Blvd. in the area) is a major north to south traffic artery within mainland Brevard County. This road generally parallels the Indian River and provides access through the central areas of Rockledge, Cocoa, and Titusville to the north, and Melbourne and Palm Bay to the south. It has been streetscaped and resurfaced. Murrell Road connects with Wickham Road to the south and terminates at Barton Boulevard to the north. It contains a mix of commercial and residential uses. Fiske Boulevard originates at Interstate 95 to the south and terminates at Dixon Boulevard to the north.

Utilities

The neighborhood has availability to water, sewer, telephone, and electricity. The City of Cocoa and Rockledge provide water and sewer. Florida Power & Light Company (FPL) provides electricity, while telephone service is provided by a variety of service providers.



Neighborhood Development

Typical uses in the neighborhood include single-family and townhouse planned unit development, as well as office and retail uses. Industrial uses exist in the neighborhood as well. Barton Boulevard is considered the historical center of Rockledge. Most local government entities are located along Barton Boulevard, including the town hall. Additional uses include standalone retail and retail strip centers, banks, service stations, and restaurants. A significant portion of the neighborhood is devoted to heavy commercial and industrial uses. These uses are located along U.S. Highway 1, the Florida East Coast Railway, State Road 520, Gus Hipp Boulevard and portions of Murrell Road. Several medical uses surround Wuesthoff Hospital along U.S. Highway 1. The Publix anchored shopping center at Rockledge Square provides shopping for the neighborhood. It is located at the southeast corner of Barton Boulevard and Rockledge Boulevard, and it was built in 1985. Another major shopping destination in the neighborhood is located at the intersection of Barnes Boulevard and Murrell Road. It is a Publix anchored shopping center known as Rockledge Crossing.

The residential market is currently in a growth phase. The residential areas in the neighborhood are seeing an increase in median sales price with a decrease in consecutive days on the market.

Commercial growth is occurring. Dollar General and O'Reilly Auto Parts have both built locations along Murrell Road. Dollar General purchased a site in August 2011 for \$310,000, or \$6.78 per square foot. The Dollar General has since been net leased and sold to an investor. O'Reilly Auto Parts purchased a site in August 2012 for \$310,000, or \$7.12 per square foot. Long Dogger's Eateries purchased a 1.19 acre site at the northwest quadrant of Murrell Road and Viera Boulevard during April 2013 for \$275,000, or \$5.31 per square foot. They have constructed a new restaurant at this location. An out parcel to the Riverwalk Plaza at the intersection of Eyster Boulevard and U.S. Highway 1 was developed with a new Dunkin Donuts in 2015.

A multi-story office/retail building was completed southeast of the neighborhood. Tricon Development of Brevard built an 80,000 square foot Class A office known as Riverview Tower at the corner of Suntree Boulevard and U.S. Highway 1. The property was delivered during Fourth Quarter 2016. The property has the first floor as retail, and the remaining four floors are office.

A Wawa was constructed in the northern portion of the neighborhood at the southeast corner of State Road 520 and Fiske Boulevard. The developer demolished the old structures to build the new gas station in 2017.

The neighborhood's residential market is currently in the growth phase. Absorption, sales prices and days on market are all improving. New subdivisions are being developed and formally stalled subdivisions are being built out.



Employment

Wuesthoff Hospital is a privately owned 298-bed medical center that employs 1,400 people. Due to the neighborhoods central location in Brevard County, it has several other employment opportunities in addition to Wuesthoff Hospital. Large corporations have taken up locations in the Melbourne/Palm Bay MSA to the south, including Harris Corporation, Intersil Corporation and Northrop Grumman, Boeing, Embraer GE, DRS and Arco Communications. Other employment opportunities to the north in Cape Canaveral and Titusville include the Kennedy Space Center and Port Canaveral. Blue Origin is expanding at the Space Center and the Port has also been expanding.

Conclusion

The neighborhood is an established area in close proximity to commercial services, major employers, and recreation areas. It is located in Central Brevard County, and it benefits from its proximity to Viera. Overall, the market is currently in a growth phase. The ultimate performance of the Subject neighborhood and its developmental uses will be dependent upon the continued stabilization and improvement of the national and local economies.

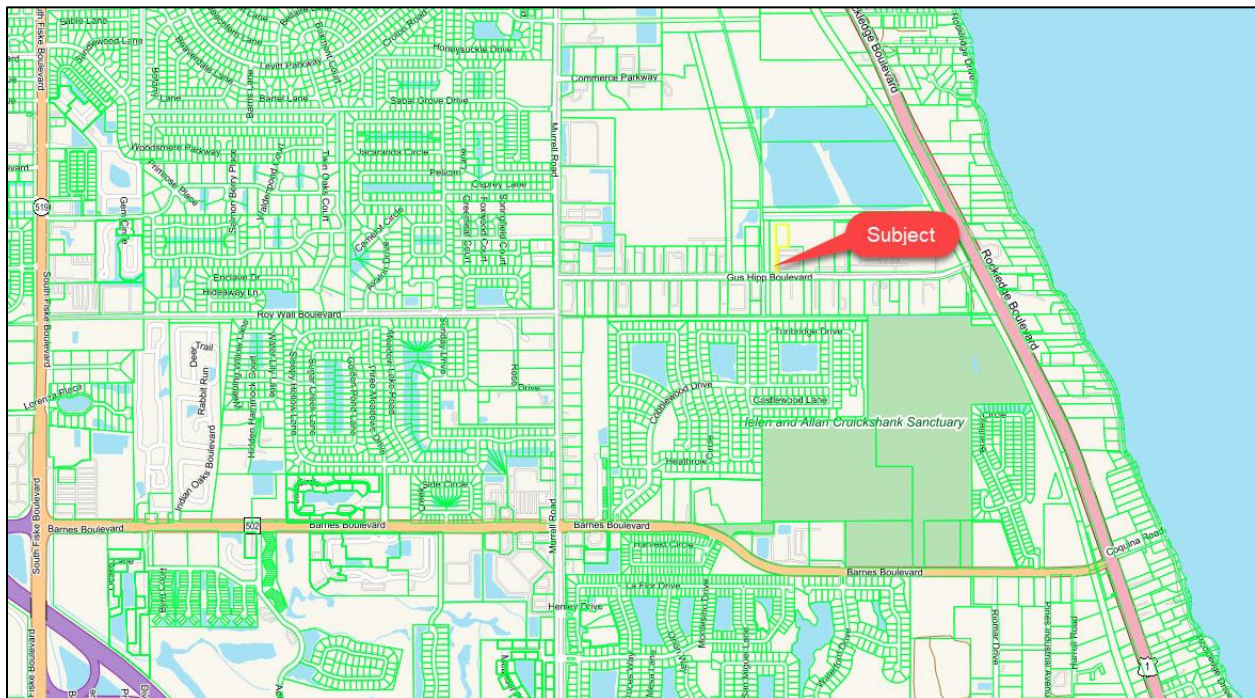


PROPERTY DATA

Location

The Subject Property is located along the north side of Gus Hipp Boulevard between Murrell Road and US Highway 1, with the physical address of 350 Gus Hipp Boulevard in Rockledge, FL.

Location Map



Zoning

The Subject is zoned IP, Industrial Park, by City of Rockledge. This district is composed of lands so situated as to be well adapted in industrial park development. The uses permitted in this zoning district are limited to those administrative, wholesaling and manufacturing activities that can be carried on in a relatively unobtrusive manner. Maximum lot coverage is 80%. Minimum lot area is 20,000 square feet. Front setback is 50 feet, rear setback is 25 feet and side setback is 20 feet. Maximum building height is 35 feet.

Land-Use Plan

The Subject is located in an area designated as Industrial by the Comprehensive Land-Use Plan for the City of Rockledge. The land-use plan and the zoning are consistent.

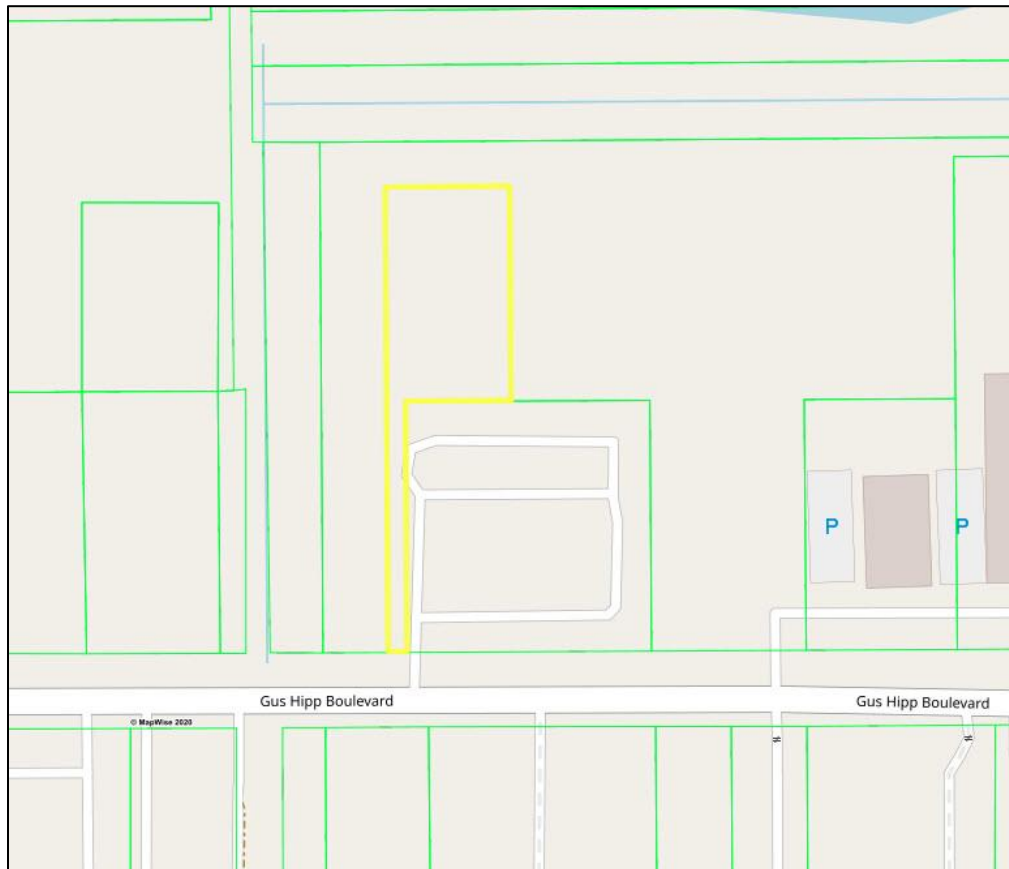


Easements and Deed Restrictions

According to the Public Records there are no known easements, nor encroachments that would negatively affect the Subject Property.

Site Size, Shape, and Access

The Subject Property consists of one legal parcel of record which totals 1.37 acres, or approximately 59,677 square feet. The property has 25 feet of frontage on Gus Hipp Boulevard. The Subject is a flag shaped parcel. Overall, the site size, shape, and access are typical and average. Copies of the recorded plat and the provided boundary survey illustrating the Subject's size and shape are located on the following page.



Utilities

The Subject has direct connection availability to all utilities. Water/sewer lines are available. Electricity is provided by Florida Power and Light, water and sewer services are provided by the City of Cocoa, and telephone and cable services are provided by a variety of providers.



Topography

We were not provided with a topographical survey, wetland identification/delineation or soil boring study of the site. An inspection of public records and aeriels did not indicate adverse issues of this nature. The Subject site is raw land with sparse native vegetation present. The Subject site is generally level and is at the approximate grade or slightly above the neighboring streets and lands with the exception of a small portion located at the northwest corner of the site. The overall site's topographical features are similar to the surrounding properties. Soil types appear to be adequate to support a variety of development scenarios based upon existing surrounding uses.

The Subject Property appears to have a small amount of Freshwater Emergent Wetland located at the northwest corner of the site. Below is a copy of the wetland mapper from the U.S. Fish & Wildlife Service National Wetland Inventory website indicating no wetlands on-site.





Census Tract

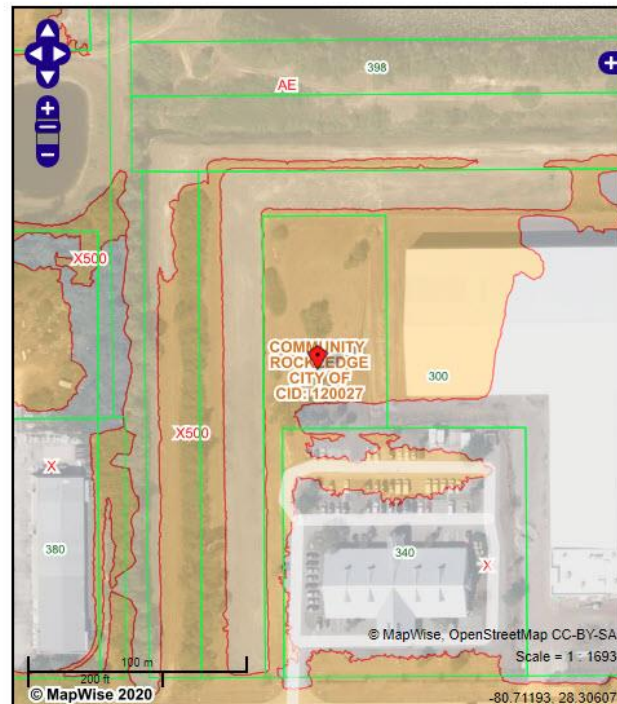
The Subject Property lies within Census Tract 631.04.

Flood Hazard Zone

The Subject Property lies within Flood Zones "X500", "X" & "AE" according to the Flood Insurance Rate Map (Panel Number 12009C0440G) prepared for the National Flood Insurance Program of the U.S. Department of Housing and Urban Development (HUD) dated March 17, 2014. The Subject is primarily designated Flood Zone "X500" and "X" which both indicate areas outside of a special flood zone hazard area. A small portion of the Subject along the west boundary is designated Flood Zone "AE" which indicates areas inundated by 100 year flooding (Flood Map located below).

Flood Report

Address (from parcels)	350 GUS HIPP BLVD NURSRY
FEMA Data Source	DFIRM - Digital Flood Information Rate Map
Inside Special Flood Hazard Area?	OUTSIDE SPECIAL FLOOD HAZARD AREA INSIDE SPECIAL FLOOD HAZARD AREA OUTSIDE SPECIAL FLOOD HAZARD AREA
Risk Level	MODERATE RISK AREAS HIGH RISK AREAS MODERATE TO LOW RISK AREAS
Flood Zone(s)	X500 AE X
Description(s)	X500 = 500-YEAR FLOODPLAIN AE = 100-YEAR FLOODPLAIN X = OUTSIDE FLOODPLAIN
Base Flood Elevation	-9999.000000000 20.700000000 -9999.000000000
NFIP Community Name	ROCKLEDGE, CITY OF
County	BREVARD
State	Florida
NFIP Community Number	120027
NFIP Map Number or Community Panel Number	12009C0440G
Inside CBRA?	FALSE
CBRA Type	N/A
Map Panel Effective Date	3/17/2014
LOMA/LOMR (yes/no)	UNKNOWN - check map
LOMA/LOMR Date	UNKNOWN - check map





2019 Assessed Value and Taxes

2019 Taxes						
Subject Property Parcel Control Number	Land Assessment	Building Assessment	Agricultural Credit	Total Assessment	Non-Ad Valorem Assessments	Total Taxes
24-36-15-00-794	\$53,710	\$0	\$0	\$53,710	\$0.00	\$0.00

The following taxes and assessment indications are based on the Property Appraiser's gross site area. The assessed value for 2019 was \$53,710 or \$0.90 per square foot. However, given that the site is owned by Brevard County no taxes are associated with the property. The reported millage rate is 17.7147 multiplied by the current assessed value of \$53,710 would indicate taxes of \$951.46.

The current assessed value for 2019 of \$53,710 equates to the Subject being assessed for \$0.90 per square foot of site area. Assessed value has been stable over the past three years. Taxes are current and due and payable on March 1st with early payments receiving a maximum discount of 4% in November. Prudent management would take advantage of the maximum discount. Based on our analysis herein, the Subject is well under assessed and taxed and would be re-assessed after any sale occurs.

Property History

A title search was not provided by the client, nor did our office perform one. According to the Brevard County Public Records, the Subject Property is currently under the ownership of Brevard County. According to the Brevard County Public Records, there has been no arm's length transfers of the Subject Property in the past three years. The most recent arm's length transfers occurred on October of 2007 by Warranty Deed from WOB, LLC., grantor, to Brevard County, Florida, as grantee. The recorded sale price was \$308,700, as recorded in Brevard County public records Official Records Book 5820 and Page 6794.

The Subject Property is not currently listed for sale in Loopnet, CoStar, or the Multiple Listing Service



HIGHEST AND BEST USE

The Dictionary of Real Estate Appraisal, Sixth Edition 2015, by the Appraisal Institute defines Highest and Best Use on page 109 as follows:

1. "The reasonably probable use of property that results in the highest value. The four criteria that the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity."
2. "The use of an asset that maximizes its potential and that is possible, legally permissible, and financially feasible. The highest and best use may be for continuation of an asset's existing use or for some alternative use. This is determined by the use that a market participant would have in mind for the asset when formulating the price that it would be willing to bid. (IVS)"
3. "The highest and most profitable use for which the property is adaptable and needed or likely to be needed in the reasonably near future. (Uniform Appraisal Standards for Federal Land Acquisitions)."

Conclusion – As Vacant

It is our opinion that the Highest and Best Use of the Subject Property as vacant is for the development of an industrial use. The reasons for the conclusion are as follows:

1. To our knowledge, the Subject site has no deed restrictions or other legal encumbrances that would limit the utilization of the site to its Highest and Best Use. The Subject Property has a zoning classification of IP, Industrial Park, by the City of Rockledge with consistent future land uses. The Subject's zoning requirements would allow the site to be developed with an industrial use.
2. The Subject Property contains a total of 1.37 gross acres, or 59,677 square feet, according to the Brevard County Property Appraiser website. The Subject Property is a flag shaped shape and has access available from Gus Hipp Boulevard only. The Subject's site size, shape, and access allow for multiple development schemes including industrial development. An industrial use is compatible with surrounding uses and is physically possible.
3. The Subject is located in an area of established development. The market for vacant industrial has shown signs of stability over the recent past. The market demand for industrial uses is demonstrated by the existing industrial base in the immediate area and recent activity within the market. Given the uses which are both legally and physically possible, it is our opinion that the development of an industrial at a reasonable cost development is financially feasible.



4. The maximally productive use of the site is the use that will generate the highest rate of return to the underlying land. In the case of the Subject Property, it is our opinion that the maximally productive use is for the development of an industrial use.



LAND VALUE ANALYSIS

According to The 14th Edition of The Appraisal of Real Estate the valuation of land begins by identifying the real estate and property rights valued, any encumbrances, use restrictions, and the land's physical characteristics. An appraiser can use several techniques to obtain an indication of land value:

- Sales Comparison
- Extraction
- Allocation
- Land Residual
- Ground Rent Capitalization
- Subdivision Development

Usually the most reliable way to estimate land value is by Sales Comparison. When few sales are available, however, or when the value indications produced through sales comparison need additional support, alternative techniques like extraction or allocation may be applied. In the case of the Subject Property the only approach used was the Sales Comparison Approach.

Discussion of Vacant Land Sales

In order to estimate the value of the Subject Property, a search was made for sales and listings of vacant industrial land with similar development potential. The land sales range in size from 1.10 acres to 3.83 acres. The comparables indicated a non-adjusted range from \$1.68 to \$4.35 per square foot.

Details of each comparable and a comparable sales location map are located on the following pages. A sales chart and discussion follow.



Land Sale 1



Property Identification

Record ID	4222
Property Type	Industrial
Address	255 Paint Street, Rockledge, Brevard County, Florida
Tax ID	25-36-35-00-792

Sale Data

Grantor	PHL Group, Inc.
Grantee	Paint Street, LLC
Sale Date	November 26, 2019
Deed Book/Page	8606/2924
Property Rights	Fee
Conditions of Sale	Arm's length
Sale History	None in the past three years.
Sale Price	\$252,200

Land Data

Zoning	IU
Topography	Generally, level
Shape	Rectangular
Landscaping	Cleared
Land Use	Ind

**Land Size Information**

Gross Land Size 1.330 Acres or 57,935 SF

Indicators

Sale Price/Gross Acre \$189,624

Sale Price/Gross SF \$4.35

Remarks

This property consists of 1.33 acres of land that has frontage along both Paint Street as well as Schenck Ave. The site was reported to have environmental, surveys, St. Johns water permits, county permits in place. The Buyer is planning to build a warehouse with office space on the site.



Land Sale 2



Property Identification

Record ID	4223
Property Type	Industrial
Address	TBD Dow Road, Melbourne, Brevard County, Florida
Tax ID	27-36-26-00-261

Sale Data

Grantor	Gulf Mining Company Limited A/K/A Gulf Mining Company S.A.
Grantee	Curtis McKinney
Sale Date	August 12, 2019
Deed Book/Page	8517/2225
Property Rights	Fee
Conditions of Sale	Arm's length
Financing	Cash to Seller
Sale History	None in the past three years.
Sale Price	\$140,000

Land Data

Zoning	IU
Shape	Rectangular
Landscaping	Partially wooded
Land Use	Ind

Land Size Information

Gross Land Size	1.100 Acres or 47,916 SF
------------------------	--------------------------

**Indicators****Sale Price/Gross Acre** \$127,273**Sale Price/Gross SF** \$2.92**Remarks**

This site consists of 1.10 acres that sold in August 2019 for \$140,000. The site was reported to have utilities available and access via Dow Road.



Land Sale 3



Property Identification

Record ID	4224
Property Type	Industrial
Address	3265 N Courtenay Parkway, Merritt Island, Brevard County, Florida
Tax ID	24-36-11-00-262

Sale Data

Grantor	Stefano & Mary Ingoglia, Andrea & Josephine Cassara
Grantee	Frederick Stewart
Sale Date	April 15, 2019
Deed Book/Page	8422/0161
Property Rights	Fee
Conditions of Sale	Arm's length
Financing	Conventional
Sale History	Sold in April 2018 for \$260,000.
Sale Price	\$280,000

Land Data

Zoning	PIP-Planned Industrial Park
Topography	Cleared
Shape	Flag Shaped
Land Use	PI, Planned Industrial

**Land Size Information**

Gross Land Size 3.830 Acres or 166,835 SF

Indicators

Sale Price/Gross Acre \$73,107

Sale Price/Gross SF \$1.68

Remarks

This site consists of 3.83 acres that sold in April of 2019 for \$280,000. The site was reported to not have any approvals for development at the time of the closing. It was reported that the property was bought for investment.



Land Sale 4



Property Identification

Record ID	4225
Property Type	Industrial
Address	460 Cox Road, Cocoa, Brevard County, Florida
Tax ID	24-35-26-00-756

Sale Data

Grantor	Roberta Ann Brown
Grantee	460 Cox, LLC
Sale Date	July 31, 2018
Deed Book/Page	8228/2106
Property Rights	Fee
Conditions of Sale	Arm's length
Financing	Cash
Sale History	None in the past three years.
Sale Price	\$285,000

Land Data

Zoning	Ind
Utilities	Available
Landscaping	Cleared
Land Use	Ind

Land Size Information

Gross Land Size	2.560 Acres or 111,514 SF
------------------------	---------------------------

**Indicators****Sale Price/Gross Acre** \$111,328**Sale Price/Gross SF** \$2.56**Remarks**

This site consists of 2.56 acres that sold in July of 2018 for \$285,000. The property was reported to have been used for tractor trailer storage and is partially fenced. It was reported that the property is currently producing income with a parking lease on a month to month basis.



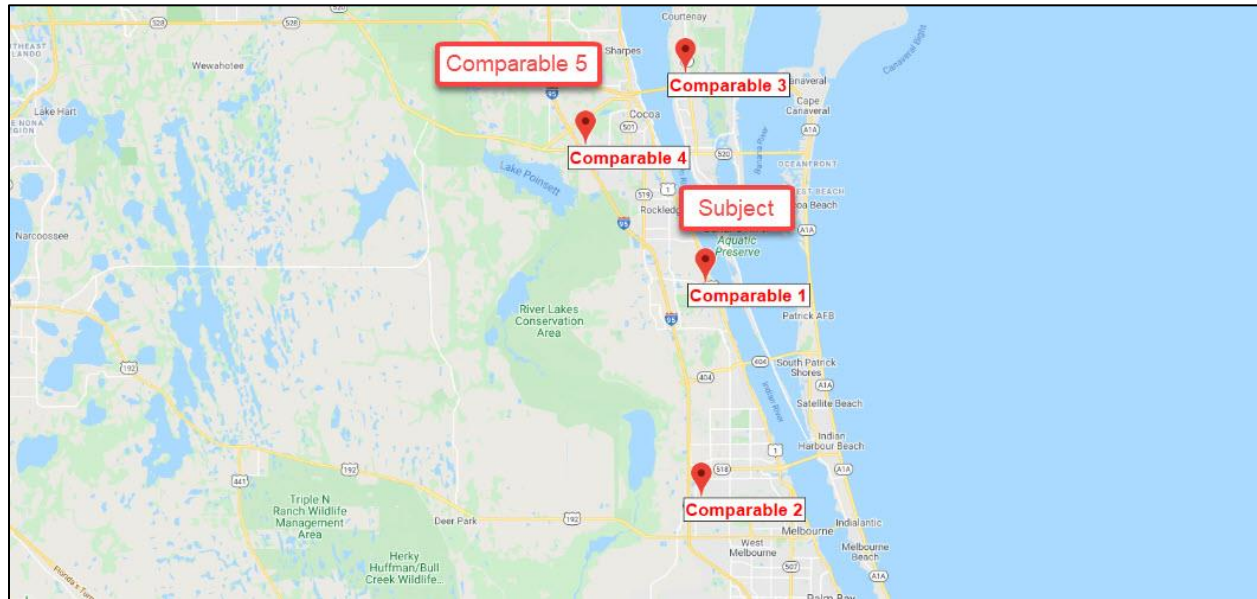
Comparable 5 – Active Listing



This vacant industrial site consists of 2.46 acres that is listed for an asking price of \$450,000 or \$4.20 per square foot. The site is wooded with natural vegetation and has frontage along Grissom Parkway. According to the listing broker the property has had about 6 to 7 inquiries over the past year. The site is reported to have no approvals for development at this time.



Comparable Sales Map





Discussion of Adjustments

All the comparables were analyzed with regard to property rights appraised, financing, conditions of sale, time or market conditions, location, size, site quality, utilities, approvals, and access. A sales chart and a discussion of the factors requiring adjustment are located below.

Vacant Comparable Sales 1.37 - Acres 3350 Gus Hipp Boulevard, Rockledge FL Callaway & Price, Inc. #20-81157						
Sale Number	Subject	1	2	3	4	5
Record ID Number		4222	4223	4224	4225	Active
OR BK/PG		8606/2924	8517/2225	8422/0161	8228/2106	Current
Sale Price		\$252,200	\$140,000	\$280,000	\$285,000	\$450,000
Size - Useable Acres	1.37	1.33	1.10	3.83	2.56	2.46
Size - Sq Ft	59,677	57,935	47,916	166,835	111,514	107,158
Price/Acre		\$189,624	\$127,273	\$73,107	\$111,328	\$182,927
Price/SF		\$4.35	\$2.92	\$1.68	\$2.56	\$4.20
Location	350 Guss Hipp Boulevard	255 Paint Street	TBD Dow Road	3265 N Courtenay Parkway	460 Cox Road	TBD Grissom Parkway
County	Rockledge	Rockledge	Melbourne	Merritt Island	Cocoa	Cocoa
Arm's Length	Yes	Yes	Yes	Yes	Yes	Yes
Property Rights	Fee	Fee	Fee	Fee	Fee	Fee
Date of Sale		Dec-19	Aug-19	Apr-19	Jul-18	Current
Date of Value	Sep-20					
Zoning	IP	IU	IU	PIP	Ind	M2
Future Land Use	Ind	Ind	Ind	PI	Ind	Ind
Conditions of Sale	-	0%	0%	0%	0%	-20%
Market Condition Adj.	-	0%	0%	0%	10%	0%
Adjusted Price Per Acre	-	\$189,624	\$127,273	\$73,107	\$122,461	\$146,341
Adjusted Price Per SF	-	\$4.35	\$2.92	\$1.68	\$2.81	\$3.36
Physical Adjustments						
Location	Rockledge	-5%	0%	10%	0%	0%
Size - Acres	1%	0%	0%	10%	5%	5%
Site Quality/Topography	Cleared	0%	5%	0%	0%	10%
Utilities	Available	0%	0%	0%	0%	0%
Plans and Approvals	None	-10%	0%	0%	0%	0%
Access and Frontage	Gus Hipp Blvd	-5%	0%	0%	0%	0%
Total Physical Adjustment	-	-20.00%	5.00%	20.00%	5.00%	15.00%
Adjusted Price Per Acre	-	\$151,699	\$133,636	\$87,728	\$128,584	\$168,293
Adjusted Price Per SF	-	\$3.48	\$3.07	\$2.01	\$2.95	\$3.86

Price Per SF
Average \$3.08
Minimum \$2.01
Maximum \$3.86
Median \$3.07



Property Rights Conveyed

All the sales in this analysis were transferred on a Fee Simple Estate basis, with the buyers receiving full property rights ownership. We are also unaware of any adverse deed restrictions or any other property rights limitations which would have affected the sales. Therefore, no adjustment was considered necessary for property rights conveyed.

Terms of Financing (Cash Equivalency)

The transaction price of one property may differ from that of a similar property due to atypical financing arrangements. In a case where favorable financing is established, a cash equivalency adjustment is often necessary. However, all of the sales analyzed herein involved either market terms or cash to Grantor. Therefore, no adjustments were made, nor any cash equivalency performed.

Conditions of Sale

Adjustments for conditions of sale usually reflect the motivations of the buyer and seller at the time of conveyance. Within the confirmation process, detailed attention was made to ensure the conditions of each sale. Comparable 5 is a property that is listed for sale and has not yet sold. Therefore, given that in the current market listings rarely sell for the entire asking price Comparable 5 was adjusted downward for conditions of sale.

Time or Changes in Market Conditions

In the absence of sales and re-sales and quality sales data for paired sales analysis, market surveys or substitution methods are relied upon to quantify an appropriate market conditions adjustment. Market conditions generally change over time and may be caused by inflation, deflation, fluctuations in supply and demand, or other factors. The sales occurred from July 2018 to December 2019. These sales were considered to be the best data available. Therefore, given the recent closing dates no adjustments were warranted for time with the exception of Comparable 4 which was adjusted upwards to recognize the market increase since the closing date of July 2018.

Location

The Subject is located along the north side of Gus Hipp Boulevard between US Highway 1 and Murrell Road within the City of Rockledge. All the comparable sales have similar locations and require no adjustment with the exception of Comparables 1 and 3. Comparable 1 is located in an area of Rockledge that is considered superior to the Subjects location and therefore Comparable 1 was adjusted downward for this factor. Additionally, Comparable 3 is located in Merritt Island which is considered inferior to the Subjects location and therefore an upward adjustment was warranted to Comparable 3 for this factor.



Site Size

The Subject Property contains 1.37 acres, or 59,677 square feet. The comparable sales range in size from 1.10 to 3.83 acres. Larger sites tend to sell for less and smaller sites tend to sell for more due to economies of scale. Therefore, Comparables 3, 4, and 5 were adjusted upwards for being larger than the Subject. No adjustments were warranted to Comparables 1 and 2 for this factor.

Site Quality/Topography

The Subject Property is a cleared lot. Comparables 1, 3, and 4 are all also cleared lots and no adjustments were warranted. However, Comparables 2 and 5 both will require some clearing prior to development. Comparable 2 is partially wooded and Comparable 5 is heavily wooded with natural vegetation and therefore would require the added expense of clearing prior to development. Therefore, Comparables 2 and 5 were each adjusted upwards for this factor.

Utilities

The Subject Property has direct availability to all municipal utilities. All of the comparables also have availability to utilities and therefore no adjustments were warranted for this factor.

Plans and Approvals

The Subject Property was reported to not have any approvals for development associated with the site according to the City of Rockledge officials. All of the comparables are similar in this regard with the exception of Comparable 1. Comparable 1 has been reported to have partial approved for development prior to the sale and therefore Comparable 1 is considered superior in this regard and adjusted downward for this factor.

Access/Visibility

The Subject Property is a flag shaped site with little frontage along Gus Hipp Boulevard. Comparable 1 has frontage and access from two different roadways and therefore was adjusted downward for this factor. None of the remaining comparables warranted any adjustments for access.



Conclusion – Land-Value Analysis

As can be seen on the comparable sales chart displayed earlier, the sales indicate an adjusted range from \$2.01 to \$3.86 per square foot with an adjusted average of \$3.08 per square foot and an adjusted median of \$3.07 per square foot. All of the comparables are considered to be good indicators of value, however Comparables 1, 2, 3, and 4 are considered to be the best indicators of value as they are the most recent closed comparables. Comparables 1, 2, 3, and 4 have an adjusted range from \$2.01 to \$3.48 per square foot.

Based on all the information discussed above, it is our opinion that the Market Value of the Subject Property is best represented at \$3.00 per square foot. Therefore, the indicated Market Value of the Subject Property is calculated as follows:

$$\text{\$3.00 Per Sq. Ft.} \times 59,677 \text{ Sq. Ft.} = \$179,032$$

Say, \$180,000

ADDENDA



BOARD OF COUNTY COMMISSIONERS

Public Works Department

2725 Judge Fran Jamieson Way

Building A, Room 201

Viera, Florida 32940

321-617-7202

August 13, 2020

Curtis L. Phillips, MAI, Principal
Callaway and Price, Inc.
1120 Palmetto Avenue
Melbourne, FL 32901
Via email: c.phillips@callawayandprice.com

RE: Notice to Proceed for Work Order 2017-3988-A-006 for 350 Gus Hipp on behalf of Facilities

Dear Mr. Phillips,

This is your Notice to Proceed with appraisal services for the above referenced parcel per the email quote from July 31, 2020 and in accordance with Contract No. 3988.

Your fee for this service shall not exceed \$2,900.00.

Please reference the Work Order number on all invoices and correspondence. No other work is authorized under this Work Order unless directed in writing from this office. This work order is issued from the Appraisal Services Agreement contract no. 3988.

Procurement Approval
Funding: Facilities 0001/201130/5340000

Tammy Thomas-Wood, Support Services Manager
Amounts up to \$5,000

Cc: Lucy Hamelers, Land Acquisition Supervisor
Debbie Cruz, Special Projects Coordinator

QUALIFICATIONS



Professional Designations\Licenses\Certifications

Member, Appraisal Institute, MAI Designation #11762 - July 2001
State-Certified General Real Estate Appraiser #RZ2085
Florida Licensed Real Estate Broker #BK0587137

Professional Experience

Principal, Callaway & Price, Inc. – since January 2002
Appraisal Consultant, Callaway & Price, Inc. - since January 1994
Associate Appraiser, Boutin, Brown & Butler Real Estate Services - 1992 to 1993
Researcher, Callaway & Price, Inc. - May 1990 to August 1990

Qualified As An Expert Witness

Brevard County, Florida & Special Master	Sarasota County, Florida
Indian River County, Florida	Glades County, Florida
Broward County, Florida	Hendry County, Florida
Federal Aviation Adm., Washington, DC	Putnam County, Florida
Federal Court, Orange County	Osceola County, Florida & Special Master
Polk County, Florida	

Education

Bachelor of Science Degree in Real Estate, Florida State University
Associates of Arts Degree, 1990, Brevard Community College

Appraisal Institute:

- Standards of Professional Practice, Part A, August 1993
- Standards of Professional Practice, Part B, August 1993
- Standards of Professional Practice, Part C, November 1998
- Single-Family Construction, August 1994
- Real Estate Evaluations in the Appraisal Industry May 1995
- Advanced Sales Comparison and Cost Approach, June 1995
- Advanced Income Analysis, August 1995
- Highest and Best Use & Market Analysis, October 1995
- Report Writing & Valuation Analysis, April 1996
- Advanced Applications (Case Studies), April 1997
- State of Florida Core Law, November 2008
- Environmental Hazards/Appraising Wetlands, October 2000
- State of Florida Law Update, October 2000
- Appraising Conservation Easements & Less than Fee Interest, October 2000
- Analyzing Commercial Leases, March 2002
- Litigation Appraisal, June 2002
- Attacking & Defending an Appraisal in Litigation, March 2003
- Subdivision Analysis November 2003



Real Estate Finance Value and Investment Performance, September 2006
Appraising the Tough Ones, September 2006
Appraisal Consulting, September 2006
Real Estate Finance, Value & Investments September 2006
Business Practice and Ethics, November 2006

Education - Continued

Florida Appraisal Laws and Regulations, November 2006
IFREC 14 hr CE for Real Estate September 2007
Reviewing Residential Appraisals November 2007
Leadership Development and Advisory Council Appraisal Institute April 2008/2009
Identify & Prevent Real Estate Fraud September 2008
Supervisor Trainee Roles and Rules October 2008
Quality Assurance in Residential Appraisals October 2008
Florida State Law for Real Estate Appraisers October 2008
National USPAP Course November 2008
MLS Brokers Ethics Seminar December 2008, 2015, 2018
Leadership Development and Advisory Council Appraisal Institute 2009 & 2010
Florida Law July 2010
USPAP Update Course July 2010
Supervisor Trainee Roles & Rules July 2010
Condemnation Appraising: Principles & Applications October 2010
Central Florida Valuation June 2011
Appraisal Overview February 2011
Fundamentals of Separating Real, Personal Property & Intangible Business Assets Feb. 2012
Central Florida Real Estate Forum June 2012 & 2013
Florida Law & USPAP Update July 2012
Candidate for Designation Advisor October 2012
Central Florida Real Estate Forum September 2013 , 2015, 2017 & 2018
The Appraiser as an Expert Witness December 2013
Florida Law 2014, 2016, 2018
7-Hour National USPAP Update September 2014, 2016 , 2018
20-Hour Appraisal Review B – FDOT 2016 & 2018
Business Practices & Ethics November 2016 & 2018

Geographic Experience

Throughout Florida; Alabama; Tennessee

Appraising\Consulting Expertise

Acreage/Agricultural	Marinas	Eminent Domain
Bowling Alleys	Office Buildings	
Commercial Buildings	Residences	
Eminent Domain	Retail Buildings	
Environmentally Sensitive Lands	Service Stations	
Feasibility Studies	Shopping Centers	
Foreclosures	Utility Plants	
Hotels	Vacant Land/Ranches	
Industrial	Warehouses	



Low Income Housing Projects

Citrus/Sugarcane


Litigation Appraisal Assignment - Trials


Nanzi vs. Nazi
Florida Community Bank vs. Keenan
PNC V Turtlemound Pointe, LLC
RBC V The Villages
General Development Utilities-vs-Port St. Lucie
Suncoast Parkway
Western Beltway, Osceola and Orange Counties
State Road 60, Indian River County Right-of-Way
State Road 5, Brevard County Right-of-Way
State Road 5, Brevard County Right-of-Way
State Road 600, Osceola County Right-of-Way
State Road 20, Putnam County
State Road 80, Hendry/Glades County
State Road 542, Polk County
State Road 45A Venice By-Pass, Sarasota County
State Road 70, St. Lucie County
Orange County- Various
St. Lucie County – Various
Brevard County-Variou
Indian River County - Various
Martin County-Variou

Organizations and Affiliations

Appraisal Institute, East Florida Chapter, President 2013
Appraisal Institute, East Florida Chapter, Vice-President 2012
Appraisal Institute, East Florida Chapter, Treasurer 2011
Appraisal Institute, East Florida Chapter, Secretary & Regional Representative 2010
Appraisal Institute, East Florida Chapter, Board of Directors 2008-2010
Appraisal Institute, East Florida Chapter, Leadership Advisor and Development Council
Appraisal Institute, National Chapter, Member
Florida State University, Real Estate Society, Member
Brevard County Seminole Boosters
Melbourne/Palm Bay Chamber of Commerce Member
Melbourne/Palm Bay Chamber of Commerce Ambassador, 1998-1999
West Melbourne Business Association
Co-Chairman Right-of-Way Adornment
West Melbourne Business Association, 2000 President



 RICK SCOTT, GOVERNOR


JONATHAN ZACHEM, SECRETARY 

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
FLORIDA REAL ESTATE APPRAISAL BD

THE CERTIFIED GENERAL APPRAISER HEREIN IS CERTIFIED UNDER THE
PROVISIONS OF CHAPTER 475, FLORIDA STATUTES

PHILLIPS, CURTIS L
1120 PALMETTO AVE SUITE 1
MELBOURNE FL 32901

LICENSE NUMBER: RZ2085
EXPIRATION DATE: NOVEMBER 30, 2020
Always verify licenses online at MyFloridaLicense.com



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Professional Designations/Licenses/Certifications

Florida State Certified General Real Estate Appraiser #RZ3241
Florida State Real Estate Sales Associate #SL3044482

Professional Experience

Associate Appraiser, Callaway & Price, Inc. – September 2008 to Present
Appraisal Researcher, Callaway & Price, Inc. – August 2006 – August 2008
Realtor – Coldwell Banker Thomas J. White Realty – January 2003 – July 2005
Neill Real Estate Services, Inc. – October 2005 – Present

Education

Associates of Arts Degree – Indian River Community College
Institute of Florida Real Estate Careers – Sales Associate Pre-Licensing Course
Indian River Community College – Course AB I – Real Estate Residential Appraiser
Williamson's School of Real Estate – Course AB II
Williamson's School of Real Estate – Course AB III
Institute of Florida Real Estate Careers – 15 Hour National USPAP Course – AB IV

Graduate Realtor Institute – Course I
Graduate Realtor Institute – Course II
Florida Realtors School of Real Estate – 14 Hour Residential Continuing Education

Appraising/Research Expertise

Office Buildings	Multifamily Residential
Industrial Buildings	Restaurants
Retail Buildings	Warehouses
Retail Strip Centers	Apartment Complexes
Single-Family Residential	Branch Banks
Vacant Land	Mini-Warehouses
Gas Stations	Hotel/Motels
Subdivisions	
Citrus Groves	
Agricultural Land	

Organizations and Affiliations

Racing on Faith Barrel Racing 4-H Club, Co-Leader
The American Quarter Horse Association
Florida Cracker Trail Association
Fort Pierce Sportfishing Club



RICK SCOTT, GOVERNOR

JONATHAN ZACHEM, SECRETARY



STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

FLORIDA REAL ESTATE APPRAISAL BD

THE CERTIFIED GENERAL APPRAISER HEREIN IS CERTIFIED UNDER THE
PROVISIONS OF CHAPTER 475, FLORIDA STATUTES

IVEY, MELANIE MINTON

2700 S BROCKSMITH ROAD
FORT PIERCE FL 34945

LICENSE NUMBER: RZ3241

EXPIRATION DATE: NOVEMBER 30, 2020

Always verify licenses online at MyFloridaLicense.com



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TITLE	20-81157-with Addenda-signed
FILE NAME	20-81157-with Addenda.pdf
DOCUMENT ID	1cffc1f12412e4bf734d8ea02defabb32536b2f5
AUDIT TRAIL DATE FORMAT	MM / DD / YYYY
STATUS	● Completed

Document History



SENT

09 / 04 / 2020
14:59:47 UTC-5

Sent for signature to CLP (c.phillips@callawayandprice.com) and MMI (m.ivey@callawayandprice.com) from c.waters@callawayandprice.com
IP: 173.9.180.150



VIEWED

09 / 04 / 2020
15:00:45 UTC-5

Viewed by MMI (m.ivey@callawayandprice.com)
IP: 173.9.180.150



SIGNED

09 / 04 / 2020
15:02:15 UTC-5

Signed by MMI (m.ivey@callawayandprice.com)
IP: 173.9.180.150



VIEWED

09 / 04 / 2020
15:28:57 UTC-5

Viewed by CLP (c.phillips@callawayandprice.com)
IP: 97.68.1.110



SIGNED

09 / 04 / 2020
15:30:30 UTC-5

Signed by CLP (c.phillips@callawayandprice.com)
IP: 97.68.1.110



COMPLETED

09 / 04 / 2020
15:30:30 UTC-5

The document has been completed.

**BREVARD COUNTY BOARD OF
COUNTY COMMISSIONERS**

BID DOCUMENT

**COUNTY LAND SALE # 2021-2538438
VACANT COMMERCIAL PROPERTY**

**350 GUS HIPP BOULEVARD
ROCKLEDGE, FLORIDA 32955**

PARCEL INFORMATION

PARCEL IDENTIFICATION	TAX IDENTIFICATION	TOTAL ACRES
25-36-15-00-00794.0-00	2538438	+/- 1.37

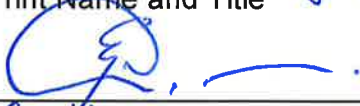
BID SHEET
COUNTY LAND SALE 2021-2538438

TAX ID: 2538438

350 GUS HIPPI BLVD, ROCKLEDGE FL

BID AMOUNT \$ 230,000
(Minimum Bid \$225,000)

NAME Glenn Duncan as Managing Member of
Print Name and Title Aquarius Equity, LLC

SIGNATURE 
Aquarius Equity, LLC, a Florida Limited Liability Company

ADDRESS 300 Gus Hipp Blvd

CITY Rockledge

STATE FL ZIP CODE 32955

PHONE 321.701.3330



Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001

Fax: (321) 264-6972

Kimberly.Powell@brevardclerk.us

September 16, 2020

M E M O R A N D U M

TO: Steven Darling, Central Services Director

RE: Item F.25., Permission to Surplus, Develop, and Advertise for Sale Via Sealed Bidding
1.37 Acres of Vacant Industrial Land Located at 350 Gus Hipp Boulevard, Rockledge

The Board of County Commissioners, in regular session on September 15, 2020, granted you permission to surplus the 1.37 acres of vacant industrial land located at 350 Gus Hipp Boulevard, Rockledge; and authorized Asset Management to develop and advertise for sale via sealed bidding process, with a minimum acceptable bid of \$225,000, the sale of the property.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Kimberly Powell, Clerk to the Board

cc: Asset Management
Finance
Budget



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.12.

2/9/2021

Subject:

Brevard County v. Altman - Approval of Stipulated Final Judgment for Attorney's Fees and Costs at trial for BRP Parcel 174 Alex B. Altman, Roberta M. Altman and Thad Altman

Fiscal Impact:

\$36,004.55

Dept/Office:

County Attorney's Office

Requested Action:

Request the Board approve settling a Defendant's attorney fees and costs at trial for \$36,004.55 and authorize the County Attorney's Office and the County Manager, or designee, to sign or file any necessary documents.

Summary Explanation and Background:

Pursuant to section 73.092(2), Florida Statutes, the County is responsible for attorney's fees and costs incurred by property owners at the trial in this case. The law firm of Harris, Harris, Bauerle, Ziegler, and Lopez represent the Altmans, the property owners and defendants in this case. The law firm submitted records supporting the claim of fees and costs and, after discussion, agreed to settle with a 27 percent reduction in their claims. Given the substantial reduction proposed, staff recommends settlement at \$29,554.00 in fees and \$6,410.55 in costs. This agenda item is to approve that offer, and authorize the County Attorney's Office and the County Manager, or designee, to sign or file any necessary documents.

Clerk to the Board Instructions:

Return a copy of the memo to the County Attorney's Office

IN THE CIRCUIT COURT OF THE EIGHTEENTH JUDICIAL CIRCUIT
IN AND FOR BREVARD COUNTY, FLORIDA

CASE NO. 05-2018-CA-055386-XXXX-XX

BREVARD COUNTY, FLORIDA,
a political subdivision of
the State of Florida,

Petitioner,

vs.

ALEX B. ALTMAN, et al,

Parcel # BRP-174
Alex B. Altman, Roberta M.
Altman, and Thad Altman

Respondents.

**JOINT MOTION FOR STIPULATED FINAL JUDGMENT
AS TO ATTORNEY'S FEES AND COSTS AT TRIAL**

The Petitioner, BREVARD COUNTY, FLORIDA, and the Respondents, ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN, in the above styled case, by and through the undersigned counsel, respectfully move for the entry of the attached Stipulated Final Judgment on this _____ day of _____, 2021.

Office of the County Attorney
2725 Judge Fran Jamieson Way
Building C-Suite #308
Viera, FL 32940
*Attorney for Petitioner,
Brevard County, Florida*

Harris Harris Bauerle Ziegler Lopez
1201 East Robinson Street
Orlando, FL 32801-2115
*Attorney for Respondents,
Altman.*



CHRISTINE SCHVERAK, ESQUIRE
Assistant County Attorney
Fla. Bar No.: 0605336
Christine.Schverak@brevardfl.gov
Karen.Lane@brevardfl.gov
Calvin.Khan@brevardfl.gov

EDGAR LOPEZ, ESQUIRE
Florida Bar No.: 12917
edgar@hhbzflorida.com
GORDON H. HARRIS, ESQUIRE
Florida Bar No.: 94513
stumpy@hhbzflorida.com

IN THE CIRCUIT COURT OF THE EIGHTEENTH JUDICIAL CIRCUIT
IN AND FOR BREVARD COUNTY, FLORIDA

CASE NO. 05-2018-CA-055386-XXXX-XX

BREVARD COUNTY, FLORIDA,
a political subdivision of
the State of Florida,

Petitioner,

vs.

ALEX B. ALTMAN, et al,

Parcel # BRP-174
Alex B. Altman, Roberta M.
Altman, and Thad Altman

Respondents.

**STIPULATED FINAL JUDGMENT AS TO
ATTORNEY'S FEES AND COSTS AT TRIAL**

THIS CAUSE having come on upon a joint motion for the entry of a Stipulated Final Judgment made by the Petitioner, BREVARD COUNTY, FLORIDA, and Respondents, ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN, set forth herein below; and it appearing to the Court that the Parties are authorized to enter into such motion; the Court finds that:

1. Respondents ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN timely filed a Motion for Appellate Attorneys' Fees, Expert Fees and Costs on October 2, 2020 and the Court has entered an order on those matters on December 4, 2020.

2. Claims for trial level attorney fees and costs were submitted to the County, and subsequently, on January 21, 2021, Respondents ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN agreed to settle all additional claims with Petitioner,

BREVARD COUNTY, FLORIDA for an additional sum of \$36,004.55 in trial courts costs and attorney fees.

3. The Parties agree that this stipulated final judgment of \$36,004.55 is to settle all outstanding attorney fee and cost claims in this case, and Respondents ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN stipulate that they waive all rights to any additional compensation for outstanding attorney's fees and costs incurred in Case No. 05-2018-CA-055386 prior to the date of this order.

ADJUDGED that Respondents, ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN, pursuant to the sections 73.091 and 73.092, Florida Statutes, shall have and recover from the Petitioner the sum of Thirty-Six Thousand and Four Dollars and 55/100 (\$36,004.55) to settle all outstanding attorney fee and cost claims between Petitioner BREVARD COUNTY and Respondents ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN, related to this action.

ADJUDGED that upon entry of this Stipulated Final Judgment as to all matters and claims as to ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN, the Petitioner shall, within thirty (30) days, pay Thirty-Six Thousand and Four Dollars and 55/100 (\$36,004.55) to Harris Harris Bauerle Ziegler Lopez, 1201 East Robinson Street, Orlando, Florida 32801-2115 on behalf of Respondents, ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN. Respondents ALEX B. ALTMAN, ROBERTA M. ALTMAN, and THAD ALTMAN stipulate that they waive all rights to any additional attorney fees and costs of any kind arising from Case No. 05-2018-CA-055386 for services performed prior to the date of this order. The above notwithstanding, nothing in this order shall preclude Respondents from later advancing claims for full

compensation, including attorney's fees and costs, if appropriate, incurred after the date of this order, relative to any temporary takings that may be established in connection with the Order of Taking that was previously entered in this action. However, nothing herein shall be deemed to be a finding or any indication that the court has made any ruling or order as to the validity or appropriateness of a temporary takings claim in this case.

It is further ADJUDGED that within five days from the date of eservice of this Order/Judgment, the Petitioner shall:

1. Furnish a copy of this Order/Judgment to each self-represented party by U.S. Mail, first class, postage paid; and
2. File a certificate signed by Petitioner's counsel that delivery of this Order/Judgment has been made as set forth herein.

(Signature Page Follows)

DONE AND ORDERED



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.13.

2/9/2021

Subject:

Brevard County v. Altman - Approval of Stipulated Final Judgment for Attorney's Fees and Costs at trial for BRP Parcels 172 and 173 Daniel Hasratian and Karine Melkounian

Fiscal Impact:

\$51,500

Dept/Office:

County Attorney's Office

Requested Action:

Request the Board approve settling a Defendant's attorney fees and costs at trial for \$51,500 and authorize the County Attorney's Office and the County Manager, or designee, to sign or file any necessary documents.

Summary Explanation and Background:

Pursuant to section 73.092(2), Florida Statutes, the County is responsible for attorney's fees and costs incurred by property owners at the trial in this case. The law firm of Harris, Harris, Bauerle, Ziegler, and Lopez represent the property owners and defendants in this case. The law firm submitted records supporting the claim of fees and costs and, after discussion, agreed to settle with a 27 percent reduction in their claims. Given the substantial reduction proposed, staff recommends settlement at \$51,500. This agenda item is to approve that offer, and authorize the County Attorney's Office and the County Manager, or designee, to sign or file any necessary documents.

Clerk to the Board Instructions:

Return a copy of the memo to the County Attorney's Office

IN THE CIRCUIT COURT OF THE EIGHTEENTH JUDICIAL CIRCUIT
IN AND FOR BREVARD COUNTY, FLORIDA

CASE NO. 05-2018-CA-055386-XXXX-XX

BREVARD COUNTY, FLORIDA,
a political subdivision of
the State of Florida,

Petitioner,

vs.

ALEX B. ALTMAN, et al,

Parcel # BRP-172 and BRP-173
Daniel Hasratian and Karine
Melkounian

Respondents.

**JOINT MOTION FOR STIPULATED FINAL JUDGMENT
AS TO ATTORNEY'S FEES AND COSTS AT TRIAL**

The Petitioner, BREVARD COUNTY, FLORIDA, and the Respondents, DANIEL
HASRATIAN and KARINE MELKOUMIAN, in the above styled case, by and through the
undersigned counsel, respectfully move for the entry of the attached Stipulated Final
Judgment on this _____ day of _____, 2021.

Office of the County Attorney
2725 Judge Fran Jamieson Way
Building C-Suite #308
Viera, FL 32940
*Attorney for Petitioner,
Brevard County, Florida*

Harris Harris Bauerle Ziegler Lopez
1201 East Robinson Street
Orlando, FL 32801-2115
*Attorney for Respondents,
Hasratian and Melkounian.*



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IN THE CIRCUIT COURT OF THE EIGHTEENTH JUDICIAL CIRCUIT
IN AND FOR BREVARD COUNTY, FLORIDA

CASE NO. 05-2018-CA-055386-XXXX-XX

BREVARD COUNTY, FLORIDA,
a political subdivision of
the State of Florida,

Petitioner,

vs.

ALEX B. ALTMAN, et al,

Parcel # BRP-172 and BRP-173
Daniel Hasratian and Karine
Melkounian

Respondents.

**STIPULATED FINAL JUDGMENT AS TO
ATTORNEY'S FEES AND COSTS AT TRIAL**

THIS CAUSE having come on upon a joint motion for the entry of a Stipulated Final Judgment made by the Petitioner, BREVARD COUNTY, FLORIDA, and Respondents, DANIEL HASRATIAN and KARINE MELKOUMIAN, set forth herein below; and it appearing to the Court that the Parties are authorized to enter into such motion; the Court finds that:

1. Respondents DANIEL HASRATIAN and KARINE MELKOUMIAN timely filed a Motion for Appellate Attorneys' Fees, Expert Fees and Costs on October 2, 2020 and the Court has entered an order on those matters on December 4, 2020.

2. Claims for trial level attorney fees and costs were submitted to the County, and subsequently, on January 19, 2021, Respondents DANIEL HASRATIAN and KARINE MELKOUMIAN agreed to settle all additional claims with Petitioner, BREVARD COUNTY, FLORIDA for an additional sum of \$51,500.00 in trial court costs and

attorney fees.

3. The Parties agree that this stipulated final judgment of \$51,500.00 is to settle all outstanding attorney fee and cost claims in this case, and Respondents DANIEL HASRATIAN and KARINE MELKOUMIAN stipulate that they waive all rights to any additional compensation for outstanding attorney's fees and costs incurred in Case No. 05-2018-CA-055386 prior to the date of this order.

ADJUDGED that Respondents, DANIEL HASRATIAN and KARINE MELKOUMIAN, pursuant to the sections 73.091 and 73.092, Florida Statutes, shall have and recover from the Petitioner the sum of Fifty-One Thousand Five Hundred Dollars and no/100 (\$51,500.00) to settle all outstanding attorney fee and cost claims between Petitioner BREVARD COUNTY and Respondents DANIEL HASRATIAN and KARINE MELKOUMIAN, related to this action.

ADJUDGED that upon entry of this Stipulated Final Judgment as to all matters and claims as to DANIEL HASRATIAN and KARINE MELKOUMIAN, the Petitioner shall, within thirty (30) days, pay Fifty-One Thousand Five Hundred Dollars and no/100 (\$51,500.00) to Harris Harris Bauerle Ziegler Lopez, 1201 East Robinson Street, Orlando, Florida 32801-2115 on behalf of Respondents, DANIEL HASRATIAN and KARINE MELKOUMIAN. Respondents DANIEL HASRATIAN and KARINE MELKOUMIAN stipulate that they waive all rights to any additional attorney fees and costs of any kind arising from Case No. 05-2018-CA-055386 for services performed prior to the date of this order. The above notwithstanding, nothing in this order shall preclude Respondents from later advancing claims for full compensation, including attorney's fees and costs, if appropriate, incurred after the date of this order, relative to

any temporary takings that may be established in connection with the Order of Taking that was previously entered in this action. However, nothing herein shall be deemed to be a finding or any indication that the court has made any ruling or order as to the validity or appropriateness of a temporary takings claim in this case.

It is further ADJUDGED that within five days from the date of eservice of this Order/Judgment, the Petitioner shall:

1. Furnish a copy of this Order/Judgment to each self-represented party by U.S. Mail, first class, postage paid; and
2. File a certificate signed by Petitioner's counsel that delivery of this Order/Judgment has been made as set forth herein.

(Signature Page Follows)

DONE AND ORDERED



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.14.

2/9/2021

Subject:

Annual Investment Performance Report Year Ended September 30, 2020

Fiscal Impact:

n/a

Dept/Office:

County Finance Department

Requested Action:

It is requested that the Board of County Commissioners accept the Brevard County Annual Investment Performance Report, for the Year-Ended September 30, 2020.

Summary Explanation and Background:

The County's Investment Advisor, PFM Asset Management, LLC (PFM), has prepared the Annual Investment

Performance Report for year-ended September 30, 2020 as required by Brevard County Investment Policy No. BCC-49. Brevard County Investment Policy No. BCC-49 designates responsibility to the Brevard County Investment Committee, authorized by the County Commission, for providing oversight of the County's investment program.

This report complies with the Board's Investment Policy which is to foremost safeguard the County's funds, insure the availability of operating and capital funds when needed and then an investment return competitive with comparable funds and financial market indices. The overall investment return for the combined long term and short term portfolio was 2.31% which both portfolio's exceeded their benchmark indices. The report reflects the investment activity of the County as a whole and compares the performance with the prior year and established benchmarks. This report does not address the financial condition of the various individual County funds.

The Investment Committee at its meeting on November 13, 2020 approved the attached Investment Report.

County Investment Advisor:

PFM Asset management, LLC; Steve Alexander; (407) 648-2208; email alexanders@pfm.com

Clerk to the Board Instructions:



Brevard County, Florida



Investment Performance Review For the Fiscal Year Ended September 30, 2020

Investment Advisors

PFM Asset Management LLC

Steven Alexander, CTP, CGFO, CPPT, Managing Director
Robert Cheddar, CFA, Chief Credit Officer, Managing Director
Richard Pengelly, CFA, CTP, Director
Sean Gannon, CTP, Senior Analyst
Scott Sweeten, BCM, CFS, Client Relationship Manager

213 Market Street
Harrisburg, PA 17101
717.232.2723
717.233.6073 fax

300 South Orange Avenue
Suite 1170
Orlando, FL 32801
407.648.2208
407.648.1323 fax

Tab I

- Annual Review

Tab V

- Important Disclosures

Tab II

- Executive Summary
- Asset Allocation Chart

Tab III

- Short Term and Bond Portfolio

Tab IV

- Long Term Portfolio
- Multi-Asset Class Management Portfolio

Tab I

Total Portfolio Balances and Interest Earnings

Balances	Book Value	Book Value	Percent Change
<u>Fund Name</u>	<u>as of September 30, 2020</u>	<u>as of September 30, 2019</u>	<u>From FY 2020 - 2019</u>
General Fund	\$42,479,038	\$41,226,720	3.04%
Special Revenue	437,644,185	283,941,613	54.13%
Debt Service	10,063,323	6,522,259	54.29%
Capital Projects	3,694,666	4,568,882	-19.13%
Enterprise	128,270,158	122,908,281	4.36%
Internal Service	57,045,631	63,918,543	-10.75%
Total	\$679,197,001	\$523,086,298	29.84%

Interest Earnings	Interest Earned	Interest Earned	Percent Change
<u>Fund Name</u>	<u>Fiscal Year 2020</u>	<u>Fiscal Year 2019</u>	<u>From FY 2020 - 2019</u>
General Fund	\$1,510,602	\$1,550,318	-2.56%
Special Revenue	7,730,740	6,315,256	22.41%
Debt Service	341,508	260,106	31.30%
Capital Projects	82,817	112,142	-26.15%
Enterprise	2,986,030	2,867,556	4.13%
Internal Service	1,252,495	1,376,917	-9.04%
Total	\$13,904,192	\$12,482,294	11.39%

	Book Value	Market Value
<u>County Total Portfolio</u>	<u>as of September 30, 2020</u>	<u>as of September 30, 2020</u>
Short Term and Bond Portfolio	\$292,613,976	\$292,613,976
Long Term Portfolio	269,799,970	274,970,683
Total	\$562,413,946	\$567,584,659

Short Term and Long Term Portfolios Annual Review Fact Sheet

Ending Balance as of September 30, 2020

Short Term Portfolio Market Value ¹	\$292,613,976
Long Term Portfolio Market Value	274,970,683
Total All Assets	<u>\$567,584,660</u>

Interest Earnings

	<u>Last 12 Months</u>
Total Portfolio Interest Earnings for Fiscal Year 2020	\$13,904,192

Additional Annual Returns in Dollars²**Total Return**

	<u>Last 12 Months</u>
Long Term Portfolio	\$10,668,863
Merrill Lynch 1-3 Year U.S. Treasury Index	9,843,950
Additional Returns over Benchmark	<u>\$824,912</u>

Short Term Portfolio Performance**Yield at Cost**

	<u>Last 12 Months</u>
Short Term Portfolio	0.34%
S&P Rated GIP Index Government 30 Day Gross Yield	0.19%
Performance over the Benchmark	<u>0.15%</u>

Weighted Average Maturity

	<u>As of September 30, 2020</u>
Short Term Portfolio	13 Days
S&P Rated GIP Index Government	30 Days

Long Term Portfolio Performance**Total Return**

	<u>Last 12 Months</u>
Long Term Portfolio	3.88%
Merrill Lynch 1-3 Year U.S. Treasury Index	3.58%
Performance over the Benchmark	<u>0.30%</u>

Effective Duration³

	<u>Fiscal Year End</u>
Long Term Portfolio	1.92 Years
Merrill Lynch 1-3 Year U.S. Treasury Index	1.83 Years

Summary

1. As of September 30, 2020, the County's Portfolio is in compliance with the Investment Policy. The investment composition and allocation is provided on the Asset Allocation Chart in this report.

Notes:

1. The Short Term Portfolio is managed by the County.
2. Based on the fiscal year end balance.

Multi-Asset Class Management Portfolio Annual Review Fact Sheet

Ending Balance as of September 30, 2020

Multi-Asset Class Management Portfolio Market \$25,904,930

Interest Earnings

	Year-to-Date
Total Portfolio Interest Earnings Year-to-Date	\$956,529

Multi-Asset Class Management Portfolio Performance

Year-to-Date

Total Return

Multi-Asset Class Management Portfolio	3.94%
Multi-Asset Class Management Portfolio Benchmark	3.91%
Performance over the Benchmark	0.03%

Sector Allocation Breakout

	Sector Allocation (\$)	Sector Allocation (%)	Benchmark Target (%)	Overweight/ Underweight	Sector Performance Year-to-Date	Benchmark Performance YTD
Domestic Equity	\$11,177,950	43.1%	42.0%	1.1%	7.13%	5.41%
International Equity	6,028,908	23.3%	23.0%	0.3%	-0.04%	-5.44%
Fixed Income	8,698,072	33.6%	35.0%	-1.4%	5.39%	6.79%
Total	\$25,904,930	100.0%	100.0%	0.00%	3.94%	3.91%

Summary

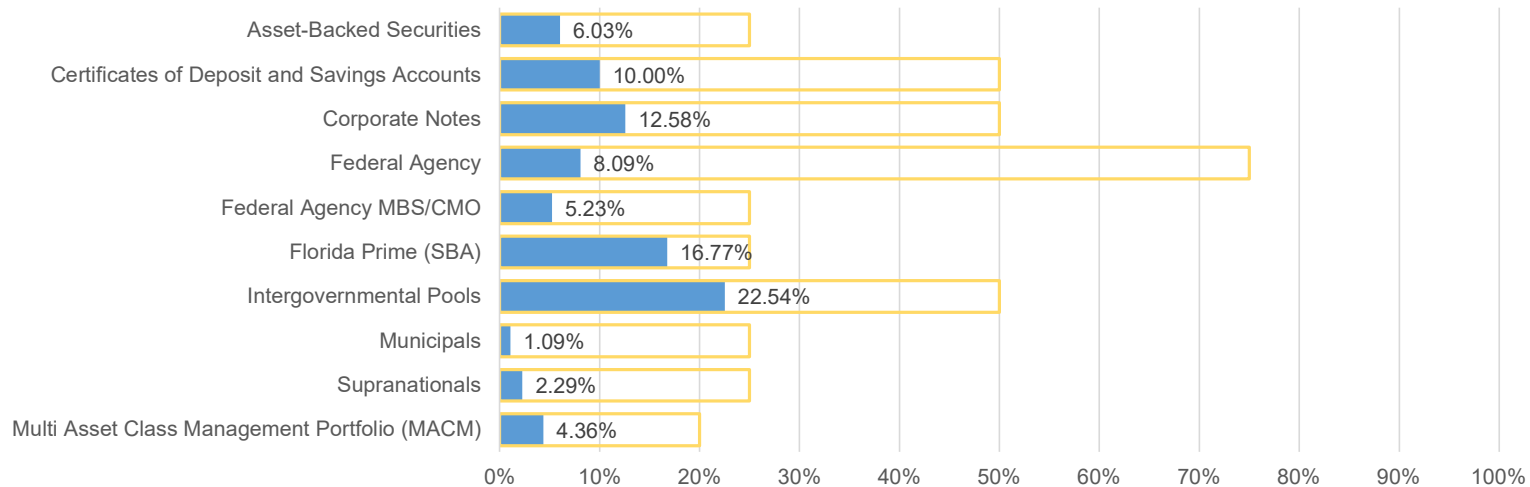
1. As of September 30, 2020, the Multi-Asset Class Management Portfolio is in compliance with the Investment Policy.

Notes:

1. Based on the fiscal year end balance.

Tab II

- The Short Term and Bond Portfolio is of high credit quality and invested in certificates of deposit, Florida Prime (SBA), FL PALM, Florida Fit, and bank accounts.
- The Short Term and Bond Portfolio ended the fiscal year with a yield to maturity at cost of 0.34%, 15 basis points (0.15%) higher than the benchmark yield of 0.19%.
- The Long Term Fund Portfolio is of high credit quality and invested in U.S. Treasury, federal agency/GSE, federal agency/CMO, mortgage-backed, supranational, municipal, asset-backed, and corporate note securities.
- The Long Term Fund Portfolio's annual total return performance of 3.88% outperformed the benchmark performance of 3.58% by 0.30%.
- The Multi-Asset Class Management Portfolio was created during the 4th Quarter of 2018. Calendar year-to-date performance of the portfolio is 3.94%, outperforming the benchmark's performance of 3.91%.
- The Federal Reserve (Fed) continued to play a large role in supporting financial market stability. The central bank re-affirmed its ongoing support of many bond market sectors through its continuing purchase and liquidity programs, and it extended the expiration date of many of its lending facilities. The Fed also extended its forward guidance regarding zero short-term interest rates through 2023.
- The U.S. Treasury yield curve remained low and range-bound after plummeting to all-time lows in the March. All maturities ended the third quarter within 0.05% of where they began. Yields on shorter-term maturities drifted lower as the lack of new fiscal stimulus resulted in lighter Treasury debt issuance. Longer-dated yields inched only slightly higher, nudged primarily by the Fed's new inflation targeting policy. As a result, Treasury index returns were muted for the most recent quarter end.
- Due to the economic uncertainties surrounding the ongoing coronavirus pandemic, we intend on structuring portfolio duration to be neutral relative to their respective benchmarks.



Security Type	Market Value (Includes Interest)	Allocation Percentage	Permitted by Policy	In Compliance
Asset-Backed Securities	35,800,324.11	6.03%	25%	Yes
Bankers' Acceptances	-	-	10%	Yes
Certificates of Deposit and Savings Accounts	59,332,054.04	10.00%	50%	Yes
Commercial Paper	-	-	50%	Yes
Corporate Notes	74,647,439.90	12.58%	50%	Yes
Federal Agency	48,028,691.38	8.09%	75%	Yes
Florida Prime (SBA)	99,524,892.72	16.77%	25%	Yes
Intergovernmental Pools	133,748,350.23	22.54%	50%	Yes
Multi Asset Class Management Portfolio (MACM)	25,904,930.09	4.36%	20%	Yes
Federal Agency MBS/CMO	31,037,210.60	5.23%	25%	Yes
Money Market Funds	-	-	50%	Yes
Municipals	6,447,281.43	1.09%	25%	Yes
Repurchase Agreements	-	-	40%	Yes
Supranationals	13,577,239.84	2.29%	25%	Yes
United States Treasury Securities	65,432,495.86	11.03%	100%	Yes
Total	593,480,910.20	100%		

End of month trade-date market value of portfolio holdings, including accrued interest. Does not include bond proceed funds. Some funds managed by the County.

Sector	Individual Issuer Breakdown	Market Value (Includes Interest)	Allocation Percentage	Permitted by Policy	In Compliance
ASSET-BACKED	ALLY AUTO RECEIVABLES TRUST	306,225.36	0.05%	5%	Yes
ASSET-BACKED	AMERICAN EXPRESS CREDIT ACCOUN	571,796.21	0.10%	5%	Yes
ASSET-BACKED	CAPITAL ONE MULTI-ASSET EXECUT	2,056,434.69	0.35%	5%	Yes
ASSET-BACKED	CNH EQUIPMENT TRUST	2,809,290.28	0.47%	5%	Yes
ASSET-BACKED	FIFTH THIRD AUTO TRUST	332,476.34	0.06%	5%	Yes
ASSET-BACKED	FORD CREDIT AUTO OWNER TRUST	674,916.95	0.11%	5%	Yes
ASSET-BACKED	GM FINANCIAL AUTO LEASING TRUST	1,416,140.46	0.24%	5%	Yes
ASSET-BACKED	GM FINANCIAL SECURITIZED TERM	3,200,004.72	0.54%	5%	Yes
ASSET-BACKED	HARLEY-DAVIDSON MOTORCYCLE TRUST	484,836.88	0.08%	5%	Yes
ASSET-BACKED	HONDA AUTO RECEIVABLES OWNER T	1,887,416.82	0.32%	5%	Yes
ASSET-BACKED	HYUNDAI AUTO RECEIVABLES TRUST	1,179,552.58	0.20%	5%	Yes
ASSET-BACKED	NISSAN AUTO RECEIVABLES OWNER	2,182,587.93	0.37%	5%	Yes
ASSET-BACKED	TOYOTA AUTO RECEIVABLES OWNER	1,807,879.35	0.30%	5%	Yes
ASSET-BACKED	WORLD OMNI AUTO RECEIVABLES TR	2,943,987.32	0.50%	5%	Yes
ASSET-BACKED	CARMAX AUTO OWNER TRUST	2,130,629.23	0.36%	5%	Yes
ASSET-BACKED	JOHN DEERE OWNER TRUST	2,017,725.93	0.34%	5%	Yes
ASSET-BACKED	BMW VEHICLE LEASE TRUST	184,983.62	0.03%	5%	Yes
ASSET-BACKED	MERCEDES-BENZ AUTO LEASE TRUST	903,086.56	0.15%	5%	Yes
ASSET-BACKED	MERCEDES-BENZ AUTO RECEIVABLES	925,401.57	0.16%	5%	Yes
ASSET-BACKED	VOLKSWAGEN AUTO LOAN ENHANCED	1,112,693.65	0.19%	5%	Yes
ASSET-BACKED	FORD CREDIT AUTO LEASE TRUST	824,779.82	0.14%	5%	Yes
ASSET-BACKED	NISSAN AUTO LEASE TRUST	1,213,900.32	0.20%	5%	Yes
ASSET-BACKED	DISCOVER CARD EXECUTION NOTE TRUST	734,219.38	0.12%	5%	Yes
ASSET-BACKED	VOLKSWAGEN AUTO LEASE TRUST	432,805.44	0.07%	5%	Yes
ASSET-BACKED	VERIZON OWNER TRUST	2,764,710.02	0.47%	5%	Yes
ASSET-BACKED	BMW VEHICLE OWNER TRUST	701,842.68	0.12%	5%	Yes
CORPORATE NOTE	AMERICAN EXPRESS CREDIT	2,450,340.14	0.41%	5%	Yes
CORPORATE NOTE	AMERICAN HONDA FINANCE	2,079,997.69	0.35%	5%	Yes
CORPORATE NOTE	APPLE INC	1,775,013.45	0.30%	5%	Yes
CORPORATE NOTE	BRANCH BANKING & TRUST	1,574,081.92	0.27%	5%	Yes
CORPORATE NOTE	CHEVRON CORP	909,158.48	0.15%	5%	Yes
CORPORATE NOTE	CITIGROUP INC	3,045,037.03	0.51%	5%	Yes
CORPORATE NOTE	GOLDMAN SACHS GROUP INC	744,268.81	0.13%	5%	Yes
CORPORATE NOTE	MORGAN STANLEY	1,022,368.11	0.17%	5%	Yes
CORPORATE NOTE	TOYOTA MOTOR CREDIT CORP	1,804,043.03	0.30%	5%	Yes
CORPORATE NOTE	WELLS FARGO BANK NA	1,634,798.19	0.28%	5%	Yes
CORPORATE NOTE	WALT DISNEY COMPANY/THE	562,979.45	0.09%	5%	Yes
CORPORATE NOTE	JOHN DEERE CAPITAL CORP	1,878,721.56	0.32%	5%	Yes
CORPORATE NOTE	WESTPAC BANKING CORP NY	890,819.25	0.15%	5%	Yes
CORPORATE NOTE	CATERPILLAR FINANCIAL SERVICES CORP	2,890,533.07	0.49%	5%	Yes
CORPORATE NOTE	EXXON MOBIL CORP	719,456.21	0.12%	5%	Yes
CORPORATE NOTE	NATIONAL RURAL UTIL COOP	884,686.05	0.15%	5%	Yes

BREVARD COUNTY, FLORIDA

Asset Allocation

Sector	Individual Issuer Breakdown	Market Value (Includes Interest)	Allocation Percentage	Permitted by Policy	In Compliance
CORPORATE NOTE	PACCAR FINANCIAL CORP	1,258,897.71	0.21%	5%	Yes
CORPORATE NOTE	PEPSICO INC	653,530.78	0.11%	5%	Yes
CORPORATE NOTE	UNILEVER CAPITAL CORP	586,331.31	0.10%	5%	Yes
CORPORATE NOTE	UNITED PARCEL SERVICE	1,303,020.74	0.22%	5%	Yes
CORPORATE NOTE	BANK OF AMERICA CORP	3,194,731.38	0.54%	5%	Yes
CORPORATE NOTE	BOEING CO	893,577.52	0.15%	5%	Yes
CORPORATE NOTE	HOME DEPOT INC	365,667.87	0.06%	5%	Yes
CORPORATE NOTE	MERCK & CO INC	828,902.93	0.14%	5%	Yes
CORPORATE NOTE	PFIZER INC	1,520,740.14	0.26%	5%	Yes
CORPORATE NOTE	ROYAL BANK OF CANADA NY	2,093,190.61	0.35%	5%	Yes
CORPORATE NOTE	3M COMPANY	1,416,486.39	0.24%	5%	Yes
CORPORATE NOTE	WAL-MART STORES INC	1,369,850.72	0.23%	5%	Yes
CORPORATE NOTE	CHARLES SCHWAB CORP	1,233,300.13	0.21%	5%	Yes
CORPORATE NOTE	JPMORGAN CHASE & CO	2,872,959.64	0.48%	5%	Yes
CORPORATE NOTE	BANK OF MONTREAL CHICAGO	2,391,493.90	0.40%	5%	Yes
CORPORATE NOTE	BANK OF NOVA SCOTIA HOUSTON	4,110,969.86	0.69%	5%	Yes
CORPORATE NOTE	CANADIAN IMP BK COMM NY	303,582.30	0.05%	5%	Yes
CORPORATE NOTE	GLAXOSMITHKLINE CAPITAL	1,795,965.37	0.30%	5%	Yes
CORPORATE NOTE	LLOYDS BANK PLC	1,685,230.47	0.28%	5%	Yes
CORPORATE NOTE	SANTANDER UK PLC	1,332,599.23	0.22%	5%	Yes
CORPORATE NOTE	TORONTO DOMINION BANK	3,803,087.75	0.64%	5%	Yes
CORPORATE NOTE	MITSUBISHI UFJ FIN GRP	1,993,780.56	0.34%	5%	Yes
CORPORATE NOTE	US BANK NA CINCINNATI	695,136.61	0.12%	5%	Yes
CORPORATE NOTE	TOTAL CAPITAL SA	1,424,291.79	0.24%	5%	Yes
CORPORATE NOTE	HONEYWELL INTERNATIONAL	1,733,154.52	0.29%	5%	Yes
CORPORATE NOTE	BANK OF NY MELLON CORP	3,359,721.75	0.57%	5%	Yes
CORPORATE NOTE	AMAZON.COM INC	1,353,498.00	0.23%	5%	Yes
CORPORATE NOTE	COMCAST CORP	700,566.94	0.12%	5%	Yes
CORPORATE NOTE	BURLINGTN NORTH SANTA FE	716,364.13	0.12%	5%	Yes
CORPORATE NOTE	ADOBE INC	247,914.56	0.04%	5%	Yes
CORPORATE NOTE	ELI LILLY & CO	624,697.67	0.11%	5%	Yes
CORPORATE NOTE	SHELL INTERNATIONAL FIN	1,917,894.18	0.32%	5%	Yes
MBS / CMO	FANNIE MAE	12,717,571.18	2.14%	25%	Yes
MBS / CMO	FHLMC MULTIFAMILY STRUCTURED P	8,571,687.26	1.44%	25%	Yes
MBS / CMO	FREDDIE MAC	6,916,880.00	1.17%	25%	Yes
MBS / CMO	FANNIEMAE-ACES	2,831,072.16	0.48%	25%	Yes
US TSY BOND/NOTE	UNITED STATES TREASURY	65,432,495.86	11.03%	100%	Yes
SUPRANATL	ASIAN DEVELOPMENT BANK	8,103,530.67	1.37%	5%	Yes
SUPRANATL	INTER-AMERICAN DEVELOPMENT BANK	1,410,695.84	0.24%	5%	Yes
SUPRANATL	AFRICAN DEVELOPMENT BANK	4,063,013.33	0.68%	5%	Yes
FED AGY BOND/NOTE	FANNIE MAE	13,509,368.54	2.28%	40%	Yes
FED AGY BOND/NOTE	FREDDIE MAC	34,519,322.84	5.82%	40%	Yes

BREVARD COUNTY, FLORIDA

Asset Allocation

Sector	Individual Issuer Breakdown	Market Value (Includes Interest)	Allocation Percentage	Permitted by Policy	In Compliance
MUNI BOND/NOTE	NEW YORK NY	2,526,041.67	0.43%	5%	Yes
MUNI BOND/NOTE	CONNECTICUT ST	300,929.78	0.05%	5%	Yes
MUNI BOND/NOTE	FLORIDA ST BRD OF ADMIN FIN CO (MARYLAND	685,593.56	0.12%	5%	Yes
MUNI BOND/NOTE	ST	1,004,577.78	0.17%	5%	Yes
MUNI BOND/NOTE	MISSISSIPPI ST	373,434.27	0.06%	5%	Yes
MUNI BOND/NOTE	PORT AUTH OF NY/NJ TXBL REV BONDS	1,556,704.37	0.26%	5%	Yes
FLORIDA PRIME (SBA)	FLORIDA PRIME (SBA)	99,524,892.72	16.77%	25%	Yes
CD / SAVINGS ACCOUNT	BANK UNITED CERTIFICATE OF DEPOSIT	30,417,288.08	5.13%	50%	Yes
INTERGOVERNMENTAL POOLS	FLFIT	67,278,228.20	11.34%	25%	Yes
CD / SAVINGS ACCOUNT	SUNTRUST BANK ACCOUNT	6,464,926.12	1.09%	50%	Yes
CD / SAVINGS ACCOUNT	BANK UNITED MONEY MARKET ACCOUNT	22,449,839.84	3.78%	50%	Yes
MACM	MULTI-ASSET CLASS MANAGEMENT PORTFOLIO	25,904,930.09	4.36%	20%	Yes
INTERGOVERNMENTAL POOLS	FL PALM	66,470,122.03	11.20%	25%	Yes
Total		593,480,910.20	100.00%		

End of month trade-date market value of portfolio holdings, including accrued interest. Does not include bond proceed funds. Some funds managed by the County.

Tab III

Short Term and Bond Portfolio Yields

Yields^{1,2} <u>Security Type</u>	<u>Yield at Cost as of</u> <u>September 30, 2020</u>	<u>Percent of Portfolio</u> <u>September 30, 2020</u>	<u>Yield at Cost as of</u> <u>September 30, 2019</u>	<u>Percent of Portfolio</u> <u>September 30, 2019</u>
Florida PRIME (SBA)	0.33%	34.01%	2.31%	28.54%
SunTrust Bank Account ⁴	0.35%	2.21%	1.50%	3.10%
PFM FL PALM	0.29%	19.30%	2.26%	15.17%
PFM FL PALM - Term	0.32%	3.42%	2.11%	10.12%
Bank United Money Market Fund	0.30%	7.67%	2.20%	7.27%
Florida FIT	0.41%	22.99%	2.26%	25.57%
Bank United CD	0.35%	10.40%	2.51%	10.23%
Total Average Yield²	0.34%	100.00%	2.26%	100.00%

<u>Benchmarks</u>	<u>September 30, 2020</u>	<u>September 30, 2019</u>
S&P Rated GIP Index Government 30 Day Yield ³	0.19%	2.20%

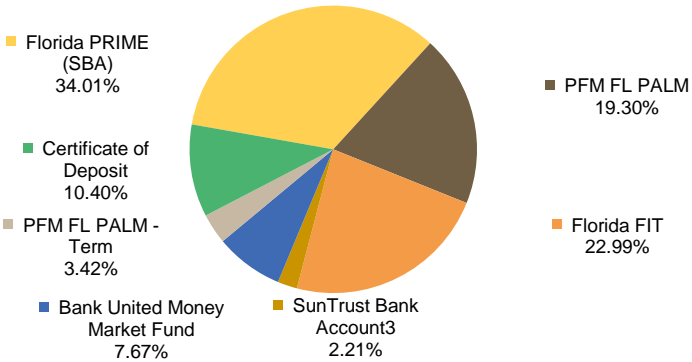
Notes:

1. Yields are presented as "Yield on Cost" pursuant to the County's Investment Policy Performance Section for short-term securities and compared to the benchmark which is the Standard & Poor's GIP 30 Day Index.
2. Yield on cost is a dollar weighted yield.
3. Monthly yield, gross of fees. Source Standard & Poor's Financial Institutions Ratings.
4. Bank Deposits in excess of \$250,000 are collateralized under Florida State Statute 280 with U.S. Government and U.S. Government Agency securities, including Mortgage Backed Securities.

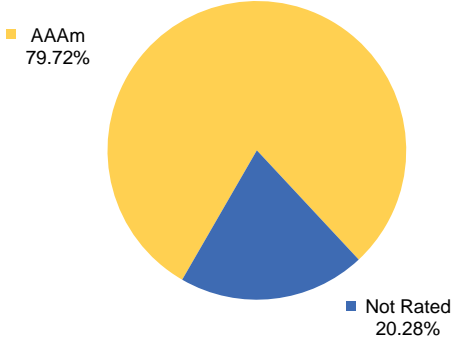
Short Term and Bond Portfolio Composition (Market Value)

Security Type ¹	Balance as of September 30, 2020	Percent of Portfolio	Balance as of September 30, 2019	Percent of Portfolio
Florida PRIME (SBA)	\$99,524,893	34.01%	\$85,077,429	28.54%
PFM FL PALM	56,470,122	19.30%	45,218,213	15.17%
Florida FIT	67,278,228	22.99%	76,214,353	25.57%
SunTrust Bank Account ³	6,464,926	2.21%	9,229,818	3.10%
Bank United Money Market Fund	22,449,840	7.67%	21,685,985	7.27%
PFM FL PALM - Term	10,008,679	3.42%	30,182,475	10.12%
Certificate of Deposit	30,417,288	10.40%	30,505,274	10.23%
Totals	\$292,613,976	100.00%	\$298,113,548	100.00%

Portfolio Composition
as of September 30, 2020¹



Credit Quality Distribution
as of September 30, 2020²



Notes:

- Investment balances are market values as of September 30, 2020.
- Credit rating of securities held in portfolio. Standard & Poor's is the source of the credit ratings. The SBA Fund B and Bank Deposits are not rated.
- Bank Deposits in excess of \$250,000 are collateralized under Florida State Statute 280 with U.S. Government and U.S. Government Agency securities, including Mortgage Backed Securities.

Short Term and Bond Portfolio Holdings and Yields¹ as of September 30, 2020

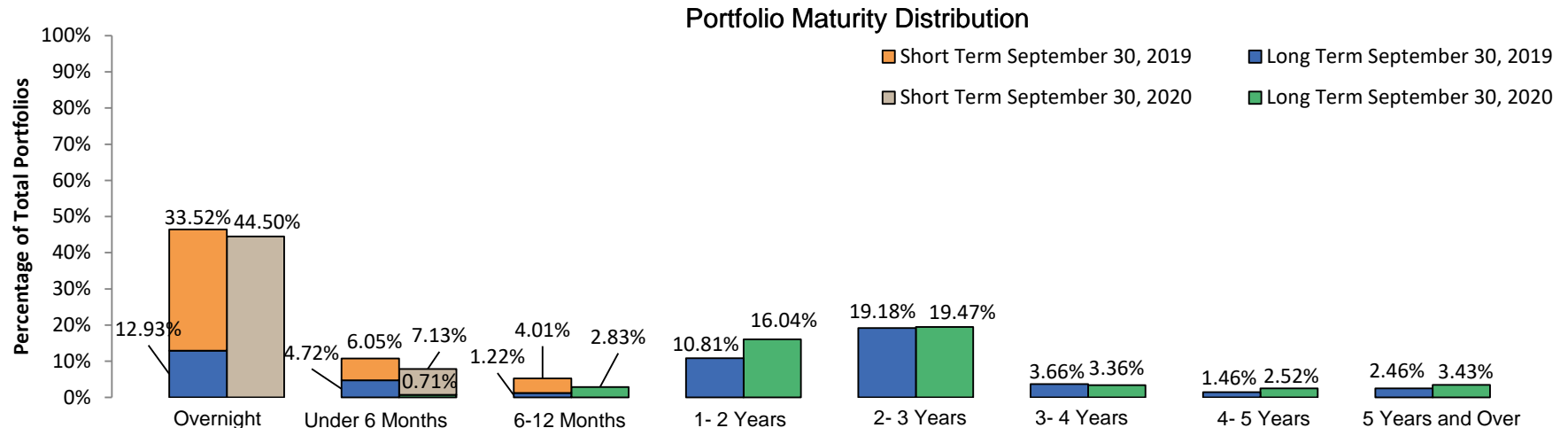
Security Description	CUSIP	Purchase Date	Maturity Date	Par Value	Book Amount	Market Value	Yield on Cost ²
Florida Prime (SBA)				\$ 99,524,893	\$ 99,524,893	\$ 99,524,893	0.33%
PFM FL PALM				\$ 56,470,122	\$ 56,470,122	\$ 56,470,122	0.29%
PFM FL PALM - Term			12/20/20	\$ 10,008,679	\$ 10,008,679	\$ 10,008,679	0.32%
Florida FIT				\$67,278,228	\$67,278,228	\$67,278,228	0.41%
SunTrust Bank Account3				6,464,926	6,464,926	6,464,926	0.35%
Bank United CD	1815043014	8/20/2020	11/24/2020	20,236,496	20,236,496	20,236,496	0.35%
Bank United CD	1815057503	8/8/2020	2/24/2021	10,180,792	10,180,792	10,180,792	0.35%
Bank United Money Market Fund				22,449,840	22,449,840	22,449,840	0.30%
Grand Total				\$ 292,613,976	\$292,613,976	\$ 292,613,976	0.34%

Notes:

1. Yields are presented as "Yield on Cost" pursuant to the County's Investment Policy Performance Section for short-term securities and compared to the benchmark which is the Standard & Poor's GIP 30 Day Index.
2. Yield on Cost is a dollar weighted yield.
3. Bank Deposits in excess of \$250,000 are collateralized under Florida State Statute 280 with U.S. Government and U.S. Government Agency securities, including Mortgage Backed Securities.

Long Term and Short Term Fund Portfolios Maturity Distribution

<u>Maturity Distribution¹</u>	<u>September 30, 2020</u>	<u>September 30, 2019</u>
Overnight (Money Market Fund)	\$252,188,009	\$237,425,799
Under 6 Months	44,455,811	55,025,600
6 - 12 Months	16,053,955	26,688,398
1 - 2 Years	90,936,877	55,239,171
2 - 3 Years	110,340,179	98,015,976
3 - 4 Years	19,051,228	18,704,201
4 - 5 Years	14,274,433	7,477,420
5 Years and Over	19,466,445	12,568,882
Totals	\$566,766,936	\$511,145,445



Notes:

1. Callable securities in portfolio are included in the maturity distribution analysis to their stated maturity date, although they may be called prior to maturity.

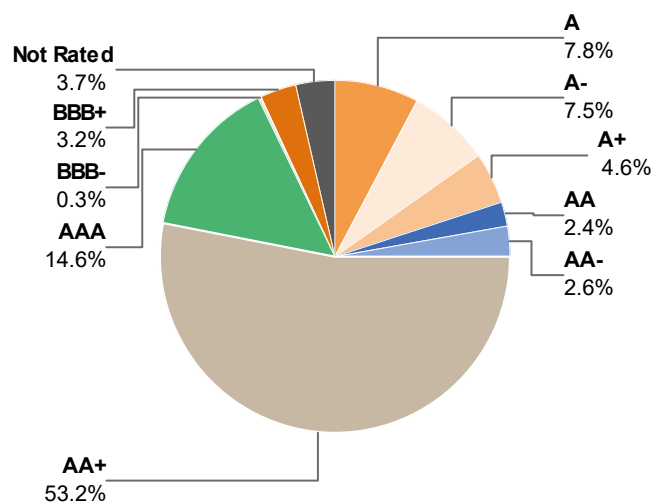
Tab IV

Portfolio Statistics

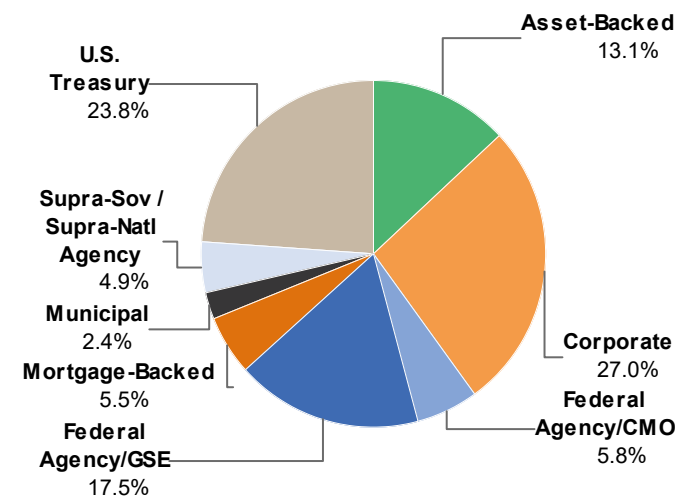
As of September 30, 2020

Par Value:	\$268,846,548
Total Market Value:	\$274,970,683
Security Market Value:	\$274,152,959
Accrued Interest:	\$817,724
Cash:	-
Amortized Cost:	\$269,799,970
Yield at Market:	0.49%
Yield at Cost:	1.47%
Effective Duration:	1.92 Years
Average Maturity:	2.60 Years
Average Credit: *	AA

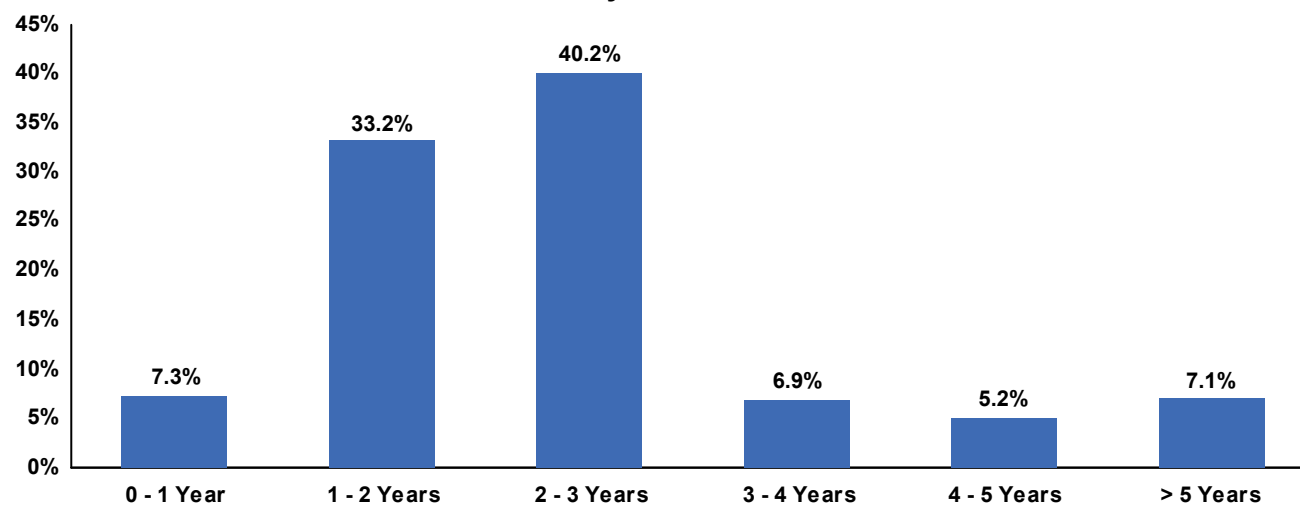
Credit Quality (S&P Ratings)



Sector Allocation



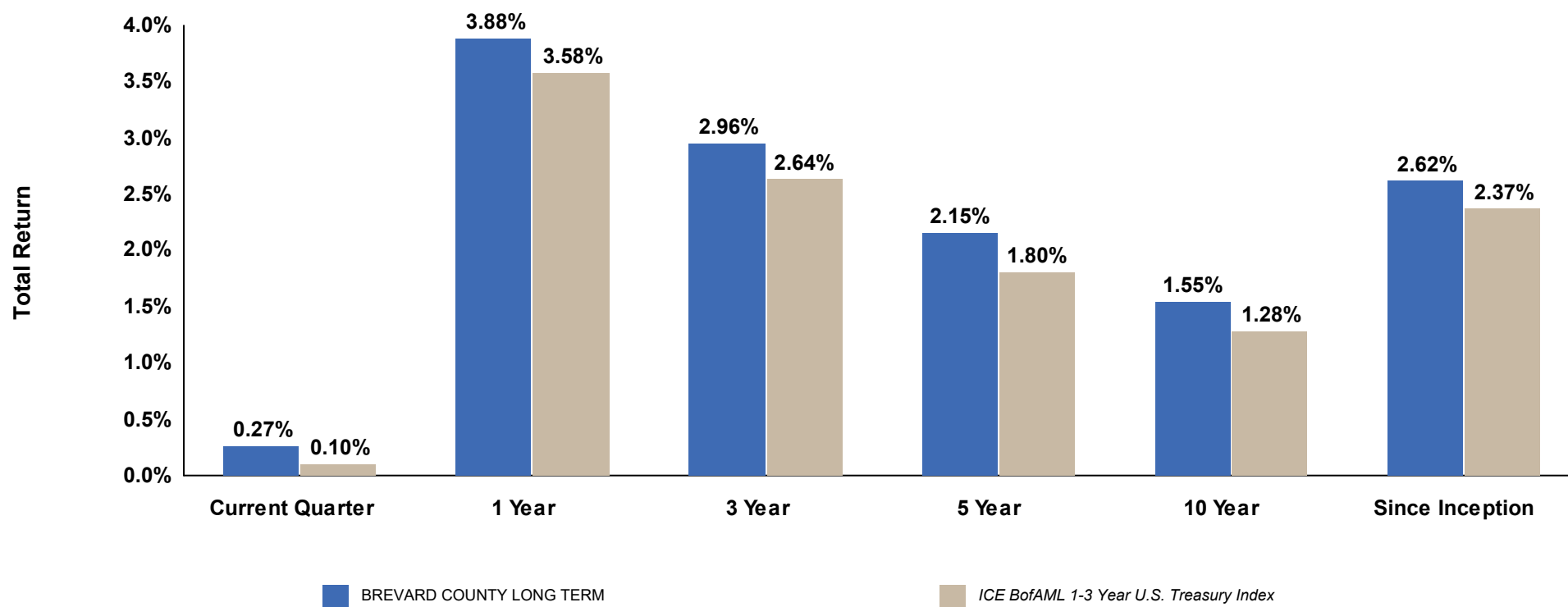
Maturity Distribution



* An average of each security's credit rating assigned a numeric value and adjusted for its relative weighting in the portfolio.

Portfolio Performance (Total Return)

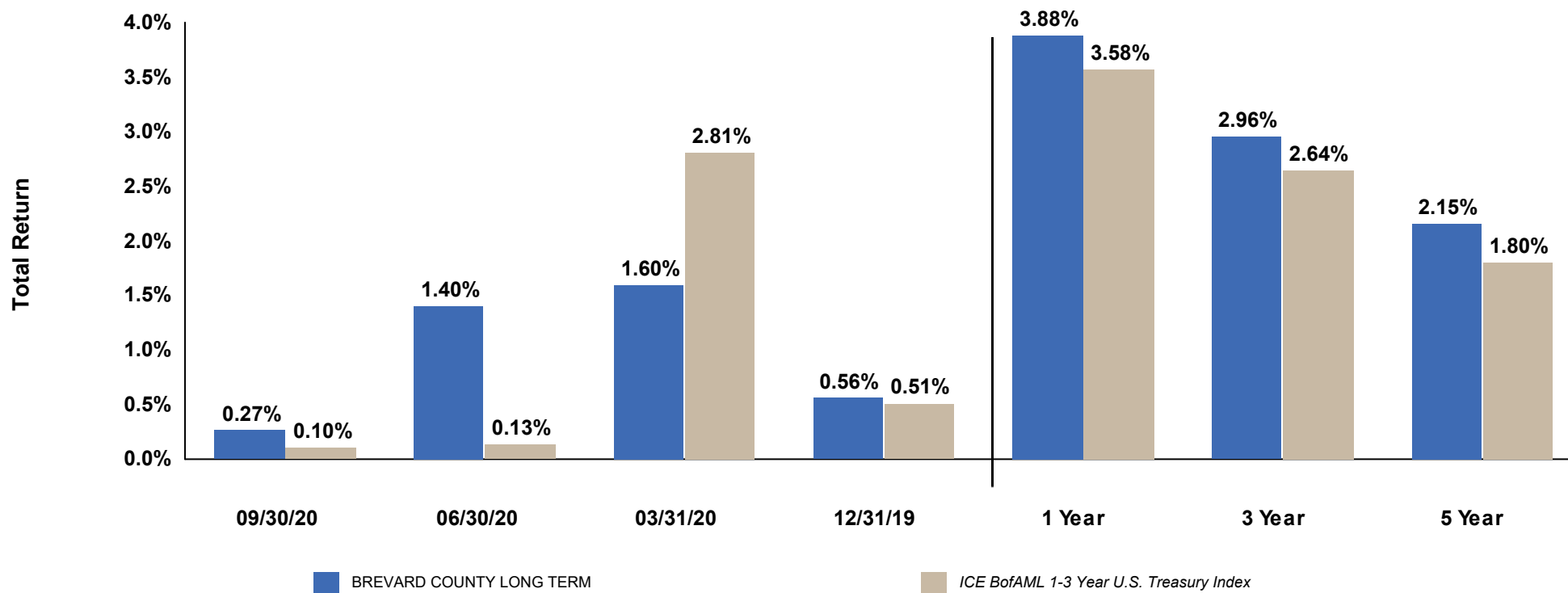
Portfolio/Benchmark	Effective Duration	Current Quarter	Annualized Return				
			1 Year	3 Year	5 Year	10 Year	Since Inception (03/31/02) **
BREVARD COUNTY LONG TERM	1.92	0.27%	3.88%	2.96%	2.15%	1.55%	2.62%
ICE BofAML 1-3 Year U.S. Treasury Index	1.83	0.10%	3.58%	2.64%	1.80%	1.28%	2.37%
Difference		0.17%	0.30%	0.32%	0.35%	0.27%	0.25%



Portfolio performance is gross of fees unless otherwise indicated. **Since Inception performance is not shown for periods less than one year.

Portfolio Performance (Total Return)

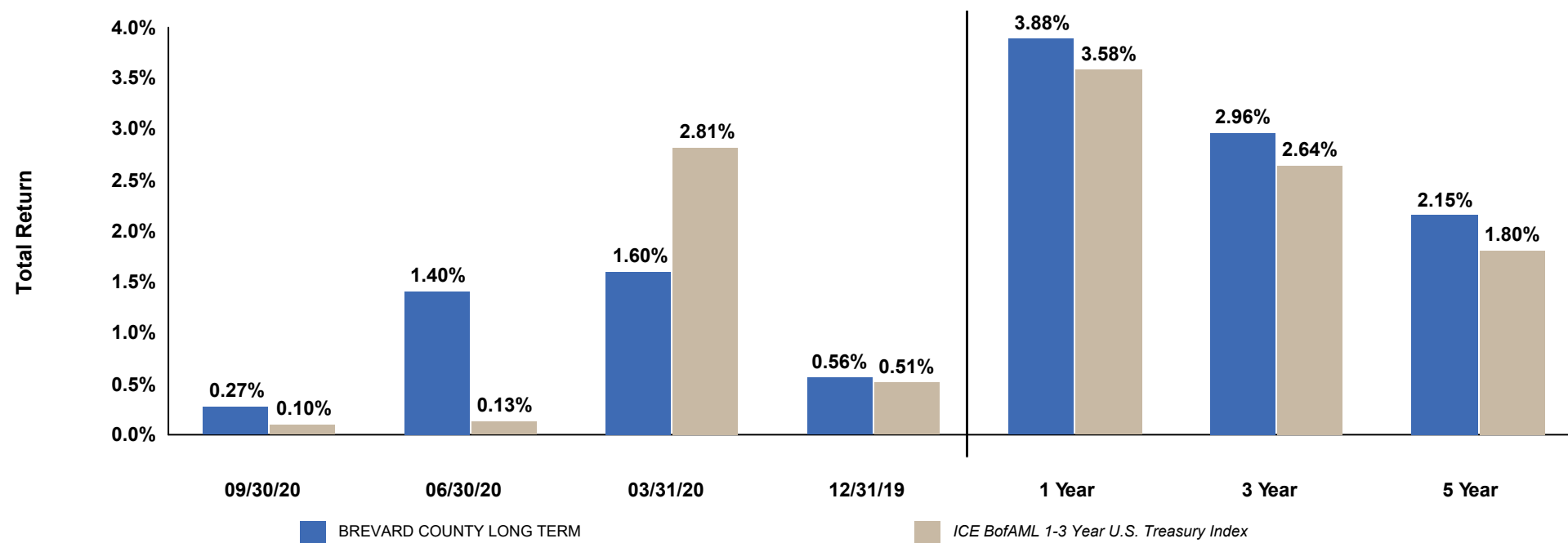
Portfolio/Benchmark	Effective Duration	Quarter Ended				1 Year	Annualized Return	
		09/30/20	06/30/20	03/31/20	12/31/19		3 Year	5 Year
BREVARD COUNTY LONG TERM	1.92	0.27%	1.40%	1.60%	0.56%	3.88%	2.96%	2.15%
ICE BofAML 1-3 Year U.S. Treasury Index	1.83	0.10%	0.13%	2.81%	0.51%	3.58%	2.64%	1.80%
Difference		0.17%	1.27%	-1.21%	0.05%	0.30%	0.32%	0.35%



Portfolio performance is gross of fees unless otherwise indicated.

Portfolio Performance (Total Return)

Portfolio/Benchmark	Effective Duration	Quarter Ended				Annualized Return		
		09/30/20	06/30/20	03/31/20	12/31/19	1 Year	3 Year	5 Year
BREVARD COUNTY LONG TERM	1.92	0.27%	1.40%	1.60%	0.56%	3.88%	2.96%	2.15%
<i>Net of Fees **</i>	-	0.25%	1.38%	1.58%	0.54%	3.81%	2.89%	2.09%
ICE BofAML 1-3 Year U.S. Treasury Index	1.83	0.10%	0.13%	2.81%	0.51%	3.58%	2.64%	1.80%
Difference (Gross)		0.17%	1.27%	-1.21%	0.05%	0.30%	0.32%	0.35%
Difference (Net)		0.15%	1.25%	-1.23%	0.03%	0.23%	0.25%	0.29%



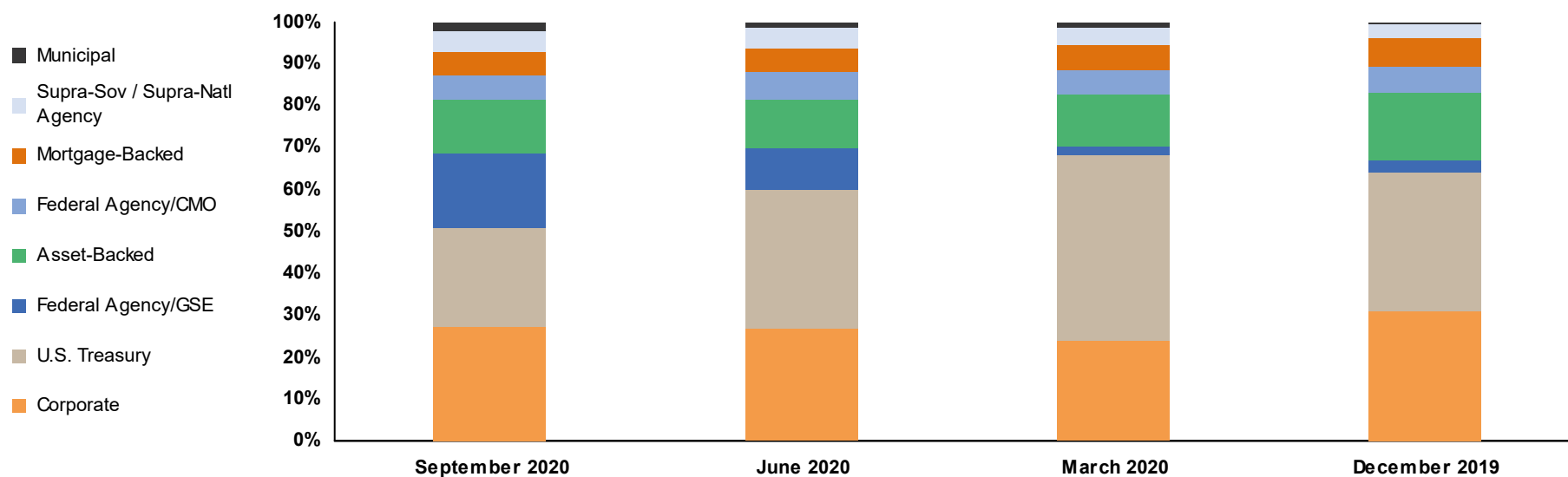
Portfolio performance is gross of fees unless otherwise indicated. ** Fees were calculated based on average assets during the period at the contractual rate.

Portfolio Earnings**Quarter-Ended September 30, 2020**

	Market Value Basis	Accrual (Amortized Cost) Basis
Beginning Value (06/30/2020)	\$277,300,049.50	\$271,592,152.07
Net Purchases/Sales	(\$2,698,127.65)	(\$2,698,127.65)
Change in Value	(\$448,962.52)	\$905,945.42
Ending Value (09/30/2020)	\$274,152,959.33	\$269,799,969.84
Interest Earned	\$1,197,644.74	\$1,197,644.74
Portfolio Earnings	\$748,682.22	\$2,103,590.16

Sector Allocation

Sector	September 30, 2020		June 30, 2020		March 31, 2020		December 31, 2019	
	MV (\$MM)	% of Total	MV (\$MM)	% of Total	MV (\$MM)	% of Total	MV (\$MM)	% of Total
Corporate	74.2	27.0%	74.8	27.0%	65.9	23.9%	67.2	31.0%
U.S. Treasury	65.2	23.8%	91.4	33.0%	122.1	44.3%	71.4	33.0%
Federal Agency/GSE	48.0	17.5%	27.6	10.0%	5.9	2.1%	5.8	2.7%
Asset-Backed	35.8	13.1%	32.3	11.6%	33.5	12.2%	34.5	16.0%
Federal Agency/CMO	15.9	5.8%	17.3	6.2%	15.6	5.7%	13.8	6.4%
Mortgage-Backed	15.1	5.5%	16.7	6.0%	17.2	6.2%	15.2	7.1%
Supra-Sov / Supra-Natl Agency	13.5	4.9%	13.0	4.7%	11.6	4.2%	6.7	3.1%
Municipal	6.4	2.4%	4.2	1.5%	3.9	1.4%	1.4	0.7%
Total	\$274.2	100.0%	\$277.3	100.0%	\$275.7	100.0%	\$216.0	100.0%

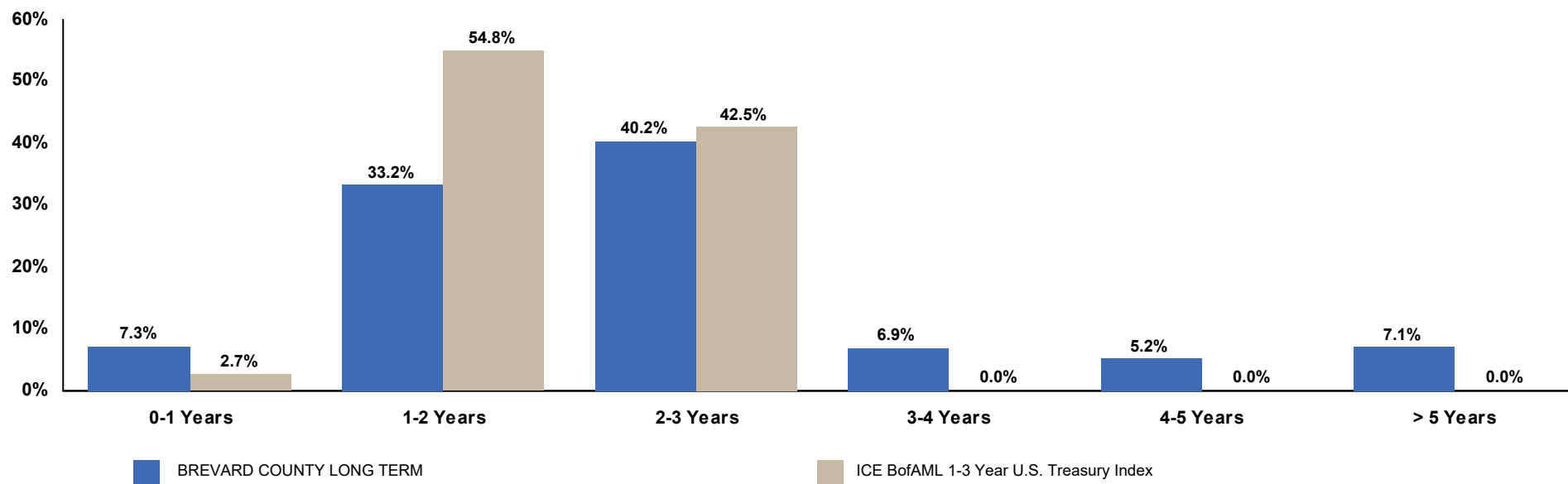


Detail may not add to total due to rounding.

Maturity Distribution

As of September 30, 2020

Portfolio/Benchmark	Yield at Market	Average Maturity	0-1 Years	1-2 Years	2-3 Years	3-4 Years	4-5 Years	>5 Years
BREVARD COUNTY LONG TERM	0.49%	2.60 yrs	7.3%	33.2%	40.2%	6.9%	5.2%	7.1%
ICE BofAML 1-3 Year U.S. Treasury Index	0.13%	1.94 yrs	2.7%	54.8%	42.5%	0.0%	0.0%	0.0%

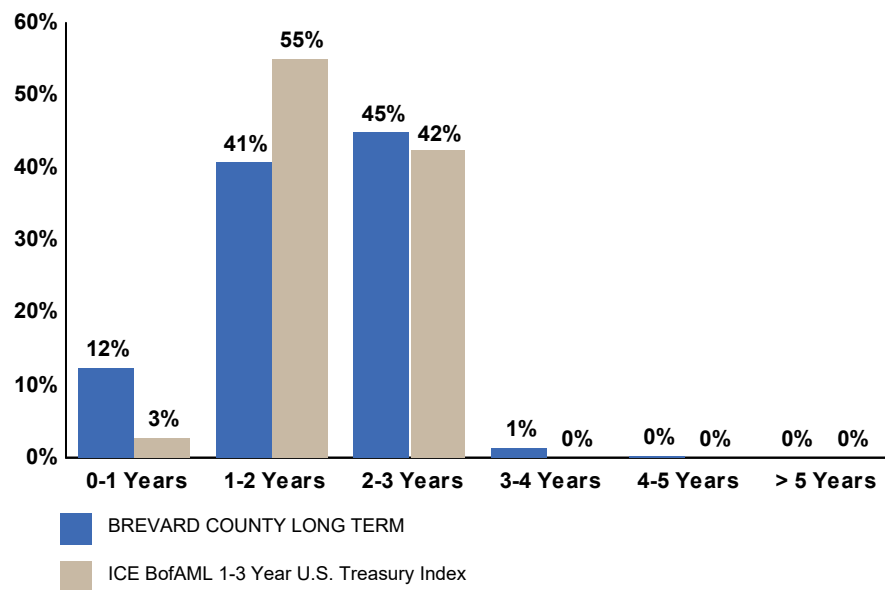


Duration Distribution

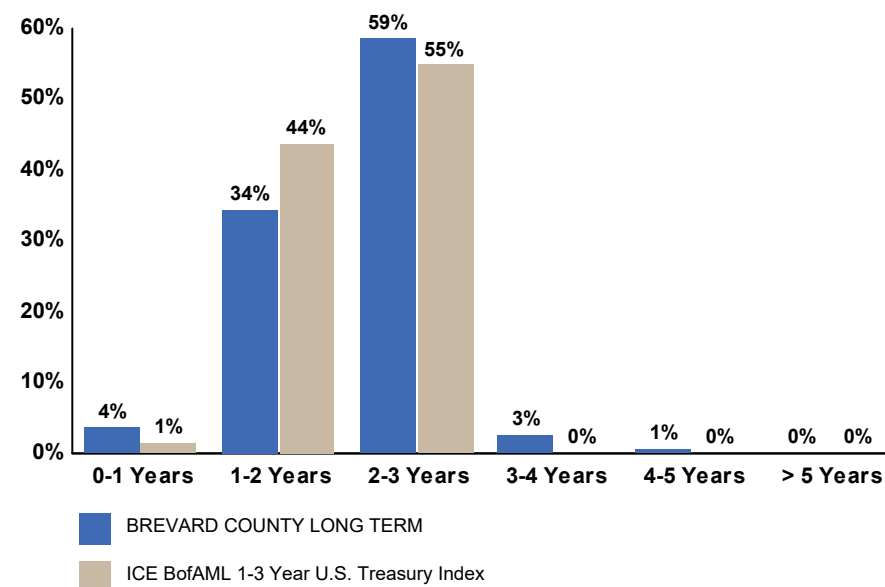
As of September 30, 2020

Portfolio / Benchmark	Effective Duration	0-1 YEARS	1-2 YEARS	2-3 YEARS	3-4 YEARS	4-5 YEARS	> 5 YEARS
BREVARD COUNTY LONG TERM	1.92	12.5%	40.9%	44.9%	1.5%	0.2%	0.0%
ICE BofAML 1-3 Year U.S. Treasury Index	1.83	2.7%	55.0%	42.3%	0.0%	0.0%	0.0%

Distribution by Effective Duration



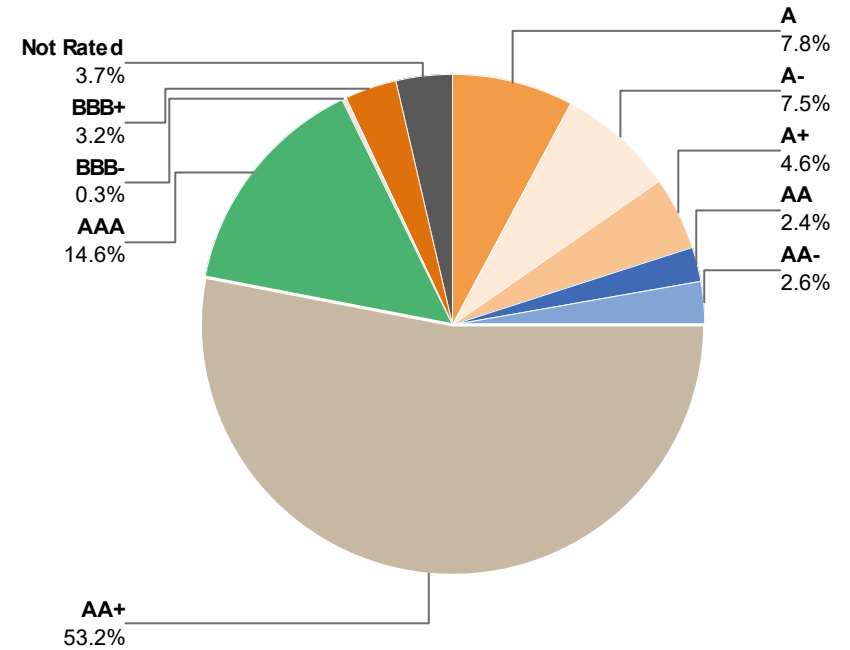
Contribution to Portfolio Duration



Credit Quality

As of September 30, 2020

S&P Rating	Market Value (\$)	% of Portfolio
AA+	\$145,923,500	53.2%
AAA	\$40,063,535	14.6%
A	\$21,333,924	7.8%
A-	\$20,640,898	7.5%
A+	\$12,669,997	4.6%
Not Rated	\$10,256,492	3.7%
BBB+	\$8,830,522	3.2%
AA-	\$6,980,738	2.6%
AA	\$6,565,354	2.4%
BBB-	\$887,998	0.3%
Totals	\$274,152,959	100.0%



Detail may not add to total due to rounding.

Issuer Distribution
As of September 30, 2020

Issuer	Market Value (\$)	% of Portfolio		
UNITED STATES TREASURY	65,194,429	23.8%	Top 5 = 57.0%	Top 10 = 63.6%
FREDDIE MAC	49,954,190	18.2%		
FANNIE MAE	29,004,020	10.6%		
ASIAN DEVELOPMENT BANK	8,085,550	3.0%		
BANK OF NOVA SCOTIA	4,096,191	1.5%		
AFRICAN DEVELOPMENT BANK	4,048,180	1.5%		
TORONTO-DOMINION BANK	3,793,025	1.4%		
TOYOTA MOTOR CORP	3,604,207	1.3%		
THE BANK OF NEW YORK MELLON CORPORATION	3,349,529	1.2%		
GM FINANCIAL SECURITIZED TERM	3,197,165	1.2%		
BANK OF AMERICA CO	3,168,631	1.2%		
CITIGROUP INC	3,030,135	1.1%		
WORLD OMNI AUTO REC TRUST	2,942,397	1.1%		
CATERPILLAR INC	2,883,759	1.1%		
JP MORGAN CHASE & CO	2,839,684	1.0%		
CNH EQUIPMENT TRUST	2,806,369	1.0%		
VERIZON OWNER TRUST	2,763,653	1.0%		
NEW YORK NY	2,523,750	0.9%		

BREVARD COUNTY LONG TERM

Portfolio Composition

Issuer	Market Value (\$)	% of Portfolio
AMERICAN EXPRESS CO	2,424,808	0.9%
BANK OF MONTREAL	2,384,056	0.9%
NISSAN AUTO RECEIVABLES	2,180,731	0.8%
CARMAX AUTO OWNER TRUST	2,128,926	0.8%
ROYAL BANK OF CANADA	2,075,845	0.8%
AMERICAN HONDA FINANCE	2,063,847	0.8%
CAPITAL ONE FINANCIAL CORP	2,054,906	0.8%
JOHN DEERE OWNER TRUST	2,016,778	0.7%
mitsubishi UFJ FINANCIAL GROUP INC	1,984,912	0.7%
ROYAL DUTCH SHELL PLC	1,917,573	0.7%
HONDA AUTO RECEIVABLES	1,886,479	0.7%
DEERE & COMPANY	1,866,274	0.7%
GLAXOSMITHKLINE PLC TAL	1,782,849	0.7%
APPLE INC	1,770,861	0.7%
HONEYWELL INTERNATIONAL	1,731,043	0.6%
LLOYDS BANKING GROUP PLC	1,663,648	0.6%
WELLS FARGO & COMPANY	1,629,418	0.6%
TRUIST FIN CORP	1,561,247	0.6%
NY & NJ PORT AUTH	1,552,874	0.6%
PFIZER INC	1,518,651	0.6%
TOTAL SA	1,417,478	0.5%

BREVARD COUNTY LONG TERM

Portfolio Composition

Issuer	Market Value (\$)	% of Portfolio
GM FINANCIAL AUTO LEASING TRUST	1,415,384	0.5%
3M COMPANY	1,413,970	0.5%
INTER-AMERICAN DEVELOPMENT BANK	1,408,226	0.5%
WAL-MART STORES INC	1,358,536	0.5%
AMAZON.COM INC	1,351,728	0.5%
BANCO SANTANDER SA	1,317,866	0.5%
UNITED PARCEL SERVICE INC	1,290,204	0.5%
PACCAR FINANCIAL CORP	1,256,372	0.5%
CHARLES SCHWAB	1,219,217	0.4%
NISSAN AUTO LEASE TRUST	1,213,018	0.4%
HYUNDAI AUTO RECEIVABLES	1,179,056	0.4%
VOLKSWAGEN OF AMERICA	1,111,612	0.4%
MORGAN STANLEY	1,011,257	0.4%
MARYLAND ST	1,003,940	0.4%
MERCEDES-BENZ AUTO RECEIVABLES	924,528	0.3%
CHEVRON CORPORATION	906,344	0.3%
MERCEDES-BENZ AUTO LEASE TRUST	902,139	0.3%
BOEING COMPANY	887,998	0.3%
WESTPAC BANKING CORP	887,093	0.3%
NATIONAL RURAL UTILITIES CO FINANCE CORP	881,490	0.3%
MERCK & CO INC	828,050	0.3%

BREVARD COUNTY LONG TERM

Portfolio Composition

Issuer	Market Value (\$)	% of Portfolio
FORD CREDIT AUTO LEASE TRUST	823,699	0.3%
GOLDMAN SACHS GROUP INC	734,904	0.3%
DISCOVER FINANCIAL SERVICES	733,623	0.3%
EXXON MOBIL CORP	718,291	0.3%
BURLINGTON NORTHERN SANTA FE	715,291	0.3%
BMW VEHICLE OWNER TRUST	701,787	0.3%
US BANCORP	694,243	0.3%
COMCAST CORP	689,904	0.3%
FLORIDA ST HURRICAN CAT FUND	685,240	0.3%
FORD CREDIT AUTO OWNER TRUST	674,020	0.3%
PEPSICO INC	651,515	0.2%
ELI LILLY & CO	619,371	0.2%
UNILEVER PLC	585,728	0.2%
AMERICAN EXPRESS CO DIT ACCOUN	571,095	0.2%
THE WALT DISNEY CORPORATION	562,223	0.2%
HARLEY-DAVIDSON MOTORCYCLE TRUST	484,442	0.2%
VOLKSWAGEN AUTO LEASE TURST	432,547	0.2%
MISSISSIPPI STATE	373,193	0.1%
HOME DEPOT INC	364,720	0.1%
FIFTH THIRD AUTO TRUST	332,095	0.1%
ALLY AUTO RECEIVABLES TRUST	305,928	0.1%

BREVARD COUNTY LONG TERM

Portfolio Composition

Issuer	Market Value (\$)	% of Portfolio
CANADIAN IMPERIAL BANK OF COMMERCE	302,255	0.1%
STATE OF CONNECTICUT	298,715	0.1%
ADOBE INC	247,235	0.1%
BMW FINANCIAL SERVICES NA LLC	184,800	0.1%
Grand Total:	274,152,959	100.0%

Sector/Issuer Distribution

As of September 30, 2020

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
Asset-Backed			
ALLY AUTO RECEIVABLES TRUST	305,928	0.9%	0.1%
AMERICAN EXPRESS CO DIT ACCOUN	571,095	1.6%	0.2%
BMW FINANCIAL SERVICES NA LLC	184,800	0.5%	0.1%
BMW VEHICLE OWNER TRUST	701,787	2.0%	0.3%
CAPITAL ONE FINANCIAL CORP	2,054,906	5.7%	0.7%
CARMAX AUTO OWNER TRUST	2,128,926	6.0%	0.8%
CNH EQUIPMENT TRUST	2,806,369	7.8%	1.0%
DISCOVER FINANCIAL SERVICES	733,623	2.1%	0.3%
FIFTH THIRD AUTO TRUST	332,095	0.9%	0.1%
FORD CREDIT AUTO LEASE TRUST	823,699	2.3%	0.3%
FORD CREDIT AUTO OWNER TRUST	674,020	1.9%	0.2%
GM FINANCIAL AUTO LEASING TRUST	1,415,384	4.0%	0.5%
GM FINANCIAL SECURITIZED TERM	3,197,165	8.9%	1.2%
HARLEY-DAVIDSON MOTORCYCLE TRUST	484,442	1.4%	0.2%
HONDA AUTO RECEIVABLES	1,886,479	5.3%	0.7%
HYUNDAI AUTO RECEIVABLES	1,179,056	3.3%	0.4%
JOHN DEERE OWNER TRUST	2,016,778	5.6%	0.7%
MERCEDES-BENZ AUTO LEASE TRUST	902,139	2.5%	0.3%
MERCEDES-BENZ AUTO RECEIVABLES	924,528	2.6%	0.3%
NISSAN AUTO LEASE TRUST	1,213,018	3.4%	0.4%
NISSAN AUTO RECEIVABLES	2,180,731	6.1%	0.8%

BREVARD COUNTY LONG TERM

Portfolio Composition

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
TOYOTA MOTOR CORP	1,806,954	5.1%	0.7%
VERIZON OWNER TRUST	2,763,653	7.7%	1.0%
VOLKSWAGEN AUTO LEASE TURST	432,547	1.2%	0.2%
VOLKSWAGEN OF AMERICA	1,111,612	3.1%	0.4%
WORLD OMNI AUTO REC TRUST	2,942,397	8.2%	1.1%
Sector Total	35,774,131	100.0%	13.0%

Corporate

3M COMPANY	1,413,970	1.9%	0.5%
ADOBE INC	247,235	0.3%	0.1%
AMAZON.COM INC	1,351,728	1.8%	0.5%
AMERICAN EXPRESS CO	2,424,808	3.3%	0.9%
AMERICAN HONDA FINANCE	2,063,847	2.8%	0.8%
APPLE INC	1,770,861	2.4%	0.6%
BANCO SANTANDER SA	1,317,866	1.8%	0.5%
BANK OF AMERICA CO	3,168,631	4.3%	1.2%
BANK OF MONTREAL	2,384,056	3.2%	0.9%
BANK OF NOVA SCOTIA	4,096,191	5.5%	1.5%
BOEING COMPANY	887,998	1.2%	0.3%
BURLINGTON NORTHERN SANTA FE	715,291	1.0%	0.3%
CANADIAN IMPERIAL BANK OF COMMERCE	302,255	0.4%	0.1%
CATERPILLAR INC	2,883,759	3.9%	1.1%
CHARLES SCHWAB	1,219,217	1.6%	0.4%
CHEVRON CORPORATION	906,344	1.2%	0.3%
CITIGROUP INC	3,030,135	4.1%	1.1%

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
COMCAST CORP	689,904	0.9%	0.3%
DEERE & COMPANY	1,866,274	2.5%	0.7%
ELI LILLY & CO	619,371	0.8%	0.2%
EXXON MOBIL CORP	718,291	1.0%	0.3%
GLAXOSMITHKLINE PLC TAL	1,782,849	2.4%	0.7%
GOLDMAN SACHS GROUP INC	734,904	1.0%	0.3%
HOME DEPOT INC	364,720	0.5%	0.1%
HONEYWELL INTERNATIONAL	1,731,043	2.3%	0.6%
JP MORGAN CHASE & CO	2,839,684	3.8%	1.0%
LLOYDS BANKING GROUP PLC	1,663,648	2.2%	0.6%
MERCK & CO INC	828,050	1.1%	0.3%
mitsubishi UFJ Financial Group Inc	1,984,912	2.7%	0.7%
MORGAN STANLEY	1,011,257	1.4%	0.4%
NATIONAL RURAL UTILITIES CO Finance Corp	881,490	1.2%	0.3%
PACCAR Financial Corp	1,256,372	1.7%	0.5%
PEPSICO INC	651,515	0.9%	0.2%
PFIZER INC	1,518,651	2.0%	0.6%
ROYAL BANK OF CANADA	2,075,845	2.8%	0.8%
ROYAL DUTCH SHELL PLC	1,917,573	2.6%	0.7%
THE BANK OF NEW YORK MELLON CORPORATION	3,349,529	4.5%	1.2%
THE WALT DISNEY CORPORATION	562,223	0.8%	0.2%
TORONTO-DOMINION BANK	3,793,025	5.1%	1.4%
TOTAL SA	1,417,478	1.9%	0.5%
TOYOTA MOTOR CORP	1,797,253	2.4%	0.7%
TRUIST FIN CORP	1,561,247	2.1%	0.6%

BREVARD COUNTY LONG TERM

Portfolio Composition

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
UNILEVER PLC	585,728	0.8%	0.2%
UNITED PARCEL SERVICE INC	1,290,204	1.7%	0.5%
US BANCORP	694,243	0.9%	0.3%
WAL-MART STORES INC	1,358,536	1.8%	0.5%
WELLS FARGO & COMPANY	1,629,418	2.2%	0.6%
WESTPAC BANKING CORP	887,093	1.2%	0.3%
Sector Total	74,246,522	100.0%	27.1%
Federal Agency/CMO			
FANNIE MAE	5,159,846	32.5%	1.9%
FREDDIE MAC	10,732,267	67.5%	3.9%
Sector Total	15,892,113	100.0%	5.8%
Federal Agency/GSE			
FANNIE MAE	13,486,183	28.1%	4.9%
FREDDIE MAC	34,495,455	71.9%	12.6%
Sector Total	47,981,637	100.0%	17.5%
Mortgage-Backed			
FANNIE MAE	10,357,991	68.7%	3.8%
FREDDIE MAC	4,726,469	31.3%	1.7%
Sector Total	15,084,460	100.0%	5.5%

BREVARD COUNTY LONG TERM

Portfolio Composition

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
Municipal			
FLORIDA ST HURRICAN CAT FUND	685,240	10.6%	0.2%
MARYLAND ST	1,003,940	15.6%	0.4%
MISSISSIPPI STATE	373,193	5.8%	0.1%
NEW YORK NY	2,523,750	39.2%	0.9%
NY & NJ PORT AUTH	1,552,874	24.1%	0.6%
STATE OF CONNECTICUT	298,715	4.6%	0.1%
Sector Total	6,437,710	100.0%	2.3%
Supra-Sov / Supra-Natl Agency			
AFRICAN DEVELOPMENT BANK	4,048,180	29.9%	1.5%
ASIAN DEVELOPMENT BANK	8,085,550	59.7%	2.9%
INTER-AMERICAN DEVELOPMENT BANK	1,408,226	10.4%	0.5%
Sector Total	13,541,956	100.0%	4.9%
U.S. Treasury			
UNITED STATES TREASURY	65,194,429	100.0%	23.8%
Sector Total	65,194,429	100.0%	23.8%
Portfolio Total	274,152,959	100.0%	100.0%



Brevard County Board of Commissioners Multi-Asset Class Management Portfolio

Investment Performance Review For the Quarter Ended September 30, 2020

Client Management Team

Steven Alexander, CTP, CGFO, CPPT, Managing Director
Khalid Yasin, CIMA, CHP, Director

PFM Asset Management LLC

300 S. Orange Avenue
Ste. 1170
Orlando, FL 32801
407-648-2208

1735 Market Street
43rd Floor
Philadelphia, PA 19103
215-567-6100

Financial Markets & Investment Strategy Review

QUARTERLY MARKET SUMMARY

Market Index Performance

As of September 30, 2020

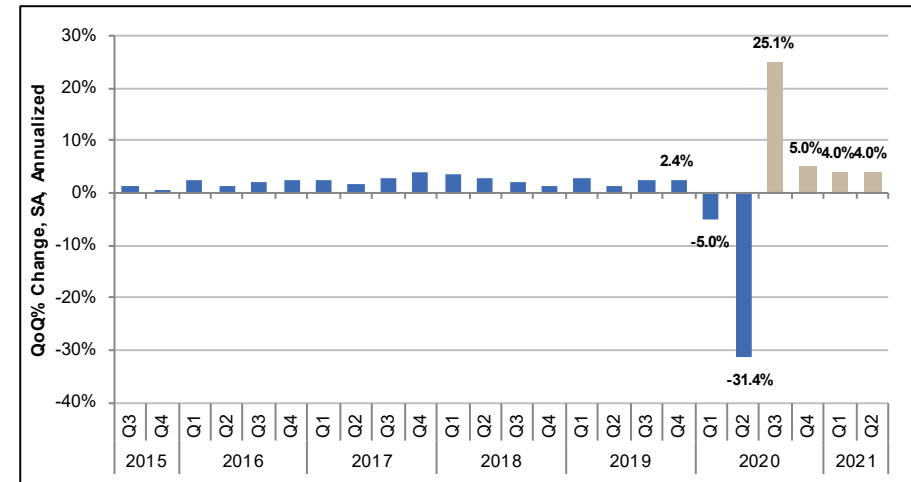
	QTD	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
DOMESTIC EQUITY							
S&P 500	8.93%	5.57%	15.15%	12.28%	14.15%	12.68%	13.74%
Russell 3000 Index	9.21%	5.41%	15.00%	11.65%	13.69%	12.11%	13.48%
Russell 1000 Value Index	5.59%	-11.58%	-5.03%	2.63%	7.66%	7.35%	9.95%
Russell 1000 Growth Index	13.22%	24.33%	37.53%	21.67%	20.10%	17.39%	17.25%
Russell Midcap Index	7.46%	-2.35%	4.55%	7.13%	10.13%	9.37%	11.76%
Russell 2500 Index	5.88%	-5.82%	2.22%	4.45%	8.97%	7.70%	10.81%
Russell 2000 Value Index	2.56%	-21.54%	-14.88%	-5.13%	4.11%	3.27%	7.09%
Russell 2000 Index	4.93%	-8.69%	0.39%	1.77%	8.00%	6.42%	9.85%
Russell 2000 Growth Index	7.16%	3.88%	15.71%	8.18%	11.42%	9.22%	12.34%
INTERNATIONAL EQUITY							
MSCI EAFE (Net)	4.80%	-7.09%	0.49%	0.62%	5.26%	3.01%	4.62%
MSCI AC World Index (Net)	8.13%	1.37%	10.44%	7.12%	10.30%	7.84%	8.55%
MSCI AC World ex USA (Net)	6.25%	-5.44%	3.00%	1.16%	6.23%	3.18%	4.00%
MSCI AC World ex USA Small Cap (Net)	10.50%	-3.64%	6.97%	0.93%	6.80%	4.49%	5.31%
MSCI EM (Net)	9.56%	-1.16%	10.54%	2.42%	8.97%	3.74%	2.51%
ALTERNATIVES							
FTSE NAREIT Equity REIT Index	1.44%	-17.54%	-18.16%	0.20%	3.95%	6.05%	7.90%
FTSE EPRA/NAREIT Developed Index	2.33%	-19.09%	-17.50%	-0.51%	2.98%	3.59%	5.62%
Bloomberg Commodity Index Total Return	9.07%	-12.08%	-8.20%	-4.18%	-3.09%	-7.24%	-6.03%
FIXED INCOME							
Blmbg. Barc. U.S. Aggregate	0.62%	6.79%	6.98%	5.24%	4.18%	3.97%	3.64%
Blmbg. Barc. U.S. Government/Credit	0.78%	8.04%	8.03%	5.86%	4.66%	4.30%	3.87%
Blmbg. Barc. Intermed. U.S. Government/Credit	0.61%	5.92%	6.32%	4.43%	3.39%	3.12%	2.91%
Blmbg. Barc. U.S. Treasury: 1-3 Year	0.10%	3.11%	3.64%	2.66%	1.81%	1.54%	1.29%
Blmbg. Barc. U.S. Corp: High Yield	4.60%	0.62%	3.25%	4.21%	6.79%	5.33%	6.47%
Credit Suisse Leveraged Loan index	4.13%	-0.82%	0.84%	3.16%	4.03%	3.67%	4.44%
ICE BofAML Global High Yield Constrained (USD)	4.90%	0.41%	3.83%	3.61%	6.63%	4.79%	6.07%
Blmbg. Barc. Global Aggregate Ex USD	4.14%	4.77%	5.48%	3.07%	3.60%	1.28%	1.35%
JPM EMBI Global Diversified	2.32%	-0.51%	1.29%	3.49%	6.15%	5.64%	5.43%
CASH EQUIVALENT							
90 Day U.S. Treasury Bill	0.04%	0.64%	1.10%	1.69%	1.18%	0.85%	0.62%

Source: Investment Metrics. Returns are expressed as percentages. Please refer to the last page of this document for important disclosures relating to this material.

THE ECONOMY

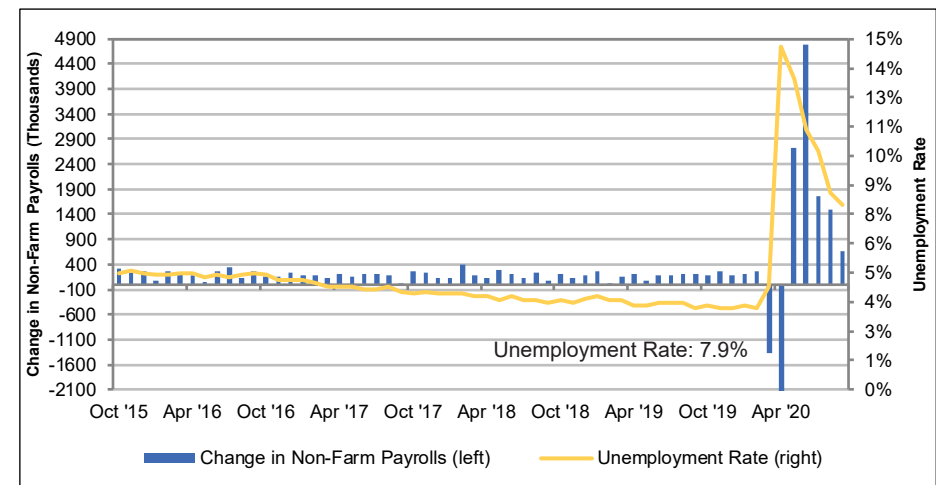
- The COVID-19 pandemic continues to dominate the news and strongly influence the path of economic recovery. September 28 marked the grim milestone of one million deaths worldwide attributed to the virus. We will likely continue to experience significant disruptions in economic activity until a vaccine is widely available.
- The revised estimate of second-quarter gross domestic product (GDP) announced on September 30 reflected a slightly smaller contraction than initially announced in July. Based on the revision, economic activity dropped by -31.4% from the previous quarter by an annualized rate. Third-quarter GDP is likely to reflect a sharp increase in the range of 20-30%.
- The overall employment situation has improved rapidly over the months since the peak in unemployment in April. The unemployment rate declined from 14.7% in April to 7.9% in September. The speed of job recovery from now on will likely depend on the evolution of the virus and policymakers' response. Factors include the degree of social distancing measures and the extent to which policymakers continue to provide income support to unemployed workers.
- Equity markets focused on mostly favorable data throughout the summer months. Macro data improved as multiple drug companies claimed to have fast-tracked versions of a vaccine in the works, earnings looked to have bottomed and another fiscal stimulus package appeared forthcoming. The S&P 500 Index (S&P) lost some steam during September after school openings caused numerous COVID-19 hot spots across the country and medical experts indicated that a vaccine would not likely be available until summer 2021. The fiscal stimulus deal was less likely, or at least delayed.
- Corporate earnings are expected to fall. According to FactSet's earnings insight, the S&P's expected gains for the third quarter are higher today than at the start of the quarter. Despite this increase, the index is still likely to report the second-largest year-over-year decline in earnings over the past 10 years, mainly due to the negative impact of COVID-19 on numerous industries. Companies have not regained lost sales.

U.S. Real GDP Growth
Seasonally Adjusted (SA)



Source: Bloomberg. Blue bars indicate actual numbers; taupe bars indicate forecasted estimates.

Change in Non-Farm Payrolls

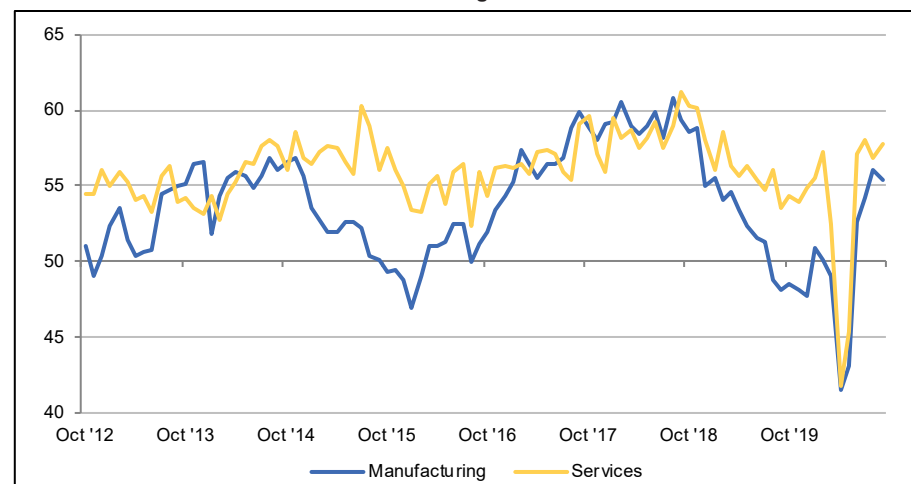


Source: Bloomberg.

WHAT WE'RE WATCHING

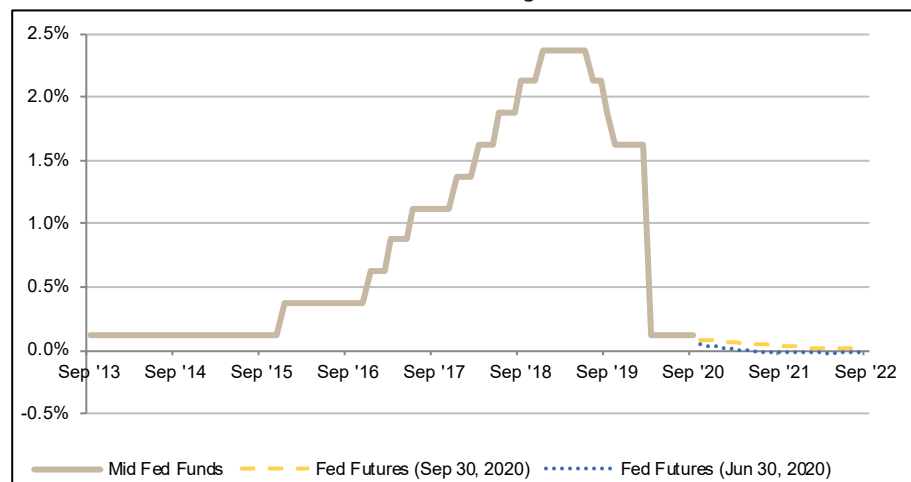
- Domestically, the beginning of the summer started with a sharp rise in the number of people hospitalized with COVID-19, but since late July, that number has declined sharply. Hospitalizations had been very low for most of the summer in Europe and the UK, but have started to rise since people went on holiday during August. Increased movement and lower restrictions have prompted concerns that hospitalizations and deaths could increase more meaningfully as temperatures fall in the coming months.
- A return to normalcy must include a vaccine, and as such, its development has been vigilantly observed. Though it has been discovered that some drugs speed up recovery times or decrease the chance of death, researchers have not found a cure or prevention for the disease. Vaccine researchers have been working with their country regulators at a blistering pace, and most timelines put the widespread availability of a vaccine in the first half of 2021. This timeframe is just a fraction of the usual timeframe for vaccine development.
- The U.S. is less than one month away from its presidential election. Both major party candidates are touting their ability to lead the country out of the pandemic and ensuing economic situation. The next presidential term will be focused on rebuilding the economy while taking on immense federal debt and running budget deficits. Incumbent presidents have typically won reelection unless there was a recession during their term, but current circumstances are far from typical, casting doubt on an outcome.
- Fiscal and monetary policies have played a vital role in response to the COVID-19 pandemic. The Central Banks' monetary policy response to the economic crisis has included lowering interest rates to at or below zero for some countries while governments provide additional fiscal stimulus. Globally this helped stem a deeper recession, but with the possible consequence of lower near-term growth rates because the increase in debt levels may constrain budgets.
- The end of the year-long transition period for the UK to leave the EU (Brexit) is looming at year-end. During the 11-month long transition period, the UK still follows EU rules. It continues to pay into the EU budget despite no longer having voting rights in the EU's political institutions. As of January 1, 2021, the UK will automatically drop out of the EU's primary trading arrangements.

ISM Manufacturing & Services PMI



Source: Bloomberg.

Federal Funds Target Rate



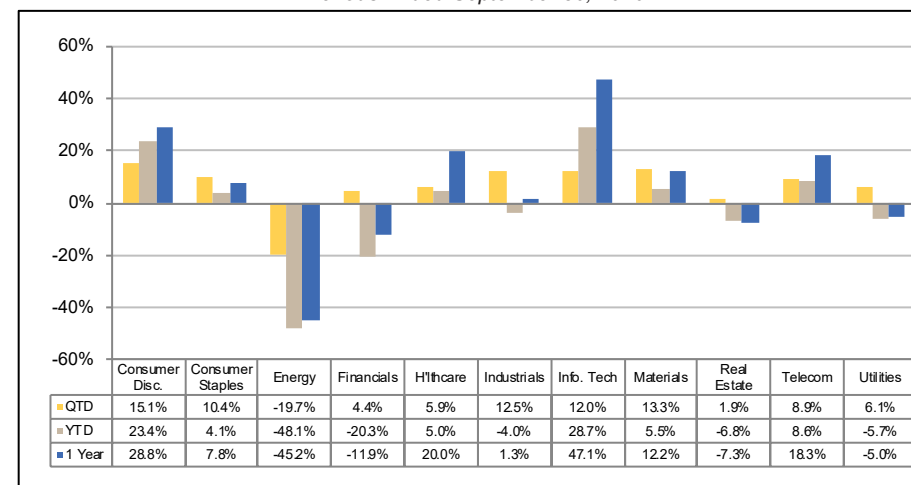
Source: Bloomberg.

DOMESTIC EQUITY

- The S&P posted a return of 8.9% for the quarter, benefiting from the reopening of businesses and increased hours of operations, the continuation of the technology rally, decreasing COVID-19 related hospitalizations in the U.S., CARES Act relief and discussions of additional fiscal stimulus.
- Within the S&P, 10 of the 11 sectors earned positive returns, with Consumer Discretionary (+15.1%), Materials (+13.3%), Industrials (+12.5%) and Information Technology (+12.0%) leading the way. Energy (-19.7%) was the worst-performing sector due to pandemic induced lower demand for fuel.
- Value stocks, as represented by the Russell 1000 Value Index, returned 5.6%, lagging growth stocks, as represented by the Russell 1000 Growth Index, which returned 13.2%. Russell 1000 Value outperformed Russell 1000 Growth during September, a slight departure from the overall trend. Within small- and mid-cap, growth continues to outperform their value counterparts.
- Small-caps, as represented by the Russell 2000 Index, returned 4.9% during the quarter and lagged both mid- and large- caps. The Russell Midcap and Russell 1000 Indices returned 7.5% and 9.5%, respectively. This quarter, larger capitalization along with momentum and growth led performance.

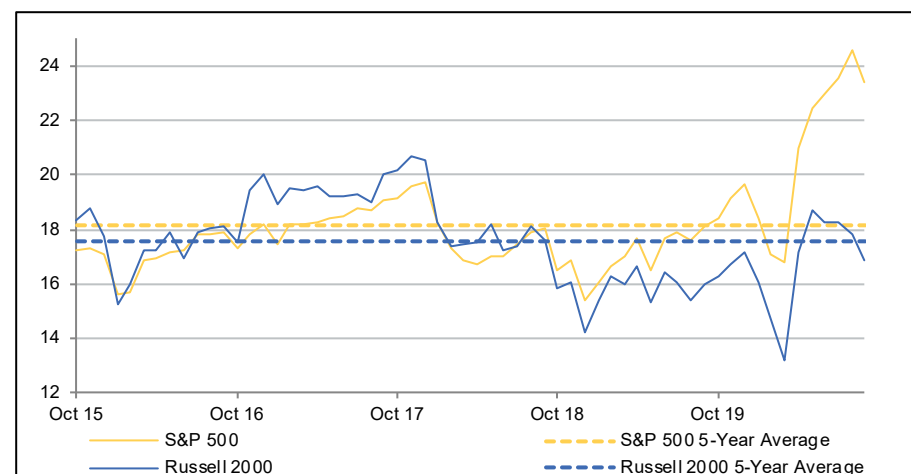
S&P 500 Index Performance by Sector

Periods Ended September 30, 2020



Source: Bloomberg.

P/E Ratios of Major Stock Indices*



Source: Bloomberg.

*P/E ratios are calculated based on one-year forward estimates and adjusted to include only positive earnings results for consistency.

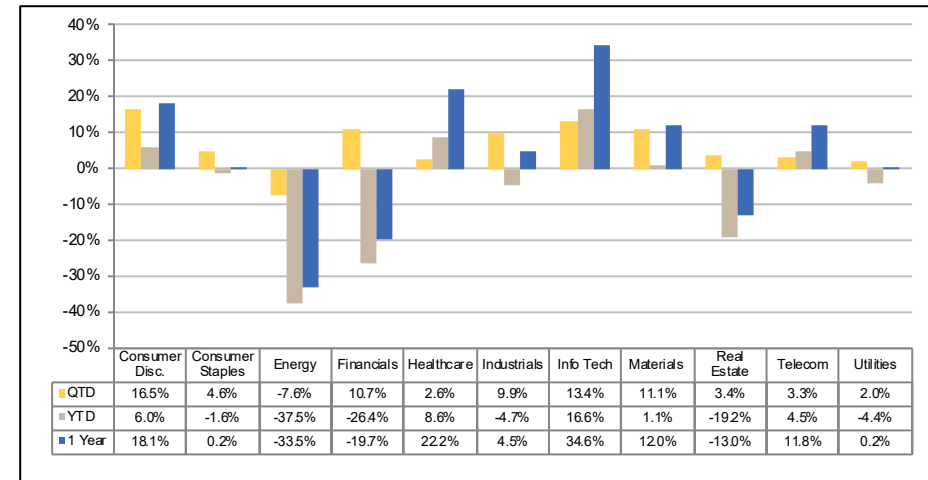
QUARTERLY MARKET SUMMARY

NON-U.S. EQUITY

- International markets, as measured by the MSCI ACWI ex-U.S. Index, slightly lagged their U.S. counterparts, returning 6.3% for the quarter. Consumer Discretionary was the best-performing sector returning 16.5%, while Energy was the worst-performing sector returning -7.6%.
- Emerging markets (EM), as represented by MSCI Emerging Market Index, outperformed developed ex-U.S. markets, represented by the MSCI EAFE Index, returning 9.6% versus 4.8% for the quarter. EM Asia continued to be a strong performer over the quarter, returning 11.9%.
- Value continued to underperform growth for the quarter across the international markets (MSCI AC World ex-USA Growth 10.2% versus MSCI AC World ex-USA Value 2.4%).
- Small-caps performed well within the international equity markets, returning 10.5% for the quarter, as represented by MSCI ACWI ex-U.S. Small Cap Index.

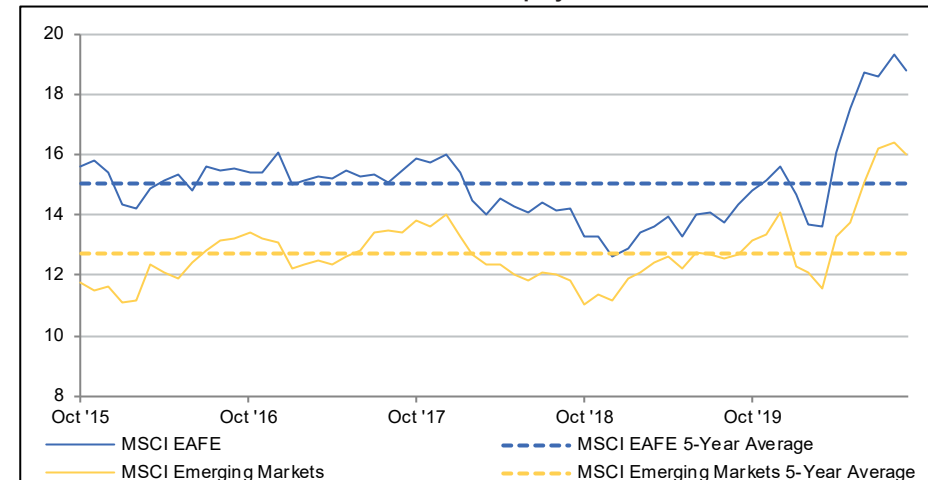
MSCI ACWI ex-U.S. Sectors

Periods Ended September 30, 2020



Source: Bloomberg.

P/E Ratios of MSCI Equity Indices*



Source: Bloomberg.

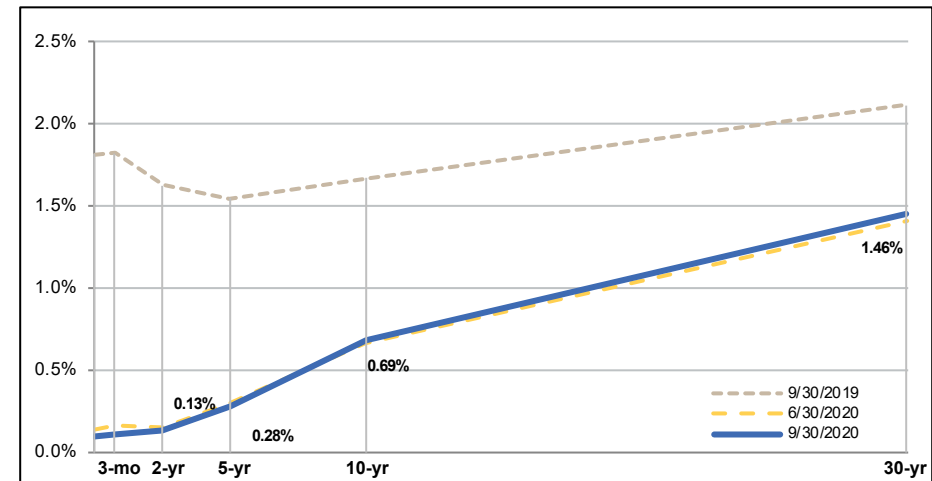
*P/E ratios are calculated based on one-year forward estimates and adjusted to include only positive earnings results for consistency.

QUARTERLY MARKET SUMMARY

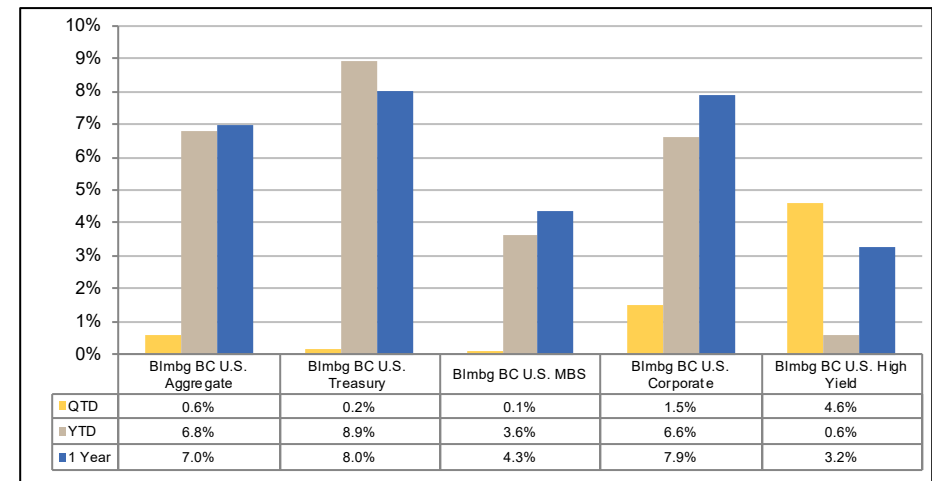
FIXED INCOME

- The U.S. bond market, as represented by the Bloomberg Barclays U.S. Aggregate (Aggregate) Index, returned 0.6%.
- Long-term rates rose slightly compared to the previous quarter-end, with much of the movement taking place in August. The 5-year Treasury decreased by one basis point (bp) while the 10-year and 30-year rates increased by three and five bps, respectively. Much of the Aggregate return came from spread compression in corporate and mortgage credit.
- Corporate credit had another solid quarter on the back of liquidity support and bond-buying programs from the Federal Reserve. July was a strong month, but the rallies faded towards quarter-end. Overall, investment-grade (IG) corporate spreads declined during the quarter. The Bloomberg Barclays U.S. Corporate Index gained 1.5%, despite negative returns in August and September. High yield bonds, as represented by the Bloomberg Barclays U.S. Corporate High Yield (HY) Index, had stronger performance, gaining 4.6% with positive returns in two out of three months. The strongest returns were in the lowest ratings by quality, where the yield advantage partially offset a rise in rates.
- The fixed-rate mortgage market, as measured by the Bloomberg Barclays U.S. Mortgage-Backed Securities (MBS) Index, had a muted return of just 0.1%. Meanwhile, the Bloomberg Barclays U.S. Agency CMBS Index (measuring commercial MBS) gained 0.5%. At the same time, non-index mezzanine tranches of CMBS remained stressed with office and retail shutdowns and hotels facing lower demand.
- EM USD sovereign bonds, as represented by the JP Morgan EMBI Global Diversified Index, gained 2.3% as some of the top-weighted index countries performed well (Mexico, Indonesia, Saudi Arabia).

U.S. Treasury Yield Curve



Source: Bloomberg.

Returns for Fixed-Income Segments
Periods Ended September 30, 2020

Source: Bloomberg. "Blmbg BC" is Bloomberg Barclays.

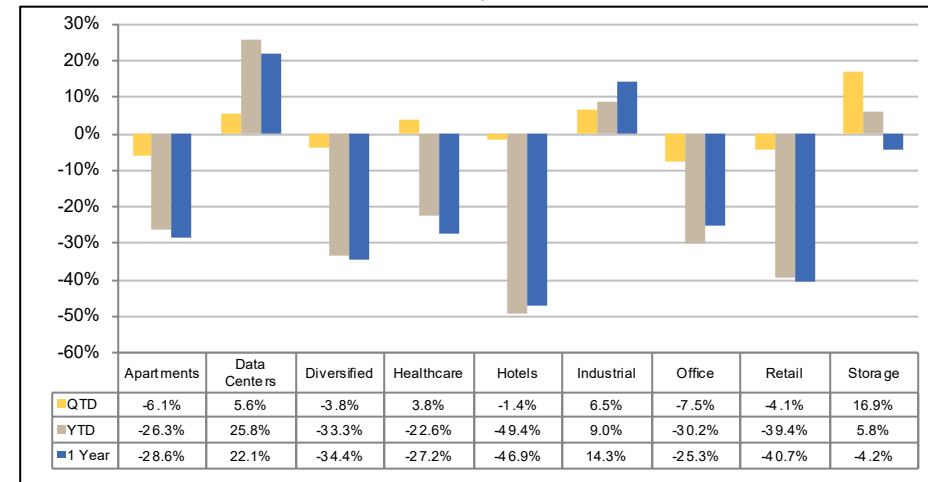
QUARTERLY MARKET SUMMARY

ALTERNATIVES

- REITs, as measured by the FTSE NAREIT Equity REIT Index, returned 1.4% in the third quarter, compared to an 11.8% return in the prior quarter. Five out of 11 major sectors posted moderate to large gains in the third quarter. The gains were again led by the Self-Storage sector, which posted a return of 16.9% over the quarter. Office and Apartment sectors were the worst-performing sectors during the third quarter, fell 7.5% and 6.1%, respectively.
- Private real estate, as measured by the NCREIF Property Index, fell 1.0% in the second quarter, resulting in a 2.7% return over the last 12-month period. Industrial properties continued to be the top-performing sector, with a total return of 1.0% in the second quarter. Hotel properties were the worst-performing sector in the second quarter with a total return of -16.6%, comprised of -0.5% in income return and -16.1% in appreciation return.
- Hedge funds generated positive returns in the third quarter, with the HFRI Fund Weighted Composite Index returning 4.1%. During the same period, the HFRI Macro (Total) Index returned 1.0%. The HFRI Equity Hedge (Total) Index and the HFRI Fund of Funds Index returned 5.8% and 4.2%, respectively.
- In the second quarter, private capital fundraising was led by private equity funds, which closed on \$116 billion, followed by \$39 billion raised by private real estate funds, \$34 billion raised by private debt funds and \$12 billion raised by infrastructure funds. Private equity dry powder, which accounts for the bulk of private capital dry powder, reached \$1.45 trillion as of June. According to Cambridge Associates, U.S. private equity generated a 13.1% return for the five years ended Q1 2020. According to Cliffwater Direct Lending Index, U.S. middle-market loans, a proxy for private debt, generated a return of 7.1% for the five years ended Q2 2020.
- Commodity futures, represented by the Bloomberg Commodity Total Return Index, returned 9.1% in the third quarter. The U.S. Dollar Index (DXY) fell 3.6% over the same period. Gold spot price finished the quarter at \$1,885.82 per ounce, representing a 5.9% gain over the period. The West Texas Intermediate (WTI) Crude Oil spot price increased 2.4%, from \$39.27 to \$40.22 during the third quarter.

FTSE NAREIT Sectors

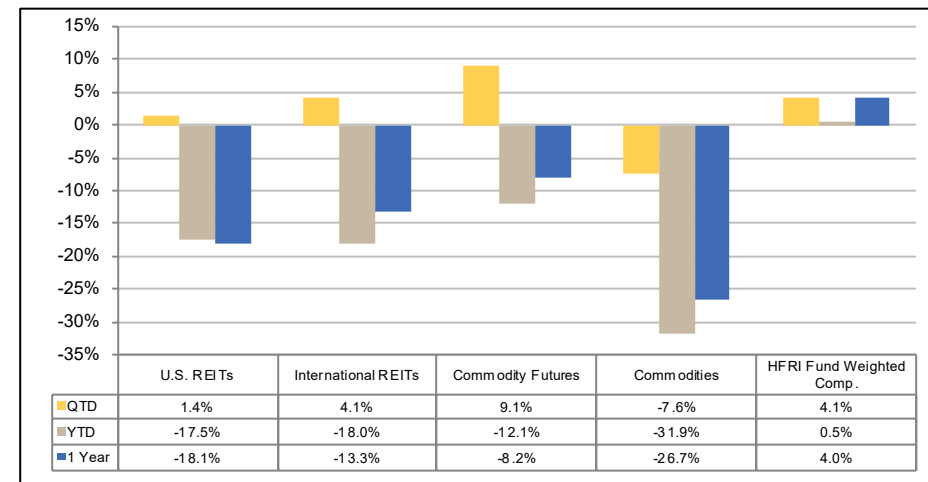
Periods Ended September 30, 2020



Source: Bloomberg.

Returns for Alternative Assets

Periods Ended September 30, 2020



Sources: Bloomberg and Hedge Fund Research, Inc.

QUARTERLY MARKET SUMMARY

Investment Strategy Overview

For the Fourth Quarter 2020

Asset Class	Our Investment Outlook	Comments
U.S. EQUITIES		<ul style="list-style-type: none"> Improving economic fundamentals pointing to recovery in economic activity leads us to slightly overweight equities. The Fed's accommodative stance and continued expectation of low interest rates remain a tailwind to equity valuations. We expect equities to outperform fixed income in the near term. Amidst continued re-opening efforts and a bounce back in consumer activity, earnings and profit margins are expected to recover strongly looking ahead. Small-caps are expected to recover better as the economic recovery continues. We remain cautious about the high debt levels and lower quality companies within this space.
Large-Caps		
Mid-Caps		
Small-Caps		
NON-U.S. EQUITIES		<ul style="list-style-type: none"> International equities continue to trade at a discount to U.S. equities. Improving economic fundamentals as economies emerge from pandemic related lockdowns leads to a slight overweight. Most EM economies, with lower debt levels and cheaper valuations, are recovering faster, following China's faster recovery. Except for Brazil and India, where COVID-19 continues to negatively impact the economy, most other EM countries, with lower debt levels and cheaper relative valuations, are recovering faster. International small caps are expected to perform as the economic recovery continues. We remain cautious about the lower quality companies that could be subject to cash flow disruptions.
Developed Markets		
Emerging Markets		
International Small-Caps		
FIXED INCOME		<ul style="list-style-type: none"> Continued coordinated accommodative monetary policies globally has been tailwind to fixed income returns. Looking ahead, the low level of interest rates will limit returns relative to equities. Corporate spreads have narrowed substantially in Q2 leading us to remain neutral. We continue to monitor downgrades and defaults within the corporate bond space while opportunistically allocating to areas of dislocation within spread sectors.
Long Duration, Interest-Rate-Sensitive Sectors		
Credit-Sensitive Sectors		
ALTERNATIVES		<ul style="list-style-type: none"> Attractive valuations, low level of interest rates and stabilizing rental income are positives. The possibility of defaults in the future makes us cautious. Improved credit market conditions and easy access to capital markets are a positive while the impact of business closures and rising bankruptcies needs to be assessed closely. Private debt strategies are expected to be impacted by cash flow uncertainty as businesses adjust to lack of demand in the short-term, while easy access to capital is a positive. Select hedge fund strategies managed by talented managers may provide some benefit in the current market environment of increased volatility. We remain cautious on the overall hedge fund universe.
Real Estate		
Private Equity		
Private Debt		
Hedge Funds		










● Current outlook ○ Outlook one quarter ago

Negative Slightly Negative Neutral Slightly Positive Positive

QUARTERLY MARKET SUMMARY

Factors to Consider Over the Next 6-12 Months

For the Fourth Quarter 2020

Monetary Policy:  <ul style="list-style-type: none"> The Fed's decision to hold short-term interest rates near zero until inflation stays above a 2% target, provides further support to risk-assets. Globally, all major central banks continue on the path of accommodative monetary policy. 	Economic Growth:  <ul style="list-style-type: none"> In the U.S., improving fundamentals recently point to a recovery from the lows of April. Slow and gradual recovery leads to improvement in manufacturing and services. Global growth expectations have improved for 2021 as economies continue to re-open following the pandemic related shutdown. 	Fiscal Stimulus:  <ul style="list-style-type: none"> CARES Act stimulus has lapsed at a time when there is no consensus on composition of further stimulus. Possibility of another round of stimulus remains uncertain. Stimulus focused on infrastructure spending should be a positive.
COVID-19 Containment:  <ul style="list-style-type: none"> Concerns around the rise of a second wave of infections remain a focal point for economic recovery in the fall. Progress on vaccine-development is a positive while the timing remains uncertain. 	Consumer Confidence (U.S.):  <ul style="list-style-type: none"> Labor market conditions have improved from the historic lows but the pace of improvement has slowed. Reopening of states and a strong housing market have been positive, while a lack of further stimulus weighs on consumers. 	Inflation (U.S.):  <ul style="list-style-type: none"> Range-bound inflation remains, but concerns are rising that inflation could increase as latent demand hits the economy post the relaxation of social distancing efforts.
Corporate Fundamentals:  <ul style="list-style-type: none"> Earnings visibility has improved, with earnings expected to recover strongly in 2021. Second wave of COVID-19 cases in the fall might weigh on expectations. Credit markets have stabilized, however, a rise in downgrades/defaults needs to be monitored. 	Valuations:  <ul style="list-style-type: none"> Equity market valuations look less attractive given the strong rebound but the low level of rates continues to be a tailwind. The Fed's actions that provide support to certain spread sectors is a tailwind to fixed income assets. 	Political Risks:  <ul style="list-style-type: none"> Upcoming U.S. elections could cause policy uncertainty, especially as the focus to reopen the economy continues. Rising tensions in U.S. and China relations adds to the political uncertainty.

Stance
Unfavorable to
Risk Assets



Stance
Favorable to
Risk Assets

The view expressed within this material constitute the perspective and judgment of PFM Asset Management LLC at the time of distribution (9/30/2020) and are subject to change.

Plan Performance Review

Asset Allocation & Performance

	Allocation		Performance(%)						
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	Since Inception	Inception Date
Total Fund	25,904,930	100.00	5.88	3.94	10.14	N/A	N/A	9.91	11/01/2018
<i>Blended Benchmark</i>			5.55	3.91	10.03	N/A	N/A	10.83	11/01/2018
Domestic Equity	11,177,950	43.15	8.20	7.13	16.20	N/A	N/A	13.97	11/01/2018
PFM Multi-Manager Domestic Equity Fund	11,177,950	43.15	7.90	4.56	13.43	N/A	N/A	13.07	11/01/2018
<i>Russell 3000 Index</i>			9.21	5.41	15.00	11.65	13.69	13.64	11/01/2018
Vanguard Total Stock Market ETF - 60.8%			9.19	5.46	14.96	11.64	13.68	5.53	02/01/2020
<i>Russell 3000 Index</i>			9.21	5.41	15.00	11.65	13.69	5.53	02/01/2020
Vaughan Nelson Select - 19.1% (^)			7.61	7.24	14.19	N/A	N/A	14.82	11/01/2018
Nuance All Cap Value - 4.8% (^)			3.65	-6.66	1.79	N/A	N/A	10.22	11/01/2018
<i>Russell 3000 Index</i>			9.21	5.41	15.00	11.65	13.69	13.64	11/01/2018
Champlain Mid Cap Core - 12.8% (^)			7.86	10.23	17.63	N/A	N/A	16.64	11/01/2018
<i>S&P MidCap 400</i>			4.77	-8.62	-2.16	2.90	8.11	2.82	11/01/2018
Jacobs Levy Small Cap - 2.0% (^)			3.26	-12.42	-5.21	N/A	N/A	-6.54	05/01/2019
<i>S&P SmallCap 600</i>			3.17	-15.25	-8.29	-0.33	7.20	-7.34	05/01/2019
International Equity	6,028,908	23.27	7.75	-0.04	8.27	N/A	N/A	7.77	11/01/2018
PFM Multi-Manager International Equity Fund	6,028,908	23.27	7.78	-3.00	5.09	N/A	N/A	6.17	11/01/2018
<i>MSCI AC World ex USA (Net)</i>			6.25	-5.44	3.00	1.16	6.23	5.47	11/01/2018
iShares Core MSCI Total Int'l Stock ETF - 40.3%			6.74	-5.18	3.54	1.29	6.50	-2.47	02/01/2020
<i>MSCI AC World ex USA (Net)</i>			6.25	-5.44	3.00	1.16	6.23	-2.83	02/01/2020
Lazard Int'l ACW ex US - 7.7% (^)			6.87	-7.57	-0.80	N/A	N/A	4.33	11/01/2018
<i>MSCI AC World ex USA (Net)</i>			6.25	-5.44	3.00	1.16	6.23	5.47	11/01/2018
WCM Focused Growth International - 16.8% (^)			9.67	12.67	N/A	N/A	N/A	17.77	12/01/2019
<i>MSCI AC World ex USA (Net)</i>			6.25	-5.44	3.00	1.16	6.23	-1.34	12/01/2019
Acadian Non-U.S. Equity - 9.7% (^)			7.92	-3.04	N/A	N/A	N/A	-3.04	01/01/2020
<i>MSCI EAFE (net)</i>			4.80	-7.09	0.49	0.62	5.26	-7.09	01/01/2020
Aristotle International Equity - 10.3% (^)			5.27	-7.91	-1.04	N/A	N/A	4.50	11/01/2018
<i>MSCI EAFE (net)</i>			4.80	-7.09	0.49	0.62	5.26	3.96	11/01/2018
JO Hambro Int'l Small Company - 4.1% (^)			10.91	-8.88	2.01	N/A	N/A	1.91	11/01/2018
<i>MSCI AC World ex USA Small Cap (Net)</i>			10.50	-3.64	6.97	0.93	6.80	6.00	11/01/2018

Returns are net of mutual fund fees and are expressed as percentages.

Blended Benchmark: See historical hybrid composition page for details. Asset class level returns may vary from individual underlying manager returns due to cash flows.

(*) Performance information is gross of fees and reflects sleeve level information (not specific to this client/investor). It is provided by sub-advisers of the PFM Multi-Manager Equity Fund, PFM Multi-Manager International Equity Fund and PFM Multi-Manager Fixed-Income Fund.

Asset Allocation & Performance

	Allocation		Performance(%)						
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	Since Inception	Inception Date
Schroders Global Emerging Markets - 10.5% (^)			12.34	2.91	N/A	N/A	N/A	2.91	01/01/2020
MSCI EM (net)			9.56	-1.16	10.54	2.42	8.97	-1.16	01/01/2020
Fixed Income	8,698,072	33.58	1.59	5.39	5.80	N/A	N/A	8.44	11/01/2018
PFM Multi-Manager Fixed Income Fund	8,698,072	33.58	1.64	5.78	6.21	N/A	N/A	8.59	11/01/2018
<i>Blmbg. Barc. U.S. Aggregate</i>			0.62	6.79	6.98	5.24	4.18	9.47	11/01/2018
PGIM Core Fixed - 37.3% (^)			1.37	7.41	7.65	N/A	N/A	10.15	11/01/2018
TIAA Core Fixed - 36.9% (^)			1.64	7.63	7.96	N/A	N/A	10.06	11/01/2018
<i>Blmbg. Barc. U.S. Aggregate</i>			0.62	6.79	6.98	5.24	4.18	9.47	11/01/2018
iShares Core U.S. Aggregate Bond ETF - 2.9%			0.62	6.72	6.89	5.18	4.11	1.72	05/01/2020
<i>Blmbg. Barc. U.S. Aggregate</i>			0.62	6.79	6.98	5.24	4.18	1.72	05/01/2020
PineBridge IG Credit - 7.3% (^)			2.64	10.36	11.97	N/A	N/A	14.20	11/01/2018
<i>Blmbg. Barc. U.S. Credit Index</i>			1.50	6.39	7.50	6.19	5.75	11.31	11/01/2018
Brown Bros. Harriman Structured - 7.1% (^)			2.37	1.92	2.57	N/A	N/A	4.31	11/01/2018
ICE BofAML Asset-Bckd Fxd & Flting Rate AA-BBB			2.73	2.19	2.34	3.45	3.36	3.99	11/01/2018
iShares JP Morgan USD Emging Mkts Bd ETF - 3.2%			2.39	-0.47	1.52	3.13	5.77	2.39	07/01/2020
JPM EMBI Global Diversified			2.32	-0.51	1.29	3.49	6.15	2.32	07/01/2020
Diamond Hill High Yield - 1.5%			6.04	6.89	10.02	8.30	N/A	N/A	10/01/2020
<i>Blmbg. Barc. Ba to B U.S. High Yield</i>			4.21	1.93	4.50	4.97	6.83	N/A	10/01/2020
iShares iBoxx \$ High Yield Corporate Bd ETF - 3.5%			4.20	-1.39	1.26	3.39	5.61	N/A	10/01/2020
<i>Blmbg. Barc. U.S. High Yield Very Liquid Ind</i>			4.54	-0.08	2.65	3.98	6.48	N/A	10/01/2020

Returns are net of mutual fund fees and are expressed as percentages.

Blended Benchmark: See historical hybrid composition page for details. Asset class level returns may vary from individual underlying manager returns due to cash flows.

(*) Performance information is gross of fees and reflects sleeve level information (not specific to this client/investor). It is provided by sub-advisers of the PFM Multi-Manager Equity Fund, PFM Multi-Manager International Equity Fund and PFM Multi-Manager Fixed-Income Fund.

Comparative Performance

	2019	2018	2017	2016	2015
Total Fund	20.81	N/A	N/A	N/A	N/A
<i>Blended Benchmark</i>	20.95	N/A	N/A	N/A	N/A
Domestic Equity					
PFM Multi-Manager Domestic Equity Fund	29.70	N/A	N/A	N/A	N/A
<i>Russell 3000 Index</i>	31.02	-5.24	21.13	12.74	0.48
Vanguard Total Stock Market ETF - 60.8%	30.80	-5.13	21.16	12.68	0.40
<i>Russell 3000 Index</i>	31.02	-5.24	21.13	12.74	0.48
Vaughan Nelson Select - 19.1% (^)	29.17	N/A	N/A	N/A	N/A
Nuance All Cap Value - 4.8% (^)	31.33	N/A	N/A	N/A	N/A
<i>Russell 3000 Index</i>	31.02	-5.24	21.13	12.74	0.48
Champlain Mid Cap Core - 12.8% (^)	27.82	N/A	N/A	N/A	N/A
<i>S&P MidCap 400</i>	26.20	-11.08	16.24	20.74	-2.18
Jacobs Levy Small Cap - 2.0% (^)	N/A	N/A	N/A	N/A	N/A
<i>S&P SmallCap 600</i>	22.78	-8.48	13.23	26.56	-1.97
International Equity					
PFM Multi-Manager International Equity Fund	21.23	N/A	N/A	N/A	N/A
<i>MSCI AC World ex USA (Net)</i>	21.51	-14.20	27.19	4.50	-5.66
iShares Core MSCI Total Int'l Stock ETF - 40.3%	21.85	-14.55	28.08	4.66	-4.62
<i>MSCI AC World ex USA (Net)</i>	21.51	-14.20	27.19	4.50	-5.66
Lazard Int'l ACW ex US - 7.7% (^)	21.83	N/A	N/A	N/A	N/A
WCM Focused Growth International - 16.8% (^)	N/A	N/A	N/A	N/A	N/A
<i>MSCI AC World ex USA (Net)</i>	21.51	-14.20	27.19	4.50	-5.66
Acadian Non-U.S. Equity - 9.7% (^)	N/A	N/A	N/A	N/A	N/A
Aristotle International Equity - 10.3% (^)	25.45	N/A	N/A	N/A	N/A
<i>MSCI EAFE (net)</i>	22.01	-13.79	25.03	1.00	-0.81
JO Hambro Int'l Small Company - 4.1% (^)	23.48	N/A	N/A	N/A	N/A
<i>MSCI AC World ex USA Small Cap (Net)</i>	22.42	-18.20	31.65	3.91	2.60
Schroders Global Emerging Markets - 10.5% (^)	N/A	N/A	N/A	N/A	N/A
<i>MSCI EM (net)</i>	18.44	-14.58	37.28	11.19	-14.92

Returns are net of mutual fund fees and are expressed as percentages.

Blended Benchmark: See historical hybrid composition page for details.

(^*) Performance information is gross of fees and reflects sleeve level information (not specific to this client/investor). It is provided by sub-advisers of the PFM Multi-Manager Equity Fund, PFM Multi-Manager International Equity Fund and PFM Multi-Manager Fixed-Income Fund.

Comparative Performance

	2019	2018	2017	2016	2015
Fixed Income					
PFM Multi-Manager Fixed Income Fund	9.56	N/A	N/A	N/A	N/A
<i>Blmbg. Barc. U.S. Aggregate</i>	8.72	0.01	3.54	2.65	0.55
PGIM Core Fixed - 37.3% (^)	9.65	N/A	N/A	N/A	N/A
TIAA Core Fixed - 36.9% (^)	9.59	N/A	N/A	N/A	N/A
iShares Core U.S. Aggregate Bond ETF - 2.9%	8.68	-0.05	3.53	2.56	0.48
<i>Blmbg. Barc. U.S. Aggregate</i>	8.72	0.01	3.54	2.65	0.55
PineBridge IG Credit - 7.3% (^)	15.48	N/A	N/A	N/A	N/A
<i>Blmbg. Barc. U.S. Credit Index</i>	13.80	-2.11	6.18	5.63	-0.77
Brown Bros. Harriman Structured - 7.1% (^)	5.07	N/A	N/A	N/A	N/A
<i>ICE BofAML Asset-Bckd Fxd & Fltng Rate AA-BBB</i>	4.31	3.16	4.53	3.08	0.84
iShares JP Morgan USD Emging Mkts Bd ETF - 3.2%	15.57	-5.67	9.98	9.41	0.43
<i>JPM EMBI Global Diversified</i>	15.04	-4.26	10.26	10.15	1.18
Diamond Hill High Yield - 1.5%	15.56	1.27	10.48	14.73	N/A
<i>Blmbg. Barc. Ba to B U.S. High Yield</i>	15.18	-1.86	6.92	14.14	-2.79
iShares iBoxx \$ High Yield Corporate Bd ETF - 3.5%	14.23	-1.93	6.09	13.92	-5.55
<i>Blmbg. Barc. U.S. High Yield Very Liquid Ind</i>	15.28	-2.57	6.81	16.65	-5.26

Returns are net of mutual fund fees and are expressed as percentages.

Blended Benchmark: See historical hybrid composition page for details.

(^*) Performance information is gross of fees and reflects sleeve level information (not specific to this client/investor). It is provided by sub-advisers of the PFM Multi-Manager Equity Fund, PFM Multi-Manager International Equity Fund and PFM Multi-Manager Fixed-Income Fund.

Account Reconciliation

QTR

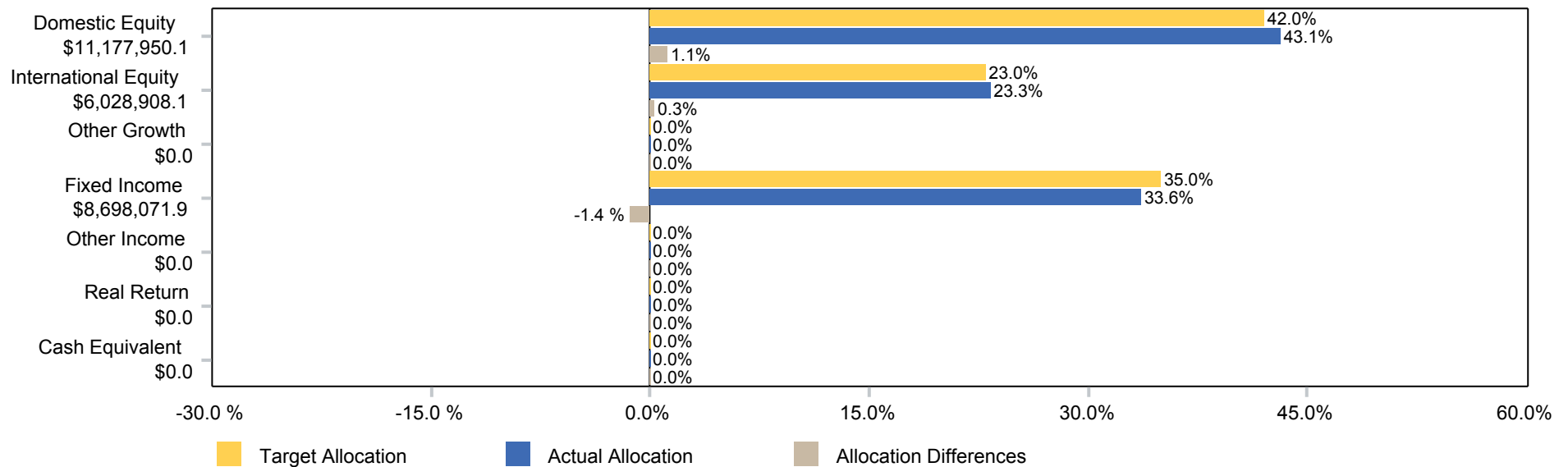
	Market Value As of 07/01/2020	Net Flows	Return On Investment	Market Value As of 09/30/2020
Total Fund	22,597,662	1,997,486	1,309,783	25,904,930

YTD

	Market Value As of 01/01/2020	Net Flows	Return On Investment	Market Value As of 09/30/2020
Total Fund	22,950,998	1,997,403	956,529	25,904,930

Asset Allocation Summary

	Asset Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Differences (%)
Total Fund	100.0	100.0	N/A	N/A	0.0
Domestic Equity	43.1	42.0	22.0	62.0	1.1
International Equity	23.3	23.0	3.0	43.0	0.3
Other Growth	0.0	0.0	0.0	20.0	0.0
Fixed Income	33.6	35.0	15.0	55.0	-1.4
Other Income	0.0	0.0	0.0	20.0	0.0
Real Return	0.0	0.0	0.0	20.0	0.0
Cash Equivalent	0.0	0.0	0.0	20.0	0.0



Historical Hybrid Composition - Blended Benchmark

Allocation Mandate	Weight (%)
Nov-2018	
Russell 3000 Index	42.0
MSCI AC World ex USA (Net)	23.0
Blmbg. Barc. U.S. Aggregate	35.0

Tab V

IMPORTANT DISCLOSURES

PFM is the marketing name for a group of affiliated companies providing a range of services. All services are provided through separate agreements with each company. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation, as it was prepared without regard to any specific objectives or financial circumstances.

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It is not possible to invest directly in an index. The index returns shown throughout this material do not represent the results of actual trading of investor assets. Third-party providers maintain the indices shown and calculate the index levels and performance shown or discussed. Index returns do not reflect payment of any sales charges or fees an investor would pay to purchase the securities they represent. The imposition of these fees and charges would cause investment performance to be lower than the performance shown.

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(^) Performance information is gross of fees and reflects sleeve level information (not specific to this client/investor). It is provided by sub-advisers of the PFM Multi-Manager Equity Fund, PFM Multi-Manager International Equity Fund and PFM Multi-Manager Fixed-Income Fund.

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- Market values that include accrued interest are derived from closing bid prices as of the last business day of the month as supplied by Refinitiv, Bloomberg, or Telerate. Where prices are not available from generally recognized sources, the securities are priced using a yield based matrix system to arrive at an estimated market value.
- In accordance with generally accepted accounting principles, information is presented on a trade date basis; forward settling purchases are included in the monthly balances, and forward settling sales are excluded.
- Performance is presented in accordance with the CFA Institute's Global Investment Performance Standards (GIPS). Unless otherwise noted, performance is shown gross of fees. Quarterly returns are presented on an unannualized basis. Returns for periods greater than one year are presented on an annualized basis. Past performance is not indicative of future returns.
- Bank of America/Merrill Lynch Indices provided by Bloomberg Financial Markets.
- Money market fund/cash balances are included in performance and duration computations.
- Standard & Poor's is the source of the credit ratings. Distribution of credit rating is exclusive of money market fund/LGIP holdings.
- Callable securities in the portfolio are included in the maturity distribution analysis to their stated maturity date, although, they may be called prior to maturity.
- MBS maturities are represented by expected average life.



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.15.

2/9/2021

Subject:

Appointment(s) / Reappointment(s)

Fiscal Impact:

n/a

Dept/Office:

County Manager's Office

Requested Action:

It is requested the Board of County Commissioners approve the District appointment(s) / reappointment(s).

Summary Explanation and Background:

Clerk to the Board Instructions:



BOARD OF COUNTY COMMISSIONERS

COMMISSIONER KRISTINE ZONKA, DISTRICT 5

490 Centre Lake Drive
Suite 175
Palm Bay, Florida 32907
Kristine.zonka@brevardfl.gov

FROM THE DISTRICT 5 COMMISSION OFFICE

ADVISORY COMMITTEE APPOINTMENT CANDIDATE

Name of Committee: Charter Review Committee

Name of Appointee: Jordin Chandler

Home Address: 9400 Pinewood Drive, Apt. 209

Palm Bay, FL 32905

Business Address:

Cell Number: 321-591-8091

Business Number:

Home Number:

Email Address: chandlerjordin@yahoo.com

Reappointment: Yes () or No (*)

Replacing:

Term of Appointment: 12/31/2021

Office Contact:

Date of Request: 1/27/2021

A waiver of the term limit is recommended due to difficulty to fill the appointment? Yes () or No ()



COMMISSIONER KRISTINE ZONKA, DISTRICT 5

490 Centre Lake Drive

Suite 175

Palm Bay, Florida 32907

Kristine.zonka@brevardfl.gov

BOARD OF COUNTY COMMISSIONERS

FROM THE DISTRICT 5 COMMISSION OFFICE

ADVISORY COMMITTEE APPOINTMENT CANDIDATE

Name of Committee: Contractors Licensing Board

Name of Appointee: Brian Fleis

Home Address: 1275 South Patrick Drive, Suite K

Satellite Beach, FL 32937

Business Address:

Cell Number: 321-609-0190

Business Number:

Home Number:

Email Address: brian@monarchhomesfl.com

Reappointment: Yes () or No (*)

Replacing:

Term of Appointment: 12/31/2021

Office Contact:

Date of Request: 1/27/2021

A waiver of the term limit is recommended due to difficulty to fill the



BOARD OF COUNTY COMMISSIONERS

COMMISSIONER KRISTINE ZONKA, DISTRICT 5

490 Centre Lake Drive

Suite 175

Palm Bay, Florida 32907

Kristine.zonka@brevardfl.gov

FROM THE DISTRICT 5 COMMISSION OFFICE

ADVISORY COMMITTEE APPOINTMENT CANDIDATE

Name of Committee: Redistricting Committee

Name of Appointee: Jason Steele

Home Address:

Business Address: 709 South Harbor City Blvd., Ste. 540 Melbourne,
Florida 32901

Cell Number: 321-258-8993

Business Number: 321-676-5555

Home Number:

Email Address: jason@smithlawtlh.com

Reappointment: Yes () or No (*)

Replacing:

Term of Appointment: 12/31/2021

Office Contact:

Date of Request: 01/27/2021

A waiver of the term limit is recommended due to difficulty to fill the
appointment? Yes () or No ()



BOARD OF COUNTY COMMISSIONERS

FROM THE DISTRICT 4 COMMISSION OFFICE

ADVISORY COMMITTEE APPOINTMENT CANDIDATE

Name of Committee: Art In Public Places Advisory Committee

Name of Appointee: Kristina Latraverse

Home Address: 1306 Helliwell Palm Bay 32907

Cell Number: 321-223-3378

Home Number:

Email Address: Kristina.latraverse@gmail.com

Reappointment: Yes (X) or No ()

Replacing:

Term of Appointment: 01/01/2021 – 12/31/2022

Office Contact: Christine Bellak

Date of Request: 02-04-2021

A waiver of the term limit is recommended due to difficulty to fill the appointment? Yes () or No (X)



BOARD OF COUNTY COMMISSIONERS

COMMISSIONER JOHN TOBIA, DISTRICT 3

2539 Palm Bay Road, NE

Suite 4

Palm Bay, FL 32905

John.Tobia@Brevardfl.gov

FROM THE DISTRICT 3 COMMISSION OFFICE

ADVISORY COMMITTEE APPOINTMENT CANDIDATE

Name of Committee: Planning and Zoning

Name of Appointee: William Capote

Home Address: 1452 Glendale Ave N.W.

Palm Bay, FL 32907

Cell Number: 321-292-0382

Home Number: 321-914-0075

Email Address: wcdolphfan@gmail.com

Reappointment: Yes () or No (X)

Replacing: vacant

Term of Appointment: 2/9/2021-12/31/2021

Office Contact: Bethany Iliff

Date of Request: 2/9/2021

A waiver of the term limit is recommended due to difficulty to fill the appointment? Yes () or No (X)



BOARD OF COUNTY COMMISSIONERS

COMMISSIONER JOHN TOBIA, DISTRICT 3

2539 Palm Bay Road, NE

Suite 4

Palm Bay, FL 32905

John.Tobia@Brevardfl.gov

FROM THE DISTRICT 3 COMMISSION OFFICE

ADVISORY COMMITTEE APPOINTMENT CANDIDATE

Name of Committee: Employee Benefits Insurance Advisory Committee

Name of Appointee: Katelynne Prasad

Home Address: 597 Almond Ave NW

Palm Bay, FL 32907

Cell Number: 321-652-3953

Home Number:

Email Address: katelynne.prasad@brevardfl.gov

Reappointment: Yes () or No (X)

Replacing: Ritch Workman

Term of Appointment: 2/9/2021-12/31/2021

Office Contact: Bethany Iliff

Date of Request: 2/9/2021

A waiver of the term limit is recommended due to difficulty to fill the appointment? Yes () or No (X)



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.1.

2/9/2021

Subject:

Proposed Amendments to Chapter 2, Article VIII, Code of Ordinances of Brevard County, Florida

Fiscal Impact:

None

Dept/Office:

County Attorney following Board approval of District 3 request for approval of legislative intent on January 12, 2021

Requested Action:

Approve proposed amendments

Summary Explanation and Background:

On January 12, 2021, the Board approved legislative intent to amend Chapter 2, Article VIII of the Brevard County Code to remove the supermajority vote requirement for the sale of county property and to alter the notice provisions. As a result of the proposed changes a simple majority will be required to sell or lease county property. Notice of the sale or lease via the agenda posted on the county's website will be deemed sufficient notice.

Clerk to the Board Instructions:

Upon approval by the Board, execution by the chair and attestation by the clerk, file the ordinance with the Department of State as required by law within the 10 day deadline.

ORDINANCE 2021-_____

AN ORDINANCE, AMENDING THE CODE OF ORDINANCES OF BREVARD COUNTY, FLORIDA, CHAPTER 2, ARTICLE VIII, SPECIFICALLY SECTION 2-244(a) TO ELIMINATE THE SUPERMAJORITY VOTE REQUIREMENT; AMENDING SECTION 2-247(2) TO ELIMINATE THE SUPERMAJORITY VOTE REQUIREMENT; AMENDING SECTION 2-249 TO ALTER THE NOTICE REQUIREMENTS; PROVIDING FOR CONFLICTING PROVISIONS; PROVIDING FOR SEVERABILITY; PROVIDING FOR AREA ENCOMPASSED AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners reviewed the existing ordinance, and

WHEREAS, Board seeks to streamline code requirements, and simplify procedures, and

WHEREAS, the existing voting requirements and notice requirements in the Brevard County Code relating to the sale or lease of surplus real property should be modified to provide greater simplicity and ease of application,

NOW, THEREFORE, BE IT ORDAINED by the Board of County Commissioners of Brevard County, Florida, that:

SECTION 1. Section 2-244(a) of Chapter 2, Article VIII of the Code of Ordinances of Brevard County Florida is hereby amended to read as follows:

(a) ~~Upon a supermajority vote, w~~Whenever the board of county commissioners determines that it is in the best interest of the county to sell or lease real property or modular structures, the board may direct the utilization of the procedures for requiring bids on the property found in F.S. § 125.35, or may utilize the alternative minimum base bid procedures provided for in this article. Notice of the intent to consider the use of such alternative minimum base bid procedures for the disposition of county real or personal property shall be published on the county internet website at least one week prior to the date of the meeting at which the county commission considers the use of the procedure. Such notice shall identify, with as much specificity as is reasonable, the real or personal property which is proposed for lease or sale.

SECTION 2. Section 2-247(2) of Chapter 2, Article VIII of the Code of Ordinances of Brevard County, Florida is amended to read as follows:

(2)The proposed lease or purchase must be brought up as a regular agenda item at a duly noticed regular public meeting of the county commission at which members of the public are afforded the opportunity to comment on the proposed sale or lease. A copy of

this article shall be made available for review by any member of the public at the location where members of the public sign up to speak on the item. If, ~~upon a supermajority vote,~~ the board of county commissioners is satisfied that the proposed use of the property will serve the public interest; will serve a public purpose; is in the best interest of the county; and make a finding that the property is either likely to be not needed for county purposes in the future or will be used in a manner compatible with county purposes, the board of county commissioners may, in its sole discretion, authorize the sale or entry into a lease for rent, whether nominal or otherwise, as the board of county commissioners may fix, regardless of the actual value of the lease.

SECTION 3. Section 2-249 of Chapter 2 Article VIII of the Code of Ordinances of Brevard County, Florida is amended to read as follows:

Notice of the county commission's intent to consider final action on the disposition of any county real or personal property by sale or lease shall be published on the county internet website ~~at least five days~~ prior to the date of the regular meeting at which the disposition will be considered. Publication of the notice via an electronic posting of the agenda on the county internet website shall be deemed sufficient. Any person objecting to the sale or disposition may submit written objections to the county manager's office or may appear and speak in objection at the meeting where the disposition is considered. A copy of the standards set forth in this article shall also be made available to interested persons by posting a copy of this article on the county internet website. Persons without a computer may access such information using the internet access available at libraries in the county public library system.

SECTION 4. CONFLICTING PROVISIONS

In the case of a direct conflict between any provision of this Ordinance and a portion or provision of any other applicable federal, state or county law, rule, code or regulation, the more restrictive shall apply, unless preempted by law.

SECTION 5. SEVERABILITY.

If any section, subsection, clause, phrase, word or provision of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such invalid unconstitutional portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions of this ordinance, provided the remaining portions effectuate purpose and intent of this ordinance.

SECTION 6. AREA ENCOMPASSED.

This Ordinance shall take effect in the unincorporated area of Brevard County, Florida.

SECTION 7. EFFECTIVE DATE.

This Ordinance shall take effect upon filing as provided by law.

DONE, ORDERED AND ADOPTED in Regular Session, this ____ day of _____, 2021.

Attest:

BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA

Rachel Sadoff, Clerk

Rita Pritchett, Chair
(As approved by the Board on ____, 2021)



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.2.

2/9/2021

Subject:

Petition to Vacate, Re: Public Utility Easements - 917 & 919 Cashew Circle - "Barefoot Bay Unit Two Part Twelve" Plat Book 22, Page 79 - Barefoot Bay - Barry Southard and Valerie Gallo - District 3

Fiscal Impact:

The petitioners are charged \$640. These fees are deposited in Fund 0002-30265 revenue account for vacatings.

Dept/Office:

Public Works Department - Surveying & Mapping

Requested Action:

It is requested that the Board of County Commissioners (BOCC) conduct a public hearing to consider vacating part of two public utility easements between Lots 46 and 47, Block 114, "Barefoot Bay Unit Two Part Twelve" in Section 10, Township 30 South, Range 38 East. If approved, it is requested that the Board authorize the Chair to sign the attached Resolution approving the vacating.

Summary Explanation and Background:

Florida Statutes, Section 336.09 and Brevard County Article II, Section 86-36, provide a method to the Board of County Commissioners to vacate and abandon unused rights-of-way and easements. The petitioners own Lots 46 and 47, Block 114 and are requesting the vacating of the portions of two 6.00 ft. wide public utility easements lying between lots 46 and 47, Block 114 to allow for a single-family home to be built between both lots. Easement to be vacated contains 720 square feet, more or less. The property is located in Barefoot Bay North of Micco Road and West of US Highway 1.

January 25, 2021, the legal notice was advertised in Florida TODAY informing the public of the date a public hearing would be held to consider the vacating. All pertinent county agencies and public utility companies have been notified. At this time, no objections have been received.

Name: Amber.Holley@brevardfl.gov Phone: Ext. 58346

Clerk to the Board Instructions:

Advertise Approved Resolution Notice and Record Vacating Resolution Documents as one resolution type document which in sequence includes the approved/signed resolution, the proof of publication of the public hearing notice and the proof of publication of the adopted resolution notice.

Resolution 2021 - _____

**Vacating a portion of two public utility easements in "Barefoot Bay Unit Two, Part Twelve"
Subdivision, Barefoot Bay, Florida, lying in Section 10, Township 30 South, Range 38 East**

WHEREAS, pursuant to Article II, Section 86-36, Brevard County Code, a petition has been filed by **BARRY SOUTHARD AND VALERIE GALLO** with the Board of County Commissioners to vacate two public utility easements in Brevard County, Florida, described as follows:

SEE ATTACHED SKETCH & DESCRIPTION

WHEREAS, the vacating action will in no way affect any private easements which may also be present in the existing public easement(s) or public right-of-way, nor does this action guarantee or transfer title.

WHEREAS, notice of the public hearing before the Board of County Commissioners was published one time in the TODAY Newspaper, a newspaper of general circulation in Brevard County, Florida, prior to the public hearing; and

WHEREAS, the Board finds that vacating the public utility easements will not be detrimental to Brevard County or the public.

THEREFORE BE IT RESOLVED that said public utility easements are hereby vacated; and Brevard County renounces and disclaims any rights in and to said easements. Pursuant to Section 177.101(5), Florida Statutes, the vacating shall not become effective until a certified copy of this resolution is filed in the offices of the Clerk of Courts and recorded in the Public Records of Brevard County.

DONE, ORDERED AND ADOPTED, in regular session, this 9th day of February, 2021 A.D.

BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA

ATTEST:

Rachel Sadoff, Clerk

Rita Pritchett, Chair

As approved by the Board on:
February 9, 2021

Brevard County Property Appraiser Detail Sheet

Account 3004992
 Owners Southard, Barry; Gallo, Valerie
 Mailing Address 3825 12th St Micco FL 32976
 Site Address 917 Cashew Cir Barefoot Bay FL 32976
 Parcel ID 30-38-10-JU-114-46
 Property Use 0020 – Vacant Mobile Home Site (Platted)
 Exemptions None
 Taxing District 3400 - Unincorp District 3
 Total Acres 0.09
 Subdivision Barefoot Bay Unit 2 Part 12
 Site Code 0001 - No Other Code Appl.
 Plat Book/Page 0022/0079
 Land Description Barefoot Bay Unit 2 Part 12 Lot 46 Blk 114

VALUE SUMMARY

Category	2020	2020	2019
Market Value	\$14,000	\$13,000	\$13,000
Agricultural Land Value	\$0	\$0	\$0
Assessed Value Non-School	\$7,310	\$6,650	\$6,650
Assessed Value School	\$14,000	\$13,000	\$13,000
Homestead Exemption	\$0	\$0	\$0
Additional Homestead	\$0	\$0	\$0
Other Exemptions	\$0	\$0	\$0
Taxable Value Non-School	\$7,310	\$6,650	\$6,650
Taxable Value School	\$14,000	\$13,000	\$13,000

SALES/TRANSFERS

Date	Price	Type	Parcel	Deed
05/27/2015	\$5,000	WD	Vacant	7381/0528
03/12/2004	\$59,500	WD	Improved	5230/3777
03/21/2000	\$26,400	WD	--	4143/0522

Fig. 1: Copy of Property Appraiser's detail sheet for lot 46, block 114, Barefoot Bay Unit Two Part Twelve, 917 Cashew Circle, Barefoot Bay, FL 32976, Section 10, Township 30 South, Range 38 East, District 3

Brevard County Property Appraiser Detail Sheet

Account 3004993
 Owners Southard, Barry; Gallo, Valerie
 Mailing Address 3825 12th St Micco FL 32976
 Site Address 919 Cashew Cir Barefoot Bay FL 32976
 Parcel ID 30-38-10-JU-114-47
 Property Use 0020 – Vacant Mobile Home Site (Platted)
 Exemptions None
 Taxing District 3400 - Unincorp District 3
 Total Acres 0.09
 Subdivision Barefoot Bay Unit 2 Part 12
 Site Code 0001 - No Other Code Appl.
 Plat Book/Page 0022/0079
 Land Description Barefoot Bay Unit 2 Part 12 Lot 47 Blk 114

VALUE SUMMARY

Category	2020	2020	2019
Market Value	\$14,000	\$13,000	\$13,000
Agricultural Land Value	\$0	\$0	\$0
Assessed Value Non-School	\$5,290	\$4,810	\$4,380
Assessed Value School	\$14,000	\$13,000	\$13,000
Homestead Exemption	\$0	\$0	\$0
Additional Homestead	\$0	\$0	\$0
Other Exemptions	\$0	\$0	\$0
Taxable Value Non-School	\$5,290	\$4,810	\$4,380
Taxable Value School	\$14,000	\$13,000	\$13,000

SALES/TRANSFERS

Date	Price	Type	Parcel	Deed
09/25/2020	\$13,400	XD	Vacant	8868/0657
05/30/2001	\$27,500	WD	Improved	4257/2362
12/13/2000	\$27,000	WD	--	4262/0149

Fig. 2: Copy of Property Appraiser's detail sheet for lot 47, block 114, Barefoot Bay Unit Two Part Twelve, 919 Cashew Circle, Barefoot Bay, FL 32976, Section 10, Township 30 South, Range 38 East, District 3

Vicinity Map

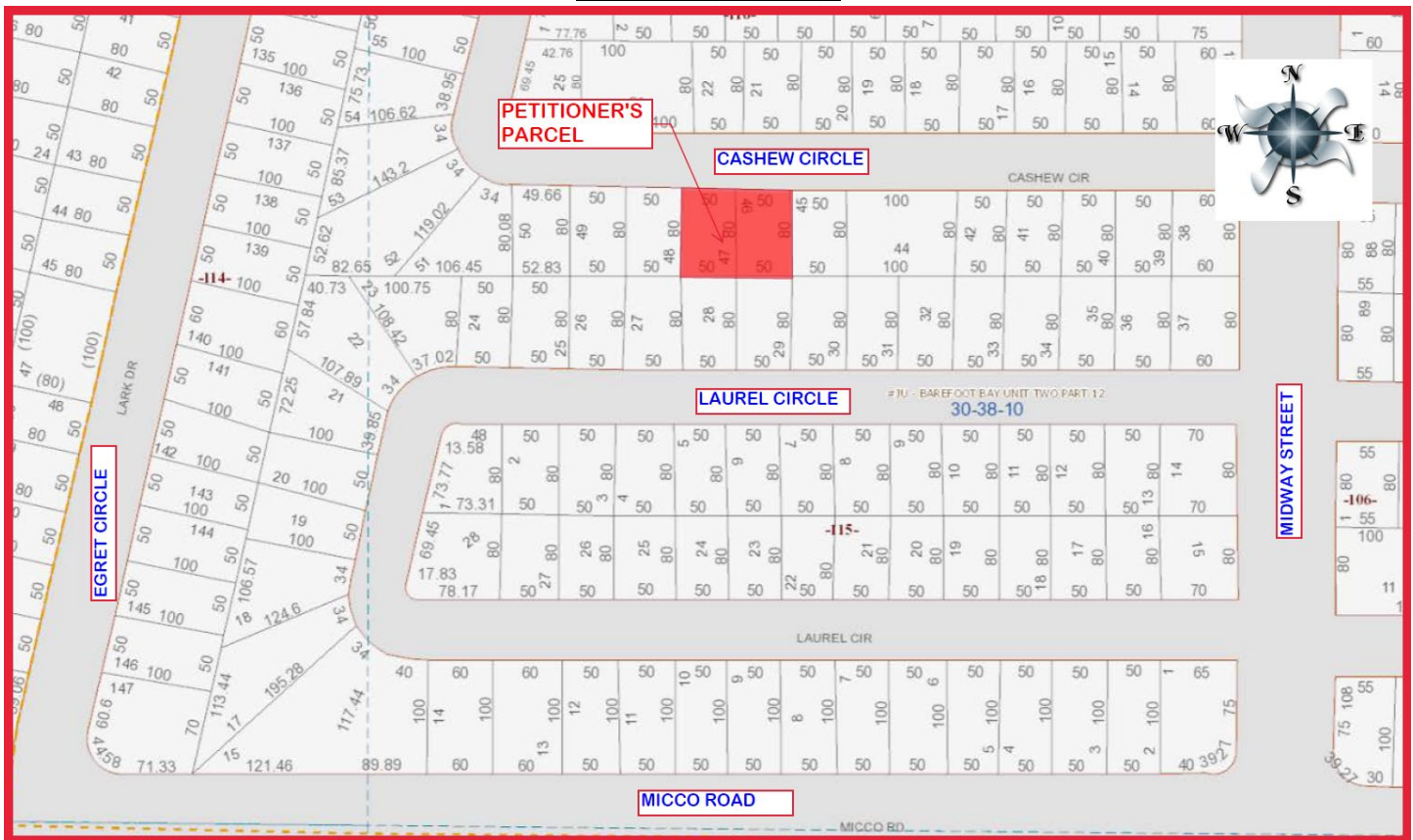


Fig. 3: Map of Lots 46 & 47, Block 114, Barefoot Bay Unit Two, Part Twelve, 917 & 919 SW Cashew Circle, Barefoot Bay, FL 32976.

Valerie Gallo and Barry Southard – 917 & 919
Cashew Circle – Barefoot Bay, FL, 32976 – Lots 46
& 47, Block 114, plat of “Barefoot Bay Unit Two
Part Twelve” – Plat Book 22, Page 79 – Section
10, Township 30 South, Range 38 East – District 3
– Proposed Vacating of portions of two 6.0 ft.
Wide Public Utility Easements

Aerial Map

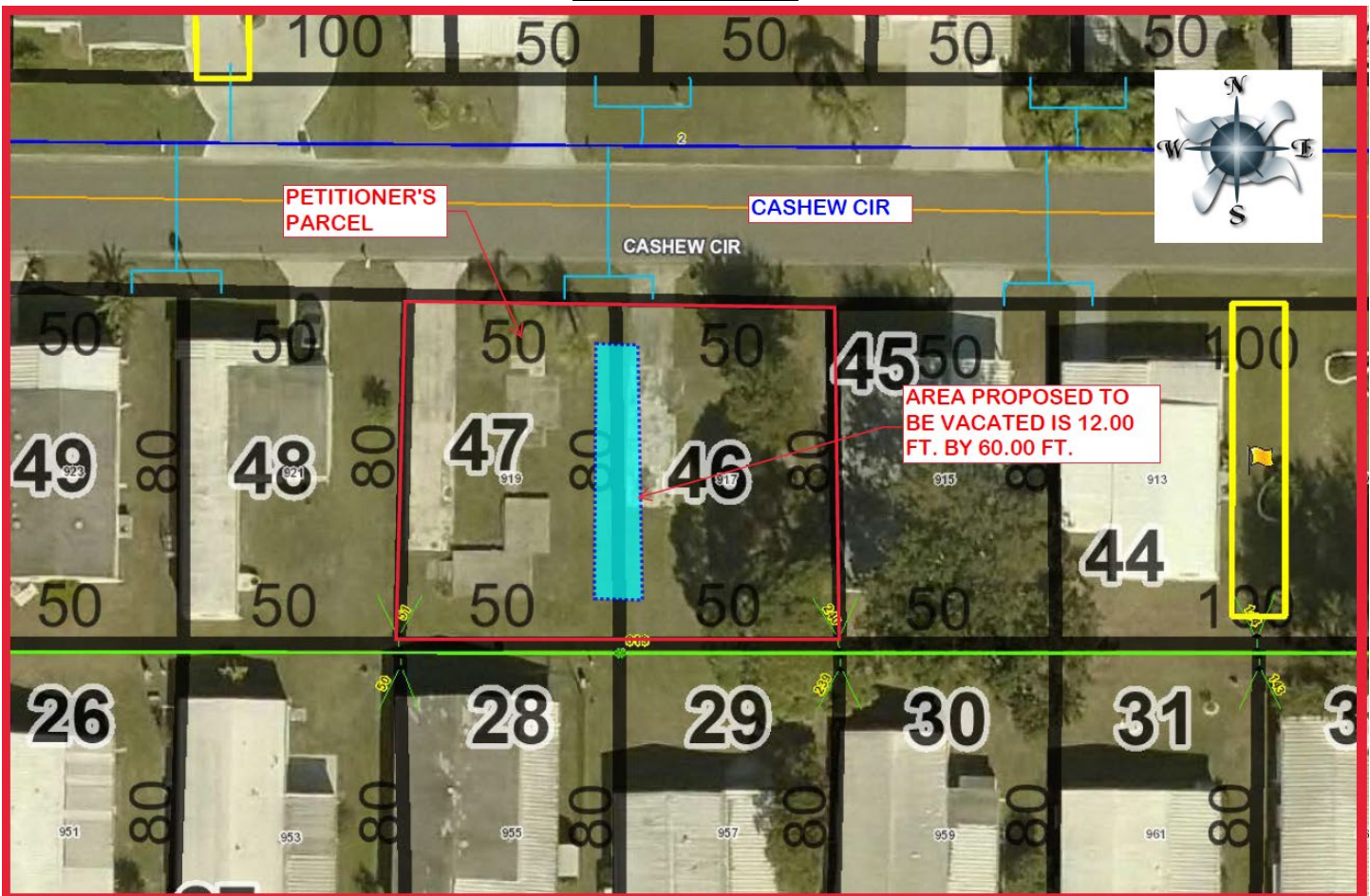


Fig. 4: Map of aerial view of Lots 46 & 47, Block 114, Barefoot Bay Unit Two, Part Twelve, 917 & 919 SW Cashew Circle, Barefoot Bay, FL 32976

Valerie Gallo and Barry Southard – 917 & 919
Cashew Circle – Barefoot Bay, FL, 32976 – Lots 46
& 47, Block 114, plat of “Barefoot Bay Unit Two
Part Twelve” – Plat Book 22, Page 79 – Section
10, Township 30 South, Range 38 East – District 3
– Proposed Vacating of portions of two 6.0 ft.
Wide Public Utility Easements

Plat Reference

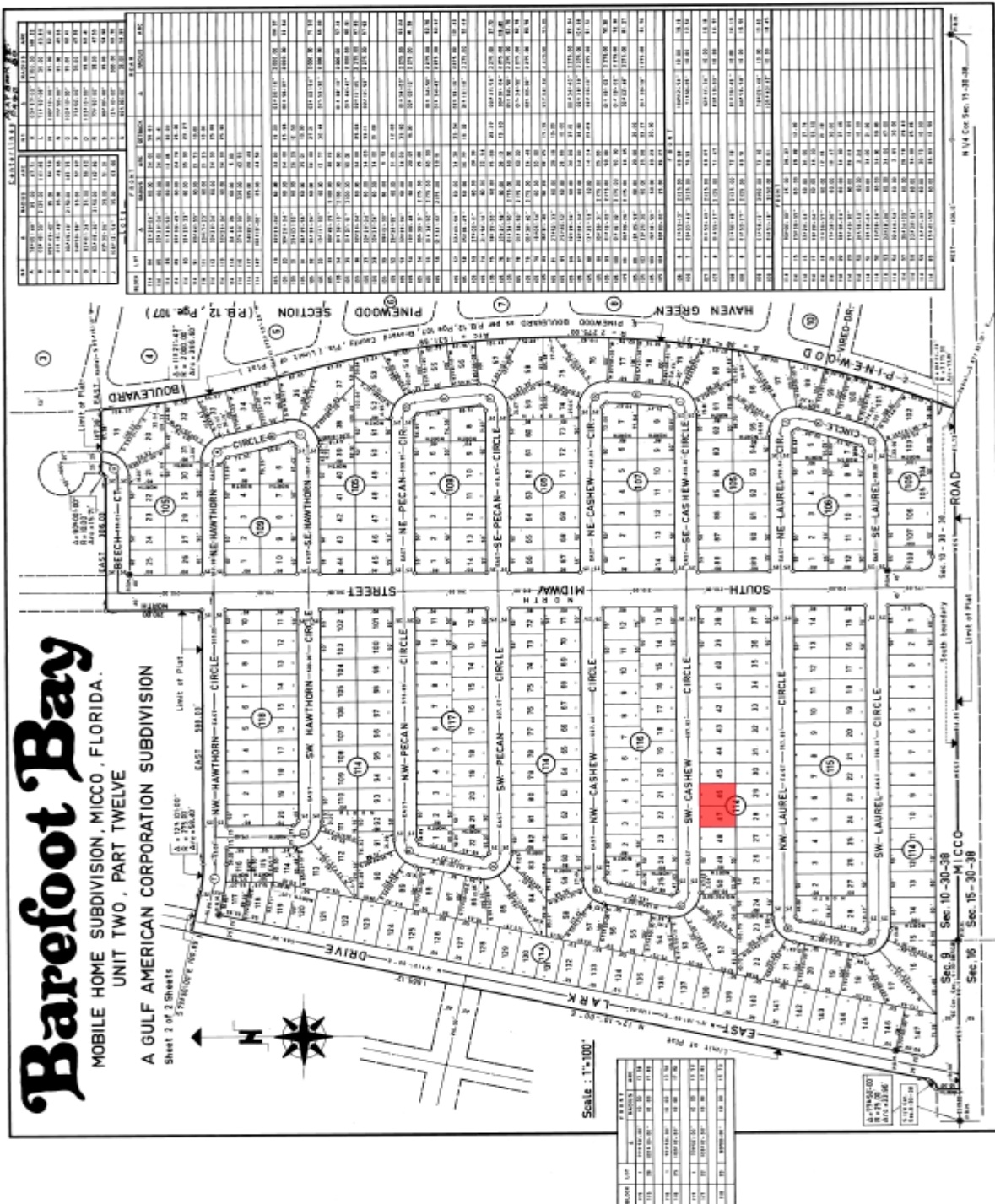


Fig. 5: Copy of plat map "Barefoot Bay" dedicated to Brevard County July 21, 1969.

LEGAL DESCRIPTION

SECTION 10, TOWNSHIP 30 SOUTH, RANGE 38 EAST
PARCEL I.D. NUMBER: 30-38-10-JU-114-46
PARCEL I.D. NUMBER: 30-38-10-JU-114-47

SHEET 1 OF 2
NOT VALID WITHOUT THE
SKETCH ON SHEET 2 OF 2

PURPOSE OF SKETCH AND DESCRIPTION:

TO VACATE TWO, 6' WIDE PUBLIC UTILITY EASEMENTS LYING ON BOTH
SIDES OF THE COMMON LINE BETWEEN LOTS 46 AND 47, BLOCK 114.

LEGAL DESCRIPTION: THE 6.00 FOOT PUBLIC UTILITY EASEMENT LYING ALONG THE EASTERLY LINE
OF LOT 47 AND THE 6.00 FOOT PUBLIC UTILITY EASEMENT LYING ALONG THE WESTERLY LINE
OF LOT 46, BLOCK 114, LESS THE NORTH 10.0 FEET FOR UTILITIES AND LESS
THE SOUTH 10 FEET FOR UTILITIES.

BAREFOOT BAY UNIT TWO, PART TWELVE,
ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 22, PAGES 79-80,
OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.
CONTAINING 720 SQUARE FEET, MORE OR LESS.

SURVEYORS NOTES:

- 1) THE BEARING BASE FOR THIS SURVEY IS A PLATTED BEARING OF N90°00'00"E
ALONG THE SOUTHERN RIGHT OF WAY OF S.W. CASHEW CIRCLE, ALL OTHER BEARINGS
ARE RELATIVE THERETO.
- 2) NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHT OF WAY AND/OR OWNERSHIP
WERE FURNISHED TO THIS SURVEYOR EXCEPT AS SHOWN. NO TITLE OPINION IS EXPRESSED
OR IMPLIED.
- 3) THIS SKETCH IS NOT INTENDED TO LOCATE EXISTING UNDERGROUND FOUNDATIONS,
ENCROACHMENTS, OR ANY IMPROVEMENTS EXCEPT AS SHOWN.
- 4) THIS SKETCH IS NOT A BOUNDARY SURVEY.
- 5) IMPROVEMENTS SHOWN HEREON ARE BASED ON THE SURVEY PREPARED BY THE UNDERSIGNED
DATED 11/12/2020, DRAWING NUMBER 20-084

PREPARED FOR:

BARRY SOUTHARD
VALERIE GALLO

DRAWN BY: C.J.C.
DATE: 12/01/2020
CHECKED BY: C.J.C.
SHEET 1 OF 2

THIS SURVEY PERFORMED BY:
COONEY SURVEYING &
MAPPING, LLC L.B. #8070
456 Chaloupe Terrace
Sebastian, FL. 32958
772-913-5322
cooneymap@gmail.com

SECTION 10
TOWNSHIP 30 SOUTH
RANGE 38 EAST

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED
SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER
PROFESSIONAL SURVEYOR AND MAPPER IN RESPONSIBLE CHARGE
CHRISTOPHER J. COONEY FLORIDA CERTIFICATE NO. 6077

Christopher J. Cooney
DATE AND SIGNATURE

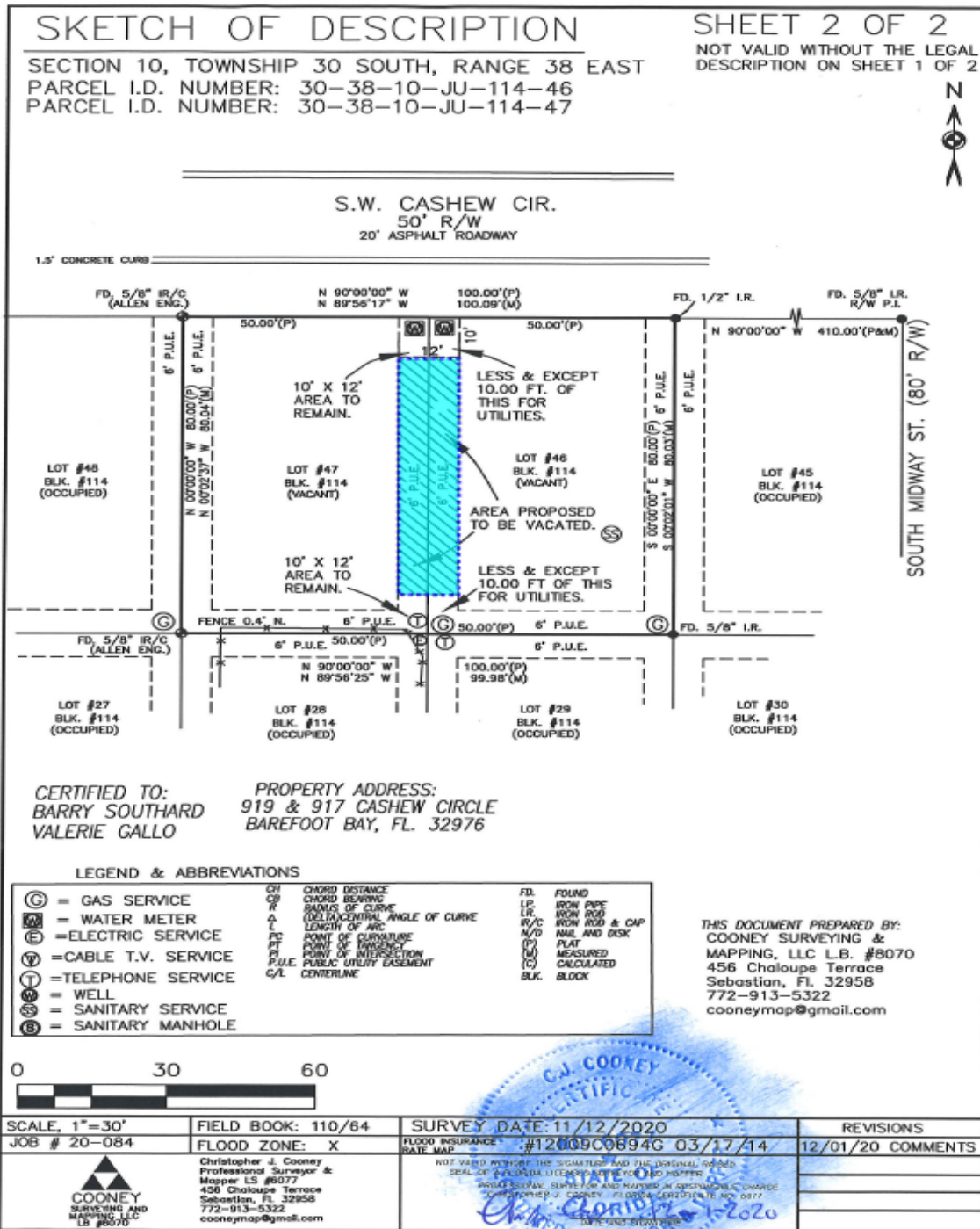


Fig. 7: Sketch of Description. Situated in Section 10, Township 30 South, Range 38 East, Parent Parcel: #30-38-10-JU-114-46&47. Sheet 2 of 2. Not valid without sheet 1 of 2. Sketch illustrates lots 46 & 47 that reside on S.W. Cashew Circle, Barefoot Bay, Florida. Two 6-foot public utility easements lying between lots 46 & 47. The coordinates of the area depicted is as follows moving North to East clockwise. North boundary – North 89°56'17" West 100.09'; East boundary South 00°02'01" West 80.03', South boundary – North 89°56'25" West 99.98'. Prepared by: Cooney Surveying & Mapping, LLC, FL LB# 8070. Project NO: 20-084.

Comment Sheet

Applicant: Barry Southard and Valerie Gallo

Updated by: Amber Holley 20210115 at 830 hours

Utilities	Notified	Received	Approved	Remarks
FL City Gas Co	20201223	20201229	Yes	No objections
FL Power & Light	20201223	20201228	Yes	No objections
At&t	20201223	20200112	Yes	No objections
Charter/Spectrum	20201223	20201230	Yes	No objections

County Staff	Notified	Received	Approved	Remarks
Road & Bridge	20201223	20210115	Yes	No objections
Land Planning	20201223	20200107	Yes	No objections
Utility Services	20201223	20200106	Yes	No objections
Storm Water	20201223	20201228	Yes	No objections
Zoning	20201223	20210107	Yes	No objections

Fig. 8: Copy of comment sheet for utility review.

Public Hearing Legal Advertisement

Ad#4561407,

01/25/2021

LEGAL NOTICE

NOTICE FOR THE PARTIAL VACATING OF TWO 6.0 FT. WIDE PUBLIC UTILITY EASEMENTS, PLAT OF "BAREFOOT BAY MOBILE HOME SUBDIVISION, UNIT TWO PART TWELVE" IN SECTION 10, TOWNSHIP 30 SOUTH, RANGE 38 EAST, BAREFOOT BAY, FL

NOTICE IS HEREBY GIVEN that pursuant to Chapter 336.09, Florida Statutes, and Chapter 86, Article II, Section 86-36, Brevard County Code, a petition has been filed by **BARRY SOUTHARD AND VALERIE GALLO** with the Board of County Commissioners of Brevard County, Florida, to request vacating the following described property, to wit:

THE 6.00 FOOT PUBLIC UTILITY EASEMENT LYING ALONG THE EASTERLY LINE OF LOT 47, AND THE 6.00 FOOT PUBLIC UTILITY EASEMENT LYING ALONG THE WESTERLY LINE OF LOT 46, BLOCK 114, LESS THE NORTH 10.00 FEET FOR UTILITIES AND LESS THE SOUTH 10.00 FEET FOR UTILITIES. BAREFOOT BAY UNIT TWO, PART TWELVE ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 22, PAGES 79-80 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA. CONTAINING 720 SQUARE FEET, MORE OR LESS. PREPARED BY: CHRISTOPHER J. COONEY, PSM.

The Board of County Commissioners will hold a public hearing to determine the advisability of such vacating of the above-described easement at **5:00 P.M. on February 9, 2021** at the Brevard County Government Center Board Room, Building C., 2725 Judge Fran Jamieson Way, Viera, Florida, at which time and place all those for or against the same may be heard before final action is taken.

Pursuant to Section 286.0105, Florida Statutes, if a person decides to appeal any decision made by the board, agency, or commission with respect to the vacating, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based.

Persons seeking to preserve a verbatim transcript of the record must make those arrangements at their own expense.

The needs of hearing or visually impaired persons shall be met if the department sponsoring the meeting/hearing is contacted at least 48 hours prior to the public meeting/hearing by any person wishing assistance.

Fig. 9: Copy of public hearing advertisement as published on January 25, 2021 see next page for full text.

Legal Notice Text

LEGAL NOTICE

NOTICE FOR THE PARTIAL VACATING OF TWO 6.0 FT. WIDE PUBLIC UTILITY EASEMENTS, PLAT OF "BAREFOOT BAY MOBILE HOME SUBDIVISION, UNIT TWO PART TWELVE" IN SECTION 10, TOWNSHIP 30, SOUTH, RANGE 38 EAST, BAREFOOT BAY, FL

NOTICE IS HEREBY GIVEN that pursuant to Chapter 336.09, Florida Statutes, and Chapter 86, Article II, Section 86-36, Brevard County Code, a petition has been filed by **BARRY SOUTHARD AND VALERIE GALLO** with the Board of County Commissioners of Brevard County, Florida, to request vacating the following described property, to wit:

THE 6.00 FOOT PUBLIC UTILITY EASEMENT LYING ALONG THE EASTERLY LINE OF LOT 47, AND THE 6.00 FOOT PUBLIC UTILITY EASEMENT LYING ALONG THE WESTERLY LINE OF LOT 46, BLOCK 114, LESS THE NORTH 10.00 FEET FOR UTILITIES AND LESS THE SOUTH 10.00 FEET FOR UTILITIES. BAREFOOT BAY UNIT TWO, PART TWELVE ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 22, PAGES 79-80 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA. CONTAINING 720 SQUARE FEET, MORE OR LESS. PREPARED BY: CHRISTOPHER J. COONEY, PSM.

The Board of County Commissioners will hold a public hearing to determine the advisability of such vacating of the above-described easement at **5:00 P.M. on February 9, 2021** at the Brevard County Government Center Board Room, Building C., 2725 Judge Fran Jamieson Way, Viera, Florida, at which time and place all those for or against the same may be heard before final action is taken.

Pursuant to Section 286.0105, Florida Statutes, if a person decides to appeal any decision made by the board, agency, or commission with respect to the vacating, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based.

Persons seeking to preserve a verbatim transcript of the record must make those arrangements at their own expense.

The needs of hearing or visually impaired persons shall be met if the department sponsoring the meeting/hearing is contacted at least 48 hours prior to the public meeting/hearing by any person wishing assistance.

Petitioner's Proposed Plot Plan for New Home

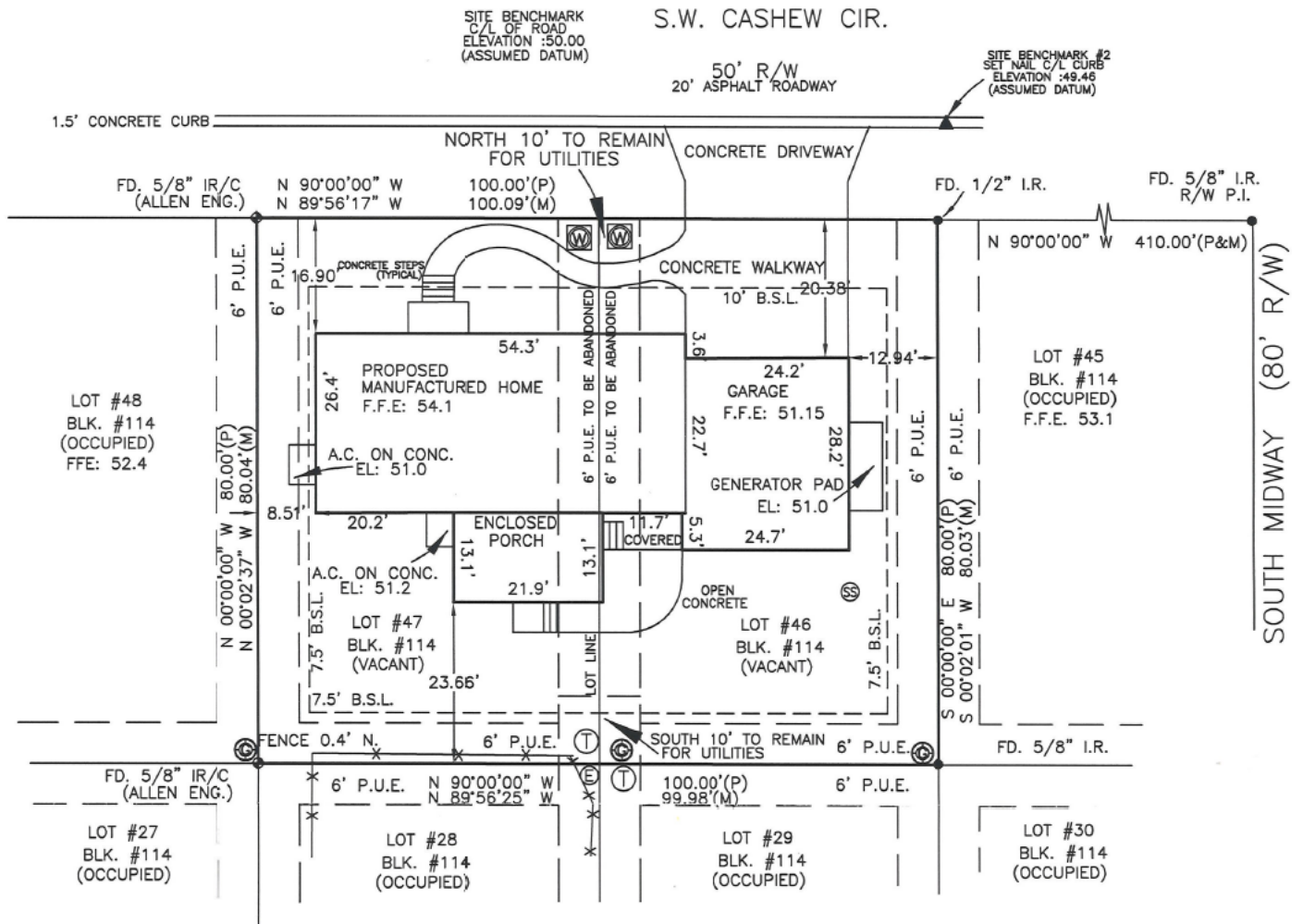


Fig. 10: Petitioner's Proposed Plot Plan for new home on lots 46 & 47, Block 114, Barefoot Bay.



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.3.

2/9/2021

Subject:

Approval Re: Second Amendment to Developer's Agreement with Benchmark Melbourne 35 Associates, Limited Partnership and the City of West Melbourne

Fiscal Impact:

There should be no fiscal impact to Brevard County. A transportation impact fee credit in the amount of \$441,887.00 remains in effect until April 3, 2023. Since this development is entirely within the City of West Melbourne, the potential fiscal impact will be to reduce transportation impact fee collections within the City by no more than the full amount of the credit.

Dept/Office:

Planning and Development Department

Requested Action:

It is requested that the Board of County Commissioners consider approval of the Second Amendment to the Developer's Agreement between Brevard County, City of West Melbourne and Benchmark Melbourne 35 Associates, Limited Partnership; authorize the Chair to announce the date and time of the second public hearing as February 23, 2021 beginning at 9:00 am; authorize the Chair to execute the agreement as amended on behalf of the County if approved; and authorize the Budget Office to execute any budget changes necessary to implement the Agreement as amended.

Summary Explanation and Background:

This Developer's Agreement was originally adopted on April 2, 2013 by the Board of County Commissioners. As originally adopted, the Agreement required Benchmark Melbourne 35 Associates, LP (M35) to construct certain roadway improvements on Hollywood Boulevard beginning at its intersection with Palm Bay Road; provides M35 with vesting for transportation concurrency for a period of ten years; awards M35 a transportation impact fee credit, and provides for the purchase of right-of-way along Hollywood Boulevard.

The First Amendment to the Developer's Agreement was approved by the Board of County Commissioners on January 8, 2019. The effect of that amendment was to reduce shopping center land use and add a 260-room hotel to the development program.

The effect of the Second Amendment to the Developer's Agreement, as proposed, will be to allow a child day care facility, automotive care center and medical office within the development while reducing the shopping

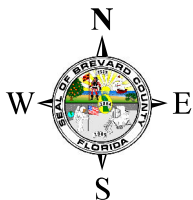
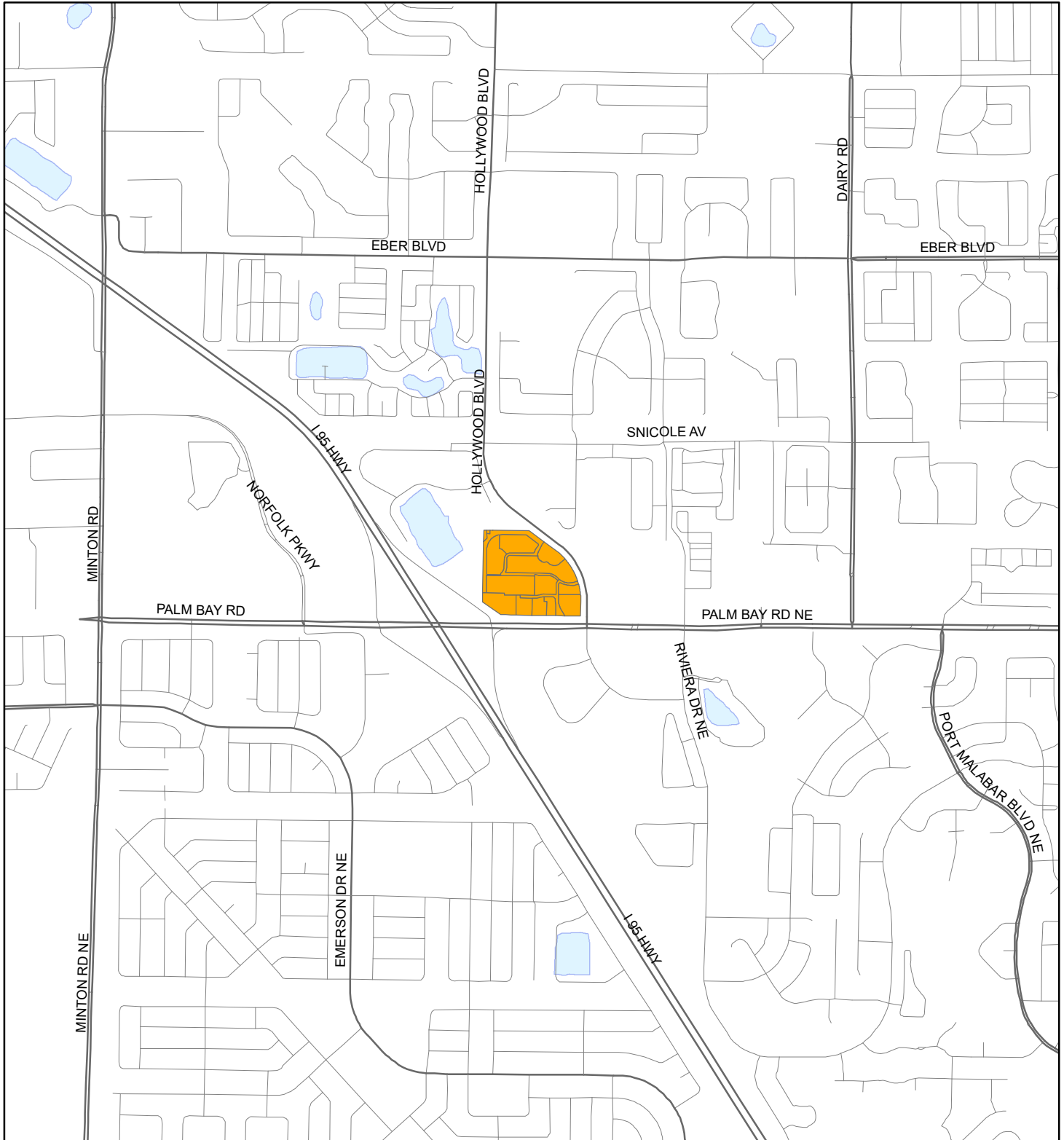
center land use. The external trip generation from the development will be balanced through the use of a traffic equivalency matrix. The City of West Melbourne will consider approval of the Second Amendment to the Developer's Agreement on February 2, 2021.

Clerk to the Board Instructions:

After the second public hearing on February 23, 2021, have three copies of the Second Amendment to the Developer's Agreement executed on behalf of the County and return them to Planning and Development for recording.

LOCATION MAP

DEVELOPER'S AGREEMENT FOR BENCHMARK 35 - 2nd AMENDMENT



1:24,000 or 1 inch = 2,000 feet

 Subject Property

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

Produced by BoCC - GIS Date: 1/25/2021

**SECOND AMENDMENT TO THE TRAFFIC CONCURRENCY AND TRAFFIC
IMPACT FEE CREDIT DEVELOPMENT AGREEMENT**

THIS SECOND AMENDMENT TO TRAFFIC CONCURRENCY AND TRAFFIC IMPACT FEE CREDIT DEVELOPMENT AGREEMENT is hereby entered into this _____ day of _____, 2021 by and between **BENCHMARK MELBOURNE 35 ASSOCIATES LIMITED PARTNERSHIP**, a foreign limited partnership, registered to do business in the State of Florida, whose address is 4053 Maple Road, Amherst, NY 14226 Maple Road, Amherst, NY 14226 (hereinafter referred to as “Developer”); **CITY OF WEST MELBOURNE, FLORIDA**, a municipal corporation, whose address 2240 Minton Road, West Melbourne, Florida 32904 (hereinafter referred to as “City”); and the **BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY FLORIDA**, a political subdivision of the State of Florida, whose address is 2725 Judge Fran Jamieson Way, Viera, Florida 32940, (hereinafter referred to as “County”), and is based on the following premises:

RECITALS:

WHEREAS, on April 2, 2013, Developer, County, and City entered into the Traffic Concurrence and Traffic Impact Fee Credit Development Agreement (“Agreement”), which Agreement was recorded in Official Records Book 6852, at Page 1866 of the Public Records of Brevard County on April 14, 2013. The Agreement was then amended on January 8th, 2019 and recorded into the Official Records Book 8354, at Page 563 of the Public Records of Brevard County; and

WHEREAS, Exhibit “1” to this Second Amendment is a Traffic Technical Memorandum (“TTM”) which states that the Developer wishes to include Child Day Care Facility, Automobile Care Center, and Medical Office land uses to the development while reducing shopping center land use intensity accordingly; and

WHEREAS, a revised TTM under date of December 8, 2020 has been prepared by Lassiter Transportation Group, Inc. for the Project, which establishes trip equivalency rates for each land use to accommodate future modifications; and

WHEREAS, the net external trip generation for the rebalance of the land uses will remain within the 5,483 trips vested in the Agreement; and

WHEREAS, the revised TTM of December 8, 2020 has been approved by the County and City; and

WHEREAS, the Developer is seeking approvals from the City and County to reduce the shopping center land use intensity accordingly to accommodate a Child Day Care Facility, Automobile Care Center, and Medical Office without increasing the vested trips, as set forth herein.

NOW THEREFORE THE PARTIES AGREE AS FOLLOWS:

1. **Recitals.** The above recitals are hereby incorporated and made a part of this Second Amendment.

2. **Technical Memorandum Provision.** The City and County agree that the TTM of December 8, 2020 as set forth in Exhibit “1” attached and incorporated herein shall replace the Traffic Technical Memorandum of October 18, 2012 and the revised Technical Memorandum dated September 25, 2018, and the Project as defined in the Agreement is changed to consist of previously approved 260 hotel rooms and 133,100 square feet of shopping center with an option to substitute shopping center land uses for “daycare, auto service, or medical office” with the equivalencies specified in the TTM.

3. **Validity.** The parties agree that all of the terms and conditions contained within the Agreement and First Amendment not in conflict with this Second Amendment shall remain in full force and effect and remain binding on the parties.

IN WITNESS WHEREOF, the parties have caused this agreement to be duly executed and their corporate seals affixed as of the day and year first above written.

*Signed, sealed and delivered
in the presence of:*

Witness 1

Print Name of Witness 1

Witness 2

Print Name of Witness 2

ATTEST:

Cynthia Hanscom, City Clerk

(SEAL)

Reviewed for legal form and sufficiency:

Morris Richardson, City Attorney

ATTEST:

Rachel M. Sadoff, Clerk
(SEAL)

DEVELOPER:

**BENCHMARK MELBOURNE 35
ASSOCIATES, LIMITED PARTNERSHIP,
a Delaware limited partnership by
Benchmark Blue Ash Properties, a
Delaware Corporation, its General Partner**

By: John Rehak
Its: Vice President

CITY OF WEST MELBOURNE, a
chartered municipal corporation

Hal J. Rose, Mayor
As approved by the Council on_____

**BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA, a**
political subdivision of the State of Florida

Rita Pritchett, Chair
As approved by the Board on_____

STATE OF _____ §
COUNTY OF _____ §

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this _____ day of _____, 2021, by **John Rehak, Vice President of Benchmark Blue Ash Properties, Inc., General Partner of Benchmark Melbourne 35 Associates Limited Partnership**, a Delaware corporation of the State of New York. He is [] personally known to me or [] produced as identification and did/did not take an oath.

My commission expires:

Notary Public

SEAL

Commission No.:

(Name typed, printed or stamped)

STATE OF FLORIDA §
COUNTY OF BREVARD §

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this _____ day of _____, 2021, by **Hal J. Rose, Mayor of The City of West Melbourne, Florida**, a chartered municipal Corporation, on behalf of the City. They are [] personally known to me or [] produced as identification and did/did not take an oath.

My commission expires:

Notary Public

SEAL

Commission No.:

(Name typed, printed or stamped)

STATE OF FLORIDA §
COUNTY OF BREVARD §

The foregoing instrument was acknowledged before me by means of ☐ physical presence
or ☐ online notarization, this _____ day of _____, 2021, by **Rita
Pritchett, Chair Board County Commissioners of Brevard County, Florida**, a political,
subdivision of the State of Florida, who is [] personally known to me or [] produced as
identification and did/did not take an oath.

My commission expires:

Notary Public

SEAL

Commission No.:

(Name typed, printed or stamped)

EXHIBIT “1”

Traffic Technical Memorandum by Lassiter Transportation Group, Inc.

Dated January 14, 2021


[Attached]

Ref: 3419.31

TECHNICAL MEMORANDUM

To: John Denninghoff, PE
Assistant County Manager, Brevard County

To: Christy Fischer
Planning and Economic Development Director, City of West Melbourne

From: Matthew West, AICP 

Date: January 14, 2021

Subject: West Melbourne Interchange Center – Land Use Modification

Introduction

LTG Inc. (LTG) has been retained by The Benchmark Group to provide a trip equivalency matrix which will permit the conversion of land uses without exceeding the maximum number of vested trips included in the Traffic Concurrency and Traffic Impact Fee Credit Development Agreement (the Agreement) for the West Melbourne Interchange Center. The Agreement is attached as Exhibit B of this memorandum.

West Melbourne Interchange Conversion Matrix

The matrix below allows the conversion of shopping center space to Child Care Center, Auto Care Center, and/or Medical Office uses. The conversion is based on the daily rates in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th edition. The Agreement was based on 9th edition. The ITE land use codes are noted in the matrix for each use. The Shopping Center rate received a 34% reduction based on pass-by capture as noted in the original analysis included in Exhibit B of the Agreement. Also, the rates for all uses were reduced ten (10) percent to reflect internal capture per the Agreement, Exhibit B. The rate adjustments are shown in Exhibit A of this memorandum.

**Land Use Exchange Matrix
(Based on Daily Traffic)
West Melbourne Interchange Center**

	To:		
From 1000 square feet – s.f. of the following uses	Medical Office/ 1,000 s.f.	Child Care Center/ 1,000 s.f.	Automobile Care Center/1,000 s.f.
ITE Code 820	ITE Code 720	ITE Code 565	ITE Code 942
Shopping Center	0.78	0.38	1.19

Automobile Care Center does not have a weekday daily rate, so the Saturday daily rate was used.

TECHNICAL MEMORANDUM

Christy Fischer
John Denninghoff, PE
January 14, 2021
Page 2

c: John Rehak (The Benchmark Group)
Robert Robb (Robb & Taylor Engineering)

Exhibit A - Land Use Exchange Matrix

Exhibit B - Traffic Concurrency and Traffic Impact Fee Credit Development Agreement

TECHNICAL MEMORANDUM

Christy Fischer
 John Denninghoff, PE
 January 14, 2021
 Page 3

EXHIBIT A

Land Use Exchange Matrix

**Daily Net Rates Matrix
 West Melbourne Interchange Center**

USE	ITE Code*	Daily Rate*	34% Pass-by +10 % internal Capture	10% Internal Capture Only
Shopping Center	820	42.7	25.36	NA
Medical Office	720	36.13	NA	32.52
Child Care Center	565	74.06	NA	66.65
Automobile Care Center	942**	23.72	NA	21.35

* Source: ITE Trip Generation, 9th Edition

**Saturday Daily Rate was utilized

**Land Use Exchange Matrix
 (Based on Daily Traffic)
 West Melbourne Interchange Center**

	To:		
From 1000 square feet – s.f. of the following uses	Medical Office/ 1,000 s.f.	Child Care Center/ 1,000 s.f.	Automobile Care Center/1,000 s.f.
ITE Code 820	ITE Code 720	ITE Code 565	ITE Code 942
Shopping Center	0.78	0.38	1.19

TECHNICAL MEMORANDUM

Christy Fischer
John Denninghoff, PE
January 14, 2021
Page 4

Exhibit B
Traffic Concurrency and Traffic Impact Fee
Credit Development Agreement

**TRAFFIC CONCURRENCY AND TRAFFIC IMPACT FEE CREDIT
DEVELOPMENT AGREEMENT**

**PROVIDING FOR VESTING FOR TRANSPORTATION CONCURRENCY AND
TRANSPORTATION IMPACT FEE CREDIT AGREEMENT.**

**THIS VESTING FOR TRANSPORTATION CONCURRENCY AND
TRANSPORTATION IMPACT FEE CREDIT AGREEMENT** is entered into this 2
day of April, 2013 by and between the **BOARD OF COUNTY
COMMISSIONERS OF BREVARD COUNTY FLORIDA**, a political subdivision of the
State of Florida, whose address is 2725 Judge Fran Jamieson Way, Viera, Florida 32940,
(hereinafter referred to as "County"), the **CITY OF WEST MELBOURNE, FLORIDA**, a
municipal corporation, whose address 2285 Minton Road, West Melbourne, Florida 32904
(hereinafter referred to as "City"), and **BENCHMARK MELBOURNE 35 ASSOCIATES
LIMITED PARTNERSHIP**, a foreign limited partnership, registered to do business in the State
of Florida, whose address is 4053 Maple Road, Amherst, NY 14226 Maple Road, Amherst, NY
14226 (hereinafter referred to as "Developer"), and is based on the following premises:

RECITALS:

WHEREAS, on January 17, 1989 the County adopted Ordinance 89-04 which amended
the Code of Laws and Ordinances of Brevard County, Florida to include Article XI known as the
"Brevard County Transportation Impact Fee Ordinance;" (hereinafter referred to as the
"Ordinance"); and

WHEREAS, the County and the City entered into an interlocal agreement, executed on
April 11, 1989 by the City and May 16, 1989 by the County, providing for the participation by
the City in the program created by the Ordinance; and

WHEREAS, the City and County have entered into an Interlocal Agreement regarding
collection and distribution of Transportation Impact Fees; and

WHEREAS, the City and County Transportation Impact Fee Ordinances provide a mechanism for credits against Impact Fees for qualifying contributions towards off-site roadway improvements and further provides that no credit shall exceed the assessed transportation impact fee for the land development activity awarded the credit; and

WHEREAS, the provisions of the Ordinance are applicable within the incorporated limits of the City including the real property owned by the Developer; and

WHEREAS, the Ordinance includes a schedule of Impact Fees assessable against the users of property for the public purpose of requiring new developments to pay their fair share of the impacts attributable to said development on the transportation network of Brevard County; and

WHEREAS, the County has enacted a moratorium on the assessment of Impact Fees, which moratorium the County and City acknowledge applies to the Benchmark Property; and

WHEREAS, Developer acknowledges that the County and City may, but are not obligated to reinstate Transportation Impact Fees, and in the event of reinstatement may alter the amount of Impact Fees previously charged; and

WHEREAS, Developer is the owner of that certain property located at the Northwest corner of Palm Bay Road and Hollywood Boulevard in the City of West Melbourne and more particularly described on Exhibit "A" attached hereto and incorporated herein by this reference (the "Benchmark Property"); and

WHEREAS, in the event that the moratorium on the assessment of Transportation Impact Fees are lifted, and Impact Fees on some or all of the Benchmark Property is assessed against the Developer, its successors and/or assigns, then in that event, the County and City agree that any Transportation Impact Fees collected shall be paid to Developer regardless of the then

owner at time of collection up to the amount of the Transportation Impact Fee Credit granted under this Agreement.

WHEREAS, the City has adopted a Comprehensive Plan and Zoning Regulations that are applicable within its corporate limits; and

WHEREAS, the City has established a Future Land Use Map designation of Commercial and established the C-1 Zoning Districts on the Benchmark Property; and

WHEREAS, the technical Memorandum prepared by Lassiter Transportation Group, Inc. dated October 18, 2012, and more particularly described on Exhibit "B," which Memorandum has been approved by the County and City states that the Project will generate 5,483 new external trips, which trips were approved as part of the County's Concurrency Approval for driveway permit; and

WHEREAS, Developer as part of its Project and subject to receiving Transportation Impact Fee Credits if and when the moratorium is lifted and Impact Fees are in fact collected during the term of this Agreement, all as set forth herein, is willing to make certain roadway improvements to the southern portion of Hollywood Boulevard and signaling the entranceway to its development and Wal-Mart all as set forth in the attached list and diagram prepared by Robb & Taylor Engineering Solutions, Inc. ("Roadway Improvements") which are attached as Exhibit "C"; and

WHEREAS, Benchmark Property has received Concurrency Approval from Brevard County for the development of 174,500 square feet of commercial/retail plus a 114 room hotel ("Project") per Exhibit "D" attached; and

WHEREAS, the parties agree that a portion of the Roadway Improvements include site related improvements, and that any and all expenses associated with the completion of any site related improvement as described herein are not eligible for Transportation Impact Fees Credits; and

WHEREAS, the Roadway Improvements to be constructed by Developer is expected to further increase the capacity of and improve traffic safety on Hollywood Boulevard, and the additional capacity will accommodate traffic that is not generated by the Project; and

WHEREAS, the Roadway Improvements shall be constructed according to the design specifications of Brevard County, which shall be incorporated in the plans being submitted for review and approval; and

WHEREAS, Developer shall commence the Roadway Improvements within twelve (12) months from the adoption of this Agreement, subject only to Developer obtaining all of the necessary government permits for the Roadway Improvements and finalization of the right-of-way purchase described herein.

WHEREAS, the City is responsible for issuance of building permits on the Benchmark Property and the City based upon the County's Trip Capacity Analysis on Hollywood Boulevard has verified the Trip Capacity Analysis in determining trip availability or capacity; and

WHEREAS, a traffic concurrency evaluation of the proposed development program for the Benchmark Property was conducted by the County and the City and a Finding of Non-Deficiency was issued on October 11, 2012; and

WHEREAS, the Florida Local Government Development Agreement Act as set forth in Chapter 163, Subsections 163.3220 through 163.3243, Florida Statutes was established to authorize local governments to provide assurances to developers through the approval of development agreements that the developers will be able to implement their development programs subject to the conditions of the development agreements and thereby to encourage a stronger commitment to capital facilities planning, ensure the provisions of adequate public facilities for development, encourage the efficient use of resources, encourage private participation in comprehensive planning, and reduce the economic cost of development; and

WHEREAS, the City and County desires to utilize the provisions of the Florida Local Government Development Agreement Act in order to promote the stated goals and objectives of the Act in Brevard County by entering into this Agreement; and

WHEREAS, the design and construction of the Roadway Improvements is consistent with and serves to implement the goals, objectives, and policies of the City's Comprehensive Plan; and

WHEREAS, Developer wishes to document it is authorized to implement its Project subject to the conditions set forth herein and that the Project is vested for development and transportation concurrency for a period not to exceed ten years; and

WHEREAS, the City and County endorse the Developer's request for a credit against Transportation Impact Fees if and only if said Impact Fees through Brevard County are levied on the Project in the future.

NOW THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged by all parties, the parties hereto agree as follows:

1. **Recitals.** The above recitals are hereby incorporated and made a part of this Agreement.

2. **Roadway Improvements.** Developer shall be responsible for and construct Roadway Improvements pursuant to the design and engineering plans prepared by Lassiter Transportation Group, Job No. 3419.04 dated December 7, 2012, Pages T-1 through T-9, and Robb & Taylor Engineering Solutions, Inc., Project No. DR-12-10-01-D, dated December 7, 2012 ("Plans") as said Plans may be amended by Developer and County. The Roadway Improvements shall consist of those improvements as shown on Exhibit "C," including all improvements necessary to integrate the new road area with the County's Advance Traffic Management System, and all improvements shall be constructed in compliance with Brevard

County Right of Way Permit #10RW-00700. The Roadway Improvements illustrated in Exhibit “C” shall commence within twelve (12) months of the adoption of this Agreement by all parties subject only to the Developer obtaining all of the necessary government permits for the Roadway Improvements.

3. **Engineer’s Opinion of Costs.** The Engineer’s Opinion of Costs (hereinafter the “Estimated Costs”) for completing the site-related and non-site related Roadway Improvements in accordance with the requirements of this Agreement and the Plans are itemized in Exhibit “E” attached hereto and by this reference made a part hereof. For the purpose of calculating the amount of transportation impact fee credit due Benchmark, the Engineer’s Opinion of costs shall have the same meaning as estimated costs in the Ordinance. The estimated costs itemized in Exhibit “E” are those costs associated with the completion of the site-related improvements described in Paragraph 2 and 3 above. The estimated costs of \$441,877.00 itemized in Exhibit “E” are those costs associated with the completion of the non-Site Related Improvements and which are eligible for a traffic impact fee credit.

4. **Non-related Roadway Improvements.** For the purposes of this Agreement and in accordance with the definitions, limitations, and other provisions of the Ordinance, the parties agree that the non-Site related Roadway Improvements have been determined on a percentage basis as set forth in Exhibit “C” attached hereto and incorporated herein.

5. **Initiation of the Project.** Developer shall design and construct the Roadway Improvements in the manner and time as provided for in the Plans. Prior to the commencement of any work on the Project, Developer shall notify the County and City that it is ready to proceed.

6. **Delivery by Developer’s Certificate of Completion.** Upon the delivery by Developer and/or its agents of its Certificate of Completion and request for final inspection of the Roadway Improvements, and the issuance of final “As Built” plans, the County within five (5) days thereafter shall conduct any remaining inspections, if any, and issue its Certificate of Completion or in the event of any deficiencies state in writing the specifics of the deficiency, and

the Developer shall within thirty (30) days thereafter correct any deficiencies, and thereafter the County shall issue its Certificate of Completion within five (5) days of the additional submittal. Road construction shall be inspected by the County's Development Inspection Group, and Developer shall pay all fees associated with such review.

7. **Statement of Actual Costs.** Within sixty (60) days from the date that the County issues a certificate of completion for the Roadway Improvements, the Developer shall provide to the City and County a statement of the actual total cost of the Roadway Improvements including the non-site related portion thereof, which statement shall be certified by the engineer of record. The County and City shall have sixty (60) days to review the costs for eligibility and reasonableness and approve the engineer's certification. In the event the City or County does not approve the engineer's certification of cost, the parties shall, within fifteen (15) days of rejection of Engineer's certification, choose a mutually acceptable engineer familiar with road design and construction to arbitrate the dispute. The parties shall be bound by said engineer's determination of the actual total cost of eligible improvements.

8. **Impact Fee Credit.** In consideration of the financial expenses associated with the construction of the Roadway Improvements described in Paragraph 2 above the City and County agree that the Developer and its successors in interest shall enjoy the benefit of a credit against any future Transportation Impact Fees that maybe assessed (hereinafter referred to as the "Impact Fee Credit") assessed on new construction on the Real Property whichever is less. The amount of the Impact Fee Credit shall not exceed the estimated cost of constructing the eligible improvements or the actual cost of construction of said improvements, whichever is less, nor shall it exceed the actual cumulative amount of Transportation Impact Fees assessed for the Project. The estimated cost of constructing the eligible improvements are \$441,877.00.

9. **Non- Transferability of Impact Fee Credit.** The Impact Fee Credit shall be applicable to Transportation Impact Fees that maybe assessed on new construction on the Benchmark Property. The Impact Fee Credit shall not be applicable, creditable or transferable to any other property. The Impact Fee Credit shall be available to the Developer and its successors in interest, including without limitation any subsequent owners of all or any portion of the

Benchmark Property. In no event shall the Developer or its successors in interest enjoy the benefit of the Impact Fee Credit more than ten (10) years from the effective date of this Agreement. Any unused credit shall be forfeited at the expiration of such ten (10) year period, and in no event shall it be reimbursed or redeemable for cash or other valuable consideration other than the Impact Fee Credit described herein. The County agrees that any and all Transportation Impact Fees that it receives from the Benchmark Property shall regardless of who the current owner of the Property or any portion thereof maybe, shall be forwarded to and/or reimbursed directly to the Developer up to the total amount of the Impact Fee Credit, if said fees are received within ten (10) years from the effective date of this Agreement. In the event no Impact Fees are imposed or Impact Fees are eliminated, County shall not owe Developer or be liable to Developer for any money compensation or other consideration as a result of this Agreement.

10. **Vesting.** The parties hereto recognize that Hollywood Boulevard is within the control of the County. The Benchmark Property is within the jurisdiction of the City. The City has jurisdiction over the Benchmark property for site plan permitting purposes other than County road connection permits and other state, federal or regional permitting requirements. A Concurrency evaluation on the Project was conducted by the County, a finding of non-deficiency was issued on October 11, 2012, a copy of which is attached as Exhibit "D" and has been verified by the City Engineer. Provided there is no material default under this Agreement, the Benchmark Property shall be vested for 5,483 new trips for a period of ten years from the date of this Agreement. The driveway permit may be subject to revision or revocation if the plans change or the regulations change within ten years of the date of this Agreement. The City acknowledges that it shall treat the 5,483 new vested trips as already existing and shall not issue building permits for other projects which would require such projects to utilize or consume any of the 5,483 trips that are being vested hereunder. The City shall not be prohibited from issuing building permits for other projects, if and only to the extent that there is still capacity available on the effective roadways to serve such projects after taking into account the Project's 5,483 new trips, existing trips, and otherwise committed trips. To assist in addressing the capacity issue, the County shall include the trips to be vested herein as existing trips when conducting any future

traffic concurrency analysis on the subject roadway or other projects for the period of ten (10) years.

11. **Right-of-Way Purchase.** County has agreed to purchase and Developer has agreed to sell to County additional right-of-way on Hollywood Boulevard the legal descriptions and diagrams of which are shown on Exhibit "F" attached. The County shall purchase the right-of-way pursuant to the Right-of-Way Purchase Agreement between the parties as set forth in Exhibit "F".

12. **Applicability of Ordinances and Resolutions of City to Agreement.** The applicability of Ordinances and Resolutions of the City to the Agreement are as set forth below:

- A. As provided in Section 163.3233(1), Florida Statutes (2011), the ordinances and regulations of the City governing the Development of the Benchmark Property on the Effective Date of this Agreement shall continue to govern the Development, except as otherwise provided herein. At the termination of this Agreement, all then existing codes shall become applicable to the Development of the Benchmark Property. Except as otherwise specifically set forth herein, no fee (including the existence or lack thereof), fee structure, amount computation method or fee amount, including any Impact Fees, then in existence or hereafter imposed, shall be vested by virtue of this Agreement.
- B. As provided in Section 163.3233(2), Florida Statutes (2011), the City may apply changes to vested ordinances and policies, or new requirements, adopted subsequently to the execution of this Agreement to the Benchmark Property, only if the City has held a public hearing and determined that: (a) such new ordinances or policies are not in conflict with the laws and policies governing this Agreement and do not prevent Development of the land uses, intensities or densities as allowed under the terms of this Agreement; (b) such new ordinances or policies are essential

to the public health, safety, or welfare and the new ordinances or policies expressly state that they shall apply to a Development that is subject to a Development Agreement; (c) as provided in Section 163.3233(3). This Ordinance does not abrogate any rights that may vest pursuant to common law; d) such new ordinances or policies are specifically anticipated and provided for in this Agreement; (e) the City has demonstrated that substantial changes have occurred in pertinent conditions existing at the time of the approval of this Agreement; or (f) this Agreement is based on substantially inaccurate information supplied by the Developer.

- C. As provided in Section 163.3241, Florida Statutes (2011), in the event that state or Federal laws are enacted after the approval, effectiveness, or execution of this Agreement which are applicable to and preclude the parties' compliance with the terms of this Agreement, such Agreement shall be modified or revoked as is necessary to comply with the relevant state or Federal laws, such modification or revocation to take place only after the notice provisions provided for the adoption of a Development Agreement have been complied with. The City shall cooperate with the Developer in the securing of any permits which may be required as a result of such modifications.

- D. As provided in Section 163.3235, Florida Statutes (2011), the City shall review this Agreement not less than once every twelve (12) months to determine if good faith compliance with this Agreement has been shown. If the Community Development Department determines there is a lack of compliance by Developer with this Agreement, it shall notify the Developer of same and give Developer a reasonable time, not to exceed ninety (90) days, to correct such noncompliance. If Developer fails to comply with the requirements of the notice, the Community Development Department shall report its findings to the City Council and the City Attorney. If the City finds, on the basis of competent substantial evidence

there has been a failure to comply with the terms of this Agreement after affording Developer such period of time within its discretion to come back into compliance, the Agreement may be revoked or modified by the City upon thirty (30) days' notice to the Developer. Such termination or modification may be accomplished only after public hearing and notice otherwise required for the adoption of this Agreement.

13. **Effective Date and Duration.** In accordance with Section 163.3239, Florida Statutes, this Agreement shall become effective when: (a) it has been recorded in the Public Records of Brevard County, Florida, and (b) thirty (30) days after a certified copy of the recorded Agreement has been received by the Florida Department of Community Affairs (the "**Effective Date**"), Unless terminated earlier by either party as provided herein, this Agreement shall remain in effect for a period of ten (10) years pursuant to Fla. Statute Section 163.3220, et seq. Additionally, the duration of this Agreement may be extended as provided for in Fla. Statute 163.3220, et seq.

14. **Notices.** All notices, demands and correspondence required or provided for under this Agreement shall be in writing and delivered in person or dispatched by certified mail, postage prepaid, return receipt requested. Notice required to be given shall be addressed as follows:

If to Developer:	Benchmark Melbourne 35 Associates Limited Partnership Attn: Mr. John Rehak, Jr. 4053 Maple Road Amherst, NY 14226 Telephone: 716-833-4986 Facsimile: 716-833-2954 Email: jrehak@benchmarkgrp.com
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With a copy to:	GrayRobinson, P.A. Attn: Philip F. Nohrr, Esq. P.O. Box 1870 Melbourne, FL 32902-1870 Telephone: 321-727-8100 Facsimile: 321-984-1156 Email: pnohrr@gray-robinson.com
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If to City: City of West Melbourne
 Attn: Scott Morgan, City Manager
 2285 Minton Road
 West Melbourne, FL 32904-4928
 Telephone: 321-727-7700
 Facsimile: 321-768-2390
 Email: smorgan@westmelbourne.org

With a copy to: James Wilson, City Attorney
 City of West Melbourne
 2285 Minton Road
 West Melbourne, FL 32904-4928
 Telephone: 321-727-7700
 Facsimile: 321-768-2390
 Email: jwilson@westmelbourne.org

If to County: Brevard County
 Attn: Howard Tipton, County Manager
 2725 Judge Fran Jamieson Way
 Viera, FL 32940
 Telephone: 321-633-2000
 Facsimile: 321-633-2115
 Email: howard.tipton@brevardcounty.us

With Copy to: Brevard County Public Works Department
 Attn: John Denninghoff
 2725 Judge Fran Jamieson Way
 Viera, FL 32940
 Telephone: 321 617-7202
 Facsimile:
 Email: John.Denninghoff@brevardcounty.us

15. **Miscellaneous.** The execution of this Agreement has been duly authorized by the appropriate body of each of the parties hereto. Each party has complied with all the applicable requirements of law and has full power and authority, to comply with the terms and conditions of this Agreement. The venue of any litigation arising out of this Agreement shall be Brevard County, Florida. The exhibits attached hereto and incorporated by reference herein are by such attachment and incorporation made a part of this Agreement for all purposes. The fact that one of the parties to this Agreement may be deemed to have drafted or structured the provisions of this Agreement, whether in whole or in part, shall not be considered in construing or interpreting any

particular provision hereof, whether in favor of or against such party. The terms and conditions of this Agreement shall bind and inure to the benefit of the parties hereto and their respective successors and assigns. This Agreement is solely for the benefit the parties hereto and their respective successors and assigns, and no right or cause of action shall accrue upon or result by reason hereof or for the benefit of any third party not a formal party hereto. Nothing in this Agreement whether express or implied, is intended or shall be construed to confer upon any person other than the parties hereto any right, remedy, or claim under or by reason of this Agreement or any of the provisions hereof. This Agreement may not be changed amended, or modified in any respect whatsoever, nor may any covenant,, condition, agreement, requirement, provision, or obligation contained herein be waived, except in writing signed by an of the parties hereto.

16. **Recording.** This Agreement shall be recorded in the Public Records of Brevard County, Florida, at the expense of the Developer.

17. **Attorneys' Fees/Hold Harmless/Prevailing Party.** Should any litigation arise between the parties each party shall bear its own attorneys' fees and costs in the event of litigation or claims against the County and City from third parties arising from this agreement or the construction described herein. Developer shall indemnify and hold harmless the County and City for any such claims; however, nothing contained herein shall be deemed to be a waiver by the County and City's sovereign immunity. Developer acknowledges specific consideration has been paid and other good and sufficient consideration has been received for this.

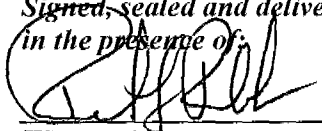
18. **Captions.** Headings of a particular paragraph of this agreement are inserted only for convenience and are in no way to be construed as part of the agreement or as a limitation of the scope of the paragraphs to which they refer.

19. **Severability.** If any part of this agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way. If any party's joinder in

or execution of this agreement is deemed invalid for any particular purpose, the sections for which the joinder or execution is valid shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have caused this agreement to be duly executed and their corporate seals affixed as of the day and year first above written.

*Signed, sealed and delivered
in the presence of:*



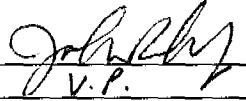
Witness 1
Robert F. Robb
Print Name of Witness 1

Philip F. Mohr

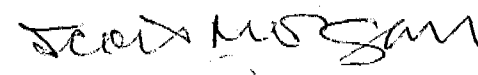
Witness 2
Philip F. Mohr
Print Name of Witness 2

DEVELOPER:

**BENCHMARK MELBOURNE 35
ASSOCIATES, LIMITED PARTNERSHIP,**
a Delaware limited partnership by
Benchmark Blue Ash Properties, a
Delaware Corporation, its General Partner

By: 
Its: V.P.

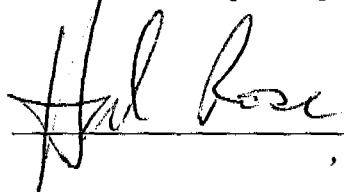
ATTEST:



, City Manager


(SEAL)

CITY OF WEST MELBOURNE, a
chartered municipal corporation



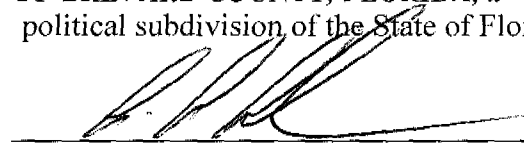
, Mayor

ATTEST:



Scott Ellis, Clerk

**BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA, a**
political subdivision of the State of Florida



Andy Anderson, Chairman (SEAL)
As approved by the Board on 4-2-13

STATE OF FLORIDA §
COUNTY OF BREVARD §

The foregoing instrument was acknowledged before me this 19th day of MARCH, 2013, by John Rehak on behalf of the Managing Partner of Benchmark Melbourne 35 Associates Limited Partnership, a Delaware corporation of the State of New York. He/She is ☒ personally known to me or ☐ produced as identification and did/did not take an oath.

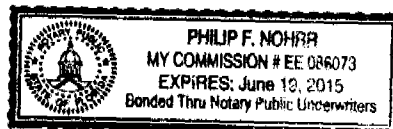
My commission expires:

Philip F. Nohra
Notary Public

SEAL

Commission No.:

(Name typed, printed or stamped)



STATE OF FLORIDA §
COUNTY OF BREVARD §

The foregoing instrument was acknowledged before me this 25th day of March, 2013, by Hal J. Rose and Scott Morgan, Mayor and City Manager, respectively, of The City of West Melbourne, Florida, a chartered municipal Corporation, on behalf of the City. They are ☒ personally known to me or ☐ produced as identification and did/did not take an oath.

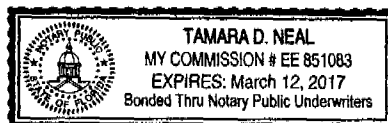
My commission expires:

Tamara D. Neal
Notary Public

SEAL

Commission No.:

(Name typed, printed or stamped)



STATE OF FLORIDA §
COUNTY OF BREVARD §

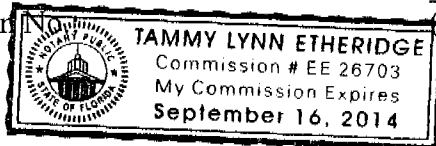
The foregoing instrument was acknowledged before me this 2 day of
April, 2013, by Andy Anderson, Chairman of the
Board of County Commissioners of Brevard County, Florida, a political subdivision of the State
of Florida, who is [] personally known to me or [] produced as identification and did/did not
take an oath.

My commission expires:

Tammy Lynn Etheridge
Notary Public

SEAL

Commission



Tammy Lynn Etheridge
(Name typed, printed or stamped)

LIST OF EXHIBITS

- A. Benchmark Property
- B. Trip Memorandum by Lassiter Transportation Group, Inc.
- C. Roadway Improvements
- D. Concurrency Approval for Driveway Permit (10/11/12)
- E. Engineer's Opinion of Total Costs and Percentage of Non-Site Related Costs
- F. Legal Description and Diagram of right-of-way being acquired and Contract for Sale and Purchase of Right-Of-Way with price to be determined.

EXHIBIT "A"**BENCHMARK PROPERTY****Property Description:**

A portion of Lots 22, 23, and 24, FLORIDA INDIAN RIVER LAND COMPANY SUBDIVISION of Section 20, Township 28 South, Range 37 East, according to the plat thereof as recorded in Plat Book 1, Page 164 of the Public Records of Brevard County, Florida, being more particularly described as follows:

Commence at the Southwest corner of the Northwest one-quarter of said Section 20; thence N00°53'40"E, along the West line of the Northwest one-quarter of said Section 20, a distance of 296.72 feet, to a point on the Limited Access right of way of Interstate 95 and the POINT OF BEGINNING of the herein described parcel; thence continue, N00°53'40"E, along the West line of the Northwest one-quarter of said Section 20, a distance of 1,026.94 feet; thence S89°12'13"E, along the North lines of said Lots 24 and 23, a distance of 729.13 feet, to a point on the Westerly right of way line of Hollywood Boulevard (a 100.00 foot wide right of way); thence the following 3 courses along said Westerly right of way line: (1) S53°29'51"E, a distance of 397.65 feet, to the point of curvature of a curve, concave Southwesterly, having a radius of 950.00 feet and a central angle of 54°16'33"; (2) Southeasterly, along the arc of said curve to the right, a distance of 899.93 feet, to a point of tangency; (3) S00°46'42"W, a distance of 226.00 feet, to a point on the North right of way line of Palm Bay Road as shown on the Interstate 95 Right of Way Map (Section 70220-2429); thence N89°13'18"W, along said North right of way line and along the Interstate 95 Limited Access right of way as shown on said map, a distance of 1,040.69 feet; thence N00°36'57"E, along said Limited Access right of way, a distance of 1.45 feet; thence N86°47'35 "W, along said Limited Access right of way, a distance of 117.77 feet; thence N55°13'18"W, along said Limited Access right of way, a distance of 351.00 feet, to the POINT OF BEGINNING.

Less and except those lands described in that Warranty Deed recorded in Official Records Book 5477, Page 3131.

EXHIBIT "B"

TRIP MEMORANDUM BY LASSITER TRANSPORTATION GROUP, INC.



Ref: 3419.04

TECHNICAL MEMORANDUM

To: John Denninghoff, PE
Director of Transportation Engineering, Brevard County

From: Daniel M. D'Antonio, PE

Date: October 18, 2012

Subject: West Melbourne Interchange Center – Proportionate Fair-Share Determination
Hollywood Boulevard

INTRODUCTION

Lassiter Transportation Group, Inc. (LTG) has been retained by The Benchmark Group (the developer) to determine the proportionate fair-share (PFS) responsibility for the West Melbourne Interchange Center to satisfy transportation mitigation requirements on Hollywood Boulevard. The West Melbourne Interchange Center is a proposed development located between Hollywood Boulevard and I-95, north of Palm Bay Road, in the City of West Melbourne. The developer has been granted concurrency approval from Brevard County for 179,000 square feet of shopping center and a 114-room hotel on the 35-acre parcel.

LTG previously submitted to Brevard County a traffic impact study (TIS) which was followed by responses to County comments and additional analyses. The PFS analysis presented in this memorandum incorporates all previous analyses and is intended to establish the developer's proportionate fair-share and transportation impact fee credits related to proposed improvement to Hollywood Boulevard.

TRIP GENERATION

Project trips are a key input variable in the equation used to calculate PFS. As such, the project trip generation was calculated using the procedures also used by Brevard County to evaluate transportation concurrency. A copy of the concurrency worksheet is attached as Exhibit B-1 with the total trip generation presented in Table 1.

Table 1
Total Trip Generation
West Melbourne Interchange Center – PFS Determination

Time Period	Land Use	Land Use Code	Trip Rate Equation	Size (X)	Total Trips (T)	Percent Entering	Percent Exiting	Trips Entering	Trips Exiting
Daily	Hotel	310	$T = 8.92(X)$	114 rooms	1,018	50%	50%	509	509
	Shopping Center	820	$T = 42.94(X)$	179.00 KSF	7,688	50%	50%	3,844	3,844
Totals:					8,706			4,353	4,353
P.M. Peak-Hour	Hotel	310	$T = 0.70(X)$	114 rooms	80	49%	51%	39	41
	Shopping Center	820	$\ln(T) = 0.67 \ln(X) + 3.37$	179.00 KSF	940	49%	51%	461	479
Totals:					1,020			500	520

123 Live Oak Ave. • Daytona Beach, FL 32114 • Phone 386.257.2571 • Fax 386.257.6996

www.lassitertransportation.com

TECHNICAL MEMORANDUM

John Denninghoff, PE

October 18, 2012

Page 2

According to the Institute of Transportation Engineer's (ITE) reference manual titled *Trip Generation Handbook, 2nd Edition*, mixed-use developments retain a portion of total trips internal to the site. These trips do not travel on the external network and are removed from the external trip generation. Additionally, retail developments attract a portion of trips already on the existing roadway network adjacent to the site. This attraction is referred to as pass-by capture. Table 2 presents the net external trip generation for the West Melbourne Interchange Center.

Table 2
Net External Trip Generation
West Melbourne Interchange Center – PFS Determination

Time Period	Land Use	Total Trips			Pass-By Trips ¹			Internal Trips (10%) ²			New External Trips		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Daily	Hotel	509	509	1,018	0	0	0	51	51	102	458	458	916
	Shopping Center	3,844	3,844	7,688	1,307	1,307	2,614	254	254	507	2,283	2,283	4,567
Totals:		4,353	4,353	8,706	1,307	1,307	2,614	305	305	609	2,741	2,741	5,483
P.M. Peak-Hour	Hotel	39	41	80	0	0	0	4	4	8	35	37	72
	Shopping Center	461	479	940	157	163	320	30	32	62	274	285	558
Totals:		500	520	1,020	157	163	320	34	36	70	309	321	630

¹ Pass-by trips for ITE land use code 820 equals 34% of the total trip generation

² Consistent with Brevard County concurrency calculations, internal capture equals 10%

PROPOSED ROADWAY IMPROVEMENTS

The developer has met with County Staff on several occasions to discuss improvements to Hollywood Boulevard to increase capacity and provide efficient access to the site. Exhibit B-2 shows the improvements that provide access to the site as well as additional capacity at the intersection of Palm Bay Road and Hollywood Boulevard.

As shown on Exhibit B-2, the following improvements are proposed to benefit the general motoring public:

- 1.) Signalize existing over-capacity intersection of Hollywood Boulevard at Wal-Mart Driveway
- 2.) Construct additional southbound left-turn lane at Hollywood Boulevard/Palm Bay Road and provide a southbound right-turn overlap phase

It should be noted that LTG performed a traffic signal warrant study (TSWS) for the intersection of Hollywood Boulevard/Wal-Mart Drive using existing count data. The study concluded that a signal is warranted based on the westbound (Wal-Mart traffic) approach volumes.

PROPORTIONATE FAIR-SHARE

The Florida Statutes (FS) provide a mechanism for developers to pay a proportionate share of transportation infrastructure improvement costs based the ratio of project traffic versus the increase in roadway capacity due to an improvement. This mechanism is known as proportionate fair-share (PFS). The developer's PFS calculations for transportation improvements previously mentioned are presented below.

Hollywood Boulevard at Wal-Mart Driveway/Project Driveway – Improvement: Signalize

As previously stated, the intersection of Hollywood Boulevard and Wal-Mart Drive warrants signalization under existing conditions, with no traffic from the proposed project. As such, the developer should only be responsible for a portion of the signal that benefits the eastbound approach comprised exclusively of project traffic. Exhibit B-3 graphically shows the p.m. peak-hour turning movements used to evaluate the existing capacity under two-way

TECHNICAL MEMORANDUM

John Denninghoff, PE

October 18, 2012

Page 3

stop control and improved capacity under signal control. The project traffic was determined based on the trip generation presented in Table 2 and the prior project trip distribution results. Background traffic was obtained by applying growth factors based on the last five years of historic traffic counts to the 2012 turning movement counts.

The current version of *Highway Capacity Software* (HCS) was used to determine the unsignalized capacity based on build-out traffic. Exhibit B-4 presents the HCS results with the unsignalized capacities reported on Page 5. The intersection was then analyzed under signal control to determine the improved capacity. Exhibit B-5 presents HCS results of the improved lane group capacity.

For the purposes of determining PFS, only the capacities of the minor street left-turn movements were considered. This is consistent with TSWS procedures as it is recognized that major-street movements and exclusive right-turn lanes do not generally experience capacity benefits from signal control. Table 3 summarizes the PFS calculations using the data presented in Exhibits B-3 through B-5.

Table 3
Hollywood Boulevard at Wal-Mart/Project Driveway PFS Summary
West Melbourne Interchange Center – PFS Determination

Lane Group	Existing Capacity	Resultant Capacity	Change in Capacity	Project Trips	Prop. Fair-Share %
<i>Eastbound</i>					
Left	28	196	168	75	
<i>Westbound</i>					
Left	32	311	279	0	
Totals:	60	507	447	75	16.78%

As indicated in Table 3, the West Melbourne Interchange Center project traffic is expected to consume only 16.78% of the additional minor-street capacity available under signal control. Alternatively, the developer's share of the signal can be evaluated based the portion of project traffic benefitted by the signal versus the portion of Wal-Mart traffic benefitted by the signal. As shown below, this comparison results in a 38.9% share of signalization costs for which the developer would be responsible.

$$\text{Wal - Mart Volume} = 145 + 147 + 124 + 161 = 577$$

$$\text{Project Volume} = 75 + 88 + 132 + 73 = 368$$

$$\text{Total Volume} = 577 + 368 = 945$$

$$\text{Project Share} = \frac{368}{945} = \underline{\underline{38.9\%}}$$

It should be noted that although a traffic signal will facilitate ingress/egress of the proposed project, it is warranted under existing conditions by westbound (Wal-Mart) approach traffic. Based traffic projections, the eastbound approach (project traffic) will not warrant signalization under build-out conditions.

Palm Bay Road at Hollywood Boulevard – Improvement: Additional Southbound Left-Turn Lane

As part of the proposed improvement plan, the developer has proposed an additional southbound left-turn lane at the Palm Bay Road/Hollywood Boulevard intersection. This improvement is illustrated on Exhibit B-2. The additional lane will add capacity to the intersection by directly affecting the southbound left-turn movement as well as facilitating the redistribution of green time to other approaches.

TECHNICAL MEMORANDUM

John Denninghoff, PE

October 18, 2012

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According to FS 163.3180(16)(b)2, PFS mitigation shall be applied as a credit against impact fees to the extent that the mitigation is used to address improvements contemplated by the local government's impact fee ordinance. Based on Brevard County's current transportation impact fee schedule, West Melbourne Interchange Center will generate \$1,255,120 in revenue. The improvements will be made by the developer to the intersection of Palm Bay Road and Hollywood Boulevard in exchange for transportation impact fee credits. As indicated on Exhibit B-2, only a portion of the proposed Hollywood Boulevard improvements will be eligible for transportation impact fee credits. However, according to statutes, the portion should be 100% creditable.

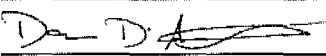
CONCLUSION

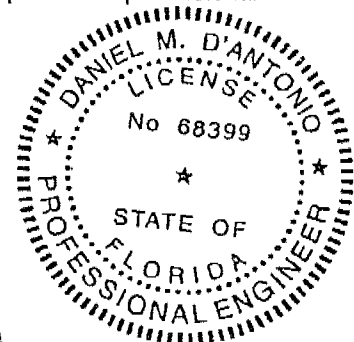
The proposed West Melbourne Interchange Center has received transportation concurrency approval from Brevard County for 179,000 square feet of shopping center and a 114-room hotel. The development program is expected to generate 5,483 net external daily trips with 630 occurring in the p.m. peak-hour.

Two improvements which will benefit the general motoring public are proposed as part of a Hollywood Boulevard improvement plan. The developer is responsible for his PFS to signalize the intersection of Hollywood Boulevard at Wal-Mart Drive and add a second southbound left-turn lane at the intersection of Palm Bay Road at Hollywood Boulevard. A maximum of 83.22% and a minimum of 61.1% of the signalization costs should be impact fee creditable while 100% of the capacity improvements at Palm Bay Road/Hollywood Boulevard should be impact fee creditable.

c: John Rehak (The Benchmark Group)
 Rob Robb (Robb & Taylor Engineering)
 Phil Nohr, Esq. (Gray Davis)
 R. Sans Lassiter, PE (LTG)

I affirm, by affixing my signature and seal below, that the findings contained herein are, to my knowledge, accurate and truthful and were developed using current procedures standard to the practice of professional engineering.

Name: Daniel M. D'Antonio
 Signature: 
 Florida PE License No.: 68399
 Date: October 18, 2012



 **Lassiter Transportation Group, Inc.**
 Engineering and Planning

Exhibit B-1

Brevard County Concurrency Worksheet

2411.04

CONCURRENCY WORKSHEET FOR SITE PLAN/SUBDIVISION			Review # (DR) 08 04 06-D	
Project Name: WEST MELBOURNE INTERCHANGE CENTER, WEST MELBOURNE ROAD IMPACT 2nd submittal			Review Date: 04-16-08	
<input checked="" type="checkbox"/> Site Plan Subdivision Commercial Subdivision			Commission District # 3	
for driveway/r.o.w. permit			note; replaces DR-08-04-03-D	
Specific Use(s)			Projected ADT	
820 SHOPPING Center I (s.f.)			179,000.00	7686.26 -34% (PASSBY CREDIT) = 5072.932
NOTE: ALL BLDGS ARE SPEC. NO SIGNED TENANTS S.F. MAY CHANGE +/-				
310 HOTEL (rooms) w/meeting rooms			114.00	1016.88
PID: 28 3720 Zoned: RU111			Total ADT: 6089.812 less 10% internal capture as previously approved in meeting 6/29/07 -609.9812 = 5480 / 2 SEG = 2740 EA	
A. Solid Waste				
Billing Units		150*0054	Landfill Capacity 5,208 (million tons)	
Volume		0.8100 (tons/day)	Landfill Capacity Remaining 49.45 %	
B. Parks and Recreation (LOS is given in acres per 1000 capita)				
Planning Area		Number of Units	Existing LOS	
		Project's Population	Potential LOS	
C. Transportation Facilities				
Projected ADT:		2740 * 50% = 1370		
Segment #	164A	Road Name	HOLLYWOOD	
MAV (ADT)	15600	ALOS	E	
Current Volume (ADT)	14139	Current Vol/MAV	90.63	%
Potential Volume (ADT)	15509	Potential Vol/MAV	99.42	%
Maximum Capacity Allotment	365			
		2600 * 50% = 1300		
Segment #	230B	Road Name	PALM BAY RD	
MAV (ADT)	51800	ALOS	E	
Current Volume (ADT)	40797	Current Vol/MAV	78.76	%
Potential Volume (ADT)	42167	Potential Vol/MAV	81.40	%
Maximum Capacity Allotment	27			
Segment #		Road Name		
MAV (ADT)		ALOS		
Current Volume (ADT)		Current Vol/MAV	%	
Potential Volume (ADT)		Potential Vol/MAV	%	
Maximum Capacity Allotment				
D. Drainage Is addressed by the site plan/subdivision ordinance requirements.				
E. Potable Water				
Capacity Availability Certificate attached		Provider:		
Capacity Reservation Certificate attached		Expiration Date:		
Comments:				
F. Sewer/Septic				
Capacity Availability Certificate attached		Provider:		
Capacity Reservation Certificate attached		Expiration Date:		
Comments:				
FINDING:				
<input checked="" type="checkbox"/> Non-deficiency		<input type="checkbox"/> Deficiency (see attached)		<input checked="" type="checkbox"/> Exceeds vesting threshold(s)
<input checked="" type="checkbox"/> Approved with Conditions		for Hollywood Blvd		
Reviewed By: Randy Oller, 4/16/08				

Reservation Fee: _____ Paid by cash/check # _____ Received by: _____

Date: _____

Site Plan/subdivision application must be made by: driveway/r.o.w. permit application made by 10/16/08 Receipt #: 217381

Site Plan/subdivision must be approved by: _____

Building Permit must be obtained by: _____

Current Road Segment Info			
04/05/08			
SEG#:	164A		
Local Name:	Hollywood		
From:	Palm Bay		
To:	Eber		
Current Volume:	14,139		
100% MAV (ADT):	15,600	ALOS:	E
Current Vol/MAV:	90.63%		
Max Capacity Allotment:	365	per project if vesting	
U/R LOS Group:	UM		
Permit Trips:	546		
ADT Count	13,593		
Count Date	11/12/2007		

Current Road Segment Info	
04/05/08	
SEG #:	2308
Local Name:	Palm Bay Rd
From:	I-95
To:	Babcock (SR 507)
Current Volume:	41,421
100% MAV (ADT):	51,800
ALOS:	E
Current Vol/MAV:	79.96%
Max Capacity Alignment:	2,595 per project if vesting
U/R LOS Group:	U2
Permit Trips:	2,454
ADT Count:	38,907
Count Date:	11/13/2007

Exhibit B-2

Hollywood Boulevard Improvement Plan

Exhibit B-3

Build-Out P.M. Peak-Hour Traffic

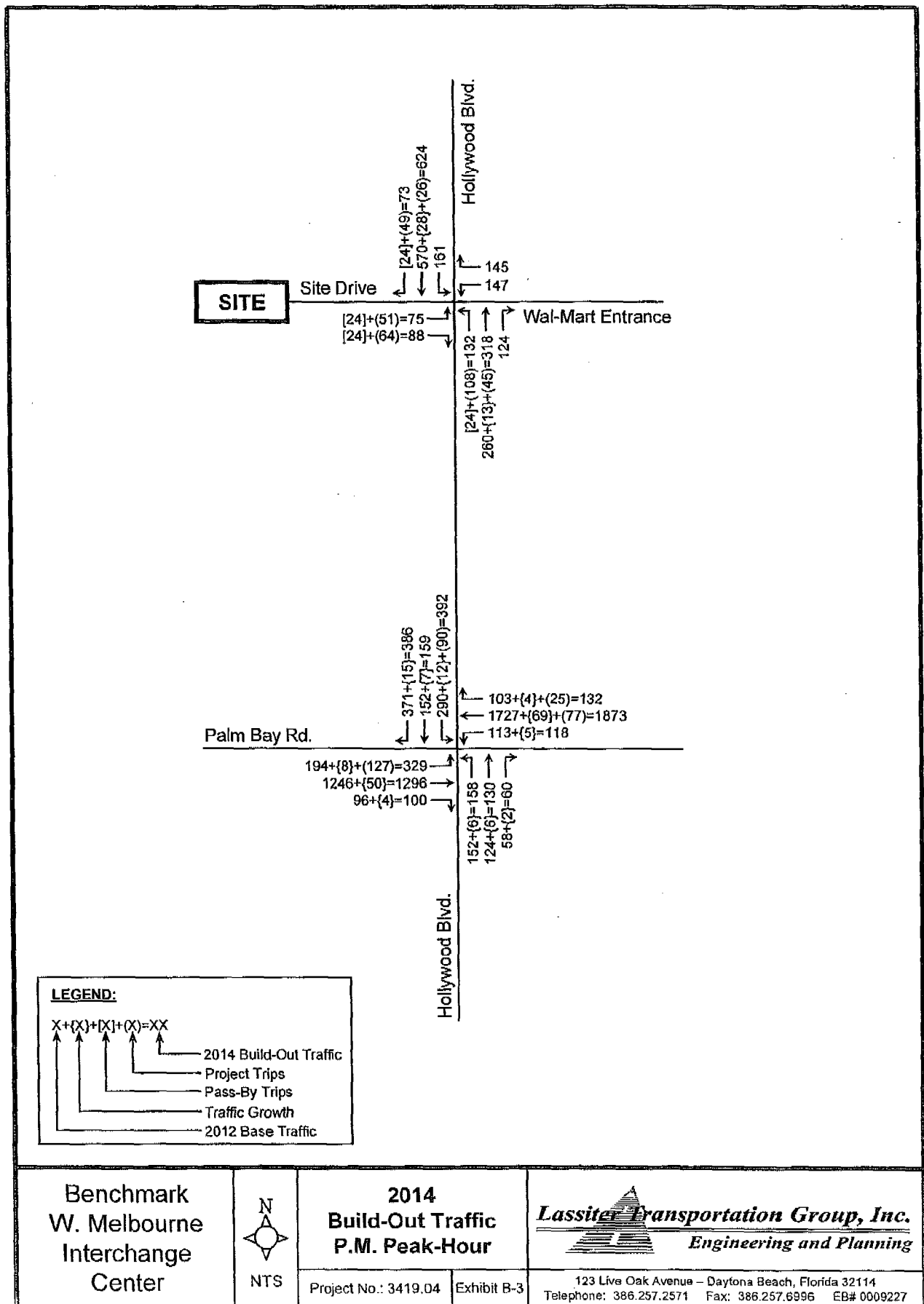


Exhibit B-4

**Hollywood Boulevard at Wal-Mart Drive/Project Drive
HCS Two-Way Stop Control Worksheet**

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: KLD
 Agency/Co.: LTG
 Date Performed: 10/17/2012
 Analysis Time Period: P.M. Peak-Hour
 Intersection: Hollywood Blvd.
 Jurisdiction: West Melbourne
 Units: U. S. Customary
 Analysis Year: Build-Out
 Project ID: Benchmark Project
 East/West Street: Wal-Mart Dr./Site Dr.
 North/South Street: Hollywood Blvd.
 Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach	Northbound				Southbound	
	Movement	1	2	3	4	5	6
		L	T	R	L	T	R
Volume		132	318	124	161	624	73
Peak-Hour Factor, PHF		0.84	0.84	0.84	0.95	0.95	0.95
Hourly Flow Rate, HFR		157	378	147	169	656	76
Percent Heavy Vehicles		2	--	--	2	--	--
Median Type/Storage		Undivided				/	
RT Channelized?		No				No	
Lanes		1	1	1	1	1	1
Configuration		L	T	R	L	T	R
Upstream Signal?		Yes				No	

Minor Street:	Approach	Westbound			Eastbound		
	Movement	7	8	9	10	11	12
		L	T	R	L	T	R
Volume		147	0	145	75	0	88
Peak Hour Factor, PHF		0.77	0.77	0.77	0.75	0.75	0.75
Hourly Flow Rate, HFR		190	0	188	100	0	117
Percent Heavy Vehicles		2	0	0	2	0	0
Percent Grade (%)		0			0		
Flared Approach: Exists?/Storage		No			/		
Lanes		1	1	0	1	1	0
Configuration		L	TR		L	TR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound		Eastbound		
Movement	1	4	7	8	9	10	11
Lane Config	L	L	L	TR	L	L	TR
v (vph)	157	169	190		188	100	117
C(m) (vph)	873	1030	32		699	28	469
v/c	0.18	0.16	5.94		0.27	3.57	0.25
95% queue length	0.65	0.59	22.87		1.09	12.10	0.98
Control Delay	10.0+	9.2	2467		12.0	1448	15.2
LOS	B	A	F		B	F	C
Approach Delay				1246			675.4
Approach LOS				F			F

HCS+: Unsignalized Intersections Release 5.5

Phone:
E-Mail:

Fax:

TWO-WAY STOP CONTROL (TWSC) ANALYSIS

Analyst: KLD
Agency/Co.: LTG
Date Performed: 10/17/2012
Analysis Time Period: P.M. Peak-Hour
Intersection: Hollywood Blvd.
Jurisdiction: West Melbourne
Units: U. S. Customary
Analysis Year: Build-Out
Project ID: Benchmark Project
East/West Street: Wal-Mart Dr./Site Dr.
North/South Street: Hollywood Blvd.
Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street Movements	1 L	2 T	3 R	4 L	5 T	6 R
Volume	132	318	124	161	624	73
Peak-Hour Factor, PHF	0.84	0.84	0.84	0.95	0.95	0.95
Peak-15 Minute Volume	39	95	37	42	164	19
Hourly Flow Rate, HFR	157	378	147	169	656	76
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type/Storage	Undivided			/		
RT Channelized?	No			No		
Lanes	1	1	1	1	1	1
Configuration	L	T	R	L	T	R
Upstream Signal?	Yes			No		
Minor Street Movements	7 L	8 T	9 R	10 L	11 T	12 R
Volume	147	0	145	75	0	88
Peak Hour Factor, PHF	0.77	0.77	0.77	0.75	0.75	0.75
Peak-15 Minute Volume	48	0	47	25	0	29
Hourly Flow Rate, HFR	190	0	188	100	0	117
Percent Heavy Vehicles	2	0	0	2	0	0
Percent Grade (%)	0			0		
Flared Approach: Exists?/Storage	No			/		
RT Channelized?	No			/		
Lanes	1	1	0	1	1	0
Configuration	L	TR		L	TR	

Pedestrian Volumes and Adjustments

Movements	13	14	15	16
Flow (ped/hr)	0	0	0	0

Lane Width (ft)	12.0	12.0	12.0	12.0
Walking Speed (ft/sec)	4.0	4.0	4.0	4.0
Percent Blockage	0	0	0	0

Upstream Signal Data

		Prog. Flow vph	Sat Flow vph	Arrival Type	Green Time sec	Cycle Length sec	Prog. Speed mph	Distance to Signal feet
S2	Left-Turn	329	1700	3	17	140	45	615
	Through	130	1700	3	0	140	45	615
S5	Left-Turn							
	Through							

Worksheet 3-Data for Computing Effect of Delay to Major Street Vehicles

Movement 2

Movement 5

Shared ln volume, major th vehicles:
 Shared ln volume, major rt vehicles:
 Sat flow rate, major th vehicles:
 Sat flow rate, major rt vehicles:
 Number of major street through lanes:

Worksheet 4-Critical Gap and Follow-up Time Calculation

Critical Gap Calculation

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(c,base)	4.1	4.1	7.1	6.5	6.2	7.1	6.5	6.2
t(c,hv)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
P(hv)	2	2	2	0	0	2	0	0
t(c,g)			0.20	0.20	0.10	0.20	0.20	0.10
Percent Grade			0.00	0.00	0.00	0.00	0.00	0.00
t(3,lt)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
t(c,T): 1-stage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-stage	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
t(c) 1-stage	4.1	4.1	7.1	6.5	6.2	7.1	6.5	6.2
2-stage								

Follow-Up Time Calculations

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(f,base)	2.20	2.20	3.50	4.00	3.30	3.50	4.00	3.30
t(f,HV)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
P(HV)	2	2	2	0	0	2	0	0
t(f)	2.2	2.2	3.5	4.0	3.3	3.5	4.0	3.3

Worksheet 5-Effect of Upstream Signals

Computation 1-Queue Clearance Time at Upstream Signal

	Movement 2 V(t)	Movement 5 V(t)
V prog	130	329

Total Saturation Flow Rate, s (vph)	1700	1700
Arrival Type	3	3
Effective Green, g (sec)	0	17
Cycle Length, C (sec)	140	140
Rp (from Exhibit 16-11)	1.000	1.000
Proportion vehicles arriving on green P	0.000	0.121
g(q1)	10.7	23.8
g(q2)	0.9	5.7
g(q)	11.6	29.5

Computation 2-Proportion of TWSC Intersection Time blocked

	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
alpha		0.550		
beta		0.645		
Travel time, t(a) (sec)		9.297		
Smoothing Factor, F		0.233		
Proportion of conflicting flow, f	1.000	1.000		
Max platooned flow, V(c,max)	1621	1699		
Min platooned flow, V(c,min)	1000	1000		
Duration of blocked period, t(p)	-3.4	13.6		
Proportion time blocked, p		0.074		0.000

Computation 3-Platoon Event Periods

	Result
p(2)	0.074
p(5)	0.000
p(dom)	0.074
p(subo)	0.000
Constrained or unconstrained?	U

Proportion

unblocked for minor movements, p(x)	(1) Single-stage Process	(2) Two-Stage Process Stage I	(3) Stage II
p(1)	1.000		
p(4)	0.926		
p(7)	0.926		
p(8)	0.926		
p(9)	0.926		
p(10)	0.926		
p(11)	0.926		
p(12)	1.000		

Computation 4 and 5
Single-Stage Process

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
V c, x	732	525	1782	1762	378	1854	1833	656
s	1500	1500	1500	1500	1500	1500	1500	1500
Px	1.000	0.926	0.926	0.926	0.926	0.926	0.926	1.000
V c, u, x	732	448	1804	1783	289	1882	1859	656
C r, x	873	1112	61	83	755	54	74	469
C plat, x	873	1030	57	77	699	50	69	469

Two-Stage Process

7	8	10	11
---	---	----	----

	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2
V(c,x)								
s	1500	1500	1500	1500	1500	1500	1500	1500
P(x)								
V(c,u,x)								
C(r,x)								
C(plat,x)								

Worksheet 6-Impedance and Capacity Equations

Step 1: RT from Minor St.	9	12
Conflicting Flows	378	656
Potential Capacity	699	469
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	699	469
Probability of Queue free St.	0.73	0.75
Step 2: LT from Major St.	4	1
Conflicting Flows	525	732
Potential Capacity	1030	873
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	1030	873
Probability of Queue free St.	0.84	0.82
Maj L-Shared Prob Q free St.		
Step 3: TH from Minor St.	8	11
Conflicting Flows	1762	1833
Potential Capacity	77	69
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.69	0.69
Movement Capacity	53	47
Probability of Queue free St.	1.00	1.00
Step 4: LT from Minor St.	7	10
Conflicting Flows	1782	1854
Potential Capacity	57	50
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor	0.69	0.69
Maj. L, Min T Adj. Imp Factor.	0.76	0.76
Cap. Adj. factor due to Impeding mvmnt	0.57	0.55
Movement Capacity	32	28

Worksheet 7-Computation of the Effect of Two-stage Gap Acceptance

Step 3: TH from Minor St.	8	11
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Probability of Queue free St.		

Part 2 - Second Stage

Conflicting Flows

Potential Capacity

Pedestrian Impedance Factor

Cap. Adj. factor due to Impeding mvmnt

Movement Capacity

Part 3 - Single Stage

Conflicting Flows

1762

1833

Potential Capacity

77

69

Pedestrian Impedance Factor

1.00

1.00

Cap. Adj. factor due to Impeding mvmnt

0.69

0.69

Movement Capacity

53

47

Result for 2 stage process:

a

y

C t

53

47

Probability of Queue free St.

1.00

1.00

Step 4: LT from Minor St.

7

10

Part 1 - First Stage

Conflicting Flows

Potential Capacity

Pedestrian Impedance Factor

Cap. Adj. factor due to Impeding mvmnt

Movement Capacity

Part 2 - Second Stage

Conflicting Flows

Potential Capacity

Pedestrian Impedance Factor

Cap. Adj. factor due to Impeding mvmnt

Movement Capacity

Part 3 - Single Stage

Conflicting Flows

1782

1854

Potential Capacity

57

50

Pedestrian Impedance Factor

1.00

1.00

Maj. L, Min T Impedance factor

0.69

0.69

Maj. L, Min T Adj. Imp Factor.

0.76

0.76

Cap. Adj. factor due to Impeding mvmnt

0.57

0.55

Movement Capacity

32

28

Results for Two-stage process:

a

y

C t

32

28

Worksheet 8-Shared Lane Calculations

Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (vph)	190	0	188	100	0	117
Movement Capacity (vph)	32	53	699	28	47	469
Shared Lane Capacity (vph)			699			469

Worksheet 9-Computation of Effect of Flared Minor Street Approaches

Movement	7	8	9	10	11	12
	L	T	R	L	T	R
C sep	32	53	699	28	47	469
Volume	190	0	188	100	0	117
Delay						
Q sep						
Q sep +1						
round (Qsep +1)						
n max						
C sh			699			469
SUM C sep						
n						
C act						

Worksheet 10-Delay, Queue Length, and Level of Service

Movement	1	4	7	8	9	10	11	12
Lane Config	L	L	L		TR	L		TR
v (vph)	157	169	190		188	100		117
C(m) (vph)	873	1030	32		699	28		469
v/c	0.18	0.16	5.94		0.27	3.57		0.25
95% queue length	0.65	0.59	22.87		1.09	12.10		0.98
Control Delay	10.0+	9.2	2467		12.0	1448		15.2
LOS	B	A	F		B	F		C
Approach Delay				1246			675.4	
Approach LOS				F			F	

Worksheet 11-Shared Major LT Impedance and Delay

	Movement 2	Movement 5
p(oj)	0.82	0.84
v(i1), Volume for stream 2 or 5		
v(i2), Volume for stream 3 or 6		
s(i1), Saturation flow rate for stream 2 or 5		
s(i2), Saturation flow rate for stream 3 or 6		
P*(oj)		
d(M,LT), Delay for stream 1 or 4	10.0+	9.2
N, Number of major street through lanes		
d(rank,1) Delay for stream 2 or 5		

Exhibit B-5

**Hollywood Boulevard at Wal-Mart Drive/Project Drive
HCS Signal Control Worksheet**

HCS+: Signalized Intersections Release 5.5

Analyst: Inter.: Hollywood Blvd. at Wal-mart Dr
 Agency: LTG Area Type: All other areas
 Date: 10/17/2012 Jurisd: West Melbourne
 Period: P.M. Peak-Hour Year : 2014 Build-Out
 Project ID: Benchmark Project
 E/W St: Wal-Mart Dr./Project Dr. N/S St:

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	0	1	1	0	1	1	1	1	1	1
LGConfig	L	TR		L	TR		L	T	R	L	T	R
Volume	75	0	88	147	0	145	132	318	124	161	624	73
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A		A		NB Left	A	A	
	Thru			A		Thru		A	
	Right			A		Right		A	
	Peds					Peds			
WB	Left	A	A	A		SB Left	A	A	
	Thru		A	A		Thru		A	
	Right		A	A		Right		A	
	Peds					Peds			
NB	Right					EB Right			
SB	Right					WB Right			
Green		6.9	5.3	16.3			11.3	75.2	0.0
Yellow		4.0	4.0	4.0			4.0	4.0	
All Red		1.0	1.0	1.0			1.0	1.0	

Cycle Length: 140.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	196	1770	0.51	0.17	55.4	E		
TR	184	1583	0.64	0.12	66.1	E	61.1	E
Westbound								
L	311	1770	0.61	0.28	45.2	D		
TR	301	1583	0.62	0.19	56.1	E	50.6	D
Northbound								
L	194	1770	0.81	0.65	51.5	D		
T	1001	1863	0.38	0.54	18.9	B	25.9	C
R	850	1583	0.17	0.54	16.6	B		
Southbound								
L	592	1770	0.28	0.65	10.8	B		
T	1001	1863	0.65	0.54	24.5	C	21.2	C
R	850	1583	0.09	0.54	15.8	B		

Intersection Delay = 31.8 (sec/veh) Intersection LOS = C

EXHIBIT "C"
ROADWAY IMPROVEMENTS

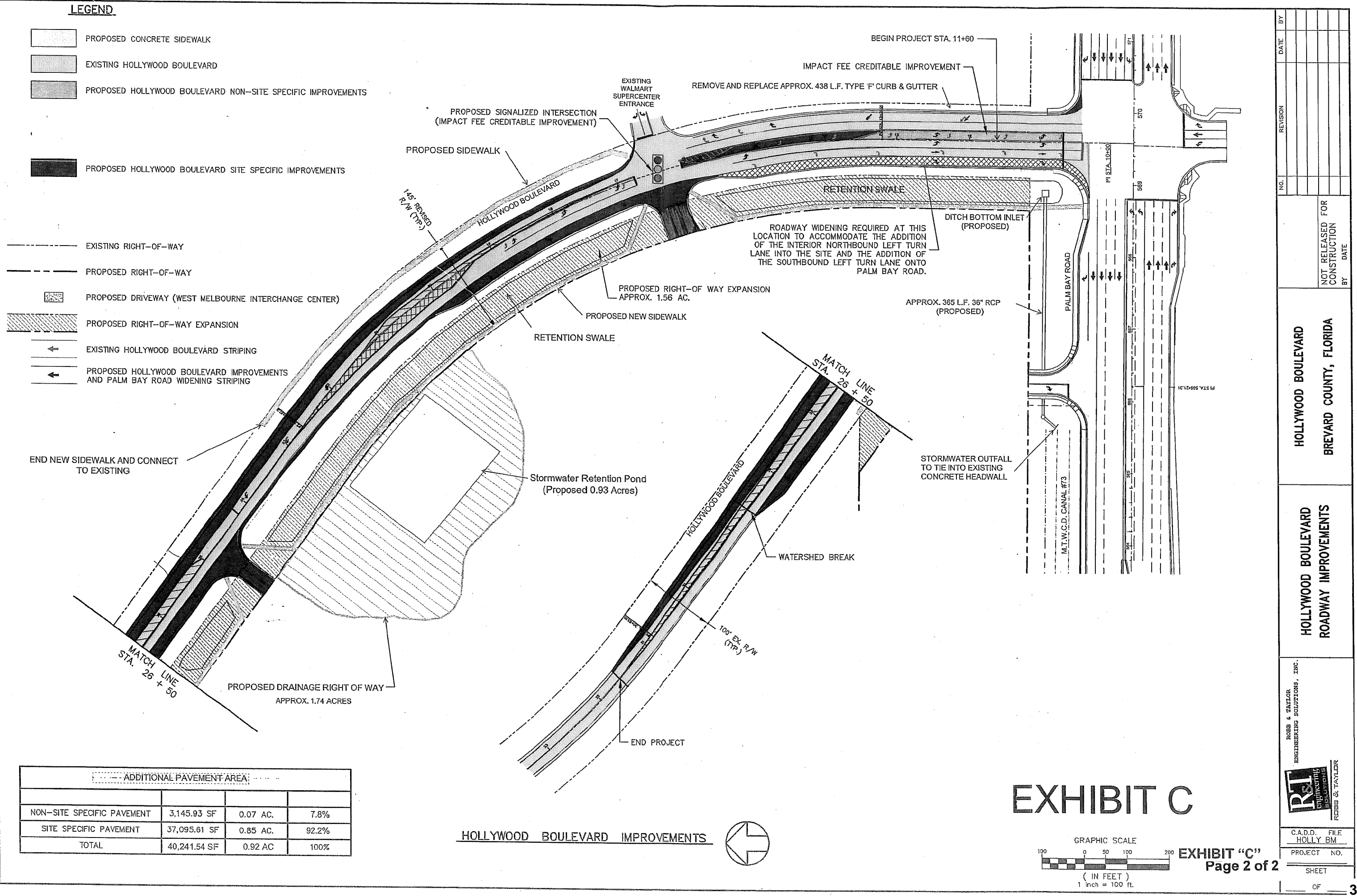
ROADWAY IMPROVEMENTS

- (a) Construct a mast arm traffic signal on Hollywood Boulevard at the WalMart entrance/main Benchmark Property entrance;
- (b) Widen Hollywood Boulevard by constructing a southbound left-turn lane at Palm Bay Road and a northbound left-turn on Hollywood Boulevard at the main Benchmark Property entrance opposite the Wal-Mart entrance;
- (c) Widen Hollywood Boulevard to accommodate a northbound left-turn lane at the northerly, minor Benchmark Property entrance;
- (d) Construct two separate southbound right-turn lanes on Hollywood Boulevard into the main and minor Benchmark Property entrances;
- (e) Construct a wet retention/detention drainage system which will provide water quality treatment for runoff from Hollywood Boulevard as more fully described in the stormwater analysis report prepared by Robb & Taylor Engineering Solutions, Inc.

EXHIBIT "C"

Page 1 of 2

R:\Land Projects 2008\HOLLYWOOD BOULEVARD\DWG\HOLLYWOOD BASE MAP.dwg, Jan 19, 2009 - 10:01:24AM, mcorr

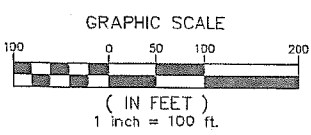


ADDITIONAL PAVEMENT AREA			
NON-SITE SPECIFIC PAVEMENT	3,145.93 SF	0.07 AC.	7.8%
SITE SPECIFIC PAVEMENT	37,095.61 SF	0.85 AC.	92.2%
TOTAL	40,241.54 SF	0.92 AC	100%

HOLLYWOOD BOULEVARD IMPROVEMENTS



EXHIBIT C



NOT RELEASED FOR CONSTRUCTION	NO.	REVISION	DATE	BY
HOLLYWOOD BOULEVARD		BREVARD COUNTY, FLORIDA		
HOLLYWOOD BOULEVARD ROADWAY IMPROVEMENTS				
ROBB & TAYLOR ENGINEERING SOLUTIONS, INC.				
C.A.D.D. FILE HOLLY BM				
PROJECT NO.				
SHEET				
OF		353		

EXHIBIT "D"

CONCURRENCY APPROVAL FOR DRIVEWAY PERMIT

Project Number: DR-12-10-01-D

Project Name: West Melbourne Interchange Center 11th Submittal

Applicant/Engineer: Robb & Taylor Engineering Solutions, Inc.

CONCURRENCY APPROVAL FOR DRIVEWAY PERMIT AND OR A RIGHT OF WAY PERMIT
WITH AN ASSOCIATED SITE PLAN OR SUBDIVISION PLAN

NOTICE TO APPLICANT REGARDING CONCURRENCY APPROVALS:

This concurrency approval is for a Brevard County Driveway or a Right of Way Permit only, and is not intended to satisfy or eliminate any concurrency requirements from any affected municipality.

This Concurrency Evaluation Finding of Non-Deficiency will expire on: 4/11/2013, 6 months from the review date. The Driveway or Right of Way Permit submittal and approval must be made prior to this expiration date.

THE APPLICANT IS HEREBY NOTIFIED THAT THIS CONCURRENCY APPROVAL
DOES NOT GUARANTEE THE ISSUANCE OF A BUILDING PERMIT.

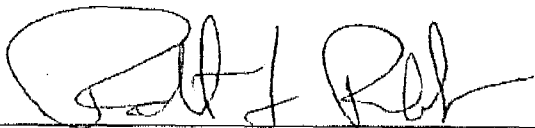
This project was evaluated for a 174,500 s.f. shopping center and a 114 room hotel.

In performing the concurrency evaluation for the above-named project,
infrastructure facilities were within established levels of service.

Paul Body, Planner I
Reviewed By

10-11-2012
Date

I acknowledge that I have read and understand the above information pertaining to Concurrency Approvals.


Name

10/18/12
Date

Concurrency File Copy

Applicant's Copy

Replaces DR-13-04-01D

District # <u>3</u>	APPLICATION FOR CONCURRENCY EVALUATION	OFFICE USE ONLY
Segment # <u>164A, 230B</u>	BREVARD COUNTY, FLORIDA	Review # <u>DR-13-10-01D</u>
	PLANNING & ZONING OFFICE	
	7725 JAMIESON WAY, BLDG A, SUITE 114, VIERA, FL 32940	
	PHONE: (321) 633-2070 FAX: (321) 633-2074 INTERNET: http://www.brevardcounty.us/zoning/	
<small>NOTE: This application, together with all required attachments shall be completed and submitted to the Planning & Zoning Office for Evaluation. The Project must have Concurrency Approval prior to making application for Site Plan, Subdivision Plat, Driveway Permit and/or a Right of Way Use Permit Submittal. A finding of Non-Deficiency only entitles the owner/applicant to apply for development permits pursuant to the time parameters established in the Concurrency Evaluation Ordinance (91-36).</small>		

Owner: Benchmark Melbourne 35 Associates
 Address: 4053 Maple Road
Amherst, New York 14226
 Phone: 716-833-4986
 Email: _____

Applicant/Company: Robb & Taylor Engineering Solutions, Inc.
 Engineer: Robert Robb, P.E.
 Address: 4685 Hidden Lakes Place
Melbourne, FL 32934
 Phone & Fax: 321-302-2313
 Email: r-tengineering@cfl.rr.com

PROPERTY DESCRIPTION

Township: 28S Range: 37E Section: 20 SD #: _____ Parcel: 26 Block: _____ Lot: _____
 Acreage: 34.57 Zoning: C-1 Tax Parcel ID, Legal: 28-37-20-00-00260.0-0000.00

PROPOSED DEVELOPMENT INFORMATION/POTENTIAL

☐ Site Plan Submittal or Amendment: Project Name: West Melbourne Interchange Center
☐ Subdivision Plat Submittal: Nearest Major Road: Hollywoods Blvd / Palm Bay Road

Residential Uses (check all that apply): (du = dwelling units)
☐ Single-Family Houses Detached _____ du
☐ Single-Family Homes Attached (duplex, triplex, condo, townhome) _____ du
☐ Multi-Family Apartments (4 or more units/buildings) _____ du
☐ Mobile/Manufactured Homes (lots & or acreage) _____ du
☐ Recreational Homes (lots/sites & or acreage) _____ du

Notes: If project will be phased, or has multiple buildings, please give a breakdown showing the type and number of units in each phase or building.
 Phase #/Building # _____

Non-residential Uses (check all that apply): (sf = square feet)

☐ Bank (with or without drive-through) _____ sf
☐ Church (all uses except classroom space) _____ sf
☐ Convenience store (with gas sales, or without gas) _____ sf
☒ Hotel/Motel (# of rooms) 114 rm
☐ Office _____ sf
☒ Retail 168,625 sf
☒ Restaurant (all down indoor & or outdoor seating) 5,875 sf
☐ Restaurant (fast food with drive-through or without) _____ sf
☐ Warehouse _____ sf
☐ ACLF & or Nursing Home (number of beds or rooms) _____ beds or rooms
☐ Other: _____ size: _____
☐ Other: _____ size: _____

of vehical fueling positions/hoses: _____

OFFICE USE ONLY		
<input checked="" type="checkbox"/> Fee of \$175.00 in Cash or Check (No. <u>574</u>) drawn to the order of Brevard County Board of County Commissioners.	Provider: <u>Melbourne</u>	Expires: <u>Univied</u>
<input checked="" type="checkbox"/> Potable Water Capacity Availability Certificate or Reservation	Provider: <u>West Melbourne</u>	Expires: <u>Univied</u>
<input checked="" type="checkbox"/> Solid Waste Capacity Availability Certificate or Reservation	Provider: <u>West Melbourne</u>	Expires: <u>4-10-14</u>
<input checked="" type="checkbox"/> 1 Copy of Site Plan, Subdivision Plan or Concept Drawing with A General Statement		
Received By: <u>Paul Body</u>	Date: <u>10-11-12</u>	Receipt: <u>322858</u>
<input checked="" type="checkbox"/> A Finding of Non Deficiency	Applicant must Apply for and Receive Approval for Site Plan, Subdivision Plat, Driveway Permit and/or a Right of Way Use Permit with the Land Development Office prior to: <u>4-11-13</u>	
<input checked="" type="checkbox"/> APPROVED CONDITIONALLY		
<input type="checkbox"/> Exempt per: _____	Site Plan Number: _____	
<input type="checkbox"/> A Finding of Deficiency		
<input type="checkbox"/> DEFERRED OR DENIED		
Reviewed By: <u>Paul Body</u>	Date: <u>10-11-12</u>	Title: <u>Planner I</u>
White - Office Original	Yellow - Land Development Copy	Pink - Applicant Copy

EXHIBIT "E"

**ENGINEER'S OPINION OF TOTAL COSTS AND PERCENTAGE OF NON-SITE
RELATED COSTS**

HOLLYWOOD BOULEVARD IMPROVEMENTS						
OPINION OF PROBABLE CONSTRUCTION COST						
ROADWAY LENGTH: 2090 LINEAL FEET						
Owner: The Benchmark Group		R. Robb		10/30/2012		
Firm: Robb & Taylor Engineering, Inc.						
ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	% REIMBURSABLE	REIMBURSABLE COST	TOTAL COST
Start - up Items						
Mobilization	1	ls	22000	7.80%	\$ 1,716.00	\$ 22,000
Trailer	6	mos	385	7.80%	\$ 180.18	\$ 2,310
Dumpster	12	ea	55	7.80%	\$ 51.48	\$ 660
Chemical Toilets	6	mos	230	7.80%	\$ 107.64	\$ 1,380
Staging Area	1	ea	5500	7.80%	\$ 429.00	\$ 5,500
Temporary Electric	6	mos	770	7.80%	\$ 360.36	\$ 4,620
Testing	1	ls	11000	7.80%	\$ 858.00	\$ 11,000
					\$ 3,703	\$ 47,470
Erosion Control						
Silt Fence - Staked	4500	lf	\$ 3.00	7.80%	\$ 1,053.00	\$ 13,500
Floating Turbidity Barriers	225	lf	\$ 5.50	7.80%	\$ 96.53	\$ 1,238
NPDES Compliance	1	ls	\$ 5,500.00	7.80%	\$ 429.00	\$ 5,500
					\$ 1,579	\$ 20,238
Demolition						
Sign relocation	1	ea	\$ 330.00	7.80%	\$ 25.74	\$ 330
18" RCP removal	262	lf	\$ 11.00	7.80%	\$ 224.80	\$ 2,882
24" RCP removal	218	lf	\$ 11.00	7.80%	\$ 187.04	\$ 2,398
18" MES removal	4	ea	\$ 110.00	7.80%	\$ 34.32	\$ 440
24" MES removal	1	ea	\$ 110.00	7.80%	\$ 8.58	\$ 110
Asphalt Paved Shoulder Removal	1470	sy	\$ 1.65	7.80%	\$ 189.19	\$ 2,426
Asphalt pavement removal (Traffic Lanes)	5850	sy	\$ 1.65	7.80%	\$ 752.90	\$ 9,653
Asphalt Milling (1 1/2" depth)	1270	sy	\$ 1.45	7.80%	\$ 143.64	\$ 1,842
Type F Concrete Curb Removal	515	lf	\$ 5.50	7.80%	\$ 220.94	\$ 2,833
6" Force Main Relocation	750	lf	\$ 65.00	7.80%	\$ 3,802.50	\$ 48,750
Dewatering - Force Main Relocation	750	lf	\$ 11.00	7.80%	\$ 643.50	\$ 8,250
Power Pole Relocation	6	ea	\$ 18,700.00	100.00%	\$ 112,200	\$ 112,200
Traffic Hand Signal Removal	1	ea	\$ 8,250.00	7.80%	\$ 643.50	\$ 8,250
Traffic Control Box and loop removal	1	ea	\$ 8,800.00	7.80%	\$ 686.40	\$ 8,800
4' barbed wire fence / post removal	1549	lf	\$ 4.40	7.80%	\$ 531.62	\$ 6,816
					\$ 120,295	\$ 215,978

EXHIBIT "E"

HOLLYWOOD BOULEVARD IMPROVEMENTS						
OPINION OF PROBABLE CONSTRUCTION COST						
ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	% REIMBURSABLE	REIMBURSABLE COST	COST
Roadway Construction						
Cemented Coquina 10" Thk base (shoulder)	1500	sy	\$ 13.20	7.80%	\$ 1,544	\$ 19,800
Cemented Coquina 10" Thk base (new traffic lanes)	2980	sy	\$ 15.40	7.80%	\$ 3,580	\$ 45,892
Cemented Coquina base (existing traffic lanes - add'tl)	1110	cy	\$ 61.50	7.80%	\$ 5,325	\$ 68,265
Stabilized Shoulder Subgrade (12" thk.)	1500	sy	\$ 8.25	7.80%	\$ 965	\$ 12,375
Stabilized New Traffic Lane Subgrade (12" thk)	2980	sy	\$ 8.25	7.80%	\$ 1,918	\$ 24,585
2" Thk. Asphalt structural course (Superpave 12.5)	11370	sy	\$ 9.90	7.80%	\$ 8,780	\$ 112,563
1 1/2" FC-12.5 Dense Graded Friction Course	10235	sy	\$ 14.85	7.80%	\$ 11,855	\$ 151,990
Bituminous Prime Coat	1150	gal	\$ 2.85	7.80%	\$ 256	\$ 3,278
Bituminous Tack Coat	1150	gal	\$ 2.85	7.80%	\$ 256	\$ 3,278
Guardrail	577	lf	\$ 20.35	7.80%	\$ 916	\$ 11,742
					\$ 35,394	\$ 453,767
Earthwork						
Clear and Grub roadway area	360	ac.	\$ 6,050.00	7.80%	\$ 1,699	\$ 21,780
Fill Placement / Rough Grading	3669	cy	\$ 2.75	7.80%	\$ 787	\$ 10,090
Earthwork cut	2125	cy	\$ 3.30	7.80%	\$ 547	\$ 7,013
Seed and Mulch of disturbed areas and swales	17310	sy	\$ 0.80	7.80%	\$ 1,080	\$ 13,848
Sod (2' strip along curb)	114	sy	\$ 5.50	7.80%	\$ 49	\$ 629
Final Grading	17450	sy	\$ 1.55	7.80%	\$ 2,110	\$ 27,048
					\$ 6,272	\$ 80,407
Drainage - Conveyance System						
Reinforced Concrete Pipe (36" Dia.)	356	lf	\$ 71.50	7.80%	\$ 1,985	\$ 25,454
M.E.S. (36" Dia.)	1	ea	\$ 2,750.00	7.80%	\$ 215	\$ 2,750
M.E.S. (18" Dia.)	6	ea	\$ 550.00	7.80%	\$ 257	\$ 3,300
18" R.C.P.	177	lf	\$ 30.00	7.80%	\$ 414	\$ 5,310
FDOT Type D Inlet	2	ea	\$ 2,100.00	7.80%	\$ 328	\$ 4,200
Manholes (Type 'J')	2	ea	\$ 3,850.00	7.80%	\$ 601	\$ 7,700
Manholes (5' dia.)	6	ea	\$ 2,300.00	7.80%	\$ 1,076	\$ 13,800
14" x 23" ERCP	1512	lf	\$ 35.00	7.80%	\$ 4,128	\$ 52,920
14" x 23" M.E.S.	7	ea	\$ 750.00	7.80%	\$ 410	\$ 5,250
					\$ 9,413	\$ 120,684

EXHIBIT "E"

Page 2 of 3

HOLLYWOOD BOULEVARD IMPROVEMENTS						
OPINION OF PROBABLE CONSTRUCTION COST						
ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	% REIMBURSABLE	REIMBURSABLE COST	COST
Stormwater Retention Basin						
Clear and Grub Pond Area	1.2	ac.	\$ 7,150.00	7.80%	\$ 669	\$ 8,580
Excavation	11100	cy	\$ 2.75	7.80%	2,381	\$ 30,525
Dewatering	11100	cy	\$ 1.65	7.80%	1,429	\$ 18,315
Sod	1700	sy	\$ 2.20	7.80%	292	\$ 3,740
Final Grading	2420	sy	\$ 2.75	7.80%	519	\$ 6,655
Outfall Control Structure	1	ea	\$ 4,950.00	7.80%	386	\$ 4,950
					5,676	\$ 72,765

Miscellaneous						
FDOT Type 'F' concrete curb	515	lf	\$ 25.30	7.80%	1,016	\$ 13,030
5' Sidewalk	1549	lf	\$ 24.50	7.80%	2,960	\$ 37,951
8' Sidewalk	539	lf	\$ 39.20	7.80%	1,648	\$ 21,129
Signage	9	ea	\$ 350.00	7.80%	246	\$ 3,150
Detectable Warning (Truncated Domes) Ped Ramps	5	ea	\$ 550.00	7.80%	215	\$ 2,750
Reflective Pavement Markers	390	ea	\$ 11.00	7.80%	335	\$ 4,290
Striping	1	ls	\$ 14,025.00	7.80%	1,094	\$ 14,025
Layout and "As-Builts"	1	ls	\$ 16,500.00	7.80%	1,287	\$ 16,500
Turn arrows	37	ea	\$ 100.00	7.80%	289	\$ 3,700
Stop Bars	5	ea	\$ 265.00	7.80%	103	\$ 1,325
Maintenance of Traffic	1	ls	\$ 88,000.00	7.80%	6,864	\$ 88,000
Traffic Signal Design			\$ 25,000.00	61.10%	15,275	\$ 25,000
Civil Engineering Design			\$ 75,000.00	7.80%	5,850	\$ 75,000
Legal			\$ 25,000.00	7.80%	1,950	\$ 25,000
					39,131	\$ 330,849

Traffic Signalization						
Traffic Signalization w/mast arms	1	ls	\$295,000.00	61.10%	180,245	\$ 295,000
						\$ 295,000

Total Reimbursable Costs:

	\$	401,707
--	----	---------

Subtotal Cost Hollywood Boulevard Improvements:

	\$	1,637,156
--	----	-----------

Contingency (10%):

	\$	40,171
--	----	--------

Total Cost Hollywood Boulevard Improvements:

	\$	441,877
	\$	1,800,872

EXHIBIT "F"

LEGAL DESCRIPTION OF RIGHT-OF-WAY AND
RIGHT OF WAY PURCHASE AGREEMENT

CONTRACT FOR SALE AND PURCHASE**Seller:** Benchmark Melbourne 35 Associates Limited Partnership, a foreign limited partnership**Buyer:** Board of County Commissioners, Brevard County, Florida
2725 Judge Fran Jamieson Way, Viera, Florida 32940**Legal description of property being transferred:** See Exhibit "A".

The transfer shall be made pursuant to the following terms and conditions and the Standards for Real Estate Transactions, on the reverse side of this contract.

Purchase price: \$578,250.00**Deposit:** \$100 to be transferred to an escrow account established and held by the Brevard County Clerk, such deposit to be applied to the purchase price.**Time for acceptance of offer; effective date; facsimile:** If this offer is not executed by and delivered to all parties OR FACT OF EXECUTION communicated in writing between the parties on or before April 17, 2013, the deposit(s) will, at Buyer's option, be returned and this offer withdrawn. The date of Contract ("Effective Date") will be the date when the last one of the Buyer and Seller has signed this offer. A facsimile copy of this Contract and any signatures hereon shall be considered for all purposes as originals.**Title evidence:** At least 15 days before closing date, x ☐ Seller shall, at Seller's expense, deliver to Buyer or Buyer's attorney or ☐ Buyer shall at Buyer's expense obtain ☐ a title search and/or x ☐ title insurance commitment (with legible copies of instruments listed as exceptions attached thereto) and, after closing, an owner's policy of title insurance.**Closing Date:** This transaction shall be closed and the deed and other closing papers delivered on June 30, 2013, unless modified by other provisions of this Contract.**Warranties:** The following warranties are made and shall survive closing.

- a. SELLER warrants that there are no parties in occupancy other than Seller.
- b. SELLER warrants there is no hazardous waste or other environmental contamination located in or upon the property being acquired by the County. Seller shall indemnify and defend Buyer from any and all claims or expenses resulting from hazardous waste or environmental contamination located in or upon the property provided such waste or contamination was not placed on the property by the Buyer.
- c. SELLER warrants that he/she has no knowledge of any fact or restriction which would prevent use of the property for purposes.
- d. SELLER hereby represents and warrants to COUNTY that SELLER has not engaged or dealt with any agent, broker or finder, in regard to this Agreement or to the sale and purchase of the property contemplated hereby. SELLER hereby acknowledges and covenants that SELLER is solely responsible for any and all commissions due arising out of or connected within the sale or transfer of the property. SELLER hereby indemnifies COUNTY and agrees to hold COUNTY free and harmless from and against any and all liability, loss, costs, damage and expense, including but not limited to attorney's fees and costs of litigation both prior to and on appeal, which COUNTY shall ever suffer or incur because of any claim by any agent, broker or finder engaged by SELLER, including broker, whether or not meritorious, for any fee, commission or other compensation with respect to this Agreement or to the sale and purchase of the property contemplated hereby.

Inspections: The BUYER shall have 60 days after the Brevard County Board of County Commissioners executes the contract within which to complete physical inspection and evaluation of the property for environmental, hazardous materials, developability, access, drainage and subsurface conditions. In the event a Phase I environmental assessment meeting ASTM standards is prepared and environmental issues objectionable to BUYER are detected, SELLER shall 1) take all steps necessary to remove BUYER'S objections prior to the expiration of the 60 day inspection period, if possible or 2) if acceptable to BUYER, SELLER shall allow an additional 90 days to provide adequate time to conduct a Phase II assessment meeting ASTM standards. If the Phase I assessment reveals contamination this agreement may be terminated by BUYER and BUYER may decline to allow SELLER to clean up or to proceed to a Phase II assessment. Likewise, if the Phase II assessment reveals contamination objectionable to BUYER, BUYER may terminate this agreement. Alternatively, BUYER may grant SELLER an additional 90 days to clean up the site after the Phase II assessment, but BUYER is not required to do so. SELLER shall allow the BUYER or its agents reasonable right of entry upon the property for inspection purposes. Before the expiration of the initial 60-day inspection period or the additional 90-day extension for a Phase II assessment, BUYER shall have the right to terminate this agreement with a full refund of any deposits, should the results of the inspection indicate the property cannot be used for its intended purpose or that mitigation of conditions would be required. If clean up after a Phase II assessment is attempted but unacceptable to BUYER, the BUYER shall receive a full refund of its deposit.**Condemnation:** This property ☐ is x ☐ is not being acquired under threat of condemnation. If so, this agreement, includes and settles all issues of full compensation for the property being acquired, including fees and costs.

SELLER shall comply with §196.295, Fla. Stat.

SELLER hereby agrees to provide the necessary information and execute a beneficial interest and disclosure affidavit as required by §286.23, Fla. Stat.

Special Clauses: ☐ See attached addendum ☐ NOT APPLICABLEBOARD OF COUNTY COMMISSIONERS
BREVARD COUNTY, FLORIDABENCHMARK MELBOURNE 35 ASSOCIATES LIMITED PARTNERSHIP a Delaware Limited Partnership
By Benchmark Blue Ash Properties, a Delaware Corporation, its General Partner_____
Andy Anderson, CHAIRMAN_____
(Seller) By: Benchmark Blue Ash Properties, Inc., General Partner
By: _____, as President

As approved by the Board _____

Date: _____

(Seller) _____ Date _____

STANDARDS FOR REAL ESTATE TRANSACTIONS

A. EVIDENCE OF TITLE: A title insurance commitment issued by a Florida licensed title insurer agreeing to issue to Buyer, upon recording of the deed to Buyer, an owner's policy of title insurance in the amount of the purchase price insuring Buyer's title to the Real Property, subject only to liens, encumbrances, exceptions or qualifications set forth in this Contract and those which shall be discharged by Seller at or before closing. Seller shall convey marketable title subject only to liens, encumbrances, exceptions or qualifications specified in this Contract. Marketable title shall be determined according to applicable Title Standards adopted by authority of The Florida Bar and in accordance with law. Buyer shall have 5 days from date of receiving evidence of title to examine it. If title is found defective, Buyer shall within 3 days thereafter, notify Seller in writing specifying defect(s). If the defect(s) render title unmarketable, Seller will have 30 days from receipt of notice to remove the defects, failing which Buyer shall, within five (5) days after expiration of the thirty (30) day period, deliver written notice to Seller either: (1) extending the time for a reasonable period not to exceed 120 days within which Seller shall use diligent effort to remove the defects; or (2) requesting a refund of deposit(s) paid which shall immediately be returned to Buyer. ~~If Buyer fails to so notify Seller, Buyer shall be deemed to have accepted the title as it then is.~~ Seller shall, if title is found unmarketable, use diligent effort to correct defect(s) in the title within the time provided therefor. If Seller is unable to remove the defects within the times allowed therefor, Buyer shall either waive the defects or receive a refund of deposit(s), thereby releasing Buyer and Seller from all further obligation under this Contract.

B. SURVEY: Buyer, at Buyer's expense, within time allowed to deliver evidence of title and to examine same, may have the Real Property surveyed and certified by a registered Florida surveyor. If survey shows encroachment on Real Property or that improvements located on Real Property encroach on setback lines, easements, lands of others or violate any restrictions, Contract covenants or applicable governmental regulation, the same shall constitute a title defect.

C. INGRESS AND EGRESS: Seller warrants and represents that there is ingress and egress to the Real Property sufficient for its intended use as described in the Warranties section of the agreement.

D. LIENS: Seller shall furnish to Buyer at time of closing an affidavit attesting to the absence, unless otherwise provided for herein, of any financing statement, claims of lien or potential lienors known to Seller and further attesting that there have been no improvements or repairs to the Property for 90 days immediately preceding date of closing. If Property has been improved or repaired within that time Seller shall deliver releases or waivers of construction liens executed by all general contractors, subcontractors, suppliers and materialmen in addition to Seller's lien affidavit setting forth the names of all such general contractors, subcontractors, suppliers and materialmen and further affirming that all charges for improvements or repairs which could serve as a basis for a construction lien or a claim for damages have been paid or will be paid at closing of this Contract.

E. TIME PERIOD: Time is of the essence in this Contract.

F. DOCUMENTS FOR CLOSING: Seller shall furnish the deed, bill of sale, construction lien affidavit, owner's possession affidavit, assignments of leases, tenant and mortgagee estoppel letters and corrective instruments. Buyer shall furnish closing statement.

G. EXPENSES: Documentary stamps on the deed, if required, and recording of corrective instruments shall be paid by Seller. Buyer will pay for the cost of recording the deed.

H. PRORATIONS; CREDITS: Taxes, assessments, rent, interest, insurance and other expenses and revenue of Property shall be prorated through day before closing. Buyer shall have the option of taking over any existing policies of insurance, if assumable, in which event premiums shall be prorated. Cash at closing shall be increased or decreased as may be required by prorations. Prorations will be made through day prior to occupancy if occupancy occurs before closing. Advance rent and security deposits will be credited to Buyer and escrow deposits held by mortgagee will be credited to Seller. Taxes shall be prorated based on the current year's tax with due allowance made for maximum allowable discount, homestead and other exemptions. If closing occurs at a date when the current year's millage is not fixed and current year's assessment is available, taxes will be prorated based upon such assessment and the prior year's millage. If current year's assessment is not available, then taxes will be prorated on the prior year's tax. If there are completed improvements on the Real Property by January 1st of year of closing, which improvements were not in existence on January 1st of the prior year, then taxes shall be prorated based upon the prior year's millage and at an equitable assessment to be agreed upon between the parties, failing which, request will be made to the County Property Appraiser for an informal assessment taking into consideration available exemptions. Any tax proration based on an estimate shall, at request of either Buyer or Seller, be subsequently readjusted upon receipt of tax bill on condition that a statement to that effect is in the closing statement.

I. SPECIAL ASSESSMENT LIENS: Certified, confirmed and ratified special assessment liens as of date of closing (not as of Effective Date) are to be paid by Seller. Pending liens as of date of closing shall be assumed by Buyer. If the improvement has been substantially completed as of Effective Date, any pending lien shall be considered certified, confirmed or ratified and Seller shall, at closing, be charged an amount equal to the last estimate of assessment for the improvement by the public body.

J. PROCEEDS OF SALE; CLOSING PROCEDURE: The deed shall be recorded upon clearance of funds. If abstract of title has been furnished, evidence of title shall be continued at Buyer's expense to show title in Buyer, without any encumbrances or change which would render Seller's title unmarketable from the date of the last evidence. Proceeds of the sale shall be held in escrow by Seller's attorney or by another mutually acceptable escrow agent for a period of not more than 5 days after closing date. If Seller's title is rendered unmarketable, through no fault of Buyer, Buyer shall, within the 5-day period, notify Seller in writing of the defect and Seller shall have 30 days from date of receipt of such notification to cure the defect. If Seller fails to timely cure the defect, all deposit(s) and closing funds shall, upon written demand by Buyer and within 5 days after demand, be returned to Buyer and, simultaneously with such repayment, Buyer shall return the Personal Property, vacate the Real Property and reconvey the Property to Seller by special warranty deed and bill of sale. If Buyer fails to make timely demand for refund, Buyer shall take title as is, waiving all rights against Seller as to any intervening defect except as may be available to Buyer by virtue of warranties contained in the deed or bill of sale. The escrow and closing procedure required by this Standard shall be waived if title agent insures adverse matters pursuant to Section 627.7841, F.S. (1993), as amended.

K. FAILURE OF PERFORMANCE: If Buyer fails to perform this Contract within the time specified, including payment of all deposit(s), the deposit(s) paid by Buyer and deposit(s) agreed to be paid, may be retained by or for the account of Seller as agreed upon liquidated damages, consideration for the execution of this Contract and in full settlement of any claims; whereupon, Buyer and Seller shall be relieved of all obligations under this Contract; or Seller, at Seller's option, may proceed in equity to enforce Seller's rights under this Contract. If for any reason other than failure of Seller to make Seller's title marketable after diligent effort, Seller fails, neglects or refuses to perform this Contract, the Buyer may seek specific performance or elect to receive the return of Buyer's deposit(s) without thereby waiving any action for damages resulting from Seller's breach. In the event of any litigation arising out of this contract, each party shall bear its own attorney's fees and costs. The parties hereby agree to waive trial by jury.

L. CONVEYANCE: Seller shall convey title to the Real Property by statutory warranty, trustee's, personal representative's or guardian's deed, as appropriate to the status of Seller. Personal Property shall, at request of Buyer, be transferred by an absolute bill of sale with warranty of title, subject only to such matters as may be otherwise provided for herein.

M. OTHER AGREEMENTS: No prior or present agreements or representations shall be binding upon Buyer or Seller unless included in this Contract. No modification to or change in this Contract shall be valid or binding upon the parties unless in writing and executed by the party or parties intended to be bound by it.

N. WARRANTY: Seller warrants that there are no facts known to Seller materially affecting the value of the Property which are not readily observable by Buyer or which have not been disclosed.

Reviewed for legal form and content:

_____, (Assistant) County Attorney

OFFICIAL COURT USE ONLY (CFN#)

SKETCH & DESCRIPTION**-NOT A SURVEY-**

SECTION 20, TOWNSHIP 28 SOUTH, RANGE 37 EAST

PARCEL ID# 28-37-20-00-00260.0-0000.00

PURPOSE OF SURVEY: Right-of-Way dedication of
Hollywood Boulevard Roadway Improvements

EXHIBIT A-1

page 1

SHEET 1 OF 2

NOT VALID WITHOUT THE SKETCH
ON SHEET 2 OF 2LEGAL DESCRIPTION:

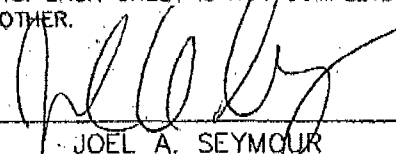
A parcel of land lying in the Northwest one-quarter of Section 20, Township 28 South, Range 37 East, Brevard County, Florida being a portion of those lands described in Official Records Book 5526, Page 5122 of the Public Records of Brevard County, Florida and being more particularly described as follows: Commence at the Southwest corner of said Northwest one-quarter and run S 89°13'18" E along the South line of said Northwest one-quarter, a distance of 1450.20 feet; thence N 00°46'42" E 114.00 feet to a point on the North right-of-way line of Palm Bay Road, as presently occupied, and the Point of Beginning of the herein described parcel; thence N 89°13'18" W along said North right-of-way line 45.00 feet; thence run Northwesterly parallel to and 45 feet Westerly of (by perpendicular measure) the Westerly right-of-way line of Hollywood Boulevard, as presently occupied for the next three (3) courses; (1) N 00°46'42" E 205.88 feet to a point of curvature of a circular curve concave to the Southwest having a radius of 905.00 feet; (2) thence run Northwesterly along the arc of said curve through a central angle of 54°16'33" a distance of 857.30 feet to a point of tangency; (3) thence N 53°29'51" W 460.26 feet to the North line of said lands described in Official Records Book 5526, Page 5122; thence S 89°12'25" E along the North line of said lands 77.10 feet to the said Westerly right-of-way line of Hollywood Boulevard; thence run Southeasterly along said Westerly right-of-way line for the next three (3) courses; (1) S 53°29'51" E 397.66 feet to a point of curvature of a circular curve concave to the Southwest having a radius of 950.00 feet; (2) thence run Southeasterly along the arc of said curve through a central angle of 54°16'33" a distance of 899.93 feet to a point of tangency; (3) thence S 00°46'42" W 205.88 feet to the Point of Beginning. Containing 1.56 acres more or less.

ABBREVIATIONS:

A = ARC
BRG = BEARING
CHD = CHORD
C/L = CENTERLINE
DA = DELTA ANGLE
ORB = OFFICIAL RECORDS BOOK
PC = POINT OF CURVATURE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
PT = POINT OF TANGENCY
R = RADIUS
R/W = RIGHT-OF-WAY.

SURVEYORS NOTES:

1. BEARINGS BASED ON ORB 5526, PAGE 5122
2. NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
3. THIS SKETCH AND DESCRIPTION CONTAINS 2 SHEETS. EACH SHEET IS NOT COMPLETE WITHOUT THE OTHER.



JOEL A. SEYMOUR
FLORIDA LICENSED PROFESSIONAL
SURVEYOR & MAPPER, PSM NO. 6133
NOT VALID UNLESS SIGNED AND SEALED

PREPARED FOR:
BENCHMARK MELBOURNE 35 ASSOCIATES, LP

PREPARED BY: KANE SURVEYING
ADDRESS: 505 DISTRIBUTION DRIVE, MELBOURNE, FLORIDA 32904
PHONE: (321) 676-0427

DRAWN BY: JAS	CHECKED BY: JAS	DRAWING NO. 23229	SECTION 20
DATE: 8/10/09	SHEET 1 OF 2	REVISIONS 8/26/09	TOWNSHIP 28 SOUTH
			RANGE 37 EAST

OFFICIAL COURT USE ONLY (CFN#)

SKETCH & DESCRIPTION

-NOT A SURVEY-

SECTION 20, TOWNSHIP 28 SOUTH, RANGE 37 EAST
 PARCEL ID# 28-37-20-00-00260.0-0000.00

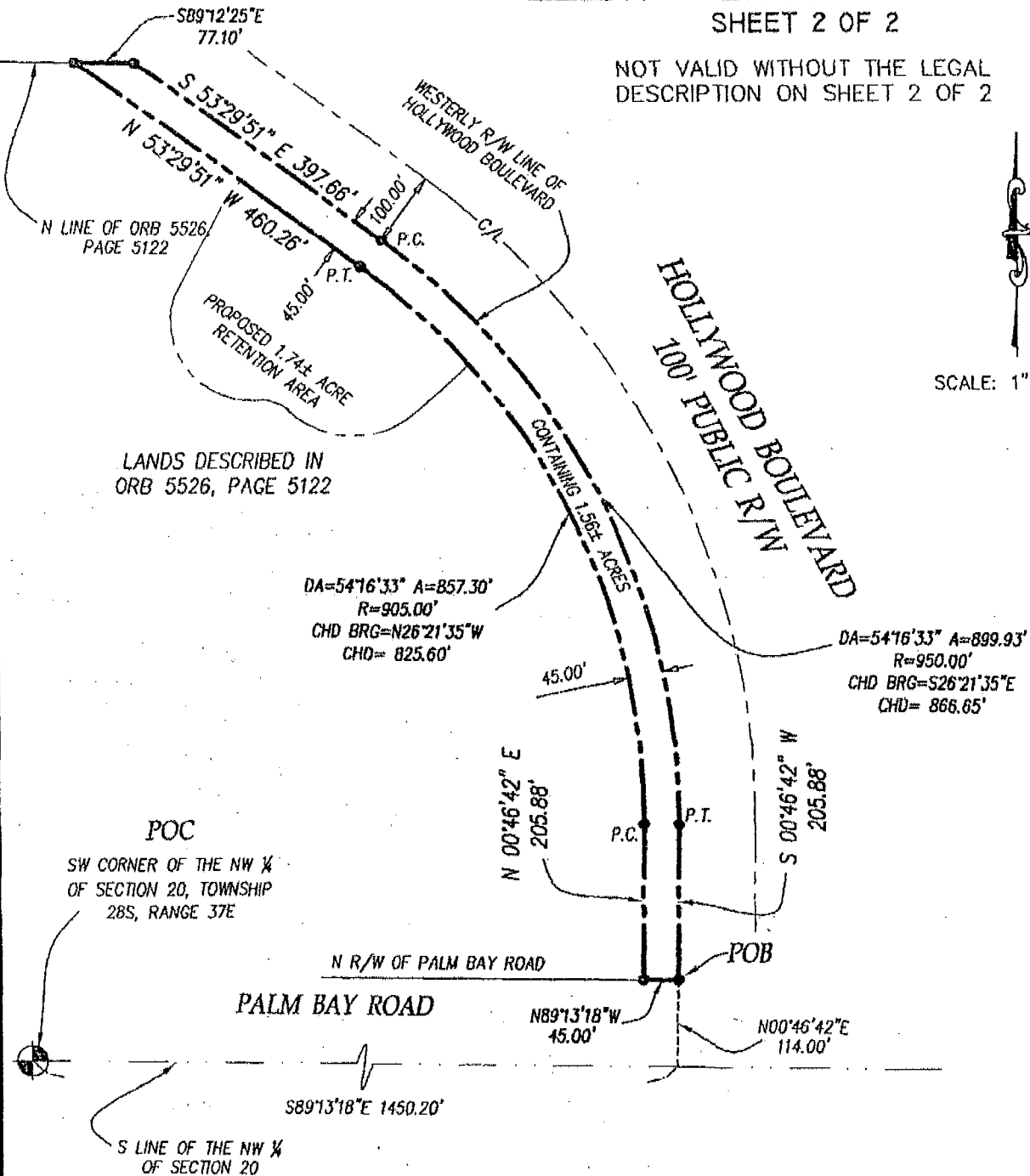
EXHIBIT A-1
 page 2

SHEET 2 OF 2

NOT VALID WITHOUT THE LEGAL
 DESCRIPTION ON SHEET 2 OF 2



SCALE: 1"=200'



SECTION 20, TOWNSHIP 28
 SOUTH, RANGE 37 EAST

PREPARED BY:
 Kane Surveying
 505 Distribution Drive
 Melbourne, Florida 32904
 (321) 676-0427

PROJECT NO. 23229

OFFICIAL COURT USE ONLY (CFN#)

SKETCH & DESCRIPTION**-NOT A SURVEY-**SECTION 20, TOWNSHIP 28 SOUTH, RANGE 37 EAST
PARCEL ID# 28-37-20-00-00260.0-0000.00PURPOSE OF SURVEY: Retention Pond description for
Hollywood Boulevard Roadway Improvements

EXHIBIT A-2

page 1

SHEET 1 OF 2

NOT VALID WITHOUT THE SKETCH
ON SHEET 2 OF 2**LEGAL DESCRIPTION:**

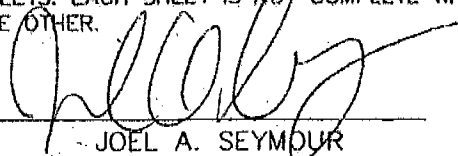
A parcel of land lying in the Northwest one-quarter of Section 20, Township 28 South, Range 37 East, Brevard County, Florida being a portion of those lands described in Official Records Book 5526, Page 5122 of the Public Records of Brevard County, Florida and being more particularly described as follows: Commence at the Southwest corner of said Northwest one-quarter and run S 89°13'18" E along the South line of said Northwest one-quarter, a distance of 1450.20 feet; thence N 00°46'42" E 114.00 feet to a point on the North right-of-way line of Palm Bay Road, as presently occupied; thence N 89°13'18" W along said North right-of-way line 45.00 feet; thence run Northwesternly parallel to and 45 feet Westerly of (by perpendicular measure) the Westerly right-of-way line of Hollywood Boulevard, as presently occupied for the next two (2) courses; (1) N 00°46'42" E 205.88 feet to a point of curvature of a circular curve concave to the Southwest having a radius of 905.00 feet; (2) thence run Northwesternly along the arc of said curve through a central angle of 42°04'52" a distance of 664.68 feet to the Point of Beginning of the herein described parcel; thence S 48°41'50" W 95.70 feet to the point of curvature of a circular curve concave to the North having a radius of 122.00 feet; thence run Westerly along the arc of said curve through a central angle of 86°14'15" a distance of 183.63 feet to a point of reverse curvature with a circular curve concave to the Southwest having a radius of 47.00 feet; thence run Northwesternly along the arc of said curve through a central angle of 51°15'13" a distance of 42.04 feet to a point of reverse curvature with a circular curve concave to the Northeast having a radius of 103.00 feet; thence run Westerly and Northerly along the arc of said curve through a central angle of 124°22'40" a distance of 223.59 feet to a point of tangency; thence N 28°03'32" E 116.54 feet; thence N 36°30'09" E 45.19 feet to a point that is 45 feet Westerly of the said Westerly right-of-way line of Hollywood Boulevard; thence S 53°29'51" E parallel to and 45 feet Westerly of (by perpendicular measure) the said Westerly right-of-way line, a distance of 194.03 feet to the point of curvature of a circular curve concave to the Southwest having a radius of 905.00 feet; thence continue parallel to and 45 feet Westerly of (by perpendicular measure) the said Westerly right-of-way line along the arc of said curve through a central angle of 12°11'41" a distance of 192.62 feet to the Point of Beginning. Containing 1.74 acres more or less.

ABBREVIATIONS:

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C/L = CENTERLINE
DA = DELTA ANGLE
ORB = OFFICIAL RECORDS BOOK
PC = POINT OF CURVATURE
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PRC = POINT OF REVERSE CURVATURE
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2. NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
3. THIS SKETCH AND DESCRIPTION CONTAINS 2 SHEETS. EACH SHEET IS NOT COMPLETE WITHOUT THE OTHER.



JOEL A. SEYMOUR
FLORIDA LICENSED PROFESSIONAL
SURVEYOR & MAPPER, PSM NO. 6133
NOT VALID UNLESS SIGNED AND SEALED

PREPARED FOR:
BENCHMARK MELBOURNE 35 ASSOCIATES, LP

PREPARED BY: KANE SURVEYING
ADDRESS: 505 DISTRIBUTION DRIVE, MELBOURNE, FLORIDA 32904
PHONE: (321) 676-0427

DRAWN BY: JAS	CHECKED BY: JAS	DRAWING NO. 23229	SECTION 20
DATE: 8/10/09	SHEET 1 OF 2	REVISIONS 8/26/09	TOWNSHIP 28 SOUTH
			RANGE 37 EAST

OFFICIAL COURT USE ONLY (CFN#)

SKETCH & DESCRIPTION**-NOT A SURVEY-**

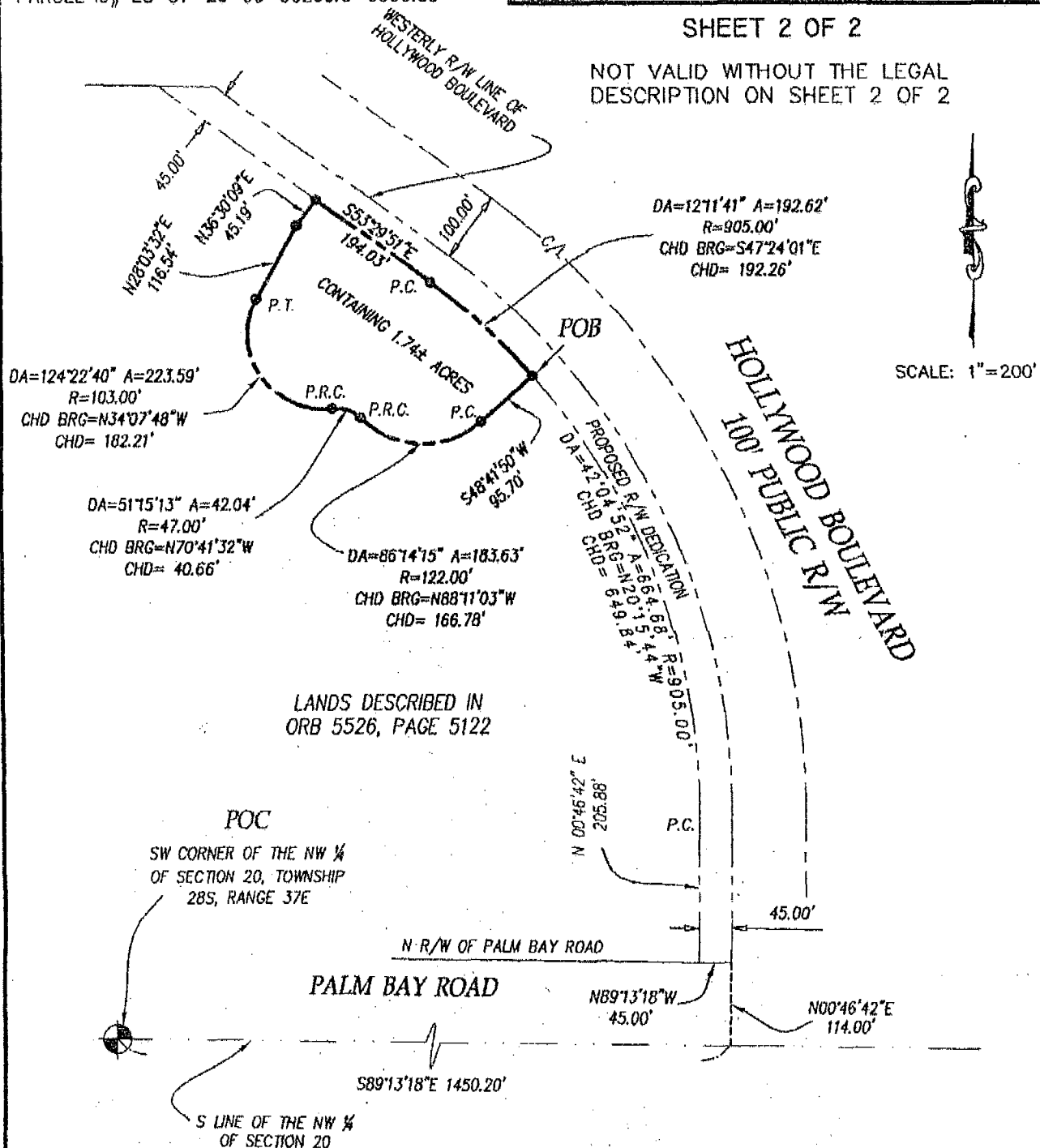
SECTION 20, TOWNSHIP 28 SOUTH, RANGE 37 EAST

PARCEL ID# 28-37-20-00-00260.0-0000.00

EXHIBIT A-2

page 2

SHEET 2 OF 2

NOT VALID WITHOUT THE LEGAL
DESCRIPTION ON SHEET 2 OF 2SECTION 20, TOWNSHIP 28
SOUTH, RANGE 37 EASTPREPARED BY:
Kane Surveying
505 Distribution Drive
Melbourne, Florida 32904
(321) 676-0427

PROJECT NO. 23229



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.4.

2/9/2021

Subject:

Approval, Re: Renewal of Lease with the North Brevard Senior Center, Inc. (District 1)

Fiscal Impact:

Approval of this action will result in revenue in the amount of \$1,200 annually to the Parks and Recreation Department.

Dept/Office:

Parks and Recreation

Requested Action:

It is requested the Board of County Commissioners approve and authorize the Chair to execute the Resolution and Renewal of Lease with the North Brevard Senior Center, Inc.

This action requires a super-majority vote by the Board.

Summary Explanation and Background:

The county has contracted the operation of our Senior Centers since the mid-1970s. The North Brevard Senior Center, Inc., a private Not For Profit corporation, operates the Senior Center located in Titusville. This partnership enables all socioeconomic levels of the senior population the opportunity to participate in programs and services designed to meet their recreational, physical, financial, health, social, nutritional and educational needs.

On August 18, 2015 the Board of County Commissioners approved the lease for a term of five years. Approval of the lease renewal will grant an additional five-year term extending the contract through August 17, 2025. The lease renewal documents have been reviewed and approved by both the County Attorney and Risk Management.

Brevard County Code Ordinances, Chapter 2, Section 2-241 through Section 2-251, establishes procedures for the sale, leasing and donation of real property. It requires the intent and County Code to be published on the County website at least five days prior to the public meeting and also requires a supermajority vote by the Board. The posting requirement was successfully completed on February 1, 2021.

Clerk to the Board Instructions:

Please call Melissa at 350-9125 when the document is ready for pick up.

Renewal of Lease

This Renewal of Lease is made by and between the Brevard County Board of County Commissioners, a political subdivision of the State of Florida, (hereinafter referred to as “County”) and the North Brevard Senior Center, Inc., a Not for Profit Corporation organized under the laws of the State of Florida (hereinafter referred to as “Lessee”)

Witnesseth:

Whereas, the parties hereto previously entered into a Lease on August 18, 2015 and amended on August 20, 2019 (hereinafter referred to as “Lease” and attached as Exhibit “A”), more specifically identified as Contract Number 3324, for real property located in Brevard County, Florida, commonly known as the North Brevard Senior Center, hereinafter referred to as “Senior Center”, located at 909 Lane Avenue, Titusville, Florida 32780; and

Whereas, the Lease was for a term of five years; and

Whereas, the Lessee leases the Senior Center for a sum of One Hundred Dollars paid monthly; and

Whereas, the parties desire to renew the Lease for an additional term of five years.

Now, Therefore, in consideration of the premises and mutual covenants herein contained, the parties hereby agree as follows:

1. The above recitals are true and correct and are incorporated into this Renewal of Lease.
2. Pursuant to Section 3. of the Lease, the term of the Lease shall be renewed for an additional five-year term beginning on August 18, 2020 through August 17, 2025.
3. All terms and conditions of said Lease not inconsistent with the provisions of this Renewal of Lease, shall remain in full force and effect.

In Witness Whereof, the parties have hereunto set their hands and seals on the day and year written herein below.

Attest:

Board of County Commissioners of
Brevard County, Florida

Rachel Sadoff, Clerk of Court

By: _____

Rita Pritchett, Chair

As Approved by the Board on 2/9/2021.

Reviewed for Legal Form and Content

Robin Rogers 1/27/2021

Robin Rogers, Assistant County Attorney

North Brevard Senior Center, Inc.

By: Catherine J. Simkins
Catherine J. Simkins, President Date

State of Florida
County of Brevard

The foregoing instrument was acknowledged before me by means of [] physical presence or [] online notarization on this 28th day of January, 2021 by Catherine J. Simkins, President of North Brevard Senior Center, Inc. She is personally known to me or has produced FL Driver's license as identification.

Shirley L. Corliss
Notary Public

Shirley L. Corliss
Typed/Printed Name





Brevard County Parks and Recreation Department
First Amendment to Lease



This First Amendment to the **Lease** is made and entered into by and between the **Board of County Commissioners of Brevard County, Florida**, a political subdivision of the State of Florida, hereinafter referred to as “County,” and, the **North Brevard Senior Center, Inc.**, a Not for Profit Corporation organized under the laws of the State of Florida (hereinafter referred to as “Lessee”).

Witnesseth:

Whereas, the parties hereto have previously entered into a Lease Agreement (hereinafter referred to as “Lease”), more specifically identified as Contract Number 3324, dated August 18, 2015; and

Whereas, the Lessee has requested a reduction in rent; and

Whereas, the County is amenable to the Lessee’s request; and

Whereas, the parties hereto desire to amend certain provisions of the Lease to provide for the requested rent reduction.

Now, Therefore, in consideration of the premises and mutual covenants herein contained, the parties hereby agree as follows:

1. Recitals. The above recitals are true and correct and are incorporated into this First Amendment by this reference.

2. **Section 4. “Rent.”** of the Lease is hereby amended to read as follows:

“The rent for the Senior Center shall be One Hundred Dollars per month, due the fifth day of each month and payable in advance by the Lessee. It is hereby mutually agreed and understood that the rent may be negotiated annually.”

3. Each and every other term and provision of the Lease shall remain in full force and effect as written. In the event of a conflict between the Lease and this First Amendment, this First Amendment shall prevail.

4. This First Amendment shall be effective immediately upon execution by both parties.

In Witness Whereof, the parties hereto have hereunto set their hands and seals on the day and year first written below.

Attest:

Board of County Commissioners
of Brevard County, Florida

By:

Scott Ellis
Scott Ellis, Clerk of Court

By:

Kristine Isnardi
Kristine Isnardi, Chair

Date

As approved by the Board on August 20, 2019.

Reviewed for legal form and content:

Abigail Forrester Jorandby
Abigail Forrester Jorandby
Assistant County Attorney

Witness:

North Brevard Senior Center, Inc.
(Corporate Seal)

William J. Hostler 9/23/19
Signature & Date

By:

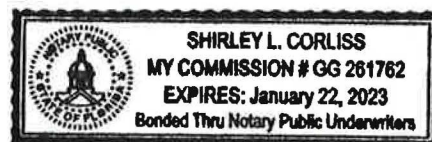
William J. Hostler
William Hostler, President

9-23-19
Date

Witness:

James Prince 9/23/19
Signature & Date

State of Florida
County of Brevard



The foregoing instrument was acknowledged this 23rd day of September
by William Hostler who personally appeared before me or provided FL Drivers License
as form of identification and who affirms that he/she signed the instrument voluntarily for the
purpose expressed in it.

Shirley L. Corliss
Signature of Notary of Public

Shirley L. Corliss
Name of Notary of Public (print, type or stamp) My Commission Expires: Jan. 22, 2023

LEASE

THIS LEASE, made and entered into this 18 day of August, 2015, by and between the **BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA**, a political subdivision of the State of Florida (hereinafter referred to as the "County"), and the **NORTH BREVARD SENIOR CENTER, INC.**, a Not For Profit Corporation organized under the laws of the State of Florida (hereinafter referred to as the "Lessee").

WHEREAS, the Lessee desires to lease a County owned facility which is a part of the County public park known as **North Brevard Senior Center** and is for the purpose of serving as a senior center (hereinafter referred to as the "Senior Center");

WHEREAS, the Lessee has an interest in providing programs and services to the senior population of the County, is well situated to do so, and has previously contracted with the County to provide such services;

WHEREAS, the County has an interest in allowing programs and services to be provided to the senior population of the County;

WHEREAS, the County has by Resolution, a copy of which is attached hereto as **Exhibit "A"**, determined that these programs and services provided will promote public health, safety or welfare, will serve the public interest, will serve a public purpose, constitute a service that could be provided by local government, and are compatible with the County purposes for which the Senior Center was constructed.

WITNESSETH:

NOW THEREFORE, in consideration of the mutual promises and terms and conditions contained herein, the parties hereto hereby agree as follows:

- 1. Leased Property.** The County hereby leases to the Lessee and Lessee hereby leases from the County, the Senior Center as presently constituted, commonly known as the **North Brevard Senior Center, 909 Lane Avenue, Titusville, Florida 32780** and described in **Exhibit "B"**. The Senior Center includes all improvements to the leased real property, whether constructed before or after the date of the Lease, and all fixtures, furniture, equipment and supplies, if any, placed on the leased property by the County.
- 2. Representation by Lessee.** The Lessee represents that it is a Florida Not For Profit organization under the laws of Florida as described in Section 501(c)(3) of the Internal Revenue Code as amended, and is exempt from federal income tax pursuant to Section 501(a) of said Code.
- 3. Term.** This Lease shall be effective from the date of the last signature for a period of five (5) years. It is hereby mutually agreed and understood that the Lessee may request renewal of this Lease for an additional five (5) year term by written notice from Lessee at least 60 days prior to the expiration date of this Lease.

4. **Rent.** The rent for the Senior Center shall be Two Hundred Fifty Dollars (\$250.00) per month, due the 5th day of each month and payable in advance by the Lessee. It is hereby mutually agreed and understood that the rent may be negotiated annually.
5. **Utilities.** The Lessee shall pay costs of all public utility charges which shall include telephone, electric, gas, water, sanitary sewer, and garbage, as applicable which is provided to the Senior Center by the County, City or any other public agency or public utility.
6. **General Liability Insurance.** Lessee agrees to provide and maintain at all times during the term of this Lease, without cost or expense to the County, policies of insurance generally known as general liability policies insuring the Lessee against any and all claims, demands and causes of action whatsoever for injuries received and damages to property in connection with the use, occupation, management or control of the Senior Center and any improvements thereon. The County shall be added on to the policy as an additional insured. The General Liability Insurance shall be issued by responsible insurance companies and in a form acceptable to the County, protecting and insuring against all the foregoing with combined single limits of not less than One Million dollars (\$1,000,000) for Bodily Injury and Property Damage and Fire Legal Liability in the amount of One Hundred Thousand dollars (\$100,000). All personal property housed or placed at the leased Senior Center shall be at the risk of the Lessee, whether owned by the County or the Lessee, and the County shall not be liable for any loss or damage to the personal property of the Lessee or others located thereon for any cause whatsoever. The Lessee agrees and understands that the County does not and shall not carry liability, theft or fire insurance on said property to cover the Lessee's interest therein.
7. **Insurance Certificates.** Lessee shall provide the County with Certificate(s) of Insurance on all policies of insurance and renewals thereof in a form(s) acceptable to the County. Said certificates shall provide that the County is an additional insured, and that County shall be notified in writing of any reduction, cancellation or substantial change of policy or policies at least thirty (30) days prior to the effective date of said action. All insurance policies shall be issued by responsible companies who are acceptable to the County and licensed and authorized under the laws of the State of Florida.
8. **Indemnification.** The Lessee shall indemnify and hold harmless the County and its employees from all claims, damages, losses, and expenses, including attorney's fees, arising out of or associated with the use, occupation, management or control of the Senior Center or any improvements or any furniture, furnishings, equipment and fixtures utilized in connection with the Senior Center by the Lessee unless such claims, damages, expenses, or losses are caused solely by acts of the County, its employees, or other persons not a party to this Lease acting on the County's request. Lessee agrees that it will, at its own expense, defend any and all such actions, suits, or proceedings which may be brought against the County in connection with the Lessee's use, occupation, management or control of said Senior Center and that it will satisfy, pay and discharge any and all judgments that may be entered against the County in such action or proceeding. Likewise, the County shall indemnify and defend the Lessee and its employees, officers, and agents from all claims, damages, losses, and expenses,

including attorneys fees, caused solely by the County's use, occupation, or management of the Senior Center or any improvements made by the County unless such claims, damages, or losses are caused by the acts of the Lessee, its employees, officers, members or other persons not a party to this Lease acting on/at the Lessee's request. The County agrees that it will, at its own expense, defend any and all such actions, suits, or proceedings which may be brought against the Lessee as the sole result of the County's use, occupation or management of said Senior Center and that it will satisfy, pay and discharge any and all judgments that may be entered against the Lessee in such action or proceeding. However, nothing contained herein shall constitute a waiver by the County of its sovereign immunity or the provisions of Section 768.28, Florida Statutes.

9. **Obligations of the Lessee.** The Lessee shall keep the interior of the building clean and orderly in accordance with any applicable laws, regulations or ordinances. The County reserves the right to perform, or have performed, periodic inspections of the cleanliness and sanitation conditions of the Senior Center. Lessee shall maintain said property in its present condition, ordinary wear and tear excepted. All improvements and any changes made by Lessee to the interior of building shall be at the cost of the Lessee and subject to prior written approval by the County.

The Lessee, at its cost, shall be responsible for all interior and exterior signage it desires and signs which the Lessee desires in order to advertise its programs, excluding parking signs. However, all signage must comply with Americans with Disabilities regulations and must be preapproved by the County. Such signs must be in compliance with any applicable jurisdiction's code or ordinance.

The Lessee shall have control and responsibility for County owned (presently or subsequently installed) equipment and other depreciable property at the Senior Center as described in **Exhibit "C"**. Such property shall be considered a part and portion of the County's property covered in this Lease. None of the County owned property or equipment, if any is present, is to be sold, loaned, rented, used or moved outside of the Senior Center without the written approval of the Parks and Recreation Department Director or designee.

The Lessee shall promptly notify the County of the necessity of any and all maintenance and repairs needed to the exterior and/or the utility systems for the Senior Center.

All inspections, maintenance, repair monitoring and costs associated with the security systems shall be the responsibility of the Lessee. The Lessee shall pay the expense of fire alarm monitoring. Lessee understands that the Senior Center must be operated in such a fashion to comply with all federal, state and local all codes in order to operate the Senior Center or otherwise carry out the programs and activities authorized by the Lessee in compliance with this lease.

The Lessee agrees to cooperate with the County in all matters pertaining and relating to the operation of the Senior Center. This shall include providing space for public meetings, health and wellness services, and any other County sponsored programs, services, events and meetings, under the condition that the scheduling of such events would not interfere with previously scheduled Lessee events.

10. Obligations of the County. The County shall maintain the building's exterior in good condition. Maintenance and repair of the exterior structure includes rodent and termite control, exterior painting and sealing. The County shall be responsible for the cost and provision of ground maintenance around the exterior of the structure, which will include irrigation system maintenance for the lawn. The County shall mow, edge, and fertilize the lawns; weed and mulch landscapes; trim hedges, shrubs, and small trees; remove dead, damaged or unwanted trees; and water the lawns, landscapes and gardens. The County shall be responsible for costs of the water retention area maintenance for the leased Senior Center so that areas meet requirements of federal, state, and local regulations.

The County shall be responsible for maintenance and repair of the sidewalks and parking lot, including parking signs, parking lot light poles including light bulbs, outside seating, and flagpole.

All inspections, maintenance and repair of the fire alarm and fire sprinkler systems, and fire extinguishers, shall be the responsibility of the County.

The County shall be responsible for any needed repair and/or replacement of the HVAC system and plumbing system.

The County shall be responsible for the provision of maintenance, repair, and bear the costs of such, for the electrical distribution system from the load side of the meter can to all outlets. The County shall be responsible for replacement of exterior light bulbs and all ballasts.

11. Violation of Provisions. Any violation of these provisions will constitute a breach of the conditions of this Lease and may result in the cancellation of same. The County shall notify the Lessee of any violation of the provisions of this Lease in writing. Such notice shall identify the provision which is being violated and how it is being violated. The Lessee shall then have sixty (60) days within which to fix the violation. It is the intent of this provision for the parties to work together cooperatively towards a positive resolution of all issues. However, if the violation is not fixed or addressed in a reasonable fashion to the County's reasonable satisfaction, the County has the right to issue a notice of termination/cancellation effective immediately at the end of the sixty day period. In the event of cancellation or termination of this Lease, Lessee shall remove its personal property from the Senior Center. Any personal property not removed within ninety (90) days from the effective date of termination of the Lease shall be subject to becoming the property of the County.

12. Permitted Activities of the Lessee at the Senior Center. The Senior Center shall be operated to provide well rounded programs and services to the senior population of Brevard County so that one activity does not dominate the availability of use of the Senior Center. The Lessee shall provide a calendar of events on a quarterly basis subject to approval by the County. The Lessee shall strive to develop a variety of diverse programs and services that meet the recreational, physical, financial, health, social, nutritional, and educational needs of all socioeconomic levels of the senior population of the County. The Board of Directors of the Lessee shall not have sole authority to deny such programs and services as stated above to the senior population of the

county with regard to race, color, religious creed, national origin, ancestry, age, gender, marital status, or disability.

The ongoing operation of the Senior Center will be the responsibility of the Board of Directors of the Lessee in coordination with the County. A representative from the County shall serve as a non-voting member on the Board of Directors. When requested, the Lessee shall provide a list to include names, addresses, and phone numbers of the Executive Committee of the Board of Directors of the Lessee, and additionally shall provide notification of any changes to said officers that may occur in the course of the year.

Revenues may be derived by the Lessee from memberships, fund-raising events, donations, special activities, shared revenues obtained from admission to activities sponsored and operated by other senior organizations, some participation from community-based organizations and for occasional use by other age groups. The County shall have the option to rent out the Senior Center during non-dedicated/usage time. The County shall supply notice fourteen (14) days in advance of said usage and direct costs shall apply.

13. **Reverter and Right of Re-Entry and Repossession.** In the event the Senior Center is not used or ceases to be used for the public purposes set forth herein, the Lease shall immediately cease and the Senior Center shall revert to the County which shall thereafter have the right to re-enter and repossess the Senior Center.
14. **ADA Compliance.** The County and Lessee shall conform to current requirements of the Americans with Disabilities Act in the performance of this Lease, and shall not cause or place on the Senior Center any condition causing the Senior Center to become non-compliant. The parties shall work together to cure any known violations of the ADA that may occur.
15. **Hours of Operation.** For normal operations, the Lessee assures that the Senior Center will be open an average of 35 daytime hours per week with the exception of those weeks which include a holiday or in the event of an emergency. During all hours of operation of the Senior Center by the Lessee or during all hours when the Senior Center is utilized for programs or services sanctioned by the Lessee, the Lessee shall be responsible for any and all damage to the Senior Center, ordinary wear and tear excepted. The Lessee shall provide either paid staff or designate members of its organization to supervise use of the Senior Center and to secure the Senior Center following use by the Lessee, or any other groups sanctioned by the Lessee.
16. **Emergency Services.** In the case of a general emergency as declared by the County, the County retains the right to immediately resume occupation, management, and maintenance of the Senior Center, to use the facility to meet any emergency needs for the period of that emergency and a reasonable period of time thereafter as deemed necessary by the County. The Lessee will be provided as much notice as is practicable dependent on how suddenly the need arises and predictability of how long the need will continue. The County shall not be responsible for the damage, loss of property or income created by the use of the Senior Center by agencies which support the emergency response and recovery such as Red Cross, Federal Emergency Management Agency and others. The County and Lessee shall work directly with such support agencies to recover the cost

of restoration, lost equipment, and supplies used. During the period in which the County or other governmental or non-governmental agency occupies or manages the Senior Center, Lessee occupancy and any duties or obligations hereunder will be suspended. Any maintenance, damage, restoration, or repair necessitated during any suspension of the Lessee's occupancy under this Lease will be the responsibility and the expense of the County occupancy under this Lease will be the responsibility and the expense of the County. Repairs, rehabilitation, restoration or maintenance, the need for which arises as a result of such emergency suspension of the Lessee's occupancy, shall all be diligently completed by the County, at the expense of the County prior to the Lessee reoccupying the Senior Center. As used herein, an "emergency" will be defined as a period of civil unrest or riot, a period during which the military needs the Senior Center for a period of time relating directly to defense of the nation and a likely attack of the nation, a period during which weather such as a hurricane or tornado is likely to cause damage to the community and the Senior Center, is needed for public shelter, distribution of emergency supplies such as food or water, or other related event, or any other circumstance designated by the Emergency Operations Center, "E.O.C." as an emergency.

17. **Lessee's Assignment, Sublease or License for Occupation by Other Persons.** Lessee agrees not to assign or sublease the Senior Center, any part thereof, or any right or privilege connected therewith, without first obtaining the County's written consent, which consent the County may withhold in its sole discretion. Consent on one occasion by the County shall not be consent to a subsequent assignment, sublease, or occupation by other persons. Lessee's unauthorized assignment, sublease or license to occupy shall be void, and shall terminate the Lease at the County's option. Lessee's interest in this Lease is not assignable by operation of law, nor is any assignment of its interest herein, without the County's written consent. Nothing herein is intended to prevent the Lessee from entering into short-term use/rental lease with third parties for up to and including three (3) days (no overnight activities); however, even under such circumstances the Lessee shall remain responsible for each and every of its obligations under this Lease. The Lessee shall be responsible for ensuring that all short term use or rental leases shall only be allowed for activities that are consistent with the remainder of the terms of this Lease.
18. **Alterations, Changes and Additions.** No structural changes, alterations or additions shall be made by the Lessee to the Senior Center without the prior written consent of the County. Any such alterations, changes and additions shall remain for the benefit of and become the property of the County.
19. **No Use that Increases Insurance Risk.** The Lessee shall not use the Senior Center in any manner, even in its use for the purposes for which the Senior Center is leased, that will increase the risk covered by insurance on the building where the Senior Center is located, so as to increase the rate of insurance on the Senior Center, or to cause cancellation to any insurance policy covering the building. Lessee further agrees not to keep at the Senior Center, or permit to be kept, used, or sold thereon, anything prohibited by the policy of fire insurance covering the Senior Center. Lessee shall comply, at its own expense, with all requirements of insurers necessary to keep in force the fire and public liability insurance covering the Senior Center.

20. **Licenses, Permits, and Taxes.** Lessee agrees to secure and maintain all licenses and permits required to operate, including any applicable sales or use tax, which shall be imposed or assessed by any and all governmental authorities, in connection with the business or operation conducted under this Lease, and to meet all federal, state, county and municipal laws, ordinances, policies and rules. Any such licenses and permits shall be maintained and posted, if required, at appropriate places at the Senior Center within thirty (30) days of the execution of this lease by both parties. If applicable, a Bingo Class "A" License shall be obtained on an annual basis and a copy shall be provided to the County.
21. **No Waiver of Covenants or Conditions.** The failure of either party to insist on strict performance of any covenant or condition hereof, or to exercise any option herein contained, shall not be construed as a waiver of such covenant, condition, or option in any other instance. This Lease cannot be changed or terminated orally.
22. **Successors in Interest.** This Lease and the covenants and conditions hereof apply to and are binding on the heirs, successors, legal representatives, and assigns of the parties.
23. **Severability.** If any provision of this Lease is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.
24. **Venue.** Venue for any legal action brought by any party to this Lease to interpret, construe or enforce this Lease shall be in court of competent jurisdiction in and for Brevard County, Florida, and any trial shall be non-jury.
25. **Attorney's Fees.** In the event of any legal action to enforce the terms of this Agreement each party shall bear its own attorney's fees and costs.
26. **Governing Law.** This Lease shall be deemed to have been executed and entered into within the State of Florida and this Lease, and any dispute arising hereunder, shall be governed, interpreted and construed according to the laws of the State of Florida.
27. **Compliance with Statutes.** It shall be the Lessee's and the County's responsibility to be aware of and comply with all statutes, ordinances, rules, orders, regulations and requirements of all local, state, and federal agencies as applicable.
28. **Independent Contractor.** Lessee shall perform the services under this Lease as an independent contractor and nothing contained herein shall be construed to be inconsistent with this relationship or status. Nothing in this Lease shall be interpreted or construed to constitute the Lessee or any of its agents or employees to be the agent, employee or representative of the County.
29. **Right to Audit Records.** The Lessee shall prepare an annual financial statement and shall submit same to the Area Manager. In the performance of this Lease, the Lessee shall keep books, records, and accounts of all activities related to this Lease, in compliance with general accounting procedures. Books, records and accounts

related to the performance of this Lease shall be open to inspection during regular business hours by an authorized representative of the County and shall be retained by the agency for a period of three (3) years after the termination of this Lease. All records or documents created by Lessee or provided to Lessee by the County in connection with the activities or services provided by County under the terms of this Lease, are public records and the Lessee agrees to comply with any request for such public records or documents made in accordance with Chapter 119, Florida Statutes.

- 30. Construction of Lease.** The parties hereby acknowledge that they have fully reviewed this Lease and its attachments and have had the opportunity to consult with legal counsel of their choice, and that this Lease shall not be construed against any party as if they were the drafter of this Lease.
- 31. Surrender of Premises.** Lessee shall surrender the Senior Center to the County at the end of the Lease term in generally the same condition as when Lessee took possession, allowing for changes and modifications agreed to by the parties over time, reasonable wear and tear, damages by acts of God, including fire and storm. The Lessee shall remove all business signs or symbols placed on the Senior Center by the Lessee before surrendering the Senior Center and restore the portion of the Senior Center on which they were placed in the same condition as before placement. Lessee shall have ninety (90) days notice to surrender.
- 32. Partial Destruction of Premises.** Partial destruction of the Senior Center shall not render this Lease void, or terminate it except as herein provided. If the Senior Center is partially destroyed during the term of this Lease, County may endeavor to make repairs, providing the County has the fiscal means to do so, and when such repairs can be made in conformity with local, state, and federal laws and regulations, within ninety (90) days of the partial destruction. If the repairs cannot be so made in ninety (90) days and the County does not elect to make them within a reasonable time, either party hereto has the option to terminate this Lease. If the leased Senior Center is more than one-third destroyed, County or Lessee may at its option terminate this Lease, giving ninety (90) day notice to Lessee.
- 33. County's Entry for Inspection and Maintenance.** The County reserves the right to enter the -Senior Center at reasonable times to inspect, to perform required maintenance and repair, or to make additions or alteration to any part of the building in which the Senior Center under Lease is located, and Lessee agrees to permit the County to do so. The County may, in connection with such alterations, additions, or repairs, erect scaffolding, fences, and similar structures, post relevant notices, and place moveable equipment without incurring liability to Lessee for disturbance of quiet enjoyment of the Senior Center, or loss of occupation thereof, unless done so in an unreasonable, willful, or negligent manner.
- 34. Modifications.** No modification of this Lease shall be binding on the County or the Lessee unless reduced to writing and signed by a duly authorized representative of County and the Lessee.
- 35. Notice.** Notice under this Lease shall be given to the County at Brevard County Parks and Recreation: **North Area Parks Operations, 475 North Williams Avenue, Titusville, Florida 32796.** Notice shall be given to


Lessee by mailing written notice, postage prepaid to the President of the **North Brevard Senior Center, Inc., 909 Lane Avenue, Titusville, Florida, 32780**. Notice shall be effective upon receipt or five (5) days from mailing, whichever even occurs first.

- 36. Unauthorized Alien Workers.** Brevard County will not intentionally award publicly-funded contracts to any Lessee who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contained in 8 U.S.C. Section 1324a(e)(Section 274A(e) of the Immigration and Nationality Act "INA"). The County shall consider the employment by the Lessee of unauthorized aliens a violation of Section 274A (e) of the INA and such violation shall be grounds for unilateral cancellation of this Lease by the County.
- 37. Public Entity Crimes.** A person or affiliate who had been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with a public entity, and may not transact business with any public entity in excess of Category Two for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.
- 38. Termination for Convenience.** Either party may terminate this Lease for their own convenience upon providing thirty (30) day written notice to the other party. In the event of a termination for convenience, the parties agree that the only termination damages payable by either party will be prorated rent up to the date of termination, and any other sums the respective party is otherwise obligated to pay under the terms of this Lease up to the effective date of termination.
- 39. Illegal, Unlawful, or Improper Use.** The Lessee shall make no unlawful, improper, immoral, or offensive use of the Leased Senior Center nor will the Lessee use the Leased Senior Center or allow the use of the Leased Senior Center for any purpose other than that hereinabove set forth. Failure of Lessee to comply with this provision shall be considered a material default under this Lease.
- 40. Copyright.** No reports, data, programs or other materials produced, in whole or in part, for the benefit and use of the County under this Lease shall be subject to copyright by the Lessee in the United States or any other country.
- 41. Music Performance.** The Lessee shall not use, play or perform copyrighted music without appropriate licensing or other permission. The Lessee shall be solely responsible for obtaining appropriate licensing or permission to use, play or perform copyrighted music. The use or performance of copyrighted music without appropriate licensing or other permission shall constitute a breach of this Lease. The Lessee agrees to indemnify and hold harmless the County from damages for unauthorized use or performance of copyrighted music.

42. Entire Lease. This Lease, together with any Exhibits, constitutes the entire Lease between the County and Lessee and supersedes all prior written or oral understandings. This Lease and any Exhibits may only be amended, supplemented or canceled by a written instrument duly executed by both parties hereto. As of the Effective Date of this Lease, all authority, permission, and right, express or implied, heretofore granted or inferred to be granted by the County to Lessee to operate a Senior Center shall be terminated, and Lessee shall cease operating any Senior Center other than as permitted by this Lease.


IN WITNESS WHEREOF, the parties have hereunto set their hands and seals on the day and year first above written.

ATTEST:



Scott Ellis, Clerk of Court

BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA



Robin Fisher, Chairman

As approved by the Board on 8/18/2015.

WITNESS:

NORTH BREVARD SENIOR CENTER, INC.



Rachel Kustura



Catherine Simkins, President

Reviewed for Legal Form and Content



Assistant County Attorney

RESOLUTION NO. 2015- 131

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA, PURSUANT TO SECTION 125.35, FLORIDA STATUTES AND SECTION 2-247 BREVARD COUNTY CODE OF ORDINANCES, AUTHORIZING THE LEASING OF REAL PROPERTY TO A NOT FOR PROFIT CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF FLORIDA; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the **NORTH BREVARD SENIOR CENTER, INC.**, a 501(c)(3) tax exempt Not For Profit Corporation organized under the laws of the State of Florida (hereinafter referred to as "Lessee") has applied to the **BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA**, a political subdivision of the State of Florida (hereinafter referred to as "County") to lease a County owned facility which is a part of the County public park known as the **North Brevard Senior Center** (hereinafter referred to as the "Senior Center");

WHEREAS, the Lessee desires to operate and maintain the Senior Center for the benefit and enjoyment of the senior population of Brevard County; and


WHEREAS, the County finds that the Lessee's proposed use of the Senior Center will promote public health, safety or welfare, will serve the public interest, will serve a public purpose, constitutes a service that could be provided by the local government, and is compatible with the County purposes for which the Senior Center was constructed.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA, that:

1. The North Brevard Senior Center is a County owned facility and was constructed for the purpose of being used as a public senior center.
2. The County has determined that the North Brevard Senior Center is not needed by the County.
3. The Lessee shall operate and maintain the Senior Center for the benefit and enjoyment of the senior population of Brevard County.
4. The Lessee shall strive to develop a variety of diverse programs and services that meet the recreational, physical, financial, health, social, nutritional, and educational needs of all socioeconomic levels of the senior population of the County.
5. The County shall enter into a lease with the Lessee beginning on the date of the last signature on the Lease Agreement for a term of five (5) years with the option to renew for an additional five (5) year term.
6. The consideration for the conveyance shall be \$250.00 per month.
7. This Resolution shall take effect immediately upon its adoption. No obligation to Lease the Senior Center to the Lessee shall arise until the Lease is executed by both parties.
8. In the event the Lessee fails to comply with the Lease, then the Senior Center shall immediately revert to the County which shall thereafter have the right to reenter and repossess the property.

DONE, ORDERED AND ADOPTED this 18th day of August, 2015.

ATTEST:


 Scott Ellis, Clerk

**BOARD OF COUNTY COMMISSIONERS
BREVARD COUNTY, FLORIDA**


 Robin Fisher, Chairman

As approved by the Board on 8/18/2015.

EXHIBIT "B"

North Brevard Senior Center

909 Lane Avenue
Titusville, FL 32780



2015 Aerial

Brevard County Parks and Recreation

0 50 100
Feet

2725 Judge Fran Jamieson Way
Viera, FL 32940



2021 Renewal of Lease with North Brevard Senior Center, Inc.
DISCLAIMER: This map is intended for display purposes only and is not intended for any legal representation. Page 16 of 17

Exhibit "C"

There is no County owned equipment located at the Senior Center.

**BREVARD COUNTY
BOARD OF COUNTY COMMISSIONERS**

CONTRACT REVIEW AND APPROVAL FORM

SECTION I - GENERAL INFORMATION

1. Contractor: North Brevard Senior Center Inc.		2. Amount:
3. Fund/Account #:	4. Department Name: Parks & Recreation	
5. Contract Description: Lease Renewal		
6. Contract Monitor: Melissa Renninger		8. Contract Type: LEASE/RENTALS
7. Dept/Office Director: Mary Ellen Donner		
9. Type of Procurement: Exempt from Competition		

SECTION II - REVIEW AND APPROVAL TO ADVERTISE

APPROVAL

<u>COUNTY OFFICE</u>	<u>YES</u>	<u>NO</u>	<u>SIGNATURE</u>
User Agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Purchasing	<input type="checkbox"/>	<input type="checkbox"/>	
Risk Management	<input type="checkbox"/>	<input type="checkbox"/>	
County Attorney	<input type="checkbox"/>	<input type="checkbox"/>	

SECTION III - REVIEW AND APPROVAL TO EXECUTE

APPROVAL

<u>COUNTY OFFICE</u>	<u>YES</u>	<u>NO</u>	<u>SIGNATURE</u>
User Agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Renninger, Melissa <small>Digitally signed by Renninger, Melissa Date: 2021.01.27 15:14:17 -05'00'</small>
Purchasing	<input type="checkbox"/>	<input type="checkbox"/>	
Risk Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lairsey, Matt <small>Digitally signed by Lairsey, Matt Date: 2021.01.27 15:22:39 -05'00'</small>
County Attorney	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Rogers, Robin <small>Digitally signed by Rogers, Robin Date: 2021.01.27 15:49:08 -05'00'</small>

SECTION IV - CONTRACTS MANAGEMENT DATABASE CHECKLIST

CM DATABASE REQUIRED FIELDS	Complete ✓
Department Information	<input type="checkbox"/>
Department	<input type="checkbox"/>
Program	<input type="checkbox"/>
Contact Name	<input type="checkbox"/>
Cost Center, Fund, and G/L Account	<input type="checkbox"/>
Vendor Information (SAP Vendor #)	<input type="checkbox"/>
Contract Status, Title, Type, and Amount	<input type="checkbox"/>
Storage Location (SAP)	<input type="checkbox"/>
Contract Approval Date, Effective Date, and Expiration Date	<input type="checkbox"/>
Contract Absolute End Date (No Additional Renewals/Extensions)	<input type="checkbox"/>
Material Group	<input type="checkbox"/>
Contract Documents Uploaded in CM database (Contract Form with County Attorney/ Risk Management/ Purchasing Approval; Signed/Executed Contract)	<input type="checkbox"/>
"Right To Audit" Clause Included in Contract	<input type="checkbox"/>
Monitored items: Uploaded to database (Insurance, Bonds, etc.)	<input type="checkbox"/>

Resolution Number 2021-

A Resolution of the Board of County Commissioners of Brevard County, Florida, pursuant to Section 125.35, Florida Statutes and Section 2-247 of the Brevard County Code of Ordinances, authorizing the Renewal of a Lease of Real Property to a Not For Profit Corporation organized under the laws of the State of Florida; and Providing for an Effective Date.

Whereas, the **North Brevard Senior Center, Inc.**, a 501(c)(3) tax exempt Not For Profit Corporation organized under the laws of the State of Florida (hereinafter referred to as “Lessee”) previously applied to the **Board of County Commissioners of Brevard County, Florida**, a political subdivision of the State of Florida (hereinafter referred to as “County”) and entered into a Lease for a County owned facility which is a part of the County public park known as the **North Brevard Senior Center** (hereinafter referred to as the “Senior Center”); and

Whereas, under the Lease dated August 18, 2015 and the First Amendment dated August 20, 2019, the Lessee operates and maintains the Senior Center for the benefit and enjoyment of the senior population of Brevard County; and

Whereas, the Lessee has requested to renew the Lease and the County is amenable to the Lessee’s request; and

Whereas, the County finds that the Lessee’s continued use of the Senior Center will promote public health, safety or welfare, will serve the public interest, will serve a public purpose, constitutes a service that could be provided by the local government, and is compatible with the County purposes for which the Senior Center was constructed.

Now, Therefore, be it resolved by the Board of County Commissioners of Brevard County, Florida, that:

1. The North Brevard Senior Center is a County owned facility and was constructed for the purpose of being used as a public senior center.
2. The County has determined that the North Brevard Senior Center is not needed by the County.
3. The Lessee shall continue to operate and maintain the Senior Center for the benefit and enjoyment of the senior population of Brevard County.
4. The Lessee shall strive to develop a variety of diverse programs and services that meet the recreational, physical, financial, health, social, nutritional, and educational needs of all socioeconomic levels of the senior population of the County.
5. The County entered into a Lease with the Lessee on August 18, 2015 and a First Amendment on August 20, 2019 and the parties now desire to renew the Lease for a term of five years.
6. The consideration for the Lease shall be One Hundred Dollars per month.

7. This Resolution shall take effect immediately upon its adoption.
8. In the event that the Lessee fails to comply with the Lease and the Lease Renewal, then the Senior Center shall immediately revert to the County which shall thereafter have the right to reenter and repossess the property.

Attest:

**Board of County Commissioners
of Brevard County, Florida**

By: _____
Rachel Sadoff, Clerk of Court

By: _____
Rita Pritchett, Chair

As approved by the Board on 2/9/2021.

Public Notice
Brevard County Board of County Commissioners

As provided in Brevard County Code Section 2-249, notice is hereby given that the Board of County Commissioners will hold a public meeting at 5:00 p.m. on February 9, 2021 at the Brevard County Government Center Board Room, Building C, 2725 Judge Fran Jamieson Way, Viera, Florida. At the meeting the Board will consider Resolution and Renewal of Lease with the North Brevard Senior Center, Inc. for the leasing of the North Brevard Senior Center. Any person objecting to the Renewal of the Lease may submit written objections to the county manager's office or may appear and speak in objection at the meeting. Additional information may be obtained by contacting Mary Ellen Donner, Parks and Recreation Department Director at (321) 633-2046.

If a person desires to appeal any decision made by this Board with respect to any matter considered at this meeting or hearing, such a person will need a record of this proceeding and that, for such purposes, such person may need to ensure that a verbatim record of this proceeding is made, at his/her own expense, which record includes testimony and evidence on which any such appeal is to be based.

In accordance with the Americans with Disabilities Act and Section 286.26, F.S., persons needing accommodations or an interpreter to participate in the meeting should notice County Administration no later than forty-eight hours prior to the public meeting at 321-633-2012.



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

New Business - Development and Environmental Services Group

J.1.

2/9/2021

Subject:

Adoption of the Save Our Indian River Lagoon Project Plan 2021 Update unanimously recommended by the Save Our Indian River Lagoon Citizens Oversight Committee

Fiscal Impact:

The recommended plan update recognizes a \$5 million decrease in total revenues to be generated by the Save Our Indian River Lagoon Surtax over its 10-year life (reduced from \$494 million to \$489 million) and a net increase of \$1.3 million allocated to projects. These changes are covered by the \$6.3 million of trust fund revenue that was left unallocated in the 2020 Plan. The net changes in allocation, broken down by project type, are as follows:

- \$2.6 million more for connecting the worst package treatment plants to central sewer;
- \$0.4 million less for added treatment at package plant infiltration basins and spray-fields;
- \$0.4 million more for additional septic to sewer projects;
- \$0.3 million more for stormwater treatments and vegetative harvesting projects;
- \$0.3 million more for oyster gardening, per April 7, 2020 Board direction;
- \$0.2 million less in the 5% contingency; and
- \$1.7 million less for inflation, based on a 2.5% construction index rate.

Dept/Office:

Natural Resources Management

Requested Action:

- 1) Adopt the Save Our Indian River Lagoon Project Plan 2021 Update, as recommended by the Save Our Indian River Lagoon Citizen Oversight Committee (Committee) on January 15, 2021;
- 2) authorize associated budget change requests;
- 3) approve continued signature authority to the Chair (or designee, in accordance with the threshold limits provided in Brevard County Code (B.C.C.)-25, B.C.C.-27, and Administrative Order (A.O.)-29) to execute Interlocal, Non-Governmental Organization, University and Private Agreements, task orders, change orders, and contract renewals, using contract terms and templates previously approved by the Board, subject to review and approval by the County Attorney, Risk Management and Purchasing, as appropriate, to provide cost share from the Save Our Indian River Lagoon Trust Fund for projects and programs approved in the Save Our Indian River Lagoon Project Plan;
- 4) approve continued authority for the County Manager to execute contract amendments;
- 5) approve continued authority for the Director of Natural Resources Management to execute up to two no-cost time extensions up to six months each;
- 6) permission to advertise formal solicitation of bids and proposals, and to award to the qualified bidder having the lowest, responsible and best response for tangible items, capital improvement projects, and/or

equipment, when funding is available; and

7) authorize the County Manager or his designee to submit grant applications for leveraging cost share for projects approved in the Save Our Indian River Lagoon Project Plan.

Summary Explanation and Background:

Each year, in order to account for new information and opportunities, the Save Our Indian River Lagoon Citizen Oversight Committee is tasked with recommending an Update to the Save Our Indian River Lagoon Project Plan (SOIRLPP). The Committee has held monthly public meetings throughout the year to keep informed, gather ideas from the community, review potential changes, and recommend an annual plan update to the County Commission. The Committee's annually recommended SOIRLPP Updates are posted on the Committee's webpage for public access at least 15 days prior to being brought to the County Commission for consideration. The County Commission may adopt or modify the Committee's recommended Plan Update.

An email was sent to cities on July 31st, 2020 to review the process for submitting project requests to be considered for addition in the 2021 annual update. Project requests were due October 1st. Year 5 Project Submissions listed in the summary table (attached) were reviewed by the Committee during a November 20th public meeting. New projects that were recommended in November, as well as other changes based on new information gathered and analyzed throughout the year, were incorporated into the attached Draft Save Our Indian River Lagoon Project Plan 2021 Update, as recommended by the Committee on January 15th.

The draft 2021 Update (attached) includes 26 new projects and two amended projects, bringing the total number of funded projects during the 10-year plan to 327, plus 876 individual quick connections to sewer, 1625 septic upgrades and 20 miles of filter feeding living shorelines. The plan also includes performance updates and refinements on a number of project types. To help readers find all areas of the SOIRLPP that contain proposed updates or modifications, the attached Draft 2021 Update uses yellow highlighted text, table and figure captions to indicate additions and revisions.

Significant updates in the draft 2021 Update include:

- Changing the plan format to consolidate information by project type and eliminate iterative annual update sections;
- Deleting old information made obsolete by more recent updates;
- Recalculating the benefits of wastewater treatment and package treatment plant improvements based on modified state standards adopted in 2020 through Senate Bill 712;
- Expanding the funds for leaky sewer laterals to fund repairs county-wide within the watershed of the Indian River Lagoon;
- Allowing the funds for sewer connections and septic upgrades to be available county-wide with cost share amounts to be prorated based on the load reduction benefit;
- Updating information on an enhanced circulation pilot study being conducted by Florida Institute of Technology with funding from the Florida Legislature and modeling completed by St Johns River Water Management District on the benefits of replacing causeways with bridge spans;
- Adding information on clam restoration and an aquaculture stimulus pilot program;
- Reporting on the costs, benefits, successes and lessons learned from completed projects and resulting, science-based plan modifications;
- Revising the revenue projection and construction index rate to reflect economic changes related to

covid-19; and

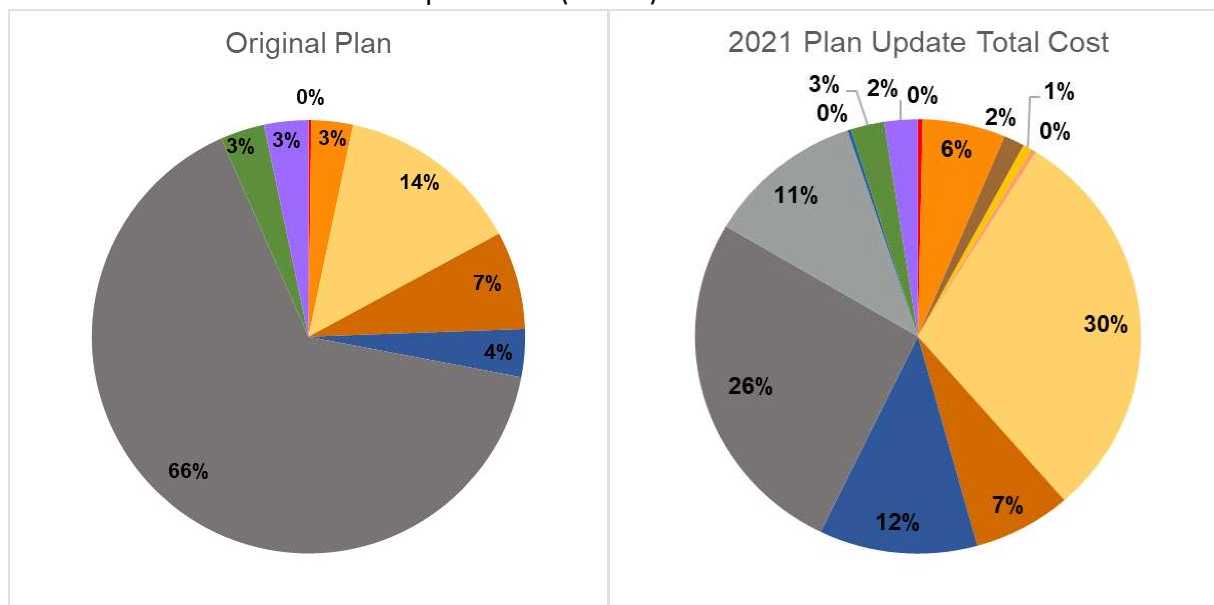
- Making formatting changes to simplify compliance with the Americans with Disabilities Act.

During fiscal year 19/20, tax collections were \$46.8 million instead of the budgeted estimate of \$47.1 million. Large monthly fluctuations in revenue during the fiscal year led to multiple forecasting iterations for future revenues and modification of economic growth projections and construction price index assumptions. Using actual revenues collected in 2016 through September 2020, the state’s latest consumer price index of 1.8% for projecting the last quarter of 2020, and assuming 2% revenue growth in 2021 through 2026, the estimate of 10-year collections was decreased from \$494 million to \$489 million. Revenue forecasting adjustments will continue to be considered as part of the annual Plan Update process.

Available funding is divided between projects that **reduce** the incoming load of new pollution, **remove** accumulations of old pollution, **restore** natural stabilization and filtration systems, or facilitate processes to **respond** to new information. The original distribution of funds between project types was guided by best available data in 2016 regarding major contributing sources of pollution to the Indian River Lagoon.

In the 2021 Update, \$185 million (46%, up from 24% in the original plan) is directed to projects that improve the treatment of human waste through upgraded treatment of reclaimed water, connection of package treatment plants to central sewer, nutrient removal from treatment plant spray-fields and rapid infiltration basins, smoke testing to identify leaky sewer infrastructure coupled with funding to incentivize repairs, conversion of septic neighborhoods to sewer service, connection of septic homes to adjacent sewer lines, and upgrade of high-risk conventional septic to advanced septic systems. The 2021 Update allocates 26% for muck removal (down from 66% in the original plan) plus 11% for stripping nutrients from the dredge outflow water.

The recommended changes in the 2021 update are consistent with the prior year shifts in emphasis that reduced muck dredging and increased human wastewater related projects and stormwater treatment, as illustrated in the cost allocation pie charts (below).



- Public Education
- Rapid Infiltration Basin/Sprayfield Upgrades
- Sewer Laterals
- Septic System Upgrades
- Muck Removal
- Vegetation Harvesting
- Project Monitoring
- WWTF Upgrades for Reclaimed Water
- Package Plant Connection
- Septic System Removal
- Stormwater Projects
- Treatment of Interstitial Water
- Oyster Reef Living Shorelines

Clerk to the Board Instructions:

N/A

Project Number	Project Name	Entity	Project Type	TN Reduction (pounds/year)	Total Cost TN (\$/pound)	Total Cost	Eligible Tax Funding Cost Share	Eligible Tax Funding (\$/pound TN)	Dollar Amount Secured Grants
171	Mechanical Aquatic Vegetation Harvesting	Melbourne-Tillman Water Control District	Vegetation Harvesting	16,636	\$ 61	\$ 1,011,976	\$ 1,011,976	\$ 61	
172	Horseshoe Pond Vegetative Harvesting	Brevard County Stormwater	Vegetation Harvesting	74	\$ 730	\$ 54,000	\$ 8,140	\$ 110	
173	North and South Lakemont Ponds Vegetation Harvesting	City of Cocoa	Vegetation Harvesting	18	\$ 596	\$ 10,720	\$ 1,980	\$ 110	
174	St Johns 2 Baffle Box	City of Titusville	Stormwater Projects	1,992	\$ 233	\$ 465,000	\$ 243,070	\$ 122	
123	Ray Bullard WRF Stormwater Management Area Amendment	City of West Melbourne	Stormwater Projects	1,317	\$ 1,294	\$ 1,704,160	\$ 160,674	\$ 122	
175	High School Baffle Box	City of Melbourne	Stormwater Projects	1,183	\$ 668	\$ 790,000	\$ 144,326	\$ 122	
176	Funeral Home Baffle Box	City of Melbourne	Stormwater Projects	481	\$ 967	\$ 465,000	\$ 58,682	\$ 122	
177	North and South Lakemont Ponds Floating Wetlands	City of Cocoa	Stormwater Projects	107	\$ 467	\$ 50,000	\$ 13,054	\$ 122	
178	Marina B MAPS	City of Titusville	Stormwater Projects	55	\$ 266	\$ 14,531	\$ 6,670	\$ 122	
179	Lori Laine Basin Pipe Improvement Project	City of Satellite Beach	Stormwater Projects	117	\$ 25,453	\$ 2,973,641	\$ 17,525	\$ 150	
180	Scottsmoor Impoundment	Marine Resources Council	Planted Shoreline	44	\$ 240	\$ 10,560	\$ 10,560	\$ 240	
181	Riveredge	Marine Resources Council	Planted Shoreline	17	\$ 240	\$ 4,080	\$ 4,080	\$ 240	
182	Newfound Harbor Drive	Marine Resources Council	Planted Shoreline	7	\$ 240	\$ 1,680	\$ 1,680	\$ 240	

Project Number	Project Name	Entity	Project Type	TN Reduction (pounds/year)	Total Cost TN (\$/pound)	Total Cost	Eligible Tax Funding Cost Share	Eligible Tax Funding (\$/pound TN)	Dollar Amount Secured Grants
183	Brevard Zoo North Indian River Lagoon Plant Project 3	Brevard Zoo	Planted Shoreline	4	\$ 240	\$ 960	\$ 960	\$ 240	
184	Brevard Zoo North Indian River Lagoon Oyster Project 3	Brevard Zoo	Oyster	1,056	\$ 397	\$ 419,232	\$ 419,232	\$ 397	
185	Brevard Zoo Central Indian River Lagoon Tributary Pilot Oyster Project	Brevard Zoo	Oyster	581	\$ 397	\$ 230,657	\$ 230,657	\$ 397	
186	Brevard Zoo North Indian River Lagoon Individual Oyster Project	Brevard Zoo	Oyster	436	\$ 397	\$ 173,092	\$ 173,092	\$ 397	
187	Brevard Zoo Central Indian River Lagoon Oyster Project 3	Brevard Zoo	Oyster	218	\$ 397	\$ 86,546	\$ 86,546	\$ 397	
188	Brevard Zoo Banana River Oyster Project 3	Brevard Zoo	Oyster	143	\$ 397	\$ 56,771	\$ 56,771	\$ 397	
189	Avenida del Rio Septic to Sewer	City of Melbourne	Septic Removal/ Extend	71	\$ 986	\$ 70,000	\$ 70,000	\$ 986	\$ 30,000
190	Bowers Septic to Sewer	City of Melbourne	Septic Removal/ Extend	120	\$ 1,225	\$ 147,000	\$ 147,000	\$ 1,225	\$ 72,000
191	Kent and Villa Espana Septic to Sewer Conversion	City of Melbourne	Septic Removal/ Extend	542	\$ 1,310	\$ 710,000	\$ 710,000	\$ 1,310	\$ 294,000
3	Micco Sewer Line Extension (Phase I & II) Amendment	Brevard County	Septic Removal/ Extend	1,493	\$ 1,811	\$ 2,704,444	\$ 2,239,500	\$ 1,500	\$ 214,920
192	Oak Point Wastewater Treatment Facility Improvements	Oak Point Mobile Home Park	Septic Removal/ Extend	186	\$ 3,251	\$ 604,750	\$ 279,000	\$ 1,500	\$ 350,000
193	Oyster Gardening	Brevard Zoo	Oyster			\$ 300,000	\$ 300,000		\$ -
194	Clam Aquaculture Pilot	Clam Farmers	Clam	1,000	\$ 60	\$ 60,000	\$ 60,000	\$ 60	\$ -

Project Number	Project Name	Entity	Project Type	TN Reduction (pounds/year)	Total Cost TN (\$/pound)	Total Cost	Eligible Tax Funding Cost Share	Eligible Tax Funding (\$/pound TN)	Dollar Amount Secured Grants
197	South Shores Utility	South Shores Utility	Package Plant Connection to Sewer	929	\$ 1,401	\$ 1,301,154	\$ 1,301,154	\$ 1,401	\$ -
199	River Grove I & II Mobile Home Park	River Grove I & II Mobile Home Park	Package Plant Connection to Sewer	697	\$ 1,441	\$ 1,004,640	\$ 1,004,640	\$ 1,441	\$ -

Draft Save Our Indian River Lagoon Project Plan **2021** Update for Brevard County, Florida



Prepared by:
Tetra Tech, Inc.



and
Closewaters, LLC
CloseWaters LLC

Prepared for:
Brevard County, Natural Resources Management Department



January 2021

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Photographs on cover:

Top from <http://spacecoastdaily.com/2013/09/hands-across-lagoon-set-for-sept-28/>

Bottom left from the Central Boulevard baffle box upgrade in the City of Cape Canaveral

Bottom middle from the muck dredging project in the City of Cocoa Beach

Bottom right from the Bomalaski oyster bar project in Merritt Island

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Executive Summary

The Indian River Lagoon (IRL) system includes Mosquito Lagoon, Banana River Lagoon, and Indian River. This is a unique and diverse system that connects Volusia, Brevard, Indian River, St. Lucie, Martin, and Palm Beach counties. The IRL is part of the National Estuary Program, one of 28 estuaries of National Significance, and has one of the greatest diversity of plants and animals in the nation. A large portion of the IRL system, 71% of its area and nearly half its length, is within Brevard County and provides County residents and visitors many opportunities and economic benefits.

However, the balance of this delicate ecosystem has been disturbed as development in the area has led to harmful impacts. Stormwater runoff from urban and agricultural areas, wastewater treatment facility (WWTF) discharges, septic systems, and excess fertilizer applications have led to harmful levels of nutrients and sediments entering the lagoon. These pollutants create cloudy conditions in the lagoon and feed algal blooms, both of which negatively affect the seagrass community that provides habitat for much of the lagoon's marine life. In addition, these pollutants lead to muck accumulation, which releases (fluxes) nutrients and hydrogen sulfide, depletes oxygen, and creates a lagoon bottom that is not hospitable to seagrass, shellfish, or other marine life.

Efforts have been ongoing for decades to address these sources of pollution. Despite significant load reductions, in the last five years, signs of human impact to the IRL system have been magnified. In 2011, the "superbloom" occurred, an intense algal bloom in the Mosquito Lagoon, Banana River Lagoon, and North IRL, as well as a secondary, less intense bloom in the Central IRL. There have also been recurring brown tides; unusual mortalities of dolphins, manatees, and shorebirds; and large fish kills due to low dissolved oxygen from decomposing algae.

Local governments and the St. Johns River Water Management District have been proactive in implementing projects over the last several decades. However, to restore the lagoon to health and prosperity, additional funds are needed to eliminate current excess loading and remove the legacy of previous excess loading. Therefore, the County placed a Save Our Indian River Lagoon 0.5 cent sales tax referendum on the ballot in November 2016, which passed and will provide a funding stream for the types of projects listed in this plan for Brevard County and its municipalities.

The Save Our Indian River Lagoon Project Plan outlines local projects planned to meet water quality targets and improve the health, productivity, aesthetic appeal, and economic value of the lagoon. Implementation of these projects is contingent upon funding raised through the 0.5 cent sales tax. This sales tax funding would also allow the County to leverage additional dollars in match funding from state and federal grant programs because the IRL ecosystem is valued not only in Florida but also nationally. Funding implementation of this plan would help to restore this national treasure. Lagoon ecosystem response may lag several years behind completion of nutrient reductions; however, major steps must begin now to advance progress on the long road to recovery.

In the development of this plan, Subject Matter Experts were consulted to provide feedback on the plan elements. The experts all agreed that there is a "critical mass" of nutrient reductions that must be achieved to see a beneficial result in the IRL. This critical level of nutrient reduction will be achieved through the implementation of the projects in this plan. During plan development, it was estimated that the benefit of restoring the lagoon has a present value of \$6 billion and a cost of \$300 million. Therefore, implementing this plan to restore the IRL is an

excellent investment in the future of Brevard County's community and economy with a benefit to cost ratio of 20:1.

In order to restore the lagoon's balance, Brevard County seeks to accelerate implementation of a multi-pronged approach to **Reduce** pollutant and nutrient inputs to the lagoon from fertilizer, reclaimed water from WWTFs, septic systems, and stormwater; **Remove** the accumulation of muck from the lagoon bottom; **Restore** water-filtering oysters and related lagoon ecosystem services; and monitor progress to **Respond** to changing conditions, technologies, and new information by amending the plan to include actions that will be most successful and cost-effective for significantly improving the health, productivity, and natural resilience of the IRL.

The portfolio of projects in this plan were selected as the most cost-effective suite of options to achieve water quality and biological targets for the lagoon system. Investment has been distributed among a set of project types with complimentary benefits to reduce future risk of failure. Nearly half (originally one-third) of the effort and expense is split among multiple projects to reduce incoming load to healthy levels, restore natural filtration, measure success, and respond with annual plan updates. Slightly more than half (originally two-thirds) of the effort and expense is directed toward muck removal to address decades of past excess nutrient loading. Nitrogen and phosphorus released each year as muck decays are now larger than any current source of nutrient pollution to lagoon waters.

The plan projects have been prioritized and ordered to deliver improvements to the lagoon in the most beneficial spatial and temporal sequence so that the implementation of this plan is expected to result in a healthy IRL system. If a future project is ready to move forward earlier than scheduled in the plan, if such advancement is consistent with temporal sequencing goals in the plan and is recommended by the Citizen Oversight Committee, and if there are sufficient Trust Fund dollars available, the County Manager (for budget changes less than \$100,000) or Brevard County Commission have the authority to adjust the project schedule at any time to ensure that approved projects funded in the plan move forward as soon as feasible.

This 2021 Update to the Save Our Indian River Lagoon Project Plan contains the fifth set of project updates, new approved projects, and schedule accelerations to the plan. Local stakeholders submitted projects annually to Brevard County for inclusion in the plan. The appointed Citizen Oversight Committee reviewed the submitted projects and made a recommendation to the Board of County Commissioners on which projects should be added to the Save Our Indian River Lagoon Project Plan. This update includes those projects that were reviewed by the Citizen Oversight Committee and approved for inclusion by the Board of County Commissioners.

The timing of the projects is shown in **Figure ES-1**. A summary of the types of projects included in the plan, as well as the associated costs and total nitrogen (TN) and total phosphorus (TP) reduction benefits are shown in **Table ES-1**. Despite the considerable cost of restoration, analysis demonstrates that the economic cost of inaction is double the cost of action. Furthermore, although there are many tangible and intangible benefits for saving the lagoon, the readily estimated return on investment for three benefits – tourism, waterfront property values, and commercial fisheries – is approximately 10% to 26%.

Flow Path to Success

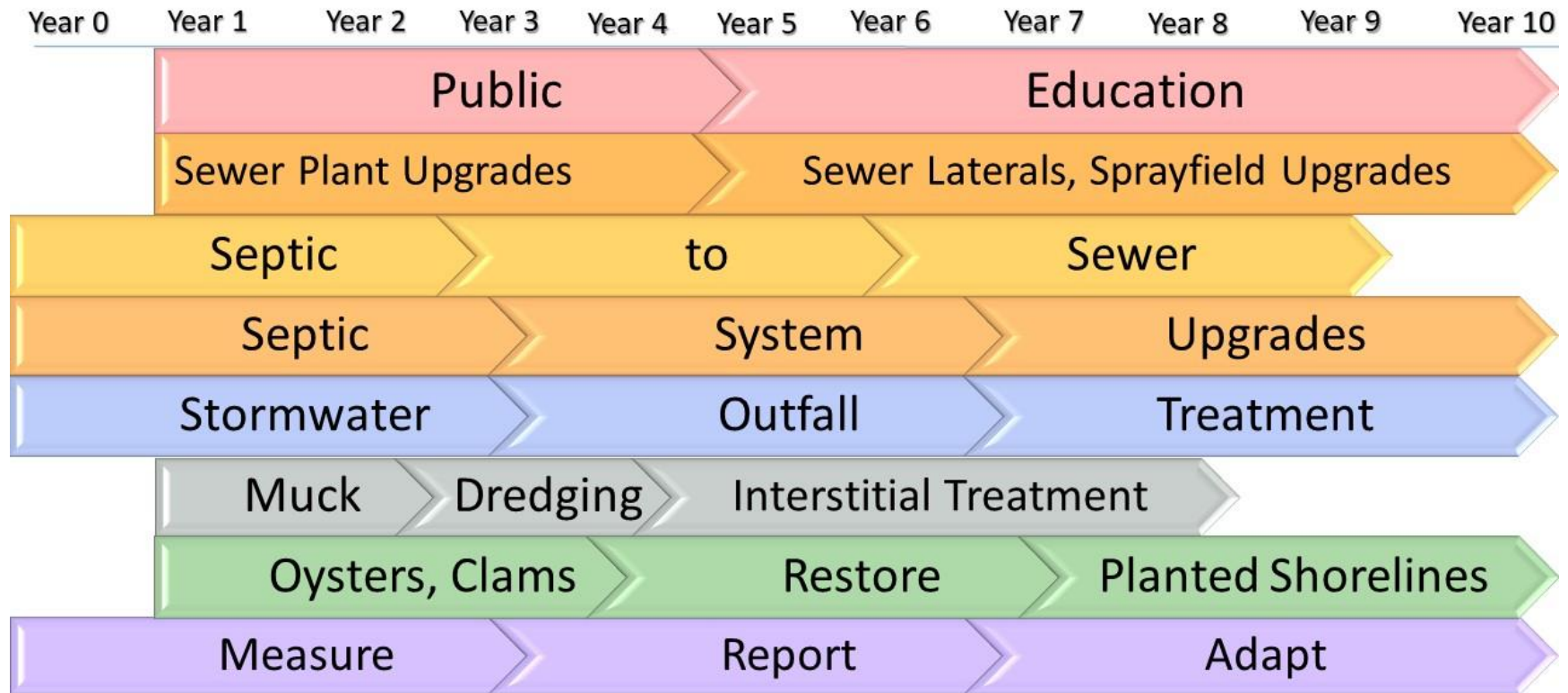


Figure ES-1: Save Our Indian River Lagoon Project Implementation Schedule

Table ES-1: Summary of Project Types, Costs, and Nutrient Reductions in the 2020 Update of the Save Our Indian River Lagoon Project Plan

Project Category	Project Type	Estimated Total Project Cost	Nitrogen Reductions (lbs/yr)	Average Cost per Pound per Year of TN	Phosphorus Reductions (lbs/yr)	Average Cost per Pound per Year of TP
Reduce	Public Education	\$1,425,000	28,879	\$49	2,013	\$708
Reduce	WWTF Upgrades for Reclaimed Water	\$24,711,400	64,458	\$383	13,760	\$1,796
Reduce	Rapid Infiltration Basin/Sprayfield Upgrades	\$6,265,507	8,965	\$699	2,141	\$2,926
Reduce	Package Plant Connection	\$2,584,794	1,812	\$1,426	To be determined	To be determined
Reduce	Sewer Lateral Rehabilitation	\$1,580,000	6,196	\$255	188	\$8,404
Reduce	Septic System Removal by Sewer Extension	\$110,990,852	94,547	\$1,174	To be determined	To be determined
Reduce	Septic System Removal by Sewer Connection	\$11,280,000	21,446	\$526	To be determined	To be determined
Reduce	Septic System Upgrades	\$29,248,485	37,981	\$770	To be determined	To be determined
Reduce	Stormwater Projects	\$47,261,101	275,359	\$172	38,211	\$1,237
Remove	Muck Removal	\$108,152,240	207,990	\$520	17,815	\$6,071
Remove	Treatment of Muck Interstitial Water	\$46,945,641	481,059	\$98	28,361	\$1,655
Remove	Vegetation Harvesting	\$1,086,096	17,442	\$62	1,703	\$638
Restore	Oyster Bars	\$9,832,825	24,766	\$397	781	\$12,590
Restore	Planted Shorelines	\$107,280	447	\$240	152	\$706
Restore	Clam Restoration	\$60,000	1,000	\$60	To be determined	To be determined
Respond	Projects Monitoring	\$10,000,000	-	-	-	-
Respond	Contingency	\$20,258,580	-	-	-	-
Respond	Inflation	\$57,065,372	-	-	-	-
Total	Total	\$488,855,173	1,272,347	\$384 (average)	105,125	\$4,650 (average)

Section 1. Background

The Indian River Lagoon (IRL) system includes Mosquito Lagoon, Banana River Lagoon, and Indian River. A large portion of the IRL system, 71% of its area and nearly half its length, is within Brevard County (County) and provides County residents and visitors many opportunities.

However, the balance of this delicate ecosystem has been disturbed as development in the area has led to harmful impacts. Stormwater runoff from urban and agricultural areas, wastewater treatment facility (WWTF) discharges, septic systems, and excess fertilizer applications have led to harmful levels of nutrients and sediments entering the lagoon. In addition, these pollutants lead to muck accumulation on the lagoon bottom, which fluxes nutrients and creates a lagoon bottom that is not conducive to seagrass, shellfish, or benthic invertebrate growth.

Efforts have been ongoing to address these sources of pollution. The Indian River Lagoon System and Basin Act of 1990 (Chapter 90-262, Laws of Florida) was enacted to protect the IRL system from WWTF discharges and the improper use of septic tanks. The act includes three objectives: elimination of surface water discharges, investigation of feasibility of reuse, and centralization of wastewater collection and treatment facilities (Florida Department of Environmental Protection 2016). This act led to the removal of effluent discharges to the lagoon from more than 40 WWTFs (St. Johns River Water Management District, 2016a).

Stormwater regulations were adopted in unincorporated Brevard County in 1978 and adopted statewide in 1989. Due to stormwater regulations, stormwater treatment systems were constructed along with all new development exceeding size thresholds. Privately owned and operated stormwater treatment systems have prevented more than a million pounds of sediments from entering the lagoon since 1989 (St. Johns River Water Management District, 2016a). Stormwater treatment projects also reduce nutrient inputs to the lagoon. In addition, dredging projects have been ongoing since 1998 to remove muck from the lagoon and major tributaries, including Crane Creek, Turkey Creek, and St. Sebastian River (St. Johns River Water Management District, 2016a). These stormwater treatment and muck removal projects contributed to significant improvements in water quality and water clarity in the lagoon, which allowed for a great expansion of seagrass from 2000–2010.

However, recently, human impacts on the IRL system have been magnified. In 2011, the “superbloom” occurred, an intense algal bloom in the Mosquito Lagoon, Banana River Lagoon, and North IRL, as well as a secondary, less intense bloom in Central IRL. The extent and longevity of the bloom had a detrimental impact on seagrass. There have also been recurring brown tides; unusual mortalities of dolphins, manatees, and shorebirds; and large fish kills due to low dissolved oxygen from decomposing algae.

In 2009, to improve lagoon water quality and restore seagrass, the Florida Department of Environmental Protection adopted total maximum daily loads for total nitrogen (TN) and total phosphorus (TP) allowed to discharge to the Banana River Lagoon, North IRL, and Central IRL. The purpose of these total maximum daily loads is to reduce nutrients that lead to algae growth, which block sunlight from seagrass and create low dissolved oxygen conditions that affect fish in the lagoon. To implement these total maximum daily loads, the Florida Department of Environmental Protection adopted three basin management action plans that outline responsibilities for reductions by the local stakeholders, list projects, and stipulate a timeline for implementation. The intent of the nutrient reductions is to provide water quality conditions that should result in seagrass growth in the lagoon at historical levels. Brevard County has a major

responsibility in all three basin management action plans along with its 16 municipalities, Florida Department of Transportation District 5, Patrick Air Force Base, National Aeronautics and Space Administration – Kennedy Space Center, and agriculture. The Florida Department of Environmental Protection updated all three basin management action plans in 2020.

From 2012 to 2015, Brevard County led an effort with its municipalities, Florida Department of Transportation District 5, and Patrick Air Force Base to update the estimates of nutrient loadings to the lagoon. The County and its partners teamed with several consultants to develop the Spatial Watershed Iterative Loading model that revised the estimates of loading by source to the lagoon (refer to **Section 2** for more details). The revised loading estimates were compared to seagrass area to recommend refinement of state and federal approved total maximum daily loads. The loading estimates and total maximum daily load targets referenced in this plan are from these local efforts, as they are based on the most up-to-date data and analyses even though the state and federal total maximum daily loads have not been officially updated.

Damage to the lagoon has been occurring for decades and will require time and money to reverse. An important example is the accumulation of muck on the bottom of 10% of the IRL. This muck kills marine life and releases stored pollutants into the IRL. To address the damage to the IRL system, in 1990, Brevard County implemented a stormwater utility assessment, which established an annual assessment rate of \$36 per year per equivalent residential unit that stayed at this level until 2014. The rate increased to \$52 per equivalent residential unit for 2014 and 2015 and increased to \$64 per equivalent residential unit in 2016. This raised collections from \$3.4 million (in 2014) to \$6.0 million (in 2016). Of the funding raised, a portion is available for capital improvement programs or other stormwater best management practices and is split between water quality improvement programs and flood control and mitigation programs. In addition, funding is spent on annual program operating expenses. Operation and maintenance includes National Pollutant Discharge Elimination System permit compliance activities (street sweeping, trap and box cleaning, and aquatic weed harvesting), outfall/ditch treatments, small scale oyster restoration, as well as harvesting and replanting of floating vegetative islands.

While revenues from this stormwater assessment have funded many projects, a significant portion of projects have been partially funded by grants. When applicable, federal water quality grants provide up to 60% matching funds, state total maximum daily load grants provide up to 50% match, and St. Johns River Water Management District cost-share grants fund up to 33% of construction. All these grant programs are highly competitive and subject to variable state and federal appropriations, as well as changing priorities.

Due to funding limitations and the continuing degradation of key indicators of health in the IRL, such as seagrass and fish, Brevard County identified a need for additional funding to implement projects identified as critical to lagoon restoration. Therefore, the County placed a Save Our Indian River Lagoon 0.5 cent sales tax referendum on the ballot in November 2016. This referendum passed by more than 60% of the votes and provides a funding mechanism for the projects listed in this plan and annual updates for the County and its municipalities. Revenue collection from the sales tax began in January 2017.

This Save Our Indian River Lagoon Project Plan outlines projects planned to meet updated total maximum daily load targets and improve the health, productivity, aesthetic appeal, and economic value of the lagoon. Almost all these projects require sales tax funding to be implemented. Furthermore, the local sales tax funding could be used to leverage significantly more in match funding from state and federal grant programs. The IRL ecosystem is an asset valued not only in Florida but also nationally; therefore, implementation of this plan would help

to restore this national treasure. If additional funding is provided through matching funds from other sources, additional projects may be implemented, which would increase the overall plan cost, and/or project timelines may be moved up to allow the benefits of those projects to occur earlier than planned. Response of the lagoon ecosystem may lag for several years behind completion of nutrient reduction implementation; however, action must be accelerated now to ensure restoration succeeds over time.

1.1. Return on Investment and Economic Value

The economic value of the lagoon system was evaluated during development of this plan. It was estimated that at least a total present value of \$6 billion is tied to restoration of the Indian River Lagoon (IRL). There is approximately \$2 billion in benefits from restoration and an estimated \$4 billion in damages if the IRL is not brought back to health during the next decade. If viewing this project plan purely as a financial investment that pays the \$2 billion in benefits alone (i.e. not counting the avoidance of the \$4 billion loss), the projected pretax internal rate of return is 10%, if the plan takes 10 years to implement.

Table 1-1 documents projections of three economic engines likely to have significant economic impacts on Brevard County residents with positive impacts if the IRL is restored versus negative impacts if the IRL is not restored. Additional detail on each of these impacts is provided in **Section 1.1.1**. The upper part of the table lists the economic benefits for restoring a healthy IRL while the lower part of the table lists the economic costs of declining IRL health in the absence of restoration through plan implementation.

Economic impacts in the table are expressed both as annual cash flows and as the discounted expected present value of those cash flows over a 30-year financial plan period. Expected present value is an economic indicator used in business to express the present monetary value of a future stream of cash flows. This expected monetary value discounts the future stream by an interest rate and discounts it further by a probability factor to account for the uncertainty of future events. Therefore, the expected present value of IRL economic benefits shown in **Table 1-1** is much less than the sum of those future cash flows.

Table 1-1: Economic Impact Scenarios Based Upon the Condition of the IRL

Economic Benefits for Restoring a Healthy IRL and Costs of Declining IRL Health	Annual Cash Flow	Expected Present Value
Tourism and Recreation Growth Benefits	\$95 million	\$997 million
Property Value Growth Benefits	\$81 million	\$852 million
Rebirth of Commercial Fishing Benefits (excludes indirect benefits)	\$15 million	\$159 million
Healthy Residents and Tourists Benefits	Not quantified	Not quantified
Total Benefits	\$191 million	\$2.01 billion
Tourism and Recreation at Risk Damages	-\$237 million	-\$3 billion
Property Value at Risk Damages	-\$92 million	-\$1.2 billion
Decline of Commercial Fishing (excludes indirect impacts)	-\$6 million	-\$87 million
Potential Pathogen Impacts to Residents and Tourists	Not quantified	Not quantified
Total Damages	-\$335	-\$4.29 billion

Today there is a \$6 billion decision point for the IRL. Despite unprecedented algae blooms and fish kills, conditions could become worse. If large-scale fish kills continue with increasing frequency, algae blooms continue or become toxic, or there is a pathogen outbreak, then real estate, tourism, and the quality of life and health for Brevard County residents would likely suffer.

1.1.1 Areas of Economic Value at Risk

Tourism and Recreation

Today's tourism revenue in Brevard County comes primarily from the beaches. To diversify the tourism base and increase revenue, Brevard County has developed a plan to increase ecotourism, a globally growing and high value sector of tourism that depends on restoration and maintenance of a healthy Indian River Lagoon (IRL). High value ecotourism relies on exceptional natural experiences including fishing, bird watching, kayaking, paddle boarding, camping, hiking, and nature tours. In the short-term, there are opportunities for tourists to participate in restoration experiences, such as collecting mangrove seeds by kayak or canoe, planting mangrove seedlings, or establishing colonies of clams, oysters, or mussels. A successful example of Brevard County ecotourism is the world famous annual Space Coast Birding and Wildlife Festival that brings \$1.2 million annually to the County and attracts approximately 5,000 visitors.

Property Value

While the economic benefits of IRL restoration are likely to increase property value throughout the County, to be conservative this plan assessed the exposure only to properties with frontage on Mosquito Lagoon, IRL, Banana River Lagoon, Sykes Creek, and connected waterways. Approximately 11.2% of the County's \$27 billion in taxable property value is directly on the IRL. Therefore, more than \$3 billion in taxable property value is directly at risk with ongoing IRL issues, such as algal blooms and fish kills. Furthermore, a weighted-average millage rate of 18.58 results in an estimated annual tax revenue of \$56 million that is also at risk in the absence of IRL restoration. The \$852 million of incremental expected present value assumes a 20% improvement in IRL frontage property value, which would be 90% likely after 10 years with the IRL restored.

Consultants for the County surveyed the Space Coast Association of REALTORS® to assess the likely impacts of IRL health on the waterfront property value. Approximately 170 REALTORS® most familiar with the waterfront market replied to the survey. These professionals assessed that waterfront IRL property values would increase 22% on average over five years if the IRL were healthy and would decrease by 25% over five years if the lagoon were not restored.

Commercial Fishing

IRL restoration is critical to the recovery of a once thriving, valuable, and world-class fishery, both commercial and recreational. In 1995, the commercial fish harvest in Brevard County was \$22 million annually. While a 1995 ban on commercial net fishing marked economic decline, the degradation of the lagoon system contributed considerably to a severe reduction in value of only \$6.7 million annually in 2015, based on Florida Fish and Wildlife Conservation Commission data (see **Figure 1-1**). These numbers do not include the many indirect benefits of a robust commercial fishing industry including fresh local fish for restaurants, employment, commerce of supplies and services for the industry, and benefits of local fresh fish for residents and visitors.

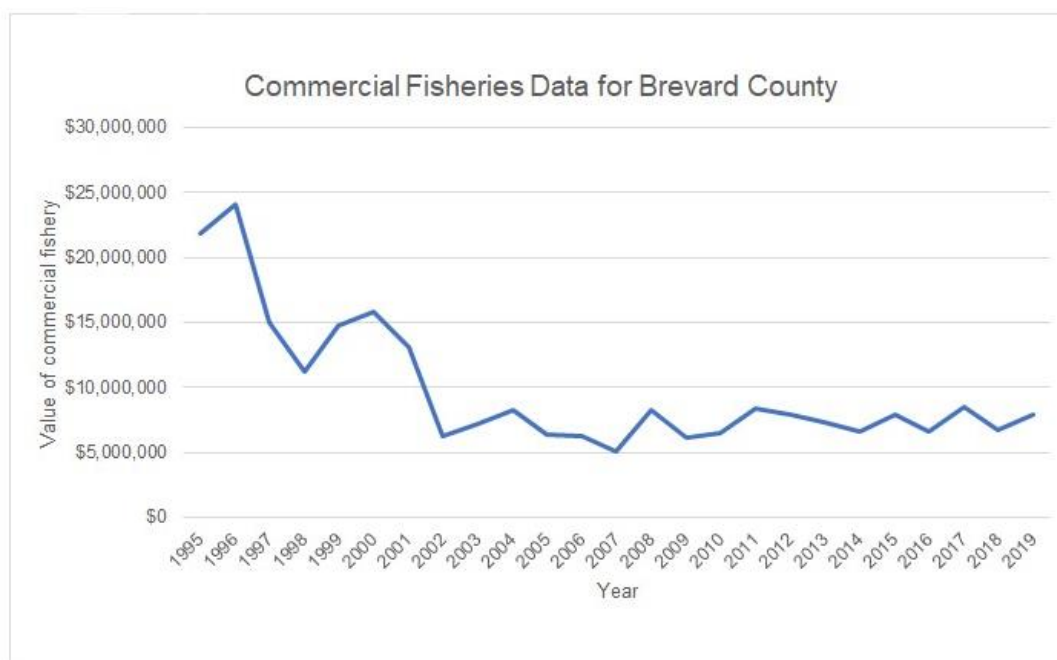


Figure 1-1: Decline of Commercial Fishing in Brevard County

Figure 1-1 [Long Description](#)

In addition, a healthy fish population is critical to the brand of any coastal community. Historically Brevard County was once home to a world-class abundance and diversity of rare and widespread species of fish, crabs, shrimp, and clams that made the IRL a global brand. That brand can be restored along with the fish and shellfish of the IRL.

Healthy Residents and Tourists

Septic systems within Brevard County can pollute groundwater that migrates to the lagoon. This groundwater moves slowly toward the lagoon through soils that attenuate some but not all these pollutants. It would cost at least \$1.19 billion to convert all 59,500 septic tanks to central sewage treatment. While total conversion is cost prohibitive, this plan targets the septic systems with the highest potential impacts to the lagoon. Targeted action includes connection to the central sewer system or upgrade to advanced treatment systems that remove significantly more nutrients and pathogens than traditional septic systems.

Although there are studies that have identified pathogens migrating from septic systems into waterways, it is not possible to estimate the economic impact of potential disease from these waterborne pathogens. The conversion of septic systems is expensive relative to other types of nutrient reduction projects; however, the additional health benefits associated with septic system upgrades make this option a priority beyond only the abatement of nutrients.

1.2. Maximizing Benefits and Managing Risk

There is much at stake with regard to both economic outcomes and the incremental funding critical to restoration; therefore, the County chose to address the unavoidable risks inherent in a multi-year, large-scale restoration plan in a transparent and objective manner. To help ensure objectivity, the County retained outside consultants to assess risk and to estimate potential positive or negative outcomes.

The approach for this plan to evaluate the different project options included using expected monetary value models; a decision science tool used in business to improve decision-making and planning in a context of unavoidable uncertainty. Expected monetary value is a financial model of probability-weighted outcomes expressed in quantified financial terms that are comparable across multi-year planning periods. To compare outcomes, expected present value was used as a key metric. Expected present value has the benefit of valuing future financial costs and benefits in common present day terms to take into account the value of time and to facilitate comparisons of initiatives spanning long periods of time.

As part of this methodology, consultants engaged Subject Matter Experts to assess the uncertainties of project scenarios. Subject Matter Experts include scientists, property value experts, tourism experts, lagoon advocates, and agency staff. Subject Matter Experts brought expertise in Indian River Lagoon (IRL) science, nutrient reduction technologies, waterborne pathogens, and relevant law or county financial and accounting parameters needed for the expected monetary value models. Information gathered during these assessments was used to document the key interdependence of initiatives, minimize risk, and maximize the likely return on investment.

1.2.1 Project Selection to Maximize Return on Investment

Assessment of risk by Subject Matter Experts determined that the amount and speed of nutrient reductions are the two most critical factors affecting the success of restoring Indian River Lagoon (IRL) health. Therefore, those projects with the greatest nutrient reduction benefit for the least cost are recommended for funding and, of those, the projects with the greatest benefits are planned for implementation first. Three other key criteria drove this plan:

1. Achieving sufficient nutrient abatement through a blend of options was a key success factor for restoration.
2. No one type of project alone could achieve an adequate nutrient abatement.
3. The target for nutrient reduction must be sufficient to minimize the need for recurring expensive muck removal, which is important for future cost avoidance.

The plan sequences a diversity of project types, implementing the highest nutrient reduction impact early and implementing other projects concurrently to achieve a multi-pronged blend of total nutrient abatement as quickly as possible with minimal risk. Another important consideration for project sequencing was how quickly projects could produce significant nutrient pollution reduction. For decades, man-made nutrient pollution from fertilizers, septic systems, and stormwater runoff have been introduced at varying distances from the IRL. The soils are still saturated with those nutrients. Therefore, if all sources of nutrient pollution ended today, groundwater would continue to transport nutrients accumulated in the soil into the IRL with every rain event for decades in the future. However, soils next to the IRL will purge themselves quickly, in days or weeks. Septic system conversions near the lagoon or near drainage conduits into the lagoon are likely to produce water quality and reduced pathogen benefits in the lagoon in weeks or months whereas septic conversions more distant from waterways are not anticipated to generate lagoon benefits for several decades. Therefore, whenever possible, project selection and sequencing scheduled nutrient abatements closest to the IRL first.

Undoing the damage to a unique and complex biological system as large as the IRL carries inherent risk. The County made the decision to be open and transparent about that risk. Assessing that risk diligently has allowed the County to mitigate and manage risk proactively in the development of this plan.

Two subjective risk assessments were conducted by an independent consultant working with top science Subject Matter Experts most knowledgeable about the IRL. The first assessment was conducted with individual Subject Matter Experts and occurred before plan projects were defined. These experts assessed that the likelihood of a healthy fish population in the IRL would begin to rise faster after reaching a critical point of nutrient reduction. Therefore, there is a "critical mass" of nutrient reduction needed to achieve significant and sustainable IRL health benefits. The Subject Matter Experts also assessed that the likelihood of recovery would continue to improve as more nutrients are removed from the IRL and then begin to decline if too many nutrients were removed. The result of that first risk assessment reinforced the objective of reducing nutrients in the IRL as quickly as possible through the definition and sequencing of the projects in this plan.

A second uncertainty assessment was conducted in a meeting at the Florida Institute of Technology with a group of water quality, toxicity, muck, fish, algae, invertebrates, and seagrass Subject Matter Experts. First, the experts were briefed about the projects proposed in this plan. The experts were then asked their subjective assessment of the likelihood of a healthy lagoon after this plan was implemented in each sub-lagoon. Sub-lagoons were assessed because the experts had commented previously that each sub-lagoon functioned differently. This group assessment indicated higher likelihoods of success than the first assessment. However, the scientists continued to voice concern about the restoration of the IRL in the absence of regulatory reform needed to prevent new development from adding more septic system and stormwater pollution to the lagoon. Therefore, updated regulations are needed as a complement to this plan to ensure timely and sustained success in restoring health to the IRL.

Figure 1-2 represents the input from the Subject Matter Experts.

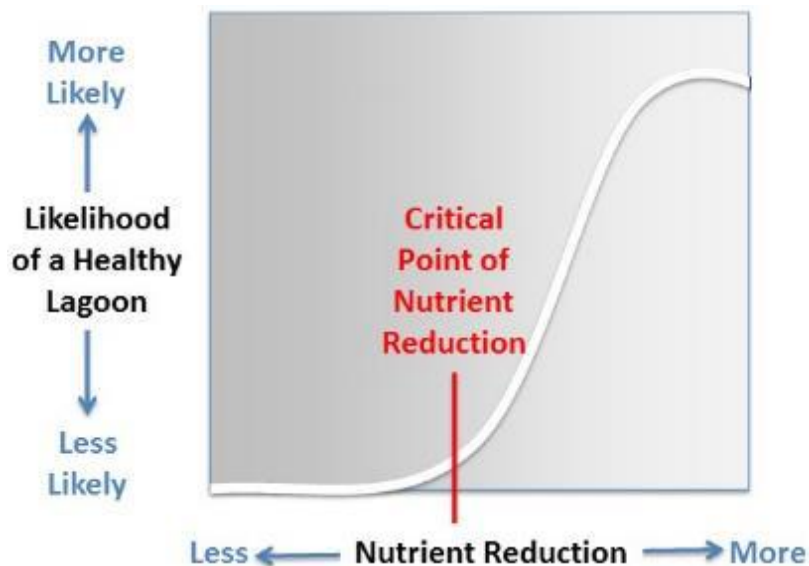


Figure 1-2: Likelihood of a Healthy IRL as Nutrients are Removed

There are other large-scale aquatic system restoration efforts that have been successful in achieving restoration. Some of these systems were damaged even more so than the IRL, but they have recovered through the implementation of extensive, multi-year, and multi-pronged restoration plans. These include the Chesapeake Bay, Cuyahoga River, Lake Erie, and Tampa Bay. These areas have reaped enormous economic and quality of life benefits as a result of dedicated investments in their restoration.

Section 2. Approach, Outputs, and Outcomes

The amount and distribution of nutrient loading from the sources described in **Section 3** were examined to determine the key locations where nutrient reduction projects are needed and the extent of reductions required from each source to achieve the County's proposed total maximum daily loads for each sub-lagoon. For each source, a reduction goal is set and projects are proposed to meet the goal. The estimated cost for each project is also included. Information on expected project efficiencies and project costs were gathered from data collected by the County in implementation of similar projects, as well as literature results from studies in Florida, where available, and across the country. The most cost-effective projects are selected and prioritized to maximize the nutrient reductions that can be achieved.

2.1. Plan Focus Area

This plan focuses on projects implemented in three sub-lagoons in the Indian River Lagoon (IRL) system: Banana River Lagoon, North IRL, and Central IRL. **Figure 2-1** shows the locations of these sub-lagoons. All the Banana River Lagoon watershed and the majority of the North IRL watershed are located within Brevard County. However, only a portion of the Central IRL watershed is located within the County. As shown in **Figure 2-1**, Central IRL Zone A is located entirely in Brevard, whereas Zone SEB straddles Brevard and Indian River counties. For Zone SEB, the County has completed several projects in this area and the St. Johns River Water Management District is completing projects along the C-54 Canal and on the Wheeler property to treat the Sottile Canal. The reductions from these projects (in pounds per year [lbs/yr] for total nitrogen [TN] and total phosphorus [TP]) should be sufficient to meet the **estimated need for** reductions in the Brevard County portion of Zone SEB, as shown in **Table 2-1**. This plan includes some additional beneficial projects located in Zone SEB to help ensure that the necessary reductions are achieved throughout Brevard County; however, most of the projects proposed in this plan for the Central IRL fall within Central IRL Zone A.

Table 2-1: Summary of Load Reductions and Projects in Central IRL Zone SEB

Category	Annual TN Load (lbs/yr)	Five-Month TN Load (lbs/yr)	Annual TP Load (lbs/yr)	Five-Month TP Load (lbs/yr)
Stormwater and Baseflow Loading	248,233	79,956	34,901	11,242
Atmospheric Deposition Loading	22,371	7,206	404	130
Point Sources Loading	0	0	0	0
Total Loading	270,604	87,162	35,305	11,372
Target Percent Reductions	18.0%	38.0%	16.0%	35.0%
Targeted Reductions	48,709	33,121	5,649	3,980
Completed County Projects (2010-February 2016)	29,890	12,454	9,643	4,018
C-54 Project	65,974	27,489	10,558	4,399
Wheeler Property Project	36,582	15,243	21,784	9,077
Total Project Reductions	132,446	55,186	41,985	17,494
% of Targeted Reductions Achieved	271.9%	166.6%	743.2%	439.5%

In addition, a small portion of the County is located within the Mosquito Lagoon. Brevard County does not have stormwater outfalls, septic systems, or point sources in this sub-lagoon.



Figure 2-1: Locations of the Banana River Lagoon (BRL), North IRL (NIRL), and Central IRL (CIRL) Sub-lagoons

2.2. Plan Outputs and Outcomes

There are several outcomes expected from implementation of the plan. The plan outputs represent the project types included to Reduce external loads to the lagoon, Remove internal sources from the lagoon, Restore the natural filtration systems, and Respond to the changing conditions and opportunities. The outcomes from these outputs are the results, impacts, and accomplishments that will occur due to plan implementation (**Figure 2-2**). The timeframes for reaching various outcomes may be impacted by many factors outside Brevard County control, including federal and state legislation and weather; however, division of outcomes into short-term, mid-term, and long-term categories is meant to illustrate the sequence and approximate schedule of anticipated natural recovery.

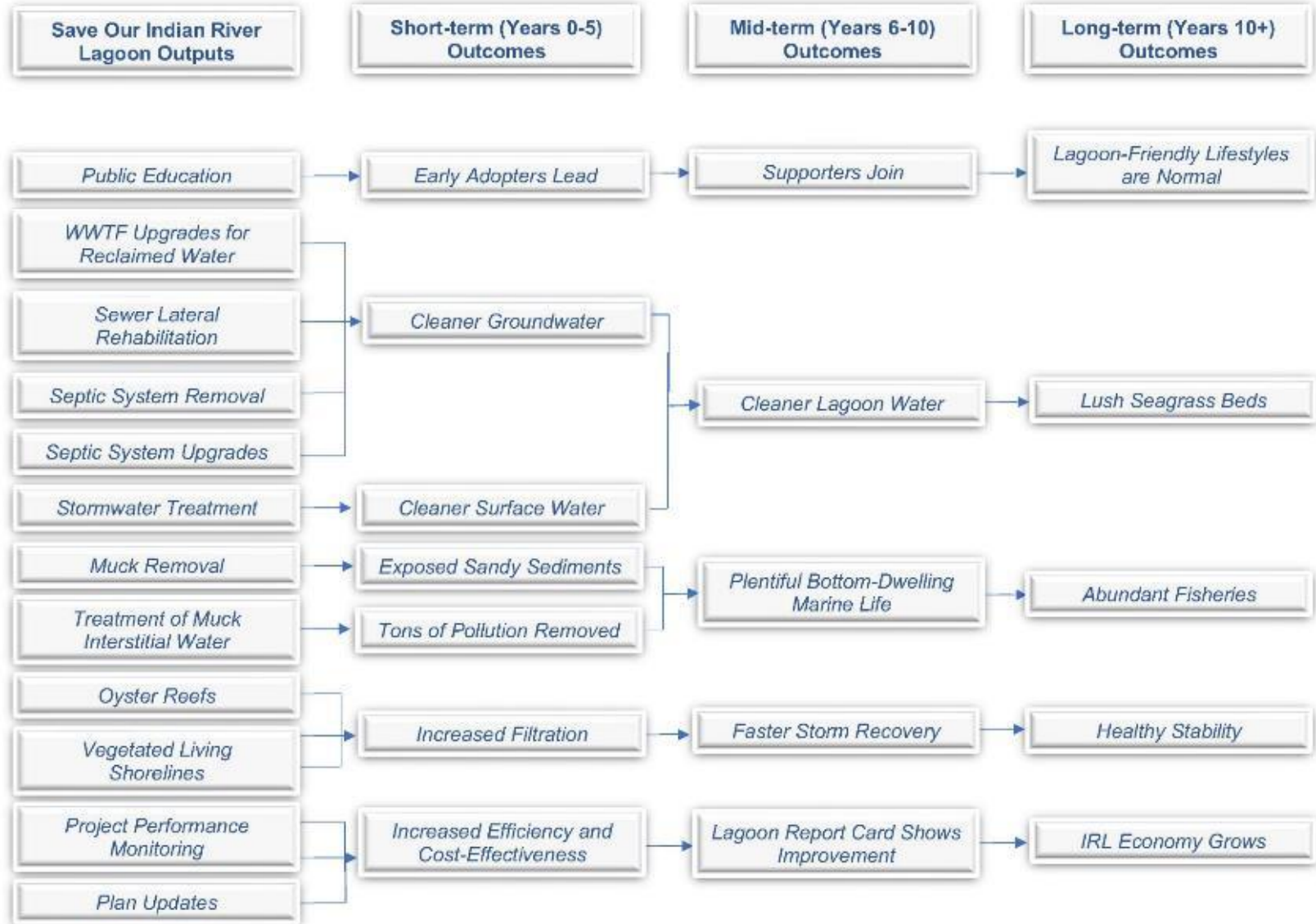


Figure 2-2. Summary of the Save Our Indian River Lagoon Outputs and Outcomes

Figure 2-2 [Long Description](#)

Section 3. Pollutant Sources in the IRL Watershed

Pollutant loads in the Indian River Lagoon (IRL) watershed are generated from multiple external sources that discharge to the lagoon. Excess loads also accumulate in nutrient sinks within the lagoon, which release nutrients to the water column during certain conditions.

External sources fall into the following major categories:

- Stormwater runoff that occurs when rainfall hits the land and cannot soak into the ground:
 - Urban stormwater runoff is generated by rainfall and excess irrigation on impervious areas associated with urban development. Urban runoff picks up and transports nutrient loading from fertilizers, grass clippings, and pet waste, as well as other pollutants including sediments, pesticides, oil, and grease. Stormwater ponds and baffle boxes reduce the nutrient loading in stormwater; however, proper maintenance of these systems is necessary to maintain their performance.
 - Agricultural stormwater runoff occurs on agricultural land and this runoff also carries nutrients from fertilizers, as well as livestock waste, pesticides, and herbicides. This source of stormwater runoff is not addressed in this plan as the County does not have jurisdiction over agricultural use. The Florida Department of Agriculture and Consumer Services has an agricultural best management practice program, and they work with agricultural producers to control the loading from this source.
 - Natural stormwater runoff comes from the natural lands in the basin. This source is not addressed by this plan as natural loading does not need be controlled.
- Baseflow is the groundwater flow that contributes loading to the IRL. Due to the sandy soils in the basin and excess irrigation, nutrients can soak quickly into the groundwater with little removal. This groundwater can recharge surface water in ditches, canals, tributaries, or the IRL.
 - Excess fertilizer that soaks into the ground past the root zones.
 - Septic systems, both functioning and failing, contribute nutrient loading to the groundwater.
 - Leaking sewer pipes located above the water table can contribute nutrient loading to the groundwater.
- Atmospheric deposition that falls on both the land and the lagoon itself:
 - Nutrients in the atmosphere fall into the basin largely during rainfall events. The sources of these nutrients are from power plants, cars, and other sources that burn fossil fuels. However, because of atmospheric conditions and weather patterns, not all the nutrients from atmospheric deposition are generated within the watershed. Atmospheric loading is not directly addressed by this plan as air quality and air emission standards are regulated by the federal Clean Air Act and are not within the County's control. However, the stormwater projects and in-lagoon projects will treat some of the nutrient loading from atmospheric deposition that falls on the land and lagoon surface.
- Point sources that treat collected sewage and discharge treated effluent:
 - The direct wastewater treatment facility (WWTF) discharges to the lagoon have been largely removed, and most of the facilities in the basin use the treated effluent for reclaimed water irrigation. However, depending on the level of treatment at the WWTF, the reclaimed water can have an excessive concentration of nutrients that may contribute loading to the baseflow.

- There have been issues with inflow and infiltration into the sanitary sewer collection system. Large rain events can result in large amounts of water entering the sewer collection system, and this additional water can cause sewer overflows that contribute nutrients and bacteria to local waterbodies.

In addition to these external sources of loading to the lagoon, nutrients from muck (muck flux) is an internal source of loading within the lagoon itself. Muck is made up of organic materials from soil erosion on the land and from decay of organic matter (leaves, grass clippings, algae, and aquatic vegetation) in the lagoon. As these organic materials decay, they constantly flux nutrients into the water column above, where they add to the surplus of nutrients coming from external sources.

Table 3-1 summarizes the estimated total nitrogen (TN) and total phosphorus (TP) loading in pounds per year (lbs/yr) from these sources in the Banana River Lagoon (including canals), North IRL, and Zone A of the Central IRL. The stormwater runoff and baseflow/septic systems loading estimates are from the Spatial Watershed Iterative Loading model, the point source loading estimates were based on the facility monthly operating reports and discharge monitoring reports, and the atmospheric deposition loads are from measured data at nearby stations. The muck flux load estimates are calculated based on the muck area in each portion of the lagoon and flux estimates from studies in the lagoon (refer to **Section 4.2.1** for more details). The loading from these sources is also shown graphically in **Figure 3-1**, **Figure 3-2**, and **Figure 3-3**.

Table 3-1: Loading from Different Sources in Each Sub-lagoon

Source	Banana River Lagoon TN (lbs/yr)	Banana River Lagoon TP (lbs/yr)	North IRL TN (lbs/yr)	North IRL TP (lbs/yr)	Central IRL Zone A TN (lbs/yr)	Central IRL Zone A TP (lbs/yr)
Stormwater Runoff	119,923	15,064	328,047	45,423	279,351	43,193
Baseflow/Septic, Leaking Sewer, Reclaimed Water	164,225	22,613	344,111	47,383	370,129	50,966
Atmospheric Deposition	175,388	3,222	301,977	5,505	49,456	892
Point Sources	17,484	3,370	14,711	1,029	0	0
Muck Flux	393,948	43,216	247,078	17,583	16,927	2,277

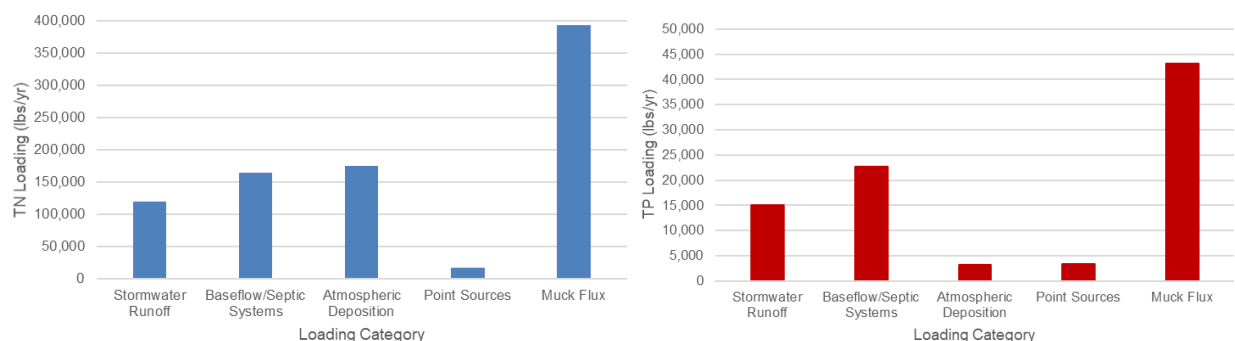


Figure 3-1: Banana River Lagoon TN (left) and TP (right) Annual Average Loads by Source

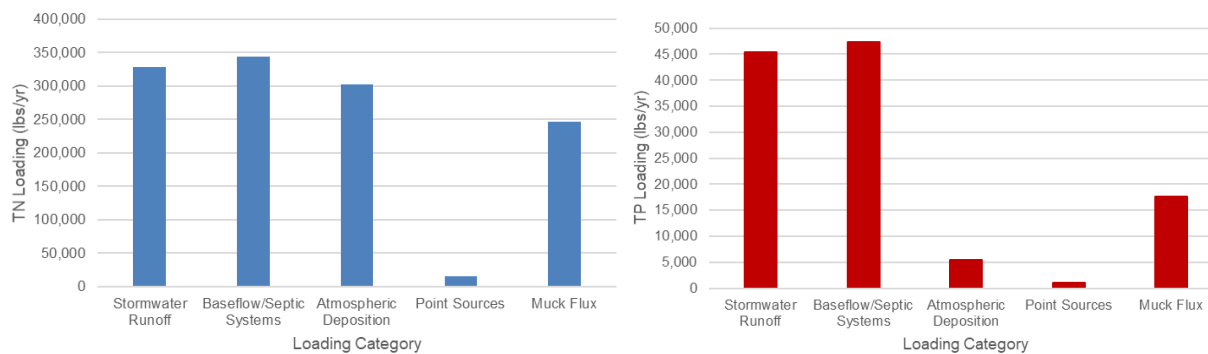


Figure 3-2: North IRL TN (left) and TP (right) Annual Average Loads by Source

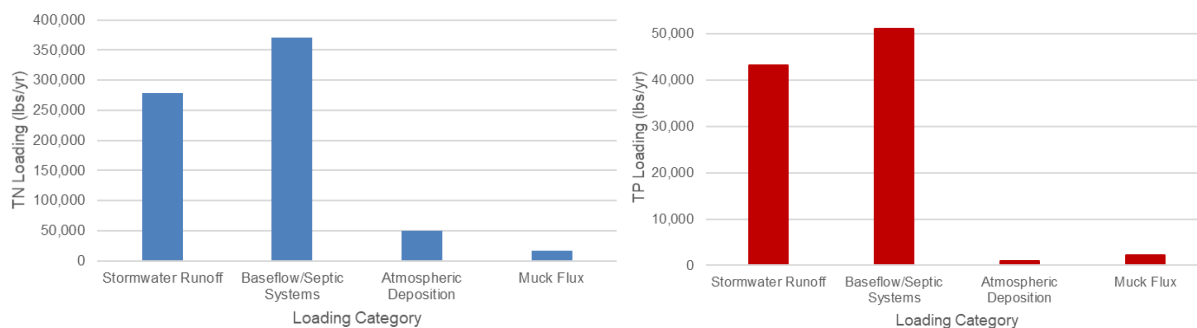


Figure 3-3: Central IRL TN (left) and TP (right) Annual Average Loads by Source

Section 4. Project Options

To restore the lagoon's balance, Brevard County has been implementing a multi-pronged approach to **Reduce** pollutant and nutrient inputs to the lagoon, **Remove** the accumulation of muck from the lagoon bottom, and **Restore** water-filtering oysters and related lagoon ecosystem services. This plan also recommends funding for project monitoring, needed for accountability and to **Respond** to changing conditions and opportunities. Response funds will be used to track progress, measure cost effectiveness, and report on performance. Each year, the Citizen Oversight Committee (additional details are included in **Section 4.4.1**) will review monitoring reports and make recommendations to the Brevard County Board of County Commissioners to redirect remaining plan funds to those efforts that will be most successful and cost-effective. Although research is important to better understand factors that significantly impact the health, productivity, and natural resilience of the Indian River Lagoon (IRL), funding for research is not included in this project plan.

Several goals were set to help select the projects for this plan. The goal for the **Reduce** projects is to achieve the proposed total maximum daily load for each sub-lagoon (refer to **Section 6** for additional details on the total maximum daily loads). The goal for the **Remove** projects is to achieve **about** a 25% reduction in estimated recycling of internal loads. The goals for the **Restore** projects are to filter the entire volume of the lagoon annually and to reduce shoreline erosion. The most cost-effective projects in each category were selected to maximize nutrient reductions, minimize lag time in lagoon response, reduce risk, and optimize the return on investment.

Section 4.1 through **Section 4.5** provide information on the proposed projects, estimated nutrient reduction benefits, and costs, as well as the ongoing studies needed to measure and assess the project efficiencies and benefits to the lagoon system.

4.1. Projects to Reduce Pollutants

An important step in restoring the lagoon system is reducing the amount of pollutants that enter the Indian River Lagoon (IRL) through stormwater runoff and groundwater. Reduction efforts include source control (such as fertilizer reductions) to reduce the amount of pollutants generated, as well as treatment to reduce pollutants that have already been discharged before they are washed off in stormwater runoff or enter the groundwater system and ultimately discharge to the IRL. Monitoring of these projects will be performed to verify the estimated effectiveness of each project type implemented (refer to **Section 4.4**).

The benefits from fertilizer management and public education, wastewater treatment facility (WWTF) upgrades for reclaimed water, and stormwater treatment are seen fairly quickly in the lagoon system. Public education about fertilizer and other sources of pollution addresses nutrients at their source and prevents these nutrients from entering the system. WWTF upgrades result in reduced nutrients in the treated effluent, which is then used throughout the basin for reclaimed water irrigation. The stormwater projects will capture and treat runoff, which is currently untreated or inadequately treated, before it reaches the lagoon.

While greatly beneficial, septic system removal or upgrade projects may take longer to result in a nutrient reduction to the lagoon. The septic systems in key areas must be removed or upgraded to see the full benefits. In addition, septic systems contribute nutrient loading to the lagoon through groundwater, and the travel time of the nutrient plumes through the groundwater to a waterbody vary throughout the basin depending on watershed conditions.

The following subsections summarize (1) public education and outreach efforts; (2) infrastructure improvements for WWTFs; (3) sprayfield and rapid infiltration basin upgrades; (4) package plant connections; (5) sewer laterals rehabilitation; (6) septic system removal and upgrades; and (7) stormwater treatment projects.

4.1.1 Public Outreach and Education

The education and outreach campaigns are summarized in the sections below.

Approximately 81,700 lbs/yr of TN and 4,200 lbs/yr of TP enter the lagoon watershed from excess fertilizer application.

Fertilizer Management

It is a common practice to apply fertilizer on urban and agricultural land uses. However, excessive and inappropriately applied fertilizer pollutes surrounding waters and stormwater. To help address fertilizer as a source of nutrient loading, local governments located within the watershed of a waterbody or water segment that is listed as impaired by nutrients are required to adopt, at a minimum, the Florida Department of Environmental Protection's Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes (Section 403.067, Florida Statutes). Brevard County and its municipalities adopted fertilizer ordinances that included the required items from the Model Ordinance in December 2012, as well as additional provisions in 2013 and 2014. Local fertilizer ordinances are posted online at [the Brevard County Extension website](#). These ordinances require zero phosphorus year-round, nitrogen to be at least 50% slow release, no nitrogen use during the rainy season, and variable surface water protection buffers.

Florida Department of Agriculture and Consumer Services compiled information on the fertilizer sales by county, as well as the estimated nutrients from those fertilizers. It is important to note that all fertilizer sold in a county may not be applied within that county because a portion of that fertilizer may be transported to another county. However, details on the amount of fertilizer transported between counties is not tracked. Therefore, the information in the Florida Department of Agriculture and Consumer Services reports is simply the best estimate of the amount of fertilizer used, and the associated nutrient content, in a county.

Based on the Florida Department of Agriculture and Consumer Services information, the lawn fertilizer sold in Brevard County in fiscal year 2014-2015 contained 408,220 pounds of nitrogen and 32,520 pounds of phosphorus. The fertilizer applied is attenuated through several naturally occurring physical, chemical, and biological processes including uptake by grass. The environmental attenuation/uptake for urban fertilizer is 80% for nitrogen (Florida Department of Environmental Protection, 2017) and 90% for phosphorus. The estimated total nitrogen (TN) and total phosphorus (TP) that is applied but is not naturally attenuated is shown in **Table 4-1**. It is important to note that not all the un-attenuated nutrients will migrate to the lagoon, either through runoff or baseflow (groundwater that enters ditches, canals, and tributaries), but these numbers provide an idea of the excess nutrients that could be reduced as a result of public education and changes in fertilizer use.

Table 4-1: Estimated TN and TP Not Attenuated in Fiscal Year 2014-2015

Parameter	Pounds Sold Fiscal Year 2014-15 (Lawn Only)	Environmental Attenuation (%)	Fiscal Year 2014-15 Pounds (Lawn Only) after Attenuation
TN	408,220	80%	81,644
TP	32,520	90%	3,252

When recent sales data are compared to the fertilizer sold in fiscal year 2013-2014, which is before adoption of the more protective amendments to the ordinance, significant reductions are observed. These reductions in pounds per year (lbs/yr) from the implementation of the ordinance are shown in **Table 4-2**.

Table 4-2: Reductions from Fertilizer Ordinance Compliance as of Fiscal Year 2014-2015

Parameter	Fiscal Year 2013-14 Pounds (Lawn Only) after Attenuation: Pre-Ordinance	Fiscal Year 2014-15 Pounds (Lawn Only) after Attenuation: Post-Ordinance	Reductions from Ordinance to Date (lbs/yr)
TN	127,540	81,644	45,896
TP	12,640	3,252	9,388

Based on studies by the University of Florida, approximately 0.03% of applied nitrogen ends up in runoff during establishment of sodded Bermudagrass on a 10% slope. Nitrogen leaching ranged from 8% to 12% of the amount applied (Trenholm and Sartain, 2010). Therefore, nitrogen leaching from fertilizer into the groundwater is 300 to 400 times as much as the nitrogen running off in stormwater. To help address the leaching issue, the Brevard County fertilizer ordinance encourages the use of slow release nitrogen fertilizer. Slow release fertilizer decreases nitrogen leaching by about 30% (University of Florida-Institute of Food and Agricultural Sciences, 2012). In addition, the ordinance requires that fertilizer with zero phosphorus is used.

The public education and outreach campaign will be expanded to include focus on slow release and zero phosphorus fertilizers. An important component of this will be to reach out to stores within the County to ensure they are making slow release and zero phosphorus fertilizers more visible and to add signage to let buyers know which fertilizers are compliant with all local ordinances. This would cost approximately \$125,000 per year for a period of five years. If an additional 25% of fertilizer users switch to 50% slow release nitrogen and zero phosphorus formulations, compliant with the ordinance, this would result in a reduction of 6,123 lbs/yr of TN and 813 lbs/yr of TP.

In 2019, the University of Florida Institute of Food and Agricultural Sciences and MTN Marketing conducted a survey that was concentrated on fertilizer awareness questions. The results from the 2019 survey were compared to similar questions from the 2015 Blue Life survey to evaluate changes in fertilizer use. Based on the survey results, 33.33% of respondents in 2019 stated that they use slow release nitrogen fertilizer compared to only 6.30% in 2015, which is a 27% increase in the usage of slow release fertilizer. Therefore, as part of the 2021 Update, the estimated nitrogen reductions from the expanded fertilizer education was updated to 27%, which results in an estimated reduction of 6,613 lbs/yr of TN. The TP reductions were kept at 25% compliance because, the way the survey was setup, participants were only able to select one option for the type of fertilizer used. Therefore, an update on the use of zero phosphorus formulas could not be obtained. The estimated reductions are shown in **Table 4-3**.

Table 4-3: Project for Additional Fertilizer Ordinance Compliance

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per Year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
Original	58a	Expanded Fertilizer Education*	Brevard County	All	6,613	\$95	813	\$769	\$625,000

Note: The projects highlighted in green and marked with an asterisk were identified in the original plan.

In 2018, the Citizen Oversight Committee recommended extending the fertilizer education and outreach beyond the original plan recommendation of five years to all ten years of the plan. The \$625,000 for this project will be redistributed as follows: (1) \$125,000 in Year 1 to create the education campaign and begin implementation, (2) \$50,000 per year to continue implementation in Years 2–10, and (3) an additional \$50,000 in Year 6 (for a total of \$100,000 in this year) to evaluate program success and update the outreach materials, as needed.

Grass Clippings

Grass clippings contain nutrients and those nutrients are released in stormwater or the lagoon as they decompose (Brevard County Natural Resources Management Department, 2017). St. Augustine grass contains 2.5% nitrogen and 0.2–0.5% (average of 0.5%) phosphorus and Bahia grass contains 2% nitrogen (University of Florida-Institute of Food and Agricultural Sciences, 2015). According to Okaloosa County Extension (2017), a 7,500-square foot lawn produces about 3,000 pounds of clippings per year. Unfortunately, the percentage of those total clippings that end up in stormwater is not known.

To estimate the potential nutrient reduction impact of a grass clippings campaign, it was assumed that the average home lot size is 10,000 square feet with a 100-foot by 100-foot boundary, with 2,500 square feet of built space and 7,500 square feet of lawn. The University of Florida-Institute of Food and Agricultural Sciences estimated that 3,000 pounds of grass clippings are produced annually from a healthy lawn of this size. It was assumed that most of the grass clippings in Brevard County are from St. Augustine grass, which means that 3,000 pounds of clippings contains approximately 75 pounds of TN and 10.5 pounds of TP.

It was also assumed that the standard mower size is two feet wide. From one roadside pass along 100 feet of the average lawn with a two-foot wide mower, 200 square feet or 2.6% of the total lawn clippings could be cast into the road. This equals 0.02 pounds of TN and 0.0027 pounds of TP per foot per year left in the road. With about 3,800 miles of roads in the Indian River Lagoon (IRL) Basin within Brevard County, of which approximately 1,250 miles are paved with curb and gutter and are most likely to allow the ready transport of grass clippings to the lagoon in stormwater, the potential nutrient release from those grass clippings could be up to 260,000 lbs/yr of TN and 35,640 lbs/yr of TP from mowing along both sides of the road.

If Brevard County expects a similar rate of awareness of 24% as Alachua County (2012), then a potential 200,000 lbs/yr of TN and 27,000 lbs/yr of TP may be entering the stormwater. If a successful grass clippings campaign in Brevard County can capture an increase of awareness similar to Alachua County (from 24% to 69%), then there is a potential reduction of 88,920 lbs/yr of TN and 12,189 lbs/yr of TP. In addition, assuming the environmental attenuation/uptake for grass clippings is similar to the urban fertilizer uptake of 80% for nitrogen and 90% for phosphorus, the estimated reductions would be 17,800 lbs/yr of TN and 1,200 lbs/yr of TP.

This estimate assumes a simplified worst-case scenario in which everyone leaves a portion of their clippings in the road; however, it does not take into account the number of driveways, sidewalks, medians, and other impervious surfaces that grass clippings could be falling or the grass clippings being directly cast into the IRL, canals, and other waterways. Using the available information, this provides an order of magnitude estimate of the potential benefits of a grass clippings campaign for the IRL.



Figure 4-1: Grass Clippings Example for a Typical Lot

Figure 4-1 [Long Description](#)

The Marine Resources Council proposed a partnership between the IRL Basin counties to pursue a grass clippings campaign similar to the Alachua County campaign. The Citizen Oversight Committee recommended contributing \$20,000 in Year 1 of the plan towards the research and marketing to develop the campaign. This was followed by an annual investment of \$20,000 per year for Years 2 through 10 for media and promotional materials targeting Brevard County. Therefore, the total project cost is \$200,000. **Table 4-4** summarizes the costs and benefits of implementing the grass clippings campaign.

Table 4-4: Project for Grass Clippings Campaign

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per Year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
2018	58b	Grass Clippings Campaign+	Brevard County	All	17,800	\$11	1,200	\$167	\$200,000

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

Market research needed to guide development of a grass clipping campaign was contracted through the Marine Resources Council to a community-based social marketing firm, Uppercase Inc. Survey results from 2018 are reported in **Section 4.4.3**.

Excess Irrigation

Fertilizer nutrients are more susceptible to leaching if turfgrass is overwatered, carrying nutrients beyond the reach of the turf roots. During excess watering, soluble nutrients, such as highly mobile nitrate, wash through the soil from the root zone too quickly. Excess irrigation is easy to accomplish in Florida's sandy soils as these soils typically hold no more than 0.75 inches of water per foot of soil depth (Hochmuth et al., 2016). This excess irrigation is part of the baseflow contributing nutrient loading to the IRL.

From June 2015 to May 2016, 470,737 pounds of TN in fertilizer were sold within Brevard County. Florida Department of Agriculture and Consumer Services Urban Turf Fertilizer Rule (RE-1.003[2], Florida Administrative Code) does not specify a percentage of slow-released nitrogen in fertilizer or separately track slow-release nitrogen from all nitrogen sources. However, if it is assumed that 50% of fertilizer was soluble nitrogen (compliant with local fertilizer ordinances), then the total soluble nitrogen sold in Brevard County could be as high as 235,368 lbs/yr. If 13% of soluble nitrogen were leached, up to 30,597 lbs/yr of TN could potentially be entering the groundwater. If like South Florida survey respondents 50% of irrigation users in Brevard County are not over-irrigating, and if an outreach campaign can impact half of those who do over-irrigate, fertilizer leaching could be reduced by 7,649 lbs/yr of TN. As noted above, the environmental attenuation/uptake for urban fertilizer is 80% for nitrogen (Florida Department of Environmental Protection, 2017). Therefore, the total amount of TN that could be reduced by reducing excess irrigation is 1,530 lbs/yr.

Conducting an outreach campaign with an initial \$50,000 social marketing research and development investment and \$25,000 in annual implementation, the total 10-year budget would be \$300,000. This results in an average of \$196 per pound of TN reduced per year (see **Table 4-5**). Funding for this education campaign is not recommended at this time.

Table 4-5: Estimated TN Reductions and Costs from Reducing Excess Irrigation

Project	Cost	Estimated TN Reductions (lbs/yr)	Cost per Pound per year of TN Removed
Irrigation Education	\$300,000	1,530	\$196

Stormwater Pond Maintenance

Wet detention ponds, also known as stormwater ponds, are one method used to remove nutrients from stormwater as mandated by Florida Statutes 403.0891. Retention/detention time of water in the pond accommodates the removal of accumulated nutrients by allowing material to settle and be absorbed. By itself, an optimally sized and properly maintained stormwater pond typically provides a 35–40% removal of nitrogen and 65% removal of phosphorus through settling (Florida Department of Environmental Protection and Water Management Districts, 2010). Additional behaviors and technologies can be combined with ponds to increase removal rates. On the other hand, poor pond maintenance practices can decrease nutrient removal rates or worse yet, release nutrients to downstream waterbodies.

A stormwater pond maintenance program would initially focus on vegetative buffers and their appropriate maintenance to reduce stormwater pollution. Brevard County contains 4,175 stormwater ponds covering 13,276 acres with 6,976,338 linear feet of shoreline. The average size of a pond is 3.2 acres with 1,671 linear feet of shoreline. These numbers include ponds affiliated with both residential and commercial areas. The average load to stormwater ponds is 11.4 pounds of TN per acre of land surrounding the pond annually according to the Florida Department of Environmental Protection's Spreadsheet Tool for Estimating Pollutant Loads. Assuming that a 50-foot perimeter directly impacts the pond, there are 8,008 acres contributing

91,288 pounds of TN annually to the ponds. Of this, up to 40% of the TN is removed through retention in the pond leaving a potential 54,773 lbs/yr of TN to enter the lagoon. For TP, approximately 18,836 lbs/yr is entering the stormwater pond. Of this, up to 65% of the TP is removed through retention in the pond leaving a potential of 6,593 lbs/yr TP to enter the lagoon.

Creating a 10-foot-wide low-maintenance buffer zone of un-mowed ornamental grasses has the potential to remove about 25% of the TN and TP entering the pond (United States Environmental Protection Agency, 2005). This amount increases with the width of the buffer and the addition of woody vegetation. For the plan calculations, the assumption was made that convincing homeowners to not mow a 10-foot buffer is the easiest practice to achieve. The pond will remove up to 40% of the remaining TN. Assuming that the education campaign can reach at least half of the 48% of people unaware of what stormwater is, the reduction could be 3,286 lbs/yr of TN and 396 lbs/yr of TP.

Conducting an outreach campaign with an initial \$50,000 social marketing research and development investment plus \$25,000 in annual implementation, would require a 10-year total budget of \$300,000. This would result in reductions at \$91 per pound of TN and \$750 per pound of TP (see **Table 4-6**). Additionally, during focus group research in the first year, it may be possible to identify other best management practices that homeowners' associations are willing to adopt that would further improve the performance of their stormwater pond. This would improve the cost effectiveness of this campaign. Funding for this education campaign is not recommended at this time.

Table 4-6: Estimated TN and TP Reductions and Costs from Stormwater Best Management Practice Maintenance

Project	Cost	Estimated TN Reductions (lbs/yr)	Cost per Pound Per Year of TN Removed	Estimated TP Reductions (lbs/yr)	Cost per Pound per Year of TP Removed
Stormwater Best Management Practice Maintenance Education	\$300,000	3,300	\$91	400	\$750

Septic Systems and Sewer Laterals Maintenance

Nationwide, 10–20% of septic systems are failing from overuse, improper maintenance, unsuitable drainfield conditions, and high-water tables. When septic systems are older and failing or are installed over poor soils close to the groundwater table or open water, they can be a major contributor of nutrients and bacterial and viral pathogens to the system (De and Toor 2017; **United States Environmental Protection Agency**, 2002).

A properly functioning septic tank and drainfield system reduces TN by 30–40%. However, the reduction has been measured at 0–20% in adverse conditions. The best available studies estimate a 10% reduction in nitrogen within a properly maintained tank versus an improperly maintained tank. The remaining 20–30% of nitrogen removal occurs in a properly functioning drainfield (Anderson 2006). If 15% of systems are failing and failing systems attenuate 30% less of the nitrogen load, these systems may pose far greater impacts to the groundwater, tributaries, and lagoon than the average impact reported for properly functioning systems. Without the 30% reduction, the potential load to the IRL and its tributaries is estimated to be 27.2 lbs/yr of TN for properties within 55 yards (instead of 19 lbs/yr of TN for functioning systems), 5.2 lbs/yr of TN for properties between 55 and 219 yards away (instead of 3.6 lbs/yr of TN for functioning systems), and 1.1 lbs/yr of TN for properties more than 219 yards away (instead of 0.8 lbs/yr of TN for functioning systems).

There are an estimated 53,204 septic systems in Brevard County within the IRL Basin. As noted in **Section 4.1.6**, the total loading of septic systems within 55 yards of the IRL and its tributaries is calculated at 299,590 lbs/yr of TN, the total loading of systems between 55 and 219 yards is 86,575 lbs/yr of TN, and the total loading of septic systems further than 219 yards is 10,805 lbs/yr of TN. If the failure rate in Brevard County is about 15%, and if failing systems receive 30% less attenuation, then failing systems within 55 yards of open water are contributing 13,481 lbs/yr of TN, failing systems between 55 and 219 yards of open water are contributing 3,896 lbs/yr of TN, and failing tanks further than 219 yards are contributing 486 lbs/yr of TN. By factoring in this failure rate, the total additional loading to the IRL from failing septic systems is approximately 17,863 lbs/yr of TN.

A 10-year outreach campaign budget of \$300,000, which includes \$50,000 for research and campaign development and \$25,000 per year for implementation to improve septic system maintenance, reduce excess use, and prevent harmful additives, would strive to reduce the number of failing systems countywide by 25%, thereby reducing the excess loading from failing systems by 4,466 lbs/yr of TN. This would result in average cost of \$67 per pound of TN (see **Table 4-7**).

Table 4-7: Project for Septic System Maintenance Program

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per Year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
2018	58c	Septic System Maintenance Education+	Brevard County	All	4,466	\$67	Not applicable	Not applicable	\$300,000

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

Market research needed to guide development of a septic maintenance campaign was contracted with state grant funding through the Marine Resources Council to the University of Central Florida. Survey results from 2018 are reported in **Section 4.4.3**. In reaching out to citizens to participate in the survey, it was found that many people are unsure of whether they are on central sewer or a septic system. When developing the septic system maintenance education program, Brevard County will identify opportunities to educate people who are on central sewer about proper maintenance of their sewer laterals. Adding this education component to the septic system maintenance education campaign is not anticipated to require additional funding.

Lagoon Loyal Program

Using funding from the fertilizer education and septic system maintenance education programs, the marketing company MTN Advertising was contracted to create an outreach campaign to engage Brevard citizens in IRL restoration efforts. The Lagoon Loyal campaign uses an incentive program to motivate positive actions that benefit the IRL ([website](#)). Citizens can create an online Lagoon Loyal profile that suggests various activities that benefit the lagoon. Completing each activity earns points, which can accumulate and be redeemed for discounts to local area businesses. The businesses providing discounts are given display materials that indicate their participation, which also advertises the program to their customers. Combined with social media marketing and traditional media advertising, the program uses the slogan “Let’s Be Clear...” to share easy actions that citizens can take to reduce their contribution to lagoon pollution. Message selection is guided by focus groups and survey responses from citizens who either care for a yard or maintain a septic system. The program also maintains landing pages to facilitate the septic upgrade and removal grants available to the owners of eligible locations.

Oyster Gardening Program

Most of the IRL system in Brevard County no longer has a sufficient oyster population to allow for natural recruitment of oysters to suitable substrate (Futch, 1967). Therefore, to create the oyster bars, the oysters must be grown and then carefully placed on appropriate substrate in the selected locations. To help grow the oyster population, in fiscal year 2013–2014, the Board of County Commissioners approved \$150,000 to launch the Oyster Gardening Program. This program is a citizen-based oyster propagation program where juvenile oysters are raised under lagoon-front homeowners' docks for about six months before being used to populate constructed oyster bar sites. Oyster Gardening participants receive spat-on-shell oysters plus all supplies needed to care for their oysters. The Oyster Gardening Program is executed in partnership with the Brevard Zoo. The project continued during fiscal year 2014–2015 with funding from the state and has continued with annual County funding.

In 2020, the Citizen Oversight Committee approved \$300,000 from the Save Our Indian River Lagoon Tax to fund the Oyster Gardening Program through September 2021 (Table 4-8).

Table 4-8: Project for Oyster Gardening Program

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per Year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
2020	193	Oyster Gardening Program+	Brevard County	All	Not applicable	Not applicable	Not applicable	Not applicable	\$300,000

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

4.1.2 WWTF Upgrades

88% of reclaimed water in the County is used in public access areas and for landscape irrigation.

The direct wastewater treatment facility (WWTF) discharges to the Indian River Lagoon (IRL) have been largely removed, and the majority of facilities in the basin use the treated effluent for reclaimed water irrigation. While the use of reclaimed water for irrigation is an excellent approach to conserving potable water, if the reclaimed water is high in nutrient concentrations, the application of the reclaimed water for irrigation can result in nutrients leaching into the groundwater. It is important to note that there are no regulations on the concentration of nutrients in reclaimed water that is used for irrigation. However, University of Florida-Institute of Food and Agricultural Sciences studies indicate that a nitrogen concentration of 5 to 9 milligrams per liter is optimal for turfgrass growth, and each year a maximum amount of 1 pound of nitrogen can be applied per 1,000 square feet of turf (University of Florida-Institute of Food and Agricultural Sciences, 2013a and 2013b). Nitrogen leaching increases significantly when irrigation is greater than 2 centimeters per week (0.75 inches per week), even if the nitrogen concentrations are half of the maximum Institute of Food and Agricultural Sciences recommendation of 9 milligrams per liter.

In Brevard County, 88% of the reclaimed water is used in public access areas and for landscape irrigation. The total reclaimed water used countywide is approximately 18.5 million gallons per day, which is applied over 7,340 acres. The unincorporated County and city WWTFs with the reclaimed water flows, total nitrogen (TN) concentrations based on permit data and loads in pounds per year (lbs/yr) are shown in Table 4-9. This table also summarizes the excess TN in the reclaimed water after environmental attenuation/uptake (75% for TN [Florida Department of

Environmental Protection, 2017)), for both the current TN effluent concentration and if the facility were upgraded to achieve a TN effluent concentration of 6 milligrams per liter (the City of Palm Bay Water Reclamation Facility update will achieve a TN effluent concentration of 7.5 milligrams per liter and the City of Melbourne Grant Street WWTF will achieve a TN effluent concentration of 5 milligrams per liter).

Table 4-9: TN Concentrations in WWTF Reclaimed Water

Facility	Permitted Capacity (million gallons per day)	Reclaimed Water Flow (million gallons per day)	TN Concentration (milligrams per liter)	TN After Attenuation (lbs/yr)	TN After Attenuation and Upgrade (lbs/yr)
City of Palm Bay Water Reclamation Facility	4.0	1.20	29.4	27,305	6,966
City of Melbourne Grant Street WWTF	5.5	2.08	21.0	33,806	8,049
City of Titusville Osprey WWTF	2.75	1.67	12.7	16,415	7,755
Brevard County Port St. John WWTF	0.5	0.35	12.6	3,413	1,625
Cape Canaveral Air Force Station WWTF	0.8	0.80	11.9	7,368	3,714
City of West Melbourne Ray Bullard Water Reclamation Facility	2.5	0.85	11.1	7,302	3,947
Brevard County Barefoot Bay Water Reclamation Facility	0.9	0.48	10.3	3,826	2,229
Brevard County South Beaches WWTF	8.0	1.12	9.3	8,061	5,201
Brevard County North Regional WWTF	0.9	0.26	8.9	1,791	1,207
Rockledge WWTF	4.5	1.40	7.0	7,584	6,501
Brevard County South Central Regional WWTF	5.5	3.79	6.7	19,653	17,600
City of Titusville Blue Heron WWTF	4.0	0.84	4.8	4,993	Not applicable
City of Cape Canaveral Water Reclamation Facility	1.8	0.88	3.8	4,141	Not applicable
City of Cocoa Jerry Sellers Water Reclamation Facility	4.5	1.44	3.5	6,241	Not applicable
Brevard County Sykes Creek WWTF	6.0	1.48	3.4	3,895	Not applicable
City of Cocoa Beach Water Reclamation Facility	6.0	3.66	2.5	11,331	Not applicable

Based on a 2007 study by United States Environmental Protection Agency, the cost to upgrade WWTFs to meet advanced wastewater treatment standards is approximately \$4,200,000 per plant. This cost is in 2006 dollars, which, when inflated to 2016 dollars and costs are included for design and permitting, is approximately \$6,000,000 per facility. Where cost estimates were available for facility upgrades, these costs were used instead of the inflated estimated costs. Due to the high cost per pound of TN and total phosphorus (TP) removed to upgrade some of these facilities compared to other projects in this plan, only those facilities in **Table 4-10** are recommended for upgrades as part of this plan. This table also includes the WWTF upgrade projects submitted as part of an annual update to the plan.

As part of the public education and outreach efforts, customers who use reclaimed water for irrigation should be informed of the nutrient content in the reuse water because they can and should eliminate or reduce the amount of fertilizer added to their lawn and landscaping. This information can be provided to the customers through their utility bill.

Table 4-10: Projects for WWTF Upgrades to Improve Reclaimed Water

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN Removed	TP Reduction (lbs/yr)	Cost per Pound per Year of TP Removed	Plan Funding
Original	2016-17	City of Palm Bay Water Reclamation Facility*	City of Palm Bay	Central IRL	20,240	\$180	102	\$35,656	\$3,636,900
Original	2016-02a	City of Titusville Osprey WWTF*	City of Titusville	North IRL	8,660	\$1,016	Not applicable	Not applicable	\$8,800,000
2018	59	Grant Street Water Reclamation Facility Nutrient Removal Improvements+	City of Melbourne	Central IRL	18,052	\$375	9,671	\$700	\$6,769,500
2019	99	Cocoa Beach Water Reclamation Facility Upgrade+	City of Cocoa Beach	Banana	2,520	\$375	685	\$1,380	\$945,000
2020	2016-2b	City of Titusville Osprey Nutrient Removal Upgrade Phase 2+	City of Titusville	North IRL	3,626	\$83	Not applicable	Not applicable	\$300,000
2020	138	Ray Bullard Water Reclamation Facility Biological Nutrient Removal Upgrade+	City of West Melbourne	Central IRL	11,360	\$375	3,302	\$1,290	\$4,260,000
-	-	Total	-	-	64,458	\$383 (average)	13,760	\$1,796 (average)	\$24,711,400

Note: The projects highlighted in green and marked with an asterisk were identified in the original plan. The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

4.1.3 Sprayfield and Rapid Infiltration Basin Upgrades

Another opportunity to reduce the nutrient loading from the wastewater treatment facilities (WWTFs) is to upgrade the disposal locations, either sprayfields or rapid infiltration basins, for the treated effluent. The sprayfields and rapid infiltration basins could be modified to include biosorption activated media to provide additional nutrient removal. Examples of biosorption activated media include mixes of soil, sawdust, zeolites, tire crumb, vegetation, sulfur, and spodosols (Wanielista et al., 2011). Based on a pilot project in the City of DeLand, the potential removal of adding biosorption activated media to a sprayfield or rapid infiltration basin is 83% for total nitrogen (TN) and 66% for total phosphorus (TP) (City of DeLand and University of Central Florida, 2018). The loads for the facilities in Brevard County that dispose of reclaimed water to a sprayfield or rapid infiltration basin were estimated based on permit and discharge monitoring report information (where available). Attenuation rates were based on ArcGIS-Based Nitrate Load Estimation Toolkit (Rios et al., 2013) model results for each specific package plant location. Then the biosorption activated media efficiency rate was applied to determine the TN that could be removed (in pounds per year [lbs/yr]). Costs were estimated for each upgrade and the upgrades that could be made for the least cost per pound of TN are recommended for pilot project funding as part of this plan (see **Table 4-11** and **Table 4-12**). Information on nutrient concentrations or the size of the sprayfield/rapid infiltration basin were missing from several facilities. As this information is gathered, additional upgrades may be found to be cost-effective.

Table 4-11: Projects for Sprayfield or Rapid Infiltration Basin Upgrades for Public Facilities

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)*	TN Cost per Pound per Year	TP Reduction (lbs/yr)*	TP Cost per Pound per Year	Plan Funding
2017	6	Long Point Park Upgrade+	Brevard County Parks Department	Central IRL	163	\$625	Not applicable	Not applicable	\$101,854
2019	2016-51	Port St. John Wastewater Treatment Plant – Rapid Infiltration Basin+	Brevard County	North IRL	4,116	\$238	915	\$1,071	\$980,100
2019	204	Cape Canaveral Air Force Station Regional WWTF – Rapid Infiltration Basin+	Brevard County	Banana	4,625	\$1,130	1,226	\$4,264	\$5,227,200
-	-	Total	-	-	8,904	\$709 (average)	2,141	\$2,947 (average)	\$6,309,154

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

* The starting TN and TP concentrations assume that the facility has been upgraded to achieve the basin management action plan effluent requirements.

Table 4-12: Projects for Sprayfield or Rapid Infiltration Basin Upgrades for Private Facilities

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per Year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
2019	2016-20	Canebreaker Condo – Sprayfield+	Brevard County	North IRL	61	\$590	To be determined	To be determined	\$36,000
-	-	Total	-	-	61	\$590	To be determined	To be determined	\$36,000

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

4.1.4 Package Plant Connections

Package plants are miniature wastewater treatment facilities (WWTFs) that serve small communities producing more than 2,000 gallons of effluent per day. The most common package plant treatment methods are extended aeration, sequencing batch reactors, and oxidation ditches; the same biological treatment methods used in larger wastewater treatment plants. The smallest package plants often use the same technology as advanced septic systems. Following this treatment, the effluent is disposed of in rapid infiltration basins (ponds), sprayfields, or drainfields (United States Environmental Protection Agency, 2000).

Most package plants were removed in the 1990s following the Indian River Lagoon System and Basin Act of 1990. However, opportunities still exist to address some of the worst remaining package plants by upgrading the existing plant, adding nutrient scrubbing technology, or preferably connecting them to central sewer where the wastewater will receive further treatment and disposal far from the lagoon. A few of these package plants are located along the Indian River Lagoon (IRL) and, therefore, pose a substantial nutrient risk due to their effluent concentration and disposal methods. **Table 4-13** lists the estimated total nitrogen (TN) reductions in pounds per year (lbs/yr) and costs to connect the package plants to the sewer system. Based on the information in this table, the cost to connect the package plants to the sewer are higher than the cost per pound of other projects in this plan; therefore, none of the package plant projects are recommended at this time.

Table 4-13: Projects for Package Plant Connection

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
2021	197	South Shores Utility Connection+	Brevard County	Central IRL	929	\$1,401	To be determined	To be determined	\$1,301,154
2021	199	River Grove I & II Mobile Home Park Connection+	Brevard County	Central IRL	697	\$1,441	To be determined	To be determined	\$1,004,640
2021	192	Oak Point Wastewater Treatment Facility Improvements+	Oak Point Mobile Home Park	North IRL	186	\$1,500	0	Not applicable	\$279,000
-	-	Total	-	-	1,812	\$1,426 (average)	To be determined	To be determined	\$2,584,794

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

4.1.5 Sewer Laterals Rehabilitation

Sewage overflows following heavy rainfall events are an indicator of illegal connections or inadequate sewer asset conditions. There are three major components of wastewater flow in a sanitary sewer system: (1) base sanitary (or wastewater) flow, (2) groundwater infiltration, and (3) rainfall inflow. Virtually every sewer system has some infiltration and/or inflow. Historically, small amounts of infiltration and/or inflow are expected and tolerated. However, infiltration and/or inflow becomes excessive when it causes overflows, health, and/or environmental risks. Overflows from the South Beaches Wastewater Treatment Facility (WWTF) sewer system have occurred 7 of the last 13 years, including significant overflows following Hurricane Matthew in 2016 and Hurricane Irma in 2017. Less frequent overflows and line breaks have occurred in other sewer service areas.

In 2012, in recognition of aging infrastructure and increasingly frequent issues, the Brevard County Utility Services Department engaged seven professional engineering firms to perform independent field evaluations of the condition of the sewage infrastructure assets located in each of the County's seven independent sewer service areas. The output of this investigation was identification of \$134 million in specific capital improvement needs required over a ten-year period to bring County-owned sewer system assets up to a fully-functional, reliable, affordable, efficient, and maintainable condition (Brevard County Utility Services, 2013). The field evaluation results and corresponding 10-year Capital Improvement Program Plan were presented to the Brevard County Commission in 2013. In response, the Commission approved financing the entire Capital Improvement Program Plan and increased the County's sewer service rates to repay the debt. Plan implementation began in 2014 and projects are progressing quickly.

Because there was already a capital improvement plan and funding mechanism for updating the County's aging sewer system infrastructure, the original Save Our Indian River Lagoon Project Plan did not include analysis or funding for sewer system repairs. Unfortunately, even in areas where capital improvements have been made, infiltration and/or inflow continues to be a problem that contributes to overflows that discharge untreated wastewater into the Indian River Lagoon (IRL). This indicates the probability of problems outside the County-owned assets and could include illegal connections and/or leaks in the privately owned lateral connections of homes and businesses to the County sewer system.

Identifying problems on the customer side of the connection required smoke testing each building or private residence to determine if leaks or illegal connections are present. The extent of infiltration and/or inflow on the customer side of the connections is unknown and, therefore, the nutrient loading associated with these issues are also unknown. As a first step to determine the extent of infiltration and/or inflow problems with the sewer laterals, the County partnered with the City of Satellite Beach on a pilot project to perform smoke testing of more than 12,000 buildings and residences within the area of concern in March through July of 2018. Smoke testing results are included in **Section 4.4.3**.

Repair of privately-owned portions of the sewer system is not funded in the County's adopted Capital Improvement Program Plan for the Wastewater Utility; therefore, consideration has been given to the use of the Save Our Indian River Lagoon Tax funding. The Brevard County **Utility** Services Department estimates that infiltration and/or inflow due to rainfall and flooding associated with Hurricane Irma, caused 1,835 pounds per year (lbs/yr) of total nitrogen (TN) and 350 lbs/yr of total phosphorus (TP) to enter the lagoon from sewer overflowing from the South Beaches Regional WWTF sewer system. Staff reviewed 13 years of storm-related release data

(2004–2017) to estimate the average annual nutrient load to the lagoon from emergency sewage overflows. If repairing private connections could prevent similar overflows in the future, then the average annual nitrogen reduction benefit of such repairs would be approximately 988 lbs/yr of TN. The average cost effectiveness of sewer expansion projects funded in the 2017 Plan Supplement was \$852 per pound of nitrogen removed, thus the cost to reduce 988 lbs/yr of TN loading by implementing septic to sewer projects would be \$841,842. Therefore, the 2018 Update allocated \$840,000 to assist property owners with the cost to repair leaky sewer connections expected to be found through smoke testing.

After smoke testing was complete, based on the leaks identified, the cost to make the repairs in the pilot area was estimated at \$646,200. A second pilot area for smoke testing was added in 2019 and three more areas were added in 2020; however, funds were not added to assist owners with making repairs in these areas. Instead, the Citizen Oversight Committee and Brevard County Board of County Commissioners decided in 2020 to make the \$840,000 of funding available to offer grants county-wide for the repair of leaky laterals within the watershed of the IRL. **Table 4-14** summarizes the sewer laterals rehabilitation projects. It should be noted that smoke testing alone does not result in nutrient load reductions; identified issues must be repaired to achieve a nutrient load reduction benefit. Therefore, the funding for this type of project is focused on repairs to achieve reductions.

The Save Our Indian River Lagoon Trust Fund will also be used to conduct performance monitoring to measure the nutrient reduction benefits of repairing privately-owned leaky lateral connections. In addition to documenting less groundwater leaking into pipes and overwhelming the sewer infrastructure, monitoring will also seek to document improvement in groundwater quality that may occur when the leaks are repaired. The results of performance monitoring will be used to consider expansion of this program from the Satellite Beach pilot areas to other city and county sewer service areas. The lessons learned from this pilot study and a pilot study in Titusville (added in the 2019 Update) will be applied to future sewer lateral evaluation and repair projects.

Table 4-14: Projects for Sewer Laterals Rehabilitation

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per year of TN Removed	TP Reduction (lbs/yr)	Cost per Pound per Year of TP Removed	Plan Funding
2018, 2021	63ab	Satellite Beach Lateral Smoke Testing and Countywide Repair/Replacement+	Brevard County	Banana	988	\$850	188	\$4,468	\$840,000
2019	100	Osprey Basin Lateral Smoke Testing+	City of Titusville	North IRL	640	Not applicable	Not applicable	Not applicable	\$200,000
2020	114	Barefoot Bay Lateral Smoke Testing+	Brevard County Utility Services Department	Central IRL	864	Not applicable	Not applicable	Not applicable	\$90,000
2020	115	South Beaches Lateral Smoke Testing+	Brevard County Utility Services Department	Central IRL	1,662	Not applicable	Not applicable	Not applicable	\$200,000
2020	116	Merritt Island Lateral Smoke Testing+	Brevard County Utility Services Department	North IRL	2,042	Not applicable	Not applicable	Not applicable	\$250,000
-	-	Total	-	-	6,196	\$1,230 (average)	188	\$8,404 (average)	\$1,580,000

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

4.1.6 Septic System Removal and Upgrades

Septic systems are commonly used where central sewer does not exist. When properly sited, designed, constructed, maintained, and operated, septic systems are often a safe means of disposing of domestic waste but still add nutrients to the system. However, when septic systems are older and failing or are installed over poor soils close to the groundwater table or open water, they can be a major contributor of nutrients and bacterial and viral pathogens to the system. To address this source, options for both septic system removal and septic system upgrades were evaluated. It is important to note that although the County is taking the lead on these projects, the Florida Department of Health is responsible for the regulation and permitting of septic systems. The County will coordinate with Florida Department of Health on the septic system projects recommended in this plan.

Septic System Removal by Sewer Extension

In 2018, Brevard County conducted a more detailed evaluation of septic system impacts to surface waters through both groundwater monitoring and modeling using the Florida Department of Environmental Protection-approved ArcGIS-Based Nitrate Load Estimation Toolkit (Rios et al., 2013). This evaluation found that groundwater conductance and soil types were more important for nitrogen transport from septic systems than was previously accounted for in the approach used for ranking in the original Save Our Indian River Lagoon Plan. Therefore, for the 2019 Update, the approach to prioritize areas for septic system connection to the sewer system was modified. The updated approach and recommended projects are summarized below.

The updated approach to rank areas for septic system impacts used information on the potential nutrient contribution from the ArcGIS-Based Nitrate Load Estimation Toolkit (Rios et al., 2013). Potential nutrient contributions were determined based on numerous factors, but after testing model sensitivity to these factors, a simplified approach was developed for Brevard County that was based primarily on the spatial location of the septic system (i.e. Barrier Island, Merritt Island, Mainland, or Melbourne Tillman Water Control District), soil type (soil hydraulic conductance), and the minimum distance to waterbodies (Applied Ecology, 2018).

A direct comparison between the previous model that adapted studies from Martin and St. Lucie counties (Table 4-15) and the new model tailored to Brevard County's soil and water (Table 4-16) is difficult. For loading in pounds per year (lbs/yr), the previous study estimated total nitrogen (TN), which is the sum of nitrate, nitrite, ammonia, and organic nitrogen, whereas the new approach using the ArcGIS-Based Nitrate Load Estimation Toolkit estimated only nitrate and ammonia. Through the detailed ArcGIS-Based Nitrate Load Estimation Toolkit analysis it was also determined that there are 6,260 fewer septic systems in the IRL Basin than estimated in the original plan.

Table 4-15: Original Estimate of TN Loading and Cost to Connect for Septic Systems

Septic System Distance from Surface Water	Number of Septic Systems	TN Load Per System (lbs/yr)	TN Load (lbs/yr)	Cost per System to Connect	Total Cost	Cost per Pound per Year of TN
Less than 55 yards	15,090	27.095	408,863	\$20,000	\$301,800,000	\$738
Between 55 and 219 yards	25,987	6.865	178,395	\$20,000	\$519,740,000	\$2,913
Greater than 219 yards	18,361	0.001	10	\$20,000	\$367,220,000	\$37,624,010
Total in IRL Basin	59,438	9.880 (average)	587,268	\$20,000	\$1,188,760,000	\$2,024 (average)

Table 4-16: Updated Estimate of TN Loading based on ArcGIS-Based Nitrate Load Estimation Toolkit and Updated Cost to Connect for Septic Systems

Septic System Distance from Surface Water	Number of Septic Systems	TN Load per System (lbs/yr)	TN Load (lbs/yr)	Cost per System to Connect	Total Cost	Cost per Pound per Year of TN
Less than 55 yards	15,737	19.037	299,590	\$33,372	\$525,175,164	\$1,753
Between 55 and 219 yards	23,969	3.612	86,575	\$33,372	\$799,893,468	\$9,239
Greater than 219 yards	13,472	0.802	10,805	\$33,372	\$449,587,584	\$41,611
Total in IRL Basin	53,178	7.465 (average)	396,970	\$33,372	\$1,774,656,216	\$4,471 (average)

Those septic systems within 55 yards of surface waters were further analyzed by soil hydraulic conductivity since it was found to be a highly influential variable in nutrient loading from septic systems. Hydraulic conductance is the ability of water to move through pore space in the soil with sandy soils having a higher conductance compared to loamy and clay soils. As shown in **Table 4-17**, nitrogen loading is much higher in the very high and high conductivity soils compared to the average for all soils within 55 yards. Although only half of the septic systems are in very high and high conductance soils, these account for 76% of the nitrogen loading.

Table 4-17: Septic Systems by Soil Hydraulic Conductance Class within 55 Yards of Surface Waters

Hydraulic Conductivity of Septic Systems Within 55 yards of Surface Water	Number of Septic Systems	TN Load per System (lbs/yr)	TN Load (lbs/yr)	Cost per System to Connect	Total Cost	Cost per Pound per Year of TN
Very High	1,899	34.926	66,324	\$33,372	\$63,373,428	\$956
High	6,304	26.021	164,039	\$33,372	\$210,377,088	\$1,283
Medium	3,230	12.198	39,401	\$33,372	\$107,791,560	\$2,736
Low	3,396	5.930	20,141	\$33,372	\$113,331,312	\$5,628
Very Low	908	10.664	9,683	\$33,372	\$30,301,776	\$3,129
Total	15,737	19.037 (average)	299,588	\$33,372	\$525,175,164	\$1,753 (average)

Table 4-18 shows those properties with septic systems in very high and high hydraulic conductance soils distributed by distance to surface waterbodies. Waterfront properties served by septic systems, including those properties adjacent to the lagoon, tributary rivers and creeks, or on canals or drainage ditches that discharge to the lagoon contribute 48% of all septic system loading in the IRL watershed in Brevard County. Changes in the 2019 Update shifted septic to sewer and septic upgrade projects as much as feasible to areas of high conductivity soils located adjacent to waterways that contribute the greatest loading to the IRL.

Table 4-18: Septic Systems in Very High and High Hydraulic Conductance Soils Distributed by Distance to Surface Waters

Septic System Distance from Surface Water (yards)	Number of Septic Systems	TN Load per System (lbs/yr)	TN Load (lbs/yr)	Cost per System to Connect	Total Cost	Cost per Pound per Year of TN
0-11	5,584	33.838	188,956	\$33,372	\$186,349,248	\$986
12-22	1,207	16.404	19,799	\$33,372	\$40,280,004	\$2,034
23-33	465	17.466	8,121	\$33,372	\$15,517,980	\$1,911
34-44	384	12.458	4,784	\$33,372	\$12,814,848	\$2,679
45-55	563	15.456	8,702	\$33,372	\$18,788,436	\$2,159
Total in IRL Basin	8,203	28.083 (average)	230,362	\$33,372	\$273,750,516	\$1,188

For the funded opportunities that were identified using the new ranking method, the number of lots that could be connected, associated cost of the connection, and estimated TN reductions are shown in **Table 4-19**. **Figure 4-10** through **Figure 4-14** show the location of each of these areas. These funded opportunities, including the quick connection projects described below, represent the connection of approximately 4% of the septic systems in Brevard County within the IRL Basin but reduce over 17% of the nutrient load contribution attributed to existing septic systems in Brevard.

Another opportunity for removing septic systems is to use a hybrid septic tank effluent pumping system. In this system, effluent from the septic tank is connected to sewer pressure lines. Small-diameter pipes, which can be installed relatively quickly, are used instead of the gravity sewer system. A high pressure ½ horse power pump (115 volt) pumps the effluent from the septic system to a force main or gravity sewer system. The City of Vero Beach is installing these systems and they are leaving the drainfields in place, which saves money and allows for a backup in the event that a power outage affects the septic tank effluent pumping system. If the drainfield is not left in place, a 500-gallon pump chamber is installed to allow enough reserve capacity to address power outages. Each septic tank effluent pumping system also has an emergency generator receptacle to address long-term power outages associated with hurricanes. The estimated cost per connection is \$6,000 to \$10,000, which includes the cost of the pipes. The City of Vero Beach maintains the septic tank effluent pumping system and pumps out the septic tank when needed. The customer pays the electrical costs to operate the pump for this system.

For highly ranked properties located within the vicinity of a pressure line or gravity sewer system, the septic tank effluent pumping system may be a good option instead of the septic system upgrades described below. If septic tank effluent pumping systems are selected as a preferred option anywhere in Brevard County, specific locations for septic tank effluent pumping system installation can be submitted for funding consideration through the annual project funding request and plan update process.

Table 4-19: Projects for Septic System Removal

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per Year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
Original	2016-47	Sykes Creek - Zone N*	Brevard County	Banana	2,784	\$935	Not applicable	Not applicable	\$2,603,016
Original	2016-48	Sykes Creek - Zone M*	Brevard County	Banana	1,798	\$1,039	Not applicable	Not applicable	\$1,868,832
Original	2016-49	Sykes Creek - Zone T*	Brevard County	Banana	3,360	\$1,470	Not applicable	Not applicable	\$4,939,056
Original	2016-29	South Banana - Zone B*	Brevard County	Banana	915	\$1,495	Not applicable	Not applicable	\$1,368,252
Original	2016-30	City of Rockledge*	City of Rockledge	North IRL	712	\$703	Not applicable	Not applicable	\$500,580
Original	2016-31	City of Cocoa - Zone K*	City of Cocoa	North IRL	1,663	\$722	Not applicable	Not applicable	\$1,201,392
Original	109	City of Titusville - Zones A-G*	City of Titusville	North IRL	1,563	\$769	Not applicable	Not applicable	\$1,201,392
Original	203	South Central - Zone A*	Brevard County	North IRL	3,655	\$922	Not applicable	Not applicable	\$3,370,572
Original	2016-35	South Beaches - Zone A*	Brevard County	North IRL	1,306	\$945	Not applicable	Not applicable	\$1,234,764
Original	2016-32	City of Cocoa - Zone J*	City of Cocoa	North IRL	3,259	\$963	Not applicable	Not applicable	\$3,136,968
Original	2016-36	South Beaches - Zone O*	Brevard County	North IRL	136	\$979	Not applicable	Not applicable	\$133,488
Original	2016-33	City of Melbourne*	City of Melbourne	North IRL	878	\$988	Not applicable	Not applicable	\$867,672
Original	2020-34	South Central - Zone F*	City of Melbourne	North IRL	1,688	\$1,008	Not applicable	Not applicable	\$1,701,972
Original	2016-37	South Beaches - Zone P*	Brevard County	North IRL	489	\$1,024	Not applicable	Not applicable	\$500,580
Original	2016-27	Sharpes - Zone A*	Brevard County	North IRL	5,248	\$1,183	Not applicable	Not applicable	\$6,207,192
Original	2016-38	City of Titusville - Zone H*	City of Titusville	North IRL	910	\$1,284	Not applicable	Not applicable	\$1,168,020
Original	2016-40	Rockledge - Zone B*	City of Rockledge	North IRL	4,037	\$1,323	Not applicable	Not applicable	\$5,339,520
Original	2016-28	South Central – Zone D (Melbourne)*	City of Melbourne	North IRL	177	\$1,500	Not applicable	Not applicable	\$265,500
Original	2016-39	City of Palm Bay – Zone A*	City of Palm Bay	Central IRL	2,136	\$1,203	Not applicable	Not applicable	\$2,569,644
Original	2016-46	City of Palm Bay – Zone B*	City of Palm Bay	Central IRL	6,809	\$1,220	Not applicable	Not applicable	\$8,309,628
2017	1	Breeze Swept Septic to Sewer Connection+	City of Rockledge	North IRL	2,002	\$440	Not applicable	Not applicable	\$880,530
2017	2a	Merritt Island Septic Phase Out Project+	Merritt Island Redevelopment Agency	North IRL	2,501	\$128	Not applicable	Not applicable	\$320,000
2017	4	Hoag Sewer Conversion+	City of Melbourne	Central IRL	101	\$852	Not applicable	Not applicable	\$86,031
2017	5	Pennwood Sewer Conversion	City of Melbourne	Central IRL	48	\$847	Not applicable	Not applicable	\$40,632

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per Year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
2018	60	Sylvan Estates Septic-to-Sewer Conversion+	City of West Melbourne	Central IRL	1,073	\$1,455	Not applicable	Not applicable	\$1,561,215
2018	61	Riverside Drive Septic-to-Sewer Conversion+	City of Melbourne	North IRL	305	\$872	Not applicable	Not applicable	\$265,960
2018	62	Roxy Avenue Septic-to-Sewer Conversion+	City of Melbourne	North IRL	102	\$872	Not applicable	Not applicable	\$88,944
2020	145	Merritt Island - Zone F+	Brevard County Utility Services Department	Banana	1,292	\$851	Not applicable	Not applicable	\$1,100,000
2020	50b	South Central - Zone C+	Brevard County Utility Services Department	North IRL	5,146	\$1,283	Not applicable	Not applicable	\$6,600,000
2020	136	Micco - Zone B+	Brevard County Utility Services Department	Central IRL	8,687	\$1,036	Not applicable	Not applicable	\$9,000,000
2020	146	Merritt Island - Zone C+	Brevard County Utility Services Department	Banana	1,419	\$1,113	Not applicable	Not applicable	\$1,580,000
2020	147	Sykes Creek - Zone R+	Brevard County Utility Services Department	Banana	2,925	\$1,197	Not applicable	Not applicable	\$3,500,000
2020	150	South Central - Zone D+	Brevard County Utility Services Department	North IRL	3,387	\$1,410	Not applicable	Not applicable	\$4,774,500
2020	148	North Merritt Island - Zone E+	Brevard County Utility Services Department	Banana	2,541	\$1,431	Not applicable	Not applicable	\$3,635,000
2020	151	Merritt Island - Zone G+	Brevard County Utility Services Department	Banana	11,078	\$1,500	Not applicable	Not applicable	\$16,617,000
2020	152	Sharpes - Zone B+	Brevard County Utility Services Department	North IRL	2,692	\$1,500	Not applicable	Not applicable	\$4,038,000
2020	153	Cocoa - Zone C+	Brevard County Utility Services Department	North IRL	3,499	\$1,500	Not applicable	Not applicable	\$5,248,500
2021	3	Micco Sewer Line Extension (Phase I and II)+	Brevard County	Central IRL	1,493	\$1,500	Not applicable	Not applicable	\$2,239,500
2021	189	Avendia del Rio Septic to Sewer+	City of Melbourne	Central IRL	71	\$986	Not applicable	Not applicable	\$70,000
2021	190	Bowers Septic to Sewer+	City of Melbourne	North IRL	120	\$1,225	Not applicable	Not applicable	\$147,000
2021	191	Kent and Villa Espana Septic to Sewer Conversion+	City of Melbourne	North IRL	542	\$1,310	Not applicable	Not applicable	\$710,000
-	-	Total	-	-	94,547	\$1,174 (average)	Not applicable	Not applicable	\$110,990,852

Note: The projects highlighted in green and marked with an asterisk were identified in the original plan. The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

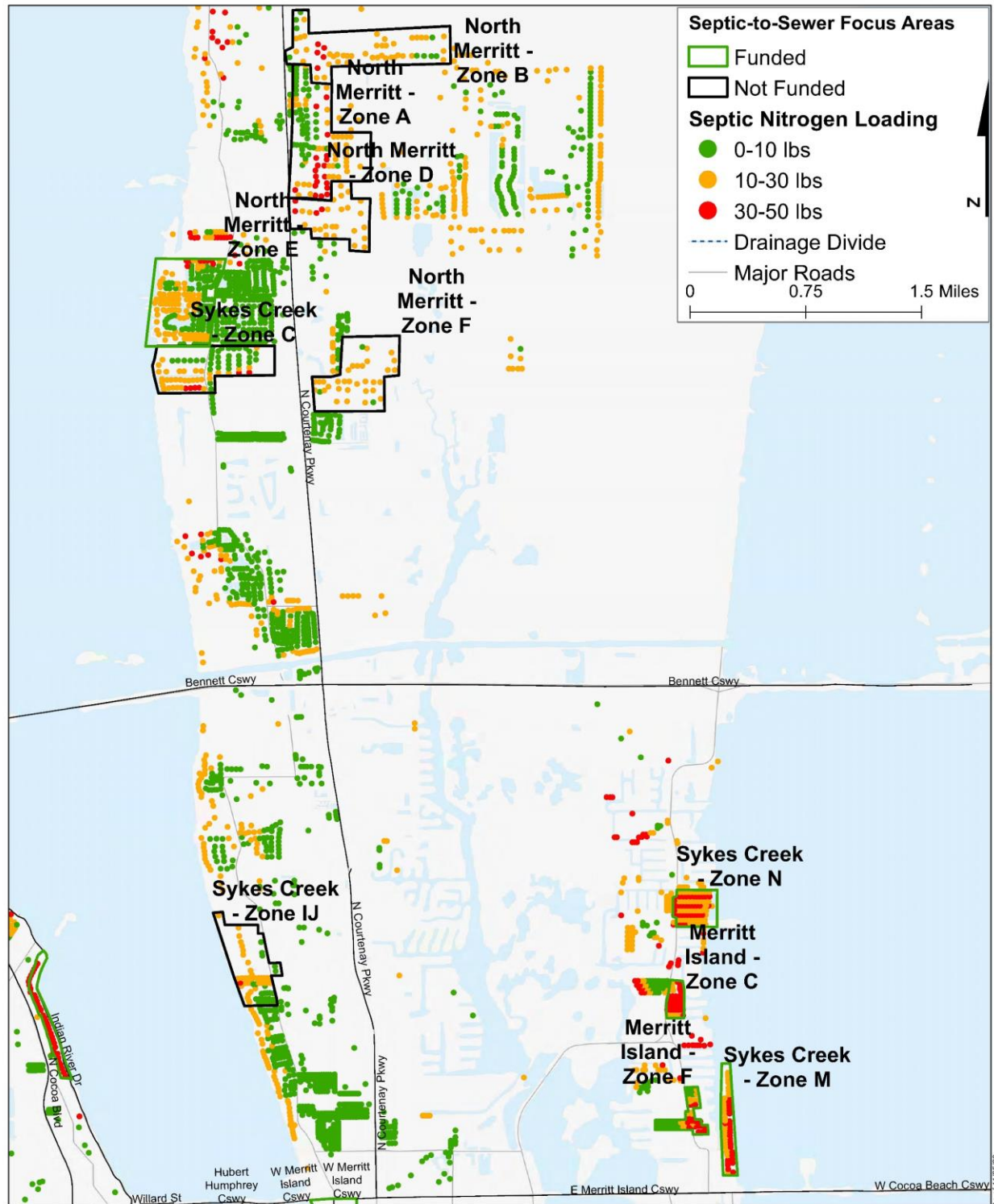


Figure 4-2: Septic System Removal Projects in Banana River Lagoon

Figure 4-2 [Long Description](#)

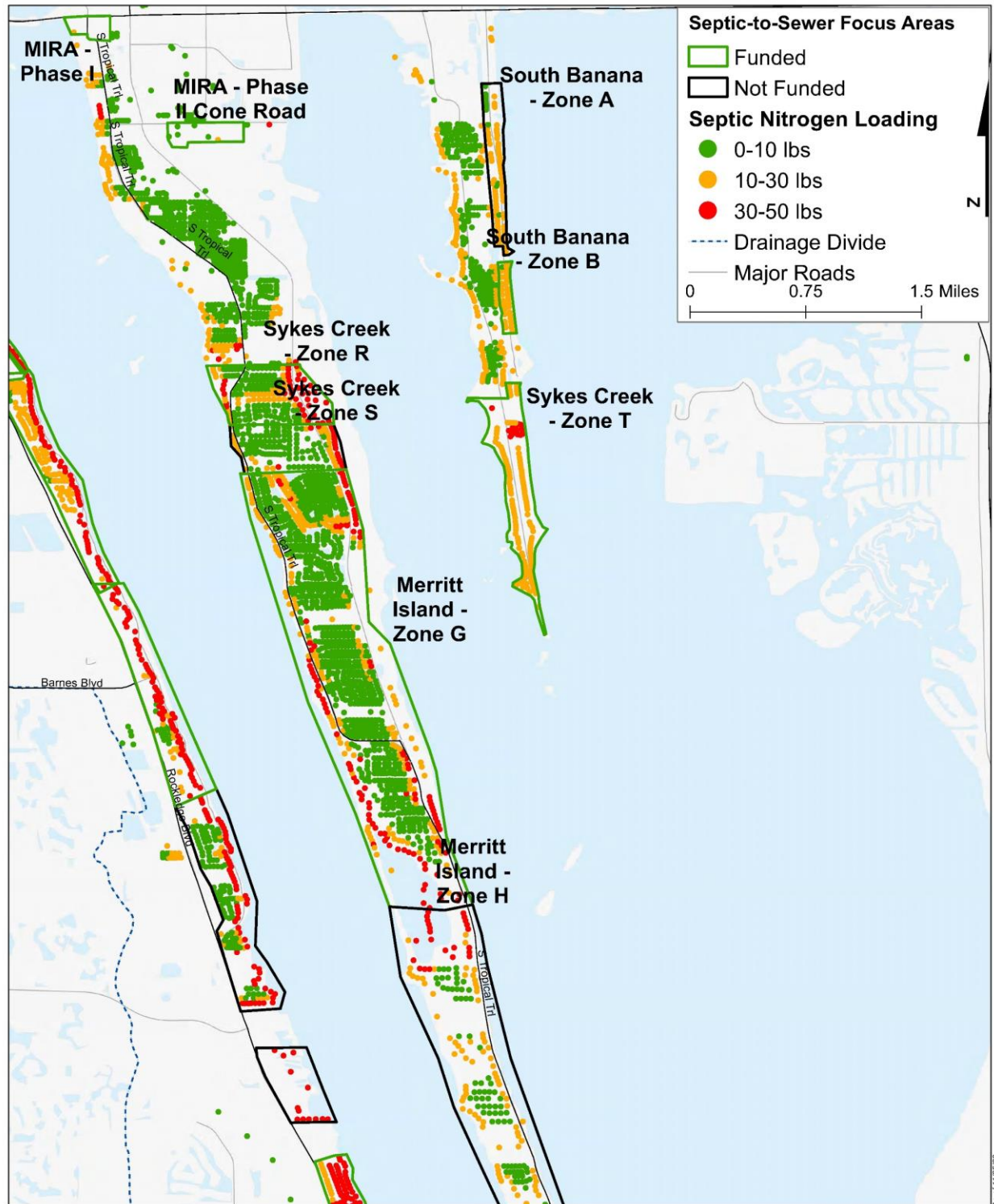


Figure 4-3: Septic System Removal Projects in Banana River Lagoon, continued

Figure 4-3 [Long Description](#)

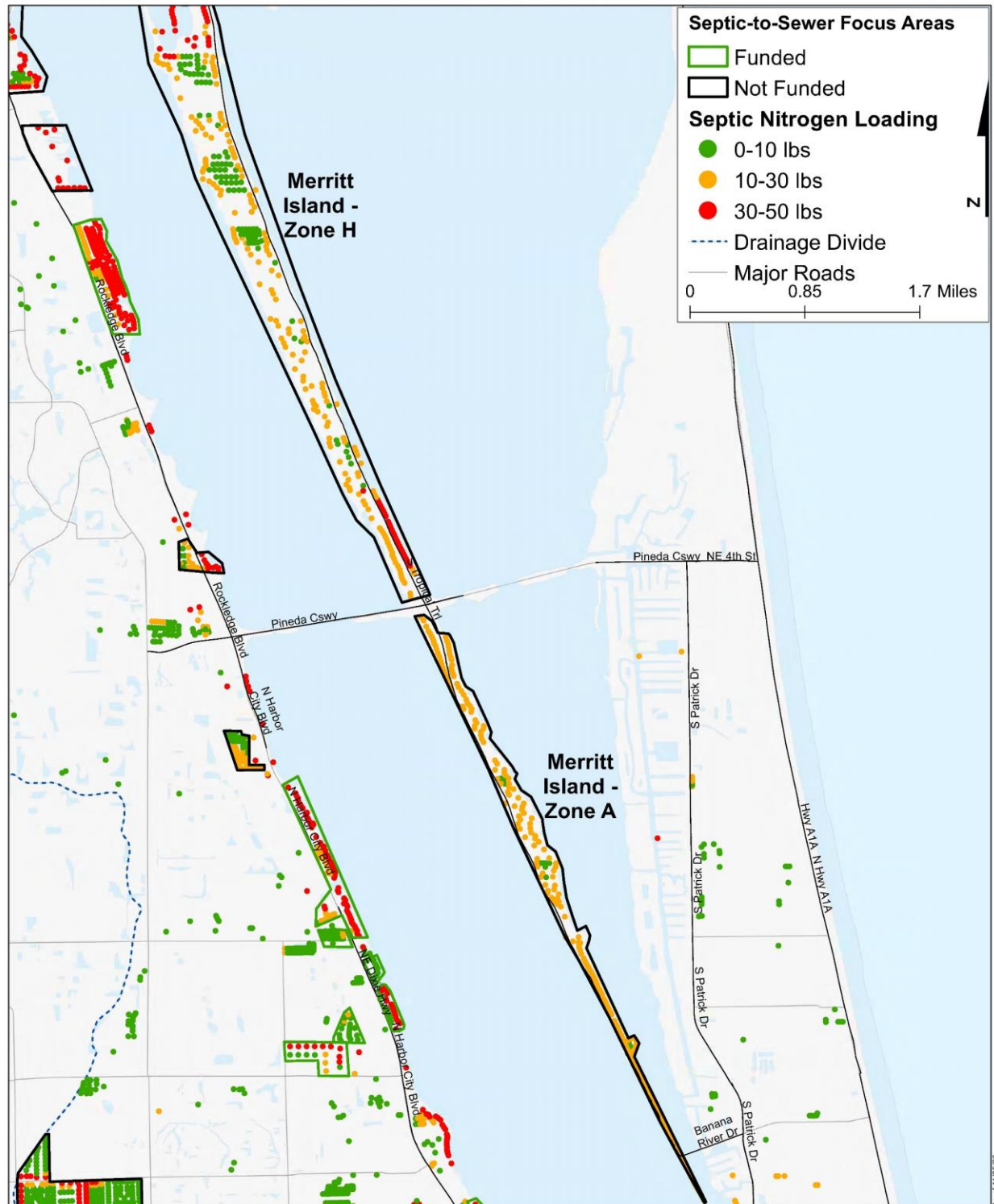


Figure 4-4: Septic System Removal Projects in Banana River Lagoon, continued

Figure 4-4 [Long Description](#)

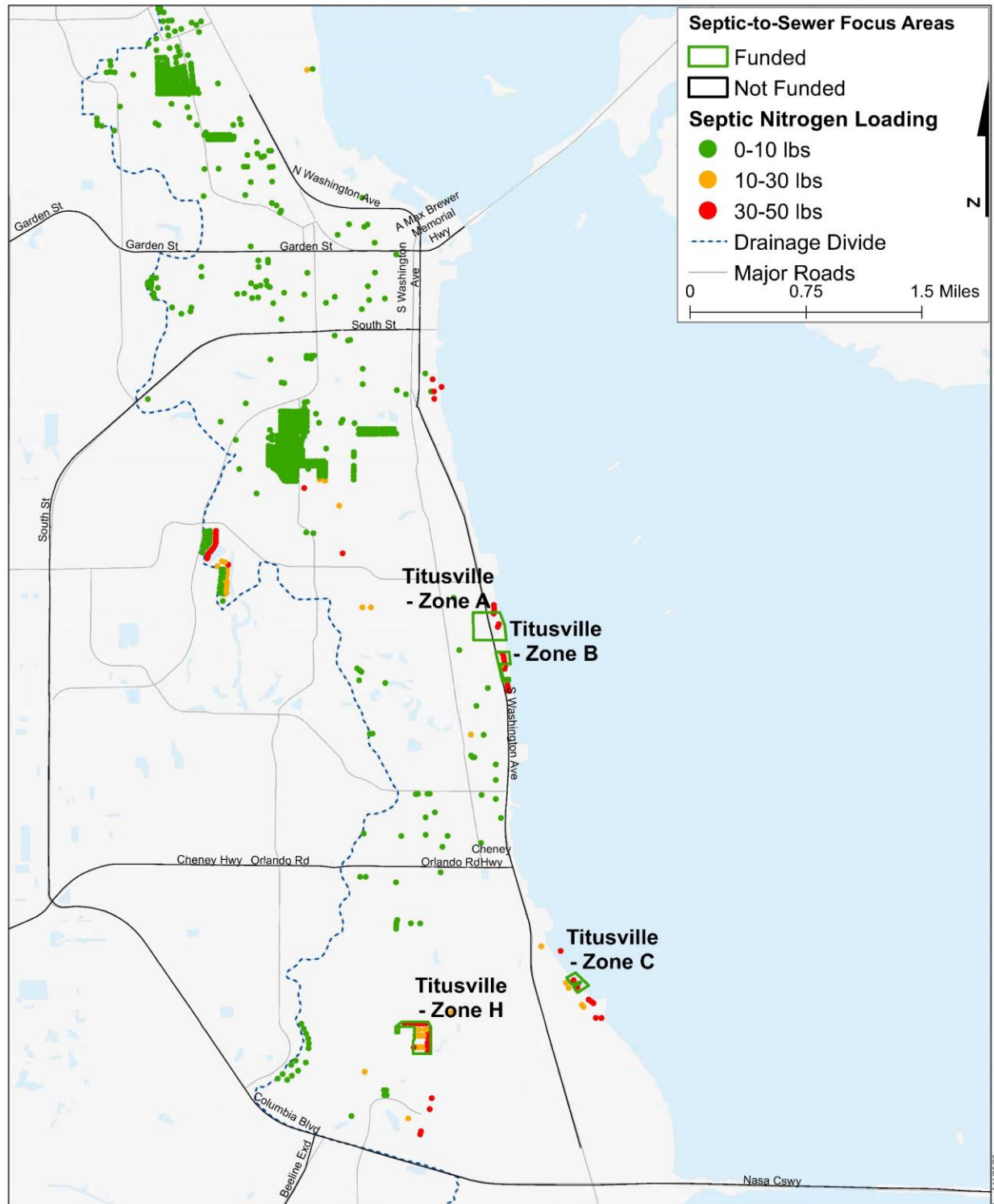


Figure 4-5: Septic System Removal Projects in North IRL

Figure 4-5 [Long Description](#)

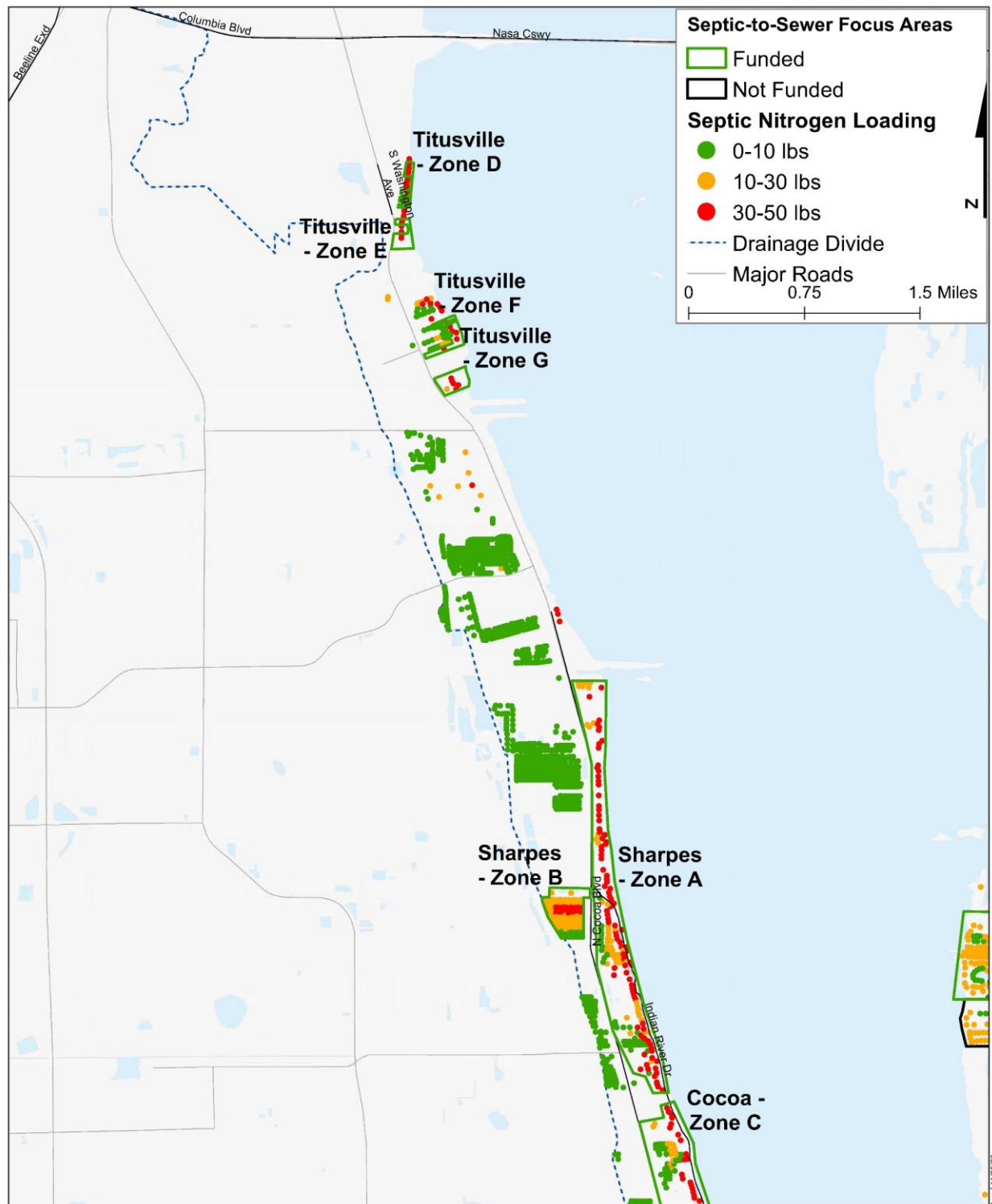


Figure 4-6: Septic System Removal Projects in North IRL, continued

Figure 4-6 [Long Description](#)

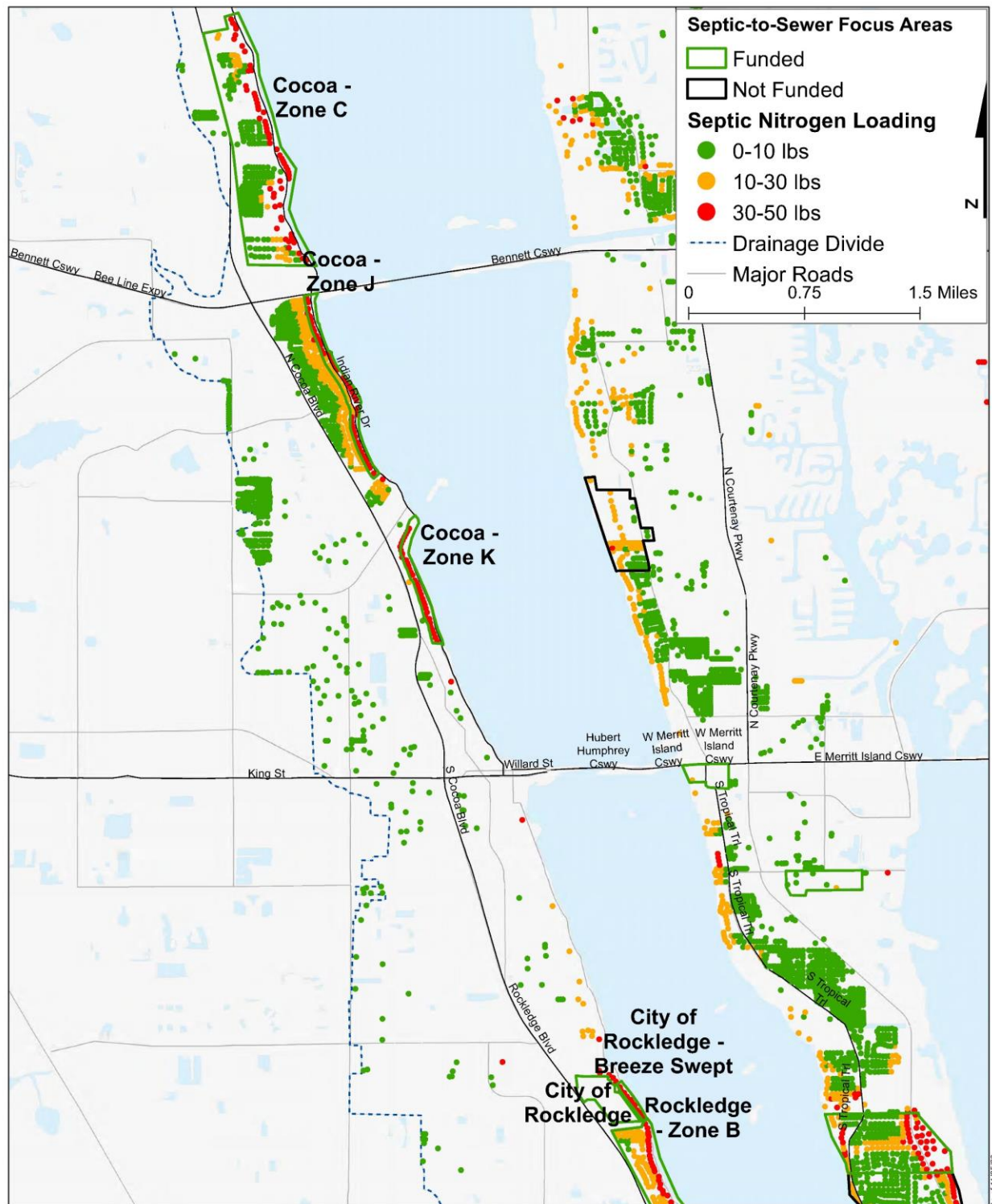


Figure 4-7: Septic System Removal Projects in North IRL, continued

Figure 4-7 [Long Description](#)

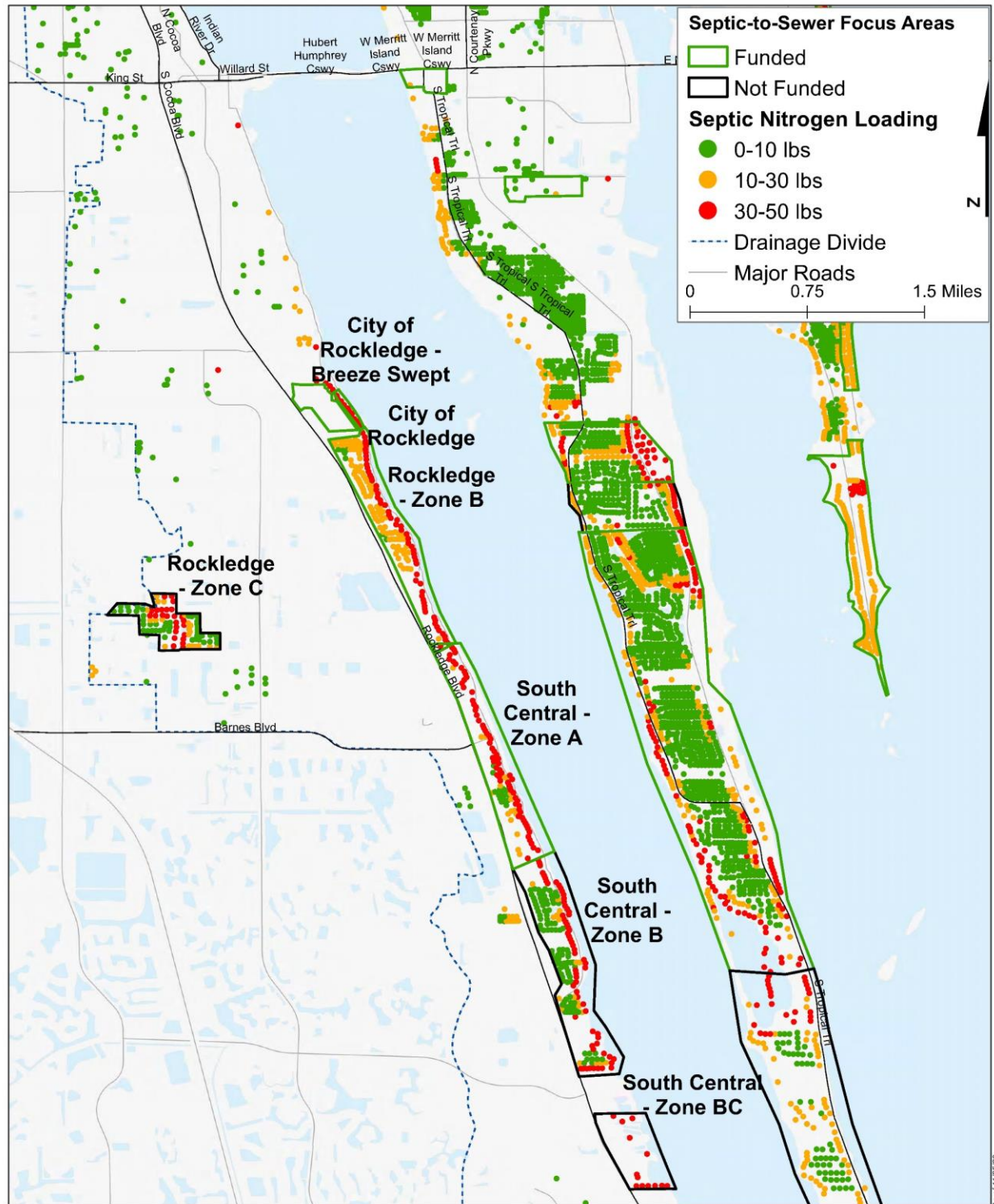


Figure 4-8: Septic System Removal Projects in North IRL, continued

Figure 4-8 [Long Description](#)

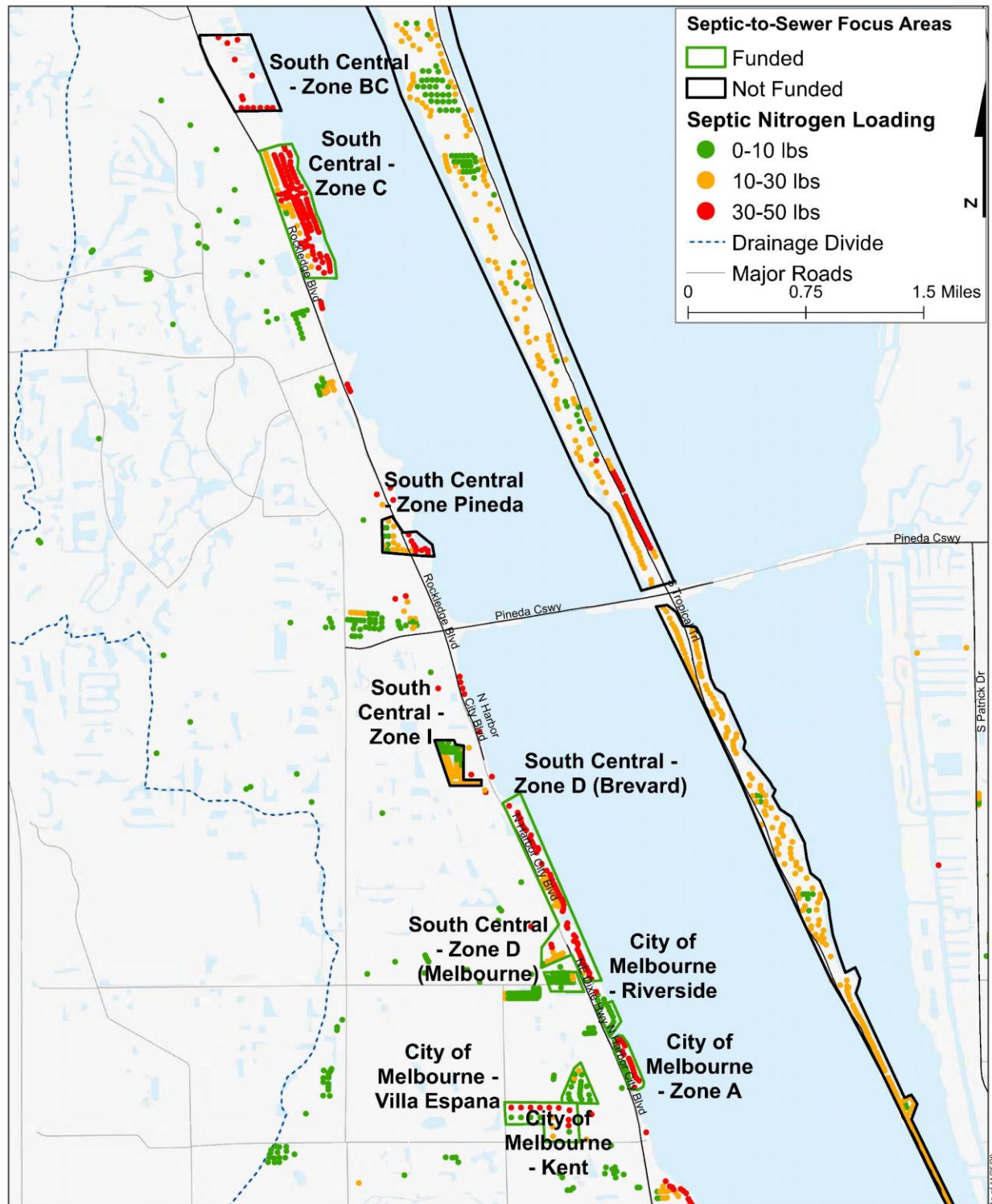


Figure 4-9: Septic System Removal Projects in North IRL, continued

Figure 4-9 [Long Description](#)

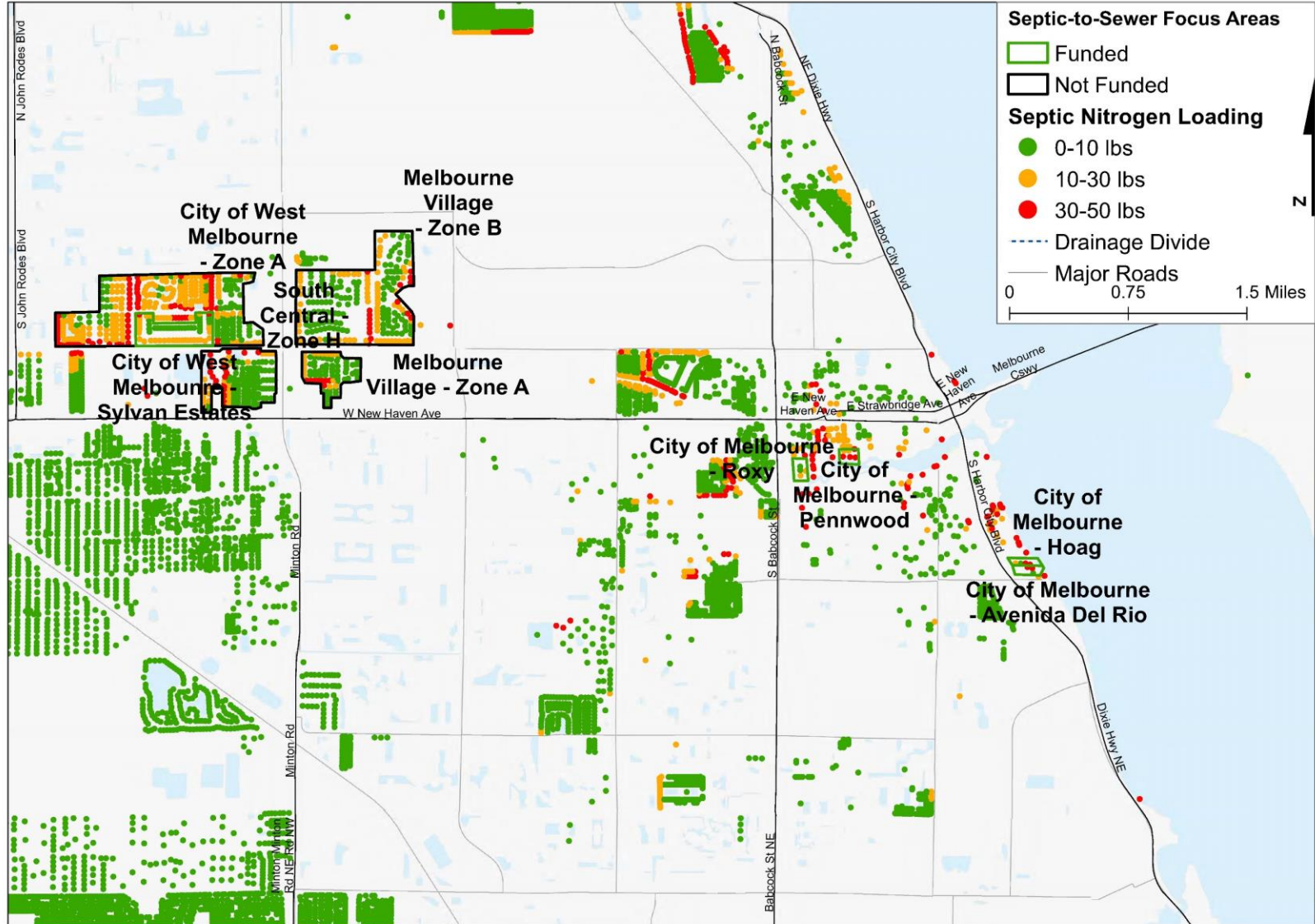


Figure 4-11: Septic System Removal Projects in Central IRL

Figure 4-11 [Long Description](#)

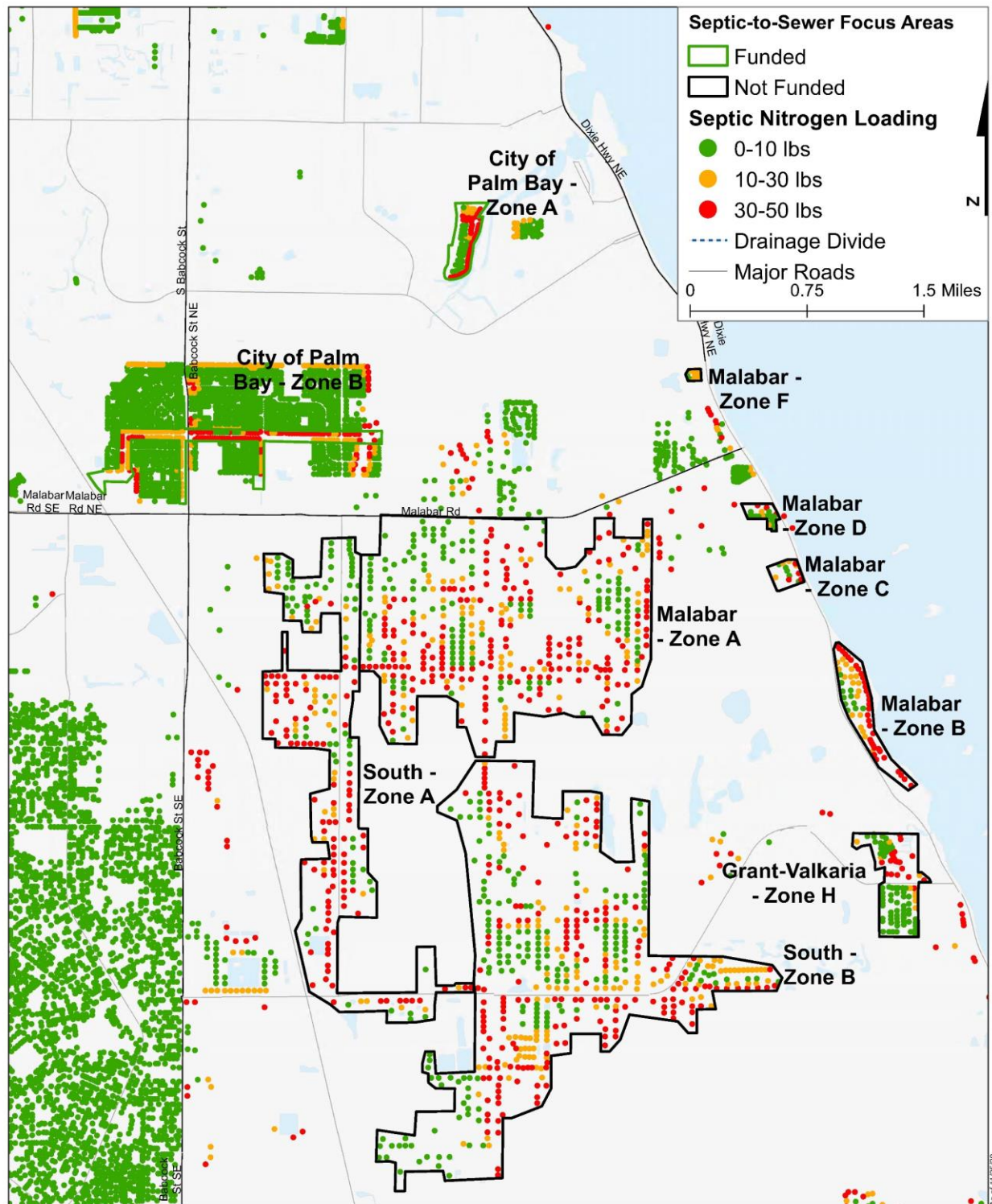


Figure 4-12: Septic System Removal Projects in Central IRL, continued

Figure 4-12 [Long Description](#)

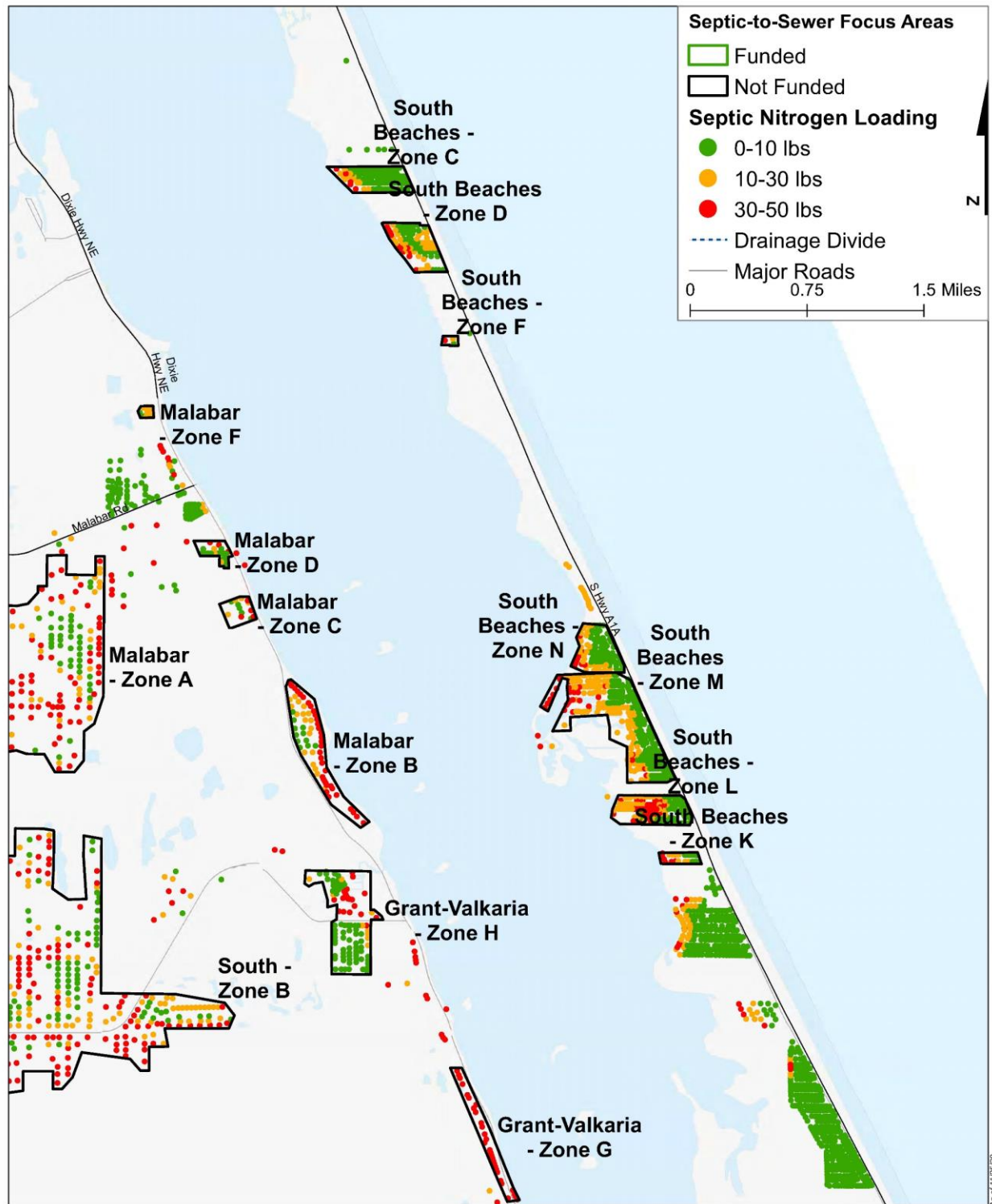


Figure 4-13: Septic System Removal Projects in Central IRL, continued

Figure 4-13 [Long Description](#)

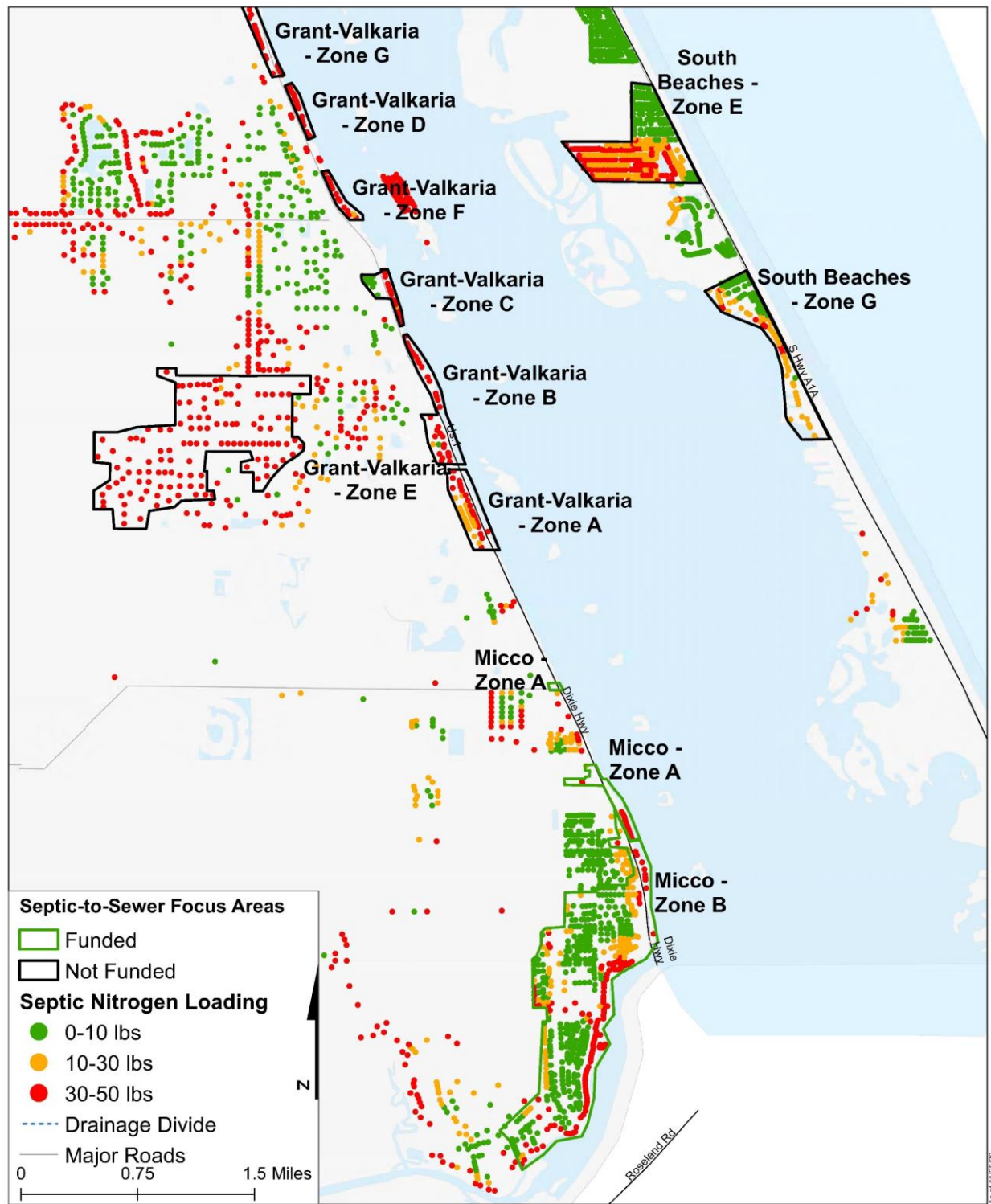


Figure 4-14: Septic System Removal Projects in Central IRL, continued

Figure 4-14 [Long Description](#)

Septic System Removal by Sewer Connection

The detailed septic analysis also identified 4,496 properties located within 30 feet of existing sewer infrastructure; however, not all potential opportunities have been identified due to incomplete records. The highest loading “Quick Connect” opportunities are included in Table 4-20 based on their ability to connect to gravity or force main sewer and are shown in Figure 4-15 through Figure 4-17.

Quick Connects to gravity sewer will be funded on a prorated basis of \$700 per pound of nitrogen loading to the lagoon reduced, up to a maximum of \$18,000 for connection to force main sewer and a maximum of \$12,000 for connection to gravity sewer. Funding allocation for this grant program is based on the number of highest priority connection opportunities within each sub-lagoon as reported in Table 4-20.

Table 4-20: Projects for Septic System Removal by Sewer Connection

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	TN Cost per Pound per Year	TP Reduction (lbs/yr)	TP Cost per Pound per Year	Plan Funding
2019	2016-16	Banana Quick Connects – 144 lots+	Brevard County	Banana	3,224	\$592	Not applicable	Not applicable	\$1,908,000
2019	2016-18	North IRL Quick Connects – 463 lots+	Brevard County	North IRL	11,339	\$531	Not applicable	Not applicable	\$6,018,000
2019	2016-19	Central IRL Quick Connects – 269 lots+	Brevard County	Central IRL	6,883	\$487	Not applicable	Not applicable	\$3,354,000
-	-	Total	-	-	21,446	\$526 (average)	Not applicable	Not applicable	\$11,280,000

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

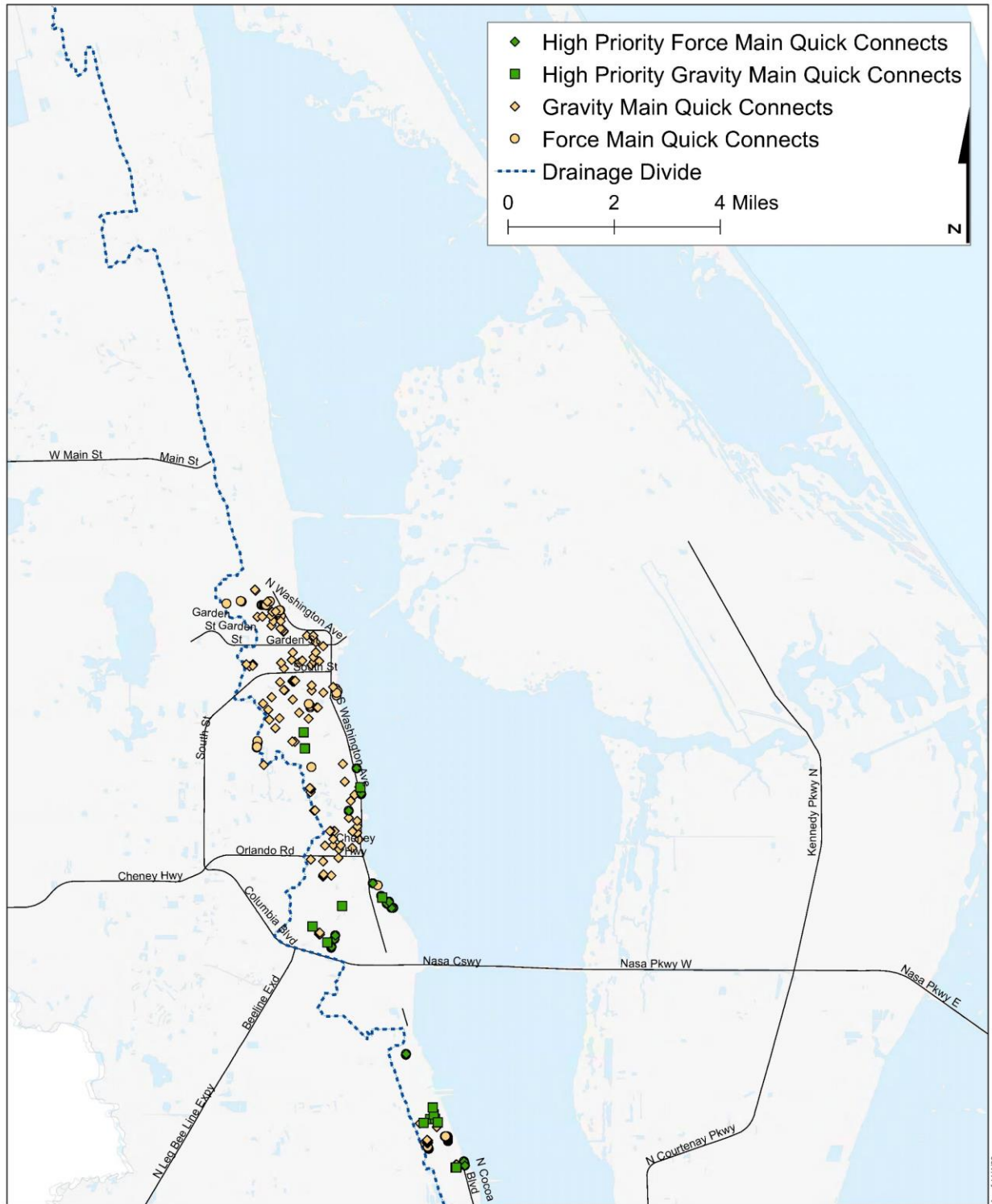


Figure 4-15: Quick Connection Septic System Removal Locations in North Brevard County

Figure 4-15 [Long Description](#)

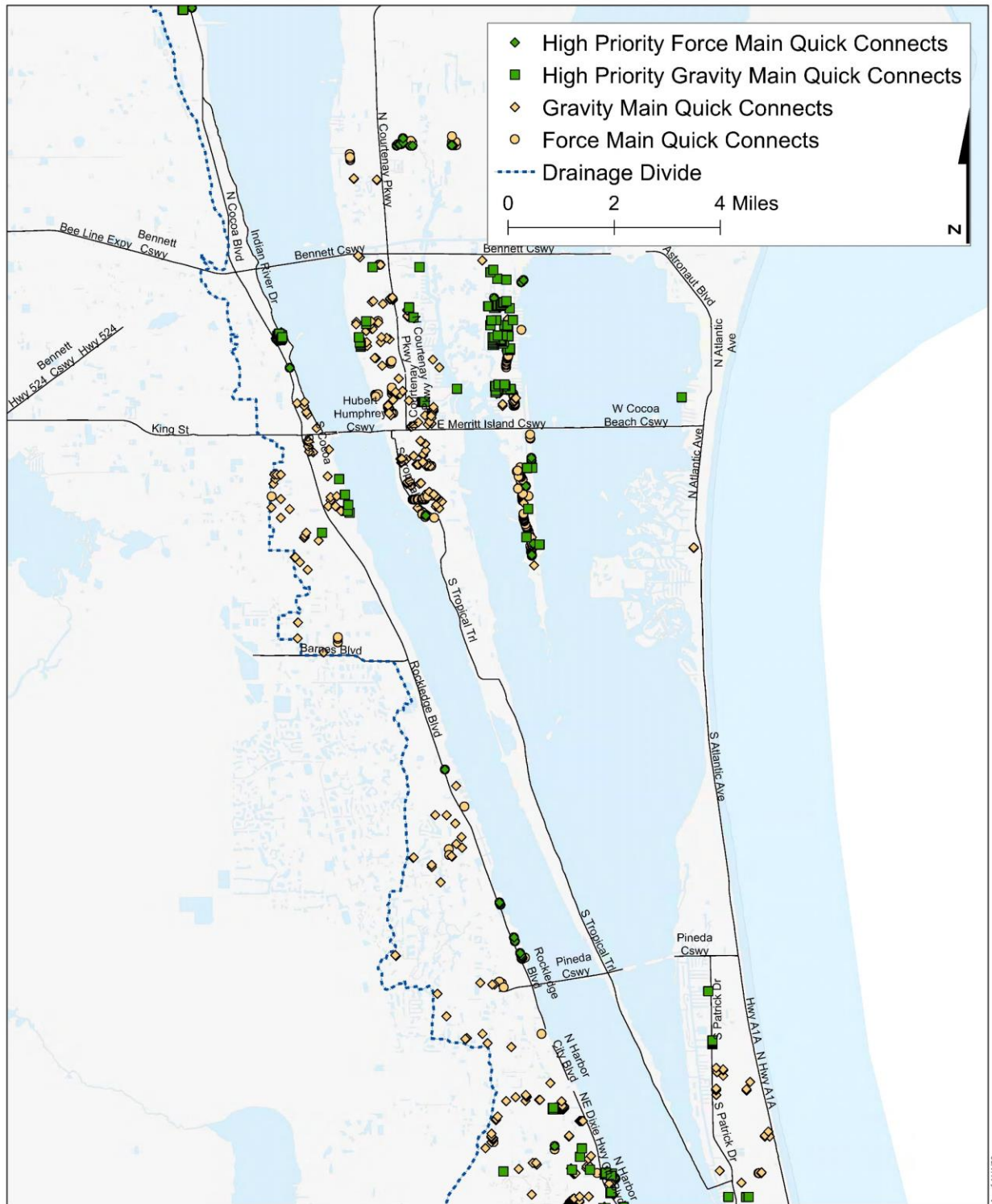
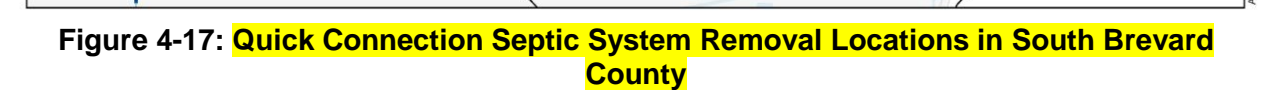


Figure 4-16: Quick Connection Septic System Removal Locations in Central Brevard County

Figure 4-16 [Long Description](#)



Septic System Upgrades

In locations where providing sewer service is not feasible due to distance from sewer infrastructure, facility capacity, or insufficient density of high-risk systems, there are options to upgrade the highest risk septic systems to increase the nutrient and pathogen removal efficiency. In recent years, research has been conducted on passive treatment systems, which provide significant treatment efficiencies without monthly sewer fees or highly complex maintenance needs for mechanical features.

In July 2018, the Florida Department of Health adopted new rules that allow for In-Ground Nitrogen-Reducing Biofilters under the drainfield of septic systems (**Figure 4-18**). This passive nitrogen-reducing technology is a result of the Florida Onsite Sewage Nitrogen Reduction Strategies project and the Springs and Aquifer Protection Act. Pilot projects to install this new system are currently in progress throughout the state and Brevard County is a participating partner in these initial installations. This passive **In-Ground Nitrogen-Reducing Biofilter** system is expected to remove 65% of nitrogen from the effluent and cost an extra \$4,000 above the typical costs of a conventional septic system. This system requires 51" of soil above the groundwater and, therefore, may not be appropriate in areas with shallow groundwater.

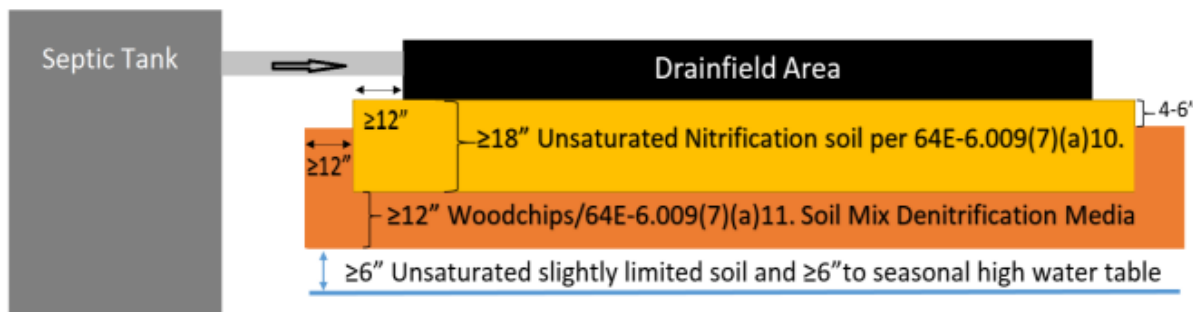


Figure 4-18: Example In-Ground Nitrogen-Reducing Biofilter Septic System

Figure 4-18 [Long Description](#)

The current ruling by Florida Department of Health only allows woodchips within the denitrification layer of this system; however, other biosorption activated media can also enhance nutrient and bacterial removal before the effluent reaches the drainfield or groundwater and potentially remove more than 65% of nitrogen from effluent. A test of the biosorption activated media removal capacity was conducted at Florida's Showcase Green Envirohome in Indialantic, Florida. This test location is a residential site built with stormwater, graywater, and wastewater treatment in a compact footprint onsite (Wanielista et al., 2011). The media used in this study was Bold & Gold®, which is a patented blend of mineral materials, sand, and clay. In this study, the effluent to the septic tank was evenly divided between a sorption filter media bed/conventional drainfield (innovative system) and to a conventional drainfield. The study found that the TN and TP removal efficiencies were 76.9% and 73.6%, respectively, for the Bold & Gold plus drainfield system, which was significantly higher than the 45.5% TN removal and 32.1% TP removal from a conventional drainfield alone.

In 2019, Brevard County entered into agreement with the Florida Department of Health to test In-Ground Nitrogen Reducing Biofilter septic systems with known nitrogen-reducing media. The first six septic systems under this agreement were installed in summer 2020 using Bold & Gold wastewater filtration media. To measure effectiveness of the alternative media, these systems will be monitored quarterly for one year. The agreement allows for testing of other nitrogen-reducing media as they become available.

In areas where septic systems are in close proximity to a surface waterbody but are not in a location where connection to the sewer system is feasible, adding biosorption activated media to the drainfield or upgrading to the passive nitrogen removing systems could be used to retrofit the existing septic systems. The estimated cost for these retrofits was increased from \$16,000 per septic system in the original plan to \$18,000 each in the 2019 Update. Any operations and maintenance costs associated with these upgrades, once installed, will be the responsibility of the owner. To be conservative and to match the Florida Department of Health rule, the estimates of the TN reductions that could be achieved are based on an efficiency of 65% removal, which is the average efficiency from the two studies described above that tested biosorption activated media in the drainfield.

In areas where the In-Ground Nitrogen-Reducing Biofilters system or biosorption activated media retrofits are not appropriate, National Sanitation Foundation 245 certified aerobic treatment units would be the best option. National Sanitation Foundation 245 certification verifies that these advanced septic systems remove at least 50% of nitrogen within the septic tank, although some systems have been shown to remove up to 80% of nitrogen. The drainfield is credited with removing another 15% of nitrogen, which brings the total nitrogen removed by the advanced septic system to 65%. Due to the electrical plumbing requirements of aerobic treatment units, the owner is required to have a maintenance agreement with a septic company and an operating permit from the Florida Department of Health.

There are options for other types of distributed onsite sewage treatment systems that are approved by the Florida Department of Environmental Protection as miniature sewage treatment plants sized for residential and commercial use. These systems provide additional opportunities to improve nutrient removal from sites where connection to central sewer is not feasible and are eligible options for septic system upgrades as part of this plan. Both the Save Our Indian River Lagoon Project Plan and Springs and Aquifer Protection Act have highlighted the need for other wastewater options that have less impact on surface water and groundwater. Brevard County will continue to vet these options as they become available in Florida.

To prioritize the septic systems for upgrade, the scoring matrix used in the original Save Our Indian River Lagoon Project Plan was replaced in the 2019 Update based on ArcGIS-Based Nitrate Load Estimation Toolkit modeling performed during determination of the Nitrogen Reduction Overlay area adopted in the Countywide Septic Ordinance, as noted above.

The septic systems with the highest loading in each sub-lagoon are recommended for retrofit upgrades to reduce the impacts of these septic systems on the waterbodies. The costs and nutrient reductions by sub-lagoon are shown in **Table 4-21**. The locations of these septic system upgrades are shown in **Figure 4-19**, **Figure 4-20**, and **Figure 4-21**. This upgrade opportunity addresses 2% of the septic systems in the IRL drainage basin.

Septic retrofit upgrades will be funded on a prorated basis of \$700 per pound of nitrogen loading to the lagoon reduced, up to a maximum of \$18,000 per septic parcel. Funding allocation for this grant program is based on the number of highest priority upgrade opportunities within each sub-lagoon as reported in **Table 4-21**. Septic retrofit upgrades are available to properties not included within a funded septic to sewer project area. **Table 4-21** also summarizes the septic system upgrade projects approved as part of an annual update.

In some circumstances, properties qualified for septic system upgrade funding may be near a sewer line. These septic upgrade funds can be used to connect the qualified property to sewer as this option results in a greater reduction in nitrogen loading to the lagoon.

Table 4-21: Projects for Septic System Upgrades

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN	TP Reduction (lbs/yr)	Cost per Pound per Year of TP	Plan Funding
Original	51	Banana River Lagoon – 100 lots*	Brevard County	Banana	1,934	\$931	Not applicable	Not applicable	\$1,800,000
Original	52	North IRL – 586 lots*	Brevard County	North IRL	13,857	\$761	Not applicable	Not applicable	\$10,548,000
Original	53	Central IRL – 939 lots*	Brevard County	Central IRL	22,190	\$762	Not applicable	Not applicable	\$16,902,000
-	-	Total	-	-	37,981	\$770 (average)	Not applicable	Not applicable	\$29,250,000

Note: The projects highlighted in green and marked with an asterisk were identified in the original plan. The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

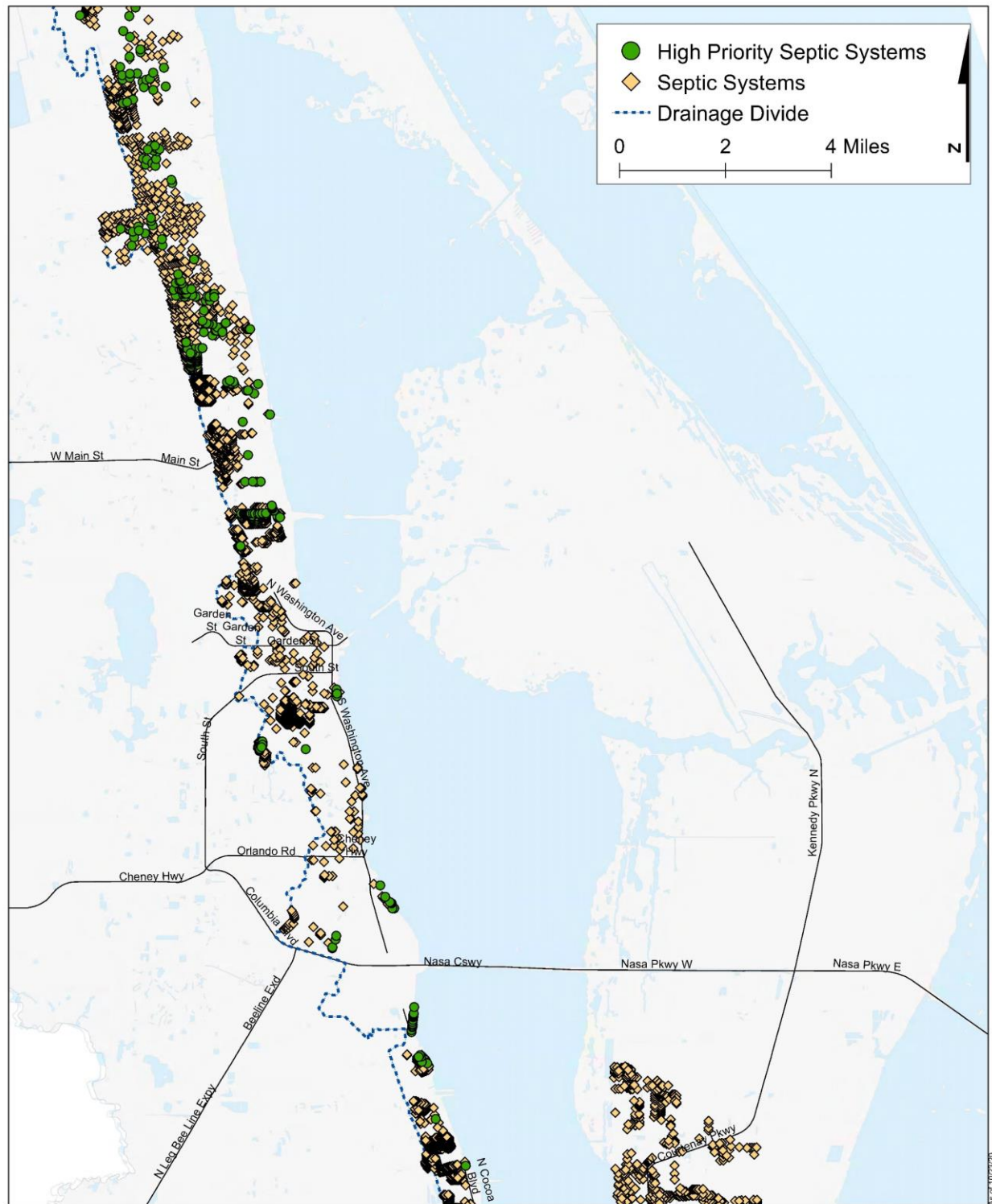


Figure 4-19: Septic System Upgrades in North Brevard County

Figure 4-19 [Long Description](#)

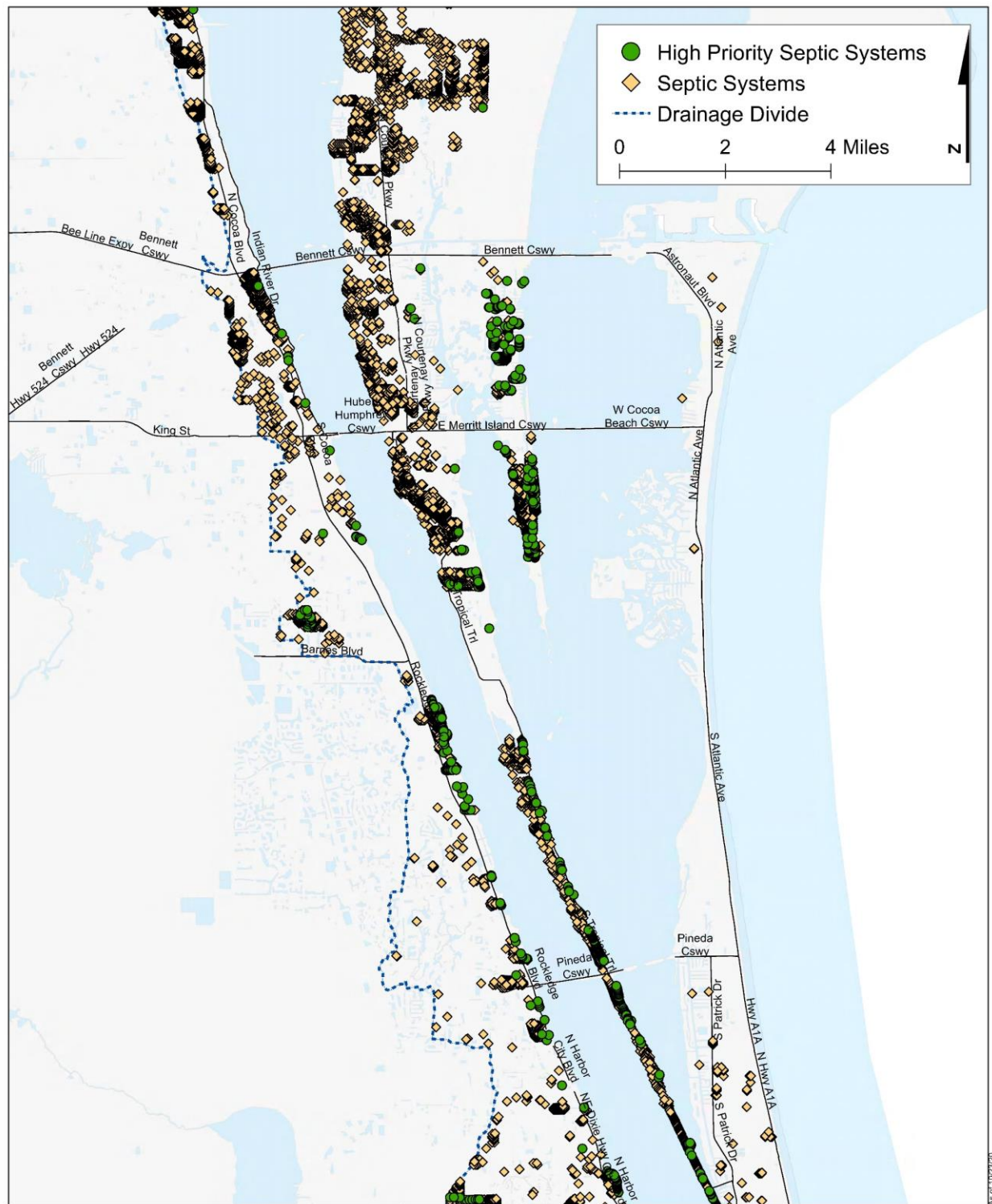


Figure 4-20: **Septic System Upgrades in Central Brevard County**

Figure 4-20 [Long Description](#)

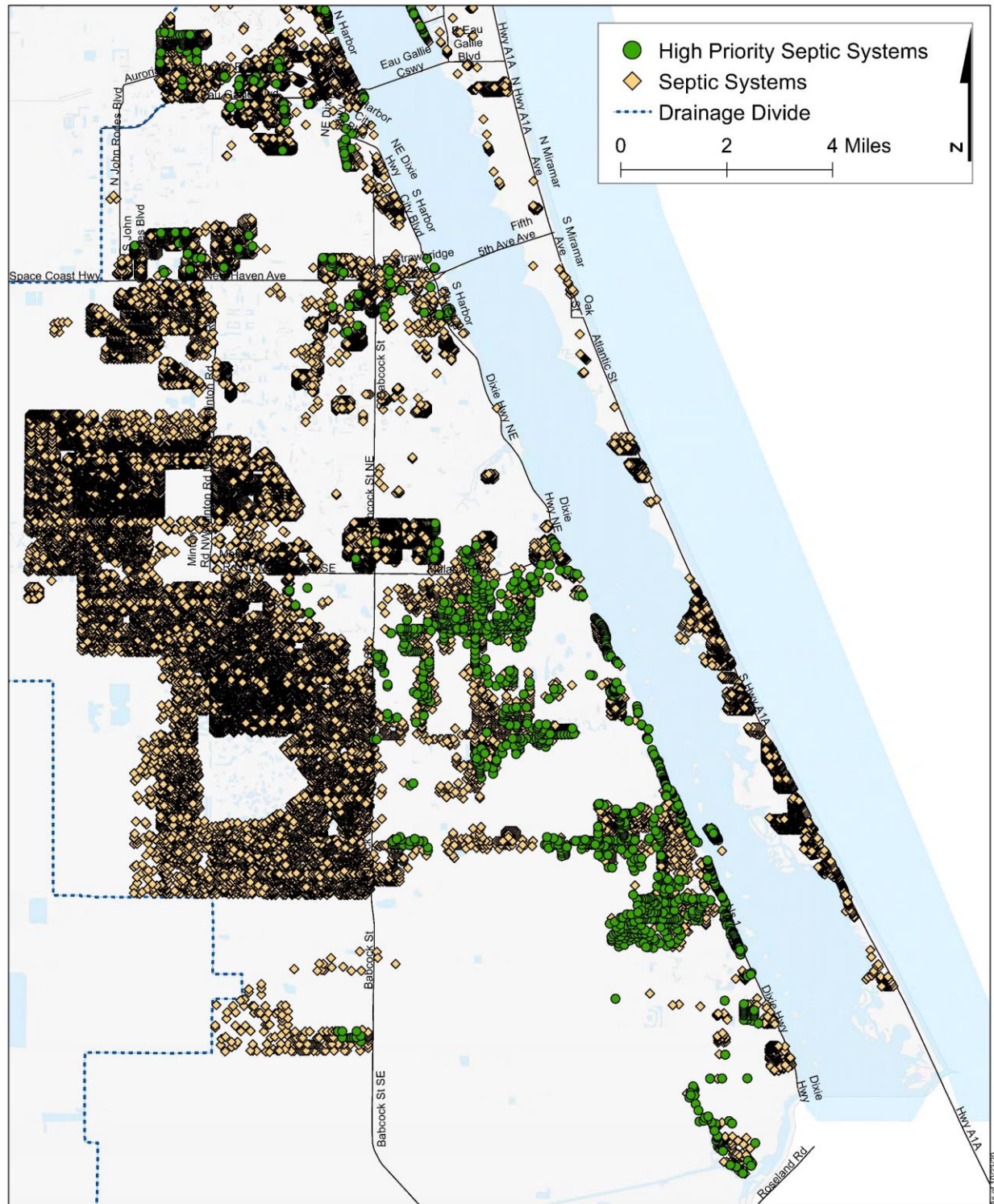


Figure 4-21: Septic System Upgrades in South Brevard County

Figure 4-21 [Long Description](#)

4.1.7 Stormwater Treatment

Stormwater runoff contributes 33.6% of the external TN loading and 43.4% of the external TP loading to the lagoon annually.

Stormwater runoff from urban areas carries pollutants that affect surface waters and groundwater. These pollutants include nutrients, pesticides, oil and grease, debris and litter, and sediments. In Brevard County, there are more than 1,500 stormwater outfalls to the IRL.

There are a variety of best management practices that can be used to capture and treat stormwater to remove or reduce these pollutants before the stormwater runoff reaches a waterbody or infiltrates to the groundwater. Potential stormwater best management practices that could help restore the Indian River Lagoon (IRL) system include:

- Traditional best management practices – These are the typical practices used to treat stormwater runoff and include wet detention ponds, retention, swales, dry detention, baffle boxes, stormwater reuse, alum injection, street sweeping, catch basin inserts/inlet filters, floating islands/managed aquatic plant systems. Descriptions of these traditional best management practices and expected total nitrogen (TN) and total phosphorus (TP) efficiencies are shown in **Table 4-22**.
- Low impact development/green infrastructure – These practices use natural stormwater management techniques to minimize runoff and help prevent pollutants from getting into stormwater runoff. These best management practices address the pollutants at the source so implementing them can help decrease the size of traditional retention and detention basins and can be less costly than traditional best management practices (University of Florida Institute of Food and Agricultural Sciences, 2016). Descriptions of low impact development and green infrastructure best management practices and estimated efficiencies are shown in **Table 4-23**.
- Denitrification best management practices – These practices use a soil media, known as biosorption activated media to increase the amount of denitrification that occurs, which increases the amount of TN and TP removed. Biosorption activated media includes mixes of soil, sawdust, zeolites, tire crumb, vegetation, sulfur, and spodosols. Additional details about denitrification best management practices are included below.
- Best management practices to reduce baseflow intrusion – These practices are modifications to existing best management practices help reduce intrusion of captured groundwater baseflow into stormwater drainage systems. These best management practices include backfilling canals so that they do not cut through the baseflow, modifying canal cross-sections to maintain the same storage capacity while limiting the depth, installing weirs to control the water levels in the best management practice, or adding a cutoff wall to prevent movement into the baseflow.
- Re-diversion to the St. Johns River – There are portions of the current IRL Basin that historically flowed towards the St. Johns River. By re-diverting these flows back to the St. Johns River, the excess stormwater runoff, as well as the additional freshwater inputs, to the IRL would be removed. The re-diversion projects would include a treatment component so that the runoff is treated before being discharged to the St. Johns River. The St. Johns River Water Management District has taken the lead on large-scale projects while the County has re-diverted more than 400 acres in the Crane Creek basin and partnered with the St. Johns River Water Management District to increase re-diversion from the Melbourne-Tillman Water Control District canal system.

Table 4-22: Traditional Stormwater Best Management Practices with TN and TP Removal Efficiencies

Best Management Practice	Definition	TN Removal Efficiency	TP Removal Efficiency	Source
Wet detention ponds	Permanently wet ponds that are designed to slowly release a portion of the collected stormwater runoff through an outlet structure. Recommended for sites with moderate to high water table conditions. Provide removal of both dissolved and suspended pollutants through physical, chemical, and biological processes.	8%-44%	45%-75%	Florida Department of Environmental Protection et al., 2010
Off-line retention	Recessed area that is designed to store and retain a defined quantity of runoff, allowing it to percolate through permeable soils into the groundwater aquifer. Runoff in excess of the specified volume of stormwater does not flow into the retention system storing the initial volume of stormwater.	40%-84%	40%-84%	Harper et al., 2007
On-line retention and swales	Recessed area that is designed to store and retain a defined quantity of runoff, allowing it to percolate through permeable soils into the groundwater aquifer. Runoff in excess of the specified volume of stormwater does flow through the retention system that stores the initial volume of stormwater.	30%-74%	30%-74%	Harper et al., 2007
Dry detention	Designed to store a defined quantity of runoff and slowly release it through an outlet structure to adjacent surface waters. After drawdown of the stored runoff is completed, the storage basin does not hold any water. Used in areas where the soil infiltration properties or seasonal high-water table elevation will not allow the use of a retention basin.	10%	10%	Harper et al., 2007
2nd generation baffle box	Box chambers with partitions connected to a storm drain. Water flows into the first section of the box where most pollutants settle out. Overflows into the next section to allow further settling. Water ultimately overflows to the stormwater pipe. Floating trays capture leaves, grass clippings, and litter to prevent them from dissolving in the stormwater.	19.05%	15.5%	GPI, 2010
Stormwater reuse	Reuse of stormwater from wet ponds for irrigation. Compare volume going to reuse to total volume of annual runoff to pond.	Amount of water not discharged annually	Amount of water not discharged annually	Not applicable
Alum injection	Chemical treatment systems that inject aluminum sulfate into stormwater systems to cause coagulation of pollutants.	50%	90%	Harper et al., 2007
Street sweeping	Cleaning of pavement surfaces to remove sediments, debris, and trash deposited by vehicle traffic. Prevents these materials from being introduced into the stormwater system.	TN content in dry weight of material collected annually	TP content in dry weight of material collected annually	University of Florida, 2011
Catch basin inserts/inlet filters	Devices installed in storm drain inlets to provide water quality treatment through filtration of organic debris and litter, settling of sediment, and adsorption of hydrocarbon by replaceable filters.	TN content in dry weight of material collected annually	TP content in dry weight of material collected annually	University of Florida, 2011

Best Management Practice	Definition	TN Removal Efficiency	TP Removal Efficiency	Source
Managed Aquatic Plant System	Aquatic plant-based best management practices that remove nutrients through a variety of processes related to nutrient uptake, transformation, and microbial activities.	10% with 5% pond coverage	10% with 5% pond coverage	Florida Department of Environmental Protection, 2018

Table 4-23: Low Impact Development and Green Infrastructure Best Management Practices and TN and TP Removal Efficiencies

Best Management Practice	Definition	TN Removal Efficiency	TP Removal Efficiency	Source
Permeable pavement	Hard, yet penetrable, surfaces reduce runoff by allowing water to move through them into groundwater below (University of Florida Institute of Food and Agricultural Sciences, 2016).	30%-74%	30%-74%	Harper et al., 2007
Bioswales	An alternative to curb and gutter systems, bioswales convey water, slow runoff, and promote infiltration. Swales may be installed along residential streets, highways, or parking lot medians (University of Florida Institute of Food and Agricultural Sciences, 2016). Must be designed for conveyance, greater in length than width, have shallow slopes, and include proper landscaping.	38%-89%	9%-80%	Florida Department of Environmental Protection, 2014
Green roofs	These systems can significantly reduce the rate and quantity of runoff from a roof and provide buildings with thermal insulation and improved aesthetics (University of Florida Institute of Food and Agricultural Sciences, 2016). Retention best management practice covered with growing media and vegetation that enables rainfall infiltration and evapotranspiration of stored water. Including a cistern capture, retain, and reuse water adds to effectiveness.	45% (without cistern) 60%-85% (with cistern)	Not applicable	Florida Department of Environmental Protection, 2014
Bioretention basins/rain gardens	Small vegetated depressions in the landscape collect and filter stormwater into the soil (University of Florida Institute of Food and Agricultural Sciences, 2016). Constructed adjacent to roof runoff and impervious areas.	30%-50%	30%-90%	Florida Department of Environmental Protection, 2014
Tree boxes	Bioretention systems with vertical concrete walls designed to collect/retain specified volume of stormwater runoff from sidewalks, parking lots and/or streets. Consists of a container filled with a soil mixture, a mulch layer, under-drain system, and shrub or tree (Florida Department of Environmental Protection, 2014).	38%-65%	50%-80%	Florida Department of Environmental Protection, 2014

Due to the importance of treating dry season baseflow to the lagoon, Brevard County has found that ditch denitrification is the most cost-effective best management practice. Biosorption activated media can be added in existing best management practices or to new best management practices to improve the nutrient removal efficiency. The removal efficiencies of using biosorption activated media in various stormwater treatment projects (Wanielista, 2015) are summarized in **Table 4-24**. While the efficiencies in **Table 4-24** are only for Bold & Gold, other types of biosorption activated media may be used in a project, if there is Florida-specific information available on the removal efficiencies for that media.

Table 4-24: TN and TP Removal Efficiencies for Biosorption Activated Media

Location in Best Management Practice Treatment Train	Material	TN Removal Efficiency	TP Removal Efficiency
Bold & Gold as a first best management practice, example up-flow filter in baffle box and a constructed wetland	Expanded Clay Tire Chips	55%	65%
Bold & Gold in up-flow filter at wet pond and dry basin outflow	Organics Tire Chips Expanded Clay	45%	45%
Bold & Gold in inter-event flow using up-flow filter at wet pond and down-flow filter at dry basin	Expanded Clay Tire Chips	25%	25%
Bold & Gold down-flow filters 12-inch depth at wet pond or dry basin pervious pavement, tree well, rain garden, swale, and strips	Clay Tire Crumb Sand and Topsoil	60%	90%

Note: From Wanielista, 2015

The County's proposed total maximum daily loads include two components: (1) a total maximum daily load for the five-month period (January – May) that is critical for seagrass growth, and (2) a total maximum daily load for the remaining seven months of the year to avoid algal blooms and protect healthy dissolved oxygen levels. In 2019, Brevard County updated the estimates for nutrient loading entering the lagoon through each stormwater ditch and outfall. The update incorporated more recent land use data, more recent rainfall and evapotranspiration data, and improved stormwater infrastructure mapping and topography. There are more than 2,000 hydrologically distinct catchment basin areas within the lagoon watershed countywide. These connect to the lagoon through more than 1,500 stormwater ditches and outfall structures. For the purpose of maximizing seagrass response to stormwater treatment, these new loading estimates for catchment basins were prioritized based on the amount of nutrients migrating into the stormwater system as groundwater baseflow during a five-month season found to be most critical to annual seagrass expansion or loss.

The stormwater project benefits were estimated, as follows, to ensure both components of the total maximum daily load are adequately addressed. The five-month total maximum daily load covers the dry season in this area when there is minimal rainfall and stormwater runoff; therefore, the benefits of stormwater biosorption activated media projects during this period were based only on January–May baseflow loading estimates from the Spatial Watershed Iterative Loading model. The estimated project treatment efficiencies used for January to May baseflow only are 55% for TN and 65% for TP. To estimate annual load reduction benefits, the annual baseflow and stormwater loading estimates from the Spatial Watershed Iterative Loading model were used with a project efficiency of 45% for TN and 45% for TP. The estimated TN and TP reductions in pounds per year (lbs/yr) accomplished by using biosorption activated media upstream of these priority outfalls are summarized in **Table 4-22**. The locations of the basins to be treated are shown in **Figure 4-22**, **Figure 4-23**, and **Figure 4-24**. Projects approved as part of an annual update to the plan are also included in **Table 4-25**.

Table 4-25: Projects for Stormwater Treatment

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
Original	-	Basin 1329*	Brevard County	Banana	51	\$76	8	\$483	\$3,864
Original	-	Basin 611*	Brevard County	Banana	1,354	\$130	115	\$873	\$176,300
Original	-	Basin 828*	Brevard County	Banana	1,397	\$155	127	\$785	\$215,900
Original	-	Basin 951*	Brevard County	Banana	1,562	\$166	154	\$812	\$258,900
Original	-	Basin 691*	Brevard County	Banana	1,749	\$172	183	\$682	\$300,600
Original	-	Basin 984*	Brevard County	Banana	1,412	\$178	143	\$873	\$251,100
Original	-	Basin CCB-E*	Brevard County	Banana	1,335	\$182	210	\$596	\$243,400
Original	-	Basin 873*	Brevard County	Banana	775	\$182	69	\$1,439	\$141,500
Original	-	Basin CCB-F*	Brevard County	Banana	1,043	\$195	158	\$632	\$203,100
Original	-	Basin 497*	Brevard County	Banana	952	\$196	95	\$1,051	\$186,700
Original	-	Basin 925*	Brevard County	Banana	895	\$197	90	\$1,115	\$176,000
Original	-	Basin 1066*	Brevard County	Banana	1,150	\$202	173	\$579	\$232,200
Original	-	Basin 602*	Brevard County	Banana	1,135	\$203	122	\$817	\$230,000
Original	-	Basin 998*	Brevard County	Banana	953	\$204	144	\$696	\$194,400
Original	-	Basin 1002*	Brevard County	Banana	903	\$205	126	\$792	\$185,300
Original	-	Basin CCAFS-4A*	Brevard County	Banana	2,091	\$208	296	\$675	\$435,000
Original	-	Basin 979A*	Brevard County	Banana	1,162	\$209	173	\$721	\$242,300
Original	-	Basin 781*	Brevard County	Banana	817	\$209	82	\$1,224	\$170,900
Original	-	Basin CCB-G*	Brevard County	Banana	956	\$211	147	\$680	\$201,300
Original	-	Basin 539*	Brevard County	Banana	935	\$212	98	\$1,023	\$198,200
Original	-	Basin CCAFS-6B*	Brevard County	Banana	3,907	\$212	545	\$505	\$829,500
Original	-	Basin 1037*	Brevard County	Banana	708	\$212	97	\$1,029	\$150,400
Original	-	Basin CCAFS-3A*	Brevard County	Banana	2,896	\$221	450	\$611	\$640,700
Original	-	Basin CCAFS-5A*	Brevard County	Banana	1,967	\$225	281	\$713	\$442,300
Original	-	Basin CCB-B*	Brevard County	Banana	760	\$226	110	\$905	\$172,100
Original	-	Basin CC-B2A*	Brevard County	Banana	774	\$228	125	\$803	\$176,700
Original	-	Basin CCAFS-1A*	Brevard County	Banana	2,531	\$229	390	\$705	\$580,100
Original	-	Basin 674*	Brevard County	Banana	1,206	\$230	145	\$859	\$277,900
Original	-	Basin 650*	Brevard County	Banana	1,251	\$232	160	\$937	\$289,900
Original	-	Basin 1222*	Brevard County	Banana	931	\$235	135	\$739	\$218,800
Original	-	Basin CCAFS-6D*	Brevard County	Banana	905	\$236	107	\$931	\$213,200
Original	-	Basin 1024*	Brevard County	Banana	668	\$237	104	\$960	\$158,700
Original	-	Basin CCAFS-6A*	Brevard County	Banana	734	\$243	81	\$1,231	\$178,300
Original	-	Basin CCAFS-2A*	Brevard County	Banana	1,778	\$244	309	\$648	\$434,200
Original	-	Basin 1304*	Brevard County	Banana	736	\$245	110	\$905	\$180,200
Original	-	Basin CCB-C*	Brevard County	Banana	525	\$249	83	\$1,209	\$130,700
Original	-	Basin 1172*	Brevard County	Banana	919	\$249	133	\$754	\$228,800
Original	-	Basin CCB-D*	Brevard County	Banana	628	\$250	103	\$972	\$156,700

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
Original	-	Basin 1067*	Brevard County	Banana	811	\$250	114	\$876	\$202,600
Original	-	Basin 484*	Brevard County	Banana	445	\$251	40	\$2,495	\$111,800
Original	-	Basin CCB-I*	Brevard County	Banana	1,337	\$253	187	\$934	\$338,000
Original	-	Basin 730*	Brevard County	Banana	576	\$255	61	\$1,628	\$146,900
Original	-	Basin 483*	Brevard County	Banana	708	\$261	84	\$1,189	\$184,400
Original	-	Basin CCB-H*	Brevard County	Banana	629	\$261	102	\$977	\$163,900
Original	-	Basin 601*	Brevard County	Banana	506	\$261	52	\$1,912	\$132,100
Original	-	Basin 1309*	Brevard County	Banana	593	\$262	89	\$1,118	\$155,500
Original	-	Basin 1280B*	Brevard County	Banana	551	\$263	81	\$1,228	\$145,100
Original	-	Basin 350*	Brevard County	Banana	695	\$266	85	\$1,174	\$184,500
Original	-	Basin 997*	Brevard County	Banana	545	\$266	83	\$1,206	\$144,900
Original	-	Basin 476*	Brevard County	Banana	680	\$266	78	\$1,274	\$181,100
Original	-	Basin 479*	Brevard County	Banana	445	\$268	42	\$2,379	\$119,300
Original	-	Basin 520*	Brevard County	Banana	400	\$269	35	\$2,843	\$107,600
Original	-	Basin 1037A*	Brevard County	Banana	540	\$270	79	\$1,258	\$145,700
Original	-	Basin 537*	Brevard County	Banana	591	\$272	68	\$1,464	\$161,100
Original	-	Basin 543*	Brevard County	Banana	511	\$272	54	\$1,853	\$139,300
Original	-	Basin 1187*	Brevard County	Banana	645	\$275	85	\$1,182	\$177,400
Original	-	Basin CCAFS-9A*	Brevard County	Banana	614	\$277	129	\$774	\$170,100
Original	-	Basin 1124*	Brevard County	Banana	533	\$278	78	\$1,287	\$148,100
Original	-	Basin 585*	Brevard County	Banana	474	\$279	48	\$2,083	\$132,000
Original	-	Basin 591*	Brevard County	Banana	399	\$279	37	\$2,698	\$111,200
Original	-	Basin 508*	Brevard County	Banana	546	\$281	59	\$1,683	\$153,600
Original	-	Basin 673*	Brevard County	Banana	595	\$282	70	\$1,421	\$167,900
Original	-	Basin CCAFS-4C*	Brevard County	Banana	801	\$288	115	\$1,085	\$230,900
Original	-	Basin 638*	Brevard County	Banana	445	\$292	47	\$2,112	\$130,200
Original	-	Basin 940B*	Brevard County	Banana	523	\$293	75	\$1,329	\$153,200
Original	-	Basin CC-B2C*	Brevard County	Banana	430	\$298	63	\$1,579	\$128,000
Original	-	Basin CC-B4B*	Brevard County	Banana	411	\$304	66	\$1,506	\$125,100
Original	-	Basin 592*	Brevard County	Banana	359	\$305	34	\$2,903	\$109,500
Original	-	Basin 716*	Brevard County	North IRL	1,157	\$108	84	\$1,188	\$124,800
Original	-	Basin 622*	Brevard County	North IRL	1,172	\$130	86	\$1,162	\$152,100
Original	-	Basin 608*	Brevard County	North IRL	744	\$138	69	\$1,455	\$102,800
Original	-	Basin 286*	Brevard County	North IRL	839	\$154	63	\$1,578	\$129,500
Original	-	Basin 668*	Brevard County	North IRL	1,508	\$156	139	\$720	\$235,400
Original	-	Basin 659*	Brevard County	North IRL	784	\$157	56	\$1,797	\$122,700
Original	-	Basin 384*	Brevard County	North IRL	986	\$161	84	\$1,193	\$158,700
Original	-	TV-St. Johns Basin*	Brevard County	North IRL	2,588	\$162	351	\$569	\$419,300
Original	-	Basin 253*	Brevard County	North IRL	1,242	\$167	132	\$760	\$207,100

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
Original	-	Basin 911*	Brevard County	North IRL	1,004	\$168	90	\$1,108	\$168,500
Original	-	Basin 560*	Brevard County	North IRL	572	\$169	41	\$2,447	\$96,800
Original	-	TV-ST Teresa Basin*	Brevard County	North IRL	2,872	\$171	426	\$528	\$492,400
Original	-	Basin 16*	Brevard County	North IRL	1,095	\$172	176	\$567	\$188,800
Original	-	Basin 338*	Brevard County	North IRL	1,938	\$176	210	\$713	\$340,900
Original	-	Basin 1419*	Brevard County	North IRL	1,735	\$181	249	\$603	\$313,800
Original	-	TV-Addison Canal Basin*	Brevard County	North IRL	7,070	\$181	914	\$301	\$1,280,300
Original	-	Basin 199*	Brevard County	North IRL	1,125	\$181	108	\$929	\$204,100
Original	-	Basin 973*	Brevard County	North IRL	2,134	\$182	307	\$570	\$387,600
Original	-	TV-Chain of Lakes Basin*	Brevard County	North IRL	4,707	\$182	683	\$403	\$857,100
Original	-	Basin 498*	Brevard County	North IRL	1,243	\$183	118	\$847	\$227,900
Original	-	Basin 662*	Brevard County	North IRL	977	\$184	101	\$995	\$180,000
Original	-	Basin 1399*	Brevard County	North IRL	1,498	\$185	232	\$539	\$276,500
Original	-	Basin CO-2K*	Brevard County	North IRL	1,448	\$186	204	\$612	\$269,500
Original	-	Basin 1430*	Brevard County	North IRL	2,361	\$186	347	\$576	\$439,700
Original	-	TV-La Paloma Basin*	Brevard County	North IRL	2,146	\$186	314	\$557	\$399,600
Original	-	Basin CO-2QA*	Brevard County	North IRL	1,354	\$187	199	\$627	\$253,200
Original	-	Basin 895*	Brevard County	North IRL	1,130	\$189	135	\$740	\$213,100
Original	-	TV-South Marine Basin*	Brevard County	North IRL	1,252	\$189	176	\$567	\$237,200
Original	-	Basin 176*	Brevard County	North IRL	797	\$191	74	\$1,357	\$152,400
Original	-	Basin 1396*	Brevard County	North IRL	1,011	\$192	147	\$680	\$193,900
Original	-	Basin RL-2A*	Brevard County	North IRL	1,715	\$192	246	\$610	\$329,500
Original	-	Basin 62*	Brevard County	North IRL	721	\$192	118	\$847	\$138,500
Original	-	Basin 141*	Brevard County	North IRL	1,049	\$193	163	\$614	\$202,100
Original	-	Basin 19*	Brevard County	North IRL	818	\$193	128	\$779	\$157,600
Original	-	TV-Main Street Basin*	Brevard County	North IRL	1,298	\$193	189	\$662	\$250,200
Original	-	Basin 94*	Brevard County	North IRL	1,141	\$194	178	\$562	\$221,500
Original	-	Basin 115*	Brevard County	North IRL	1,372	\$194	199	\$627	\$266,900
Original	-	Basin 478*	Brevard County	North IRL	896	\$195	80	\$1,254	\$174,400
Original	-	Basin RL-3B*	Brevard County	North IRL	2,158	\$196	307	\$652	\$422,400
Original	-	Basin 992*	Brevard County	North IRL	1,241	\$197	186	\$671	\$244,000
Original	-	Basin 865*	Brevard County	North IRL	879	\$198	109	\$918	\$174,300
Original	-	Basin 388*	Brevard County	North IRL	1,203	\$198	130	\$768	\$238,700

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
Original	-	Basin 116*	Brevard County	North IRL	936	\$199	142	\$703	\$185,700
Original	-	Basin 193*	Brevard County	North IRL	1,297	\$199	193	\$646	\$257,700
Original	-	Basin 1377*	Brevard County	North IRL	1,324	\$199	200	\$625	\$263,400
Original	-	TV-Parrish Basin*	Brevard County	North IRL	1,070	\$199	163	\$612	\$213,200
Original	-	Basin 26*	Brevard County	North IRL	900	\$200	138	\$726	\$179,500
Original	-	Basin RL-3*I	Brevard County	North IRL	3,009	\$200	423	\$650	\$600,700
Original	-	Basin 1392*	Brevard County	North IRL	1,050	\$200	159	\$629	\$210,600
Original	-	Basin 204*	Brevard County	North IRL	622	\$201	55	\$1,810	\$125,000
Original	-	Basin 451*	Brevard County	North IRL	1,075	\$201	123	\$811	\$216,100
Original	-	Basin 1335 (Sherwood Park)*	Brevard County	North IRL	1,452	\$201	209	\$598	\$292,400
Original	-	Basin 72*	Brevard County	North IRL	1,038	\$202	150	\$668	\$209,300
Original	-	TV-Sycamore Basin*	Brevard County	North IRL	1,246	\$202	184	\$680	\$251,900
Original	-	Basin 1387*	Brevard County	North IRL	890	\$203	125	\$799	\$180,400
Original	-	Basin 474*	Brevard County	North IRL	801	\$204	76	\$1,309	\$163,100
Original	-	Basin 157*	Brevard County	North IRL	898	\$204	90	\$1,110	\$183,500
Original	-	Basin 816*	Brevard County	North IRL	678	\$205	130	\$770	\$138,800
Original	-	TV-Marina Basin*	Brevard County	North IRL	1,169	\$205	170	\$587	\$239,500
Original	-	Basin 410*	Brevard County	North IRL	1,322	\$205	158	\$791	\$271,300
Original	-	Basin 1456*	Brevard County	North IRL	952	\$205	138	\$727	\$195,400
Original	-	Basin 824*	Brevard County	North IRL	721	\$206	103	\$967	\$148,500
Original	-	Basin 833*	Brevard County	North IRL	1,083	\$207	183	\$545	\$224,300
Original	-	Basin 254*	Brevard County	North IRL	581	\$207	45	\$2,229	\$120,200
Original	-	Basin 575*	Brevard County	North IRL	662	\$208	54	\$1,859	\$137,600
Original	-	Basin 218*	Brevard County	North IRL	491	\$208	39	\$2,562	\$102,100
Original	-	Basin CO-2I*	Brevard County	North IRL	979	\$209	146	\$687	\$204,500
Original	-	Basin 155*	Brevard County	North IRL	913	\$209	94	\$1,068	\$191,100
Original	-	Basin 1464*	Brevard County	North IRL	968	\$210	134	\$746	\$202,800
Original	-	Basin 1368*	Brevard County	North IRL	1,125	\$211	162	\$616	\$237,200
Original	-	Basin 738*	Brevard County	North IRL	497	\$211	51	\$1,980	\$104,900
Original	-	Basin 832*	Brevard County	North IRL	962	\$211	159	\$629	\$203,400
Original	-	Basin 314*	Brevard County	North IRL	827	\$212	86	\$1,166	\$175,100
Original	-	Basin 1458*	Brevard County	North IRL	947	\$212	128	\$780	\$200,500
Original	-	Basin 901*	Brevard County	North IRL	1,895	\$212	232	\$860	\$401,100
Original	-	Basin 1256*	Brevard County	North IRL	1,580	\$213	236	\$635	\$337,000
Original	-	TV-South Street Basin*	Brevard County	North IRL	900	\$215	131	\$762	\$193,300
Original	-	Basin 829*	Brevard County	North IRL	812	\$216	161	\$621	\$175,200

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
Original	-	Basin 6*	Brevard County	North IRL	716	\$216	84	\$1,191	\$154,900
Original	-	Basin 22*	Brevard County	North IRL	622	\$217	69	\$1,458	\$134,800
Original	-	Basin 439*	Brevard County	North IRL	585	\$217	53	\$1,898	\$127,100
Original	-	Basin 10*	Brevard County	North IRL	953	\$218	144	\$696	\$207,400
Original	-	Basin 413*	Brevard County	North IRL	915	\$218	103	\$975	\$199,200
Original	-	Basin 1263*	Brevard County	North IRL	914	\$218	132	\$759	\$199,500
Original	-	Basin 758*	Brevard County	North IRL	533	\$219	49	\$2,023	\$116,900
Original	-	Basin 835*	Brevard County	North IRL	1,134	\$220	159	\$785	\$249,000
Original	-	Basin 1078*	Brevard County	North IRL	1,017	\$221	150	\$666	\$224,800
Original	-	Basin 831*	Brevard County	North IRL	733	\$221	105	\$950	\$162,200
Original	-	TV-Royal Palm Basin*	Brevard County	North IRL	878	\$223	127	\$786	\$195,500
Original	-	Basin 499*	Brevard County	North IRL	761	\$223	78	\$1,289	\$169,800
Original	-	Basin 1381*	Brevard County	North IRL	968	\$224	146	\$686	\$216,500
Original	-	Basin 1342*	Brevard County	North IRL	1,034	\$224	157	\$637	\$231,700
Original	-	Basin 1298*	Brevard County	North IRL	1,667	\$224	229	\$765	\$374,200
Original	-	Basin 112*	Brevard County	North IRL	734	\$226	107	\$931	\$165,700
Original	-	Basin RL-3A*	Brevard County	North IRL	796	\$226	113	\$881	\$179,800
Original	-	Basin 89*	Brevard County	North IRL	1,084	\$226	150	\$835	\$245,100
Original	-	Basin 2159*	Brevard County	Central IRL	2,754	\$148	350	\$500	\$407,500
Original	-	Basin 2185*	Brevard County	Central IRL	1,208	\$162	94	\$1,064	\$196,200
Original	-	Basin 2163*	Brevard County	Central IRL	1,264	\$163	89	\$1,118	\$205,500
Original	-	Basin 1736*	Brevard County	Central IRL	4,263	\$167	551	\$499	\$710,600
Original	-	Basin 1604*	Brevard County	Central IRL	2,916	\$167	425	\$529	\$486,400
Original	-	Basin 2239*	Brevard County	Central IRL	1,643	\$169	261	\$479	\$276,900
Original	-	Basin 1762*	Brevard County	Central IRL	4,250	\$169	621	\$443	\$716,700
Original	-	Basin 2222*	Brevard County	Central IRL	1,534	\$169	226	\$552	\$258,700
2017	13	Central Boulevard Baffle Box+	City of Cape Canaveral	Banana	481	\$72	14	\$2,479	\$34,700
2017	14	Church Street Type II Baffle Box+	City of Cocoa	North IRL	937	\$94	135	\$652	\$88,045
2017	15	Bayfront Stormwater Project+	City of Palm Bay	Central IRL	348	\$88	83	\$369	\$30,624
2017	16	Gleason Park Reuse+	City of Indian Harbour Beach	Banana	48	\$88	9	\$469	\$4,224
2017	18	Denitrification Retrofit of Johns Road Pond+	Brevard County	North IRL	1,199	\$88	Not applicable	Not applicable	\$105,512

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
2017	19	St. Teresa Basin Treatment+	City of Titusville	North IRL	3,100	\$88	459	\$594	\$272,800
2017	20	South Street Basin Treatment+	City of Titusville	North IRL	987	\$88	156	\$557	\$86,856
2017	21	La Paloma Basin Treatment+	City of Titusville	North IRL	2,367	\$88	346	\$602	\$208,296
2017	22	Kingsmill-Aurora Phase Two+	Brevard County	North IRL	4,176	\$88	814	\$451	\$367,488
2017	23	Denitrification Retrofit of Huntington Pond+	Brevard County	North IRL	1,190	\$88	Not applicable	Not applicable	\$104,720
2017	24	Denitrification Retrofit of Flounder Creek Pond+	Brevard County	North IRL	856	\$88	Not applicable	Not applicable	\$75,328
2017	34	Cliff Creek Baffle Box+	City of Melbourne	North IRL	3,952	\$88	797	\$436	\$347,781
2017	35	Thrush Drive Baffle Box+	City of Melbourne	North IRL	3,661	\$88	773	\$417	\$322,200
2018	64	Stormwater Low Impact Development Convair Cove 1 – Blakey Boulevard+	City of Cocoa Beach	Banana	30	\$155	3	\$1,550	\$4,650
2018	65	Stormwater Low Impact Development Convair Cove 2 – Dempsey Drive+	City of Cocoa Beach	Banana	29	\$155	3	\$1,498	\$4,495
2018	66	Big Muddy at Cynthia Baffle Box+	City of Indian Harbour Beach	Banana	269	\$155	48	\$869	\$41,695
2018	67	Grant Place Baffle Box+	City of Melbourne	Central IRL	937	\$88	193	\$427	\$82,481
2018	68	Crane Creek/M-1 Canal Flow Restoration+	St. Johns River Water Management District	Central IRL	23,113	\$88	2,719	\$748	\$2,033,944
2018	69	Apollo/GA Baffle Box+	City of Melbourne	North IRL	3,381	\$88	479	\$621	\$297,522

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
2019	66b	Big Muddy at Cynthia Baffle Box Expansion+	City of Indian Harbour Beach	Banana	167	\$155	10	\$2,584	\$25,837
2019	85	Basin 1304 Bioreactor+	Brevard County	Banana	958	\$94	127	\$709	\$90,000
2019	87	Fleming Grant Biosorption Activated Media+	Brevard County	Central IRL	602	\$94	91	\$622	\$56,588
2019	88	Espanola Baffle Box+	City of Melbourne	Central IRL	1,119	\$94	148	\$711	\$105,186
2019	89	Basin 1298 Bioreactor+	Brevard County	North IRL	917	\$94	116	\$743	\$86,198
2019	90	Johns Road Pond Biosorption Activated Media+	Brevard County	North IRL	245	\$94	37	\$622	\$23,030
2019	91	Burkholm Road Biosorption Activated Media+	Brevard County	North IRL	685	\$94	104	\$619	\$64,390
2019	92	Carter Road Biosorption Activated Media+	Brevard County	North IRL	665	\$94	101	\$619	\$62,510
2019	93	Wiley Avenue Biosorption Activated Media+	Brevard County	North IRL	954	\$87	144	\$575	\$82,735
2019	94	Broadway Pond Biosorption Activated Media+	Brevard County	North IRL	456	\$94	69	\$621	\$42,864
2019	95	Cherry Street Baffle Box+	City of Melbourne	North IRL	980	\$94	174	\$529	\$92,120
2019	96	Spring Creek Baffle Box+	City of Melbourne	North IRL	1,057	\$94	232	\$428	\$99,358
2019	97	Titusville High School Baffle Box+	City of Titusville	North IRL	1,190	\$94	166	\$674	\$111,813
2019	98	Coleman Pond Managed Aquatic Plant System+	City of Titusville	North IRL	1,240	\$28	198	\$177	\$35,000
2020	110	Osprey Plant Pond Managed Aquatic Plant Systems+	City of Titusville	North IRL	606	\$99	88	\$682	\$60,000

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
2020	117	Basin 10 County Line Road Woodchip Bioreactor+	Brevard County Stormwater	North IRL	597	\$122	90	\$809	\$72,773
2020	118	Basin 26 Sunset Road Serenity Park Woodchip Bioreactor+	Brevard County Stormwater	North IRL	605	\$122	92	\$802	\$73,810
2020	119	Basin 141 Irwin Avenue Woodchip Bioreactor+	Brevard County Stormwater	North IRL	567	\$122	86	\$804	\$69,174
2020	120	Draa Field Pond Managed Aquatic Plant Systems+	City of Titusville	North IRL	256	\$122	38	\$823	\$31,281
2020	121	Basin 2258 Babcock Road Woodchip Bioreactor+	Brevard County Stormwater	Central IRL	412	\$122	62	\$810	\$50,203
2020	122	Basin 22 Hunting Road Serenity Park Woodchip Bioreactor+	Brevard County Stormwater	North IRL	329	\$122	50	\$802	\$40,077
2020	124	Floating Wetlands to Existing Stormwater Ponds+	City of Cocoa	North IRL	12	\$125	3	\$499	\$1,497
2020	125	Diamond Square Stormwater Pond+	City of Cocoa	North IRL	85	\$122	23	\$451	\$10,383
2020	127	Basin 5 Dry Retention+	Town of Indialantic	North IRL	113	\$148	18	\$927	\$16,680
2020	128	Jackson Court Stormwater Treatment Facility+	City of Satellite Beach	Banana	56	\$148	8	\$1,033	\$8,266
2020	129	Forrest Avenue 72-inch Outfall Baseflow Capture/Treatment+	City of Cocoa	North IRL	94	\$148	12	\$1,163	\$13,956
2021	169	Sherwood Park Enhancement+	City of Melbourne	North IRL	1,762	\$57	670	\$149	\$99,708
2021	174	St. Johns 2 Baffle Box+	City of Titusville	North IRL	1,992	\$122	611	\$398	\$243,070

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed	Plan Funding
2021	123	Ray Bullard Water Reclamation Facility Stormwater Management Area+	City of West Melbourne	Central IRL	1,317	\$122	400	\$402	\$160,674
2021	175	High School Baffle Box+	City of Melbourne	North IRL	1,183	\$122	319	\$452	\$144,326
2021	176	Funeral Home Baffle Box+	City of Melbourne	North IRL	481	\$122	129	\$455	\$58,682
2021	177	North and South Lakemont Ponds Floating Wetlands+	City of Cocoa	North IRL	107	\$122	25	\$522	\$13,054
2021	178	Marina B Managed Aquatic Plant Systems+	City of Titusville	North IRL	55	\$122	7	\$953	\$6,670
2021	179	Lori Laine Basin Pipe Improvement Project+	City of Satellite Beach	Banana	117	\$150	21	\$835	\$17,525
-	-	Total	-	-	275,3659	\$172 (average)	38,211	\$1,237 (average)	\$47,284,663

Note: The projects highlighted in green and marked with an asterisk were identified in the original plan. The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

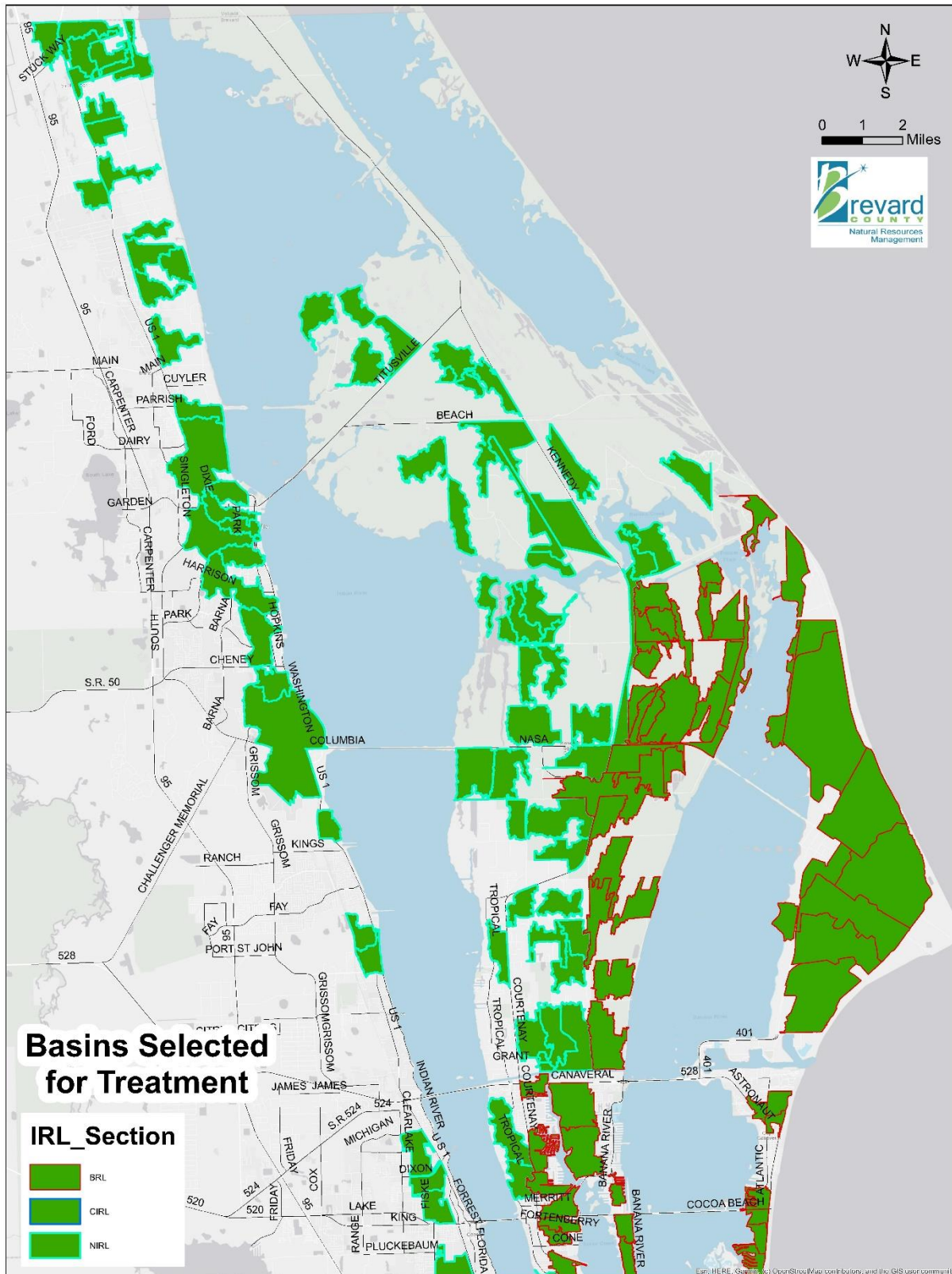


Figure 4-23: Stormwater Projects in Central Brevard County

Figure 4-23 [Long Description](#)



Figure 4-24 [Long Description](#)

4.2. Projects to Remove Pollutants

The purpose of the projects in this section is to remove pollutants that have accumulated in the lagoon. Brevard County has already begun to remove deep accumulations of muck from the lagoon bottom. Dredging to remove muck in other locations of the lagoon will continue, as well as treatment of the interstitial water when feasible. These muck removal projects have more immediate benefits on the lagoon water quality than external reduction projects because the nutrient flux is reduced as soon as muck is dredged from the system whereas it takes time for the external load reduction benefits to reach the lagoon. The County is also evaluating opportunities to use new treatment technologies to provide surface water remediation. In addition, the St. Johns River Water Management District, Indian River Lagoon (IRL) National Estuary Program, and Florida Institute of Technology are evaluating opportunities for enhanced circulation projects, which will allow additional water to flow into the lagoon system to help remove the built-up sediments and muck. The following sections describe the County's proposed muck removal projects, scrubbing of muck interstitial water, as well as potential surface water remediation and potential circulation enhancement projects.

4.2.1 Muck Removal

Muck flux contributes 45% of the TN and 49% of TP load to the Banana River Lagoon each year.

The muck in the Indian River Lagoon (IRL) increases turbidity, inhibits seagrass growth, promotes oxygen depletion in sediments and the water above, stores and releases nutrients, covers the natural bottom, and destroys healthy communities of benthic organisms (Trefry, 2013). When muck is suspended within the water column due to wind or human activities such as boating, these suspended solids limit light availability and suppress seagrass growth. Even for deeper water areas without seagrass growth, muck remains a nutrient source that potentially affects a broader area of the lagoon through nutrient flux and resuspension of fine sediments and their subsequent transport. As shown in **Table 3-1**, the annual release of nutrients from decaying muck is almost as much as the annual external loading delivered by stormwater and groundwater baseflow combined. The muck deposits cover an estimated 6,700 acres of the lagoon system bottom in Brevard County (Trefry, 2018).

The muck deposits in the lagoon flux nutrients that enter the water column and contribute to algal blooms and growth of macroalgae. Muck flux rates for nitrogen and phosphorus have been estimated through studies in the IRL system. For this plan, the average flux rates used are 150 pounds of total nitrogen (TN) per acre per year and 20 pounds of total phosphorus (TP) per acre per year (Trefry, 2018) except where specific measurements indicate otherwise.

The focus of the muck removal projects for this plan is on large deposits of muck in big, open water sites within the lagoon itself. Several of the canal systems that directly connect to the lagoon are also included for muck removal. The goal of the muck removal is to reduce TN and TP muck flux loads by 25%, which should result in a significant improvement in water quality and seagrass extent, as well as a reduced risk of massive algal blooms and fish kills. A 70% efficiency for muck removal projects was applied. This efficiency accounts for two factors: (1) each target dredge area has less than 100% muck cover, and (2) some pockets of muck within dredged areas will inevitably be left behind regardless of the dredge technology used. In 2018 and 2019, the Florida Institute of Technology conducted evaluations of the muck deposits throughout the lagoon system for Brevard County (Fox and Trefry, 2018; Fox and Trefry, 2019; Shenker, 2018; Souto, 2018; Trefry et al., 2019a and 2019b; Zarillo and Listopad, 2019). The updated muck acreage estimates are shown in **Table 4-26**.

Table 4-26: Muck Acreages in the IRL System

Muck Reduction Targets	Open Banana	Banana Canals	North IRL	North IRL Canals	Central IRL	Central IRL Canals	Mosquito Lagoon
Muck area (acres)	1,276	752	3,035	51	59	37	398
Muck flux (pounds of TN per year)	281,148	112,800	233,992	7,650	40,226	5,550	7,164
Funded dredging sites (acres)	223	0	251	0	0	0	0
Flux from funded dredging sites (pounds of TN per year)	123,723	0	85,325	0	0	0	0
Flux reduction from funded sites (pounds of TN per year)	86,606	0	59,728	0	0	0	0
Percent of total flux reduced by dredging the funded sites	31%	0%	26%	0%	0%	0%	0%

Using the information from the Florida Institute of Technology, Brevard County reevaluated the priority muck locations for dredging. The estimated area and nutrient flux in pounds per year (lbs/yr) using average flux rates for Brevard County or site-specific data collected by the Florida Institute of Technology are shown in **Table 4-27** for the recommended projects. **Table 4-28** provides a summary of the recommended projects and the projects submitted as part of an annual plan. The locations of these projects are shown in **Figure 4-25** and **Figure 4-27**.

As dredging proceeds, upland input of muck components must be reduced to prevent new muck accumulation. Therefore, land-based source control measures for nutrients, organic waste, and erosion are needed. Without source controls, muck removal will need to be frequently repeated, which is neither cost-effective nor beneficial to the lagoon's health. Public awareness and commitment are needed to control future muck accumulation. Activities that contribute organic debris and sediment to stormwater and open water must be curtailed. Additional scientific assessment should be carried out to evaluate and optimize the dredging process.

Table 4-27: Banana River Lagoon Estimated Costs and Nutrient Reductions for Muck Removal Project Areas

Location	Sub-Lagoon	Cubic Yards	Acres	TN Flux (pounds per acre per year)	TP Flux (pounds per acre per year)
Port Canaveral South	Banana	420,000	55	919	50
Pineda Banana River Lagoon	Banana	195,000	28	767	35
Patrick Air Force Base	Banana	205,000	26	357	21
Cocoa Beach Golf	Banana	975,000	140	303	21
Titusville Railroad West	North IRL	90,000	70	294	12
National Aeronautics and Space Administration Causeway East	North IRL	285,000	34	919	44
Rockledge A	North IRL	125,000	38	285	31
Titusville Railroad East	North IRL	115,000	36	214	9
Eau Gallie Northeast	North IRL	250,000	73	205	29

Table 4-28: Projects for Muck Removal

Year Added	Project Number	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN Removed	TP Reduction (lbs/yr)	Cost per Pound per Year of TP Removed	Plan Funding
Original	2016-10a	Port Canaveral South*	Brevard County	Banana	35,382	\$415	1,925	\$7,636	\$14,700,000
Original	2016-5a	Pineda Banana River Lagoon*	Brevard County	Banana	15,033	\$454	686	\$9,949	\$6,825,000
Original	2016-11a	Patrick Air Force Base*	Brevard County	Banana	6,497	\$1,104	382	\$18,783	\$7,175,000
Original	168a	Cocoa Beach Golf*^	Brevard County	Banana	29,694	\$719	2,058	\$10,374	\$21,350,000
Original	2016-06a	Titusville Railroad West*	Brevard County	North IRL	14,406	\$219	588	\$5,357	\$3,150,000
Original	2016-07a	National Aeronautics and Space Administration Causeway East*	Brevard County	North IRL	21,872	\$456	1,047	\$9,527	\$9,975,000
Original	2016-04a	Rockledge A*	Brevard County	North IRL	7,581	\$577	825	\$5,303	\$4,375,000
Original	2016-08a	Titusville Railroad East*	Brevard County	North IRL	5,393	\$746	227	\$17,731	\$4,025,000
Original	54a	Eau Gallie Northeast*	Brevard County	North IRL	10,476	\$835	1,482	\$5,904	\$8,750,000
2017	41a	Grand Canal Muck Dredging+	Brevard County	Banana	10,185	\$240	1,358	\$1,797	\$2,440,971
2017	42a	Sykes Creek Muck Dredging+	Brevard County	Banana	19,635	\$240	2,618	\$1,797	\$4,705,428
2018	70a	Cocoa Beach Muck Dredging – Phase III+	City of Cocoa Beach	Banana	4,095	\$336	780	\$1,764	\$1,376,305
2018	71	Merritt Island Muck Removal – Phase 1+	Brevard County	Banana	8,085	\$957	1,540	\$5,022	\$7,733,517
2018	72a	Muck Removal of Indian Harbour Beach Canals+	City of Indian Harbour Beach	Banana	3,780	\$961	720	\$5,044	\$3,631,815
2018	2016-3a	Muck Re-dredging in Turkey Creek+	Brevard County	Central IRL	5,691	\$38	221	\$973	\$215,000
2019	101	Cocoa Beach Muck Dredging Phase II-B+	City of Cocoa Beach	Banana	6,300	\$939	840	\$7,045	\$5,917,650
2020	144	Satellite Beach Muck Dredging+	City of Satellite Beach	Banana	3,885	\$485	518	\$3,638	\$1,884,225
-	-	Total	-	-	207,990	\$520 (average)	17,815	\$6,075 (average)	\$108,229,911

Note: The projects highlighted in green and marked with an asterisk were identified in the original plan. The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

^ The Cocoa Beach Golf project is not fully funded at this time. A total of \$21,350,000 is available and Brevard County is looking for options to fund the remaining \$12,775,000 for dredging plus associated interstitial water treatment.

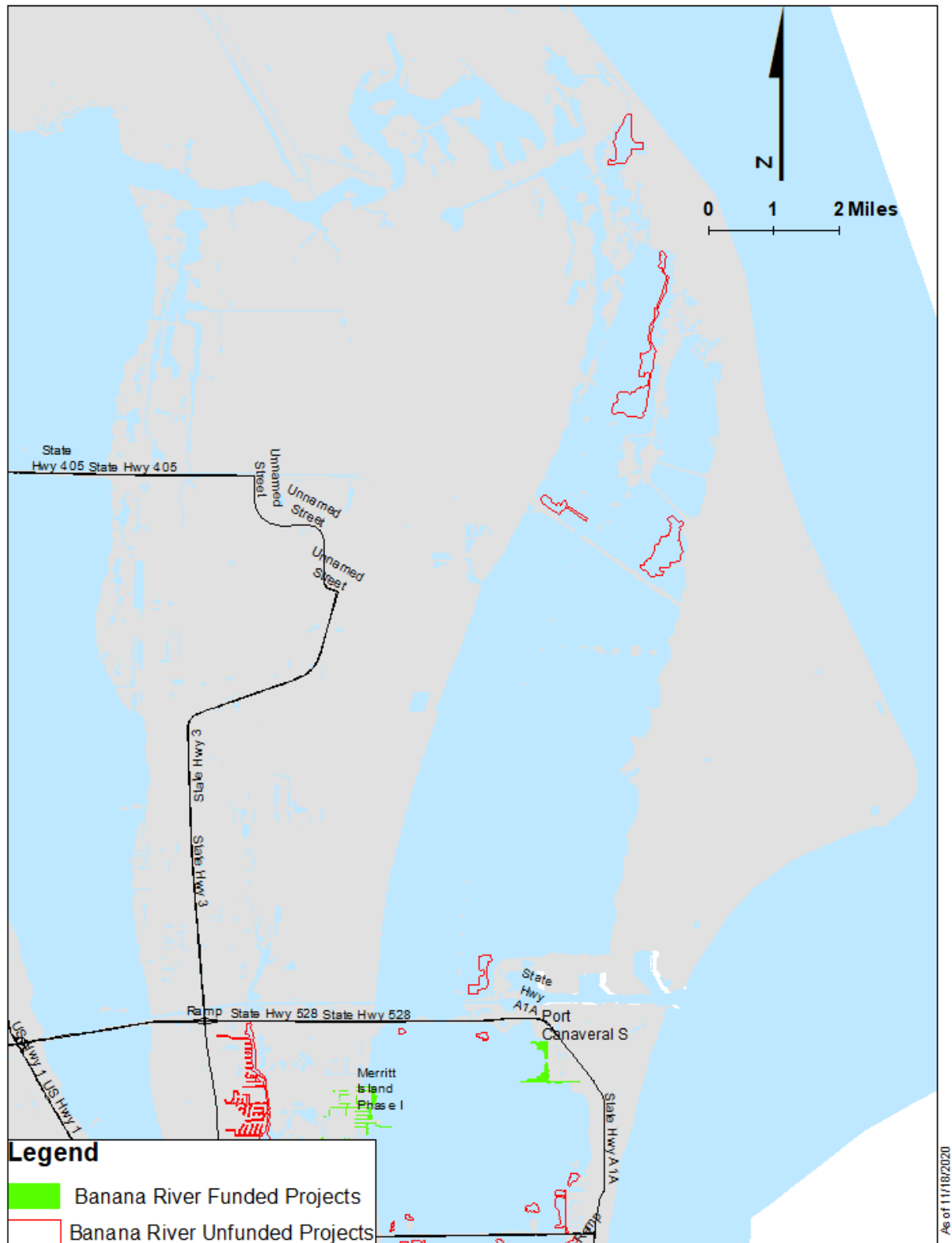


Figure 4-25: Location of Muck Removal Projects in the Northern Banana River Lagoon

Figure 4-25 [Long Description](#)

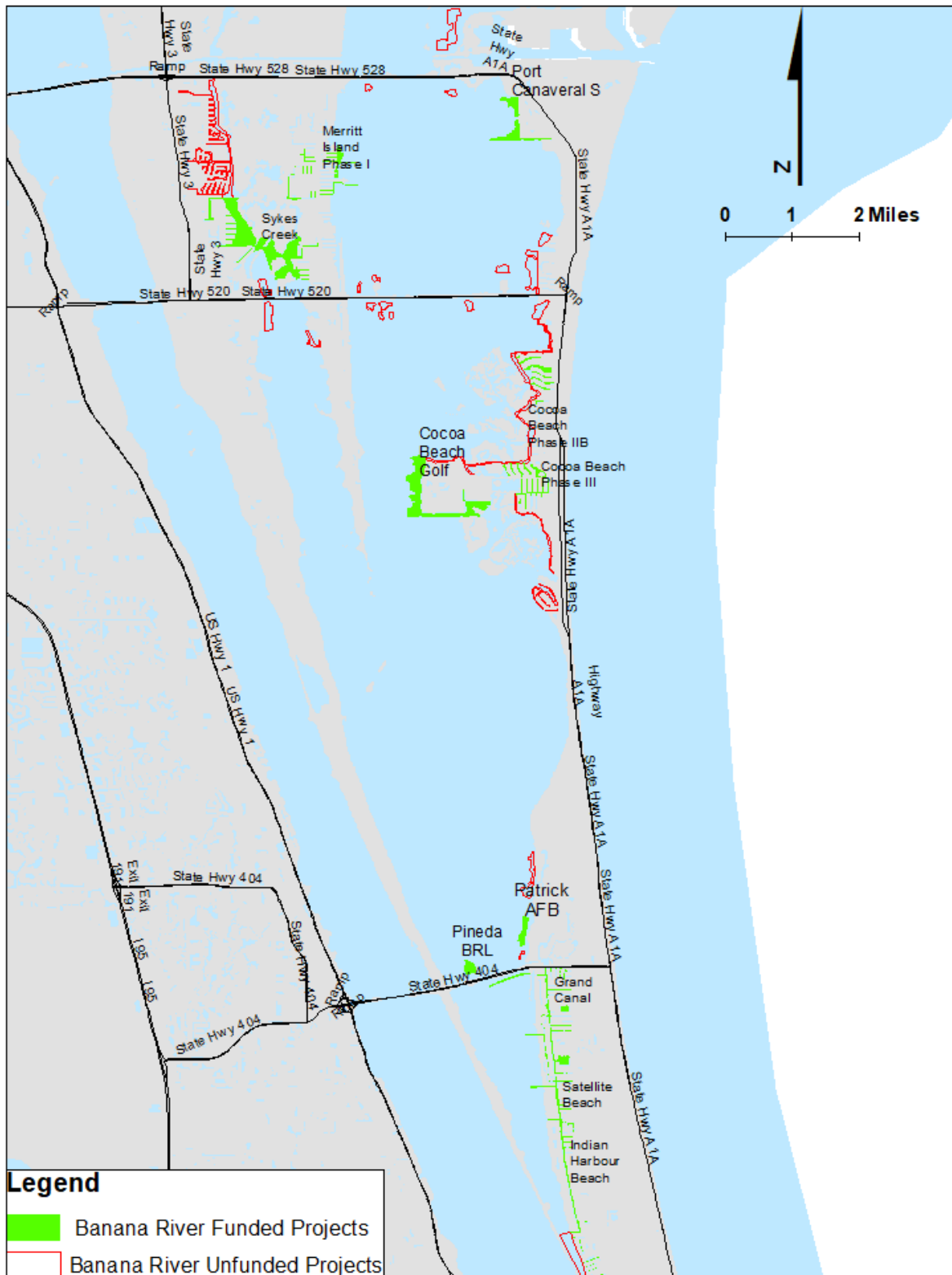


Figure 4-26: Location of Muck Removal Projects in the Southern Banana River Lagoon

Figure 4-26 [Long Description](#)

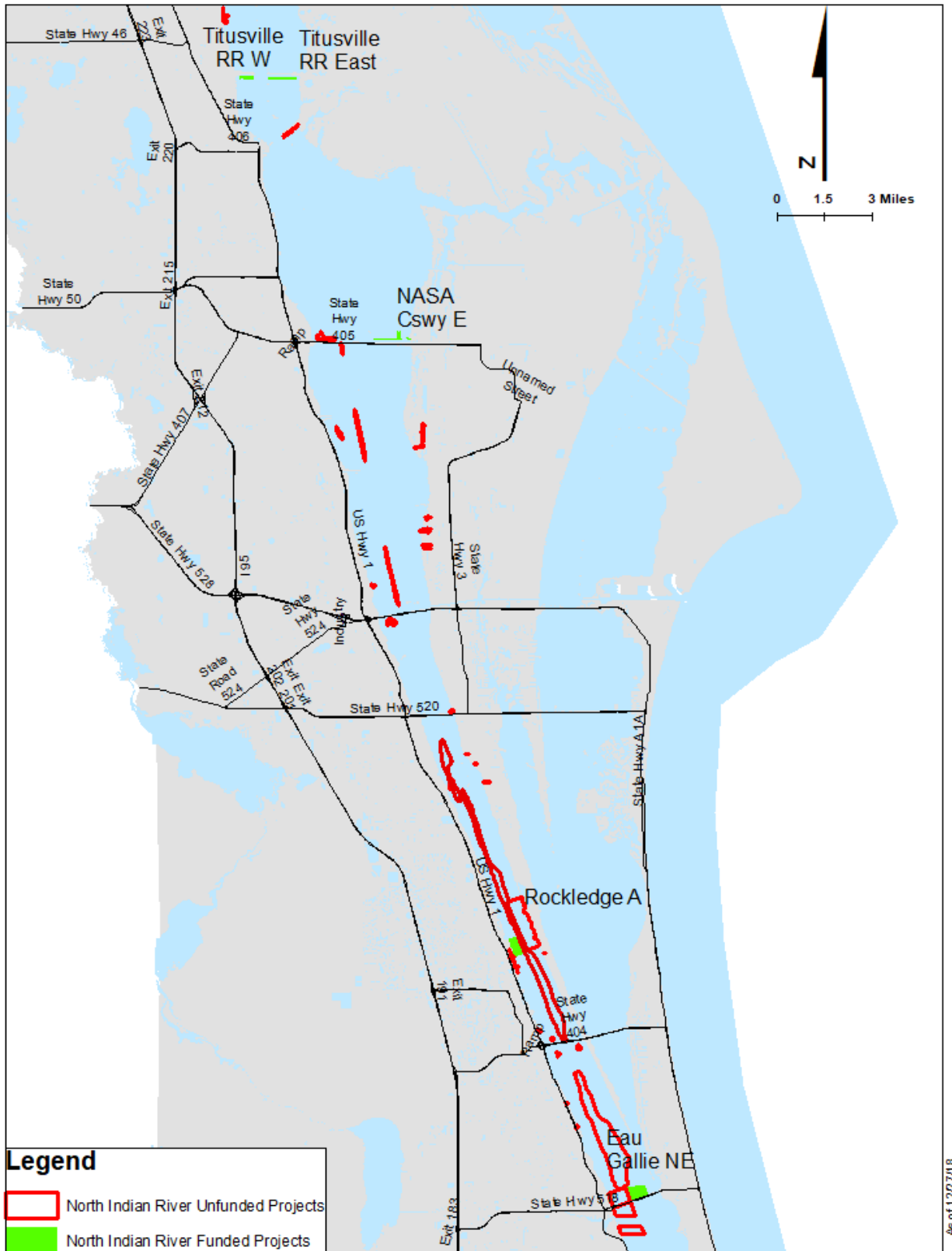


Figure 4-27: Location of Muck Removal Projects in North IRL

Figure 4-27 [Long Description](#)

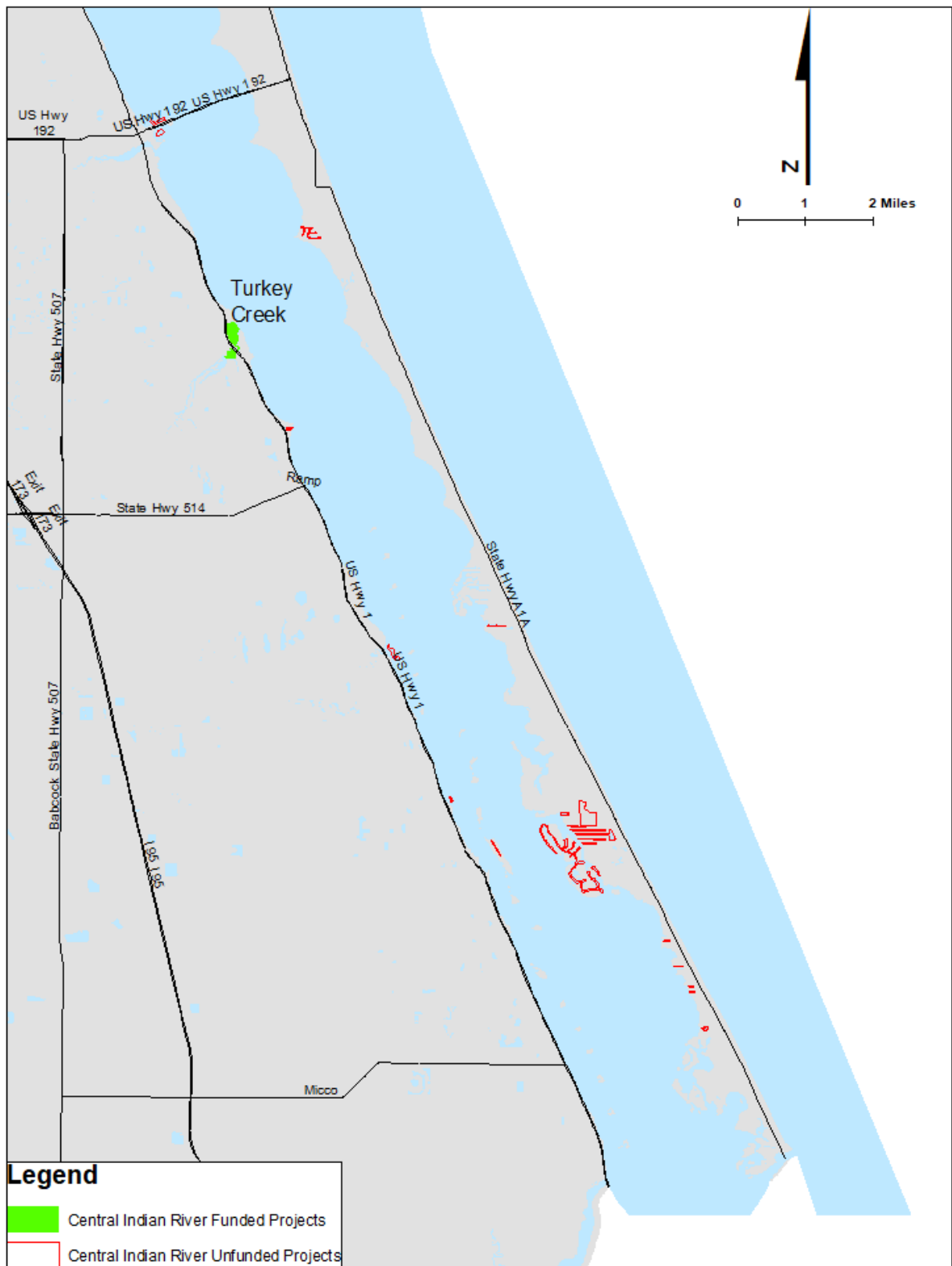


Figure 4-28: Location of Muck Removal Projects in Central IRL

Figure 4-28 [Long Description](#)

4.2.2 Treatment of Muck Interstitial Water

Interstitial water refers to the water content that is present within the muck material. Sampling and testing conducted by Florida Institute of Technology researchers has shown that the majority of nutrients are bound to solid particles in the muck; however, the interstitial water also contains a significant amount of dissolved nutrients. When the muck material is dredged, interstitial water nutrients are pumped with the muck and lagoon water in a slurry to the dredged material management area. At the dredged material management area, the muck slurry is processed in a settling pond where sediments settle out and overflow water is returned to the Indian River Lagoon (IRL). Treatment of this overflow water represents a significant opportunity to prevent return of these nutrients to the IRL.

Working with the dredging industry, sewage treatment industry, stormwater treatment entrepreneurs and industrial waste treatment engineers, feasible and reasonably cost-effective concentration targets for return water to the IRL were initially identified as 2,000–3,000 parts per billion for total nitrogen (TN) and 75–100 parts per billion for total phosphorus (TP). Treatment options for TP were demonstrated during the state-funded initial dredging of Turkey Creek, with Florida Institute of Technology researchers providing independent third-party verification of performance levels. These targets can be achieved through a variety of technologies including, but not limited to, coagulants, polymers, biosorption activated media, or a combination of these technologies. Costs associated with these technologies vary by technology, target nutrient reduction levels, and interstitial nutrient concentrations. Open market costs were initially collected through three bid solicitations: (1) Mims Boat Ramp muck removal project, (2) Sykes Creek muck removal project, and (3) Grand Canal muck removal project. More recent dredging experience indicates that concentration targets for TN may need to be adjustable and procured as bid options or alternates to allow market conditions to identify what targets are most cost-effective.

To encourage partnering entities and applicants for Save Our Indian River Lagoon Trust Fund dollars to take advantage of this opportunity to enhance the performance of muck removal projects by removing interstitial water nutrients from the dredge slurry during muck dredging operations whenever project configuration allows, a separate cost-share was developed to account for this added cost and associated nutrient reduction benefit. Using available cost information from Turkey Creek, Mims, and Sykes Creek, County staff considered how to incentivize the addition of this processing step as soon as possible into permitted muck removal projects, as well as future projects. When the substitute project request form was distributed to the public in 2018, staff estimated that a cost-share of \$200 per pound of TN removed would be sufficient to entice most partners to agree to stipulate a specific condition in their bids and dredging contracts that return water not exceed 3,000 parts per billion of TN nor 100 parts per billion of TP. However, based on recent bids for nutrient mitigation alternatives for sediment dewatering for Sykes Creek (Tetra Tech, 2015), Grand Canal, and Mims, the cost-share used for County projects in the 2019 Update was reduced to \$50 per pound of TN removed. This cost will remain volatile until a contractor meets the concentration targets long enough to more accurately determine cost.

The recommended locations for interstitial water treatment and load reductions in pounds per year (lbs/yr) are shown in **Table 4-29**.

Table 4-29: Projects for Treatment of Interstitial Water

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN Removed	TP Reduced (lbs/yr)	Cost per Pound per Year of TP Removed	Plan Funding
2017	40	Mims Muck Removal: Outflow Water Nutrient Removal+*	Brevard County	North IRL	2,803	\$143	244	\$1,639	\$400,000
2018	2016-10b	Port Canaveral South+	Brevard County	Banana	42,688	\$50	3,887	\$549	\$2,134,419
2018	2016-5b	Pineda Banana River Lagoon+	Brevard County	Banana	19,820	\$50	1,804	\$549	\$990,980
2018	2016-11b	Patrick Air Force Base+	Brevard County	Banana	20,836	\$50	1,897	\$549	\$1,041,800
2018	168b	Cocoa Beach Golf+^	Brevard County	Banana	99,098	\$30	9,022	\$334	\$3,013,100
2018	41b	Grand Canal+	Brevard County	Banana	89,025	\$175	To be determined	To be determined	\$15,579,397
2018	42b	Sykes Creek+	Brevard County	Banana	64,278	\$175	To be determined	To be determined	\$11,248,704
2018	2016-06b	Titusville Railroad West+	Brevard County	North IRL	9,148	\$50	833	\$549	\$457,375
2018	2016-07b	National Aeronautics and Space Administration Causeway East+	Brevard County	North IRL	28,967	\$50	2,637	\$549	\$1,448,355
2018	2016-04b	Rockledge A+	Brevard County	North IRL	12,705	\$50	1,157	\$549	\$635,244
2018	2016-08b	Titusville Railroad East+	Brevard County	North IRL	11,688	\$50	1,064	\$549	\$584,424
2018	54b	Eau Gallie Northeast+	Brevard County	North IRL	25,410	\$50	2,313	\$549	\$1,270,487
2018	2016-3b	Muck Interstitial Water Treatment for Turkey Creek+	Brevard County	Central IRL	Not applicable	Not applicable	688	Not applicable	Part of dredging cost
2018	72b	Muck Interstitial Water Treatment for Indian Harbour Beach Canals+	City of Indian Harbour Beach	Banana	27,418	\$200	To be determined	To be determined	\$5,483,600
2020	113	Satellite Beach Interstitial Water Treatment+	City of Satellite Beach	Banana	29,978	\$102	3,059	\$1,000	\$3,057,756
-	-	Total	-	-	483,862	\$98 (average)	28,605	\$1,655 (average)	\$47,345,641

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

* Outflow Water Nutrient Removal for the Mims Muck Removal project was funded, bid, and awarded to the lowest successful bidder; however, the contractor was unsuccessful at reducing outflow water nutrient concentrations as much as required by the contract. Therefore, only partial reductions were achieved and the Save Our Indian River Lagoon 0.5 cent sales tax funding was not used.

^ The Cocoa Beach Golf project is not fully funded at this time. A total of \$3,013,100 is available and Brevard County is looking for options to fund the remaining \$1,941,800.

4.2.3 Spoil Management Areas

As Brevard County seeks to execute muck dredging projects, the availability of upland processing areas for the treatment of dredge spoils has become a growing concern. These working sites, referred to as temporary spoil management areas or in the industry as dredged material management areas, are upland parcels of land that can be used as needed for the temporary processing of dredge spoils until such time as the materials can be moved offsite to a permanent beneficial use or disposal location.

To move muck dredging projects forward in a timely manner, initial project locations were selected to make use of existing dredged material management areas through the County's long-standing partnership with the Florida Inland Navigation District. The Florida Inland Navigation District manages Florida's Intracoastal Waterway for which it has acquired eight dredged material management area sites distributed from north to south along the 72 miles of the Indian River Lagoon (IRL), not the Banana River, in Brevard County. Only three of these Florida Inland Navigation District dredged material management areas are presently developed; however, the County is working on partnership agreements with the Florida Inland Navigation District to construct dredged material management area facilities at their remaining sites.

The eight Florida Inland Navigation District sites are insufficient to meet the volume and timing of muck dredging projects included in this plan. As the distance between dredging sites and dredged material management areas increase, more booster pumps are required. Booster pumps can complicate project operations and increase cost, particularly as multiple boosters become necessary. Booster pumps are required as project pump distances approach one-mile and are required at one-mile intervals thereafter. Each booster pump adds approximately \$1 per cubic yard of material dredged. Pump distances for the Eau Gallie and Sykes Creek projects have five- to seven-mile pump distances to the Florida Inland Navigation District sites and project amounts in excess of 400,000 cubic yards each.

As a supplement to the Florida Inland Navigation District sites, Brevard County staff investigated lease and purchase options for the development of additional multi-use spoil management areas. Lease options for parcels of interest resulted in unfavorable cost-benefit ratios on these short-term investments due to the up-front costs of site development including design, permitting, mitigation, and construction. Similar cost effectiveness issues arise from depending on private sector contractors to provide a temporary dredged material management area as part of construction costs. The contractor passes along most or all the costs of providing a dredged material management area, but the County does not have the benefit of using the site multiple times over the 10-year timespan of this plan or thereafter.

Fee simple purchase and development of spoil management areas, designed with multi-use options for the implementation of regional surface water or stormwater treatment projects, emerges as the most cost-effective long-term option. Through fee simple site acquisition and a prescribed site use and management plan, investments in acquisition and development costs, including required mitigation, can be recovered. For example, the acquisition of a spoil management site four miles closer than the nearest Florida Inland Navigation District site could reduce booster pump costs by \$1.6 million on a single 400,000 cubic yard muck removal project. This savings can offset site acquisition and development costs associated with the parcel.

Publicly owned dredged material management area sites could be used for stormwater or surface water treatment, when not being used for dredging. These additional uses can be

factored into site selection and design to provide supplementary lagoon benefits. Therefore, land acquisition shall be considered an eligible muck management project cost, particularly when the site can be designed to provide multi-use regional surface water or stormwater treatment alongside or intermittently between usages for muck management. A preliminary project design and construction layout with cost evaluation (comparison to an existing, more distant dredged material management area) shall be part of the site selection and land acquisition decision process.

Another factor to consider when evaluating long-term operations and the feasibility of muck dredging projects is the strategy for final disposal and the development of permanent beneficial use or disposal locations. Often left to the contractor as part of their construction and implementation plan, a final disposition strategy is in many cases not part of the dredging project plan. The dependency on private sector contractors to provide a final disposition strategy and permanent material disposal site can have consequences that a managed permanent disposal site can avoid. These consequences can increase the contractor's risk and drive up project costs.

A managed disposal site would consider the fiscal, environmental, and social implications of the site. A final disposition strategy evaluates the appropriateness of the disposal site in terms of the local community and future development, the environmental proximity to surface waters and runoff potential, groundwater protection, hauling costs, and minimizing risk by providing a defined disposal site. A defined material disposal site, laid-out in the project design, provides a level of security at the time of project bidding that reduces risk to the contractor and potentially lowers the project cost. Staff investigation into the purchase, use and reclamation of existing borrow pits are an example of final disposal areas that are being considered. Similar to what is seen with the development of temporary spoil management areas, the most cost-effective long-term option for the disposal of muck material should include the evaluation of fee simple purchase options and the development of spoil disposal areas.

4.2.4 Vegetation Harvesting

Mechanical removal or harvest of aquatic vegetation rather than treatment with herbicides or other control mechanisms may be one method of reducing nutrient loads to the Indian River Lagoon (IRL) and its tributaries. The use of aquatic plants for nutrient management has been considered since at least the 1960s (Boyd, 1969). The harvest of aquatic vegetation removes nutrients from the waterbody rather than recycling them through decomposition and settlement of the plant material into the sediment. Most freshwater plants do not tolerate the salinity of the IRL and, upon release (such as floating plants washed out of canals) to the lagoon, will die and decompose adding a nutrient load directly to the IRL.

Aquatic vegetation can occur either in mixed stands or as large monocultures. It is not uncommon for invasive plants to form largely monotypic stands. The plant material can form dense floating mats that prevent light diffusion into the water column, thus shading the bottom and limiting benthic habitat. The dense layer of vegetation also limits exchange of gases across the water surface and can cause depletion of dissolved oxygen under the mat. At greater densities, vegetation may also form floating islands or tussocks and incorporate woody plants.

Common invasive plants present in waterways that connect to the IRL are hydrilla, water lettuce, duck weed, and water hyacinth, and these plants present the greatest opportunity for harvest and removal of nutrients through plant biomass. However, native vegetation can be

intermixed with exotics. Examples of common native aquatic vegetation that may also be removed includes cattails, fanwort, coontail, bladderwort, and water lilies.

The removal of aquatic vegetation may be accomplished in several ways. For canals or waterbodies with small surface area, booms laid across the water surface can divert flow to screening and sorting facilities for removal of floating vegetation. Also, in canals, drag lines or back hoes can be used for removal of submerged vegetation or modified front end loaders with baskets can collect floating plant material. There are also specifically designed harvesters and shredders that move through the water and cut and remove vegetation (Florida Department of Environmental Protection, 2012).

The cost-share for vegetation harvesting was based on actual annualized costs and laboratory analyses of the total nitrogen (TN) and total phosphorus (TP) content of plant material removed from floating vegetative islands in eight Brevard County stormwater ponds (see **Table 4-30**). Cost-share reimbursement of approved projects will be based on laboratory analysis of plant material to determine true nitrogen removal. Eligible cost-share will be adjusted as additional cost and nutrient removal benefit data are collected.

Table 4-30: Estimated Costs and Nutrient Reductions for Vegetation Harvesting

Project	Annualized Cost	Annualized TN Reductions (lbs/yr)	Cost per Pound per Year of TN Reduction	Annualized TP Reductions (lbs/yr)	Cost per Pound per Year of TP Reduction
Vegetation Harvesting	\$198,868	1,812	\$110	191	\$1,041

Table 4-31 summarizes the approved projects for vegetation harvesting.

Table 4-31: Projects for Vegetation Harvesting

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN Reduction	TP Reduction (lbs/yr)	Cost per Pound per Year of TN Reduction	Plan Funding
2020	111	Draa Field Vegetation Harvesting+	City of Titusville	North IRL	574	\$87	-	-	\$50,000
2020	112	County Wide Stormwater Pond Harvesting+	Brevard County Stormwater	North IRL	140	\$100	28	\$500	\$14,000
2021	171	Mechanical Aquatic Vegetation Harvesting+	Melbourne-Tillman Water Control District	Central IRL	16,636	\$61	1,664	\$608	\$1,011,976
2021	172	Horseshoe Pond Vegetative Harvesting+	Brevard County Stormwater	North IRL	74	\$110	7	\$1,163	\$8,140
2021	173	North and South Lakemont Ponds Vegetation Harvesting+	City of Cocoa	North IRL	18	\$110	4	\$495	\$1,980
-	-	Total	-	-	17,442	\$62 (average)	1,703	\$638 (average)	\$1,086,096

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

4.2.5 Surface Water Remediation System

In 2016, AquaFiber Technologies Corporation had a technology that could treat up to 25 cubic feet per second (16 million gallons per day) of water from Turkey Creek, which is a major tributary to the Central Indian River Lagoon (IRL). This project would reduce total suspended solids by more than 90%, remove algal blooms and cyanobacteria to improve the lagoon's color and clarity, improve the dissolved oxygen concentration by returning water with near 100% oxygen saturation, and produce a biomass that can be processed into fertilizer pellets or used as a feedstock for waste-to-energy utilities to produce electricity.

This project would remove an estimated 35,633 pounds per year (lbs/yr) of total nitrogen (TN) and 2,132 lbs/yr of total phosphorus (TP) from the watershed. The facility would cost \$19,720,760 for design, permitting, construction, and use of a technology to destroy the biomass onsite. The cost to operate and maintain the remediation facility is estimated to be \$6,271,200 per year. **Table 4-32** summarizes the benefits and costs of nutrient removal for this project for a 10-year period. On an annual basis, the yearly costs would be \$8,243,276, which would result in an annual cost per pound per year of TN removed of \$231 and cost per pound per year of TP removed of \$3,867.

Brevard County also received information from Phosphorus Free Water Solutions, which has a pay for performance treatment technology to reduce phosphorus, nitrogen, color, and turbidity in surface waters. Phosphorus Free evaluated a project to treat 50 cubic feet per second of water from Turkey Creek. Based on the measured concentrations in Turkey Creek, Phosphorus Free Water Solutions provided two options for treating nitrogen. The measured phosphorus concentration in Turkey Creek is very low and it would not be cost-effective to remove additional phosphorus from the system through this technology. The first option would use the basic nitrogen removal process, which would remove a portion of the dissolved organic nitrogen. This option would reduce TN by 53% or 50,353 lbs/yr at a cost of \$6,797,000 or \$135 per pound of TN removed. The second option would include an additional treatment step to increase the removal of dissolved organic nitrogen. This option would reduce TN by 86% or 81,469 lbs/yr at a cost of \$13,035,000 or \$160 per pound of TN removed (**Table 4-32**). The costs for each scenario do not include the capital costs to construct the treatment facility, only the annual pay for performance cost estimates for a ten-year contract for treatment.

Table 4-32: Summary of Annual Benefits and Ten-Year Costs of a Surface Water Remediation System

Project	Ten-Year Project Cost	TN Reduction (lbs/yr)	Cost per pound per Year of TN Removed	TP Reduction (lbs/yr)	Cost per Pound per Year of TP Removed
AquaFiber	\$82,432,760	35,633	\$2,313	2,132	\$38,665
Phosphorus Free Option 1	\$67,970,000	50,353	\$1,350	To be determined	To be determined
Phosphorus Free Option 2	\$130,350,000	81,469	\$1,600	To be determined	To be determined

These technologies have not yet been tested in estuarine systems; therefore, these remediation systems are not recommended at this time. However, these types of treatment technologies offer additional benefits that should be more thoroughly explored to better assess the total value to restoring and maintaining lagoon health. In 2020, Brevard County received a grant to collaborate with AquaFiber Technologies Corporation to pilot test their surface water remediation technologies. Unfortunately, AquaFiber had to cancel the project due to COVID-19 related economic hardships. Brevard County continues to investigate potential surface water

remediation technologies and a portion of the Respond funding may be used to incentivize pilot testing. As feasible technologies are proven, projects may be added to future plan updates.

4.2.6 Enhanced Circulation

The 2011 superbloom occurred in the Banana River Lagoon, North Indian River Lagoon (IRL), and southern Mosquito Lagoon. These areas have long residence times, which means that water in these areas stagnates and nutrients can build up leading to additional algal blooms. Options to address this condition are to increase circulation by replacing causeways with bridges, installing culverts under causeways, or increasing ocean exchange by adding culverts, pump stations, or inlets to provide new connections to the ocean. Addressing manmade causeways that interfere with natural circulation should be beneficial without unintended consequences and modeling can help prioritize actions, but implementation is costly and requires participation by the Florida Department of Transportation.

New artificial ocean exchange projects introduce a lot of unknowns. While the residence time of water in the IRL system would decrease, the input ocean water with its complement of marine life has the potential to alter the lagoon ecosystem. Whether the amount of ocean exchange needed to have a beneficial impact on the system can be achieved without causing unintended harm to the lagoon is unknown. Artificial ocean exchange projects are costly with significant social implications and permitting hurdles to overcome. For these reasons, causeway replacements are encouraged while ocean exchange projects are not a recommended component of this plan. Other entities are taking the lead on evaluating options. The results of evaluations by the St. Johns River Water Management District and the IRL National Estuary Program are summarized below.

The St. Johns River Water Management District contracted with CDM Smith and Taylor Engineering to identify potential locations where enhanced circulation projects would be beneficial. The first phase of the project (CDM Smith et al., 2014) involved a literature review and geographic information system desktop analysis. All the locations considered in Phase I, including the top ranked locations, are shown in **Figure 4-29**. From this first phase, ten locations were identified for future evaluation as shown in **Table 4-33**. The external projects are those that could potentially connect the IRL system with the Atlantic Ocean whereas internal projects are connections within the IRL (CDM Smith et al., 2015).

Table 4-33: Phase I Top Ranked Potential Enhanced Circulation Project Locations

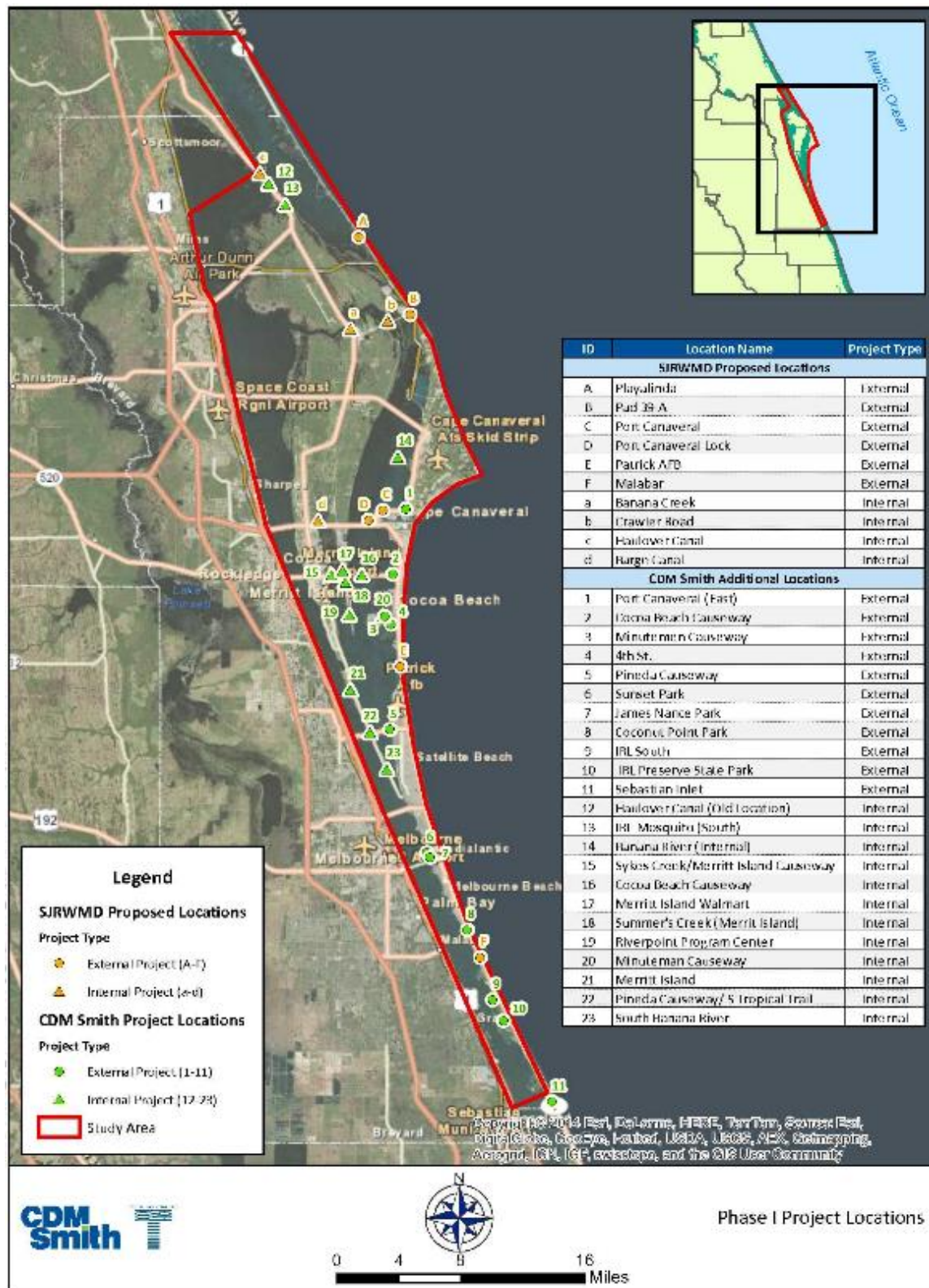
Project Site	Project Description	Zone	Project Type	Rank
D	Canaveral Lock*	Banana River Lagoon	External	1
C	Port Canaveral*	Banana River Lagoon	External	2
15	Sykes Creek/Merritt Island Causeway*	Banana River Lagoon	Internal	3
B	Pad 39-A*	Banana River Lagoon	External	4
16	Cocoa Beach Causeway	Banana River Lagoon	Internal	5
23	South Banana River	Banana River Lagoon	Internal	6
E	Patrick Air Force Base *	Banana River Lagoon	External	7
20	Minuteman Causeway	Banana River Lagoon	Internal	8
1	Port Canaveral (East)	Banana River Lagoon	External	9
8	Coconut Point Park*	Central and Southern Portion of IRL Study Area	External	10

Source: CDM Smith et al. 2015.

* Sites evaluated in Phase 2 of the CDM Smith and Taylor Engineering project for the St. Johns River Water Management District.

As part of the second phase of the project, six of the top ranked sites were further evaluated to assess the water volumes. These sites are noted in **Table 4-33**. Based on the initial evaluation of the sites, CDM Smith and Taylor Engineering determined that a project at the Sykes Creek/Merritt Island Causeway was not feasible. This location had a relatively new bridge crossing with built-up abutment protection that precludes construction of culverts and the increase of bridge openings. In addition, this connection would only provide an internal connection in the IRL and would not increase the tidal exchange. The five remaining sites were evaluated for the following types of connections (additional information in **Table 4-34**):

- Port Canaveral (Project Site C) – Culvert connection
- Pad 39-A (Project Site B) – Culvert connection
- Patrick Air Force Base (Project Site E) – Culvert connection
- Canaveral Lock (Project Site D) – Open channel flow by keeping the Canaveral Lock open over extended periods. Additional maintenance dredging may be needed to remove sediment deposition near the gates.
- Coconut Point Park (Project Site 8) – Culvert connection
- Coconut Point Park (Project Site 8) – Inlet connection with an inlet that is at least 1,350-feet long, with an average depth of about 25 feet below mean sea level.



Source: CDM Smith et al. 2015.

Figure 4-29: Phase I Potential Enhanced Circulation Project Locations

Figure 4-29 [Long Description](#)

Table 4-34: Computed Hydraulics for Connections at Select Locations

Site/Potential Project	Flood Prism (million cubic feet)	Ebb Prism (million cubic feet)	Maximum Flow (cubic feet per second)	Estimated Impacted Area for 0.27 Foot Tide Range (acres)
Port Canaveral Culvert (Project Site C)	1.51	-1.08	89	92 to 128
Pad 39-A Culvert (Project Site B) (estimated)	1.38 to 1.51	-1.08 to -1.59	Not applicable	92 to 135
Patrick Air Force Base Culvert (Project Site E) (estimated)	1.38 to 1.51	-1.08 to -1.59	Not applicable	92 to 135
Canaveral Lock Open Channel Flow (Project Site D)	68.67	-83.03	-4,670	5,839 to 7,060
Coconut Point Park Culvert (Project Site 8)	1.38	-1.59	-94	117 to 135
Coconut Point Park Inlet (Project Site 8)	1,890	Not applicable	111,000	160,698

Source: CDM Smith et al. 2015.

Note: Positive flow is towards the IRL.

A screening matrix was used to evaluate the costs and benefits of the project based on the criteria for the tidal prism, area affected, land acquisition, relative costs, ease of construction, seagrass loss, and benefit to cost ratio. The top ranked project from this evaluation is the Port Canaveral culvert (CDM et al., 2015). It is important to note that a culvert will likely not provide the amount of exchange needed to provide a significant benefit to the lagoon. The size of the lagoon in Brevard County is more than 150,000 acres. The second ranked project is the Canaveral Lock open channel. This option may have challenges moving forward based on past experience with sediment blocking submarines from using the port after the lock was held open for an extended period of time. In addition, there are limited data for estimating the water quality benefits and unintended ecological consequences that could result from keeping the lock open.

In 2019, the Florida Institute of Technology received \$800,000 in funding from the Florida Legislature, which is administered by the Florida Department of Education, to plan and perform studies at sites within the lagoon and along the coast to restore lagoon inflow. The first phase of the study gathered baseline data and performed modeling on existing water quality, biological parameters, and hydrologic conditions at potential locations for future temporary permitted inflow test structures. The Phase 1 modeling and engineering project research was conducted in parallel with the biological and water quality monitoring to gather data for an enhanced circulation pilot project. The first phase of the project was completed in September 2020. Phase 1 provided baseline biological and geochemical data near the three proposed inflow locations: Port Canaveral and south Cocoa Beach in Brevard County and Bethel Creek in Indian River County. Modeling results were provided for different flow rates in each location based on preliminary engineering concepts for three structure options: pipe with no pump, pump and pipe, and weir. In 2020, the Florida Institute of Technology received another \$800,000 in funding from the Florida Legislature, which is also administered by the Florida Department of Education, for Phase 2 of the study, which will identify the location for a temporary inflow pilot system, begin the engineering design for this location, and start the permitting process (Florida Institute of Technology, 2020).

Temporary Inlet: Another potential option for ocean exchange is when a large storm creates an opening. Instead of immediately filling in the new opening, an evaluation should be completed using available models to determine the potential benefits of temporarily stabilizing the opening

long enough to provide significant ocean exchange for short-term water quality benefits, but not long enough to excessively alter beach erosion and sand transport into the lagoon.

Causeway Modification: In 2018, the IRL National Estuary Program, in partnership with the Canaveral Port Authority, worked with the Florida Institute of Technology to assess the potential for modifications of the State Road 528 and State Road 520 causeways and bridge structures to enhance circulation in the northern portion of the Banana River Lagoon and adjacent North IRL. The Florida Institute of Technology used the United States Army Corps of Engineers Coastal Modeling System for this evaluation (Zarillo, 2018).

The model was set up to reproduce the physical conditions of 2015 to ensure the model was well calibrated. Measured data, including water levels, freshwater inflows, wind velocity, and topography, were used to drive the model. Nine model tests were performed to represent current conditions and scenarios with hypothetical bridge spans over the Banana River Lagoon and North IRL. Three of the model tests included flow relief structures embedded in the State Road 528 and State Road 520 causeways. The tests were run using numerical tracer dye concentration throughout the model domain to track the dye concentration reduction throughout the model simulation. Circulation in the model occurred through ocean exchanges through the Sebastian Inlet, freshwater inflows, and wind (Zarillo 2018).

The model results indicated that modifying the bridge and causeway structures would have a detectable influence on exchange rates within the Banana River Lagoon and North IRL. Longer bridge spans over the Banana River Lagoon along State Road 528 combined with longer bridge spans over State Road 520 resulted in a 10% net reduction in the dye concentration in the Banana River Lagoon between State Road 528 and State Road 520 at the end of the 340-day model run. The net improvement in exchange in the Banana River Lagoon immediately to the north of State Road 528 was predicted to be 5%, if bridge spans are present on both state roads. The study concluded that a significant improvement in exchange in the Banana River Lagoon study area and adjacent North IRL would require bridge spans on both State Road 520 and State Road 528 (Zarillo, 2018).

In 2019, Dr. Zarillo expanded his circulation model to include Mosquito Lagoon and the ocean inlet at New Smyrna instead of a closed boundary at Haulover Canal. This expanded model was run again to estimate the impact of causeways on residence time in various compartments of the IRL. In this study, longer bridge spans over the Banana River Lagoon along State Road 528 and State Road 520 resulted in a 17% net reduction in the dye concentration in the Banana River Lagoon between State Road 528 and State Road 520 at the end of the 340-day model run. The net improvement in exchange in the Banana River Lagoon immediately to the north of State Road 528 was predicted to be 8% and exchange within Sykes Creek improved by 20% (Zarillo, 2019).

In response to the 2019 model results, the St. Johns River Water Management District offered to use their state-of-the-art ecological modeling tools to quantify water quality improvements and algal bloom reductions anticipated from the proposed causeway modifications. At the request of Brevard County, Port Canaveral, and IRL National Estuary Program, the Florida Department of Transportation agreed to pause their causeway widening project for six months until the ecological impacts could be estimated and evaluated. The modeling results confirmed the improvement in residence time identified in Dr. Zarillo's modeling but found little corresponding change in chlorophyll a concentrations (St. Johns River Water Management District, 2020).

4.3. Projects to Restore the Lagoon

Another component of this plan is to implement projects that will restore important, filtering ecosystem services within and adjacent to the lagoon to improve water quality and resilience. Oyster reefs provide ecosystem services including improved water quality, shoreline stabilization, carbon burial, and habitat (Grabowski et al., 2012). Creating oyster bars and planting shorelines with natural vegetation will help to filter excess nutrients and suspended solids from the lagoon (Grizzle et al., 2008; Reidenbach et al., 2013), which will improve water quality, allowing for seagrass growth (Newell and Koch, 2004) and may reduce the number and severity of algal blooms in the lagoon system. Oyster bars and planted shorelines also create habitat for more than 300 different lagoon species. These types of projects take years before the full benefits are seen in the lagoon as it takes some time for the oysters and vegetation to grow and become established.

The sections below summarize the oyster restoration and planted shoreline projects that are proposed, as well as considerations for seagrass planting.

4.3.1 Oyster Restoration

The primary mechanism by which oyster bars remove nitrogen is by increasing local denitrification rates.

In addition to the fisheries value of oysters, they provide a variety of nonmarket ecosystem services, with a combined estimated economic value between \$5,500 and \$99,000 per hectare per year (Grabowski et al., 2012). Restored oyster bars have been shown to result in a positive net effect on the removal and sequestration of nitrogen compared to unrestored sites. As nitrogen is a major contributor to algal blooms and resulting increased turbidity, removal of nitrogen from the system often yields water quality benefits. The nitrogen is removed through three pathways: (1) assimilation of the nitrogen in the shell and tissues of the oysters, (2) enhanced burial of nitrogen into the sediments surrounding oyster bars, and (3) conversion to gaseous form with return to the atmosphere through microbe-related denitrification (zu Ermgassen, 2016).

The primary mechanism by which oysters remove nitrogen from the system is by increasing local denitrification rates (Grabowski et al., 2012). While the impacts of oyster bars may be localized, they also influence the larger ecosystem. For example, a study by Sharma et al. (2016) found that even with limited bio-filtration and nonsignificant reef effects on water velocity, there was a “shadow” effect on seagrass beds between the reef and shoreline, which resulted in higher localized seagrass area five years after deployment relative to other nearby areas. Further, in a study by Kroeger (2012), it was noted that the eastern section of Mobile Bay had experienced harmful algal blooms that caused fish kills. These conditions occur in the summer months when denitrification by restored oysters would be highest. Therefore, the nitrogen removal associated with the oyster bar project in the bay may make a noticeable contribution to the local water quality by avoiding peak nitrogen concentrations that may trigger algal blooms. In a study by Kellogg et al. (2013), the denitrification rates associated with oyster bars from various studies were documented. Based on these studies, the average effect of denitrification rate is 291 micromoles of total nitrogen (TN) per square meter per hour, which equates to 0.04 pounds of TN per square meter per year (161.9 pounds of TN per acre per year). A 2017 study was also conducted in the Mosquito Lagoon to determine the local benefits from oyster bed restoration. This study found that the average denitrification rate is 450 kilograms of TN per

hectare per year (401.5 pounds of TN per acre per year) and measured nitrogen sequestration in oyster tissues and shells is 0.04 pounds of TN per square foot, which equates to 4,741.1 pounds of TN per acre per year (Schmidt and Gallagher, 2017).

The focus for oyster restoration in the Indian River Lagoon (IRL) system is to provide filtration, sequestration, denitrification, and scour protection along the shoreline (see **Section 4.3.2** for details on scour protection). The goal is not to restore historical oysters in the system because information is not available on where oysters were historically located. In addition, seagrass are a more critical component of the system, so restoration efforts aim to use the beneficial aspects of oysters in protecting seagrass from waves and increasing light availability (Newell and Koch, 2004) while minimizing the competition for space. Therefore, sites are evaluated for relative seagrass and oyster habitat requirements such as salinity, depth, and bottom type. Further detailed metrics for site selection and success criteria are currently under development. Oyster bars may be constructed in submerged areas deeper than seagrass or as narrow bars along the shoreline to act as a living wave break to reduce erosion.

The oysters from the Oyster Gardening Program have been used to develop several pilot bars and demonstration sites in the IRL. In fiscal year 2014–2015, the County received a \$410,000 appropriation from the Florida Legislature for the Indian River Lagoon Oyster Restoration Project. This pilot study was completed in fall 2016. The design of oyster wave breaks funded by the Save Our Indian River Lagoon tax is based on monitoring results from the pilot bars and wave tank studies at Florida Institute of Technology that tested the oyster bar stability and wave attenuation of different designs. From these studies the importance of reef location and seasonal water depth (Anderson, 2016) as well as the ability of the reef to act as a wave break (Weaver et al., 2017) were highlighted.

To create enough oyster bar area to filter the volume of lagoon water annually, approximately 20 miles (105,600 feet) of oyster bars is needed with a width of six feet. These bars will be placed throughout the IRL system along mosquito impoundments, parks, and private properties where owners want to participate. Based on the pilot project costs and knowing that larger bars will be constructed more efficiently (using information from the pilot projects), it is estimated that the 20 miles of oyster bars could be constructed at a cost of \$10 million.

With the recent study on oyster bars in the IRL system (Schmidt and Gallagher, 2017), the benefits associated with oyster bars versus planted shorelines could be delineated. For the proposed oyster bar along 20 miles (105,600 feet) of shoreline with a width of six feet (total of 633,600 square feet), the estimated reductions are 25,344 pounds per year (lbs/yr) of TN and 906 lbs/yr of total phosphorus (TP). These estimates are based on the estimated TN reduction rate of 0.04 pounds of TN per square foot of oyster bar from Schmidt and Gallagher 2017 and the estimated TP reduction rate of 0.001 pounds of TP per square foot of oyster bar from Kellogg et al. (2013). The projects for oyster bar restoration are summarized in **Table 4-35**.

Table 4-35: Projects for Oyster Restoration

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN Reduction	TP Reduction (lbs/yr)	Cost per Pound per Year of TP Reduction	Plan Funding
Original	2016-55	Banana River Lagoon Oyster Bars*	Brevard County	Banana	7,986	\$395	200	\$15,755	\$3,151,051
Original	2016-56	North IRL Oyster Bars*	Brevard County	North IRL	7,439	\$395	186	\$15,780	\$2,935,159
Original	2016-57	Central IRL Oyster Bars*	Brevard County	Central IRL	1,194	\$395	30	\$15,705	\$471,137
2018	75	Marina Isles Oyster Bar+	Brevard Zoo	Banana	60	\$445	20	\$1,335	\$26,700
2018	76	Bettinger Oyster Bar+	Brevard Zoo	Banana	24	\$445	8	\$1,335	\$10,680
2018	78a	McNabb Park Oyster Bar+	City of Cocoa Beach	Banana	72	\$473	24	\$1,419	\$34,056
2018	79	Gitlin Oyster Bar+	Brevard Zoo	Banana	36	\$445	12	\$1,335	\$16,020
2018	80	Coconut Point/Environmentally Endangered Lands Oyster Bar+	Brevard Zoo	Central IRL	96	\$470	2	\$22,560	\$45,120
2018	81	Wexford Oyster Bar+	Brevard Zoo	Central IRL	70	\$445	24	\$1,298	\$31,150
2018	82a	Riverview Park Oyster Bar+	City of Melbourne	Central IRL	230	\$473	78	\$1,395	\$108,790
2018	83	Bomalaski Oyster Bar+	Brevard Zoo	North IRL	20	\$445	7	\$1,271	\$8,900
2018	73	Riverview Senior Resort Oyster Bar+	Brevard County	Central IRL	77	\$394	2	\$15,152	\$30,304
2019	104	Brevard Zoo Banana River Oyster Project+	Brevard Zoo	Banana	1,476	\$395	37	\$15,757	\$583,020
2019	105	Brevard Zoo Central IRL Oyster Project+	Brevard Zoo	Central IRL	408	\$395	10	\$16,116	\$161,160
2019	106	Brevard Zoo North IRL Oyster Project+	Brevard Zoo	North IRL	864	\$395	22	\$15,513	\$341,280
2020	139	Brevard Zoo North IRL Oyster Project 2+	Brevard Zoo	North IRL	841	\$400	21	\$16,019	\$336,400
2020	140	Brevard Zoo Central IRL Oyster Project 2+	Brevard Zoo	Central IRL	677	\$400	17	\$15,929	\$270,800
2020	141	Brevard Zoo Banana River Oyster Project 2+	Brevard Zoo	Banana	662	\$400	17	\$15,576	\$264,800
2020	142	Brevard Zoo Oyster Reef Adjustments North IRL+	Brevard Zoo	North IRL	68	\$400	2	\$13,600	\$27,200
2020	143	Brevard Zoo Oyster Reef Adjustments Banana River+	Brevard Zoo	Banana	32	\$400	1	\$12,800	\$12,800
2021	184	Brevard Zoo North Indian River Lagoon Oyster Project 3+	Brevard Zoo	North IRL	1,056	\$397	26	\$16,124	\$419,232
2021	185	Brevard Zoo Central Indian River Lagoon Tributary Pilot Oyster Project+	Brevard Zoo	Central IRL	581	\$397	15	\$15,377	\$230,657

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN Reduction	TP Reduction (lbs/yr)	Cost per Pound per Year of TP Reduction	Plan Funding
2021	186	Brevard Zoo North Indian River Lagoon Individual Oyster Project+	Brevard Zoo	North IRL	436	\$397	11	\$15,736	\$173,092
2021	187	Brevard Zoo Central Indian River Lagoon Oyster Project 3+	Brevard Zoo	Central IRL	218	\$397	5	\$17,309	\$86,546
2021	188	Brevard Zoo Banana River Oyster Project 3+	Brevard Zoo	Banana	143	\$397	4	\$14,193	\$56,771
-	-	Total	-	-	24,766	\$397 (average)	781	\$12,590 (average)	\$9,832,825

Note: The projects highlighted in green and marked with an asterisk were identified in the original plan. The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update. As specific project locations are added each year, the amount of funding for the original projects is reduced accordingly to keep the total funding allocation constant for projects that restore natural filtration processes (including oyster, clam, and planted shoreline projects).

4.3.2 Planted Shorelines

Typically, efforts to protect shorelines have involved hardened structures, such as seawalls, rock revetments, or bulkheads, to dampen or reflect wave energy. Although these types of structures may mitigate shoreline retreat, they accelerate scour and the ecological damages that result can be great (Scyphers et al., 2011). The planted shoreline approach incorporates natural habitats into a shoreline stabilization design; maintains the connectivity between aquatic, intertidal, and terrestrial habitats; and minimizes the adverse impacts of shoreline stabilization on the estuarine system. These efforts range from maintaining or transplanting natural shoreline vegetation without additional structural components to incorporating shoreline vegetation with hardened features, such as rock sills or oyster bars, in settings with higher wave energy (Currin et al., 2010). Selection of the most appropriate management system begins with a site analysis to evaluate the type of shoreline, amount of energy that a shoreline experiences, sediment transport forces, type and location of ecological resources, and adjacent land uses (Restore America's Estuaries, 2015).

Oyster bars can function as natural breakwaters, in addition to providing nutrient removal benefits through denitrification, as noted in **Section 4.3.1**. The rate of vertical oyster bar growth on unharvested bars (2–6.7 centimeters per year) is greater than predicted sea-level rise rate (2–6 millimeters per year); therefore, bars could serve as natural protection against shoreline erosion, shoreline habitat loss, and property damage and loss along many estuarine shorelines (Ridge et al., 2017). Oyster bars reduce erosion of other estuarine habitats such as salt marshes and submerged aquatic vegetation by serving as a living breakwater that attenuates wave energy and stabilizes sediments (Grabowski et al., 2012).

As part of a study for the Chesapeake Bay, Forand et al. (2014) evaluated the pollutant load reductions from planted shoreline projects in the area. The results of this evaluation are shown in **Table 4-36**, and were used to update the United States Environmental Protection Agency Chesapeake Bay Program Office estimate of the total nitrogen (TN) and total phosphorus (TP) reductions per foot of planted shoreline. It is important to note that the information in this table is from states up north where temperatures become much cooler for longer periods of time than what occurs in Brevard County. Therefore, the benefits associated with planted shorelines in the Indian River Lagoon (IRL) system will likely be greater than those estimated here.

Table 4-36: Pollutant Load Reductions for Shoreline Management Practices

Source	TN (pounds per foot per year)	TP (pounds per foot per year)	Study Location
Ibison 1990	1.65	1.27	Virginia
Ibison 1992	0.81	0.66	Virginia
Proctor 2012	Not applicable	0.38 or 0.29	Virginia
Maryland Department of the Environment 2011	0.16	0.11	Maryland
Baltimore County mean (Forand 2013)	0.27	0.18	Maryland
Chesapeake Bay Program Office Scenario Builder 2012	0.02	0.0025	Chesapeake Bay Program policy threshold that comes from one stream restoration site in Maryland
<i>New Interim Chesapeake Bay Program Office Rate (Expert Panel, 2013)</i>	<i>0.20</i>	<i>0.068</i>	<i>Chesapeake Bay Program Office policy thresholds that comes from six stream restoration sites</i>

Note: Table is from Forand et al., 2014.

The estimated nutrient reductions from planted shorelines can be calculated using Chesapeake Bay Program Office recommended rates of 0.2 pounds of TN per linear foot and 0.068 pounds of TP per linear foot (Forand et al., 2014.), which is for an average planting width of 24 feet. These values were adjusted for the proposed average planting width of eight feet, which results in a reduction of 0.067 pounds of TN per linear foot and 0.023 pounds of TP per linear foot. Shoreline planting projects can be combined with oyster bar breakwater projects or they may be conducted along separate stretches of shoreline. At this time, the plan does not recommend a total length of planted shoreline. Planted shoreline projects will be considered for funding annually as partners submit projects for the plan. A cost-share of \$16 per linear foot of shoreline, planted in eight-foot wide swaths, was established by using typical nursery installation costs and standard canopy dimensions for native shoreline species found in Brevard County. This equates to \$240 per pound of nitrogen reduced by shoreline plantings.

The County conducted a survey of the shorelines, in conjunction with the University of Central Florida, to determine if the shoreline included a bulkhead/seawall, hardened slope/riprap, or no structure to help identify potential locations for future oyster bars and planted shorelines (Donnelly et al., 2018) (**Figure 4-30**).

Table 4-37 summarizes the approved projects for planted shorelines and the estimated load reductions in pounds per year (lbs/yr).

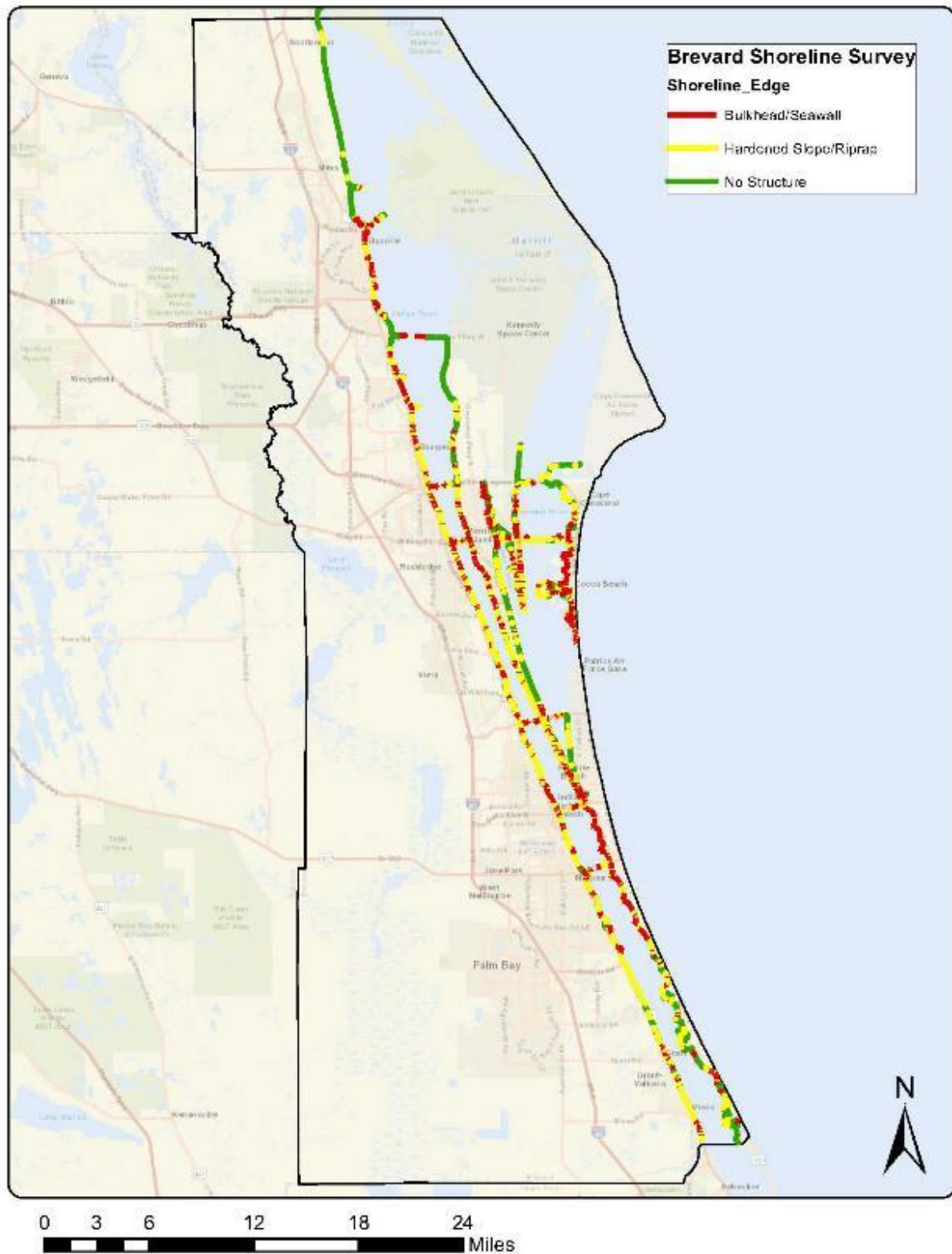


Figure 4-30: Shoreline Survey to Identify Locations Appropriate for Oyster Bars and Planted Shorelines

Figure 4-30 [Long Description](#)

Table 4-37: Projects for Planted Shorelines

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN Reduction	TP Reduction (lbs/yr)	Cost per Pound per Year of TP Reduction	Plan Funding
2018	77a	Cocoa Beach Country Club Planted Shoreline+	Marine Resources Council	Banana	67	\$239	23	\$696	\$16,014
2018	77b	Lagoon House Shoreline Restoration Planting+	Marine Resources Council	Central IRL	100	\$240	34	\$705	\$23,961
2018	78b	McNabb Park Planted Shoreline+	City of Cocoa Beach	Banana	24	\$240	8	\$720	\$5,760
2018	82b	Riverview Park Planted Shoreline+	City of Melbourne	Central IRL	77	\$240	26	\$711	\$18,480
2019	102	Brevard Zoo Banana River Plant Project+	Brevard Zoo	Banana	13	\$240	4	\$780	\$3,120
2019	103	Brevard Zoo North IRL Plant Project+	Brevard Zoo	North IRL	3	\$240	1	\$720	\$720
2020	130	Brevard Zoo North IRL Plant Project 2+	Brevard Zoo	North IRL	41	\$240	14	\$703	\$9,840
2020	131	Brevard Zoo Central IRL Plant Project+	Brevard Zoo	Central IRL	8	\$240	3	\$640	\$1,920
2020	132	Brevard Zoo Banana River Plant Project 2+	Brevard Zoo	Banana	2	\$240	1	\$480	\$480
2020	133	Fisherman's Landing+	Marine Resources Council	Central IRL	20	\$240	7	\$686	\$4,800
2020	135	Rotary Park+	Marine Resources Council	Central IRL	20	\$240	7	\$686	\$4,800
2021	180	Scottsmoor Impoundment+	Marine Resources Council	North IRL	44	\$240	15	\$704	\$10,560
2021	181	Rivertedge+	Marine Resources Council	North IRL	17	\$240	6	\$680	\$4,080
2021	182	Newfound Harbor Drive+	Marine Resources Council	Banana	7	\$240	2	\$840	\$1,680
2021	183	Brevard Zoo North Indian River Lagoon Plant Project 3+	Brevard Zoo	North IRL	4	\$240	1	\$960	\$960
-	-	Total	-	-	447	\$240 (average)	152	\$705 (average)	\$107,175

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

4.3.3 Clam Restoration and Aquaculture

Another potential tool for nutrient extraction, scour prevention, and water filtration in the Indian River Lagoon (IRL) is through clam aquaculture and restoration. Like oysters, clams can remove nitrogen from a system by burying it in sediments and enhancing the denitrification process through increased microbial activity in biodeposits (Clements and Comeau, 2019). The harvesting of clam shells and tissues can also extract nitrogen, as bivalves directly incorporate nitrogen (i.e., from consumption of phytoplankton and detritus; not dissolved nitrogen in the water) into their tissues and shells (Clements and Comeau, 2019).

Studies suggest that bivalve aquaculture has the potential to stimulate rates of denitrification equal to that of wild oyster beds and that the impacts of biodeposition from aquaculture are minimal (Clements and Comeau, 2019). The culture gear (bags, cover netting) used by growers creates a favorable environment for a myriad of plants and animals, such as juvenile fish and crabs, by providing habitat, substrate, and protection. This is especially significant since shellfish aquaculture leases can only be located in areas of the lagoon that undergo a resource survey to ensure the site is devoid of seagrasses and other marine life.

The exploration of clam aquaculture in Brevard County as a mitigation tool to extract excess nutrients from the IRL is warranted. According to the University of Florida Clam Farm Benefits Calculator, a single littleneck clam can filter 4.5 gallons of seawater per day and remove 0.09 grams of nitrogen when harvested. Therefore, in 2020, the Citizen Oversight Committee approved allocating \$60,000 in funds to stimulate bivalve aquaculture in Brevard County. This funding would be used to sponsor 10 farms with up to \$6,000 per farmer to plant up to 500,000 clams each. The funding would help to offset licensure, lease, and/or material costs. It is estimated that the clams from this stimulus project would remove 1,000 lbs/yr of TN at a cost of \$60 per pound of TN (Table 4-38). This program will also help promote education directed toward awareness of local aquaculture industries and their dependence on water quality to create mindfulness of the effects of eutrophication in a visceral, practical way. IRL clam restoration may lead to opportunities for successful partnerships with local clam farmers. Public sentiment toward clam restoration has been positive and the nutrient-removal aspects of shellfish aquaculture align with the Plan's goals.

In addition, a statewide partnership aims to restore clams in the IRL using genetic stock able to withstand the unfavorable condition of an algae bloom-ridden lagoon. The IRL Clam Restoration project is a cooperative venture between the Coastal Conservation Association, Florida Fish and Wildlife Conservation Commission, University of Florida Whitney Lab, Brevard Zoo, and Florida Oceanographic Society. They collected brood stock living in the IRL, spawned them, and have begun outplanting these "super clams" in bags or under cover netting to strategic locations in the IRL (based upon historical sites and current water quality trends) including existing partner habitat restoration and commercial lease areas. Next steps include tracking survivorship and growth. One final goal is to establish brood stock that will serve as the optimized variety (phenotype) lines for further stock enhancement.

In 2020, grant funding was requested (but has not yet been secured) to outplant super clam progeny at 100 sites throughout the lagoon. The sites would be a combination of private properties and public locations so that volunteers can assist with restoration. This project would help to obtain information on survival rates in different locations to improve restoration efforts.

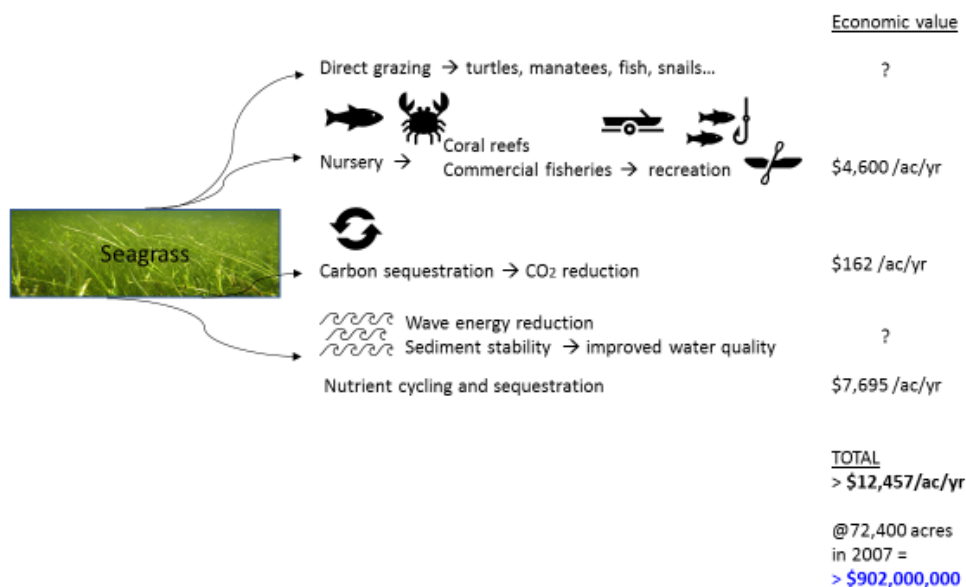
Table 4-38: Projects for Clam Restoration

Year Added	Project Number	Project Name	Responsible Entity	Sub-lagoon	TN Reduction (lbs/yr)	Cost per Pound per Year of TN Reduction	TP Reduction (lbs/yr)	Cost per Pound per Year of TP Reduction	Plan Funding
2021	194	Aquaculture Stimulus Project+	Brevard County	All	1,000	\$60	Not applicable	Not applicable	\$60,000
-	-	Total	-	-	1,000	\$60	Not applicable	Not applicable	\$60,000

Note: The projects highlighted in tan and marked with a plus sign were added to the plan as part of an annual update.

4.3.4 Seagrass Planting

The original Indian River Lagoon (IRL) Surface Water Improvement and Management Plan of 1989, as well as subsequent management plans up to and including the current basin management action plans, target a healthy, estuarine ecosystem populated by seagrasses. Seagrasses provide crucial benefits to Florida's estuaries by providing food and shelter to a variety of animals, improving water quality, and preventing erosion of sediment (Orth et al., 2006). In total, the lagoon's 72,000 acres of seagrass could provide an economic benefit of more than \$900 million per year (**Figure 4-31**; Dewsbury et al., 2016).



Note: Adapted from Dewsbury et al., 2016

Figure 4-31: Estimated Economic Value of Some Seagrass Services

Figure 4-31 [Long Description](#)

One key ecological role for seagrasses is to absorb and cycle nitrogen and phosphorus (Romero et al., 2006). Seagrasses do not remove these nutrients permanently, but they compete for them against phytoplankton and macroalgae and hold them longer. By stabilizing the cycling of nutrients, seagrasses can increase a system's ability to absorb nutrient loads without the initiation of detrimental blooms of phytoplankton or macroalgae (Schmidt et al., 2012). The contribution of seagrasses can be evaluated by examining the quantity of nutrients bound in its aboveground and belowground structures (its mass of biological material or biomass), with this approach treating uptake and release of nutrients as offsetting components of the nutrient cycle (**Table 4-39**).

Table 4-39: Average Nutrients in Seagrass from 1996-2009

Sub-lagoon	Acres	Seagrass (pounds per 100 acres)	Nitrogen (pounds per 100 acres)	Phosphorus (pounds per 100 acres)
Southern Mosquito Lagoon	14,000	45,000	1,000	100
Banana River Lagoon	21,000	45,000	1,000	100
North IRL	19,000	37,000	900	90
Central IRL	7,000	36,000	900	90

Seagrass restoration may be necessary because more than 30,000 acres of seagrasses were shaded to the point of loss during the superbloom in 2011, recovery has been limited, and the brown tide in 2016 exacerbated the situation. In fact, the Banana River Lagoon in Brevard County experienced the largest initial losses of seagrass (**Appendix C**). The absence of seagrasses has made the sediments less stable, which will hamper future colonization and spread. After the loss of seagrass, nitrogen and phosphorus became available to phytoplankton, drift algae, and other primary producers (**Table 4-40**). Seagrasses may need some help to recover in the short-term, with more rapid recovery helping to stabilize nutrient cycling and reducing the amount of nutrients available to phytoplankton. Measures that could help seagrasses recover include protecting existing seagrass to promote expansion or protecting areas from waves to reduce the movement of sediment and allow seagrasses to colonize. Planting *Halodule wrightii* would be the initial focus because planting may accelerate recovery, as *Halodule wrightii* is the most common species in the lagoon (Dawes et al., 1995), and this species is a successful pioneer due to its relatively rapid growth and tolerance of varying conditions.

Table 4-40: Average Seagrass Lost and Nutrients Made Available to Other Primary Producers in 2015

Sub-lagoon	Reduction in Acres	Seagrass Reduction* (pounds per 100 acres)	Nitrogen Reduction (pounds per 100 acres)	Phosphorus Reduction (pounds per 100 acres)
Southern Mosquito Lagoon	0	15,000	300	30
Banana River Lagoon	12,000	37,000	900	90
North IRL	1,000	8,000	200	20
Central IRL	4,000	20,000	500	50

* Changes in seagrass cover yield changes in biomass of seagrass within the same number of acres.

Planting seagrass is not a trivial undertaking; it requires considerable planning, resources, and time. For example, having suitable conditions is critical as shown in Tampa Bay where stakeholders invested more than \$500 million in projects to reduce nutrient pollution before they saw any return from planting seagrass (Lewis et al., 1999). Costs documented during a workshop on seagrass restoration ranged upward of \$1.4 million per acre for larger scale projects (Treat and Lewis, 2006). Some of the lessons learned from past projects are selecting sites that will support seagrass growth, employing optimal methods for planting (e.g., type of planting units, use of chemicals to enhance growth, and density of initial planting), and protecting newly planted seagrass from disturbance (e.g., grazing, waves, exposure, and low salinity) until it is established. These factors must be tailored to a specific location; therefore, one or more pilot studies are needed prior to attempting full-scale seagrass restoration.

A proposed two-year pilot study would evaluate 10 acres of seagrass using three planting techniques with the goal of sequestering 80 pounds per year (lbs/yr) of total nitrogen (TN) and 8 lbs/yr of total phosphorus (TP). The costs for this study are summarized in **Table 4-41**, and the three planting techniques that would be evaluated are shown in **Figure 4-32**. The first technique is the Jeb unit in which approximately three to five shoots with their rhizomes in a biodegradable pellet filled with a growth medium would be installed by hand or planted mechanically. The encapsulated rhizomes resist uprooting, and they can be produced in large quantities relatively quickly and transported easily. The second technique is the peat pot in which approximately 25 shoots will be rooted in a four-inch pot. The relatively large pot and well-rooted shoots yield protection from uprooting due to grazing or loss due to moving sediment. However, the units take more time to grow and plant. The third technique is the safe pot in which approximately 25

shoots will be wrapped in a three-inch coconut coir pot. The unit provides protection from grazing pressure and sediment transport.

Similar or more complex pilot studies could be designed to investigate other key components of successful restoration. Overall, successful seagrass planting at the scale of tens of thousands of acres will benefit from strategic investment in optimizing techniques. **Appendix C** includes additional details about seagrass. The seagrass planting pilot project is not recommended at this time due to inadequate water quality conditions throughout much of the lagoon. As conditions improve, opportunities to test seagrass planting techniques will be evaluated.

Table 4-41: Costs for Pilot Study to Evaluate Seagrass Planting Techniques

Task	Quantity	Unit Cost	Total Cost
Design and permit	1	\$50,000	\$50,000
Install linear feet of breakwater	100	\$550	\$55,000
Deploy planting units	-	-	-
Technique 1: Jeb units	30,000	\$4	\$120,000
Technique 2: Peat pots	1,940	\$5	\$9,700
Technique 3: Safe pots	2,420	\$9	\$21,780
Herbivore excluders	220	\$369	\$81,180
Install herbivore excluders	1	\$37,000	\$37,000
Remove herbivore excluders	220	\$44	\$9,680
Maintain sites and enhance sediment monthly	24	\$14,080	\$337,920
Monitor quarterly	8	\$1,000	\$8,000
Final report	1	\$3,000	\$3,000
Total	Not applicable	Not applicable	\$733,260



Figure 4-32: Types of Seagrass Planting Units for Pilot Study, Jeb Unit (left), Peat Pot (middle), and Safe Pot (right)

4.4. Projects to Respond to New Information

The funding raised from the Save Our Indian River Lagoon sales tax will go towards the projects listed in the sections above that will reduce or remove pollutants and restore the lagoon. In addition, \$10 million of the funding, over a period of 10 years, will go towards monitoring efforts to measure the success, nutrient removal efficiency, and cost effectiveness of projects included in this plan and in future updates of this plan. Measuring effectiveness is important for reporting progress toward total load reduction targets and for refining project designs to be more effective with each iteration. The monitoring data will be used to determine which projects are providing the most benefit in the most cost-effective manner so that the plan can be updated, as needed. The data will also be used to ensure the lagoon is responding as anticipated to the reductions made so that changes to the plan can be implemented if the lagoon is not responding as expected.

4.4.1 Adaptive Management to Report, Reassess, and Respond

The Indian River Lagoon (IRL) is located along the Space Coast, which is also known as a global center for exploration, innovation, and development of cutting edge technology. With a dedicated funding source and a brilliant community dedicated to meeting the challenges of today and tomorrow, it is wise to have a process that allows this plan to be updated and revised as new opportunities and better solutions are developed. The intent of the proposed adaptive management strategy is to provide a process that not only allows but also fosters the development and implementation of better tools and techniques and allows the tax rate to be reduced accordingly or retired ahead of schedule.

Although this plan was developed with the best information available in 2016, identifying the sources of water quality pollution and pairing those problems with the most timely and cost-effective solutions is a rapidly changing field of knowledge. To respond to change and take advantage of future opportunities, monitoring is necessary. Even without change in the industry, monitoring will provide data to support and refine the application of existing technology. An adaptive management approach is used to provide a mechanism to make adjustments to the plan based on new information. As projects from this plan are implemented, the actual costs and nutrient reduction benefits will be tracked, and the plan will be modified, as needed, as project performance in the lagoon basin is better understood.

This plan will be updated approximately annually with information from implemented projects and adjustments to the remaining projects. A volunteer committee of diversely skilled citizens has been assembled to assist the County with the annual plan updates. The Citizen Oversight Committee consists of seven representatives and seven alternates that represent the following fields of expertise: science, technology, economics/finance, real estate, education/outreach, tourism, and lagoon advocacy. The League of Cities nominated representatives for three fields of expertise and nominated alternates for the remaining four fields of expertise. The Brevard County Board of County Commissioners nominated representatives for the other four fields of expertise and alternates for the remaining three fields of expertise. All Citizen Oversight Committee representatives and alternates were appointed by the Brevard County Board of County Commissioners. Appointees serve for two-year terms, after which time they may be considered for reappointment or replacement. The first term ended in February 2019 and the second term ended in February 2021. The Committee's recommendations for plan updates will be presented at least annually to the Board of County Commissioners, and changes to the plan will be approved by the Board of County Commissioners.

Brevard County staff provides project monitoring reports to the Citizen Oversight Committee and works with them to recommend adjusting the planned projects, as needed. The adaptive management process allows for alternative projects to be submitted by the county, municipalities, and other community partners to be reviewed by the Citizen Oversight Committee for inclusion in the next annual update to this plan. Projects that deliver comparable nutrient removal benefits may be approved for inclusion in the plan. If a new approved project costs more than the average cost per pound of total nitrogen (TN) for that project type listed in this plan at the time of project submittal, the requesting partner must provide the balance of the costs. The requesting partner will be allowed reasonable overhead cost to manage the project from design and permitting through construction completion.

As projects are implemented, progress toward meeting the County's proposed revisions to the total maximum daily loads are being tracked. Adjustments to the types and locations of projects

implemented will be made to ensure that total maximum daily loads can be achieved in all Brevard County portions of the lagoon.

4.4.2 Cost-share for Substitute Projects

For the 2021 Update, local municipalities and partners were once again invited to submit new projects for inclusion in the Save Our Indian River Lagoon Project Plan. The projects submitted were required to deliver comparable nutrient removal benefits as those projects listed in the original plan and plan updates for each sub-lagoon.

The requesting partners each submitted a “Save Our Indian River Lagoon Project Plan Project Submittal Request” to Brevard County for review of the proposed projects. The project requests were provided to the Citizen Oversight Committee to evaluate the potential for inclusion in the plan. The projects recommended by the Citizen Oversight Committee were included in the draft plan update presented to the Brevard County Board of County Commissioners for approval.

To determine the amount of funding that a project would be eligible to receive from the Save Our Indian River Lagoon Trust Fund, the estimated total nitrogen (TN) reductions from the project were multiplied by the allowable cost per pound per year of TN shown below in **Table 4-42** for that project type. The costs shown in **Table 4-42** were included in the application instructions provided to the partners in July 2020 and were an average of the actual or engineer’s estimate of cost per pound of TN removed from the projects previously listed in the Save Our Indian River Lagoon Project Plan, as amended, or comparable projects recently planned or completed elsewhere in the Indian River Lagoon (IRL) watershed.

Table 4-42: Cost-share Offered for Project Requests Submitted for the 2021 Update

Project Type	Average Cost per Pound per Year of TN
Wastewater Treatment Facility (WWTF) Upgrades for Reclaimed Water	\$343
Sewer Lateral Rehabilitation	\$255
Rapid Infiltration Basin/Sprayfield Upgrades	\$136
Septic System Removal by Sewer Extension	\$1,500
Septic System Removal by Sewer Connection	\$487
Septic System Upgrades	\$770
Stormwater Projects	-
Mainland	\$122
Merritt Island	\$163
Beaches	\$150
Vegetation Harvesting	\$110
Muck Removal	\$520
Treatment of Muck Interstitial Water	\$98
Oyster Bar	\$397
Planted Shorelines	\$240

4.4.3 Additional Project Benefits

Although the eligible Save Our Indian River Lagoon Trust Fund contribution to new projects is determined based on the amount of total nitrogen (TN) removed, the benefits of implementing these projects include reductions in other pollutant sources, as well. These projects will reduce a multitude of different contaminants to meet water quality targets and improve the health, productivity, aesthetic appeal, and economic value of the lagoon. These additional benefits vary according to project design and site-specific conditions but often include significant reduction of

pathogenic bacteria, viruses, human and animal wastes, chemicals, metals, plastics, and sediments (see **Table 4-43**).

Table 4-43: Pollutants Removed by Different Project Types

Stormwater	Septic System Removal	Septic System Upgrade	Muck Removal
Nitrogen	Nitrogen	Nitrogen	Nitrogen
Phosphorus	Phosphorus	Phosphorus	Phosphorus
Sediments	Escherichia coli	Escherichia coli	Clay sediments
Escherichia coli	Viruses	Viruses	Hydrogen sulfide
Viruses	Fecal coliform	Fecal coliform	Biochemical oxygen demand
Fecal coliform	Pharmaceuticals	Biochemical oxygen demand	
Pesticides	Biochemical oxygen demand		
Metals			
Oil			
Litter			

This Save Our Indian River Lagoon Project Plan is an adaptable document informed by science and under supervision of the community. As monitoring updates our understanding of Indian River Lagoon (IRL) pollutants, the plan projects will target funds to the most successful and cost-effective projects.

4.4.4 Responding to Implemented Projects

During the first years of plan implementation, dozens of projects have been completed throughout the Indian River Lagoon (IRL) system as shown in **Figure 4-33** and **Figure 4-34**. The implementation of these projects provided new cost information and actual pollution reduction measurements used to update the project cost-effectiveness for the 2021 Update. The project costs and Save Our Indian River Lagoon Tax Fund money expended on completed projects are shown in **Table 4-44**. **Table 4-45** summarizes the Save Our Indian River Lagoon Tax Fund money that has been contracted and/or expended on projects that are currently underway.

Table 4-44: Save Our Indian River Lagoon Tax Funds Expended on Completed Construction Projects (as of October 31, 2020)

Project Number	Project	Project Type	Estimated Total Cost	Final Total Cost	Change in Total Cost	Eligible Save Our Indian River Lagoon Cost	Final Save Our Indian River Lagoon Cost	Change in Save Our Indian River Lagoon Cost
6	Long Point Park Denitrification	Package Plant Rapid Infiltration Basin Upgrade	\$101,854.00	\$22,206.73	-\$79,647.27	\$101,854.00	\$22,206.73	-\$79,647.27
1	Breeze Swept Septic to Sewer	Septic to Sewer	\$3,400,000.00	\$3,400,000.00	\$0.00	\$880,530.00	\$880,530.00	\$0.00
2	Merritt Island Redevelopment Agency Phase 1 Septic to Sewer*	Septic to Sewer	\$3,138,098.00	To be determined	To be determined	\$128,875.00	\$128,874.70	\$0.00
99	Cocoa Beach Water Reclamation Facility Upgrades	Wastewater Treatment Facility Upgrades	\$5,920,320.00	\$6,554,233.00	\$633,913.00	\$945,000.00	\$945,000.00	\$0.00
15	Bayfront Stormwater Ponds	Stormwater	\$630,955.97	\$635,702.00	\$4,746.03	\$30,624.00	\$30,624.00	\$0.00
13	Central Boulevard Baffle Box	Stormwater	\$41,700.00	\$43,700.00	\$2,000.00	\$34,700.00	\$34,700.00	\$0.00
14	Church Street Baffle Box	Stormwater	\$233,455.00	\$233,455.00	\$0.00	\$88,045.00	\$88,045.00	\$0.00
16	Gleason Park Reuse Expansion	Stormwater	\$11,000	\$7,193.40	-\$3,806.60	\$4,224.00	\$4,224.00	\$0.00
98	Coleman Pond Managed Aquatic Plant System	Stormwater	\$35,000	\$11,437.50	-\$23,562.50	\$35,000.00	\$11,437.50	-\$23,562.50
19	St. Teresa	Stormwater	\$375,250.00	\$474,291.97	\$99,041.97	\$272,800.00	\$272,800.00	\$0.00
20	South Street	Stormwater	\$475,125.00	\$683,969.16	\$208,844.16	\$86,856.00	\$86,856.00	\$0.00
21	La Paloma	Stormwater	\$375,250.00	\$462,346.97	\$87,096.97	\$208,296.00	\$208,296.00	\$0.00
34	Cliff Creek Baffle Box	Stormwater	\$350,000.00	\$737,611.90	\$387,611.90	\$347,781.00	\$347,781.00	\$0.00
87	Basin 2134 Fleming Grant Biosorption Activated Media	Stormwater	\$172,300.00	\$169,300.00	-\$3,000.00	\$56,588.00	\$56,588.00	\$0.00

Project Number	Project	Project Type	Estimated Total Cost	Final Total Cost	Change in Total Cost	Eligible Save Our Indian River Lagoon Cost	Final Save Our Indian River Lagoon Cost	Change in Save Our Indian River Lagoon Cost
92	Basin 115 Carter Road Biosorption Activated Media	Stormwater	\$156,078.50	\$146,949.78	-\$9,128.72	\$62,510.00	\$62,510.00	\$0.00
94	Basin 832 Broadway Pond Biosorption Activated Media	Stormwater	\$269,751.16	\$269,750.16	-\$1.00	\$42,864.00	\$42,864.00	\$0.00
117	Basin 10 County Line Road Woodchip Bioreactor	Stormwater	\$180,116.00	\$166,174.16	-\$13,941.84	\$72,773.00	\$72,773.00	\$0.00
85	Basin 1304 Bioreactor	Stormwater	\$125,000.00	\$141,988.14	\$16,988.14	\$90,000.00	\$90,000.00	\$0.00
89	Basin 1298 Bioreactor	Stormwater	\$125,000.00	\$136,100.03	\$11,100.03	\$86,198.00	\$86,198.00	\$0.00
90	Basin 51 Johns Road Biosorption Activated Media	Stormwater	\$116,905.00	\$154,000.00	\$37,095.00	\$23,030.00	\$23,030.00	\$0.00
91	Basin 100 Burkholm Road Biosorption Activated Media	Stormwater	\$117,735.00	\$141,457.00	\$23,722.00	\$64,390.00	\$64,390.00	\$0.00
127	Indialantic Basin 5 Dry Retention Pond	Stormwater	\$74,700.00	\$62,718.35	-\$11,981.65	\$16,680.00	\$16,680.00	\$0.00
124	Floating Wetlands to Existing Stormwater Ponds	Stormwater	\$50,000.00	\$14,336.00	-\$35,664.00	\$1,497.00	\$1,497.00	\$0.00
2016-03	Turkey Creek Hurricane Dredge and Interstitial Treatment	Muck Removal & Interstitial Treatment	\$1,545,522.00	\$1,098,630.71	-\$446,891.29	\$215,000.00	\$137,328.81	-\$77,671.19
70	Cocoa Beach Muck Dredging Phase III	Muck Removal	\$3,109,817.57	\$2,903,356.00	-\$206,461.57	\$1,376,305.00	\$1,376,305.00	\$0.00
40	Mims Muck Dredging Interstitial Treatment**	Interstitial Treatment	\$2,162,286.00	\$1,546,186.86	-\$616,099.14	\$400,000.00	\$0.00	-\$400,000.00
73	Riverview Senior Oyster Bar	Oyster	\$30,304.00	\$30,304.00	\$0.00	\$30,400.00	\$30,304.00	-\$96.00
83	Bomalaksi Oyster Bar	Oyster	\$8,900.00	\$8,900.00	\$0.00	\$8,900.00	\$8,900.00	\$0.00
76	Bettinger Oyster Bar	Oyster	\$10,680.00	\$10,680.00	\$0.00	\$10,680.00	\$10,680.00	\$0.00
79	Gitlin Oyster Bar	Oyster	\$16,020.00	\$16,020.00	\$0.00	\$16,020.00	\$16,020.00	\$0.00

Project Number	Project	Project Type	Estimated Total Cost	Final Total Cost	Change in Total Cost	Eligible Save Our Indian River Lagoon Cost	Final Save Our Indian River Lagoon Cost	Change in Save Our Indian River Lagoon Cost
75	Marina Isles Oyster Restoration	Oyster	\$26,700.00	\$26,700.00	\$0.00	\$26,700.00	\$26,700.00	\$0.00
80	Brevard Zoo Coconut Point/Environmentally Endangered Lands Oyster Restoration	Oyster	\$45,120.00	\$45,120.00	\$0.00	\$45,120.00	\$45,120.00	\$0.00
77a	Cocoa Beach Country Club Living Shoreline	Living Shoreline	\$16,080.00	\$16,080.00	\$0.00	\$16,080.00	\$16,080.00	\$0.00
77b	Lagoon House Living Shoreline	Living Shoreline	\$24,000.00	\$24,000.00	\$0.00	\$24,000.00	\$24,000.00	\$0.00
103	Brevard Zoo North Plant Project	Living Shoreline	\$720.00	\$720.00	\$0.00	\$720.00	\$720.00	\$0.00
133	Fisherman's Landing Living Shoreline	Living Shoreline	\$4,800.00	\$4,800.00	\$0.00	\$4,800.00	\$4,800.00	\$0.00
135	Rotary Park Living Shoreline	Living Shoreline	\$4,800.00	\$4,800.00	\$0.00	\$4,800.00	\$4,800.00	\$0.00
-	Total	-	\$23,481,343.20	\$20,405,218.82	\$61,973.62	\$5,860,640.00	\$5,279,662.74	-\$580,976.96

* Other phases not yet completed.

** Not paid due to not meeting contract requirements.

Table 4-45: Save Our Indian River Lagoon Tax Funds Contracted or Expended on Projects Underway (as of October 31, 2020)

Project Number	Project	Project Type	Save Our Indian River Lagoon Plan Funding	Save Our Indian River Lagoon Funds Contracted	Save Our Indian River Lagoon Expenditures for Projects Underway
58	Expanded Fertilizer Education	Public Education	\$625,000	\$224,966	\$170,428
58	Grass Clippings Campaign	Public Education	\$200,000	\$35,000	\$20,000
58	Septic System Maintenance Education	Public Education	\$300,000	\$124,961	\$97,625
193	Brevard Zoo Oyster Gardening	Public Education	\$300,000	\$300,000	\$150,000
2016-02	City of Titusville Osprey WWTF	WWTF Upgrade	\$9,100,000	\$9,100,000	\$793,155
2016-17	City of Palm Bay Water Reclamation Facility	WWTF Upgrade	\$3,636,900	\$3,636,900	\$339,562
59	City of Melbourne Grant Street Water Reclamation Facility	WWTF Upgrade	\$6,769,500	\$6,769,500	\$0
63ab	Satellite Beach Pilot & County-wide Repair/Replacement	Sewer Laterals	\$840,000	\$840,000	\$4,228
114	Barefoot Bay Lateral Smoke Testing	Sewer Laterals	\$90,000	\$90,000	\$0
115	South Beaches Lateral Smoke Testing	Sewer Laterals	\$200,000	\$200,000	\$0
116	Merritt Island Lateral Smoke Testing	Sewer Laterals	\$250,000	\$250,000	\$0
2016-48	Sykes Creek - Zone M	Septic System Removal	\$1,868,832	\$1,868,832	\$87,200
2016-47	Sykes Creek - Zone N	Septic System Removal	\$2,603,016	\$2,603,016	\$70,850
2016-49	Sykes Creek - Zone T	Septic System Removal	\$4,939,056	\$4,939,056	\$140,200
109	City of Titusville - Zones A-G	Septic System Removal	\$1,201,392	\$1,201,392	\$0
2016-50	South Central - Zone C	Septic System Removal	\$6,600,000	\$6,600,000	\$202,875
2020-34	South Central - Zone F	Septic System Removal	\$1,701,972	\$1,701,972	\$0
2016-35	South Beaches - Zone A	Septic System Removal	\$1,234,764	\$18,000	\$18,000
2	Merritt Island Septic Phase Out Project	Septic System Removal	\$320,000	\$320,000	\$233,148
61	Riverside Drive Septic-to-Sewer Conversion	Septic System Removal	\$265,960	\$265,960	\$0
62	Roxy Avenue Septic-to-Sewer Conversion	Septic System Removal	\$88,944	\$88,944	\$0

Project Number	Project	Project Type	Save Our Indian River Lagoon Plan Funding	Save Our Indian River Lagoon Funds Contracted	Save Our Indian River Lagoon Expenditures for Projects Underway
3	Micco Sewer Line Extension	Septic System Removal	\$2,038,500	\$2,038,500	\$201,681
4	Hoag Sewer Conversion	Septic System Removal	\$86,031	\$86,031	\$13,520
5	Pennwood Sewer Conversion	Septic System Removal	\$40,632	\$40,632	\$17,074
60	Sylvan Estates Septic-to-Sewer Conversion	Septic System Removal	\$1,561,215	\$1,561,215	\$764,558
2016-16	Banana Septic System 144 Quick Connections	Septic System Removal	\$1,908,000	\$0	\$0
2016-18	North IRL Septic System 463 Quick Connections	Septic System Removal	\$6,018,000	\$504,000	\$0
2016-19	Central IRL Septic System 269 Quick Connections	Septic System Removal	\$3,354,000	\$0	\$0
51	Banana River Lagoon 100 Septic System Upgrades	Septic System Upgrades	\$1,800,000	\$18,000	\$0
52	North IRL 586 Septic System Upgrades	Septic System Upgrades	\$10,548,000	\$446,100	\$176,100
53	Central IRL 939 Septic System Upgrades	Septic System Upgrades	\$16,902,000	\$700,187	\$106,187
66	Big Muddy at Cynthia Baffle Box	Stormwater	\$67,532	\$67,532	\$9,388
18	Denitrification Retrofit of Johns Road Pond	Stormwater	\$105,512	\$105,512	\$27,230
22	Kingsmill-Aurora Phase Two	Stormwater	\$367,488	\$367,488	\$0
23	Denitrification Retrofit of Huntington Pond	Stormwater	\$104,720	\$104,720	\$9,074
24	Denitrification Retrofit of Flounder Creek Pond	Stormwater	\$75,328	\$75,328	\$19,923
35	Thrush Drive Baffle Box	Stormwater	\$322,200	\$322,200	\$0
93	Wiley Avenue Biosorption Activated Media Basin 193	Stormwater	\$82,735	\$82,735	\$0
97	Titusville High School Baffle Box	Stormwater	\$111,813	\$111,813	\$0
111	Draa Field Vegetation Harvesting	Stormwater	\$50,000	\$50,000	\$0
110	Osprey Plant Pond Managed Aquatic Plant Systems	Stormwater	\$60,000	\$60,000	\$0
112	County Wide Stormwater Pond Harvesting	Stormwater	\$14,000	\$14,000	\$0
118	Basin 26 Sunset Road Serenity Park Woodchip Bioreactor	Stormwater	\$73,810	\$73,810	\$0

Project Number	Project	Project Type	Save Our Indian River Lagoon Plan Funding	Save Our Indian River Lagoon Funds Contracted	Save Our Indian River Lagoon Expenditures for Projects Underway
119	Basin 141 Irwin Avenue Woodchip Bioreactor	Stormwater	\$69,174	\$69,174	\$0
120	Draa Field Pond Managed Aquatic Plant Systems	Stormwater	\$31,281	\$31,281	\$0
122	Basin 22 Huntington Road Serenity Park Woodchip Bioreactor	Stormwater	\$40,077	\$40,077	\$0
68	Crane Creek/M-1 Canal Flow Restoration	Stormwater	\$2,033,944	\$2,033,944	\$100,000
121	Basin 2258 Babcock Street Woodchip Bioreactor	Stormwater	\$50,203	\$50,203	\$0
169	Sherwood Park Stormwater Quality Project	Stormwater	\$392,108	\$392,108	\$0
2016-10	Port Canaveral South & Interstitial Treatment	Muck & Interstitial	\$16,834,419	\$0	\$0
2016-05	Pineda Banana River Lagoon & Interstitial Treatment	Muck & Interstitial	\$7,815,980	\$0	\$0
2016-11	Patrick Air Force Base & Interstitial Treatment	Muck & Interstitial	\$8,216,800	\$0	\$0
168	Cocoa Beach Golf Muck & Interstitial Treatment	Muck & Interstitial	\$24,363,100	\$24,363,100	\$0
41	Grand Canal Muck & Interstitial Treatment	Muck & Interstitial	\$18,020,368	\$18,020,368	\$1,853,883
42	Sykes Creek Muck & Interstitial Treatment	Muck & Interstitial	\$15,954,132	\$1,078,266	\$821,371
71	Merritt Island Muck Removal – Phase 1	Muck & Interstitial	\$7,733,517	\$0	\$0
72	Muck Removal of Indian Harbour Beach Canals & Interstitial Treatment	Muck & Interstitial	\$9,115,415	\$9,115,415	\$0
101	Cocoa Beach Muck Dredging Phase II-B	Muck & Interstitial	\$5,917,650	\$5,917,650	\$2,660,313
2016-06	Titusville Railroad West & Interstitial Treatment	Muck & Interstitial	\$3,607,375	\$146,361	\$115,355
2016-07	National Aeronautics and Space Administration Causeway East & Interstitial Treatment	Muck & Interstitial	\$11,423,355	\$209,255	\$178,944
2016-04	Rockledge A Muck & Interstitial Treatment	Muck & Interstitial	\$5,010,244	\$175,340	\$126,366
2016-08	Titusville Railroad East & Interstitial Treatment	Muck & Interstitial	\$4,609,424	\$204,017	\$145,080
54	Eau Gallie Northeast Muck & Interstitial Treatment	Muck & Interstitial	\$10,020,487	\$98,323	\$62,449
106	Brevard Zoo North IRL Oyster Project	Oyster Bars	\$341,280	\$341,280	\$164,994
139	Brevard Zoo North IRL Oyster Project 2	Oyster Bars	\$336,400	\$336,400	\$0
105	Brevard Zoo Central IRL Oyster Project	Oyster Bars	\$161,160	\$161,160	\$0

Project Number	Project	Project Type	Save Our Indian River Lagoon Plan Funding	Save Our Indian River Lagoon Funds Contracted	Save Our Indian River Lagoon Expenditures for Projects Underway
140	Brevard Zoo Central IRL Oyster Project 2	Oyster Bars	\$270,800	\$270,800	\$34,969
102	Brevard Zoo Banana River Plant Project	Planted Shorelines	\$3,120	\$3,120	\$0
130	Brevard Zoo North IRL Plant Project 2	Planted Shorelines	\$9,840	\$9,840	\$4,507
-	Respond and Monitoring	Respond	\$10,000,000	-	\$1,280,281
-	Total	-	\$251,208,505	\$111,075,784	\$11,220,518



Figure 4-33: Completed Projects in North Brevard County

Figure 4-33 [Long Description](#)



Figure 4-34: Completed Projects in South Brevard County

Figure 4-34 [Long Description](#)

Fertilizer Management Outreach

As noted in Section 4.1.1, in 2019, the University of Florida Institute of Food and Agricultural Sciences and MTN Marketing conducted a survey that was concentrated on fertilizer awareness questions. The results from the 2019 survey were compared to similar questions from the 2015 Blue Life survey to evaluate changes in fertilizer use. Based on the survey results, 33.33% of respondents in 2019 stated that they use slow release nitrogen fertilizer compared to only 6.30% in 2015, which is a 27% increase in the usage of slow release fertilizer. This resulted in better than anticipated cost effectiveness. The cost per pound of total nitrogen (TN) removed improved from an initial estimate of \$102 to a revised estimate of \$95. The total phosphorus (TP) reductions were kept at the original plan estimate of an additional 25% compliance because, the way the survey was setup, participants were only able to select one option for the type of fertilizer used. Therefore, an update on the use of zero phosphorus formulas could not be obtained.

Also in 2019, Brevard County amended the fertilizer ordinance to require all fertilizer retail stores to display signage at the point of sale informing the public on the ordinance and best practices for fertilizer management. Focus groups were conducted to enhance the design of the sign. A total of 132 signs were distributed to 53 retail stores across Brevard County. In summer 2020, the stores were surveyed for compliance with the ordinance. Only eight stores were out of compliance with no signage posted. Request for compliance letters were issued to the eight stores and additional signs were delivered to stores that could not locate the original signs. The stores were receptive of the letters and willing to come into compliance.

Grass Clipping Outreach

Uppercase, Inc. conducted a survey between September 9, 2018 and November 11, 2018 reaching out to citizens of Brevard, Martin, and Volusia counties through advertisements on social media sites, in popular mobile apps, on Google advertisements, in instant messenger, and other online and app platforms, as well as on the counties' social media pages. The survey received 733 responses from the three counties. When asked which items in the list provided are pollutants, 61% of respondents said grass clippings were a pollutant and 50% said leaves were a pollutant. Landscape professionals were more likely to say grass clippings were a pollutant (65%). About 48% of respondents maintained their own yards and 36% used a lawn care company. When asking those respondents who maintain their own yards what they do with grass clippings, 68% say they "seldom" or "never" leave the clippings where they land. 70% of respondents say they "always" or "usually" blow clippings back into their yard, 94% said they "never" or "seldom" blow clippings into the middle of the road, 97% said they "seldom" or "never" blow clippings toward a storm drain, and 97% say they "never" or "seldom" blow grass clippings toward a waterbody. The survey also tested taglines and images to encourage keeping grass clippings out of the street and waterbodies, and the best communication channels to provide this information (Uppercase, 2018). The results from this survey will be used to guide the grass clipping campaign.

Septic System and Sewer Lateral Maintenance Outreach

The University of Central Florida conducted a survey of Brevard County residents to gather information on septic system-related topics. The survey was conducted between May 2018 and September 2018 through phone calls and door-to-door visits, resulting in a total of 404 completed surveys. Most respondents (70%) said that they have had their septic system pumped out, of which most (39.1%) had their system pumped out in the last 2–4 years or within the last 12 months (38%). Most respondents (51%) answered that they have had their current septic system inspected although many (42%) answered that they have not had their septic system inspected. Of those who responded that their septic systems had been inspected, most

were inspected within the past 12 months (41.8%) followed by within the past 2–4 years (37.2%). Most residents (53%) did not receive any information regarding the home's septic system when they moved into the home. Of the total respondents, 55.8% strongly agreed with the statement "I restrict what I flush in toilets to prevent damage." The participants strongly agree (44.8%) and agree (42.8%) with the statement "I avoid pouring chemicals and solvents down the sink" (Olive et al., 2018). The results from this survey will be used to help guide implementation of the septic system maintenance education program.

Lagoon Loyal Program

The full launch of the Lagoon Loyal website and incentive program was on July 1, 2020. As of October 31, 2020, the Lagoon Loyal website had 6,269 unique visitors who logged a total of 7,888 sessions on the website. The Lagoon Loyal incentive program has a total of 272 citizen members and 73 businesses participating. Members have completed 1,902 lagoon benefiting actions through the site. There have been 224 member check-ins to county and other partner educational events. Members have used the points they earned to redeem 184 coupons from Lagoon Loyal businesses.

Measuring Performance

Groundwater monitoring wells have been installed to measure the pre-project pollution levels in multiple project areas. This includes areas where upgrades are underway for the reduction of nutrients in the reclaimed water supplied by two wastewater treatment plants, in several septic areas where permitting is underway to provide sewer service, in sewer areas to estimate pollution from leaky infrastructure, and at six septic upgrade pilot projects.

This countywide groundwater monitoring effort has been ongoing for more than two years. It demonstrates that septic systems and reclaimed water communities have significantly higher TN concentrations in comparison to sewer service areas and natural areas across all regions of the county. Communities on septic systems had significantly higher TP concentrations compared to the other communities across all regions of the county (**Figure 4-35**) (Marine Resources Council and Applied Ecology, 2020).

Package Plant Rapid Infiltration Basin Upgrade

A denitrification wall was built surrounding a rapid infiltration basin approximately 120 feet from the IRL at Long Point Park in Melbourne Beach. Six monthly measurements of nitrogen and phosphorus from within the rapid infiltration basin were compared to nutrient measurements in the IRL versus in the groundwater at three locations between the basin and the lagoon. Average percent removals have been high when comparing concentrations in the rapid infiltration basin to the groundwater location closest to the lagoon. Ammonia decreased by 62%, nitrite by 99%, nitrate by 82%, TN by 60%, total Kjeldahl nitrogen by 59%, orthophosphate by 72%, and TP by 66%. When comparing the basin concentrations to the groundwater inside the denitrification wall, the ammonia was reduced by 59%, nitrite by 98%, TN by 53%, total Kjeldahl nitrogen by 57%, orthophosphate by 78%, and TP by 61%; however, nitrate increased by 834%. Once the water passes through the denitrification wall, nitrate levels drop substantially (97% immediately). Overall, this project has been successful and further monitoring is planned for another six months. Based on actual costs and current data on nitrogen removal, the cost effectiveness is \$136 instead of \$802 per pound of TN reduced.

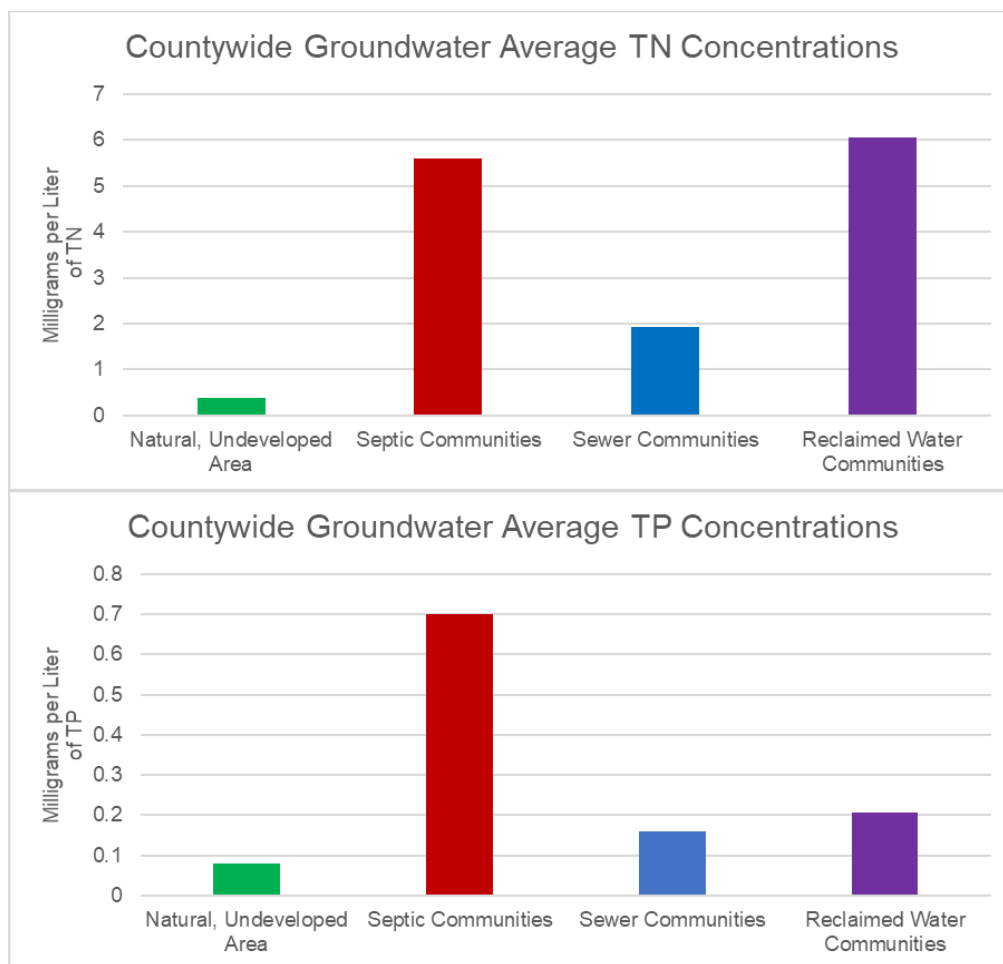


Figure 4-35. Countywide Groundwater Nutrient Concentrations for TN (top) and TP (bottom)

Figure 4-35 [Long Description](#)

Sewer Lateral Rehabilitation

Brevard County Utilities hired Kimley-Horn to conduct a sanitary sewer system smoke testing pilot study within the South Beaches service area in the City of Satellite Beach. The intent of the study was to use smoke testing to identify major contributors of stormwater into the sanitary sewer system and identify the necessary repairs. A smoke blowing machine that produces a non-toxic artificial “smoke” is used to pump smoke into the sewer system through an open manhole. As the smoke travels through the sanitary sewer system, it rises to the surface through any deficiencies in the lateral lines, such as cracks, leaks, and breaks. The South Beaches service area was selected because it had been experiencing elevated sanitary flow rates during storm events due to stormwater flow into the sanitary sewer through broken or missing infrastructure. Smoke testing was performed for the Phase 1 area in April and May 2018 for 5,165 properties. The testing identified 99 deficiencies of which there were 87 broken/missing cleanout caps, 9 broken lateral pipes, 2 damaged gravity sewer pipes, and 1 damaged manhole. Smoke testing was performed for the Phase 2 area in May and July 2018 for 7,592 properties. The testing identified 190 deficiencies of which there were 163 broken or missing cleanout caps, 21 broken lateral pipes, 1 storm connection, and 5 damaged manholes/gravity mains. The County purchased cleanout caps and replaced the damaged or

missing caps that were identified, accessible, and had no damage to the cleanout port (Kimley Horn, 2018a and 2018b).

Based on the data collected during the pilot study, the Save Our Indian River Lagoon Trust Fund will cover the costs to repair up to 250 broken cleanout ports or missing caps and 30 broken private lateral lines. The estimated cost for these repairs is \$646,200, which is well below the \$840,000 budgeted for this project. The lessons learned from this pilot study will be applied to future sewer lateral evaluation and repair projects. Because the broken sewer pipes are buried, the potential repair costs are unknown. This unknown cost has dis-incentivized cash-limited homeowners from starting repairs in a timely manner. In response, Brevard County now has qualified plumbers that can be paid directly by the county to fix these repairs.

The preliminary results from performance data for this area noted that the groundwater sampled at seven of the eight lateral sites had evidence of sewage leaking out of the lateral when the groundwater table was low. Multiple sites had high nitrogen concentration values at or near the break locations, likely directly caused by a sewer leak. Most of the elevated phosphorus was in the readily bioavailable form of ortho-phosphorus (Applied Ecology, 2019). Additional sampling will be conducted after repairs are complete to verify improvements.

Septic System Removal

The Breeze Swept septic-to-sewer project in the City of Rockledge removed 143 septic systems installed between 1958 and 1967. This was the first septic-to-sewer conversion project to be undertaken as a strategic measure to reduce the nutrient loading to the IRL. During construction, the contractor noticed that many septic systems were already failing, which posed an increased health and environmental risk. The City of Rockledge authorized Applied Ecology to install five shallow groundwater monitoring wells in June 2017, three within the Breeze Swept community and two additional reference (i.e., control) wells in an adjacent septic community. Post-construction monitoring continued through summer 2019. There were 18 sampling events with a total of 90 samples collected. All samples were sent to a certified lab and analyzed for ammonia, nitrate-nitrite, total Kjeldahl nitrogen, and fecal coliform. The median ammonia, nitrate-nitrite, total Kjeldahl nitrogen, and mean TN concentrations from the post-construction samples taken from wells within the Breeze Swept community decreased with a statistically significant difference while the control wells showed no significant differences in median concentrations of nitrate-nitrite, total Kjeldahl nitrogen, and TN concentrations during the sampling period. These data provide a better understanding of the impact of septic systems on local water quality and help inform future septic-to-sewer conversion projects.

Construction costs for septic-to-sewer projects increased significantly since the original plan was developed in 2016. At that time, the estimated cost per lot for connection to gravity sewer was \$20,000. This estimate included construction of the public and private side of the sewer, abandonment of the septic tank, connection fee, and restoration of the site. Based on actual and budgeted costs from within Brevard County and surrounding counties, the new estimated cost per lot is \$33,372.

The project in the Breeze Swept community in the City of Rockledge, completed in 2017, cost \$23,800 per lot. The West Melbourne Sylvan Estates project increased from an engineer's estimate of \$28,800 to an actual low bid amount of \$41,212 per lot. The South Central C sewer project is currently estimated at \$55,232 per lot. Indian River County experienced a similar increase in costs for a sewer project in West Wabasso. Phase 1 of West Wabasso was approved in 2011 with an estimated cost of \$20,348 per lot. Actual costs for construction in 2014 were \$22,942 per lot. Cost estimates for phase 2 of West Wabasso are \$46,269 per lot.

There are many opportunities to remove septic systems in areas with existing sewer lines. The plan currently allocates \$12,000 to these connection opportunities. Costs to connect to gravity lines were found to be consistent with this estimate; however, costs to connect to force main lines were more. In the 2019 Update, connection costs to force main sewer were increased to \$18,000 to more accurately cover the cost of a grinder pump, the pump's electrical connection, directional drilling of the lateral line, abandonment of the septic tank, connection fee, and restoration of the site.

Septic System Upgrades

The average cost of an upgraded septic system was increased from \$16,000 to \$18,000 in the 2019 Plan Update to more accurately reflect the cost to safely decommission the old tank and install the new tank and drainfield, electrical costs, and restoration of the site. Many of the oldest septic systems that are contributing the most loading to the lagoon do not comply with modern setbacks established by the Florida Department of Health. Bringing these septic systems to current standards in small lots is contributing to the higher average upgrade costs. The estimate of \$16,000 is more accurate for new construction. For the eight upgrades completed so far, the average cost was \$17,811.

Stormwater Treatment

Brevard County was awarded a grant to help upgrade multiple baffle boxes to second generation technology. Eight baffle boxes in Cocoa, Cape Canaveral, Melbourne, and Titusville were retrofitted with screens to collect larger items such as litter, leaves, and twigs from the stormwater entering the baffle box. Three of the baffle box projects were sampled twice each to estimate the pollutant removal effectiveness of the added screens. The baffle box projects chosen for sampling were Central Boulevard (City of Cape Canaveral), Church Street (City of Cocoa), and South Street (City of Titusville). By applying state-approved dry bulk density ratios to the volumes of material captured in the screens, nutrient removal was estimated to be 7.12 pounds of TN per year and 0.57 pounds of TP per year.

Muck Removal

Pre-project muck flux data have been collected by researchers at Florida Institute of Technology for more than 20 potential muck dredging sites. These data were considered with other available data to reprioritize muck dredging areas in the 2019 Update.

The goal of the muck removal program is to improve water quality and ecosystem health within the IRL. Muck removal benefits include reducing nitrogen, phosphorus, hydrogen sulfide, turbidity, pathogens, and contaminants; improving dissolved oxygen and pH; as well as uncovering clean, sandy sediments for recolonization by seagrass, shellfish, and a diversity of benthic marine life to support an abundant and productive food web. Improvements in water quality were documented with the Turkey Creek muck removal project with a 39% decrease in turbidity. The pre-project average turbidity based on six years of monthly measurements conducted by the St Johns River Water Management was 3.14 Nephelometric Turbidity Units. Post-project average turbidity, based on two years of monthly measurements, is 1.93 Nephelometric Turbidity Units (**Figure 4-36**) (Tetra Tech, 2020). In addition, there was no increase in turbidity during the dredging.

In 2020, Tetra Tech prepared a document with lessons learned for the muck dredging projects implemented between 2014 and 2019. One lesson learned is that the thickness and extent of muck deposits is generally difficult to determine. Therefore, a combination of sediment probes to plan an optimum density and pattern of sediment cores can improve the accuracy of muck sediment isopach mapping. Another lesson learned was related to the use of polymers and

flocculants. The contractor methods used at the Mims Boat Ramp did not work for performance-based specifications for nutrient removal. For future projects, more than just bench testing of the chemicals is needed and enhanced contract standards, developed by Brevard County, should be included in future project specifications. Muck sediments with high clay contents can be difficult to dewater. Design efforts should include bench testing of polymer additives to improve flocculation of the suspended sediments and the geotechnical testing of the dredged material slurry to help optimize the dewatering of the dredged material. Significant benefits to TP removal can be realized through the appropriate use of polymers (Tetra Tech, 2020).

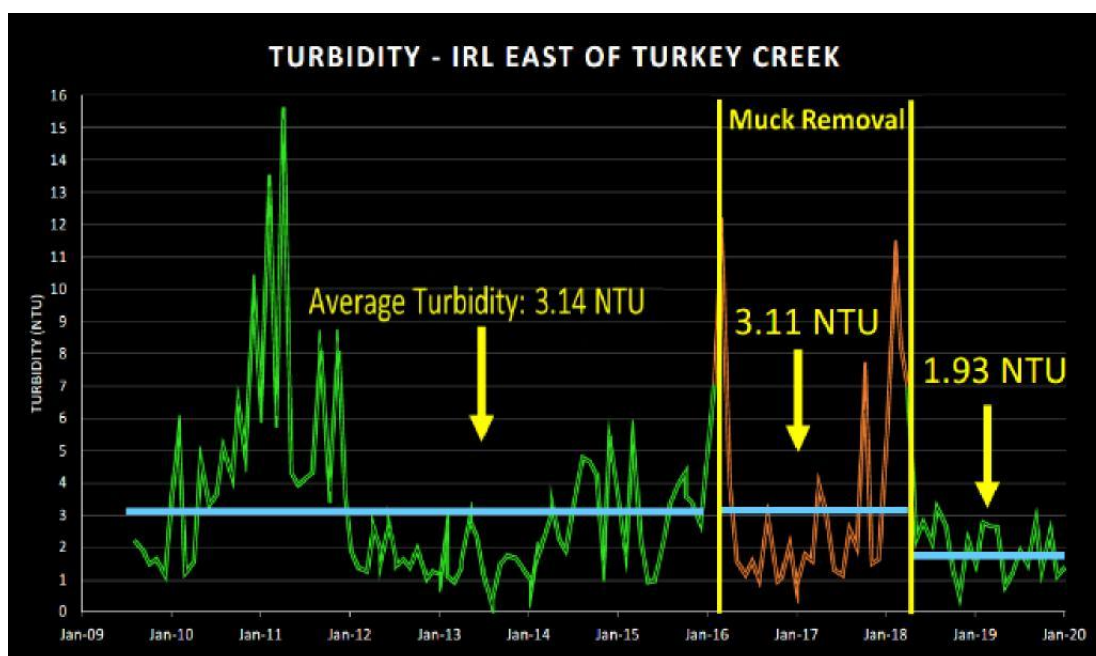


Figure 4-36. Turbidity Levels Before, During, and After Turkey Creek Muck Removal

Figure 4-36 [Long Description](#)

In-lagoon Aeration Study

In 2018, Brevard County conducted an aeration study in Sykes Creek. Before aeration, dissolved oxygen levels were measured at 10-foot increments at a depth of 2-feet, both in a southeast and northeast direction extending out 200 feet from the fixed aerator location. Dissolved oxygen levels were measured before the aerator was turned on and run continually for three days. Final dissolved oxygen measurements were collected before the aerator was unplugged and removed. The pre-aeration dissolved oxygen levels ranged from 7.91–8.96 milligrams per liter with an average of 8.59 milligrams per liter. The nearby Ocean Research & Conservation Association Kilroy station in the western portion of the Barge Canal measured dissolved oxygen at about 7.5 milligrams per liter. The final dissolved oxygen levels, post aerator deployment, ranged from 10.30–11.14 milligrams per liter with an average of 10.52 milligrams per liter. The nearby Ocean Research & Conservation Association Kilroy station measured dissolved oxygen of about 9.3 milligrams per liter. Dissolved oxygen levels close to the aerator were not higher than levels more distant from the aerator. Based on these results, it appears that the impact of aeration is minimal. Variations between pre- and post-aeration dissolved oxygen levels were likely attributed to changes in weather conditions and normal variances in dissolved oxygen. The aerator did not effectively move water to increase dissolved oxygen. There were also issues with clogging due to barnacles and algae. In addition, placement of the aerator was difficult due to the need for electricity.

Oyster Restoration and Planted Shorelines

Oyster bars are currently built using mesh bags filled with oyster shell, known as cultch. Oyster bars are typically two layers with 25 young adult oysters added to each of the top layer bags. A University of Central Florida research team conducts independent monitoring of oyster bar projects, visually inspecting for oysters growing through the bags and cementing or “bridging” of adjacent oysters, and documenting the presence of predators, algal cover, and sedimentation. Additionally, a subsample of bags is emptied to quantify oyster survival, growth, recruitment, and the abundance as well as the diversity of fish and invertebrates living within the modules.

Monitoring results inform future decisions about oyster bar site selection, design, material type, and the need for seeding. Recruitment is necessary for oyster bars to sustain themselves without additional seeding. Significant recruitment of new oysters has been observed at eight of the ten sites graphed in **Figure 4-37** (University of Central Florida, 2020b). Nine of the ten sites are reported in the University of Central Florida monitoring reports. Riverview Senior Center was funded with grants and is monitored by Brevard Zoo.

The formation of bridges between bags has been noted at Bomalaski, one of the oldest sites. Comparison of data from multiple sites indicates that oyster bars located in narrow canals are exposed to more variable salinities and less recruitment and, although surviving oysters do grow, the numbers of live oysters declines over time (University of Central Florida, 2020a). In contrast, bars constructed in open waters of the lagoon have two to nine times as many oysters as initially seeded. Finally, two projects located within 500 feet of one another are being compared to determine the influence of initial seeding. After three months, recruitment is similar at both sites (University of Central Florida, 2020c).

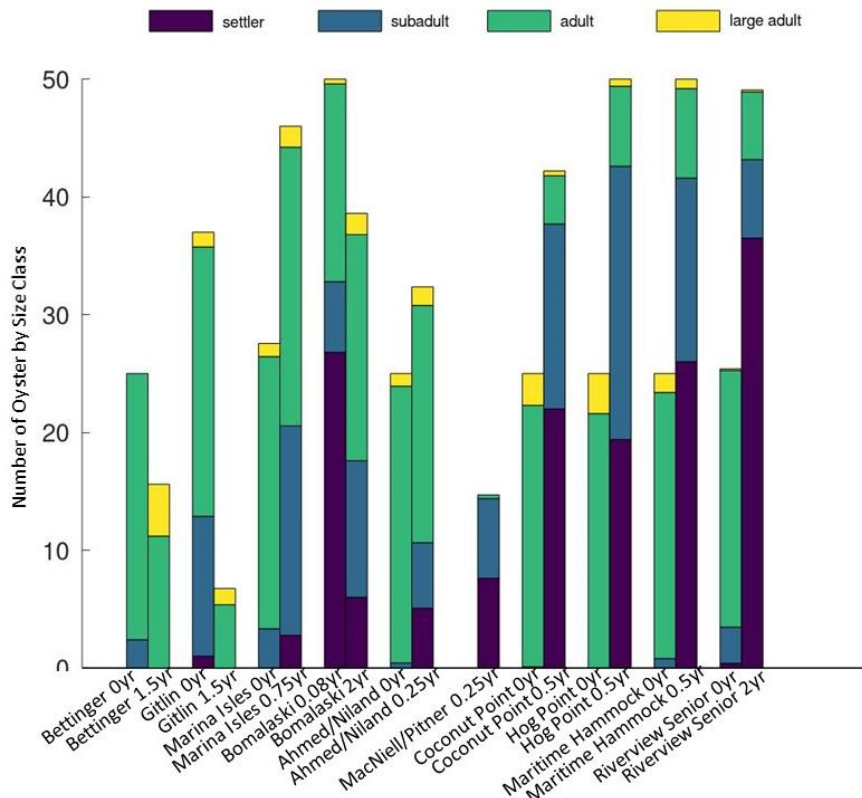


Figure 4-37. Distribution of Oyster Sizes, Age, and Average Number Per Unit

Figure 4-37 [Long Description](#)

The University of Central Florida has also monitored planted shorelines projects. Survival at locations throughout the lagoon have ranged between 46–64% for red mangroves and 36–38% for sand cordgrass after 12 months. In more recent projects, survival of red mangroves at 6 months was 86% and sand cordgrass 39%, similar to previous projects at equivalent ages. Competition with terrestrial vegetation and erosion via waves and boat wakes are common causes of loss.

In response to concerns related to the breakdown of plastics in the environment, alternative oyster restoration materials are being examined. Six alternatives to using ultraviolet stabilized plastic mesh bags for securing loose oyster shell, are being tested at three locations in the IRL. With funding from the IRL National Estuary Program and collaborators from the University of Florida, Brevard County and Brevard Zoo Restore Our Shores team built test structures that will be monitored throughout an 18-month study. Modules were hung from docks and consist of multiple configurations of cement, oyster shell, and natural materials (Community Oyster Reef Enhancement modules, jute-reinforced calcium sulfoaluminate/prisms, oyster balls), as well as two gauges of galvanized steel gabions, and controls (Naltex™ bags). Monitoring of degradation, fouling, and oyster recruitment and growth will occur quarterly. Data collected will build on material testing results from other studies, while ensuring they will meet site-specific constraints of the IRL in Brevard County.

Data on oyster reef denitrification rates are very limited in Florida; therefore, a scientist with the University of Florida's Institute of Food and Agricultural Sciences will sample sediment from three oyster bar projects, one each from the North IRL, Central IRL, and Banana River Lagoon. This work will build on a previous study conducted for Brevard County on intertidal oyster reefs of different ages within the Mosquito Lagoon (Schmidt and Gallagher, 2017). Improved analysis techniques will be employed on the subtidal oyster bars present in Brevard County to obtain sediment denitrification, percent organic matter, oxygen demand, and nitrate, ammonium, and phosphate flux rates across the sediment-water interface.

4.4.5 Research Needs

Although this project plan does not fund research, it should be recognized that many important research questions need attention. Universities, state agencies, and non-profit organizations are currently leading lagoon research efforts. This plan acknowledges the research needs identified in the Florida Department of Environmental Protection basin management action plans, St. Johns River Water Management District 2011 Superbloom Report, and Indian River Lagoon (IRL) National Estuary Program Comprehensive Conservation and Management Plan Update, which are summarized below.

- Research needs identified in the basin management action plans (Florida Department of Environmental Protection 2013a, 2013b, and 2013c):
 - Collect new bathymetry data for the IRL Basin, which would be used in the seagrass depth limit evaluations.
 - Continue and increase the frequency of the monitoring along the existing seagrass transects to track seagrass composition, density, and extent.
 - Implement phytoplankton, drift algae, macroalgae, and bacteria bloom monitoring in the basin.
 - Track watershed loads by monitoring inflow and outflow nutrient concentrations for each jurisdiction.
 - Verify the best management practice effectiveness values used in the basin management action plans, as needed.

- Test/verify the total nitrogen (TN), total phosphorus (TP), and seagrass depth regression equations using the seagrass data collected since 1999.
- Collect groundwater load contribution data and conduct groundwater modeling.
- Implement storm event monitoring at the major outfalls.
- Assess potential impacts to seagrass from sediment resuspension due to high boat traffic in parts of the lagoon.
- Collect data on nutrient flux/internal recycling of legacy nutrient loads held within the IRL sediments and exchanged with the water column.
- Research needs identified in 2011 Superbloom Report (St. Johns River Water Management District 2016b):
 - Garner an improved understanding of the ideal biological and physiological conditions and tolerances of picocyanobacteria (small cyanobacteria) and Pedinophyceae (green microflagellate), including their ability to use organic forms of nutrients, their ability to fix nitrogen, their nutrient uptake rates, their reproductive rates, and their defenses against grazers.
 - Maintain or expand water quality sampling to ensure spatiotemporal variations are captured adequately, which could include continuous monitoring of various parameters to fill gaps between monthly samples.
 - Develop an improved understanding of the physiological tolerances of drift algae and seagrasses, especially manmade conditions that could be mitigated to improve health or natural resilience.
 - Maintain or expand surveys of drift algae and seagrasses to improve the capacity to evaluate their role in nutrient cycles.
 - Improve the ability to model bottom-up influences from external and internal nutrient loads, including atmospheric deposition, surface water runoff, groundwater inputs, diffusive flux from muck, decomposition of drift algae, and cycling and transformation of nitrogen and phosphorus.
 - Enhance surveys of bacterioplankton to improve the understanding of nutrient cycling.
 - Improve surveys of potential zooplanktonic, infaunal, epifaunal, and fish grazers to enhance the understanding of spatiotemporal variation in top-down control of phytoplankton blooms.
 - Evaluate grazing pressure exerted by common species to enhance the understanding of top-down control of phytoplankton blooms.
- Research needs identified in the Comprehensive Conservation and Management Plan revision (IRL National Estuary Program 2019):
 - Undertake further studies to quantify the impacts of septic systems on the IRL with a focus on identifying high priority “problem” and “potential problem” areas.
 - Develop, improve, and implement best management practices and education programs for stormwater management and freshwater discharges.
 - Determine the impacts of atmospheric deposition of nutrients and other pollutants on the nutrient budget, water quality, and resources of the IRL.
 - Support implementation, review, and update of IRL total maximum daily loads as needed and as best available science evolves.
 - Work to continue, expand, update, and improve the IRL species inventory.
 - Research and develop new and improved wetland best management practices with a focus on understanding wetland responses to sea level rise and climate change.
 - Continue to support and expand research initiatives and coordinated finfish and shellfish management strategies specific to the IRL.

- Prepare a Risk-Based Vulnerability Assessment and Adaptation Plan for the IRL.
- Develop a comprehensive IRL monitoring plan.
- Advance the ten research priorities in the 2018 Looking Ahead – Science 2030 Report.
- Update the IRL economic analysis produced by the Treasure Coast and East Central Florida Regional Planning Councils every five years.
- Support advancements in hydrological model development, verification, and application.
- Continue evaluation of options to enhance water flow through engineering solutions that have well defined water quality and ecological outcomes.
- Complete muck mapping of the entire IRL, prioritize muck dredging projects and site selection for seagrass and filter feeder restoration projects, and reduce source contributions of sediment and biomass that result in muck formation.
- Track emerging technologies, innovative approaches or alternatives to dredging, muck capping, upstream controls of muck transport, more efficient approaches to dewatering, enhanced pollutant removal in post-dredge water, and enhanced muck management to improve process efficiency and identify beneficial uses of muck.
- Monitor and research to better understand contaminants of emerging concern within the IRL system.
- Research spatially explicit data on the extent and condition of existing filter feeder habitat.
- Research and report on science-based siting, planning, design, and construction criteria for living shorelines.
- Support research and assessment to identify and map suitable habitats and spawning habitats for forage fishes and track population size and health.

4.5. Unfunded Projects

Throughout initial development and annual updates of this plan, there have been projects considered that are not funded due to them being less cost-effective than similar projects that were selected for funding. If some of the recommended projects in the plan receive funding from outside sources, such as grants or legislative appropriations, additional projects could be implemented using the Save Our Lagoon Trust Fund. If funding becomes available, the projects listed in **Table 4-46** through **Table 4-51** include numerous unfunded opportunities sorted by the next most cost-effective projects (based on total nitrogen [TN] and total phosphorus [TP] load reductions in pounds per year [lbs/yr]) available for each major type of pollution reduction strategy.

Table 4-46: Unfunded Public Outreach and Education Projects

Project	Cost	Estimated TN Reductions (lbs/yr)	Cost per Pound per year of TN Removed	Estimated TP Reductions (lbs/yr)	Cost per Pound per Year of TP Removed
Irrigation Education	\$300,000	1,530	\$196	Not applicable	Not applicable
Stormwater Pond Best Management Practice Maintenance Education	\$300,000	3,300	\$91	400	\$750
Total	\$600,000	4,830	\$124 (average)	400	\$1,500 (average)

Table 4-47: Unfunded Wastewater Treatment Facility (WWTF) Reclaimed Water Upgrade Projects

Facility	Cost to Upgrade	TN Removed after Attenuation (lbs/yr)	Cost per Pound per Year of TN Removed	TP Removed after Attenuation (lbs/yr)	Cost per Pound per Year of TP Removed
Cape Canaveral Air Force Station	\$6,000,000	3,653	\$1,642	To be determined	To be determined
Brevard County South Beaches WWTF	\$6,000,000	2,860	\$2,098	To be determined	To be determined
Brevard County South Central Regional WWTF	\$6,000,000	2,053	\$2,923	To be determined	To be determined
Brevard County Port St. John WWTF	\$6,000,000	1,788	\$3,356	To be determined	To be determined
Rockledge WWTF	\$6,000,000	1,084	\$3,460	To be determined	To be determined
Brevard Count Barefoot Bay Water Reclamation Facility	\$6,000,000	1,597	\$5,535	To be determined	To be determined
Total	\$36,000,000	13,035	\$2,762 (average)	To be determined	To be determined

Table 4-48: Unfunded Package Plant Connection Projects

Facility Name	Number of Units	Cost to Connect to Sewer	TN Load Reduction (lbs/yr)	Cost per Pound Per Year of TN Removed
Pelican Bay Mobile Home (aka Riverview) WWTF	200	\$511,301	338	\$1,513
Willow Lakes Recreational Vehicle Park WWTF	280	\$1,270,407	740	\$1,717
River Forest Mobile Home Park	130	\$407,629	172	\$2,370
Merritt Island Utility Company WWTF	198	\$1,477,411	609	\$2,426
Indian River Shores Trailer Park WWTF	54	\$575,202	192	\$2,996
Sterling House Condominium WWTF	45	\$544,008	160	\$3,400
Tropical Trail Village WWTF	74	\$648,620	155	\$4,185
Riverview Mobile Home and Recreational Vehicle Park	110	\$763,933	180	\$4,244
Palm Harbor Mobile Home Park WWTF	130	\$729,905	152	\$4,802
Housing Authority of Brevard County WWTF	26	\$499,892	79	\$6,328
Canebreaker Condo WWTF	24	\$499,489	74	\$6,750
Lighthouse Cove WWTF	80	\$1,183,350	147	\$8,050
Cove At South Beaches Condominium Association WWTF	80	\$751,651	84	\$8,965
Treetop Villas	28	\$1,104,321	69	\$16,028
Enchanted Lakes Estates	190	To be determined	No data	No data
Camelot Recreational Vehicle Park Inc.	178	To be determined	No data	No data
Southern Comfort Mobile Home Park	40	To be determined	No data	No data
Summit Cove Condominium	84	To be determined	No data	No data
Total	1,951	\$10,967,119	3,151	\$3,481 (average)

Table 4-49: Unfunded Sprayfield or Rapid Infiltration Basin Upgrade Projects

Facility	Type	Estimated Cost to Upgrade	TN Removed from Upgrade (lbs/yr)	Cost per Pound per Year of TN Removed	TP Removed from Upgrade (lbs/yr)	Cost per Pound per Year of TP Removed
Aquarina Beach Community WWTF	Sprayfield	\$75,010	481	\$156	To be determined	To be determined
Indian River Shores Trailer Park WWTF	Rapid Infiltration Basin	\$38,145	160	\$240	65	\$591
South Shores Utility	Sprayfield	\$300,564	771	\$390	176	\$1,708

Facility	Type	Estimated Cost to Upgrade	TN Removed from Upgrade (lbs/yr)	Cost per Pound per Year of TN Removed	TP Removed from Upgrade (lbs/yr)	Cost per Pound per Year of TP Removed
Pelican Bay Mobile Home WWTF	Rapid Infiltration Basin	\$222,156	525	\$423	200	\$1,111
Oak Point Mobile Home Park WWTF	Rapid Infiltration Basin	\$65,340	153	\$427	40	\$1,634
Sterling House Condominium WWTF	Sprayfield	\$60,000	133	\$451	54	\$1,111
River Forest Mobile Home Park WWTF	Sprayfield	\$78,405	143	\$548	46	\$1,704
Cove At South Beaches Condominium Association WWTF	Sprayfield	\$51,480	70	\$735	41	\$1,256
Summit Cove Condominium	Rapid Infiltration Basin	\$157,469	171	\$921	To be determined	To be determined
Merritt Island Utility Company WWTF	Rapid Infiltration Basin	\$495,277	505	\$981	To be determined	To be determined
Lighthouse Cove WWTF	Sprayfield	\$120,000	122	\$984	58	\$2,069
Tropical Trail Village WWTF	Rapid Infiltration Basin	\$90,169	69	\$1,307	To be determined	To be determined
Housing Authority of Brevard County WWTF	Rapid Infiltration Basin	\$52,272	35	\$1,493	To be determined	To be determined
Treetop Villas	Sprayfield	\$105,000	48	\$2,183	14	\$7,500
Riverview Mobile Home and Recreational Vehicle Park	Sprayfield	\$333,234	149	\$2,236	94	\$3,545
Palm Harbor Mobile Home Park WWTF	Sprayfield	\$300,564	126	\$2,385	129	\$8,840
River Grove Mobile Home Village WWTF	Rapid Infiltration Basin	\$182,299	42	\$4,340	189	\$965
Harris Malabar Facility	Rapid Infiltration Basin	\$2,085,000	176	\$11,847	To be determined	To be determined
Camelot Recreational Vehicle Park Inc	Sprayfield	Unknown size	To be determined	To be determined	To be determined	To be determined
Enchanted Lakes Estates	Sprayfield	\$36,000	To be determined	To be determined	To be determined	To be determined
Southern Comfort Mobile Home Park WWTF	Rapid Infiltration Basin	Unknown size	To be determined	To be determined	To be determined	To be determined
Space X Launch Complex 39A	Sprayfield	Unknown size	To be determined	To be determined	To be determined	To be determined
Total	-	\$4,848,384	3,879	\$1,250 (average)	1,106	\$4,384 (average)

Table 4-50: Unfunded Septic to Sewer Projects

Service Area	Number of Lots	Cost	TN Reduction (lbs/yr)	TN Cost per Pound Per Year
Grant-Valkaria – Zone G	30	\$1,001,160	1,418	\$706
Grant-Valkaria – Zone E	128	\$4,271,616	5,862	\$729
Grant-Valkaria – Zone B	34	\$1,134,648	1,501	\$756
Grant-Valkaria – Zone F	17	\$567,324	688	\$824
Grant-Valkaria – Zone D	18	\$600,696	690	\$871
Grant-Valkaria – Zone A	42	\$1,401,624	1,296	\$1,082
Malabar – Zone B	64	\$2,135,808	1,929	\$1,107
Grant-Valkaria – Zone C	30	\$1,001,160	853	\$1,173
Malabar – Zone A	430	\$14,349,960	11,456	\$1,253
Valkaria – Zone I	223	\$7,441,956	5,380	\$1,383
South Beaches – Zone F	3	\$100,116	70	\$1,435
Valkaria – Zone J	503	\$16,786,116	11,507	\$1,459
Malabar – Zone C	14	\$467,208	289	\$1,617
South Central – Zone B	180	\$6,006,960	3,700	\$1,623
Sharpes – Zone B	136	\$4,538,592	2,692	\$1,686
South Beaches – Zone E	387	\$12,914,964	7,491	\$1,724
Rockledge – Zone C	91	\$3,036,852	1,736	\$1,749
South Beaches – Zone K	21	\$700,812	397	\$1,765
North Merritt Island – Zone F	34	\$1,550,000	830	\$1,867
North Merritt Island – Zone D	29	\$1,293,000	685	\$1,888
City of West Melbourne	60	\$2,002,320	1,041	\$1,923
Pineda	27	\$1,257,000	644	\$1,952
Sykes Creek – Zone IJ	77	\$1,900,000	62	\$1,974
South Beaches – Zone L	178	\$5,940,216	2,973	\$1,998
Sykes Creek – Zone J	63	\$2,102,436	1,028	\$2,045
South Banana – Zone A	88	\$3,025,000	1,444	\$2,095
South Central – Zone BC	13	\$1,222,000	582	\$2,100
South Beaches – Zone G	112	\$3,737,664	1,764	\$2,119
City of West Melbourne – Zone B	60	\$2,002,320	894	\$2,240
Malabar – Zone D	24	\$800,928	352	\$2,278
North Merritt Island – Zone A	107	\$4,245,000	1,821	\$2,331
South Beaches – Zone D	89	\$2,970,108	1,273	\$2,333
South Central – Zone E	411	\$13,715,892	5,761	\$2,381
South Beaches – Zone M	334	\$11,146,248	4,293	\$2,596
Grant-Valkaria – Zone H	100	\$3,337,200	1,272	\$2,624
Malabar – Zone F	14	\$467,208	174	\$2,683
Melbourne Village – Zone B	224	\$7,475,328	2,705	\$2,763
Sykes Creek – Zone H	74	\$2,469,528	887	\$2,783
South Central – Zone I	72	\$2,170,000	772	\$2,811
Sykes Creek – Zone G	52	\$1,735,344	602	\$2,881
South Beaches – Zone N	103	\$3,437,316	1,193	\$2,882
Sykes Creek – Zone C	81	\$2,703,132	929	\$2,909
Melbourne Village – Zone A	85	\$2,836,620	918	\$3,091
South Central – Zone H	165	\$5,506,380	1,779	\$3,096
South Central – Zone G	196	\$6,540,912	2,090	\$3,129
North Merritt Island – Zone C	71	\$2,369,412	737	\$3,217
Merritt Island – Zone H	285	\$22,500,000	5,464	\$4,118
Sykes Creek – Zone S	164	\$6,600,000	1,584	\$4,167
North Merritt Island – Zone B	56	\$4,690,000	1,066	\$4,399
Merritt Island – Zone A	249	\$16,700,000	3,440	\$4,855
South Beaches – Zone C	118	\$3,937,896	683	\$5,763
Total	6,166	\$232,843,980	111,598	\$2,086 (average)

Table 4-51: Unfunded Muck Dredging and Interstitial Treatment Projects

Sub-Lagoon	Indian River Lagoon (IRL) Muck Sites	Dredging Cost Estimate	Interstitial Water Treatment Cost	Total Cost	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed
Banana	Cocoa Beach Golf (unfunded portion)*	\$12,775,000	\$1,941,800	\$14,716,800	Not applicable	Not applicable	Not applicable	Not applicable
Central IRL	Goat Creek	\$350,000	\$50,819	\$400,819	735	\$545	98	\$4,090
North IRL	Pineda to Eau Gallie	\$30,625,000	\$4,446,705	\$35,071,705	34,965	\$1,003	1,554	\$22,569
North IRL	520 to Pineda	\$31,500,000	\$4,573,754	\$36,073,754	35,280	\$1,022	1,568	\$23,006
Central IRL	Mullet Creek Islands Area	\$4,550,000	\$660,653	\$5,210,653	4,305	\$1,210	574	\$9,078
North IRL	National Aeronautics and Space Administration Causeway West	\$4,375,000	\$635,244	\$5,010,244	3,903	\$1,284	193	\$25,960
North IRL	Pineda	\$5,250,000	\$762,292	\$6,012,292	4,610	\$1,304	492	\$12,220
Banana	Kent Dr	\$1,750,000	\$254,097	\$2,004,097	1,365	\$1,468	182	\$11,012
Banana	National Aeronautics and Space Administration Area	\$98,000,000	\$14,229,457	\$112,229,457	68,985	\$1,627	9,198	\$12,202
Banana	528 East	\$1,225,000	\$177,868	\$1,402,868	840	\$1,670	112	\$12,526
North IRL	North IRL Venetian Canals/Channels	\$13,475,000	\$1,956,551	\$15,431,551	9,160	\$1,685	1,243	\$12,415
Banana	Newfound Harbor E	\$1,575,000	\$228,688	\$1,803,688	1,050	\$1,718	140	\$12,883
Banana	Banana Venetian Collector Canals/Channels	\$119,000,000	\$17,278,627	\$136,278,627	78,960	\$1,726	10,927	\$12,472
Banana	Patrick AFB Borrow Pit-2	\$4,725,000	\$686,063	\$5,411,063	3,045	\$1,777	406	\$13,328
Banana	Newfound Harbor S	\$4,725,000	\$686,063	\$5,411,063	3,045	\$1,777	406	\$13,328
Banana	Mathers Bridge Area	\$12,250,000	\$1,778,682	\$14,028,682	7,875	\$1,781	1,050	\$13,361
North IRL	Max Brewer Causeway	\$2,800,000	\$406,556	\$3,206,556	1,785	\$1,796	238	\$13,473
Banana	Newfound Harbor N	\$3,150,000	\$457,375	\$3,607,375	1,995	\$1,808	266	\$13,562
Banana	Cocoa Beach High School	\$6,825,000	\$990,980	\$7,815,980	4,305	\$1,816	574	\$13,617
Central IRL	Central IRL Venetian Collector Canals/Channels	\$6,300,000	\$914,750	\$7,214,750	3,904	\$1,848	537	\$13,435
Banana	Brightwaters	\$8,225,000	\$1,194,258	\$9,419,258	5,040	\$1,869	672	\$14,017
Banana	Patrick AFB Borrow Pit-4	\$525,000	\$76,229	\$601,229	315	\$1,909	42	\$14,315
Banana	Sunset Café	\$3,850,000	\$559,014	\$4,409,014	2,310	\$1,909	308	\$14,315
Banana	520 Borrow Pit-1	\$1,400,000	\$203,278	\$1,603,278	840	\$1,909	112	\$14,315
Banana	Cape Canaveral Hospital	\$2,100,000	\$304,917	\$2,404,917	1,260	\$1,909	168	\$14,315
Banana	520 Borrow Pit-2	\$700,000	\$101,639	\$801,639	420	\$1,909	56	\$14,315
Banana	520 Borrow Pit-3	\$525,000	\$76,229	\$601,229	315	\$1,909	42	\$14,315
Banana	520 Borrow Pit-4	\$1,400,000	\$203,278	\$1,603,278	840	\$1,909	112	\$14,315
Banana	520 Borrow Pit-5	\$1,050,000	\$152,458	\$1,202,458	630	\$1,909	84	\$14,315
Banana	520 Borrow Pit-6	\$525,000	\$76,229	\$601,229	315	\$1,909	42	\$14,315
Banana	520 Borrow Pit-7	\$700,000	\$101,639	\$801,639	420	\$1,909	56	\$14,315
Central IRL	Trout Creek	\$175,000	\$25,410	\$200,410	105	\$1,909	14	\$14,315

Sub-Lagoon	Indian River Lagoon (IRL) Muck Sites	Dredging Cost Estimate	Interstitial Water Treatment Cost	Total Cost	TN Reduction (lbs/yr)	Cost per Pound of TN Removed	TP Reduction (lbs/yr)	Cost per Pound of TP Removed
Central IRL	Melbourne Causeway North	\$875,000	\$127,049	\$1,002,049	525	\$1,909	70	\$14,315
Central IRL	Front St Park	\$875,000	\$127,049	\$1,002,049	525	\$1,909	70	\$14,315
North IRL	Warwick Dr	\$700,000	\$101,639	\$801,639	420	\$1,909	56	\$14,315
North IRL	Crab Shack	\$700,000	\$101,639	\$801,639	420	\$1,909	56	\$14,315
Banana	Port Canaveral	\$9,275,000	\$1,346,716	\$10,621,716	4,988	\$2,129	245	\$43,354
North IRL	Cocoa South	\$5,250,000	\$762,292	\$6,012,292	1,947	\$3,088	182	\$33,035
Central IRL	Turkey Creek	\$4,900,000	\$711,473	\$5,611,473	1,750	\$3,207	231	\$24,292
North IRL	National Aeronautics and Space Administration Causeway to 528	\$16,625,000	\$2,413,926	\$19,038,926	4,694	\$4,056	313	\$60,827
North IRL	Rockledge A	\$29,575,000	\$4,294,247	\$33,869,247	8,093	\$4,185	1,184	\$28,606
North IRL	Eau Gallie NW	\$19,145,000	\$2,779,826	\$21,924,826	3,207	\$6,837	244	\$89,856
North IRL	Cocoa 520-528	\$3,850,000	\$559,014	\$4,409,014	599	\$7,361	40	\$110,225
North IRL	Eau Gallie South	\$40,250,000	\$5,844,241	\$46,094,241	4,144	\$11,123	777	\$59,323
-	Total	\$518,420,000	\$75,360,713	\$593,780,713	314,234	\$1,890 (average)	35,032	\$16,961 (average)

*Note: The funding for the Cocoa Beach Golf project is the balance of funding needed to fully implement this project. Brevard County is looking for sources of funding for this balance.

Section 5. Project Funding

5.1. Contingency Fund Reserve

The 2018 Update established a Contingency Fund Reserve that will be included with the development and adoption of the County's budget each fiscal year. The reserve will amount to inflation plus 5% of the total Trust Fund dollars that are budgeted for all approved projects scheduled to occur or move ahead in that fiscal year. This includes projects in the Save Our Indian River Lagoon Project Plan, including additions captured in annual updates or supplements. The purpose of the reserve is to fund emergency response to harmful algal blooms and major fish kills, to cover reasonable funding shortfalls that may occur during project implementation and would delay implementation or completion of that project unless a ready source of funds is on hand, provide funding for projects that encounter cost-effective opportunities to remove additional nutrients beyond the amount originally planned, or to move projects forward ahead of schedule if ready to proceed.

The Contingency Fund Reserve includes an additional amount of funding to account for the impact of inflation on project delivery costs. Inflation is estimated by applying the Consumer Price Index to project costs, compounded for the number of years between the year the project cost was estimated and the year that the project is expected to be constructed. Since 2016, the Consumer Price Index has varied between 3.25% and 1.3%. An inflation factor of 2.5% is used for the 2021 Plan Update.

If a cost increase for an individual project is less than 10% of the estimated cost or eligible amount of Trust Fund cost-share stated in the Save Our Indian River Lagoon Project Plan or update, then additional funding from the contingency reserve may be allocated to the project, as needed, in accordance with Brevard County policies and administrative orders. For projects that are contracted with municipalities or other partners and encounter cost overruns, the cost-share agreement may be increased up to 10% over the eligible cost-share amount stated in Attachment E of the cost-share contract. This amendment will be executed by the County Commission Chair and the appropriate municipal representative or authorized agent of a partnering organization.

For project cost increases that are more than 10% above the estimated cost or eligible amount of Trust Fund cost-share stated in the Save Our Indian River Lagoon Project Plan or update, County staff will evaluate the project circumstances and present findings and a recommendation to the Citizen Oversight Committee. The Committee will make a recommendation to the County Manager or County Commission (based on respective signature authority adopted in County contracting policy) on whether the project should proceed.

The Contingency Fund Reserve may also be used to increase funding for approved projects that encounter cost-effective opportunities for value added modifications that could occur swiftly if funding could be made available before the next plan update. If a project can be expanded or altered to provide greater nutrient reduction benefits than planned, contingency funds can be allocated at the rate for that project type established in the most recently adopted plan update in the table titled "Cost-share per Pound of Total Nitrogen (TN) Removed by Project Type." In no case shall the total cost-share from the Trust Fund exceed the total project costs, minus other grants or donations for that project. Amendment approvals would follow one of the three approval processes below:

1. If the amount of funds to be added to the cost-share contract exceeds the signature authority of the County Manager, the funding request will be brought to the Citizen Oversight Committee for a recommendation and to the County Commission for authorization to execute a contract amendment.
2. If the amount of funds to be added to the cost-share contract is within the signature authority of the County Manager but exceeds 10% of the original contract amount, the funding request will be brought to the Citizen Oversight Committee for a recommendation to the County Manager to process a contract amendment.
3. If the amount of funds to be added to the cost-share contract is within the signature authority for the County Manager and less than 10% over the original contract amount, staff will process a contract amendment in accordance with Brevard County contracting policies and administrative orders.

In addition to the Contingency Fund Reserve, if a project is ready to move forward earlier than scheduled in the plan, if such advancement is consistent with temporal sequencing goals in the plan and is recommended by the Citizen Oversight Committee, and if there are sufficient Trust Fund dollars available, the County Manager (for budget changes less than \$100,000) or Brevard County Commission have the authority to adjust the project schedule at any time to ensure that approved projects funded in the plan move forward as soon as feasible. This authority allows projects to move forward as soon as they are ready and funding is available without waiting for an annual plan update to modify the schedule. If a project schedule is updated between plan updates, this schedule change will be reflected in the next annual plan update.

If a project is not able to be completed as initially approved in the plan due to extenuating circumstances, such as permitting restrictions, loss of additional funding, or other situations beyond the managing entity's control, but is able to be downsized instead of fully withdrawn and is recommended by the Citizen Oversight Committee, then the County Manager (for budget changes less than \$100,000) or Brevard County Commission have the authority to reduce the project funding. The revised funding amount will be based on the pounds of nitrogen removal estimated for the reduced project multiplied by the eligible cost-share per pound of TN removed that is adopted for that project type in the most recent Save Our Indian River Lagoon Project Plan. If a project is downsized between plan updates, the revised plan costs and nutrient load reductions will be reflected in the next annual plan update.

5.2. Revenue Projection Update

Brevard County calculated a new estimate for Save Our Indian River Lagoon Sales Tax revenues. This estimate is based on the actual revenues for 2017, 2018, 2019, and the first nine months of 2020. The 2020 revenues for the first nine months were used to estimate the revenue for the remaining three months of 2020 using a rate of growth of 1.4%. The estimate then uses a rate of growth of 2% compounded over the remaining life of the tax. The new estimate for the total tax revenue is \$488,855,173, or an average of \$48.9 million per year. This current estimate is \$14.9 million per year more than the \$34 million per year estimate in the original Save Our Indian River Lagoon Plan, which was based on 2016 dollars. However, this is \$0.5 million per year less than the projection in the 2020 Plan Update.

5.3. Project Funding Allocations

Figure 5-1 shows the funding allocations by project type from the original plan through the 2021 Plan Update. Figure 5-2 summarizes the funding allocated by category (Reduce, Remove, Restore, and Respond) in this 2021 Plan Update.

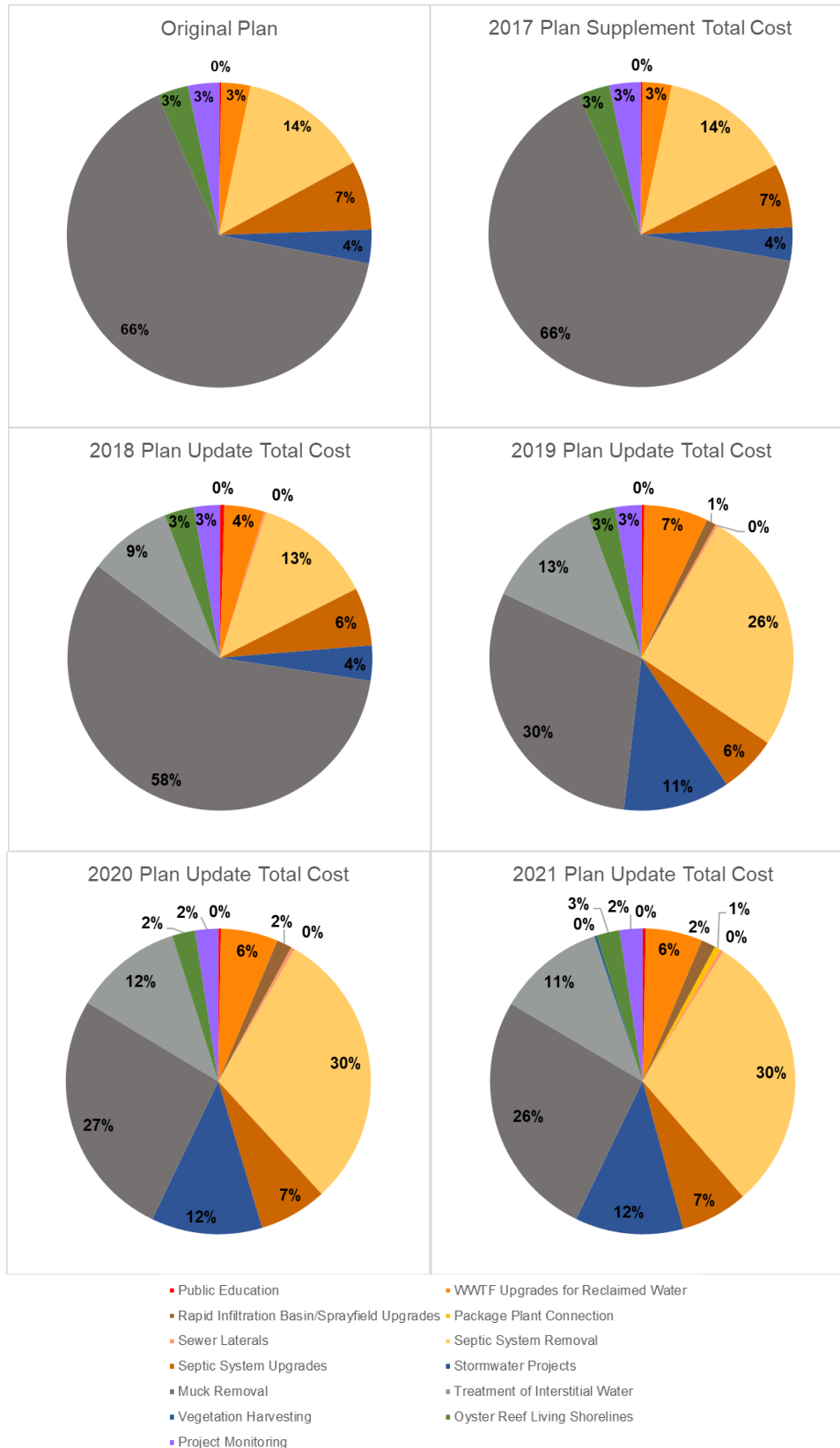


Figure 5-1: Evolution of Project Funding Allocations

Figure 5-1 [Long Description](#)

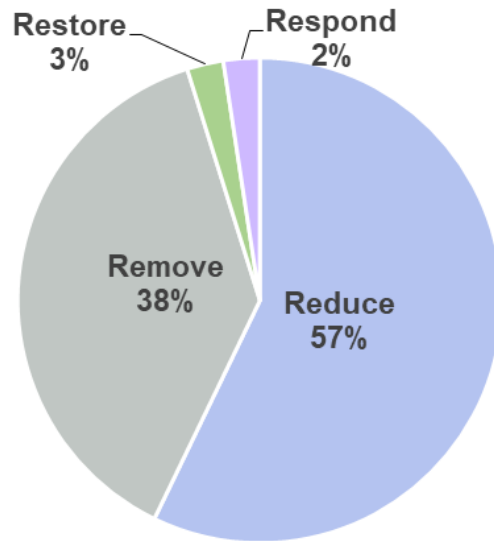


Figure 5-2: Funding for Reduce, Remove, Restore, and Respond Projects

Section 6. Summary of the Plan through the 2021 Update

6.1. Progress Toward the Local Targets for Maximum Total Loads

The County has been working with its municipalities, Florida Department of Transportation District 5, and Patrick Air Force Base to update total loading estimates to the lagoon and revise the total maximum daily loads for nitrogen and phosphorus using the best available data and more detailed modeling than previously available. Based on this process, five-month total maximum daily loads, which target the load reductions needed during the seagrass growing period (January – May), were proposed in addition to annual total maximum daily loads that protect water quality year-round. These load reductions specifically target water quality conditions needed for restoring lagoon seagrass beds to provide crucial habitat for fish and other marine life. Therefore, as this Save Our Indian River Lagoon Project Plan was developed, the total nitrogen (TN) and total phosphorus (TP) reductions from the project types that **Reduce** incoming load were compared to the proposed five-month total maximum daily loads for each sub-lagoon. After satisfying the five-month total maximum daily loads, annual load reductions for each project were compared to the 12-month total maximum daily loads. In all cases, the projects identified to meet the five-month total maximum daily loads were sufficient to meet the proposed 12-month total maximum daily loads. As projects are implemented, progress toward meeting the five-month and full-year total maximum daily loads are being tracked.

Only the projects that reduce external loading to the lagoon, not muck removal or living shorelines, were used to meet the total maximum daily loads. Even though decades of treatment projects to reduce nutrient loads have been completed to date, only the reductions associated with basin management action plan projects that were completed between January 1, 2010 (the last year of the Spatial Watershed Iterative Loading model period) and February 29, 2016 (the end of the last basin management action plan reporting period when the Save Our Indian River Lagoon Project Plan was developed) were included in the load reduction calculations as these projects also provide nutrient load reductions that have occurred after the period of record used to develop the proposed total maximum daily load updates. In Zone A of the Central Indian River Lagoon (IRL), the reductions from the St. Johns River Water Management District's C-1 re-diversion project, which was implemented with cost-share funding from the Florida Department of Environmental Protection and Brevard County, were also included as this project results in significant load reductions that were not included in the February 29, 2016 basin management action plan annual progress report. As shown in **Table 6-1**, **Table 6-3**, and **Table 6-5**, the projects proposed in this plan plus the recently completed basin management action plan projects and C-1 re-diversion project exceed the five-month reductions called for by the proposed total maximum daily load updates.

The total project reductions were also compared to the full year estimated loading to the lagoon from the Spatial Watershed Iterative Loading model. As shown in **Table 6-2**, **Table 6-4**, and **Table 6-6**, the proposed projects in this plan, as well as the recently completed basin management action plan projects and C-1 re-diversion project, achieve significant reductions of the overall loading to the lagoon and exceed the full year reductions called for by the proposed **local** total maximum daily loads (in pounds per year [lbs/yr]).

Table 6-1: Banana River Lagoon Project Reductions to Meet Five-Month Total Maximum Daily Load

Project	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)
Fertilizer Ordinance Implementation	2,945	603
Future Education	1,853	129
Wastewater Treatment Facility (WWTF) Upgrade for Reclaimed Water	1,050	285
Sewer Laterals	412	78
Rapid Infiltration Basin/Sprayfield	1,927	511
Septic System Removal	13,057	0
Septic System Upgrade	806	0
Stormwater Projects	14,185	2,261
Basin Management Action Plan Projects (2010-February 2016)	5,303	1,440
Total	41,538	5,307
Proposed Total Maximum Daily Load Reductions (five-month)	30,337	2,737
Percent of Proposed Total Maximum Daily Load Reductions Achieved	136.9%	193.9%

Table 6-2: Banana River Lagoon Project Reductions Compared to Full Year Loading

Project	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)
Fertilizer Ordinance Implementation	7,068	1,446
Future Education	4,447	310
WWTF Upgrade for Reclaimed Water	2,520	685
Sewer Laterals	988	188
Rapid Infiltration Basin/Sprayfield	4,625	1,226
Septic System Removal	31,336	0
Septic System Upgrade	1,934	0
Stormwater Projects	65,944	8,664
Basin Management Action Plan Projects (2010-February 2016)	12,726	3,456
Total	131,588	15,975
Starting Load (full year)	477,020	44,269
Percent of Starting Load Reduced	27.6%	36.1%
Proposed Full-Year Total Maximum Daily Load Percent Reductions	9.0%	9.6%

Table 6-3: North IRL Project Reductions to Meet Five-Month Total Maximum Daily Load

Project	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)
Fertilizer Ordinance Implementation	8,070	1,651
Future Education	5,078	354
WWTF Upgrade for Reclaimed Water	5,119	To be determined
Sewer Laterals	1,118	To be determined
Rapid Infiltration Basin/Sprayfield	1,740	381
Package Plant Connection	590	To be determined
Septic System Removal	23,898	0
Septic System Upgrade	5,774	0
Stormwater Projects	39,596	6,673
Vegetation Harvesting	336	16
Basin Management Action Plan Projects (2010-February 2016)	16,983	3,180
Total	108,302	12,255
Proposed Total Maximum Daily Load Reductions (five-month)	61,447	7,410
Percent of Proposed Total Maximum Daily Load Reductions Achieved	176.3%	165.4%

Table 6-4: North IRL Project Reductions Compared to Full Year Loading

Project	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)
Fertilizer Ordinance Implementation	19,368	3,962
Future Education	12,187	849
WWTF Upgrade for Reclaimed Water	12,286	To be determined
Sewer Laterals	2,682	To be determined
Rapid Infiltration Basin/Sprayfield	4,177	915
Package Plant Connection	1,415	To be determined
Septic System Removal	57,356	0
Septic System Upgrade	13,857	0
Stormwater Projects	161,735	23,234
Vegetation Harvesting	806	39
Basin Management Action Plan Projects (2010-February 2016)	40,758	7,632
Total	326,627	36,631
Starting Load (full year)	988,847	99,340
Percent of Starting Load Reduced	33.0%	36.9%
Proposed Full-Year Total Maximum Daily Load Percent Reductions	11.4%	11.4%

Table 6-5: Central IRL Project Reductions to Meet Five-Month Total Maximum Daily Load

Project	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)
Fertilizer Ordinance Implementation	8,108	1,659
Future Education	5,102	356
WWTF Upgrade for Reclaimed Water	20,688	5,448
Sewer Laterals	1,053	To be determined
Rapid Infiltration Basin/Sprayfield	68	To be determined
Package Plant Connection	856	To be determined
Septic System Removal	11,375	0
Septic System Upgrade	9,246	0
Stormwater Projects	15,073	2,104
Vegetation Harvesting	6,932	693
C-1 Re-Diversion	53,892	6,295
Basin Management Action Plan Projects (2010-February 2016)	378	243
Total	132,771	16,798
Proposed Total Maximum Daily Load Reductions (five-month) *	67,547	8,151
Percent of Proposed Total Maximum Daily Load Reductions Achieved	196.6%	206.1%

* The total maximum daily load reductions are for Zone A only; however, some of the septic system projects are in Zone SEB. There are sufficient projects to achieve the Zone A reductions without the Zone SEB projects (refer to Section 2.1).

Table 6-6: Central IRL Project Reductions Compared to Full Year Loading

Project	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)
Fertilizer Ordinance Implementation	19,460	3,981
Future Education	12,245	854
WWTF Upgrade for Reclaimed Water	49,652	13,075
Sewer Laterals	2,526	To be determined
Rapid Infiltration Basin/Sprayfield	163	To be determined
Package Plant Connection	2,054	To be determined
Septic System Removal	27,301	0
Septic System Upgrade	22,190	0
Stormwater Projects	47,680	6,313
Vegetation Harvesting	16,636	1,664
C-1 Re-Diversion	129,341	15,108
Basin Management Action Plan Projects (2010-February 2016)	908	582
Total	330,156	41,577
Starting Load (full year) *	698,937	95,051
Percent of Starting Load Reduced	47.2%	43.7%
Proposed Full-Year Total Maximum Daily Load Percent Reductions	17.8%	16.3%

* The total maximum daily load reductions are for Zone A only; however, some of the septic system are in Zone SEB. There are sufficient projects to achieve the Zone A reductions without the Zone SEB projects (refer to Section 2.1).

In addition to the projects that address the external nutrient loading summarized above, the plan includes muck flux, interstitial water treatment, oyster bars, and planted shoreline projects that will significantly reduce internal nutrient loading within the lagoon itself. The annual reductions from these projects are summarized in **Table 6-7**, along with the percentage of nutrients from 2018 estimates of muck flux that would be reduced by these projects.

Table 6-7: Annual Muck Flux, Muck Interstitial Water, Oyster Bar, and Planted Shoreline Project Benefits Compared to Annual Nutrient Loadings from Muck Flux

Project Type	Banana River Lagoon TN (lbs/yr)	Banana River Lagoon TP (lbs/yr)	North IRL TN (lbs/yr)	North IRL TP (lbs/yr)	Central A TN (lbs/yr)	Central A TP (lbs/yr)
Muck Flux Reduction	142,571	13,425	59,728	4,169	5,691	221
Average Annual Removal of Nutrients from Interstitial Water	39,314	1,967	8,792	800	0	69
Oyster Bars	10,491	323	10,724	275	3,551	183
Clams	423	0	432	0	145	0
Planted Shorelines	113	38	118	40	225	77
Total Project Reductions	192,912	15,753	79,785	5,281	9,612	550
Estimated Muck Flux Loading	393,948	43,216	247,078	17,583	16,927	2,277
Percent of Muck Flux Reduced	49.0%	36.5%	32.3%	30.0%	56.8%	24.2%

6.2. Plan Summary

Table 6-8 summarizes all the project types, as well as their estimated costs, total nitrogen (TN) and total phosphorus (TP) reductions in pounds per year (lbs/yr), and costs per pound of TN and TP removed. The information from this table on the project reductions and cost effectiveness was used to determine the schedule for implementing the projects (see **Table 6-9**). Projects that could achieve large reductions quickly, such as fertilizer reductions and wastewater treatment facility (WWTF) upgrades, as well as the most cost-effective septic to sewer, and stormwater projects were prioritized for earliest implementation. This prioritization allows for the reductions to occur as quickly as possible while best using available funding sources. Project scheduling also considered the timing of upstream reductions with downstream removals, where feasible.

The timeline in **Table 6-9** is shown in years after funding from the Save Our Indian River Lagoon sales tax became available. Each year corresponds to the County's fiscal year, which is October 1st through September 30th. Year 1 started on October 1, 2017, which was just before revenues would have begun to accrue if the funding source had been a property tax, as initially considered. When the referendum approved by the voters was a sales tax, collections began in January 2017 and the first revenue check was received by the County in March 2017. Therefore, a plan update was adopted in March 2017 to begin plan implementation in Year 0. **Table 6-9** includes the cost estimates developed as part of the original plan or provided in the year new or substitute projects were added to the plan.

As noted in **Section 4.4.1**, an adaptive management approach is being used in the implementation of this plan. As projects are completed and information on the actual construction costs, timeline, and reductions are obtained, the plan will continue to be adjusted, as needed, to ensure that the most cost-effective projects are being used to meet the Indian River Lagoon (IRL) restoration goals.

Table 6-8: Summary of Projects, Estimated TN and TP Reductions, and Costs

Project Number	Project	Save Our Lagoon Project Cost	TN Reductions (lbs/yr)	Cost per Pound per Year of TN	TP Reductions (lbs/yr)	Cost per Pound per Year of TP
-	Public Education	-	-	-	-	-
58a	Expanded Fertilizer Education	\$625,000	6,613	\$95	813	\$769
58b	Grass Clippings Campaign	\$200,000	17,800	\$11	1,200	\$167
58c	Septic System Maintenance Education	\$300,000	4,466	\$67	To be determined	To be determined
193	Oyster Gardening Program	\$300,000	Not applicable	Not applicable	Not applicable	Not applicable
-	WWTF Upgrades for Reclaimed Water	-	-	-	-	-
99	Cocoa Beach Water Reclamation Facility Upgrade	\$945,000	2,520	\$375	685	\$1,380
2016-02a	City of Titusville Osprey WWTF	\$8,800,000	8,660	\$1,016	Not applicable	Not applicable
2016-17	City of Palm Bay Water Reclamation Facility	\$3,636,900	20,240	\$180	102	\$35,656
59	City of Melbourne Grant Street Water Reclamation Facility	\$6,769,500	18,052	\$375	9,671	\$700
2016-2b	City of Titusville Osprey Nutrient Removal Upgrade Phase 2	\$300,000	3,626	\$83	Not applicable	Not applicable
138	Ray Bullard Water Reclamation Facility Biological Nutrient Removal Upgrades	\$4,260,000	11,360	\$375	3,302	\$1,290
-	Rapid Infiltration Basin/Sprayfield Upgrades	-	-	-	-	-
6	Long Point Park Upgrade	\$22,207	163	\$136	To be determined	To be determined
2016-51	Port St John Wastewater Treatment Plant	\$980,100	4,116	\$238	915	\$1,071
204	Cape Canaveral Air Force Station Regional WWTF	\$5,227,200	4,625	\$1,130	1,226	\$4,264
2016-20	Canebreaker Condo	\$36,000	61	\$590	To be determined	To be determined
-	Package Plant Connection	-	-	-	-	-
197	South Shores Utility Connection	\$1,301,154	929	\$1,401	To be determined	To be determined
199	River Grove I & II Mobile Home Park Connection	\$1,004,640	697	\$1,441	To be determined	To be determined
192	Oak Point Wastewater Treatment Facility Improvements	\$279,000	186	\$1,500	0	Not applicable
-	Sewer Laterals	-	-	-	-	-
63ab	Satellite Beach Lateral Smoke Testing and Countywide Repair/Replacement	\$840,000	988	\$850	188	\$4,468
100	Osprey Basin Lateral Smoke Testing	\$200,000	640	Not applicable	Not applicable	Not applicable
114	Barefoot Bay Lateral Smoke Testing	\$90,000	864	Not applicable	Not applicable	Not applicable
115	South Beaches Lateral Smoke Testing	\$200,000	1,662	Not applicable	Not applicable	Not applicable
116	Merritt Island Lateral Smoke Testing	\$250,000	2,042	Not applicable	Not applicable	Not applicable
-	Septic System Removal by Sewer Extension	-	-	-	-	-
47	Sykes Creek - Zone N	\$2,603,016	2,784	\$935	To be determined	To be determined
48	Sykes Creek - Zone M	\$1,868,832	1,798	\$1,039	To be determined	To be determined
146	Merritt Island - Zone C	\$1,580,000	1,419	\$1,113	To be determined	To be determined

Project Number	Project	Save Our Lagoon Project Cost	TN Reductions (lbs/yr)	Cost per Pound per Year of TN	TP Reductions (lbs/yr)	Cost per Pound per Year of TP
49	Sykes Creek - Zone T	\$4,939,056	3,360	\$1,470	To be determined	To be determined
2016-29	South Banana - Zone B	\$1,368,252	915	\$1,495	To be determined	To be determined
145	Merritt Island - Zone F	\$1,100,000	1,292	\$851	To be determined	To be determined
147	Sykes Creek - Zone R	\$3,500,000	2,925	\$1,197	To be determined	To be determined
148	North Merritt Island - Zone E	\$3,635,000	2,541	\$1,431	To be determined	To be determined
151	Merritt Island - Zone G	\$16,617,000	11,078	\$1,500	To be determined	To be determined
2016-30	City of Rockledge	\$500,580	712	\$703	To be determined	To be determined
2016-31	City of Cocoa - Zone K	\$1,201,392	1,663	\$722	To be determined	To be determined
109	City of Titusville - Zones A-G	\$1,201,392	1,563	\$769	To be determined	To be determined
150	South Central - Zone D (Brevard County)	\$4,774,500	3,387	\$1,410	To be determined	To be determined
2016-28	South Central - Zone D (Melbourne)	\$265,500	177	\$1,500	To be determined	To be determined
50b	South Central - Zone C	\$6,600,000	5,146	\$1,283	To be determined	To be determined
203	South Central - Zone A	\$3,370,572	3,655	\$922	To be determined	To be determined
2016-32	City of Cocoa - Zone J	\$3,136,968	3,259	\$963	To be determined	To be determined
2016-33	City of Melbourne	\$867,672	878	\$988	To be determined	To be determined
2020-34	South Central - Zone F	\$1,701,972	1,688	\$1,008	To be determined	To be determined
2016-27	Sharpes - Zone A	\$6,207,192	5,248	\$1,183	To be determined	To be determined
2016-35	South Beaches - Zone A	\$1,234,764	1,306	\$945	To be determined	To be determined
2016-36	South Beaches - Zone O	\$133,488	136	\$982	To be determined	To be determined
2016-37	South Beaches - Zone P	\$500,580	489	\$1,024	To be determined	To be determined
2016-38	City of Titusville - Zone H	\$1,168,020	910	\$1,284	To be determined	To be determined
2016-40	Rockledge - Zone B	\$5,339,520	4,037	\$1,323	To be determined	To be determined
1	Breeze Swept Septic to Sewer Connection	\$880,530	2,002	\$440	To be determined	To be determined
2	Merritt Island Septic Phase Out Project	\$320,000	2,501	\$128	To be determined	To be determined
61	Riverside Drive Septic-to-Sewer Conversion	\$265,960	305	\$872	To be determined	To be determined
62	Roxy Avenue Septic-to-Sewer Conversion	\$88,944	102	\$872	To be determined	To be determined
152	Sharpes - Zone B	\$4,038,000	2,692	\$1,500	To be determined	To be determined
153	Cocoa - Zone C	\$5,248,500	3,499	\$1,500	To be determined	To be determined
190	Bowers Septic to Sewer	\$147,000	120	\$1,225	To be determined	To be determined
191	Kent and Villa Espana Septic to Sewer Conversion	\$710,000	542	\$1,310	To be determined	To be determined
2016-39	City of Palm Bay – Zone A	\$2,569,644	2,136	\$1,203	To be determined	To be determined
2016-46	City of Palm Bay – Zone B	\$8,309,628	6,809	\$1,220	To be determined	To be determined
4	Hoag Sewer Conversion	\$86,031	101	\$852	To be determined	To be determined
5	Pennwood Sewer Conversion	\$40,632	48	\$847	To be determined	To be determined
60	Sylvan Estates Septic-to-Sewer Conversion	\$1,561,215	1,073	\$1,455	To be determined	To be determined

Project Number	Project	Save Our Lagoon Project Cost	TN Reductions (lbs/yr)	Cost per Pound per Year of TN	TP Reductions (lbs/yr)	Cost per Pound per Year of TP
136	Micco - Zone B	\$9,000,000	8,687	\$1,036	To be determined	To be determined
3	Micco Sewer Line Extension (Phase I and II)	\$2,239,500	1,493	\$1,500	To be determined	To be determined
189	Avandia del Rio Septic to Sewer	\$70,000	71	\$986	To be determined	To be determined
-	Septic System Removal by Sewer Connection	-	-	-	-	-
2016-16	Banana Septic System 144 Quick Connections	\$1,908,000	3,224	\$592	To be determined	To be determined
2016-18	North IRL Septic System 463 Quick Connections	\$6,018,000	11,339	\$531	To be determined	To be determined
2016-19	Central IRL Septic System 269 Quick Connections	\$3,354,000	6,883	\$487	To be determined	To be determined
-	Septic System Upgrades	-	-	-	-	-
51	Banana River Lagoon 100 Septic System Upgrades	\$1,800,000	1,934	\$931	To be determined	To be determined
52	North IRL 586 Septic System Upgrades	\$10,548,000	13,857	\$761	To be determined	To be determined
53	Central IRL 939 Septic System Upgrades	\$16,900,485	22,190	\$762	To be determined	To be determined
-	Stormwater Projects	-	-	-	-	-
-	Banana River Lagoon 68 Basin Projects	\$14,407,164	63,789	\$226	8,421	\$1,711
13	Central Boulevard Baffle Box	\$34,700	481	\$72	14	\$2,479
16	Gleason Park Reuse	\$4,224	48	\$88	9	\$469
64	Stormwater Low Impact Development Convair Cove 1 – Blakey Boulevard	\$4,650	30	\$155	3	\$1,550
65	Stormwater Low Impact Development Convair Cove 2- Dempsey Drive	\$4,495	29	\$155	3	\$1,498
66	Big Muddy at Cynthia Baffle Box	\$41,695	269	\$155	48	\$869
66b	Big Muddy at Cynthia Baffle Box Expansion	\$25,837	167	\$155	10	\$2,584
85	Basin 1304 Bioreactor	\$90,000	958	\$94	127	\$709
128	Jackson Court Stormwater Treatment Facility	\$8,266	56	\$148	8	\$1,033
179	Lori Laine Basin Pipe Improvement Project	\$17,525	117	\$150	21	\$835
-	North IRL 96 Basin Projects	\$22,936,200	118,696	\$193	15,673	\$1,463
18	Denitrification Retrofit of Johns Road Pond	\$105,512	1,199	\$88	To be determined	To be determined
14	Church Street Type II Baffle Box	\$88,045	937	\$94	135	\$652
19	St. Teresa Basin Treatment	\$272,800	3,100	\$88	459	\$594
20	South Street Basin Treatment	\$86,856	987	\$88	156	\$557
21	La Paloma Basin Treatment	\$208,296	2,367	\$88	346	\$602
22	Kingsmill-Aurora Phase Two	\$367,488	4,176	\$88	814	\$451
23	Denitrification Retrofit of Huntington Pond	\$104,720	1,190	\$88	To be determined	To be determined
24	Denitrification Retrofit of Flounder Creek Pond	\$75,328	856	\$88	To be determined	To be determined
34	Cliff Creek Baffle Box	\$347,781	3,952	\$88	797	\$436
35	Thrush Drive Baffle Box	\$322,200	3,661	\$88	773	\$417

Project Number	Project	Save Our Lagoon Project Cost	TN Reductions (lbs/yr)	Cost per Pound per Year of TN	TP Reductions (lbs/yr)	Cost per Pound per Year of TP
69	Apollo/GA Baffle Box	\$297,522	3,381	\$88	479	\$621
89	Basin 1298 Bioreactor	\$86,198	917	\$94	116	\$743
90	Johns Road Pond Biosorption Activated Media	\$23,030	245	\$94	37	\$622
91	Burkholm Road Biosorption Activated Media	\$64,390	685	\$94	104	\$619
92	Carter Road Biosorption Activated Media	\$62,510	665	\$94	101	\$619
93	Wiley Avenue Biosorption Activated Media	\$82,735	954	\$87	144	\$575
94	Broadway Pond Biosorption Activated Media	\$42,864	456	\$94	69	\$621
95	Cherry Street Baffle Box	\$92,120	980	\$94	174	\$529
96	Spring Creek Baffle Box	\$99,358	1,057	\$94	232	\$428
97	Titusville High School Baffle Box	\$111,813	1,190	\$94	166	\$674
98	Coleman Pond Managed Aquatic Plant System	\$11,438	1,240	\$9	198	\$58
110	Osprey Plant Pond Managed Aquatic Plant Systems	\$60,000	606	\$99	88	\$682
117	Basin 10 County Line Road Woodchip Bioreactor	\$72,773	597	\$122	90	\$809
118	Basin 26 Sunset Road Serenity Park Woodchip Bioreactor	\$73,810	605	\$122	92	\$802
119	Basin 141 Irwin Avenue Woodchip Bioreactor	\$69,174	567	\$122	86	\$804
120	Draa Field Pond Managed Aquatic Plant Systems	\$31,281	256	\$122	38	\$823
122	Basin 22 Hunting Road Serenity Park Woodchip Bioreactor	\$40,077	329	\$122	50	\$802
124	Floating Wetlands to Existing Stormwater Ponds	\$1,497	12	\$125	3	\$499
125	Diamond Square Stormwater Pond	\$10,383	85	\$122	23	\$451
127	Basin 5 Dry Retention	\$16,680	113	\$148	18	\$927
129	Forrest Avenue 72-inch Outfall Baseflow Capture/Treatment	\$13,956	94	\$148	12	\$1,163
169	Sherwood Park Stormwater Quality Project	\$99,708	1,762	\$57	670	\$149
174	St. Johns 2 Baffle Box	\$243,070	1,992	\$122	611	\$398
175	High School Baffle Box	\$144,326	1,183	\$122	319	\$452
176	Funeral Home Baffle Box	\$58,682	481	\$122	129	\$455
177	North and South Lakemont Ponds Floating Wetlands	\$13,054	107	\$122	25	\$522
178	Marina B Managed Aquatic Plant Systems	\$6,670	55	\$121	7	\$953
-	Central IRL 8 Basin Projects	\$3,258,500	19,832	\$164	2,617	\$1,245
15	Bayfront Stormwater Project	\$30,624	348	\$88	83	\$369
67	Grant Place Baffle Box	\$82,481	937	\$88	193	\$427
68	Crane Creek/M-1 Canal Flow Restoration	\$2,033,944	23,113	\$88	2,719	\$748
87	Fleming Grant Biosorption Activated Media	\$56,588	602	\$94	91	\$622
88	Espanola Baffle Box	\$105,186	1,119	\$94	148	\$711
121	Basin 2258 Babcock Road Woodchip Bioreactor	\$50,203	412	\$122	62	\$810

Project Number	Project	Save Our Lagoon Project Cost	TN Reductions (lbs/yr)	Cost per Pound per Year of TN	TP Reductions (lbs/yr)	Cost per Pound per Year of TP
123	Ray Bullard Water Reclamation Facility Stormwater Management Area	\$160,674	1,317	\$122	400	\$402
-	Muck Removal	-	-	-	-	-
2016-10a	Port Canaveral South	\$14,700,000	35,382	\$415	1,925	\$7,636
2016-5a	Pineda Banana River Lagoon	\$6,825,000	15,033	\$454	686	\$9,949
2016-11a	Patrick Air Force Base	\$7,175,000	6,497	\$1,104	382	\$18,783
168a	Cocoa Beach Golf	\$21,350,000	29,694	\$719	2,058	\$10,374
41a	Grand Canal Muck	\$2,440,971	10,185	\$240	1,358	\$1,797
42a	Sykes Creek Muck	\$4,705,428	19,635	\$240	2,618	\$1,797
70a	Cocoa Beach Muck Dredging – Phase III	\$1,376,305	4,095	\$336	780	\$1,764
71	Merritt Island Muck Removal – Phase 1	\$7,733,517	8,085	\$957	1,540	\$5,022
72a	Muck Removal of Indian Harbour Beach Canals	\$3,631,815	3,780	\$961	720	\$5,044
101	Cocoa Beach Muck Dredging Phase II-B	\$5,917,650	6,300	\$939	840	\$7,045
144	Satellite Beach Muck Dredging	\$1,884,225	3,885	\$485	518	\$3,638
2016-06a	Titusville Railroad West	\$3,150,000	14,406	\$219	588	\$5,357
2016-07a	National Aeronautics and Space Administration Causeway East	\$9,975,000	21,872	\$456	1,047	\$9,527
2016-04a	Rockledge A	\$4,375,000	7,581	\$577	825	\$5,303
2016-08a	Titusville Railroad East	\$4,025,000	5,393	\$746	227	\$17,731
54a	Eau Gallie Northeast	\$8,750,000	10,476	\$835	1,482	\$5,904
2016-3a	Muck Re-dredging in Turkey Creek	\$137,329	5,691	\$24	221	\$621
-	Treatment of Interstitial Water	-	-	-	-	-
2016-10b	Port Canaveral South	\$2,134,419	42,688	\$50	3,887	\$549
2016-5b	Pineda Banana River Lagoon	\$990,980	19,820	\$50	1,804	\$549
2016-11b	Patrick Air Force Base	\$1,041,800	20,836	\$50	1,897	\$549
168b	Cocoa Beach Golf	\$3,013,100	99,098	\$30	9,022	\$334
41b	Grand Canal Interstitial	\$15,579,397	89,025	\$175	To be determined	To be determined
42b	Sykes Creek Interstitial	\$11,248,704	64,278	\$175	To be determined	To be determined
72b	Muck Interstitial Water Treatment for Indian Harbour Beach Canals	\$5,483,600	27,418	\$200	To be determined	To be determined
113	Satellite Beach Interstitial Water Treatment	\$3,057,756	29,978	\$102	3,059	\$1,000
2016-06b	Titusville Railroad West	\$457,375	9,148	\$50	833	\$549
2016-07c	National Aeronautics and Space Administration Causeway East	\$1,448,355	28,967	\$50	2,637	\$549
2016-04b	Rockledge A	\$635,244	12,705	\$50	1,157	\$549
2016-08b	Titusville Railroad East	\$584,424	11,688	\$50	1,064	\$549

Project Number	Project	Save Our Lagoon Project Cost	TN Reductions (lbs/yr)	Cost per Pound per Year of TN	TP Reductions (lbs/yr)	Cost per Pound per Year of TP
54b	Eau Gallie Northeast	\$1,270,487	25,410	\$50	2,313	\$549
2016-3b	Muck Interstitial Water Treatment for Turkey Creek	Included in muck project	Not applicable	Not applicable	688	Not applicable
-	Vegetation Harvesting	-	-	-	-	-
111	Draa Field Vegetation Harvesting	\$50,000	574	\$87	To be determined	To be determined
112	County Wide Stormwater Pond Harvesting	\$14,000	140	\$100	28	\$500
171	Mechanical Aquatic Vegetation Harvesting	\$1,011,976	16,636	\$61	1,664	\$608
172	Horseshoe Pond Vegetative Harvesting	\$8,140	74	\$110	7	\$1,163
173	North and South Lakemont Ponds Vegetation Harvesting	\$1,980	18	\$110	4	\$495
-	Oyster Bars	-	-	-	-	-
2016-55	Banana River Lagoon County Oyster Bars	\$3,151,051	7,986	\$395	200	\$15,755
75	Marina Isles Oyster Bar	\$26,700	60	\$445	20	\$1,335
76	Bettinger Oyster Bar	\$10,680	24	\$445	8	\$1,335
78a	McNabb Park Oyster Bar	\$34,056	72	\$473	24	\$1,419
79	Gitlin Oyster Bar	\$16,020	36	\$445	12	\$1,335
104	Brevard Zoo Banana River Oyster Project	\$583,020	1,476	\$395	37	\$15,757
141	Brevard Zoo Banana River Oyster Project 2	\$264,800	662	\$400	17	\$15,576
143	Brevard Zoo Oyster Reef Adjustments Banana River	\$12,800	32	\$400	1	\$12,800
188	Brevard Zoo Banana River Oyster Project 3	\$56,771	143	\$397	4	\$14,193
2016-56	North IRL County Oyster Bars	\$2,935,159	7,439	\$395	186	\$15,780
83	Bomalaski Oyster Bar	\$8,900	20	\$445	7	\$1,271
106	Brevard Zoo North IRL Oyster Project	\$341,280	864	\$395	22	\$15,513
139	Brevard Zoo North IRL Oyster Project 2	\$336,400	841	\$400	21	\$16,019
142	Brevard Zoo Oyster Reef Adjustments North IRL	\$27,200	68	\$400	2	\$13,600
184	Brevard Zoo North Indian River Lagoon Oyster Project 3	\$419,232	1,056	\$397	26	\$16,124
186	Brevard Zoo North Indian River Lagoon Individual Oyster Project	\$173,092	436	\$397	11	\$15,736
2016-57	Central IRL County Oyster Bars	\$471,137	1,194	\$395	30	\$15,705
80	Coconut Point/Environmentally Endangered Lands Oyster Bar	\$45,120	96	\$470	2	\$22,560
81	Wexford Oyster Bar	\$31,150	70	\$445	24	\$1,298
82a	Riverview Park Oyster Bar	\$108,790	230	\$473	78	\$1,395
73	Riverview Senior Resort Oyster Bar	\$30,304	77	\$394	2	\$15,152
105	Brevard Zoo Central IRL Oyster Project	\$161,160	408	\$395	10	\$16,116
140	Brevard Zoo Central IRL Oyster Project 2	\$270,800	677	\$400	17	\$15,929

Project Number	Project	Save Our Lagoon Project Cost	TN Reductions (lbs/yr)	Cost per Pound per Year of TN	TP Reductions (lbs/yr)	Cost per Pound per Year of TP
185	Brevard Zoo Central Indian River Lagoon Tributary Pilot Oyster Project	\$230,657	581	\$397	15	\$15,377
187	Brevard Zoo Central Indian River Lagoon Oyster Project 3	\$86,546	218	\$397	5	\$17,309
-	Planted Shorelines	-	-	-	-	-
77a	Cocoa Beach Country Club Planted Shoreline	\$16,080	67	\$240	23	\$699
78b	McNabb Park Planted Shoreline	\$5,760	24	\$240	8	\$720
102	Brevard Zoo Banana River Plant Project	\$3,120	13	\$240	4	\$780
132	Brevard Zoo Banana River Plant Project 2	\$480	2	\$240	1	\$480
182	Newfound Harbor Drive	\$1,680	7	\$240	2	\$840
103	Brevard Zoo North IRL Plant Project	\$720	3	\$240	1	\$720
129	Brevard Zoo North IRL Plant Project 2	\$9,840	41	\$240	14	\$703
180	Scottsmeer Impoundment	\$10,560	44	\$240	15	\$704
181	Riveredge	\$4,080	17	\$240	6	\$680
183	Brevard Zoo North Indian River Lagoon Plant Project 3	\$960	4	\$240	1	\$960
77b	Lagoon House Shoreline Restoration Planting	\$24,000	100	\$240	34	\$706
82b	Riverview Park Planted Shoreline	\$18,480	77	\$240	26	\$711
131	Brevard Zoo Central IRL Plant Project	\$1,920	8	\$240	3	\$640
133	Fisherman's Landing	\$4,800	20	\$240	7	\$686
135	Rotary Park	\$4,800	20	\$240	7	\$686
-	Clam Restoration	-	-	-	-	-
194	Aquaculture Stimulus Program	\$60,000	1,000	\$60	To be determined	To be determined
-	Projects Monitoring	\$10,000,000	-	-	-	-
-	Contingency	\$20,258,580	-	-	-	-
-	Inflation	\$57,065,372	-	-	-	-
	Total	\$488,855,173	1,272,347	\$384 (average)	105,125	\$4,650 (average)

Table 6-9: Timeline for Funding Needs (Table 46 in the Original Save Our Indian River Lagoon Project Plan)

Project Name/Total Project Cost	Year 0 (Fiscal Year 2016-2017)	Year 1 (Fiscal Year 2017-2018)	Year 2 (Fiscal Year 2018-2019)	Year 3 (Fiscal Year 2019-2020)	Year 4 (Fiscal Year 2020-2021)	Year 5 (Fiscal Year 2021-2022)	Year 6 (Fiscal Year 2022-2023)	Year 7 (Fiscal Year 2023-2024)	Year 8 (Fiscal Year 2024-2025)	Year 9 (Fiscal Year 2025-2026)	Year 10 (Fiscal Year 2026-2027)
Public Education	-	-	-	-	-	-	-	-	-	-	-
Fertilizer Management	-	Year 1 of Program*	Year 2 of Program*	Year 3 of Program*	Year 4 of Program	Year 5 of Program	Year 6 of Program	Year 7 of Program	Year 8 of Program	Year 9 of Program	Year 10 of Program
\$625,000	-	\$0	\$120,951	\$49,477	\$59,096	\$59,096	\$100,000	\$59,095	\$59,095	\$59,095	\$59,095
Grass Clippings	-	Year 1 of Program*	Year 2 of Program*	Year 3 of Program*	Year 4 of Program	Year 5 of Program	Year 6 of Program	Year 7 of Program	Year 8 of Program	Year 9 of Program	Year 10 of Program
\$200,000	-	\$0	\$20,000	\$0	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$20,000	\$20,000
Septic System Maintenance	-	Year 1 of Program*	Year 2 of Program*	Year 3 of Program*	Year 4 of Program	Year 5 of Program	Year 6 of Program	Year 7 of Program	Year 8 of Program	Year 9 of Program	Year 10 of Program
\$300,000	-	\$0	\$48,380	\$49,245	\$28,911	\$28,911	\$28,911	\$28,911	\$28,911	\$28,910	\$28,910
Oyster Gardening	-	-	-	Year 1 of Program*	Year 2 of Program	-	-	-	-	-	-
\$300,000	-	-	-	\$150,000	\$150,000	-	-	-	-	-	-
WWTF Upgrades	-	-	-	-	-	-	-	-	-	-	-
Banana River Lagoon	-	-	Cocoa Beach*	-	-	-	-	-	-	-	-
\$945,000	-	-	\$945,000	-	-	-	-	-	-	-	-
North IRL	-	-	-	Titusville Osprey Design and Permitting	Titusville Osprey Design and Start Construction	Titusville Osprey Construction	-	-	-	-	-
\$8,000,000	-	-	-	\$1,000,000	\$3,000,000	\$4,000,000	-	-	-	-	-
North IRL	-	-	-	-	Osprey Nutrient Upgrade Phase 2	-	-	-	-	-	-
\$300,000	-	-	-	-	\$300,000	-	-	-	-	-	-
Central IRL	-	Palm Bay Permit and Engineering	Palm Bay Construction	Palm Bay Construction	-	-	-	-	-	-	-
\$3,636,900	-	\$200,000	\$1,200,000	\$2,236,900	-	-	-	-	-	-	-
Central IRL	-	-	-	Melbourne Grant Street	-	-	-	-	-	-	-
\$6,769,500	-	-	-	\$6,769,500	-	-	-	-	-	-	-
Central IRL	-	-	-	Ray Bullard Biological Nutrient Removal	-	-	-	-	-	-	-
\$4,260,000	-	-	-	\$4,260,000	-	-	-	-	-	-	-
Rapid Infiltration Basin/ Sprayfield Upgrades	-	-	-	-	-	-	-	-	-	-	-
Banana River Lagoon	-	-	-	-	-	-	-	Cape Canaveral Air Force Station	-	-	-
\$5,227,200	-	-	-	-	-	-	-	\$5,227,200	-	-	-
North IRL	-	-	-	-	Port St John	-	-	-	-	-	-
\$980,100	-	-	-	-	\$980,100	-	-	-	-	-	-
North IRL	-	-	-	-	Canebreaker Condo	-	-	-	-	-	-
\$36,000	-	-	-	-	\$36,000	-	-	-	-	-	-
Central IRL	Long Point*	-	-	-	-	-	-	-	-	-	-
\$22,207	\$22,207	-	-	-	-	-	-	-	-	-	-
Package Plant Connections	-	-	-	-	-	-	-	-	-	-	-
North IRL	-	-	-	-	Oak Point	-	-	-	-	-	-
\$279,000	-	-	-	-	\$279,000	-	-	-	-	-	-
Central IRL	-	-	-	-	-	South Shores	-	-	-	-	-
\$1,301,154	-	-	-	-	-	\$1,301,154	-	-	-	-	-
Central IRL	-	-	-	-	-	-	River Grove	-	-	-	-
\$1,004,640	-	-	-	-	-	-	\$1,004,640	-	-	-	-
Sewer Laterals	-	-	-	-	-	-	-	-	-	-	-
Banana River Lagoon	-	-	-	-	Satellite Beach Smoke Testing and Countywide Repairs	-	-	-	-	-	-
\$840,000	-	-	-	-	\$840,000	-	-	-	-	-	-
North IRL	-	-	Titusville Osprey Basin	-	-	-	-	-	-	-	-
\$200,000	-	-	\$200,000	-	-	-	-	-	-	-	-

Project Name/Total Project Cost	Year 0 (Fiscal Year 2016-2017)	Year 1 (Fiscal Year 2017-2018)	Year 2 (Fiscal Year 2018-2019)	Year 3 (Fiscal Year 2019-2020)	Year 4 (Fiscal Year 2020-2021)	Year 5 (Fiscal Year 2021-2022)	Year 6 (Fiscal Year 2022-2023)	Year 7 (Fiscal Year 2023-2024)	Year 8 (Fiscal Year 2024-2025)	Year 9 (Fiscal Year 2025-2026)	Year 10 (Fiscal Year 2026-2027)
North IRL	-	-	-	Merritt Island Lateral Smoke Testing	-	-	-	-	-	-	-
\$250,000	-	-	-	\$250,000	-	-	-	-	-	-	-
Central IRL	-	-	-	Barefoot Bay Lateral Smoke Testing	-	-	-	-	-	-	-
\$90,000	-	-	-	\$90,000	-	-	-	-	-	-	-
Central IRL	-	-	-	South Beaches Lateral Smoke Testing	-	-	-	-	-	-	-
\$200,000	-	-	-	\$200,000	-	-	-	-	-	-	-
Septic Removal	-	-	-	-	-	-	-	-	-	-	-
Banana River Lagoon	Sykes M Engineering	-	Sykes Creek M	-	-	-	-	-	-	-	-
\$1,868,832	\$250,000	-	\$1,618,832	-	-	-	-	-	-	-	-
Banana River Lagoon	-	Sykes Creek N	-	-	-	-	-	-	-	-	-
\$2,603,016	-	\$2,603,016	-	-	-	-	-	-	-	-	-
Banana River Lagoon	Sykes T Engineering	-	-	Sykes Creek T	-	-	-	-	-	-	-
\$4,939,056	\$250,000	-	-	\$4,689,056	-	-	-	-	-	-	-
Banana River Lagoon	-	-	-	-	South Banana B Engineering	South Banana B	-	-	-	-	-
\$1,368,252	-	-	-	-	\$275,000	\$1,093,252	-	-	-	-	-
Banana River Lagoon	-	-	-	Quick Connects	Quick Connects	Quick Connects	Quick Connects	-	-	-	-
\$1,908,000	-	-	-	\$190,800	\$572,400	\$572,400	\$572,400	-	-	-	-
Banana River Lagoon	-	-	-	-	Merritt Island C Engineering	Merritt Island C	Merritt Island C	-	-	-	-
\$1,580,000	-	-	-	-	\$145,000	\$717,500	\$717,500	-	-	-	-
Banana River Lagoon	-	-	-	-	Merritt Island F Engineering	-	Merritt Island F	-	-	-	-
\$1,100,000	-	-	-	-	\$100,000	-	\$1,000,000	-	-	-	-
Banana River Lagoon	-	-	-	-	Sykes Creek R Engineering	-	-	Sykes Creek R	-	-	-
\$3,500,000	-	-	-	-	\$320,000	-	-	\$3,180,000	-	-	-
Banana River Lagoon	-	-	-	-	Merritt Island G Engineering	-	-	-	-	Merritt Island G	-
\$16,617,000	-	-	-	-	\$1,650,000	-	-	-	-	\$14,967,000	-
Banana River Lagoon	-	-	-	-	North Merritt Island E Engineering	-	North Merritt Island E	-	-	-	-
\$3,635,000	-	-	-	-	\$727,000	-	\$2,908,000	-	-	-	-
North IRL	South Central C Engineering	South Central C	-	-	South Central C	-	-	-	-	-	-
\$6,600,000	\$450,000	\$4,222,080	-	-	\$1,927,920	-	-	-	-	-	-
North IRL	Breeze Swept*	-	-	-	-	-	-	-	-	-	-
\$880,530	\$880,530	-	-	-	-	-	-	-	-	-	-
North IRL	Merritt Island Redevelopment Agency	-	-	-	-	-	-	-	-	-	-
\$320,000	\$320,000	-	-	-	-	-	-	-	-	-	-
North IRL	-	-	Riverside Drive	-	-	-	-	-	-	-	-
\$265,960	-	-	\$265,960	-	-	-	-	-	-	-	-
North IRL	-	-	Cocoa K	-	-	-	-	-	-	-	-
\$1,201,392	-	-	\$1,201,392	-	-	-	-	-	-	-	-
North IRL	-	-	Roxy Avenue	-	-	-	-	-	-	-	-
\$88,944	-	-	\$88,944	-	-	-	-	-	-	-	-
North IRL	-	-	-	Cocoa J	-	-	-	-	-	-	-
\$3,136,968	-	-	-	\$3,136,968	-	-	-	-	-	-	-
North IRL	-	-	-	Rockledge	-	-	-	-	-	-	-
\$500,580	-	-	-	\$500,580	-	-	-	-	-	-	-
North IRL	-	-	-	Titusville A-G	-	-	-	-	-	-	-
\$1,201,392	-	-	-	\$1,201,392	-	-	-	-	-	-	-

Project Name/Total Project Cost	Year 0 (Fiscal Year 2016-2017)	Year 1 (Fiscal Year 2017-2018)	Year 2 (Fiscal Year 2018-2019)	Year 3 (Fiscal Year 2019-2020)	Year 4 (Fiscal Year 2020-2021)	Year 5 (Fiscal Year 2021-2022)	Year 6 (Fiscal Year 2022-2023)	Year 7 (Fiscal Year 2023-2024)	Year 8 (Fiscal Year 2024-2025)	Year 9 (Fiscal Year 2025-2026)	Year 10 (Fiscal Year 2026-2027)
North IRL	-	-	-	-	-	-	-	Titusville H	-	-	-
\$1,168,020	-	-	-	-	-	-	-	\$1,168,020	-	-	-
North IRL	-	-	Quick Connects	Quick Connects	Quick Connects	Quick Connects	Quick Connects	Quick Connects	Quick Connects	Quick Connects	-
\$6,018,000	-	-	\$300,900	\$300,900	\$902,700	\$902,700	\$902,700	\$902,700	\$902,700	\$902,700	-
North IRL	-	-	-	-	South Central D (Brevard) Engineering	South Central D (Brevard)	-	-	-	-	-
\$4,774,500	-	-	-	-	\$955,000	\$3,819,500	-	-	-	-	-
North IRL	-	-	-	-	-	-	South Central D (Melbourne)	-	-	-	-
\$265,500	-	-	-	-	-	-	\$265,500	-	-	-	-
North IRL	-	-	-	-	South Central A Engineering	South Central A	-	-	-	-	-
\$3,370,572	-	-	-	-	\$675,000	\$2,695,572	-	-	-	-	-
North IRL	-	-	-	-	-	-	South Beaches A	-	-	-	-
\$1,234,764	-	-	-	-	-	-	\$1,234,764	-	-	-	-
North IRL	-	-	-	-	-	-	South Central F	-	-	-	-
\$1,701,972	-	-	-	-	-	-	\$1,701,972	-	-	-	-
North IRL	-	-	-	South Beaches O	-	-	-	-	-	-	-
\$133,488	-	-	-	\$133,488	-	-	-	-	-	-	-
North IRL	-	-	-	South Beaches P	-	-	-	-	-	-	-
\$500,580	-	-	-	\$500,580	-	-	-	-	-	-	-
North IRL	-	-	-	-	-	-	-	Melbourne	-	-	-
\$867,672	-	-	-	-	-	-	-	\$867,672	-	-	-
North IRL	-	-	-	-	Sharpes A Engineering	-	-	-	Sharpes A	-	-
\$6,207,192	-	-	-	-	\$1,245,000	-	-	-	\$4,962,192	-	-
North IRL	-	-	-	-	-	-	-	-	-	Rockledge Zone B	-
\$5,339,520	-	-	-	-	-	-	-	-	-	\$5,339,520	-
North IRL	-	-	-	-	Sharpes B Engineering	-	-	-	Sharpes B	-	-
\$4,038,000	-	-	-	-	\$810,000	-	-	-	\$3,228,000	-	-
North IRL	-	-	-	-	Cocoa C Engineering	-	-	-	-	Cocoa C	-
\$5,248,500	-	-	-	-	\$1,050,000	-	-	-	-	\$4,198,500	-
North IRL	-	-	-	-	Bowers	-	-	-	-	-	-
\$147,000	-	-	-	-	\$147,000	-	-	-	-	-	-
North IRL	-	-	-	-	Kent and Villa Espana	-	-	-	-	-	-
\$710,000	-	-	-	-	\$710,000	-	-	-	-	-	-
Central IRL	-	-	-	-	Micco Phases I & II	-	-	-	-	-	-
\$2,239,500	-	-	-	-	\$2,239,500	-	-	-	-	-	-
Central IRL	Hoag	-	-	-	-	-	-	-	-	-	-
\$86,031	\$86,031	-	-	-	-	-	-	-	-	-	-
Central IRL	Pennwood	-	-	-	-	-	-	-	-	-	-
\$40,632	\$40,632	-	-	-	-	-	-	-	-	-	-
Central IRL	-	-	-	-	Palm Bay B	-	-	-	-	-	-
\$8,309,628	-	-	-	-	\$8,309,628	-	-	-	-	-	-
Central IRL	-	-	-	Quick Connects	Quick Connects	Quick Connects	Quick Connects	Quick Connects	Quick Connects	Quick Connects	-
\$3,354,000	-	-	-	\$254,400	\$516,600	\$516,600	\$516,600	\$516,600	\$516,600	\$516,600	-
Central IRL	-	Sylvan Estates	-	-	-	-	-	-	-	-	-
\$1,561,215	-	\$1,561,215	-	-	-	-	-	-	-	-	-
Central IRL	-	-	-	-	Palm Bay A	-	-	-	-	-	-
\$2,569,644	-	-	-	-	\$2,569,644	-	-	-	-	-	-
Central IRL	-	-	-	-	Micco B Engineering	-	Micco B	Micco B	-	-	-
\$9,000,000	-	-	-	-	\$815,000	-	\$5,000,000	\$3,185,000	-	-	-
Central IRL	-	-	-	-	Avendia del Rio	-	-	-	-	-	-
\$70,000	-	-	-	-	\$70,000	-	-	-	-	-	-

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Septic Upgrades	-	-	-	-	-	-	-	-	-	-	-
Banana River Lagoon	-	-	-	-	20 Upgrades	20 Upgrades	20 Upgrades	20 Upgrades	20 Upgrades	-	-
\$1,800,000	-	-	-	-	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	-	-
North IRL	-	-	-	-	80 Upgrades	90 Upgrades	90 Upgrades	90 Upgrades	80 Upgrades	80 Upgrades	76 Upgrades
\$10,548,000	-	-	-	-	\$1,440,000	\$1,620,000	\$1,620,000	\$1,620,000	\$1,440,000	\$1,440,000	\$1,368,000
Central IRL	-	-	-	2 Upgrades*	75 Upgrades	110 Upgrades	155 Upgrades	155 Upgrades	153 Upgrades	145 Upgrades	144 Upgrades
\$16,900,485	-	-	-	\$34,485	\$1,350,000	\$1,980,000	\$2,790,000	\$2,790,000	\$2,754,000	\$2,610,000	\$2,592,000
Stormwater Projects	-	-	-	-	-	-	-	-	-	-	-
Banana - Cape Canaveral	Central Boulevard Baffle Box*	-	-	-	-	-	-	-	-	-	-
\$34,700	\$34,700	-	-	-	-	-	-	-	-	-	-
Banana - Indian Harbour Beach	Gleason Park Reuse*	Big Muddy at Cynthia Baffle Box	Big Muddy Expansion	-	-	-	-	-	-	-	-
\$71,756	\$4,224	\$41,695	\$25,837	-	-	-	-	-	-	-	-
Banana - Cocoa Beach	-	-	-	-	Convair Cove 1 – Blakey Blvd	-	-	-	-	-	-
\$4,650	-	-	-	-	\$4,650	-	-	-	-	-	-
Banana - Cocoa Beach	-	-	-	-	Convair Cove 2- Dempsey Drive	-	-	-	-	-	-
\$4,495	-	-	-	-	\$4,495	-	-	-	-	-	-
Banana - Satellite Beach	-	-	-	Jackson Court	Lori Laine	-	-	-	-	-	-
\$25,791	-	-	-	\$8,266	\$17,525	-	-	-	-	-	-
Banana - Brevard	-	-	Basin 1304 Bioreactor*	-	-	-	-	-	-	-	-
\$90,000	-	-	\$90,000	-	-	-	-	-	-	-	-
Banana - Brevard	-	-	-	5 Projects	9 Projects	9 Projects	9 Projects	9 Projects	9 Projects	9 Projects	9 Projects
\$14,407,164	-	-	-	\$955,564	\$1,858,400	\$3,053,600	\$2,529,700	\$1,961,300	\$1,438,400	\$1,300,600	\$1,309,600
North IRL - Cocoa	Church Street Type II Baffle Box*	-	-	Floating Wetlands*	North and South Lakemont	-	-	-	-	-	-
\$102,596	\$88,045	-	-	\$1,497	\$13,054	-	-	-	-	-	-
North IRL - Cocoa	-	-	-	Diamond Square Pond	-	-	-	-	-	-	-
\$10,383	-	-	-	\$10,383	-	-	-	-	-	-	-
North IRL - Cocoa	-	-	-	Forrest Avenue Outfall	-	-	-	-	-	-	-
\$13,956	-	-	-	\$13,956	-	-	-	-	-	-	-
North IRL - Titusville	-	St. Teresa Basin Treatment*	Titusville High School Baffle Box	-	St. Johns 2 Baffle Box	-	-	-	-	-	-
\$627,683	-	\$272,800	\$111,813	-	\$243,070	-	-	-	-	-	-
North IRL - Titusville	-	South Street Basin Treatment*	Coleman Pond Managed Aquatic Plant System*	Osprey Plant Managed Aquatic Plant Systems	Marina B Managed Aquatic Plants	-	-	-	-	-	-
\$164,964	-	\$86,856	\$11,438	\$60,000	\$6,670	-	-	-	-	-	-
North IRL - Titusville	-	La Paloma Basin Treatment*	-	Draa Pond Managed Aquatic Plant Systems	-	-	-	-	-	-	-
\$239,577	-	\$208,296	-	\$31,281	-	-	-	-	-	-	-
North IRL - Melbourne	-	Cliff Creek Baffle Box*	Apollo/GA Baffle Box	-	High School Baffle Box	-	-	-	-	-	-
\$789,629	-	\$347,781	\$297,522	-	\$144,326	-	-	-	-	-	-
North IRL - Melbourne	-	Thrush Drive Baffle Box	Cherry Street Baffle Box	-	Funeral Home Baffle Box	-	-	-	-	-	-
\$473,002	-	\$322,200	\$92,120	-	\$58,682	-	-	-	-	-	-
North IRL - Melbourne	-	-	Spring Creek Baffle Box	-	-	-	-	-	-	-	-
\$99,358	-	-	\$99,358	-	-	-	-	-	-	-	-
North IRL - Indialantic	-	-	-	Basin 5 Dry Retention*	-	-	-	-	-	-	-
\$16,680	-	-	-	\$16,680	-	-	-	-	-	-	-
North IRL - Brevard	-	Kingsmill-Aurora Phase Two	Basin 1298 Bioreactor*	-	-	-	-	-	-	-	-
\$453,686	-	\$367,488	\$86,198	-	-	-	-	-	-	-	-

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North IRL - Brevard	-	Denitrification Retrofit of Huntington Pond	Johns Road Pond*	Basin 10 County Line Road Bioreactor*	-	-	-	-	-	-	-
\$200,523	-	\$104,720	\$23,030	\$72,773	-	-	-	-	-	-	-
North IRL - Brevard	-	Denitrification Retrofit of Flounder Creek Pond	Burkholm Road*	Basin 26 Sunset Road Serenity Park Bioreactor	-	-	-	-	-	-	-
\$213,528	-	\$75,328	\$64,390	\$73,810	-	-	-	-	-	-	-
North IRL - Brevard	-	Denitrification Retrofit of Johns Road Pond	Carter Road*	Basin 141 Irwin Avenue Woodchip Bioreactor	-	-	-	-	-	-	-
\$237,196	-	\$105,512	\$62,510	\$69,174	-	-	-	-	-	-	-
North IRL - Brevard	-	-	Wiley Avenue	Basin 22 Hunting Road Serenity Park Bioreactor	-	-	-	-	-	-	-
\$122,812	-	-	\$82,735	\$40,077	-	-	-	-	-	-	-
North IRL - Brevard	-	-	Broadway Pond*	-	-	-	-	-	-	-	-
\$42,864	-	-	\$42,864	-	-	-	-	-	-	-	-
North IRL - Brevard	-	-	-	7 Projects	13 Projects	13 Projects	13 Projects	13 Projects	13 Projects	12 Projects	12 Projects
\$22,936,200	-	-	-	\$1,026,000	\$5,184,600	\$3,285,200	\$3,070,000	\$2,990,800	\$2,343,300	\$2,505,100	\$2,531,200
Central IRL - Palm Bay	Bayfront Stormwater Project*	-	-	-	-	-	-	-	-	-	-
\$30,624	\$30,624	-	-	-	-	-	-	-	-	-	-
Central IRL - Melbourne	-	-	Grant Place Baffle Box	Ray Bullard Stormwater Management Area	-	-	-	-	-	-	-
\$243,155	-	-	\$82,481	\$160,674	-	-	-	-	-	-	-
Central IRL - Melbourne	-	-	Espanola Baffle Box	-	-	-	-	-	-	-	-
\$105,186	-	-	\$105,186	-	-	-	-	-	-	-	-
Central - St. Johns River Water Management District	-	-	Crane Creek/M-1 Canal Flow Restoration	-	-	-	-	-	-	-	-
\$2,033,944	-	-	\$2,033,944	-	-	-	-	-	-	-	-
Central IRL - Brevard	-	-	Fleming Grant*	Basin 2258 Babcock Road Bioreactor	-	-	-	-	-	-	-
\$106,791	-	-	\$56,588	\$50,203	-	-	-	-	-	-	-
Central IRL - Brevard	-	-	-	-	-	2 Projects	2 Projects	2 Projects	1 Project	1 Project	-
\$3,258,500	-	-	-	-	-	\$603,700	\$916,100	\$763,300	\$716,700	\$258,700	-
Vegetation Harvesting	-	-	-	-	-	-	-	-	-	-	-
North IRL - Brevard	-	-	-	County Wide Pond Harvesting	Horseshoe Pond	-	-	-	-	-	-
\$22,140	-	-	-	\$14,000	\$8,140	-	-	-	-	-	-
North IRL - Titusville	-	-	-	Draa Field Vegetation Harvesting	-	-	-	-	-	-	-
\$50,000	-	-	-	\$50,000	-	-	-	-	-	-	-
North IRL - Cocoa	-	-	-	-	North and South Lakemont Harvesting	-	-	-	-	-	-
\$1,980	-	-	-	-	\$1,980	-	-	-	-	-	-
Central IRL - Melbourne-Tillman	-	-	-	-	Mechanical Harvesting	-	-	-	-	-	-
\$1,011,976	-	-	-	-	\$1,011,976	-	-	-	-	-	-
Muck Removal & Interstitial Treatment	-	-	-	-	-	-	-	-	-	-	-
Banana River Lagoon	-	-	Cocoa Beach Phase III*	Cocoa Beach Ph II-B	-	-	-	-	-	-	-
\$7,293,955	-	-	\$1,376,305	\$5,917,650	-	-	-	-	-	-	-
Banana River Lagoon	-	-	Merritt Island	-	-	-	-	-	-	-	-
\$7,733,517	-	-	\$7,733,517	-	-	-	-	-	-	-	-

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Banana River Lagoon	-	-	-	Indian Harbour Beach	Indian Harbour Beach	-	-	-	-	-	-
\$9,115,415	-	-	-	\$500,000	\$8,615,415	-	-	-	-	-	-
Banana River Lagoon	-	-	29% Sykes Creek	-	71% Sykes Creek	-	-	-	-	-	-
\$15,954,132	-	-	\$5,954,132	-	\$10,000,000	-	-	-	-	-	-
Banana River Lagoon	-	-	20% Grand Canal	25% Grand Canal	55% Grand Canal	-	-	-	-	-	-
\$18,020,368	-	-	\$3,020,368	\$5,000,000	\$10,000,000	-	-	-	-	-	-
Banana River Lagoon	-	-	-	1% Cocoa Beach Golf	1% Cocoa Beach Golf	8% Cocoa Beach Golf	16% Cocoa Beach Golf	30% Cocoa Beach Golf	-	-	-
\$24,363,100	-	-	-	\$500,000	\$500,000	\$3,500,000	\$6,863,100	\$13,000,000	-	-	-
Banana River Lagoon	-	-	-	-	-	2% Port Canaveral South	25% Port Canaveral South	48% Port Canaveral South	25% Port Canaveral South	-	-
\$16,834,419	-	-	-	-	-	\$400,000	\$4,208,605	\$8,017,209	\$4,208,605	-	-
Banana River Lagoon	-	-	-	-	-	3% Pineda	47% Pineda	50% Pineda	-	-	-
\$7,815,980	-	-	-	-	-	\$200,000	\$3,707,990	\$3,907,990	-	-	-
Banana River Lagoon	-	-	-	-	-	Patrick Air Force Base	-	-	-	-	-
\$8,216,800	-	-	-	-	-	\$8,216,800	-	-	-	-	-
Banana River Lagoon	-	-	-	Satellite Beach	Satellite Beach	-	-	-	-	-	-
\$4,941,981	-	-	-	\$500,000	\$4,441,981	-	-	-	-	-	-
North IRL	-	-	2% Eau Gallie Northeast	49% Eau Gallie Northeast	49% Eau Gallie Northeast	-	-	-	-	-	-
\$10,020,487	-	-	\$200,409	\$4,910,039	\$4,910,039	-	-	-	-	-	-
North IRL	-	1% Titusville East	4% Titusville East	4% Titusville East	21% Titusville East	30% Titusville East	40% Titusville East	-	-	-	-
\$4,609,424	-	\$46,094	\$184,377	\$184,377	\$967,979	\$1,382,827	\$1,843,770	-	-	-	-
North IRL	-	1% Titusville West	4% Titusville West	4% Titusville West	21% Titusville West	30% Titusville West	40% Titusville West	-	-	-	-
\$3,607,375	-	\$36,074	\$144,295	\$144,295	\$757,549	\$1,082,212	\$1,442,950	-	-	-	-
North IRL	-	1% National Aeronautics and Space Administration East	4% National Aeronautics and Space Administration East	-	25% National Aeronautics and Space Administration East	30% National Aeronautics and Space Administration East	40% National Aeronautics and Space Administration East	-	-	-	-
\$11,423,355	-	\$114,234	\$456,934	-	\$2,855,839	\$3,427,006	\$4,569,342	-	-	-	-
North IRL	-	-	-	4% Rockledge A	48% Rockledge A	48% Rockledge A	-	-	-	-	-
\$5,010,244	-	-	-	\$200,000	\$2,405,122	\$2,405,122	-	-	-	-	-
Central IRL	-	Turkey Creek*	-	-	-	-	-	-	-	-	-
\$137,329	-	\$137,329	-	-	-	-	-	-	-	-	-
Oyster Bars	-	-	-	-	-	-	-	-	-	-	-
Banana - Brevard Zoo	-	Marina Isles*	Brevard Zoo Banana River	Brevard Zoo Banana River Oyster Project 2	Brevard Zoo Banana River Oyster Project 3	-	-	-	-	-	-
\$931,291	-	\$26,700	\$583,020	\$264,800	\$56,771	-	-	-	-	-	-
Banana - Brevard Zoo	-	Bettinger*	-	Brevard Zoo Oyster Reef Adjustments	-	-	-	-	-	-	-
\$23,480	-	\$10,680	-	\$12,800	-	-	-	-	-	-	-
Banana - Cocoa Beach	-	-	-	-	McNabb	-	-	-	-	-	-
\$34,056	-	-	-	-	\$34,056	-	-	-	-	-	-
Banana - Brevard Zoo	-	Gitlin*	-	-	-	-	-	-	-	-	-
\$16,020	-	\$16,020	-	-	-	-	-	-	-	-	-
Banana - Brevard	-	-	-	-	20,923 square feet Oysters	29788.1 square feet Oysters	29788.1 square feet Oysters	29788.1 square feet Oysters	29788.1 square feet Oysters	29788.1 square feet Oysters	29788.1 square feet Oysters
\$3,151,051	-	-	-	-	\$330,227	\$470,138	\$470,138	\$470,137	\$470,137	\$470,137	\$470,137
North IRL - Brevard Zoo	-	Bomalaski*	Brevard Zoo North IRL	Brevard Zoo North IRL Oyster Project 2	Brevard Zoo North Indian River Lagoon Oyster Project 3	-	-	-	-	-	-
\$1,105,812	-	\$8,900	\$341,280	\$336,400	\$419,232	-	-	-	-	-	-

Project Name/Total Project Cost	Year 0 (Fiscal Year 2016-2017)	Year 1 (Fiscal Year 2017-2018)	Year 2 (Fiscal Year 2018-2019)	Year 3 (Fiscal Year 2019-2020)	Year 4 (Fiscal Year 2020-2021)	Year 5 (Fiscal Year 2021-2022)	Year 6 (Fiscal Year 2022-2023)	Year 7 (Fiscal Year 2023-2024)	Year 8 (Fiscal Year 2024-2025)	Year 9 (Fiscal Year 2025-2026)	Year 10 (Fiscal Year 2026-2027)
North IRL - Brevard	-	-	-	-	26,567.4 square feet Oysters	26,567.4 square feet Oysters	26,567.4 square feet Oysters	26,567.4 square feet Oysters	26,567.4 square feet Oysters	26,567.4 square feet Oysters	26,567.4 square feet Oysters
\$2,935,159	-	-	-	-	\$419,309	\$419,309	\$419,309	\$419,308	\$419,308	\$419,308	\$419,308
North IRL - Brevard Zoo	-	-	-	Brevard Zoo Oyster Reef Adjustments	Brevard Zoo North Indian River Lagoon Individual Oyster Project	-	-	-	-	-	-
\$200,292	-	-	-	\$27,200	\$173,092	-	-	-	-	-	-
Central IRL - Brevard Zoo	-	Coconut Point*	Brevard Zoo Central IRL	Brevard Zoo Central IRL Oyster Project 2	Brevard Zoo Central Indian River Lagoon Oyster Project 3	-	-	-	-	-	-
\$563,626	-	\$45,120	\$161,160	\$270,800	\$86,546	-	-	-	-	-	-
Central IRL - Melbourne	-	Riverview Park	-	-	-	-	-	-	-	-	-
\$108,790	-	\$108,790	-	-	-	-	-	-	-	-	-
Central IRL - Brevard Zoo	-	Wexford	-	-	Brevard Zoo Central Indian River Lagoon Tributary Pilot Oyster Project	-	-	-	-	-	-
\$261,807	-	\$31,150	-	-	\$230,657	-	-	-	-	-	-
Central IRL - Brevard	-	Riverview Senior Resort*	-	-	4,264.8 square feet Oysters	4,264.8 square feet Oysters	4,264.8 square feet Oysters	4,264.2 square feet Oysters	4,264.2 square feet Oysters	4,264.2 square feet Oysters	4,264.2 square feet Oysters
\$501,441	-	\$30,304	-	-	\$67,306	\$67,306	\$67,305	\$67,305	\$67,305	\$67,305	\$67,305
Planted Shorelines	-	-	-	-	-	-	-	-	-	-	-
Banana - Marine Resources Council	-	Cocoa Beach*	-	-	Newfound Harbor	-	-	-	-	-	-
\$17,694	-	\$16,014	-	-	\$1,680	-	-	-	-	-	-
Banana - Cocoa Beach	-	-	-	-	McNabb	-	-	-	-	-	-
\$5,760	-	-	-	-	\$5,760	-	-	-	-	-	-
Banana - Brevard Zoo	-	-	Brevard Zoo Banana River	Brevard Zoo Banana River Plant Project 2	-	-	-	-	-	-	-
\$3,600	-	-	\$3,120	\$480	-	-	-	-	-	-	-
North IRL - Brevard Zoo	-	-	Brevard Zoo North IRL *	Brevard Zoo North IRL Plant Project 2	Brevard Zoo North Indian River Lagoon Plant Project 3	-	-	-	-	-	-
\$11,520	-	-	\$720	\$9,840	\$960	-	-	-	-	-	-
North IRL - Marine Resources Council	-	-	-	-	Scottsmoor	-	-	-	-	-	-
\$10,560	-	-	-	-	\$10,560	-	-	-	-	-	-
North IRL - Marine Resources Council	-	-	-	-	Riveredge	-	-	-	-	-	-
\$4,080	-	-	-	-	\$4,080	-	-	-	-	-	-
Central IRL - Marine Resources Council	-	Lagoon House*	-	Fisherman's Landing*	-	-	-	-	-	-	-
\$28,761	-	\$23,961	-	\$4,800	-	-	-	-	-	-	-
Central IRL - Melbourne	-	Riverview Park	-	-	-	-	-	-	-	-	-
\$18,480	-	\$18,480	-	-	-	-	-	-	-	-	-
Central IRL - Brevard Zoo	-	-	-	Brevard Zoo Central IRL Plant Project	-	-	-	-	-	-	-
\$1,920	-	-	-	\$1,920	-	-	-	-	-	-	-
Central IRL - Marine Resources Council	-	-	-	Rotary Park*	-	-	-	-	-	-	-
\$4,800	-	-	-	\$4,800	-	-	-	-	-	-	-
Clam Restoration	-	-	-	-	-	-	-	-	-	-	-
All	-	-	-	-	Aquaculture Stimulus	-	-	-	-	-	-
\$60,000	-	-	-	-	\$60,000	-	-	-	-	-	-
Project Monitoring	Year 0 Monitoring*	Year 1 Monitoring*	Year 2 Monitoring*	Year 3 Monitoring*	Year 4 Monitoring	Year 5 Monitoring	Year 6 Monitoring	Year 7 Monitoring	Year 8 Monitoring	Year 9 Monitoring	Year 10 Monitoring
\$10,000,000	\$17,105	\$165,036	\$363,802	\$734,338	\$1,245,675	\$1,245,674	\$1,245,674	\$1,245,674	\$1,245,67	\$1,245,674	\$1,245,674

Project Name/Total Project Cost	Year 0 (Fiscal Year 2016-2017)	Year 1 (Fiscal Year 2017-2018)	Year 2 (Fiscal Year 2018-2019)	Year 3 (Fiscal Year 2019-2020)	Year 4 (Fiscal Year 2020-2021)	Year 5 (Fiscal Year 2021-2022)	Year 6 (Fiscal Year 2022-2023)	Year 7 (Fiscal Year 2023-2024)	Year 8 (Fiscal Year 2024-2025)	Year 9 (Fiscal Year 2025-2026)	Year 10 (Fiscal Year 2026-2027)
Contingency	-	-	-	-	-	-	-	-	-	-	-
Banana River Lagoon	-	Cocoa Beach Planted*	-	-	-	-	-	-	-	-	-
\$66	-	\$66	-	-	-	-	-	-	-	-	-
Central IRL	-	Lagoon House Planted*	-	-	-	-	-	-	-	-	-
\$39	-	\$39	-	-	-	-	-	-	-	-	-
North IRL	-	-	-	Titusville Osprey WWTF*	-	-	-	-	-	-	-
\$800,000	-	-	-	\$800,000	-	-	-	-	-	-	-
North IRL - Melbourne	-	-	-	-	Sherwood Park	-	-	-	-	-	-
\$99,708	-	-	-	-	\$99,708	-	-	-	-	-	-
All	Year 0 Contingency	Year 1 Contingency	Year 2 Contingency	Year 3 Contingency	Year 4 Contingency	Year 5 Contingency	Year 6 Contingency	Year 7 Contingency	Year 8 Contingency	Year 9 Contingency	Year 10 Contingency
\$20,258,580	\$69,833	\$539,904	\$1,329,482	\$2,383,113	\$4,637,045	\$2,472,679	\$2,605,249	\$2,638,811	\$1,259,446	\$1,817,457	\$505,561
Inflation	-	Year 1 Inflation	Year 2 Inflation	Year 3 Inflation	Year 4 Inflation	Year 5 Inflation	Year 6 Inflation	Year 7 Inflation	Year 8 Inflation	Year 9 Inflation	Year 10 Inflation
\$57,065,372	-	\$269,952	\$1,346,100	\$3,664,780	\$9,627,701	\$6,498,606	\$8,320,821	\$9,958,121	\$5,501,335	\$9,045,957	\$2,831,999
\$488,855,173	\$2,543,931	\$12,163,834	\$32,577,394	\$55,024,541	\$107,105,356	\$58,424,864	\$63,031,040	\$65,373,153	\$31,949,708	\$47,212,563	\$13,448,789

* Completed project with actual Save Our Indian River Lagoon Tax Fund cost.

Appendix A: Funding Needs and Leveraging Opportunities

Brevard County explored a variety of possible mechanisms to fund the Indian River Lagoon (IRL) projects in this plan, including:

- Special Taxing District approved by referendum to allow an ad valorem tax levy and bonds
- Special Act by the legislature allowing ad valorem tax levy by referendum to issue bonds
- Local government surtax (0.5 cent sales tax)
- Altering legislation to allow for Tourist Development Council funding to be used for lagoon restoration
- Municipal Service Taxing Unit/Special District
- Increased stormwater utility assessment

The County placed a referendum on the November 8, 2016 ballot for the 0.5 cent sales tax, and this referendum passed by more than 60% of the vote. The Save Our Indian River Lagoon 0.5 cent sales tax will generate approximately \$48.9 million per year. The proposed 1 mill increase would have generated approximately \$32 million per year, whereas the proposed increase in 0.5 mill would have only generated \$16 million per year. To implement the projects in a timely manner according to the schedule in **Table 6-9**, and to accelerate the projects where possible, the County will seek to use funds generated from the sales tax to leverage matching funding from grants and appropriations and/or pay debt service on bonds. If additional funding is provided through matching funds from other sources, additional projects may be implemented, which would increase the overall plan cost, and/or project timelines may be moved up to allow the benefits of those projects to occur earlier than planned.

Examples of other funding programs (many from Florida Department of Environmental Protection, 2019) are:

- Section 319 grant program – The Florida Department of Environmental Protection administers funds received from United States Environmental Protection Agency to implement projects or programs that reduce nonpoint sources of pollution. Projects or programs must benefit Florida's impaired waters, and local sponsors must provide at least a 40% match or in-kind contribution. Eligible activities include demonstration and evaluation of urban and agricultural stormwater best management practices, stormwater retrofits, and public education.
- State water quality assistance grants – Funding may be available through periodic legislative appropriations to the Florida Department of Environmental Protection. When funds are available, the program prioritizes stormwater construction projects to benefit impaired waters, similar to the Section 319 grant program.
- Water management district funding – Florida's five regional water management districts offer financial assistance for a variety of water-related projects, for water supply development, water resource development, and surface water restoration. Assistance may be provided from ad valorem tax revenues or from periodic legislative appropriations for alternative water supply development, springs restoration, and Surface Water Improvement and Management projects. The amount of funding available, matching requirements, and types of assistance may vary from year to year.
- IRL National Estuary Program – The IRL Council funds projects each year through their work plan process.

- Tourism + Lagoon Grant Program – The Brevard County Tourism Development Council has approved funding for the development of projects that demonstrate a benefit to the health of the IRL and a positive impact to Brevard County for litter control along shorelines and causeways/entryways, restoration and protection of living shorelines, habitat restoration to support fish and wildlife viewing, and waterway destinations and access for improved and sustainable recreational waterway access. Due to revenue shortfalls in 2020, this program has been placed on an indefinite hold.
- Budget Appropriation – The Florida Legislature may solicit applications directly for projects, including water projects, in anticipation of upcoming legislative sessions. This process is an opportunity to secure legislative sponsorship of project funding through the state budget.
- Clean Water State Revolving Fund loan program – This program provides low-interest loans to local governments to plan, design, and build or upgrade wastewater, stormwater, and nonpoint source pollution prevention projects. Discounted assistance for small communities is available. Interest rates on loans are below market rates and vary based on the economic wherewithal of the community. The Clean Water State Revolving Fund is Florida's largest financial assistance program for water infrastructure.
- Florida Resilient Coastlines Program – The Florida Department of Environmental Protection offers technical assistance and funding to coastal communities dealing with increasingly complex flooding, erosion, and habitat shifts.
- Florida Rural Water Association Loan Program – This program provides low-interest bond or bank financing for community utility projects in coordination with the Florida Department of Environmental Protection's State Revolving Fund program. Other financial assistance may also be available.
- Rural Development Rural Utilities Service Guaranteed and Direct Loans and Grants – The United States Department of Agriculture's program provides a combination of loans and grants for water, wastewater, and solid waste projects to rural communities and small incorporated municipalities.
- Small Cities Community Development Block Grant Program – The Florida Department of Economic Opportunity makes funds available annually for water and sewer projects that benefit low- and moderate-income persons.
- State Housing Initiatives Partnership Program – Florida Housing administers the program, which provides funds to local governments as an incentive to create partnerships that produce and preserve affordable homeownership and multifamily housing. The program is designed to provide very low, low, and moderate income families with assistance. Funding may be used for emergency repairs, new construction, rehabilitation, down payment and closing cost assistance, impact fees, construction and gap financing, mortgage buy-downs, acquisition of property for affordable housing, matching dollars for federal housing grants and programs, and homeownership counseling.
- Rural Development Funding – The United States Department of Agriculture provides funds that will cover the repair and maintenance of private septic systems. The amount of funds available, as well as the specific purposes for which grants are intended, changes from year to year.

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Appendix C: Seagrasses

Loss of Seagrass

In partnership, the St. Johns River Water Management District, South Florida Water Management District, and Florida Department of Environmental Protection mapped seagrass from aerial imagery taken in 1943 and every two to three years since 1986 (**Figure C-1**). Through 2009, the areal footprint of seagrass generally expanded, with some areas nearing their targets, which are benchmarks to evaluate the success of reducing nutrient loads to the Indian River Lagoon (IRL) system. Unfortunately, the areal extent of seagrass in the IRL began to decline in 2011 where mapping documented a loss of almost 43% of the acreage present in 2009. Most of this loss occurred in the reaches adjacent to Brevard County, with extensive losses in Banana River Lagoon (24,000 to 3,000 acres or an 88% reduction) and the IRL down to Sebastian Inlet (50,000 to 20,000 acres or a 60% reduction). The losses occurred during a bloom of phytoplankton (single-celled algae) that reached unprecedented concentrations for a record duration as indicated by concentrations of chlorophyll-*a* (**Figure C-2**). Beyond the shallowest water, the bloom effectively reduced the amount of light reaching seagrasses below what they required for survival. Additional intense blooms exacerbated the situation.

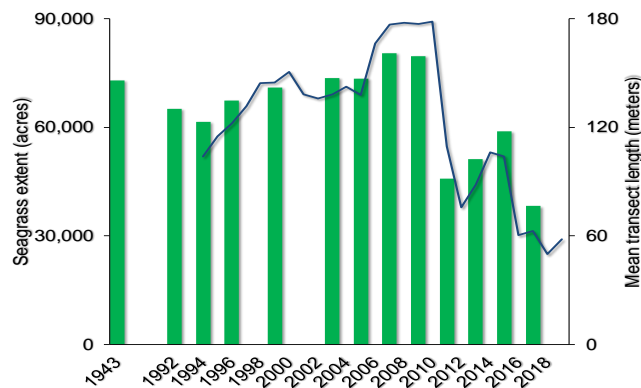


Figure C-1: Mean Areal Extent of Seagrass and Mean Length of Transects

[Figure C-1 Long Description](#)

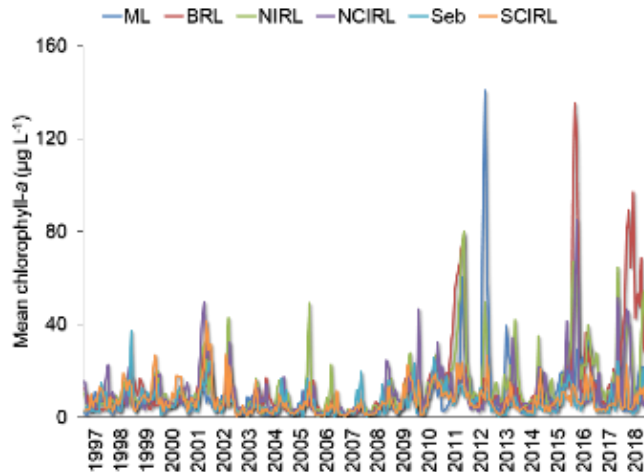
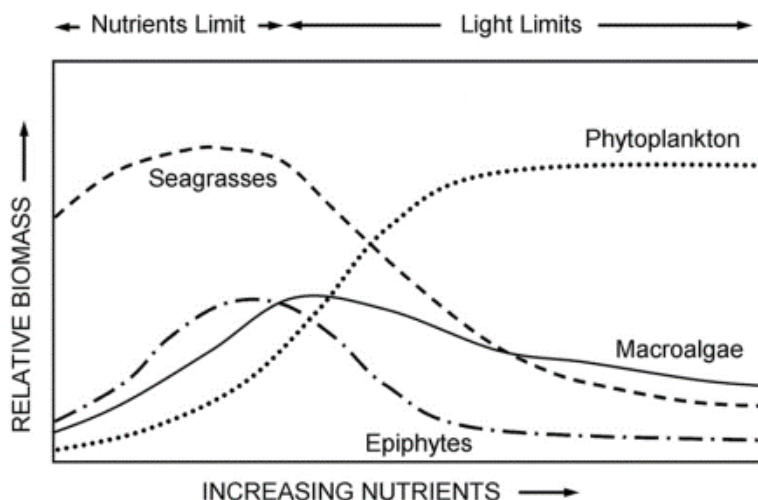


Figure C-2: Mean Chlorophyll-a Concentrations

[Figure C-2 Long Description](#)

Since 2011, some seagrass have returned. In the IRL along Brevard County, about 9,000 acres have returned or about 30% of the 30,000 acres that were lost. In addition, there has been a similar amount of recovery in Banana River Lagoon (6,000 acres returned out of 21,000 lost or about 30% recovery). Recovery has been hampered by further blooms that include a brown tide (*Aureoumbra lagunensis*) bloom in 2016, whose effects will be apparent in maps produced from digital photography acquired in 2017. The prognosis is not good because the percentage cover of seagrass reached 5%, which is a record drop from 30–50% (**Figure C-1**).

Unfortunately, the IRL appears to be following a pattern described for systems that receive increased loads of nutrients (Duarte, 1995; Burkholder et al., 2007). The pattern involves a shift in the composition of the primary producer assemblage, with higher nutrient loads differentially promoting faster growing macroalgae and ultimately phytoplankton (**Figure C-3**). The macroalgae and phytoplankton can exacerbate loss of seagrasses, especially by shading them. Loss of seagrass and macroalgae makes more nutrients available to phytoplankton through decreased competition (Schmidt et al. 2012), and loss of seagrass means that the sediments can be resuspended, which also reduces light penetration. Overall, the change in the system becomes self-perpetuating. Reducing nutrient loads represents a critical first step in efforts to reverse the shift in primary producers. However, a return to the previous areal coverage of seagrass may take some time, especially if too few recruits are available and sediments are too destabilized for colonization.



Note: Adapted from Burkholder et al. 2007

Figure C-3: Conceptual Model Illustrating a Shift in Biomass Among Major Primary Producers with Increasing Nutrient Enrichment

Nutrient Content of Seagrass

Halodule wrightii stores nutrients in its aboveground and belowground biological material or biomass. The biomass of this and other seagrasses changes seasonally, with peak growth of aboveground shoots occurring in April and May and the greatest aboveground biomass recorded during summer. These seasonal changes introduce uncertainty into estimates of nutrient storage, but mean values will suffice for estimating return on investment in the long-term (**Table C-1**). For example, a single shoot of *Halodule wrightii* may contain up to five or more leaves in the summer, whereas in the winter this same shoot may contain only one leaf (Dunton 1996). For this estimate of nutrient content, we will assume that spring-summer growth and fall-winter senescence are equal. Thus, we will focus on our recent estimates of an average

amount of aboveground and belowground biomass or standing stock of *Halodule wrightii* (Table C-1 and Table C-2).

Table C-1: Estimates of Biomass for *Halodule* Species

Location	Total Biomass (grams dry weight per square meter)	Reference
Texas (Laguna Madre)	10–400	Zieman and Zieman, 1989
North Carolina (multiple locations)	22–208	Zieman and Zieman, 1989
South Florida and Tampa Bay	10–300	Zieman and Zieman, 1989
IRL (Fort Pierce Inlet)	124–198	Hefferman and Gibson, 1983
IRL (Grand Harbor/Vero)	45	Hefferman and Gibson, 1983
IRL (Link Port)	20–140	Virnstien unpublished
IRL (Brevard County)	53*	Morris, Chamberlain, and Jacoby unpublished
Texas (Laguna Madre)	10–400	Zieman and Zieman, 1989

* Mean aboveground biomass = 23 grams dry weight meters⁻² = [(mean percent cover × 30.533) × 0.019]; mean belowground biomass = 30 grams dry weight meters⁻² = 1.3 × aboveground biomass

Table C-2: Total Biomass in Seagrasses Along Brevard County

Sub-lagoon	Description	Total Biomass (grams dry weight per square meter)
Mosquito Lagoon	Brevard County line to southern end of sub-lagoon	74
Banana River Lagoon	National Aeronautics and Space Administration restricted area	64
Banana River Lagoon	Remainder of Banana River Lagoon	44
IRL	North of State Road 405	51
IRL	State Road 405 to Pineda Causeway	35
IRL	Pineda Causeway to Hog Point	28
IRL	Hog Point to Brevard County line	51
Mean	Not applicable	50

Duarte (1990) compared nutrient contents of 27 species of seagrass, including *Halodule wrightii*. He determined that nitrogen and phosphorus represent about 2.2% and 0.2% of the dry weight of aboveground and belowground tissue of *Halodule wrightii*, respectively. These values are similar to those calculated during a recent study in the IRL (Table C-3). The values can be combined with estimates of biomass to calculate how much nitrogen and phosphorus are sequestered by 100 acres of *Halodule wrightii* on average (Table C-4).

Table C-3: Estimates of Nutrient Content for *Halodule wrightii* (percentage of dry weight)

Location	Carbon Above Ground	Nitrogen Above Ground	Phosphorus Above Ground	Carbon Below Ground	Nitrogen Below Ground	Phosphorus Below Ground
BRL-1	29.60	2.02	0.17	30.60	1.24	0.14
BRL-2	30.60	2.36	0.24	29.08	1.47	0.27
BRL-3	29.60	2.66	0.26	28.09	1.48	0.25
IRL-1	31.74	2.39	0.18	31.69	1.42	0.15
IRL-2	30.08	2.56	0.26	30.48	1.74	0.27
IRL-3	28.26	2.08	0.25	23.86	1.36	0.20
Mean	29.98	2.35	0.23	28.97	1.45	0.21

BRL = Banana River Lagoon, IRL = Indian River Lagoon

Table C-4: Average Amount of Nutrients Contained in Seagrass from 1996–2009

Sub-lagoon	Acres	Seagrass (pounds per 100 acres)	Nitrogen (pounds per 100 acres)	Phosphorus (pounds per 100 acres)
Southern Mosquito Lagoon	14,000	45,000	1,000	100
Banana River Lagoon	21,000	45,000	1,000	100
North IRL	19,000	37,000	900	90
Central IRL	7,000	36,000	900	90

Draft Evaluation Criteria for Planting Seagrass

Part of the wisdom accumulated from past seagrass restoration projects is the importance of selecting sites that will support seagrass growth. Key information has been synthesized into an initial guide, with higher scores and more certainty indicating better sites for planting seagrass (**Table C-5**). Please note that the presence of seagrass leads to a lower score based on the premise that natural recruitment represents the most cost-effective option for restoring seagrass. In addition, a high level of uncertainty can suggest targets for further study. This guide can be refined following pilot studies to determine optimal methods for planting seagrass (e.g., type of planting units, use of chemicals to enhance growth, and density of initial planting) and protecting it from disturbance (e.g., grazing, waves, exposure, and low salinity) until it is established.

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Table C-5: Guide for Ranking Potential Seagrass Restoration Sites

Category	Metric	Timeframe	Attributes for Score = 0	Attributes for Score = 2	Attributes for Score = 4	Attributes for Score = 6	Score	Uncertainty (1 = low, 3 = high)
Critical Depth Zone 0.5-0.8 meters below mean sea level	Width of Critical Depth Zone (distance perpendicular to shore)	Recent	Very narrow: < 25 meters wide (< 82 feet)	Narrow: 25-50 meters (82-164 feet)	Moderately wide: 50-100 meters (164-328 feet)	Broad: > 100 meters (> 328 feet)		
Critical Depth Zone 0.5-0.8 meters below mean sea level	Distance to seagrass (identified via the most recent map or targeted reconnaissance)	Recent	Continuous seagrass at site and within 1 kilometer (land use code = 9116): seagrass is a dominant feature (restoration not needed)	Isolated: no seagrass within 1 kilometers (0.6 miles) so conditions may be unfavorable	Discontinuous seagrass at site and within 1 kilometers (land use code = 9113): seagrass is patchy, so restoration may connect patches	Seagrass nearby: seagrass within 0.5-1.0 kilometers (0.3-0.6 miles)		
Critical Depth Zone 0.5-0.8 meters below mean sea level	Percent cover in Critical Depth Zone (derived from the closest transect, paired considerations)	Past (2000-2009)	High: > 30%	Low: 10-20%	Moderate: 20-30%	High: > 30%		
Critical Depth Zone 0.5-0.8 meters below mean sea level	Percent cover in Critical Depth Zone (derived from the closest transect, paired considerations)	Last 3 Years	High: > 10% (restoration not needed)	Low: < 10% (restoration may not help)	Low: < 10% (restoration may help but ultimate gain is likely limited)	Low: < 10% (potentially optimum site for restoration)		
Potential stressors	Water quality (salinity and light availability derived from the closest station)	Last 3 Years	Bad: salinity < 10 anytime and < 18 for ³ 3 consecutive months or annual mean salinity - 1 standard deviation < 17 Secchi depth £ 0.50 meters (1.6 feet) anytime and £ 0.65 meters (2.1 feet) for ³ 3 consecutive months or annual mean Secchi depth - 1 standard deviation £ 0.65 meters	Poor: salinity < 18 for 3 consecutive months but never < 12 or annual mean salinity - 1 standard deviation ³ 17 Secchi depth £ 0.65 meters for < 3 consecutive months but never £ 0.50 meters or annual mean Secchi depth - 1 standard deviation ³ 0.65 meters	Supportive: salinity always ³ 18 Secchi depth always > 0.65 meters and may be 0.65-1.0 meters (2.1-3.3 feet) for 3 consecutive months	Good: salinity consistently ³ 23 Secchi depth consistently > 1.0 meters		
Potential stressors	Sediment (assessed via visits to the site or other current information)	Present	Not supportive: anoxic and sulfidic near the surface or easily resuspended or moved	Minimally supportive: hard bottom (e.g., compact sand or shells), not conducive for growth of rhizomes and roots, porewater may lack nutrients	Generally supportive: unconsolidated sediment that holds plants with relatively little resuspension and movement observed, porewater nutrients not limiting	Fully supportive: loosely consolidated sediment with firmly anchored plants if present, anoxic and sulfidic layers located below the zone occupied by roots and rhizomes, porewater rich in nutrients		
Potential stressors	Water movement (assessed via visits to the site or other current information)	Present	High currents - possible scouring: frequent and strong currents or waves that may cause ripples in the sediment and uproot new plants	Moderate to high currents: currents and waves bend plants, sweep fragments of seagrass away before they can gain a foothold, and cause some resuspension of sediment	Moderate currents: plants often stand upright, fragments of seagrass may be trapped, sediment typically not resuspended	Low currents: mild currents or waves, sediment not disturbed, no apparent negative effects on any seagrass that is present		
Potential stressors	Shoreline characteristics (assessed via visits the site or other current information)	Present	Unnatural shoreline: Critical Depth Zone in close proximity to urban development, including canals, and a hardened shoreline (e.g., riprap or bulkhead)	Semi-natural shoreline: Critical Depth Zone near moderate development and some shoreline is vegetated	Mostly natural shoreline: Critical Depth Zone near low to moderate development, most of the shoreline is vegetated shoreline or the site is associated with living shoreline project	All natural shoreline: vegetated shoreline with very limited development		
Potential stressors	Public use (assessed via visits to the site visits or other current information, including recent aerial photographs)	Present	High use: Critical Depth Zone adjacent to or within an area with frequent boating, swimming or fishing (e.g., aerial photographs show prop scars)	Near high use: Critical Depth Zone within 0.5 kilometers (0.3 miles) of a highly used area	Not near high use: Critical Depth Zone more than 0.5 kilometers from a highly used area	Low use: no public facilities nearby and limited signs of use		
Potential stressors	Biota (assessed via visits to the site or other current information on grazing or physical disturbance)	Present	Heavy use: site adjacent to deep water or manatee zone, power plant within 10 kilometers (6.2 miles), freshwater nearby, manatees and rays observed frequently, disturbance or grazing evident in > 50% of the area on a weekly-monthly basis	Moderate use: power plant > 10 kilometers away, deep water and manatee zones > 0.5 kilometers away, no freshwater nearby, disturbance or grazing evident in < 50% of the area on a monthly basis	Intermittent use: disturbance or grazing evident in < 25% of the area on a quarterly basis	Rare use: disturbance or grazing hardly evident		
Logistics	Enhancement or protection (assessed via visits to the site)	Present	Extensive need: dense planting required due to absence of seagrass, fencing or caging required due to grazing, other enhancement or protection required, including living shorelines, sediment barriers, wave baffles	Substantial need: moderately dense planting required because only 1-2% cover present, fencing or caging required, few additional enhancements or protections required	Moderate need: low density planting sufficient because at least 2% cover present, fencing or caging required for a limited time, other enhancements or protections beneficial but not critical	Limited need: minimal density planting or no planting required because > 2% cover present and protection from grazing may result in spread of seagrass, no other enhancements or protections required		
Logistics	Maintenance (assessed via visits to the site)	Anticipated	High maintenance: weekly cleaning	Moderate maintenance: monthly cleaning	Low maintenance: quarterly cleaning	Minimum maintenance: maintain as needed		
Logistics	Staging and accessibility (assessed via visits to the site)	Present	Very difficult: substantial impediments that may include boat ramps > 10 kilometer away, soft sediment that is easily disturbed, permitting and access issues	Moderately difficult: boat ramp within 10 kilometers, somewhat firm sediment, tractable permitting and access issues	Relatively simple: boat ramp nearby and few other issues	No issues		
Logistics	Monitoring (relevant past, current and future information on water quality and seagrasses available)	Present	No external support: no sampling of seagrass within 5 kilometers (3.1 miles), nearest water quality station not representative of conditions at the site	Minimal external support: seagrass surveyed within 3-5 kilometers (1.9-3.1 miles), water quality station is representative of conditions at the site	Moderate external support: seagrass and water quality sampled within 3 kilometers, so both are representative of conditions at the site	Considerable external support: seagrasses and water quality sampled at or adjacent to the site		
Total								

Notes:

Optimize potential for success by planting: a) within the Critical Depth Zone (e.g., at 0.6-0.8 meters below mean sea level) with due recognition of tides and annual changes in water levels; or b) during the spring (e.g., late March to May) when water clarity is best, water temperatures are warming, and grazing by fish is relatively low

Scoring: if conditions do not match the attributes provided, then assign a score between the two that are most applicable

Appendix D: Withdrawn Projects

Some of the projects submitted and approved as part of a plan update were determined to be less cost-effective and/or infeasible to implement after further investigation. Stormwater basin delineations were updated in 2019 with some basins merged or renamed in the 2020 Plan Update. Therefore, these projects were removed from the Save Our Indian River Lagoon Project Plan so that the funding could be used for other projects. **Table D-1** lists the projects that have been removed from the plan at the request of the responsible entity.

Table D-1: Summary of Project Withdrawals from the Plan

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2017	Stormwater project in Basin 754	Brevard County	Banana	734	95	\$100,000
2017	Stormwater project in Basin 602	Brevard County	Banana	1,068	109	\$100,000
2017	Stormwater project in Basin 1434	Brevard County	North IRL	932	112	\$125,000
2017	Stormwater project in Basin 1151	Brevard County	North IRL	1,057	141	\$125,000
2017	Stormwater project in Basin 1078	Brevard County	North IRL	1,250	187	\$125,000
2017	Stormwater project in Basin 1399	Brevard County	North IRL	1,570	256	\$125,000
2017	Stormwater project in Basin 1301	Brevard County	North IRL	1,025	154	\$125,000
2017	Stormwater project in Basin 1368	Brevard County	North IRL	1,311	200	\$125,000
2017	Stormwater project in Basin 408	Brevard County	North IRL	1,179	170	\$125,000
2017	Stormwater project in Basin 338	Brevard County	North IRL	1,902	188	\$125,000
2017	Stormwater project in Basin 1367	Brevard County	North IRL	1,042	146	\$100,000
2017	Stormwater project in Basin 1384	Brevard County	North IRL	923	142	\$100,000
2017	Stormwater project in Basin 1318	Brevard County	North IRL	1,124	148	\$100,000
2017	Stormwater project in Basin 155	Brevard County	North IRL	1,149	122	\$100,000
2017	Stormwater project in Basin 289	Brevard County	North IRL	1,112	223	\$100,000
2017	Stormwater project in Basin 193	Brevard County	North IRL	1,316	198	\$100,000
2017	Stormwater project in Basin 1441	Brevard County	North IRL	1,034	149	\$100,000
2017	Stormwater project in Basin 660	Brevard County	North IRL	844	212	\$100,000
2017	Stormwater project in Basin 952	Brevard County	North IRL	1,251	212	\$100,000
2018	Holman Road Baffle Box	City of Cape Canaveral	Banana	71	2	\$6,248
2018	Center Street Baffle Box	City of Cape Canaveral	Banana	297	9	\$26,136
2018	International Drive Baffle Box	City of Cape Canaveral	Banana	443	4	\$34,700

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2018	Angel Isles Baffle Box	City of Cape Canaveral	Banana	131	3	\$11,528
2018	Cherie Down Park Swale	City of Cape Canaveral	Banana	27	9	\$2,376
2018	Norwood Baffle Box Retrofit	City of Palm Bay	Central IRL	1,631	254	\$143,528
2018	Victoria Pond	City of Palm Bay	Central IRL	267	42	\$23,486
2018	Goode Park	City of Palm Bay	Central IRL	794	121	\$69,872
2018	Florin Pond	City of Palm Bay	Central IRL	75	11	\$6,600
2018	Airport Boulevard Dry Retrofit	City of Melbourne	North IRL	99	23	\$8,718
2018	Nasa Boulevard Pond Retrofit	City of Melbourne	Central IRL	1,097	157	\$96,532
2018	General Aviation Drive Retrofit	City of Melbourne	Central IRL	158	10	\$13,937
2018	L-1 Canal Bank Stabilization	Brevard County	North IRL	995	383	\$87,560
2018	Stormwater project in Basin 979	Brevard County	Banana	3,275	448	\$225,000
2018	Stormwater project in Basin 1280	Brevard County	Banana	1,735	236	\$175,000
2018	Stormwater project in Basin 1063	Brevard County	Banana	1,235	192	\$100,000
2018	Stormwater project in Basin 970	Brevard County	Banana	1,092	185	\$100,000
2018	Stormwater project in Basin 995	Brevard County	Banana	1,048	169	\$100,000
2018	Stormwater project in Basin 1309	Brevard County	Banana	1,016	152	\$100,000
2018	Stormwater project in Basin 754	Brevard County	Banana	734	95	\$100,000
2018	Stormwater project in Basin 602	Brevard County	Banana	1,068	109	\$100,000
2018	Stormwater project in Basin 1430	Brevard County	North IRL	2,255	335	\$175,000
2018	Stormwater project in Basin 327	Brevard County	North IRL	1,999	283	\$125,000
2018	Stormwater project in Basin 1582	Brevard County	Central IRL	2,402	443	\$200,000
2019	Cocoa Beach Muck Dredging – Phase III Interstitial	City of Cocoa Beach	Banana	2,942	To be determined	\$514,809
2019	Indian River Drive Oyster Bar (reduction from 1,900 to 140 feet)	Brevard County	North IRL	422	10	\$166,672
2019	Indian River Drive Planted Shoreline (reduction from 1,900 to 140 feet)	Brevard County	North IRL	118	41	\$20,620
2019	Stormwater project in Basin 905	Brevard County	Banana	1,143	178	\$150,000
2019	Stormwater project in Basin 492	Brevard County	Banana	1,020	117	\$100,000
2019	Stormwater project in Basin 522	Brevard County	Banana	795	110	\$125,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2019	Stormwater project in Basin 705	Brevard County	Banana	650	95	\$100,000
2019	Stormwater project in Basin 821	Brevard County	Banana	627	123	\$100,000
2019	Stormwater project in Basin 820	Brevard County	Banana	597	112	\$100,000
2019	Stormwater project in Basin 338	Brevard County	North IRL	4,226	188	\$125,000
2019	Stormwater project in Basin 155	Brevard County	North IRL	2,553	122	\$100,000
2019	Stormwater project in Basin 47	Brevard County	North IRL	1,348	139	\$125,000
2019	Stormwater project in Basin 219	Brevard County	North IRL	956	113	\$125,000
2020	Cape Canaveral Air Force Station WWTF Upgrade	Cape Canaveral Air Force Station	Banana	25,627	To be determined	\$6,000,000
2020	Malabar - Zone B	Brevard County	Central IRL	1,929	Not applicable	\$2,135,808
2020	Malabar - Zone A	Brevard County	Central IRL	11,456	Not applicable	\$14,349,960
2020	South Beaches - Zone F	Brevard County	Central IRL	70	Not applicable	\$100,116
2020	Carver Cove Swale	City of Cape Canaveral	Banana	32	9	\$2,816
2020	Cocoa Palms Low Impact Development	City of Cape Canaveral	Banana	13	10	\$1,144
2020	M1 Canal Biosorption Activated Media	Brevard County	Central IRL	1,433	191	\$66,300
2020	Oliver Oyster Bar	Brevard Zoo	North IRL	116	39	\$51,620
2020	Coconut Point/Environmentally Endangered Lands Oyster Bar (reduction from 27,125 square feet to 2,400 square feet)	Brevard Zoo	Central IRL	989	367	\$464,830
2020	Turkey Creek Shoreline Restoration – Oysters	City of Palm Bay	Central IRL	309	8	\$122,055
2020	Eden Isles Lane Oyster Bar	Brevard Zoo	Banana	49	17	\$21,805
2020	Turkey Creek Shoreline Restoration – Planted	City of Palm Bay	Central IRL	104	36	\$24,960
2020	Stormwater project in Basin 388	Brevard County	Banana	1,390	138	\$100,000
2020	Stormwater project in Basin 451	Brevard County	Banana	1,168	121	\$100,000
2020	Stormwater project in Basin 815	Brevard County	Banana	698	113	\$100,000
2020	Stormwater project in Basin 829	Brevard County	Banana	630	145	\$100,000
2020	Stormwater project in Basin 865	Brevard County	Banana	454	151	\$100,000
2020	Stormwater project in Basin 889	Brevard County	Banana	539	85	\$100,000
2020	Stormwater project in Basin 901	Brevard County	Banana	1,658	196	\$150,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 912	Brevard County	Banana	1,025	34	\$100,000
2020	Stormwater project in Basin 929	Brevard County	Banana	304	41	\$100,000
2020	Stormwater project in Basin 933	Brevard County	Banana	302	38	\$100,000
2020	Stormwater project in Basin 934	Brevard County	Banana	365	42	\$100,000
2020	Stormwater project in Basin 938	Brevard County	Banana	424	160	\$100,000
2020	Stormwater project in Basin 940	Brevard County	Banana	816	106	\$100,000
2020	Stormwater project in Basin 943	Brevard County	Banana	708	90	\$100,000
2020	Stormwater project in Basin 944	Brevard County	Banana	614	83	\$100,000
2020	Stormwater project in Basin 955	Brevard County	Banana	522	60	\$100,000
2020	Stormwater project in Basin 957	Brevard County	Banana	586	53	\$100,000
2020	Stormwater project in Basin 958	Brevard County	Banana	164	26	\$100,000
2020	Stormwater project in Basin 960	Brevard County	Banana	537	80	\$100,000
2020	Stormwater project in Basin 961	Brevard County	Banana	431	57	\$100,000
2020	Stormwater project in Basin 963	Brevard County	Banana	2,092	396	\$150,000
2020	Stormwater project in Basin 969	Brevard County	Banana	528	78	\$100,000
2020	Stormwater project in Basin 973	Brevard County	Banana	2,048	311	\$175,000
2020	Stormwater project in Basin 975	Brevard County	Banana	521	75	\$100,000
2020	Stormwater project in Basin 977	Brevard County	Banana	558	59	\$100,000
2020	Stormwater project in Basin 980	Brevard County	Banana	836	127	\$100,000
2020	Stormwater project in Basin 981	Brevard County	Banana	993	179	\$100,000
2020	Stormwater project in Basin 982	Brevard County	Banana	642	68	\$100,000
2020	Stormwater project in Basin 988	Brevard County	Banana	621	108	\$100,000
2020	Stormwater project in Basin 989	Brevard County	Banana	1,030	110	\$100,000
2020	Stormwater project in Basin 990	Brevard County	Banana	634	102	\$100,000
2020	Stormwater project in Basin 992	Brevard County	Banana	1,244	195	\$100,000
2020	Stormwater project in Basin 1000	Brevard County	Banana	277	40	\$100,000
2020	Stormwater project in Basin 1001	Brevard County	Banana	401	54	\$100,000
2020	Stormwater project in Basin 1010	Brevard County	Banana	374	55	\$100,000
2020	Stormwater project in Basin 1014	Brevard County	Banana	333	50	\$100,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 1016	Brevard County	Banana	920	136	\$100,000
2020	Stormwater project in Basin 1018	Brevard County	Banana	389	54	\$100,000
2020	Stormwater project in Basin 1026	Brevard County	Banana	1,073	180	\$100,000
2020	Stormwater project in Basin 1033	Brevard County	Banana	1,113	152	\$100,000
2020	Stormwater project in Basin 1038	Brevard County	Banana	157	25	\$100,000
2020	Stormwater project in Basin 1039	Brevard County	Banana	708	104	\$100,000
2020	Stormwater project in Basin 1041	Brevard County	Banana	273	47	\$100,000
2020	Stormwater project in Basin 1048	Brevard County	Banana	107	20	\$100,000
2020	Stormwater project in Basin 1070	Brevard County	Banana	113	12	\$100,000
2020	Stormwater project in Basin 1071	Brevard County	Banana	1,082	144	\$100,000
2020	Stormwater project in Basin 1082	Brevard County	Banana	264	39	\$100,000
2020	Stormwater project in Basin 1098	Brevard County	Banana	341	53	\$100,000
2020	Stormwater project in Basin 1104	Brevard County	Banana	701	106	\$100,000
2020	Stormwater project in Basin 1117	Brevard County	Banana	282	43	\$100,000
2020	Stormwater project in Basin 1120	Brevard County	Banana	313	50	\$100,000
2020	Stormwater project in Basin 1121	Brevard County	Banana	186	27	\$100,000
2020	Stormwater project in Basin 1125	Brevard County	Banana	307	51	\$100,000
2020	Stormwater project in Basin 1133	Brevard County	Banana	562	90	\$100,000
2020	Stormwater project in Basin 1142	Brevard County	Banana	534	73	\$100,000
2020	Stormwater project in Basin 1152	Brevard County	Banana	245	30	\$100,000
2020	Stormwater project in Basin 1159	Brevard County	Banana	134	20	\$100,000
2020	Stormwater project in Basin 1167	Brevard County	Banana	180	28	\$100,000
2020	Stormwater project in Basin 1175	Brevard County	Banana	394	42	\$100,000
2020	Stormwater project in Basin 1183	Brevard County	Banana	272	39	\$100,000
2020	Stormwater project in Basin 1188	Brevard County	Banana	166	29	\$100,000
2020	Stormwater project in Basin 1198	Brevard County	Banana	365	62	\$100,000
2020	Stormwater project in Basin 1220	Brevard County	Banana	396	61	\$100,000
2020	Stormwater project in Basin 1223	Brevard County	Banana	561	86	\$100,000
2020	Stormwater project in Basin 1225	Brevard County	Banana	122	19	\$100,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 1231	Brevard County	Banana	300	58	\$100,000
2020	Stormwater project in Basin 1248	Brevard County	Banana	306	46	\$100,000
2020	Stormwater project in Basin 1250	Brevard County	Banana	188	26	\$100,000
2020	Stormwater project in Basin 1251	Brevard County	Banana	448	66	\$100,000
2020	Stormwater project in Basin 1262	Brevard County	Banana	443	80	\$100,000
2020	Stormwater project in Basin 1265	Brevard County	Banana	743	98	\$100,000
2020	Stormwater project in Basin 1270	Brevard County	Banana	187	28	\$100,000
2020	Stormwater project in Basin 1296	Brevard County	Banana	241	48	\$100,000
2020	Stormwater project in Basin 1302	Brevard County	Banana	172	25	\$100,000
2020	Stormwater project in Basin 1303	Brevard County	Banana	166	24	\$100,000
2020	Stormwater project in Basin 1305	Brevard County	Banana	119	25	\$100,000
2020	Stormwater project in Basin 1310	Brevard County	Banana	583	106	\$100,000
2020	Stormwater project in Basin 1311	Brevard County	Banana	104	15	\$100,000
2020	Stormwater project in Basin 1314	Brevard County	Banana	170	26	\$100,000
2020	Stormwater project in Basin 1317	Brevard County	Banana	1,679	143	\$125,000
2020	Stormwater project in Basin 1319	Brevard County	Banana	117	16	\$100,000
2020	Stormwater project in Basin 1327	Brevard County	Banana	352	52	\$100,000
2020	Stormwater project in Basin 1328	Brevard County	Banana	617	89	\$100,000
2020	Stormwater project in Basin 1332	Brevard County	Banana	303	47	\$100,000
2020	Stormwater project in Basin 1334	Brevard County	Banana	795	130	\$100,000
2020	Stormwater project in Basin 1336	Brevard County	Banana	470	68	\$100,000
2020	Stormwater project in Basin 1337	Brevard County	Banana	1,121	186	\$100,000
2020	Stormwater project in Basin 1338	Brevard County	Banana	256	37	\$100,000
2020	Stormwater project in Basin 1343	Brevard County	Banana	1,388	142	\$100,000
2020	Stormwater project in Basin 1346	Brevard County	Banana	189	28	\$100,000
2020	Stormwater project in Basin 1350	Brevard County	Banana	1,049	165	\$100,000
2020	Stormwater project in Basin 1351	Brevard County	Banana	129	19	\$100,000
2020	Stormwater project in Basin 1357	Brevard County	Banana	338	56	\$100,000
2020	Stormwater project in Basin 1362	Brevard County	Banana	476	71	\$100,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 1366	Brevard County	Banana	1,483	242	\$100,000
2020	Stormwater project in Basin 1371	Brevard County	Banana	273	39	\$100,000
2020	Stormwater project in Basin 1372	Brevard County	Banana	720	113	\$100,000
2020	Stormwater project in Basin 1378	Brevard County	Banana	744	104	\$100,000
2020	Stormwater project in Basin 2421	Brevard County	Banana	343	49	\$100,000
2020	Stormwater project in Basin 83	Brevard County	North IRL	452	61	\$100,000
2020	Stormwater project in Basin 100	Brevard County	North IRL	888	115	\$100,000
2020	Stormwater project in Basin 105	Brevard County	North IRL	549	72	\$100,000
2020	Stormwater project in Basin 212	Brevard County	North IRL	693	89	\$100,000
2020	Stormwater project in Basin 228	Brevard County	North IRL	684	131	\$100,000
2020	Stormwater project in Basin 262	Brevard County	North IRL	794	126	\$100,000
2020	Stormwater project in Basin 263	Brevard County	North IRL	469	65	\$100,000
2020	Stormwater project in Basin 288	Brevard County	North IRL	732	78	\$100,000
2020	Stormwater project in Basin 289	Brevard County	North IRL	1,112	223	\$100,000
2020	Stormwater project in Basin 290	Brevard County	North IRL	1,116	193	\$100,000
2020	Stormwater project in Basin 291	Brevard County	North IRL	485	82	\$100,000
2020	Stormwater project in Basin 294	Brevard County	North IRL	551	84	\$100,000
2020	Stormwater project in Basin 335	Brevard County	North IRL	1,187	206	\$100,000
2020	Stormwater project in Basin 353	Brevard County	North IRL	497	86	\$100,000
2020	Stormwater project in Basin 354	Brevard County	North IRL	555	115	\$100,000
2020	Stormwater project in Basin 392	Brevard County	North IRL	840	155	\$100,000
2020	Stormwater project in Basin 408	Brevard County	North IRL	1,179	170	\$125,000
2020	Stormwater project in Basin 454	Brevard County	North IRL	1,996	302	\$150,000
2020	Stormwater project in Basin 510	Brevard County	North IRL	586	92	\$100,000
2020	Stormwater project in Basin 512	Brevard County	North IRL	364	53	\$100,000
2020	Stormwater project in Basin 513	Brevard County	North IRL	1,137	183	\$100,000
2020	Stormwater project in Basin 544	Brevard County	North IRL	624	98	\$100,000
2020	Stormwater project in Basin 568	Brevard County	North IRL	534	85	\$100,000
2020	Stormwater project in Basin 578	Brevard County	North IRL	430	68	\$100,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 594	Brevard County	North IRL	833	135	\$100,000
2020	Stormwater project in Basin 597	Brevard County	North IRL	800	142	\$100,000
2020	Stormwater project in Basin 624	Brevard County	North IRL	860	134	\$100,000
2020	Stormwater project in Basin 626	Brevard County	North IRL	1,602	193	\$150,000
2020	Stormwater project in Basin 644	Brevard County	North IRL	686	94	\$100,000
2020	Stormwater project in Basin 660	Brevard County	North IRL	844	212	\$100,000
2020	Stormwater project in Basin 677	Brevard County	North IRL	709	136	\$100,000
2020	Stormwater project in Basin 751	Brevard County	North IRL	532	121	\$100,000
2020	Stormwater project in Basin 759	Brevard County	North IRL	614	98	\$100,000
2020	Stormwater project in Basin 796	Brevard County	North IRL	639	98	\$100,000
2020	Stormwater project in Basin 805	Brevard County	North IRL	645	94	\$100,000
2020	Stormwater project in Basin 806	Brevard County	North IRL	622	100	\$100,000
2020	Stormwater project in Basin 827	Brevard County	North IRL	639	96	\$100,000
2020	Stormwater project in Basin 838	Brevard County	North IRL	658	135	\$100,000
2020	Stormwater project in Basin 840	Brevard County	North IRL	619	84	\$100,000
2020	Stormwater project in Basin 862	Brevard County	North IRL	416	72	\$100,000
2020	Stormwater project in Basin 871	Brevard County	North IRL	366	53	\$100,000
2020	Stormwater project in Basin 884	Brevard County	North IRL	437	68	\$100,000
2020	Stormwater project in Basin 889	Brevard County	North IRL	539	85	\$100,000
2020	Stormwater project in Basin 890	Brevard County	North IRL	533	110	\$100,000
2020	Stormwater project in Basin 894	Brevard County	North IRL	794	116	\$100,000
2020	Stormwater project in Basin 896	Brevard County	North IRL	581	123	\$100,000
2020	Stormwater project in Basin 902	Brevard County	North IRL	276	35	\$100,000
2020	Stormwater project in Basin 903	Brevard County	North IRL	631	88	\$100,000
2020	Stormwater project in Basin 920	Brevard County	North IRL	511	87	\$100,000
2020	Stormwater project in Basin 921	Brevard County	North IRL	743	96	\$100,000
2020	Stormwater project in Basin 922	Brevard County	North IRL	601	107	\$100,000
2020	Stormwater project in Basin 938	Brevard County	North IRL	424	160	\$100,000
2020	Stormwater project in Basin 939	Brevard County	North IRL	502	71	\$100,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 940	Brevard County	North IRL	816	106	\$100,000
2020	Stormwater project in Basin 952	Brevard County	North IRL	1,251	212	\$100,000
2020	Stormwater project in Basin 960	Brevard County	North IRL	537	80	\$100,000
2020	Stormwater project in Basin 962	Brevard County	North IRL	527	75	\$100,000
2020	Stormwater project in Basin 980	Brevard County	North IRL	836	127	\$100,000
2020	Stormwater project in Basin 985	Brevard County	North IRL	687	99	\$100,000
2020	Stormwater project in Basin 987	Brevard County	North IRL	1,099	172	\$100,000
2020	Stormwater project in Basin 993	Brevard County	North IRL	611	93	\$100,000
2020	Stormwater project in Basin 1002	Brevard County	North IRL	1,181	159	\$100,000
2020	Stormwater project in Basin 1016	Brevard County	North IRL	920	136	\$100,000
2020	Stormwater project in Basin 1027	Brevard County	North IRL	560	84	\$100,000
2020	Stormwater project in Basin 1029	Brevard County	North IRL	685	93	\$100,000
2020	Stormwater project in Basin 1032	Brevard County	North IRL	719	115	\$100,000
2020	Stormwater project in Basin 1033	Brevard County	North IRL	1,113	152	\$100,000
2020	Stormwater project in Basin 1034	Brevard County	North IRL	902	132	\$100,000
2020	Stormwater project in Basin 1037	Brevard County	North IRL	533	105	\$100,000
2020	Stormwater project in Basin 1039	Brevard County	North IRL	708	104	\$100,000
2020	Stormwater project in Basin 1067	Brevard County	North IRL	463	67	\$100,000
2020	Stormwater project in Basin 1071	Brevard County	North IRL	1,082	144	\$100,000
2020	Stormwater project in Basin 1073	Brevard County	North IRL	428	61	\$100,000
2020	Stormwater project in Basin 1076	Brevard County	North IRL	595	91	\$100,000
2020	Stormwater project in Basin 1077	Brevard County	North IRL	1,687	289	\$150,000
2020	Stormwater project in Basin 1080	Brevard County	North IRL	861	134	\$100,000
2020	Stormwater project in Basin 1081	Brevard County	North IRL	1,281	210	\$100,000
2020	Stormwater project in Basin 1112	Brevard County	North IRL	1,032	166	\$100,000
2020	Stormwater project in Basin 1113	Brevard County	North IRL	416	93	\$100,000
2020	Stormwater project in Basin 1124	Brevard County	North IRL	681	99	\$100,000
2020	Stormwater project in Basin 1128	Brevard County	North IRL	279	77	\$100,000
2020	Stormwater project in Basin 1150	Brevard County	North IRL	476	57	\$100,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 1151	Brevard County	North IRL	1,057	141	\$125,000
2020	Stormwater project in Basin 1172	Brevard County	North IRL	852	123	\$100,000
2020	Stormwater project in Basin 1197	Brevard County	North IRL	609	82	\$100,000
2020	Stormwater project in Basin 1213	Brevard County	North IRL	904	131	\$100,000
2020	Stormwater project in Basin 1214	Brevard County	North IRL	727	84	\$100,000
2020	Stormwater project in Basin 1215	Brevard County	North IRL	382	52	\$100,000
2020	Stormwater project in Basin 1219	Brevard County	North IRL	512	60	\$100,000
2020	Stormwater project in Basin 1220	Brevard County	North IRL	396	61	\$100,000
2020	Stormwater project in Basin 1221	Brevard County	North IRL	545	85	\$100,000
2020	Stormwater project in Basin 1222	Brevard County	North IRL	888	171	\$100,000
2020	Stormwater project in Basin 1224	Brevard County	North IRL	401	111	\$100,000
2020	Stormwater project in Basin 1228	Brevard County	North IRL	501	83	\$100,000
2020	Stormwater project in Basin 1231	Brevard County	North IRL	300	58	\$100,000
2020	Stormwater project in Basin 1233	Brevard County	North IRL	605	101	\$100,000
2020	Stormwater project in Basin 1240	Brevard County	North IRL	638	100	\$100,000
2020	Stormwater project in Basin 1241	Brevard County	North IRL	584	83	\$100,000
2020	Stormwater project in Basin 1244	Brevard County	North IRL	576	78	\$100,000
2020	Stormwater project in Basin 1245	Brevard County	North IRL	356	49	\$100,000
2020	Stormwater project in Basin 1251	Brevard County	North IRL	448	66	\$100,000
2020	Stormwater project in Basin 1253	Brevard County	North IRL	379	54	\$100,000
2020	Stormwater project in Basin 1259	Brevard County	North IRL	450	106	\$100,000
2020	Stormwater project in Basin 1262	Brevard County	North IRL	443	80	\$100,000
2020	Stormwater project in Basin 1273	Brevard County	North IRL	1,964	288	\$175,000
2020	Stormwater project in Basin 1291	Brevard County	North IRL	518	79	\$100,000
2020	Stormwater project in Basin 1292	Brevard County	North IRL	386	60	\$100,000
2020	Stormwater project in Basin 1293	Brevard County	North IRL	461	67	\$100,000
2020	Stormwater project in Basin 1294	Brevard County	North IRL	628	94	\$100,000
2020	Stormwater project in Basin 1295	Brevard County	North IRL	800	121	\$100,000
2020	Stormwater project in Basin 1301	Brevard County	North IRL	1,025	154	\$125,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 1307	Brevard County	North IRL	431	47	\$100,000
2020	Stormwater project in Basin 1312	Brevard County	North IRL	549	120	\$100,000
2020	Stormwater project in Basin 1313	Brevard County	North IRL	619	92	\$100,000
2020	Stormwater project in Basin 1316	Brevard County	North IRL	557	68	\$100,000
2020	Stormwater project in Basin 1318	Brevard County	North IRL	1,124	148	\$100,000
2020	Stormwater project in Basin 1324	Brevard County	North IRL	1,422	176	\$150,000
2020	Stormwater project in Basin 1330	Brevard County	North IRL	639	89	\$100,000
2020	Stormwater project in Basin 1331	Brevard County	North IRL	1,000	159	\$100,000
2020	Stormwater project in Basin 1339	Brevard County	North IRL	857	103	\$100,000
2020	Stormwater project in Basin 1344	Brevard County	North IRL	459	61	\$100,000
2020	Stormwater project in Basin 1348	Brevard County	North IRL	723	102	\$100,000
2020	Stormwater project in Basin 1354	Brevard County	North IRL	597	86	\$100,000
2020	Stormwater project in Basin 1359	Brevard County	North IRL	887	142	\$100,000
2020	Stormwater project in Basin 1361	Brevard County	North IRL	524	79	\$100,000
2020	Stormwater project in Basin 1363	Brevard County	North IRL	715	123	\$100,000
2020	Stormwater project in Basin 1367	Brevard County	North IRL	1,042	146	\$100,000
2020	Stormwater project in Basin 1372	Brevard County	North IRL	720	113	\$100,000
2020	Stormwater project in Basin 1378	Brevard County	North IRL	744	104	\$100,000
2020	Stormwater project in Basin 1380	Brevard County	North IRL	929	134	\$100,000
2020	Stormwater project in Basin 1382	Brevard County	North IRL	622	88	\$100,000
2020	Stormwater project in Basin 1384	Brevard County	North IRL	923	142	\$100,000
2020	Stormwater project in Basin 1389	Brevard County	North IRL	822	134	\$100,000
2020	Stormwater project in Basin 1390	Brevard County	North IRL	612	92	\$100,000
2020	Stormwater project in Basin 1391	Brevard County	North IRL	887	142	\$100,000
2020	Stormwater project in Basin 1395	Brevard County	North IRL	768	114	\$100,000
2020	Stormwater project in Basin 1398	Brevard County	North IRL	449	74	\$100,000
2020	Stormwater project in Basin 1401	Brevard County	North IRL	953	147	\$100,000
2020	Stormwater project in Basin 1403	Brevard County	North IRL	558	88	\$100,000
2020	Stormwater project in Basin 1413	Brevard County	North IRL	528	78	\$100,000

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2020	Stormwater project in Basin 1416	Brevard County	North IRL	1,799	229	\$150,000
2020	Stormwater project in Basin 1417	Brevard County	North IRL	771	117	\$100,000
2020	Stormwater project in Basin 1418	Brevard County	North IRL	832	111	\$100,000
2020	Stormwater project in Basin 1423	Brevard County	North IRL	487	73	\$100,000
2020	Stormwater project in Basin 1425	Brevard County	North IRL	690	113	\$100,000
2020	Stormwater project in Basin 1426	Brevard County	North IRL	720	116	\$100,000
2020	Stormwater project in Basin 1428	Brevard County	North IRL	440	65	\$100,000
2020	Stormwater project in Basin 1429	Brevard County	North IRL	477	55	\$100,000
2020	Stormwater project in Basin 1434	Brevard County	North IRL	932	112	\$125,000
2020	Stormwater project in Basin 1435	Brevard County	North IRL	328	43	\$100,000
2020	Stormwater project in Basin 1439	Brevard County	North IRL	1,413	183	\$175,000
2020	Stormwater project in Basin 1441	Brevard County	North IRL	1,034	149	\$100,000
2020	Stormwater project in Basin 1445	Brevard County	North IRL	1,493	198	\$175,000
2020	Stormwater project in Basin 1459	Brevard County	North IRL	895	132	\$100,000
2020	Stormwater project in Basin 1463	Brevard County	North IRL	1,321	195	\$100,000
2020	Stormwater project in Basin 1491	Brevard County	North IRL	641	93	\$100,000
2020	Stormwater project in Basin 1498	Brevard County	North IRL	483	74	\$100,000
2020	Stormwater project in Basin 2419	Brevard County	North IRL	381	43	\$100,000
2020	Stormwater project in Basin 2420	Brevard County	North IRL	450	121	\$100,000
2020	Stormwater project in Basin 2421	Brevard County	North IRL	343	49	\$100,000
2020	Stormwater project in Basin 1439	Brevard County	Central IRL	1,413	183	\$200,000
2020	Stormwater project in Basin 1445	Brevard County	Central IRL	1,493	198	\$200,000
2020	Stormwater project in Basin 1470	Brevard County	Central IRL	2,813	452	\$200,000
2020	Stormwater project in Basin 1508	Brevard County	Central IRL	2,459	356	\$200,000
2020	Stormwater project in Basin 1562	Brevard County	Central IRL	3,314	449	\$275,000
2020	Stormwater project in Basin 1615	Brevard County	Central IRL	2,815	390	\$200,000
2020	Stormwater project in Basin 1803	Brevard County	Central IRL	2,227	318	\$200,000
2020	Stormwater project in Basin 1825	Brevard County	Central IRL	1,896	394	\$200,000
2021	Cape Shores Swales	City of Cape Canaveral	Banana	31	15	\$2,746

Year Removed	Project Name	Responsible Entity	Sub-Lagoon	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Plan Funding
2021	Justamere Road Swale	City of Cape Canaveral	Banana	6	3	\$528
2021	Hitching Post Berms	City of Cape Canaveral	Banana	29	22	\$2,552
2021	Oyster Bar	Brevard County	Banana	120	3	\$47,350
2021	Stewart Road Dry Retrofit	City of Melbourne	North IRL	208	47	\$18,344
2021	Basin 1349	Brevard County	North IRL	1,747	268	\$354,400
2021	Basin 1409	Brevard County	North IRL	1,375	209	\$293,800
2021	Indian River Drive Oyster Bar	Brevard County	North IRL	34	1	\$13,258
2021	Indian River Drive Planted Shoreline	Brevard County	North IRL	9	3	\$2,240
2021	Basin 2191	Brevard County	Central IRL	1,925	185	\$326,500
2021	Basin 1511	Brevard County	Central IRL	2,409	378	\$410,300

Appendix E: Long Descriptions of Figures

Figure 1-1: Decline of Commercial Fishing in Brevard County

The graph shows the declining value of the commercial fishery in Brevard County using Florida Fish and Wildlife Conservation Commission data from 1995 through 2019. The commercial fishery values drop over time while fish kill counts increase with the largest peaks in 2007 and 2016. The following table is an estimate of the values represented in the graph and are not the exact values.

Reporting Year	Value of Commercial Fishery
1995	\$21,808,095
1996	\$24,052,219
1997	\$15,027,821
1998	\$11,264,215
1999	\$14,765,165
2000	\$15,879,487
2001	\$13,096,088
2002	\$6,253,406
2003	\$7,155,669
2004	\$8,219,153
2005	\$6,314,361
2006	\$6,216,198
2007	\$5,127,527
2008	\$8,207,268
2009	\$6,166,197
2010	\$6,499,390
2011	\$8,354,718
2012	\$7,932,126
2013	\$7,278,107
2014	\$6,588,523
2015	\$7,960,368
2016	\$6,647,791
2017	\$8,444,720
2018	\$6,747,679
2019	\$7,925,947

Return to **Figure 1-1**.

Figure 2-2. Summary of the Save Our Indian River Lagoon Outputs and Outcomes

Graphic showing output of Public Education will result in years 0–5 early adopters lead, years 6–10 supporters join, and years 10+ lagoon friendly lifestyles are normal. Output of Reclaimed Water Upgrades, Sewer Later Rehabilitation, Septic System Removal and Upgrades, Stormwater Treatment will result in years 0–5 cleaner ground and surface water, years 6–10 cleaner lagoon water, and years 10+ lush seagrass beds. Outputs of Muck Removal and Treatment of Muck Interstitial Water will result in years 0–5 exposed sandy sediments and tons of pollution removed, years 5–10 plentiful bottom dwelling marine life, and years 10+ abundant fishes. Output of Oyster Reefs and Living Shorelines will result in years 0–5 increased filtration, years 5–10 faster storm recovery, years 10+ healthy stability. Outputs of Project Performance

Monitoring and Plan Updates will result in years 0–5 increased efficiency and cost effectiveness, years 5–10 lagoon report card shows improvement, and years 10+ IRL economy grows.

Return to **Figure 2-2**.

Figure 4-1: Grass Clippings Example for a Typical Lot

Example graphic showing the potential for grass clippings to get onto and be left on a road. For a 100 foot by 100 foot lot with a 2,500 square foot home and driveway produces, it will produce an estimated 3,000 pounds of grass clippings per year containing 75 pounds of total nitrogen and 10.4 pounds of total phosphorus. Grass clippings can be blown into the road from an approximately 2-foot-wide strip of lawn.

Return to **Figure 4-1**.

Figure 4-2: Septic System Removal Projects in Banana River Lagoon

Map showing the locations of the 11 highest priority and high priority sewer locations within the northern portion of the Banana River Lagoon. These include North Merritt – Zone B, North Merritt Zone A, North Merritt Zone D, Sykes Creek Zone C, North Merritt Zone E, North Merritt Zone F, Sykes Creek Zone IJ, Sykes Creek Zone N, Merritt Island Zone C, Merritt Island Zone F, and Sykes Creek Zone M. The 4 areas with the highest loading, which include Sykes Creek Zone N, Merritt Island Zone C, Merritt Island Zone F, and Sykes Creek Zone M, are funded for septic removal. The map also shows the locations of all individual septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. Most of them are concentrated along the water in the west and south east portions of Merritt Island with the areas closest to the water being either 10–30 pounds or 30–50 pounds. The areas further away from the water are 0–10 pounds. There are some of those scattered across the north center portion of Merritt Island as well. There is a line running north to south in the west that shows the drainage divide. The Bennett Causeway runs east to west through the middle of the map and North Courtenay Parkway runs north to south.

Return to **Figure 4-2**.

Figure 4-3: Septic System Removal Projects in Banana River Lagoon, continued

Map showing the locations of the 9 highest priority and high priority sewer locations within the southern portion of the Banana River Lagoon. These locations include Merritt Island Redevelopment Agency Phase 1, Merritt Island Redevelopment Agency Phase 2 Cone Road, Sykes Creek Zone R, Sykes Creek Zone S, Sykes Creek Zone G, Sykes Creek Zone T, South Banana Zone B, South Banana Zone A, and Merritt Island Zone H. The 7 areas with the highest loading, which include Merritt Island Redevelopment Agency Phase 2 Cone Road, Sykes Creek Zone R, Sykes Creek Zone S, Sykes Creek Zone G, Sykes Creek Zone T, and South Banana Zone B, are funded. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering most of the areas near the water with the areas closest to the water being either 10–30 pounds or 30–50 pounds. The areas further away from the water including the center of Merritt Island are 0–10 pounds. There is a line running north to south in the west that shows the drainage divide. South Tropical Trail runs north to south through most of the septic areas on this map.

Return to **Figure 4-3**.

Figure 4-4: Septic System Removal Projects in Banana River Lagoon, continued

Map showing the locations of the highest priority and high priority sewer locations within the central portion of the Banana River Lagoon. These locations include Merritt Island Zone H and Merritt Island Zone A. Neither of those areas are funded. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. Most of Merritt Island is 10–30 pounds with a scattering of 30–50 pounds in the north portion. There are also a few spots of 0–10 pounds in the center north part of the island. There is a line running north to south in the west that shows the drainage divide. Pineda Causeway runs east to west and Rockledge Boulevard runs north to south in this area.

Return to **Figure 4-4**.

Figure 4-5: Septic System Removal Projects in North IRL

Map showing the locations of the 4 highest priority and high priority sewer locations within the northern portion of the North Indian River Lagoon. These areas include Titusville Zone A, Titusville Zone B, Titusville Zone C, and Titusville Zone H. All are funded. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. The zones previously mentioned have loading in the 10–30 and 30–50 range. There is a sparse scatter of 0–10 zones over the rest of the map with two dense concentrations in the northern half of the map. There is a line running north to south in the west that shows the drainage divide. Garden Street runs east to west in the northern portion of the map and Cheney Highway/Orlando Road runs east to west in the southern part of the map. South Street loops through the map area.

Return to **Figure 4-5**.

Figure 4-6: Septic System Removal Projects in North IRL, continued

Map showing the locations of the 7 highest priority and high priority sewer locations within the north-central portion of the North Indian River Lagoon. These areas include Titusville Zone D, Titusville Zone E, Titusville Zone F, Titusville Zone G, Sharpes Zone A, Sharpes Zone B and Cocoa Zone C. All areas are funded. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering most of the areas near the water with the areas closest to the water being either 10–30 pounds or 30–50 pounds. The areas further away from the water are 0–10 pounds. There is a line running north to south in the west that shows the drainage divide. National Aeronautics and Space Administration Causeway is at the top of the map and Indian River Drive/North Cocoa Boulevard runs north to south.

Return to **Figure 4-6**.

Figure 4-7: Septic System Removal Projects in North IRL, continued

Map showing the locations of the 6 highest priority and high priority sewer locations within the central portion of the central North Indian River Lagoon. These areas include Cocoa Zone C, Cocoa Zone J, Cocoa Zone K, City of Rockledge Breeze Swept, City of Rockledge, and Rockledge Zone B. All are funded. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering most of the areas near the water with the areas closest to the water being either 10–30 pounds or

30–50 pounds. The areas further away from the water are 0–10 pounds. There is a line running north to south in the west that shows the drainage divide. Bennett Causeway runs east to west in the northern portion of the map and King Street/Hubert Humphrey Causeway/Merritt Island Causeway runs east to west in the southern portion of the map. Cocoa Boulevard runs north to south in the western portion of the map and North Courtenay Parkway runs north to south in the eastern portion of the map.

Return to **Figure 4-7**.

Figure 4-8: Septic System Removal Projects in North IRL, continued

Map showing the locations of the 7 highest priority and high priority sewer locations within the south-central portion of the North Indian River Lagoon. These areas include City of Rockledge Breeze Swept, City of Rockledge, Rockledge Zone B, Rockledge Zone C, South Central Zone A, South Central Zone B, and South Central Zone BC. The areas of City of Rockledge Breeze Swept, City of Rockledge, Rockledge Zone B, and South Central Zone A were funded. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering most of the areas near the water with the areas closest to the water being either 10–30 pounds or 30–50 pounds. The areas further away from the water are 0–10 pounds. Rockledge Zone C is not along the water and has areas near the center that are 10–30 or 30–50 pounds and the areas near the east and west sides are 0–10 pounds. There is a line running north to south in the west that shows the drainage divide. The Merritt Island Causeway runs east to west at the top of the map. Cocoa Boulevard/Rockledge Boulevard runs north to south in the western portion of the map and South Tropical Trail runs north to south in the eastern portion of the map.

Return to **Figure 4-8**.

Figure 4-9: Septic System Removal Projects in North IRL, continued

Map showing the locations of the 10 highest priority and high priority sewer locations within the southern portion of the North Indian River Lagoon. These include South Central Zone BC, South Central Zone C, South Central Zone Pineda, South Central Zone I, South Central Zone D (Brevard), South Central Zone D (Melbourne), City of Melbourne Riverside, City of Melbourne Zone A, City of Melbourne Villa Espana, and City of Melbourne Kent. All but South Central Zone BC, South Central Zone Pineda, and South Central Zone I are funded. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering most of the areas near the water with the areas closest to the water being either 10–30 pounds or 30–50 pounds. The areas further away from the water are 0–10 pounds. There is a line running north to south in the west that shows the drainage divide. Pineda Causeway runs east to west in the middle of the map. Rockledge Drive runs north to south in the western portion of the map and South Tropical Trail runs north to south in the eastern portion.

Return to **Figure 4-9**.

Figure 4-10: Septic System Removal Projects in North IRL, continued

Map showing the locations of the 11 highest priority and high priority sewer locations within the southern portion of the North Indian River Lagoon. These areas include City of Melbourne Riverside, City of Melbourne Zone A, City of Melbourne Villa Espana, City of Melbourne Kent, South Central Zone E, South Central Zone G, City of Melbourne Bowers, South Central Zone F,

South Beaches Zone A, South Beaches Zone P, and South Beaches Zone O. All but South Central Zone E and South Central Zone G are funded. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering most of the areas near the water with the areas closest to the water being either 10–30 pounds or 30–50 pounds. The areas further away from the water are 0–10 pounds. There are clusters of all three types of loading away from the water in the west-central and southwest part of the map. There is a line running north to south in the west that shows the drainage divide. Eau Gallie Boulevard runs east to west in the middle of the map. Dixie Highway runs north to south in the western portion of the map and Patrick Drive runs north to south in the eastern portion.

Return to **Figure 4-10**.

Figure 4-11: Septic System Removal Projects in Central IRL

Map showing the locations of the 9 highest priority and high priority sewer locations within the northern portion of the Central Indian River Lagoon. The funded areas include City of Melbourne Roxy, City of Melbourne Pennwood, City of Melbourne Hoag, and City of Melbourne Avenida del Rio. The unfunded areas include City of West Melbourne Zone A, Melbourne Village Zone B, City of West Melbourne Sylvan Estates, South Central Zone H, and Melbourne Village Zone A. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering some of the areas near the water with the areas closest to the water being 30–50 pounds. The areas further away from the water are 0–10 pounds and 10–30 pounds mostly clustered in the center of the map just west of the Melbourne Causeway along U.S. 192 and approximately 4 miles west of U.S. 192 in West Melbourne. New Haven Avenue/Melbourne Causeway runs east to west through the middle of the map. Babcock Street runs north to south in the middle of the map and Dixie Highway runs north to south closer to the eastern portion of the map.

Return to **Figure 4-11**.

Figure 4-12: Septic System Removal Projects in Central IRL, continued

Map showing the locations of the 10 highest priority and high priority sewer locations within the southern portion of the Central Indian River Lagoon. The funded areas include City of Palm Bay Zone A and B. The unfunded areas include Malabar Zones F, D, C, A, B, as well as South Zone A, South Zone B, and Grant Valkaria Zone H. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering about 30% of the map with a few areas closest to the water being either 10–30 pounds or 30–50 pounds. The areas further away from the water are 0–10 pounds and tightly clustered in the western part of the map west of Babcock Street in the Malabar area. There are clusters of all three types of loading away from the water in the central and south central part of the map. Babcock Street runs north to south in the western portion of the map and Dixie Highway runs north to south in the western portion.

Return to **Figure 4-12**.

Figure 4-13: Septic System Removal Projects in Central IRL, continued

Map showing the locations of the 15 highest priority and high priority sewer locations within the south central portion of the Central Indian River Lagoon. The unfunded areas on this map include South Beaches Zones C, D, F, N, L, K, and M. Other unfunded areas are Malabar Zones F, D, C, A, B; South Zone B; and Grant Valkaria Zones H and G. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering half of the areas near the water on the barrier island on the eastern portion of the map. There are isolated clusters of high loading areas along the waterfront on the mainland or western side of the map. There are clusters of all three types of loading away from the water in the west-central and south west part of the map. Highway A1A runs north to south in the middle of the map.

Return to **Figure 4-13**.

Figure 4-14: Septic System Removal Projects in Central IRL, continued

Map showing the locations of the 11 highest priority and high priority sewer locations within the southern portion of the Central Indian River Lagoon. The unfunded areas include Grant Valkaria Zones G, D, F, C, B, E, A, as well as South Beaches Zones E and G. The funded areas include Micco Zones A and B. The map also shows the locations of all septic systems with loading estimates of 0–10 pounds, 10–30 pounds, and 30–50 pounds. They are covering most of the areas near the water and along the Saint Sebastian River with the areas closest to the water being either 10–30 pounds or 30–50 pounds. The areas further away from the water in the northwestern portion of the map are 30–50 pounds. There are clusters of all three types of loading away from the water in the north western and southern part of the map. Dixie Highway runs north to south in the middle of the map and Highway A1A runs north to south in the western portion of the map.

Return to **Figure 4-14**.

Figure 4-15: Quick Connection Septic System Removal Locations in North Brevard County

Map showing the locations of properties eligible to receive reimbursement to connect to a sewer system in the northern portion of the north Indian River Lagoon. Dots scattered along the map indicate whether the owner can connect to a force main or gravity type sewer and whether the parcel is a high priority. On this map the dots are mostly near the water. Approximately half are for force main connections and half are for gravity sewer connections. There is a line running north to south in the west that shows the drainage divide. These sites are located north and south of Nasa Causeway on the western side of the lagoon.

Return to **Figure 4-15**.

Figure 4-16: Quick Connection Septic System Removal Locations in Central Brevard County

Map showing the locations of properties eligible to receive reimbursement to connect to a sewer system in the central Indian River Lagoon. Dots scattered along the map indicate whether the

owner can connect to a force main or gravity type sewer and whether the parcel is a high priority. On this map the dots are mostly near the water and tightly clustered in the northern portion of the map on Merritt Island. There are a few scattered near the water in the southern portion of the map south of the Pineda Causeway. Approximately half are for force main connections and half are for gravity sewer connections. There is a line running north to south in the west that shows the drainage divide. The sites are located near the Merritt Island Causeway to the northern portion of the map and Pineda Causeway to the southern portion of the map.

Return to **Figure 4-16**.

Figure 4-17: Quick Connection Septic System Removal Locations in South Brevard County

Map showing the locations of properties eligible to receive reimbursement to connect to a sewer system in the southern portion of the Indian River Lagoon in Brevard County. Dots scattered along the map indicate whether the owner can connect to a force main or gravity type sewer and whether the parcel is a high priority. On this map the dots are mostly near the water and tightly clustered in the northern portion of the map near Melbourne and Eau Gallie. There are a few scattered near the water in the central portion of the map near Malabar. Approximately 20% are for force main connections and approximately 80 percent are for gravity sewer connections. There is a line running north to south in the west that shows the drainage divide.

Return to **Figure 4-17**.

Figure 4-18: Example In-Ground Nitrogen-Reducing Biofilter Septic System

This a diagram showing how an in-ground nitrogen reducing biofilter is constructed. It shows a septic tank to the left with a pipe leading out of it with an arrow showing the direction of water flow to the drainfield. The drainfield area is depicted as an eighteen inch layer of soil above a twelve inch layer of woodchips or other denitrification media. There is a layer below these that shows an empty space which indicates native soil that should be at least six inches above the seasonal high water table.

Return to **Figure 4-18**.

Figure 4-19: Septic System Upgrades in North Brevard County

Map showing the locations of properties eligible to receive reimbursement to install an upgraded septic system in the northern portion of Brevard County along the Indian River Lagoon. Dots scattered along the map indicate whether the owner is eligible to receive reimbursement. On this map the dots are mostly near the water and scattered from north to south. There is a line running north to south in the west that shows the drainage divide. The National Aeronautics and Space Administration Causeway runs east to west near the southern part of the map.

Return to **Figure 4-19**.

Figure 4-20: Septic System Upgrades in Central Brevard County

Map showing the locations of properties eligible to receive reimbursement to install an upgraded septic system in the central portion of Brevard County along the Indian River Lagoon. Dots scattered along the map indicate whether the owner is eligible to receive reimbursement. On

this map the dots are mostly near the water and scattered from north to south on Merritt Island. There is a line running north to south in the west that shows the drainage divide. The Bennett Causeway and Merritt Island Causeway run east to west in the northern portion of the map. Rockledge Parkway runs north to south on the western side and Courtenay Parkway runs north to south on the eastern side of the lagoon.

Return to **Figure 4-20**.

Figure 4-21: Septic System Upgrades in South Brevard County

Map showing the locations of properties eligible to receive reimbursement to install an upgraded septic system in the southern portion of Brevard County along the Indian River Lagoon. Dots scattered along the map indicate whether the owner is eligible to receive reimbursement. On this map the dots are mostly near the water and scattered from north to south on along U.S. 1 and about one to three miles inland. There is a line running north to south in the west that shows the drainage divide. The Eau Gallie Causeway and 5th Avenue run east to west near the top of the map Babcock Street runs north to south in the middle of the map.

Return to **Figure 4-21**.

Figure 4-22: Stormwater Projects in North Brevard County

Map showing the selected basins for stormwater treatment in the northern portion of the Banana River Lagoon and North Indian River Lagoon in Brevard County. Project areas cover roughly 60% of the shoreline on the mainland and are all part of the North Indian River Lagoon. Project areas cover roughly 75% of North Merritt Island and half are part of the North Indian River Lagoon while the other half are part of the Banana River Lagoon. Project areas cover roughly 85% of the Barrier Island and all are part of the Banana River Lagoon.

Return to **Figure 4-22**.

Figure 4-23: Stormwater Projects in Central Brevard County

Map showing the selected basins for stormwater treatment in the southern portion of the Banana River Lagoon and North Indian River Lagoon in Brevard County. Project areas cover roughly 50% of the shoreline on the mainland and are all part of the North Indian River Lagoon. Project areas cover roughly 70% of South Merritt Island and half are part of the North Indian River Lagoon while the other half are part of the Banana River Lagoon. Project areas cover roughly 80% of the Barrier Island and all are part of the Banana River Lagoon.

Return to **Figure 4-23**.

Figure 4-24: Stormwater Projects in South Brevard County

Map showing the selected basins for stormwater treatment in the Central Indian River Lagoon for Brevard County. There is one project area on the Barrier Island on the north end of the map that is part of the Banana River Lagoon. Project areas for the Central Indian River Lagoon cover roughly 30% of the shoreline and are concentrated in the north half of the mainland with two sections also on the Barrier Island. Ten project areas are scattered inland from the shoreline in the southern half of the map.

Return to **Figure 4-24**.

Figure 4-25: Location of Muck Removal Projects in the Northern Banana River Lagoon

Map of the northern Banana River Lagoon in Brevard County showing the locations of the funded and unfunded muck removal projects. There are four unfunded projects in the very northern part of the Banana River Lagoon near the top of the map. Towards the bottom of the map, just south of State Highway 528, there are two funded projects: Port Canaveral South is along the Barrier Island shoreline and Merritt Island Phase I is along the Merritt Island shoreline. Additional unfunded projects are located at the bottom of the map, as well as the canals on Merritt Island.

Return to **Figure 4-25**.

Figure 4-26: Location of Muck Removal Projects in the Southern Banana River Lagoon

Map of the southern Banana River Lagoon in Brevard County showing the locations of the funded and unfunded muck removal projects. Towards the top of the map, just south of State Highway 528, are three funded projects. Port Canaveral South is along the Barrier Island shoreline. Merritt Island Phase I is just to the south and west along the Merritt Island shoreline. The Sykes Creek project is a little further south and west from that project. Further south, below State Highway 520, is the Cocoa Beach IIB project along the Barrier Island shoreline. South of that is the Cocoa Beach Phase III project. To the west of that is the Cocoa Beach Golf project. About six miles south along the Barrier Island is the Patrick Air Force Base project. To the west of that is the Pineda Banana River Lagoon project near the Merritt Island shoreline. South of that project, and south of State Highway 404 is the Grand Canal project on the Barrier Island. South of that project is the Satellite Beach project followed by the Indian Harbour Beach project.

Return of **Figure 4-26**.

Figure 4-27: Location of Muck Removal Projects in North IRL

Map of the North River Lagoon in Brevard County showing the locations of the funded and unfunded muck removal projects. There are five funded projects. Titusville Railroad West is at the top of the map along the mainland shoreline. Just east of that on the Merritt Island shoreline is the Titusville Railroad East project. The National Aeronautics and Space Administration Causeway East project is about 10 miles south along the Merritt Island shoreline and just north of State Highway 405. The Rockledge A project is about 15 miles south along the Merritt Island shoreline. The Eau Gallie Northeast project is about 9 miles south and near the bottom of the map near the Merritt Island shoreline.

Return to **Figure 4-27**.

Figure 4-28: Location of Muck Removal Projects in Central IRL

Map of the Central Indian River Lagoon in Brevard County showing the locations of the funded and unfunded muck removal projects. The only funded project is the Turkey Creek project, which is about 3 miles south of U.S. Highway 192 along the mainland shoreline.

Return to **Figure 4-28**.

Figure 4-29: Phase I Potential Enhanced Circulation Project Locations

Map of Brevard County showing a 40 square mile area where potential enhanced circulation projects could be located. The St. Johns River Water Management District identified potential projects the following areas: one in the south part of the Mosquito Lagoon, one in the north part of the Banana River, two in Cape Canaveral, one at Patrick Airforce Base, and one at Malabar. They identified four internal projects with one at the north end of Merritt Island, two around Haulover Canal, and one in central Merritt Island. CDM Smith identified 23 additional potential project locations both internal and external spread throughout Brevard County with a heavy concentration around central Merritt Island.

Return to **Figure 4-29**.

Figure 4-30: Shoreline Survey to Identify Locations Appropriate for Oyster Bars and Planted Shorelines

Map of Brevard County showing the shoreline survey edge types including bulkhead and seawall, hardened slope and riprap, and no structures. No structures were found mainly in the north portion of the county on the mainland and also around the central part of Merritt Island near the Space Center. There were also small concentrations on the south part of Merritt Island in the Banana River Lagoon and on the southern portion of the Barrier Islands. The rest of the shoreline was interspersed with both bulkhead and seawall types and hardened slope and riprap types. A large concentration of bulkhead and seawall was found on the west shore of Merritt Island, along Sykes Creek, in Cocoa Beach, and much of the west coast of the central Barrier Island.

Return to **Figure 4-30**.

Figure 4-31: Estimated Economic Value of Some Seagrass Services

Graphic showing the economic value provided by seagrass adapted from Dewsbury et. al. 2016. Seagrass provide direct grazing by turtles, manatees, fish, and snails has an unknown economic value. It is also nursery grounds for fish and crabs benefit coral reefs commercial fisheries and recreation for a \$4,600 per acre per year economic value. Additionally, it sequesters carbon which reduces carbon dioxide for a \$162 per acre per year economic value. It also reduces wave energy which leads to sediment stability and improved water quality for an unknown economic benefit. Finally, it cycles and sequesters nutrients for an economic value of \$7,695 per acre per year. Seagrass provides a total economic benefit of \$12,457 per acre per year. In 2007 there were 72,400 acres providing a total benefit of more than \$902,000,000.

Return to **Figure 4-31**.

Figure 4-33: Completed Projects in North Brevard County

Map of North Brevard County showing locations of 24 completed projects. County Line Road Bioreactor is located at the north end on the west shore of the Indian River Lagoon. One mile south of that is Johns Road biosorption activated media. Three miles south is Burkholm Road biosorption activated media. A half mile south of that is Carter Road biosorption activated media. One mile south of that is Wiley Avenue biosorption activated media. A half mile south of that is Mims muck removal. About three miles south of that is Kennedy Point Park living shoreline. A half mile south and west of that is Coleman Pond managed aquatic plant system. Two miles south of that is South Street baffle box. One mile south of that is St. Theresa baffle

box. A half mile south of that is the La Paloma baffle box. One mile south of that is the Nicol Park living shoreline. About five miles south of that is the Broadway Pond biosorption activated media. Six miles south of that is the Cocoa floating wetlands. Two miles south of that is the Church Street baffle box. About a quarter mile south of that is the St. Marks living shoreline. Two miles south of that is the Breeze Swept septic removal. In the southern part of Merritt Island is the Island Pointe and Hehir living shorelines with the Merritt Island Redevelopment Agency Septic Removal Phase 1 project about a half mile further south. In the southern part of the barrier island is the Central Boulevard baffle box. About four miles south of that is the Bettinger oyster reef. About a mile south of that is the Cocoa Beach Water Reclamation Facility Upgrade, Cocoa Beach Country Club living shoreline, and Cocoa Beach muck dredging Phase III.

Return to **Figure 4-33**.

Figure 4-34: Completed Projects in South Brevard County

Map of south Brevard County showing locations of 23 completed projects. Near the top of the map is the Rotary Park living shoreline and Basin 1298 bioreactor on the western shore of the lagoon. Four miles south is the Cliff Creek baffle box. Five miles south of that is the Lagoon House living shoreline. One mile south of that is the Bayfront stormwater project and Turkey Creek muck removal. One mile south of that is the Riverview Senior Resort oyster bar. Six miles south of that is the Fisherman's Landing living shoreline. Three miles south and west of that is the Fleming Grant biosorption activated media. Near the top of the map, at the southern end of Merritt Island, is the Sands living shoreline. Near the top of the map on the barrier island is the Basin 1304 bioreactor. About one mile south of that is the Gitlin oyster bar. About mile south of that is the Marina Isles oyster bar. About a half mile south of that is the Bomalaski and Dragon Point oyster bars and the Gleason Park reuse upgrade. About three miles south of that is the Basin 5 dry retention followed by the Riverside Drive oyster bars 1–12 along about 1.5 miles. About 4 miles south of that is the Coconut Point oyster bar. A half mile south of that is the Hog Point oyster bar. Three miles south of that is the Maritime Hammock oyster bar. Four miles south of that is the Long Point package plant upgrade.

Return to **Figure 4-34**.

Figure 4-36. Turbidity Levels Before, During, and After Turkey Creek Muck Removal

A line graph showing the turbidity improvements in Turkey Creek after dredging. The pre-project period from July 2009 through January 2016 had an average turbidity of 3.14 Nephelometric Turbidity Units. Muck removal occurred from January 2016 through March 2019 and had an average turbidity of 3.11 Nephelometric Turbidity Units. In the post-project period of March 2019 through January 2020, the average turbidity was 1.93 Nephelometric Turbidity Units.

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Figure 4-37. Distribution of Oyster Sizes, Age, and Average Number Per Unit

A bar chart showing the distribution of oyster sizes, as of most recent monitoring, for oyster sites located in the Banana River Lagoon, North Indian River Lagoon, and Central Indian River lagoon. At each site, there are two bars for the number of oysters at the start of the bar creation

and the number at the time of sampling. The number of settlers, subadults, adults, and large adults are shown. The following table summarizes the values shown in the bar graph.

Location	Oyster Age (Years)	Settler	Subadult	Adult	Large Adult
Bettinger	0.00	0.0000	2.4000	22.6000	0.0000
Bettinger	1.50	0.0000	0.0000	11.2000	4.4000
Gitlin	0.00	1.0000	11.8750	22.8750	1.2500
Gitlin	1.50	0.0000	0.0000	5.3750	1.3750
Marina Isles	0.00	0.0000	3.3333	23.1110	1.1111
Marina Isles	0.75	2.7778	17.7780	23.6670	1.7778
Bomalaski	0.08	26.8000	6.0000	16.8000	0.4000
Bomalaski	2.00	6.0000	11.6000	19.2000	1.8000
Ahmed/Niland	0.00	0.0000	0.4286	23.5000	1.0714
Ahmed/Niland	0.25	5.0714	5.5714	20.1430	1.5714
MacNiell/Pitner	0.00	0.0000	0.0000	0.0000	0.0000
MacNiell/Pitner	0.25	7.6154	6.7692	0.3077	0.0000
Coconut Point	0.00	0.0000	0.1000	22.2000	2.7000
Coconut Point	0.50	22.0000	15.7000	4.1000	0.4000
Hog Point	0.00	0.0000	0.0000	21.6000	3.4000
Hog Point	0.50	19.4000	23.2000	6.8000	0.6000
Maritime Hammock	0.00	0.0000	0.8000	22.6000	1.6000
Maritime Hammock	0.50	26.0000	15.6000	7.6000	0.8000
Riverview Senior	0.00	0.4000	3.0667	21.8000	0.1333
Riverview Senior	2.00	36.5000	6.6667	5.7500	0.1667

Return to **Figure 4-37**.

Figure 4-35. Countywide Groundwater Nutrient Concentrations for TN (top) and TP (bottom)

Bar graphs showing the total nitrogen (TN) and total phosphorus (TP) concentrations in groundwater for four areas: natural or undeveloped, septic system communities, sewer communities, and reclaimed water communities. The following table summarizes the values shown in the bar graphs.

Area	TN Concentration (mg/L)	TP Concentration (mg/L)
Natural, Undeveloped Area	0.379	0.081
Septic Communities	5.6	0.701
Sewer Communities	1.918	0.159
Reclaimed Water Communities	6.046	0.206

Return to **Figure 4-35**.

Figure 5-1: Evolution of Project Funding Allocations

Series of pie charts showing the percent distribution of funding from the original plan to each of the plan updates in 2017, 2018, 2019, 2020, and 2021. Public education makes up about 0% of the total funding in all years. Wastewater facility upgrades for reclaimed water were 3% of the costs in the original plan and 2017 Supplement, 4% in the 2018 Update, 7% in the 2019 Update, and 6% in the 2020 2021 Updates. Rapid infiltration basins/sprayfield upgrades were added in the 2019 Update as 1% of the cost and 2% in the 2020 and 2021 Updates. Package plant connections were added in the 2021 Update and represent 1% of the costs. Sewer laterals were added in the 2019 Update and represent about 0% of the cost. Septic system removal was 14%

of the cost in the original plan and 2017 Supplement, 13% in the 2018 Update, 26% in the 2019 Update, and 30% in the 2020 and 2021 Updates. Septic system upgrades were 7% of the cost in the original plan and 2017 Supplement, 6% in the 2018 and 2019 Updates, and 7% in the 2020 and 2021 Updates. Stormwater projects were 4% of the costs in the original plan and 2017 and 2018 Updates, 11% in the 2019 Update, and 12% in the 2020 and 2021 Updates. Muck removal was 66% of the cost in the original plan and 2017 Supplement, 58% in the 2018 Update, 30% in the 2019 Update, 27% in the 2020 Update, and 26% in the 2021 Update. Treatment of interstitial water was added in the 2019 Update at 13% of the costs, 12% in the 2020 Update, and 11% in the 2021 Update. Oyster bars and living shorelines were 3% of the costs in the original plan through the 2019 Update, 2% in the 2020 Update, and 3% in the 2021 Update. Project monitoring was 3% of the costs in the original plan through the 2019 Update, and 2% in the 2020 and 2021 Updates.

Return to **Figure 5-1**.

Figure C-1: Mean Areal Extent of Seagrass and Mean Length of Transects

A line and bar graph comparing seagrass extent in acres versus the mean transect length in meters. The date range is 1943 and then every other year from 1992 to 2018. In 1942 the seagrass extent was about 75,000 acres. In 1992 the extent was about 65,000 acres. The acreage gradually climbed to a peak of around 80,000 and 79,000 in 2008 and 2010, respectively. The acreage then drastically dropped in 2012 to about 42,000. It slowly increased to about 58,000 in 2016 and then dropped to about 34,000 acres in 2018. The mean transect length followed a similar trend in years starting at about 100 meters in 194 with a peak around 180 meters in 2016 and 2018. It dropped to around 70 meters in 2012 and increased to 100 in 2016. It then dropped to about 60 in 2018. The following table is an estimate of the numbers shown in the graph and does not represent the actual data.

Year	Seagrass extent (acres)	Mean transect length (meters)
1943	75,000	No data
1992	65,000	No data
1994	60,000	100
1996	67,000	120
2000	70,000	140
2004	75,000	130
2006	75,000	130
2008	80,000	180
2010	79,000	180
2012	42,000	70
2014	52,000	80
2016	58,000	100
2018	34,000	60

Return to **Figure C-1**.

Figure C-2: Mean Chlorophyll-a Concentrations

Line graph of mean chlorophyll a in micrograms per liter showing lines for the Mosquito Lagoon (ML), Banana River Lagoon (BRL), North Indian River Lagoon (NIRL), North Central Indian River Lagoon (NCIRL), Sebastian (Seb), and South Central Indian River Lagoon (SCIRL). The time span is yearly from 1997 to 2018. The values for each area overlap greatly making it

difficult to discern individual values, only a range of values. 1997 had values ranging from 0 to 10 with no discernable peak. 1998 ranged from 0 to 20 with the highest being NCIRL. 1999 ranged mainly from 0 to 15 with one peak in Seb around 40. 2000 ranged from 0 to 30 with the highest in SCIRL. 2001 ranged from 0 to 55 with the highest in NCIRL. 2002 ranged from 0 to 50 with the highest in NIRL. 2003 and 2004 ranged from 0 to 25 with no discernable peak areas. 2005 ranged from 0 to 50 with the highest in NIRL. 2006 ranged from 0 to 20 with the highest in NIRL. 2007 ranged from 0 to 20 with the highest in Seb. 2008 ranged from 0 to 25 with the highest in NCIRL. 2009 ranged from 0 to 30 with no discernable peak. 2010 ranged from 0 to 50 with the highest in NCIRL. 2011 ranged from 0 to 80 with the highest in NIRL. 2012 ranged from 0 to 140 with the highest in ML. 2013 ranged from 0 to 45 with the highest in NIRL and ML. 2014 ranged from 0 to 40 with the highest in NIRL. 2015 ranged from 0 to 30 with no discernable peak. 2016 ranged from 0 to 130 with the highest in BRL. 2017 ranged from 0 to 40 with no discernable peak. 2018 ranged from 0 to 100 with the highest in BRL.

Return to **Figure C-2**.



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

New Business - Community Services Group

J.2.

2/9/2021

Subject:

Amendment #10 to Management Lease Agreement #4263 between Brevard County Environmentally Endangered Lands (EEL) Program and the State of Florida and Partial Release from Lease Agreement #4263

Fiscal Impact:

Of the 1,446.52 +/- acres Amendment #10 will add, 331.49 +/- acres are currently in actively managed areas and 1,114.03 +/- acres are in areas that are currently not actively managed because these small parcels are scattered among privately owned parcels. Active management of the 1,114.03 +/- acres is delayed until some future point in time if land purchases resume and connectivity is created among parcels.

Dept/Office:

Parks and Recreation Department

Requested Action:

It is requested that the Board of County Commissioners approve and authorized the Chair to execute Amendment #10 to Board of Trustees of the Internal Improvement Trust Fund of the State of Florida Lease Agreement #4263 for the addition and removal of parcels that have been acquired jointly between the County (EEL Program) and the State, and authorize the Chair to sign related documents upon County Attorney's Office and Risk Management approval.

Summary Explanation and Background:

On January 23, 1992, the County Commission authorized the submittal of three Conservation and Recreation Lands Program (CARL) proposals to the State and pledged a 50% match in acquisition funding and a commitment of management responsibility for the lands acquired. On May 24, 1999, the County Commission approved the Multi-Party Acquisition Agreement between Brevard County and the State of Florida for the acquisition lands within the CARL project areas.

On April 25, 2000 the Board authorized a management lease agreement with the State of Florida for properties within the Florida Forever Project areas. The Lease encompassed 1,382 +/- acres. This Lease Agreement #4263 serves as the one management lease for all properties acquired in this project area and the County accepted management responsibility of all the properties added to this Lease, at the time they were proposed as part of the Florida Forever project.

- On August 17, 2001, the Board of County Commissioners approved the 1st Amendment to Lease #4263, that added 44 +/- acres.
- On April 2, 2002, the Board of County Commissioners approved the 2nd Amendment to Lease #4263, that added 653 +/- acres.
- Due to a clerical error at the State level, Amendment 3 was prepared as Amendment 4.
- On May 10, 2005, the Board of County Commissioners approved the 4th and 5th Amendments to

Lease #4263, that added a total of 251 +/- acres.

- On January 10, 2006, the Board of County Commissioners approved the 6th, 7th and 8th Amendments to Lease #4263, that added a total of 2,473 +/- acres.
- On May 16, 2006, the Board of County Commissioners approved the 9th Amendment to Lease #4263, that added 102 +/- acres.

In 2010 the State began the preparation of Amendment #10, but due to State administration and significant State staffing changes, the amendment was never prepared by the State and submitted to the County for ratification. Several inquiries were made by County staff regarding the status of Amendment #10 but it was not received for staff review until 2017. County staff review identified some discrepancies which prompted the State to audit their leases for accuracy. The current amendment was provided by the State and includes the corrections for the discrepancies.

Attached is Amendment #10 to Lease #4263, that will add a total of 1,446 +/- acres. This amendment includes all the remaining lands acquired under the EEL program that need to be amended into Lease #4263. 331 +/- acres of this lease amendment include lands that the County is currently managing. 1114 +/- acres of the amendment are within the Grant / Valkaria mega parcel area which currently has no active management occurring due to the lack of continuity of the conservation parcels. All the lands included in this amendment were acquired between 2007 and 2011.

The Partial Release from Lease #4263 will remove 11.99 acres (7 parcels) that were incorrectly added to Lease #4263 during previous amendments. The lands being removed were to have been included in a different management lease with the Florida Fish and Wildlife Conservation Commission (FWCC) who manages lands that are directly adjacent to lands managed under Lease #4263 by the County. Approval of the Partial Release will remove the parcels from the County's lease for subsequent addition to FWCC's lease.

Clerk to the Board Instructions:

Please return executed Amendment #10 and Partial Release of Lease #4263 to Brevard County Environmentally Endangered Lands (EEL) Program

This instrument prepared by:
Christopher Crenshaw
Department of Environmental Protection
Bureau of Public Administration
Division of State Lands
3900 Commonwealth Blvd. MS 130
Tallahassee, Florida 32399-3000
AID# 41940

ATL1 [1445.52 +/- acres]

**BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE OF FLORIDA**

AMENDMENT NUMBER 10 TO LEASE NUMBER 4263

THIS LEASE AMENDMENT is entered into this ____ day of _____, 20____, by and between the **BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA**, hereinafter referred to as "LESSOR" and **BREVARD COUNTY, FLORIDA**, a political subdivision of the State of Florida, hereinafter referred to as "LESSEE";

WITNESSETH:

WHEREAS, LESSOR, by virtue of Section 253.03, Florida Statutes, holds title to certain lands and property for the use and benefit of the State of Florida; and

WHEREAS, on June 27, 2001, LESSOR and LESSEE entered into Lease Number 4263 (the "lease"); and

WHEREAS, LESSOR and LESSEE desire to amend the lease to add land to the leased premises.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties hereto agree as follows:

1. The legal description of the leased premises set forth in Exhibit "A" of Lease Number 4263 is hereby amended to include the real property described in Exhibit "A" attached hereto and by reference made a part hereof.
2. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of Lease Number 4263, except as amended, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE as of the date of this amendment.
3. It is understood and agreed by LESSOR and LESSEE that this Amendment Number 10 to Lease Number 4263 is hereby binding upon the parties hereto and their successors and assigns.

IN WITNESS WHEREOF, the parties have caused this lease amendment to be executed on the day and year first above written.

WITNESSES:

Original Signature

Print/Type Name of Witness

Original Signature

Print/Type Name of Witness

**BOARD OF TRUSTEES OF THE INTERNAL
IMPROVEMENT TRUST FUND OF THE STATE
OF FLORIDA**

(SEAL)

BY: _____

Brad Richardson, Chief, Bureau of Public Land Administration,
Division of State Lands, State of Florida Department of
Environmental Protection, as agent for and on behalf of the
Board of Trustees of the Internal Improvement Trust Fund
of the State of Florida

"LESSOR"

**STATE OF FLORIDA
COUNTY OF LEON**

The foregoing instrument was acknowledged before me by means of ___ physical presence or ___ online notarization this _____ day of _____, 20____, by Brad Richardson, Chief, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. He is personally known to me.

APPROVED SUBJECT TO PROPER EXECUTION:


DEP Attorney

07-20-2020

Date

Notary Public, State of Florida

Printed, Typed or Stamped Name

My Commission Expires: _____

Commission/Serial No. _____

WITNESSES:

BREVARD COUNTY, FLORIDA,
a political subdivision of the State of Florida
By its Board of County Commissioners

(SEAL)

Original Signature

Print/Type Name of Witness

Original Signature

Print/Type Name of Witness

BY: _____

Rita Pritchett
Chair

“LESSEE”

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of __ physical presence or __ online notarization
this _____ day of _____, 20____, by Rita Pritchett, as Chair of the Board of County Commissioners, for
and on behalf of Brevard County, Florida, a political subdivision of the State of Florida. He is personally known to me or has
produced _____ as identification.

Notary Public, State of Florida

Approved for legal form and content
for Brevard County, Florida

 11/19/20

Printed, Typed or Stamped Name

My Commission Expires: _____

Commission/Serial No. _____

Exhibit A

All of those lands described in Official Records Book 5366, page 3668 of the Public Records of Brevard County, Florida, described as follows:

The South 1/2 of the North 1/2, less the East 630 feet of Lot 13 and that portion of the South 1/2 of the North 1/2 of Lot 12 lying East of Interstate Highway 95 right-of-way, Section 35, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the South 25 feet and the Westerly 50 feet for road, utility and drainage right of way.

AND:

That portion of Block 1 lying West of Interstate Highway 95 right-of-way of Melbourne Manor Section C, per Plat Book 4 at Page 25 of the resubdivision of Lot 10, Section 26, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, at Page 165, and all of Block 2 and that portion of Block 3 lying West of Interstate Highway 95 right-of-way, Melbourne Manor Section C per Plat Book 4 at Page 25 of the resubdivision of Lot 9, Section 26, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4355, page 2805 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 28, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4360, page 2213 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 6, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4390, page 2555 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 30, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4390, page 2670 of the Public Records of Brevard County, Florida, described as follows:

Exhibit "A"

Page 4 of 104

Amendment Number 10 to Lease Number 4263

Revised 05/13

The following described land situated, lying and being in the County of Brevard, and State of Florida, to-wit:

The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 30, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4390, page 2710 of the Public Records of Brevard County, Florida, described as follows:

Parcel 01A

The West 230 feet of the North Quarter of Lot 25, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., according to the plat thereof, as recorded in Plat Book 1, Page 165, of the Public Records of Brevard County, Florida, less the North 35 feet and the West 50 feet for road, utility and drainage right of way, and subject to Melbourne Tillman Drainage District Canal 41 right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

Parcel 01B

North Quarter, less the East 230 feet and less the West 230 feet of Lot 25, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the North 35 feet for road, utility and drainage right of way, and less the Melbourne Tillman Drainage District Canal 41 right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4390, page 2714 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 25, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4406, page 422 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 3/4, less the South 800 feet, of Lot 1, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4439, page 772 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 1, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 35 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5411, page 4270 of the Public Records of Brevard County, Florida, described as follows:

That portion of the North 3/4 of Lot 7, less the North 800 feet thereof, lying west of Interstate Highway 95 right-of-way in Section 26, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5734, page 9353 of the Public Records of Brevard County, Florida, described as follows:

Block 12 of Melbourne Manor Section "C", according to the plat thereof, as recorded in Plat Book 4, Page 25, of the resubdivision of Lot 9, Section 26, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

All of those lands described in Official Records Book 5822, page 2204 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 3/4, LESS the North 800 feet of Lot 16, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 4274, page 2934 of the Public Records of Brevard County, Florida, described as follows:

Tract 116:

The East 230 feet of the North 1/4 of Lot 14, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1 at Page 166, Brevard County, Florida, LESS the North 35 feet and the East 25 feet for road, utility and drainage right of way.

AND:

All of those lands described in Official Records Book 4207, page 429 of the Public Records of Brevard County, Florida, described as follows:

Section 29, Tract 114, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 27, Section 29, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

Exhibit "A"

Page 6 of 104

Amendment Number 10 to Lease Number 4263

Revised 05/13

AND:

All of those lands described in Official Records Book 4207, page 432 of the Public Records of Brevard County, Florida, described as follows:

Section 19, Tract 8:

The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 16, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the East 35 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4207, page 435 of the Public Records of Brevard County, Florida, described as follows:

Tract 239:

The West 1/2 of the South 3/4, LESS the North 800 feet of Lot 28, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

AND:

All of those lands described in Official Records Book 4207, page 440 of the Public Records of Brevard County, Florida, described as follows:

Section 20, Tract 253, described as follows:

The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 22, Section 20, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4207, page 443 of the Public Records of Brevard County, Florida, described as follows:

Tract 106:

The East 1/2 of the South 200 feet of the North 3/4 of Lot 3, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

AND:

All of those lands described in Official Records Book 4207, page 446 of the Public Records of Brevard County, Florida, described as follows:

Tract 243:

That portion of the South 1/4 of Lot 6 lying East of U.S. Missile Tracking Station Easement, Section 20, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at Page 166, Brevard County, Florida, less the South 35 feet and the East 25 feet for road, utility and drainage right of way.

AND:

Tract 244:

That portion of the South 200 feet of the North 3/4 of Lot 6 lying East of U.S. Missile Tracking Station Easement, Section 20, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Exhibit "A"

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Amendment Number 10 to Lease Number 4263

Revised 05/13

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4207, page 449 of the Public Records of Brevard County, Florida, described as follows:

Section 19, Tract 215:

The East 1/2 of the South 3/4, less the North 800 feet, of Lot 12, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4208, page 2333 of the Public Records of Brevard County, Florida, described as follows:

Section 19, Tract 251, described as follows:

The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 12, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4208, page 2418 of the Public Records of Brevard County, Florida, described as follows:

Section 20, Tract 257, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 27, Section 20, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4208, page 2428 of the Public Records of Brevard County, Florida, described as follows:

Section 20, Tract 133, described as follows:

The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 19, Section 20, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4218, page 1179 of the Public Records of Brevard County, Florida, described as follows:

Section 19, Tract 40, described as follows:

The North 1/4, LESS the East 230 feet and LESS the West 230 feet of Lot 16, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the North 35 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4218, page 1182 of the Public Records of Brevard County, Florida, described as follows:

Tract 212:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 24, Section 29, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the West 35 feet for road, utility and drainage right of way.

AND:

All of those lands described in Official Records Book 4253, page 3130 of the Public Records of Brevard County, Florida, described as follows:

Tract 299:

The South 1/4, LESS the East 230 feet and LESS the West 230 feet of Lot 7, Section 20, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the South 35 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4259, page 3005 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 12, Section 20, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., according to the plat thereof, as recorded in Plat Book 1 at Page 166, of the Public Records of Brevard County, Florida, LESS the East 25 feet for road, utility and drainage right of way.

AND:

All of those lands described in Official Records Book 4363, page 3530 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the South 1/4 of Lot 3, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the South 35 feet and the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4390, page 3961 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the South 1/4 of Lot 18, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1, at page 166, Brevard County, Florida, less the South 35 feet and the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4403, page 3544 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 29, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1, at Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5766, page 4651 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 20, in Section 20, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5089, page 1325 of the Public Records of Brevard County, Florida, described as follows:

Tract 4:

The South 1/2 of the North 1/2 less the East 600 feet of Lot 32, and that portion of the South 1/2 of the North 1/2 of Lot 31 lying East of Interstate Highway 95 right-of-way, Section 22, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the North 25 feet and the Westerly 50 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5202, page 3154 of the Public Records of Brevard County, Florida, described as follows:

Tract 24:

That portion of the South 250 feet of the North 450 feet of Lot 16 lying East of Interstate Highway 95 right-of-way, Section 22, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 35 feet for road, utility and drainage right of way.

AND:

Tract 25:

That portion of Lot 16, less the North 450 feet, lying East of Interstate Highway 95 right-of-way, Section 22, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 35 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5238, page 2445 of the Public Records of Brevard County, Florida, described as follows:

Tract 8:

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The East 1/2 of the North 200 feet of the South 1/2 of Lot 32, Section 22, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1 at Page 165, Brevard County, Florida, less the East 35 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5239, page 3271 of the Public Records of Brevard County, Florida, described as follows:

That portion of the West 1/2 of the South 1/2, less the North 400 feet, of Lot 32 and that portion of the South 1/2, less the North 400 feet, of Lot 31 lying East of Interstate Highway 95 right of way, Section 22, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the Westerly 50 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

A portion of those lands described in Official Records Book 5253, page 988 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 400 feet of the South 1/2 of Lot 32, and that portion of the South 200 feet of the North 400 feet of the South 1/2 of Lot 31 lying East of Interstate Highway 95 right-of-way, Section 22, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the Westerly 50 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5364, page 4000 of the Public Records of Brevard County, Florida, described as follows:

That portion of the North 200 feet of the South 400 feet of Lot 17 lying East of Interstate Highway 95 right-of-way, Section 22, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 35 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

A portion of those lands described in Official Records Book 5380, page 533 of the Public Records of Brevard County, Florida, described as follows:

Tract ____: Part of Lot 24, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida, more particularly described as follows: Beginning at the Southwest corner of Lot 24, running 209 feet East along the Southern line of said Lot 24; thence North 209 feet; thence West 209 feet; thence South 209 feet along the Western line of said Lot 24 to the place of beginning.

AND:

Tract ____: That part of the South 200 feet of the North 400 feet of the South 3/4 of Lot 24, lying West of Interstate Highway 95 right of way, less the West 40 feet, in Section 26, Township 29

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South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 236: That part of the North 1/4 of Lot 24, lying West of Interstate Highway 95 right of way, less the West 40 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 265: The West 1/2 of the North 200 feet of Lot 8, less the North 25 feet and the West 40 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 245: Block 5, MELBOURNE MANOR SECTION "C", a subdivision of Lot 9, Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 25, Public Records of Brevard County, Florida.

AND:

Tract 65: The East 230 feet of the South 1/4 of Lot 18, less the South 35 feet and the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 130: The West 230 feet of the North 1/4 of Lot 30, less the North 35 feet and the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 15: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 17, less the East 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 336: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 373: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 25, less the West 50 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract ____: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 24, less the West 50 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

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AND:

Tract 385: The North 1/4 of Lot 9, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 62: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 15, less the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 150: The West 230 feet of the North 1/4 of Lot 26, less the North 35 feet and the West 25 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 100: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 2, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 235: The West 1/2 of the North 200 feet of the South 3/4 of Lot 28, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 137: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 19, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 189: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 223: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 21, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 226: The East 1/2 of the North 3/4 of Lot 21, less the South 800 feet and the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

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Tract 253: The West 1/2 of the South 3/4 of Lot 12, less the North 800 feet and the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 91: The West 230 feet of the North 1/4 of Lot 15, less the North 35 feet and the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 64: The East 230 feet of the North 1/4 of Lot 15, less the North 35 feet and the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tracts 160 and 161: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 and the East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 4, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 145: The West 1/2 of the North 200 feet of the South 3/4 of Lot 14, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 38: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 14, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 167: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 29, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 291: The South 200 feet of the North 600 feet of the South 3/4 of the West 1/2 of the East 1/2 of the Northwest 1/4 of the Northwest 1/4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract ____: The East 1/2 of the North 200 feet of the South 3/4 of Lot 30, less the East 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 207: The West 1/2 of the South 3/4 of Lot 25, less the North 800 feet and the West 35 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 143: The East 1/2 of the South 3/4 of Lot 26, less the North 800 feet and the East 25 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 209: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 24, less the West 35 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 154: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 187: The East 1/2 of the North 200 feet of the South 3/4 of Lot 9, less the East 25 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 172: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 20, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 34: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 17, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 136: The West 1/2 of the North 3/4 of Lot 19, less the South 800 feet and the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract ____: The South 1/4 of Lot 20, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 77: The North 1/4 of Lot 31, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 169: The East 230 feet of the South 1/4 of Lot 20, less the South 35 feet and the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 100: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 2, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 148: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 14, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 116: The East 230 feet of the North 1/4 of Lot 14, less the North 35 feet and the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 60: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 15, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 163: The East 1/2 of the South 3/4 of Lot 13, less the North 800 feet and the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 161: The East 1/2 of the North 200 feet of the South 3/4 of Lot 13, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 197: The East 1/2 of the South 200 feet of the North 400 feet of Lot 22, less the East 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 198: The East 1/2 of the South 200 feet of the North 600 feet of Lot 22, less the East 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 71: Block 11 in Lot 19 of Melbourne Manor Section F, a subdivision of Lots 18, 19 and 20, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 28, Public Records of Brevard County, Florida.

AND:

Tract 87: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 18, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A7: The East 1/2 of the North 1/2 of the South 1/2 of Lot 18 and the North 1/2 of the South 1/2 of Lot 17, less the East 600 feet and the West 200 feet and the North 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 117: The East 230 feet of the South 1/4 of Lot 19, less the South 35 feet and the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 159: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 4, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 203: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 4, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 183: The West 1/2 of the South 3/4 of Lot 13, less the North 800 feet and the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 22: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 32, less the East 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 124: The West 1/2 of the North 3/4 of Lot 21, less the South 800 feet and the West 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 116: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 27, less the West 25 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 102: The West 1/2 of the South 3/4 of Lot 13, less the North 800 feet and the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 59: The East 1/2 of the South 3/4 of Lot 14, less the North 800 feet and the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 353: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 9, less the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 82: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of the West 1/2 of the Northeast 1/4 of the Northeast 1/4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 83: The West 1/2 of the South 3/4 of the West 1/2 of the Northeast 1/4 of the Northeast 1/4, less the North 800 feet and the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 184: The West 1/2 of the North 3/4 of Lot 4, less the South 800 feet and the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 186: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 150: The West 230 feet of the South 1/4 of Lot 3, less the West 25 feet and the South 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND

COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 151: The East 230 feet of the South 1/4 of Lot 4, less the East 25 feet and the South 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 201: The West 230 feet of the South 1/4 of Lot 4, less the West 25 feet and the South 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 202: The East 230 feet of the South 1/4 of Lot 5, less the East 25 feet and the South 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 226: The South 1/4 of Lot 5, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 280: The East 230 feet of the South 1/4 of Lot 8, less the South 35 feet and the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 161: The East 230 feet of the North 1/4 of Lot 29, less the East 25 feet and the North 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 206: The East 230 feet of the North 1/4 of Lot 28, less the North 35 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 207: The North 1/4 of Lot 28, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 359: The East 230 feet of the North 1/4 of Lot 25, less the North 35 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND

COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 376: The West 1/2 of the North 200 feet of the South 3/4 of Lot 9, less the West 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND

COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 377: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 9, less the West 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 378: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 9, less the West 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 24: The East 230 feet of the North 1/4 of Lot 32, less the East 35 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract A11: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 1: The East 230 feet of the South 1/4 of Lot 1, less the South 35 feet and the East 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 49: The South 1/4 of Lot 1, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 109: Blocks 3 and 4, in Lot 20, Melbourne Manor Section F, a subdivision of Lots 18, 19 and 20, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 28, Public Records of Brevard County, Florida.

AND:

Tract 11: The East 1/2 of the North 200 feet of the South 3/4 of Lot 16, less the East 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

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Revised 05/13

AND:

Tract 12: The East 230 feet of the North 1/4 of Lot 16, less the North 35 feet and the East 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 13: The East 230 feet of the South 1/4 of Lot 17, less the South 35 feet and the East 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 37: The South 1/4 of Lot 17, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 40: The North 1/4 of Lot 16, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 244: The South 1/4 of Lot 23, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 395: The West 230 feet of the South 1/4 of Lot 24, less the West 35 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 396: The West 1/2 of the North 220 feet of the South 1/2 of Lot 9, less the West 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 397: The West 1/2 of the South 220 feet of the North 440 feet of the South 1/2 of Lot 9, less the West 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 398: The West 1/2 of the South 1/2 of Lot 9, less the North 440 feet and the West 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

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Revised 05/13

Tract 6: The East 1/2 of the North 3/4 of Lot 1, less the South 800 feet and the East 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 48: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of the East 1/2 of the Southeast 1/4 of the Southeast 1/4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 49: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of the East 1/2 of the Southeast 1/4 of the Southeast 1/4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 50: The West 1/2 of the South 200 feet of the North 3/4 of the East 1/2 of the Southeast 1/4 of the Southeast 1/4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 51: The South 1/4 of the East 1/2 of the Southeast 1/4 of the Southeast 1/4, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 172: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 173: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 175: The West 1/2 of the South 3/4 of Lot 26, less the West 25 feet and the North 800 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 176: The West 1/2 of the North 3/4 of Lot 23, less the West 25 feet and the South 800 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 177: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 23, less the West 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

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Revised 05/13

Tract 190: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 25, less the East 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 191: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 25, less the East 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 192: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 25, less the East 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract A105: The West 250 feet of the East 500 feet of the South 1/4 of Lot 28, less the North 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A108: The West 220 feet of the East 440 feet of the North 1/4 of Lot 21, less the South 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 15: The West 1/2 of the North 200 feet of the South 3/4 of Lot 32, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 193: The East 1/2 of the North 200 feet of the South 3/4 of Lot 25, less the East 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 9: The West 1/2 of the North 200 feet of the South 1/2 of Lot 32 and that part of the North 200 feet of the South 1/2 of Lot 31 lying East of I-95 right of way, less the Westerly 50 feet, in Section 22, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 20: That part of the South 3/4 of Lot 17 lying East of I-95 right of way, less the North 400 feet and the South 400 feet and the East 35 feet, in Section 22, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

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Tract 95: The West 230 feet of the South 1/4 of Lot 20, less the South 35 feet and the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 184: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 27, less the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 116: The East 1/2 of the South 200 feet of the North 3/4 of Lot 21, less the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 137: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 21, less the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 139: The South 1/4 of Lot 21, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 167: The East 230 feet of the South 1/4 of Lot 22, less the East 25 feet and the South 35 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 168: The East 1/2 of the South 200 feet of the North 3/4 of Lot 22, less the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 171: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 22, less the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 188: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 22, less the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 223: The West 1/2 of the South 200 feet of the North 3/4 of Lot 23, less the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 242: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 24, less the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A24: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 25, less the West 35 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 114: The East 230 feet of the North 1/4 of Lot 12, less the North 35 feet and the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 158: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 6, less the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 113: The East 1/2 of the North 200 feet of the South 3/4 of Lot 12, less the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 109: The East 1/2 of the South 3/4 of Lot 12, less the North 800 feet and the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 141: The West 230 feet of the North 1/4 of Lot 12, less the North 35 feet and the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 149: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 5, less the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 197: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 11, less the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 70: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 14, less the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 74: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 13, less the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 75: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 13, less the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 32: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 17, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 34: The West 1/2 of the South 200 feet of the North 3/4 of Lot 17, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 64: The East 1/2 of the South 200 feet of the North 3/4 of Lot 18, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 133: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 19, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 136: The West 230 feet of the South 1/4 of Lot 19, less the West 25 feet and the South 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 185: The West 1/2 of the South 200 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 230: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 6, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 204: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 5, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 259: The East 1/2 of the North 3/4 of Lot 7, less the South 800 feet and the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 208: The East 1/2 of the South 3/4 of Lot 12, less the North 800 feet and the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 210: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 12, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 262: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 10, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 263: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 10, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 272: The West 1/2 of the South 3/4 of Lot 10, less the North 800 feet and the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 273G: The West 1/2 of the North 3/4 of Lot 7, less the South 800 feet and the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 11: The East 1/2 of the North 200 feet of the South 3/4 of Lot 16, less the East 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 139: The West 1/2 of the North 200 feet of the South 3/4 of Lot 14, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 6: The East 1/2 of the North 3/4 of Lot 1, less the South 800 feet and the East 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 8: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 16, less the East 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 41: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 16, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 45: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 1, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 55: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 2, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 59: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 15, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 87: The West 230 feet of the North 1/4 of Lot 15, less the West 25 feet and the North 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 90: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 15, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 94: The West 1/2 of the North 3/4 of Lot 2, less the South 800 feet and the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 97: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 2, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 101: The East 230 feet of the South 1/4 of Lot 3, less the East 25 feet and the South 35 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 145: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 3, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 152: The East 1/2 of the South 200 feet of the North 3/4 of Lot 4, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 156: The East 1/2 of the North 3/4 of Lot 4, less the South 800 feet and the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 159: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 13, less the East 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 15: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 17, less the East 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 17: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 17, less the East 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 20: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 32, less the East 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 27: The West 1/2 of the North 200 feet of the South 3/4 of Lot 32, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 30: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 32, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 34: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 17, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 36: The West 1/2 of the South 200 feet of the North 3/4 of Lot 17, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 38: The West 230 feet of the South 1/4 of Lot 17, less the West 25 feet and the South 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 72: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 31, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 76: The East 230 feet of the North 1/4 of Lot 31, less the East 25 feet and the North 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 81: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 31, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 112: The East 1/2 of the South 200 feet of the North 3/4 of Lot 19, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 125: The West 1/2 of the North 200 feet of the South 3/4 of Lot 30, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 128: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 30, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 151: The East 1/2 of the South 200 feet of the North 3/4 of Lot 20, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 155: The East 1/2 of the North 3/4 of Lot 20, less the South 800 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 156: The East 1/2 of the South 3/4 of Lot 29, less the North 800 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 158: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 29, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

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Amendment Number 10 to Lease Number 4263

Revised 05/13

Tract 159: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 29, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 170: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 171: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 172: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 173: The West 1/2 of the South 200 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 174: The South 1/4 of Lot 20, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 175: The West 230 feet of the South 1/4 of Lot 20, less the West 25 feet and the South 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 256: The East 1/2 of the North 200 feet of the South 3/4 of Lot 27, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 196: The East 1/2 of the South 200 feet of the North 3/4 of Lot 21, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 197: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 21, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 198: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 21, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 200: The East 1/2 of the North 3/4 of Lot 21, less the South 800 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 201: The East 1/2 of the South 3/4 of Lot 28, less the North 800 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 209: The West 1/2 of the North 200 feet of the South 3/4 of Lot 28, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 215: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 21, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 217: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 21, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 249: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 22, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 250: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 22, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 251: The East 1/2 of the North 3/4 of Lot 22, less the South 800 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 268G: The West 1/2 of the South 200 feet of the North 3/4 of Lot 22, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 269G: The South 1/4 of Lot 22, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 300: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 23, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 301: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 23, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 305G: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 26, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 306G: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 26, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 307G: The East 1/2 of the North 200 feet of the South 3/4 of Lot 26, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 312: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 313: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 315: The West 1/2 of the North 3/4 of Lot 23, less the South 800 feet and the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 348: The East 230 feet of the South 1/4 of Lot 24, less the East 25 feet and the South 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 350: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 24, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 355: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 25, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 372: The South 1/4 of Lot 24, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 229: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 5, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 230: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 5, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 228: The West 1/2 of the North 3/4 of Lot 5, less the West 25 feet and the South 800 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 237G: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 6, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 239G: The East 1/2 of the North 3/4 of Lot 6, less the South 600 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 244G: The East 1/2 of the North 200 feet of the South 3/4 of Lot 11, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 274G: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 11, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 276: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 11, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 280: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 6, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 292: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 10, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 324: The West 1/2 of the North 200 feet of the South 3/4 of Lot 10, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 326: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 10, less the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 329: The West 1/2 of the North 3/4 of Lot 7, less the South 800 feet and the West 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 342: The East 1/2 of the South 3/4 of Lot 9, less the North 800 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 375: The North 1/4 of Lot 9, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 58: The East 1/2 of the North 3/4 of Lot 2, less the South 800 feet and the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 64: The East 230 feet of the North 1/4 of Lot 15, less the East 25 feet and the North 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 108: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 14, less the East 25 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 176: The West 230 feet of the North 1/4 of Lot 13, less the West 25 feet and the North 35 feet, in Section 25, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 16: The East 200 feet of the West 400 feet of the South 1/4 of Lot 17, less the South 40 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 100: The West 1/2 of the North 1/2 of the South 1/2 of Lot 30, less the East 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

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Amendment Number 10 to Lease Number 4263

Revised 05/13

Tract 146: The East 1/2 of the North 200 feet of the South 3/4 of Lot 21, less the East 40 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 149: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 21, less the East 40 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 189: The West 1/2 of the South 3/4 of Lot 21, less the North 800 feet and the West 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 192: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 21, less the West 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 200: The East 1/2 of the North 3/4 of Lot 22, less the North 800 feet and the East 25 feet and the South 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 210: That part of the West 1/2 of the North 200 feet of Lot 22, lying East of Interstate Highway 95 right of way, less the Westerly 50 feet and the North 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 240G: That part of the South 3/4 of Lot 24, lying West of Interstate Highway 95 right of way, less the North 600 feet and the South 208.71 feet and the West 40 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 241G: That part of the South 208.71 feet of Lot 24, lying West of Interstate Highway 95 right of way, less the West 208.71 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 89: The West 1/2 of the South 200 feet of the North 400 feet of Lot 3, less the West 50 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

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AND:

Tract 107: Block 11, Melbourne Manor Section D, a subdivision of Lot 29, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 26, Public Records of Brevard County, Florida.

AND:

Tract 41: Block 11, in Lot 18, Melbourne Manor Section F, a subdivision of Lots 18, 19 and 20, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 28, Public Records of Brevard County, Florida.

AND:

Tract 66: Blocks 3 and 4, in Lot 19, Melbourne Manor Section F, a subdivision of Lots 18, 19 and 20, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 28, Public Records of Brevard County, Florida.

AND:

Tract 69: Block 8, in Lot 19, Melbourne Manor Section F, a subdivision of Lots 18, 19 and 20, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 28, Public Records of Brevard County, Florida.

AND:

Tract 70: Blocks 9 and 10, in Lot 19, Melbourne Manor Section F, a subdivision of Lots 18, 19 and 20, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 28, Public Records of Brevard County, Florida.

AND:

Tract 140: Lots 1, 2, and 10 through 22, Block 1, in Lot 20, Melbourne Manor Section F, a subdivision of Lots 18, 19 and 20, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 28, Public Records of Brevard County, Florida.

AND:

Tract 111: Block 8, in Lot 20, Melbourne Manor Section F, a subdivision of Lots 18, 19 and 20, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 28, Public Records of Brevard County, Florida.

AND:

Tract 235G: All that portion of Melbourne Manor Section A, a subdivision of Lots 25, 26 and 27, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 23, Public Records of Brevard County, Florida, lying West of Interstate Highway 95 right of way less and except Lots 12 and 13, Block 6, in Lot 25 and less and except Lots 15 through 17, Block 7, in Lot 25.

AND:

Tract 231: Block 6, less Lots 5 and 6, in Lot 26, and Block 4, and that portion of Block 5, lying East of Interstate Highway 95 right of way, in Lot 25, Melbourne Manor Section A, a subdivision of Lots 25, 26 and 27, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 23, Public Records of Brevard County, Florida.

AND:

Tract 225: Block 9, except Lots 1 through 4, in Lot 26, Melbourne Manor Section A, a subdivision of Lots 25, 26 and 27, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 23, Public Records of Brevard County, Florida.

AND:

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Revised 05/13

Tract 246G: Block 4, in Lot 9 and that portion of Block 6, lying West of Interstate Highway 95 right of way, in Lot 10, Melbourne Manor Section C, a subdivision of Lots 9 and 10, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 25, Public Records of Brevard County, Florida.

AND:

Tract 247G: Block 9, in Lot 9, and all of Block 7, and that portion of Block 8, lying West of Interstate Highway 95 right of way in Lot 10, Melbourne Manor Section C, a subdivision of Lots 9 and 10, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 25, Public Records of Brevard County, Florida.

AND:

Tract 181: Those portions of Blocks 2 and 3, lying East of Interstate Highway 95 right of way, in Lot 10, Melbourne Manor Section C, a subdivision of Lots 9 and 10, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 25, Public Records of Brevard County, Florida.

AND:

Tract 180: That portion of Block 4, in Lot 10, lying East of Interstate Highway 95 right of way, Melbourne Manor Section C, a subdivision of Lots 9 and 10, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 25, Public Records of Brevard County, Florida.

AND:

Tract 52: All of Block 6, in Lot 2, Melbourne Manor Section B, a subdivision of Lots 1 and 2, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 24, Public Records of Brevard County, Florida.

AND:

Tract 115: Blocks 3 and 4, in Lot 13, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 135: Block 6, in Lot 13, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 73: Blocks 3 and 4, in Lot 14, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 93: Block 6, in Lot 14, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 75: Block 8, in Lot 14, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 76: Blocks 9 and 10, in Lot 14, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 91: Block 12, in Lot 14, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 54: Block 12, in Lot 15, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 8: Block 3, in Lot 16, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 18: Block 5, in Lot 16, Melbourne Manor Section E, a subdivision of Lots 13, 14, 15 and 16, in Section 26, Township 29 South, Range 37 East, according to the map or plat thereof as recorded in Plat Book 4, Page 27, Public Records of Brevard County, Florida.

AND:

Tract 20: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 32, less the East 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 21: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 32, less the East 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 34: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 17, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 70: The East 1/2 of the North 3/4 of Lot 18, less the South 800 feet and the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 75: The East 1/2 of the North 200 feet of the South 3/4 of Lot 31, less the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 82: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 31, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 122: The East 1/2 of the North 3/4 of Lot 19, less the South 800 feet and the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 129: The North 1/4 of Lot 30, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 131: The West 1/2 of the North 200 feet of the South 3/4 of Lot 30, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 135: The West 1/2 of the South 3/4 of Lot 30, less the North 800 feet and the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 187: The West 1/2 of the South 3/4 of Lot 29, less the North 800 feet and the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 229: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 28, less the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 236: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 28, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 278: The East 1/2 of the North 3/4 of Lot 22, less the South 800 feet and the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 279: The East 1/2 of the South 3/4 of Lot 27, less the North 800 feet and the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 317: The East 1/2 of the North 200 feet of the South 3/4 of Lot 10, less the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 347: The West 1/2 of the North 200 feet of the South 3/4 of Lot 10, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 41: The West 1/2 of the North 200 feet of the South 3/4 of Lot 16, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 47: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 1, less the West 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 59: The East 1/2 of the South 3/4 of Lot 15, less the North 800 feet and the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 60: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 15, less the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 63: The East 1/2 of the North 200 feet of the South 3/4 of Lot 15, less the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 92: The North 1/4 of Lot 15, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A2: The West 200 feet of the East 400 feet of the South 1/4 of Lot 17, less the South 35 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A4: The South 1/4 of Lot 17 and the East 1/2 of the South 1/4 of Lot 18, less the East 600 feet and the West 200 feet and the South 35 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A5: The West 200 feet of the East 1/2 of the South 1/4 of Lot 18, less the South 35 feet and the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A6: The West 200 feet of the East 1/2 of the North 1/2 of the South 1/2 of Lot 18, less the North 25 feet and the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A9: The West 200 feet of the East 400 feet of the North 1/2 of the South 1/2 of Lot 17, less the North 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A10: The East 200 feet of the North 1/2 of the South 1/2 of Lot 17, less the North 25 feet and the East 35 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A48: The East 1/2 of the North 200 feet of the South 600 feet of Lot 19, less the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A51: The West 1/2 of the South 200 feet of Lot 19, less the East 25 feet and the South 35 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A53: The West 1/2 of the North 200 feet of the South 600 feet of Lot 19, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A54: The West 1/2 of the North 200 feet of the South 800 feet of Lot 19, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A59: The East 1/2 of the North 200 feet of the South 400 feet of Lot 20, less the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A60: The East 1/2 of the South 200 feet of Lot 20, less the West 25 feet and the South 35 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A65: The West 1/2 of the South 3/4 of Lot 20, less the South 800 feet and the North 25 feet and the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A98: The West 210 feet of the East 450 feet of the South 1/2 of the North 1/2 of Lot 28, less the North 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A97: The South 1/2 of the North 1/2 of Lot 28, less the East 450 feet and the North 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A103: The North 1/2 of the South 1/2 of Lot 28, less the East 600 feet and that portion of the North 1/2 of the South 1/2 of Lot 27 lying East of Interstate Highway 95 right of way, less the West 50 feet and the South 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract A102: The West 200 feet of the East 600 feet of the North 1/2 of the South 1/2 of Lot 28, less the South 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 95: The North 1/2 of the South 1/2, less the East 630 feet of Lot 13 and that portion of the North 1/2 of the South 1/2 of Lot 12 lying East of Interstate Highway 95 right of way, less the North 25 feet and the Westerly 50 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

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Amendment Number 10 to Lease Number 4263

Revised 05/13

AND:

Tract 25: The South 1/4 of Lot 1, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 29: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 2, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 31: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 2, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 34: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 15, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 40: The West 230 feet of the North 1/4 of Lot 15, less the West 25 feet and the North 35 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 46: The West 1/2 of the North 3/4 of Lot 2, less the South 800 feet and the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 48: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 2, less the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 54: The East 1/2 of the South 200 feet of the North 3/4 of Lot 3, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 56: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 3, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

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Amendment Number 10 to Lease Number 4263

Revised 05/13

Tract 58: The East 1/2 of the North 3/4 of Lot 3, less the East 25 feet and the South 800 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 61: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 14, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 63: The East 1/2 of the North 200 feet of the South 3/4 of Lot 14, less the East 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 64: The East 230 feet of the North 1/4 of Lot 14, less the East 25 feet and the North 35 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 67: The West 1/2 of the North 200 feet of the South 3/4 of Lot 14, less the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 70: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 14, less the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 72: The West 1/2 of the North 3/4 of Lot 3, less the West 25 feet and the South 800 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 78: The West 230 feet of the South 1/4 of Lot 3, less the South 35 feet and the West 25 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 88: The North 1/4, less the East 430 feet of Lot 4 and that portion of the North 1/4 of Lot 5 lying East of Interstate Highway 95 right of way, less the North 25 feet and the Westerly 50 feet, in Section 35, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

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Amendment Number 10 to Lease Number 4263

Revised 05/13

Tract 47: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 18, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 55: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 19, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 4: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 17, less the East 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 19: The West 1/2 of the South 3/4 of Lot 32, less the North 800 feet and the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 26: The West 230 feet of the South 1/4 of Lot 17, less the South 35 feet and the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 27: The East 230 feet of the South 1/4 of Lot 18, less the South 35 feet and the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 60: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 30, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 75: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 19, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 76: The West 1/2 of the South 200 feet of the North 3/4 of Lot 19, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 78: The West 230 feet of the South 1/4 of Lot 19, less the South 35 feet and the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 79: The East 230 feet of the South 1/4 of Lot 20, less the South 35 feet and the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 84: The East 1/2 of the North 3/4 of Lot 20, less the South 800 feet and the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 134G: The West 1/2 of the South 3/4 of Lot 28, less the North 800 feet and the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 136G: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 21, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 172: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 22, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 173: The East 1/2 of the North 3/4 of Lot 22, less the South 800 feet and the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 174: The East 1/2 of the South 3/4 of Lot 27, less the North 800 feet and the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 175: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 27, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 119G: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 21, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 120G: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 21, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 226: The East 1/2 of the South 3/4 of Lot 26, less the North 800 feet and the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 237: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 238: The West 1/2 of the South 3/4 of Lot 26, less the North 800 feet and the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 239: The West 1/2 of the North 3/4 of Lot 23, less the South 800 feet and the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 245: The West 230 feet of the South 1/4 of Lot 23, less the West 25 feet and the South 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 291: The West 1/2 of the North 3/4 of Lot 24, less the South 800 feet and the West 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 295: The West 1/2 of the South 200 feet of the North 3/4 of Lot 24, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 110: The East 1/2 of the North 3/4 of Lot 5, less the South 800 feet and the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 109: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 5, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 112G: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 12, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 153: The West 1/2 of the South 200 feet of the North 3/4 of Lot 5, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 154: The South 1/4 of Lot 5, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 159: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 6, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 162: The East 1/2 of the South 3/4 of Lot 11, less the North 800 feet and the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 198: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 11, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 201: The West 1/2 of the North 3/4 of Lot 6, less the South 800 feet and the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 202: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 6, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 203: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 6, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 204: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 6, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 207: The West 230 feet of the South 1/4 of Lot 6, less the West 25 feet and the South 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 248: The West 1/2 of the North 200 feet of the South 3/4 of Lot 10, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 249: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 10, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 256: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 7, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 257: The West 1/2 of the South 200 feet of the North 3/4 of Lot 7, less the West 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 259: The West 230 feet of the South 1/4 of Lot 7, less the West 25 feet and the South 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 261: The East 1/2 of the South 200 feet of the North 3/4 of Lot 8, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 262: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 8, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 263: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 8, less the East 25 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 306: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 8, less the West 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 310: The South 1/4 of Lot 8, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 36, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 37: The South 1/4 of Lot 17, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 66: The East 1/2 of the South 200 feet of the North 3/4 of Lot 18, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 67: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 18, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 72: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 31, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 89: The South 1/4 of Lot 18, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 90: The West 230 feet of the South 1/4 of Lot 18, less the West 25 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 126: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 30, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 127: The East 1/2 of the North 200 feet of the South 3/4 of Lot 30, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 191: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 194: The West 230 feet of the South 1/4 of Lot 20, less the West 25 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 221: The East 230 feet of the South 1/4 of Lot 21, less the East 25 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 243: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 21, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 218: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 12, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 219: The East 1/2 of the North 200 feet of the South 3/4 of Lot 12, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 220: The East 230 feet of the North 1/4 of Lot 12, less the East 25 feet and the North 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 248: The North 1/4 of Lot 12, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 250: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 12, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 258: The West 1/2 of the South 200 feet of the North 3/4 of Lot 5, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 259: The South 1/4 of Lot 5, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 263: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 6, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 270: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 11, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 272: The East 230 feet of the North 1/4 of Lot 11, less the East 25 feet and the North 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 303: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 11, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 316: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 7, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 353: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 10, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard AND:

County, Florida.

Tract 357: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 7, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 362: The West 230 feet of the South 1/4 of Lot 7, less the West 25 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 363: The East 230 feet of the South 1/4 of Lot 8, less the East 25 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 3: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 1, less the East 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 7: The East 1/2 of the South 3/4 of Lot 16, less the North 800 feet and the East 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 9: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 16, less the East 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 11: The East 1/2 of the North 200 feet of the South 3/4 of Lot 16, less the East 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 41: The West 1/2 of the North 200 feet of the South 3/4 of Lot 16, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 47: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 1, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 48: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 1, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 50: The West 1/2 of the South 200 feet of the North 3/4 of Lot 1, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 57: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 2, less the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 62: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 15, less the East 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 92: The North 1/4 of Lot 15, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 94: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 15, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 95: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 15, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 98: The West 1/2 of the North 3/4 of Lot 2, less the South 800 feet and the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 100: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 2, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 103: The South 1/4 of Lot 2, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 111: The East 1/2 of the South 3/4 of Lot 14, less the North 800 feet and the East 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 148: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 14, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 154: The West 1/2 of the South 200 feet of the North 3/4 of Lot 3, less the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 156: The West 230 feet of the South 1/4 of Lot 3, less the South 35 feet and the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 201: The West 1/2 of the South 3/4 of Lot 13, less the North 800 feet and the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 202: The West 1/2 of the North 3/4 of Lot 4, less the South 800 feet and the West 25 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 164: The West 1/2 of the West 1/2 of the North 1/4 of Lot 29, less the North 50 feet and the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 163: The East 1/2 of the West 1/2 of the North 1/4 of Lot 29, less the North 50 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 165: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 29, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 166: The West 1/2 of the North 200 feet of the South 3/4 of Lot 29, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 27: The North 200 feet of the South 3/4 of the West 1/2 of the East 1/2 of the Northeast 1/4 of the Northeast 1/4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 28: The South 200 feet of the North 400 feet of the South 3/4 of the West 1/2 of the East 1/2 of the Northeast 1/4 of the Northeast 1/4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 68: The North 200 feet of the South 600 feet of the North 3/4 of the East 1/2 of the West 1/2 of the Southeast 1/4 of the Northeast 1/4, less the East 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 69: The North 200 feet of the South 800 feet of the North 3/4 of the East 1/2 of the West 1/2 of the Southeast 1/4 of the Northeast 1/4, less the East 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

The West 1/2 of Tract 175: The West 1/2 of the South 1/4 of Lot 20, less the West 230 feet and the South 35 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Exhibit "A"

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Amendment Number 10 to Lease Number 4263

Revised 05/13

Tract 286: The East 230 feet of the North 1/4 of the East 1/2 of the Northwest 1/4 of the Northwest 1/4, together with vacated road right of way to the North, less the East 25 feet and the South 50 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 324: The West 1/2 of the South 200 feet of the North 3/4 of Lot 8, less the West 35 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 182: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 13, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 2: The East 1/2 of the South 200 feet of the North 3/4 of the East 1/2 of the Southeast 1/4 of the Southeast 1/4, less the East 35 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 102: The South 200 feet of the North 3/4 of the West 1/2 of the West 1/2 of the Southeast 1/4 of the Southeast 1/4, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, Brevard County, Florida.

AND:

Tract 147: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 3, less the West 25 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

The West 1/2 of Tract 178: The West 1/2 of the North 1/4 of Lot 13, less the West 230 feet and the North 35 feet, in Section 20, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 184: The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 9, less the East 25 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 131: The East 1/2 of the South 3/4 of Lot 10, less the East 25 feet and the North 800 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 182: The East 1/2 of the North 3/4 of Lot 8, less the South 800 feet and the East 25 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

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Revised 05/13

AND:

Tract 183: The East 1/2 of the South 3/4 of Lot 9, less the North 800 feet and the East 25 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 18: The East 1/2 of the North 3/4 of Lot 17, less the East 35 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 23: The East 1/2 of the North 200 feet of the South 3/4 of Lot 32, less the East 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 26: The West 230 feet of the North 1/4 of Lot 32, less the West 25 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 32: The West 1/2 of the North 3/4 of Lot 17, less the West 25 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 69: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 18, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 70: The East 1/2 of the North 3/4 of Lot 18, less the East 25 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 71: The East 1/2 of the South 3/4 of Lot 31, less the East 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 75: The East 1/2 of the North 200 feet of the South 3/4 of Lot 31, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

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Amendment Number 10 to Lease Number 4263

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Tract 76: The East 230 feet of the North 1/4 of Lot 31, less the North 35 feet and the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 78: The West 230 feet of the North 1/4 of Lot 31, less the West 25 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 82: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 31, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 118: The East 1/2 of the South 200 feet of the North 3/4 of Lot 19, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 125: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 30, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 127: The East 1/2 of the North 200 feet of the South 3/4 of Lot 30, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 138: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 19, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 139: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 19, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 175: The East 1/2 of the South 3/4 of Lot 29, less the East 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 177: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 29, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 184: The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 29, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 187: The West 1/2 of the South 3/4 of Lot 29, less the West 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 188: The West 1/2 of the North 3/4 of Lot 20, less the West 25 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 190: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 381: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 24, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 226: The East 1/2 of the North 3/4 of Lot 21, less the East 25 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 227: The East 1/2 of the South 3/4 of Lot 28, less the East 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 233: The North 1/4 of Lot 28, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 235: The West 1/2 of the North 200 feet of the South 3/4 of Lot 28, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 240: The West 1/2 of the North 3/4 of Lot 21, less the West 25 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 275: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 22, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 283: The East 1/2 of the North 200 feet of the South 3/4 of Lot 27, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 291: The West 1/2 of the South 3/4 of Lot 27, less the West 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 295: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 22, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 327: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 23, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 328: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 23, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 339: The West 1/2 of the North 200 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 341: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 26, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 344: The West 1/2 of the North 3/4 of Lot 23, less the West 25 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 347: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 23, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 391: The West 1/2 of the North 200 feet of the South 3/4 of Lot 25, less the West 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 396: The West 1/2 of the North 3/4 of Lot 24, less the West 35 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 402: The West 230 feet of the South 1/4 of Lot 24, less the West 35 feet and the South 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 410: The West 1/2 of the North 3/4 of Lot 8, less the South 800 feet and the West 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 358: The West 1/2 of the North 3/4 of Lot 7, less the South 800 feet and the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 218: The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 12, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 249: The West 1/2 of the North 200 feet of the South 3/4 of Lot 12, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 253: The West 1/2 of the South 3/4 of Lot 12, less the West 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 267: The East 1/2 of the South 3/4 of Lot 11, less the East 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 301: The West 1/2 of the North 200 feet of the South 3/4 of Lot 11, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 305: The West 1/2 of the South 3/4 of Lot 11, less the West 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 324: The East 230 feet of the North 1/4 of Lot 10, less the East 25 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 351: The West 230 feet of the North 1/4 of Lot 10, less the West 25 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 356: The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 10, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 373: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 9, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 376: The East 230 feet of the North 1/4 of Lot 9, less the North 35 feet and the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 403: The West 230 feet of the North 1/4 of Lot 9, less the North 35 feet and the West 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 405: The West 1/2 of the North 200 feet of the South 3/4 of Lot 9, less the West 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 3: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 1, less the East 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 39: The West 230 feet of the North 1/4 of Lot 16, less the West 25 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 45: The West 1/2 of the South 3/4 of Lot 16, less the North 800 feet and the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 59: The East 1/2 of the South 3/4 of Lot 15, less the East 25 feet and the North 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 115: The East 1/2 of the North 200 feet of the of the South 3/4 of Lot 14, less the East 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 144: The North 1/4 of Lot 14, less the East 230 feet and the West 230 feet and the North 35 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 162: The East 1/2 of the North 3/4 of Lot 4, less the East 25 feet and the South 800 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 199: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 13, less the West 25 feet, in Section 30, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 4: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 17, less the East 35 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 19: The West 1/2 of the South 3/4 of Lot 32, less the West 25 feet and the North 800 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 25: The South 1/4 of Lot 17, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 32: The East 1/2 of the North 3/4 of Lot 18, less the East 25 feet and the South 800 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 35: The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 31, less the East 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 49: The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 18, less the West 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 57: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 19, less the East 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 78: The West 230 feet of the South 1/4 of Lot 19, less the West 25 feet and the South 35 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 100: The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 103: The South 1/4 of Lot 20, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 131: The East 230 feet of the South 1/4 of Lot 22, less the East 25 feet and the South 35 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 147: The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 27, less the West 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 160: The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 23, less the East 25 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 208: The West 230 feet of the South 1/4 of Lot 24, less the West 35 feet and the South 35 feet, in Section 31, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 45: The South 1/4 of Lot 19, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 24: The West 1/2 of the South 200 feet of the North 3/4 of Lot 18, less the West 25 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 25: The South 1/4 of Lot 18, less the East 230 feet and the West 230 feet and the South 35 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 31: The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 19, less the East 25 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 131: The East 1/2 of the South 3/4 of Lot 26, less the East 25 feet and the North 800 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 145: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 23, less the West 25 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 152: The East 1/2 of the North 220 feet of the South 440 feet of the North 1/2 of Lot 24, less the East 25 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 207: The East 1/2 of the South 3/4 of Lot 10, less the North 800 feet and the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 71: The West 1/2 of the South 3/4 of Lot 14, less the North 800 feet the West 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 72: The East 1/2 of the South 3/4 of Lot 13, less the North 800 feet the East 25 feet, in Section 23, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 182: The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 20, less the West 25 feet, in Section 24, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 162: The East 200 feet of the West 400 feet of the North 1/2 of the South 1/2 of Lot 5, less the South 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 163: The West 200 feet of the North 1/2 of the South 1/2 of Lot 5, less the South 25 feet, in Section 26, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 263: The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 6, less the East 25 feet, in Section 27, Township 29 South, Range 37 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

Tract 180: The East 230 feet of the North 1/4 of Lot 29, less the East 25 feet and the South 50 feet, in Section 19, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 178: The East 1/2 of the South 200 feet of the North 3/4 of Lot 8, less the East 25 feet, in Section 29, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

Tract 19: The East 1/2 of the North 3/4 of Lot 18, less the South 800 feet and the East 25 feet, in Section 32, Township 29 South, Range 38 East, FLORIDA INDIAN RIVER LAND COMPANY, according to the map or plat thereof as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

AND:

All of those lands described in Official Records Book 4358, page 2450 of the Public Records of Brevard County, Florida, described as follows:

An ell-shaped parcel of land lying in Section 7, Township 29 South, Range 38 East, Brevard County, Florida, more particularly described as:

From the Northwest corner of said Section 7, proceed 52.01 feet bearing S 00° 36' 31" W along the Western boundary of said Section to a point on the Southern right-of-way boundary of Jordan Boulevard, being the Point of Beginning; thence continue Southerly 2596.63 feet, bearing S 00° 36' 31" W along said Western boundary of Section 7 to the Western quarter corner of said Section 7; thence continue Southerly 865.65 feet bearing S 00° 36' 32" W along this Western boundary of said Section 7 to a point on the Western section line of said Section 7, which point lies 1782.15 feet Northerly by right angle measure from the Southern boundary of said Section 7; thence run 2549.96 feet bearing S 89° 28' 54" E along a line parallel to said Southern boundary of said Section 7 and lying 1782.14 feet Northerly therefrom to the point of intersection of this course with the North/South quarter line of said Section 7; thence continue 873.69 feet bearing S 89° 29' 18" E along this line parallel to said Southern boundary and 1782.14 feet distant therefrom by right angle measure; thence run 838.91 feet bearing N 00° 04'

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54" W along a line parallel with the Eastern boundary of said Section 7, to the point of intersection of this course with the East/West quarter line which point lies 1675.19 feet Westerly from measured along said East/West quarter line from the Eastern quarter point of said Section 7; thence run 663.09 feet bearing N 00° 00' 52" E along a line parallel to the Eastern boundary of said Section 7; thence run 924 feet bearing N 88° 13' 40" W along a line parallel with the Northern boundary of said Section 7 to a point; thence run 1886.19 feet bearing N 00° 00' 52" E along a line parallel with the Eastern boundary of said section to a point lying on the Southern boundary of Jordan Boulevard; thence run 2463.80 feet bearing N 88° 13' 40" W along the Southern boundary of Jordan Boulevard to the Point of Beginning.

AND:

An odd shaped parcel of land lying in Sections 5 and 6, Township 29 South, Range 38 East, Brevard County, Florida, more particularly described as:

From the Southwest corner of Section 6, Township 29 South, Range 38 East, in Brevard County, Florida, proceed 52.01 feet Northerly bearing N 00° 32' 42" E along its Western boundary of said Section 6 to the Point of Beginning; thence continue 534.61 feet bearing N 00° 32' 42" E along the Western boundary of said Section 6 to a point lying 2061.54 feet Southerly on said section line from the Western quarter corner of said Section 6; thence proceed 285.0 feet bearing S 89° 02' 05" E along a line parallel with the East/West quarter line of said Section 6 and 2061.50 feet distant by right angle measure therefrom; thence proceed 600 feet bearing N 00° 32' 42" E along a line parallel to the Western boundary of Section 6; thence proceed 4568.44 feet bearing S 89° 02' 05" E along a line parallel with the East/West quarter line of said Section 6 and 1461.5 feet distant by right angle measure therefrom to its point of intersection with the Western right-of-way boundary of Florida East Coast Railway Co; thence proceed 91.19 feet bearing S 22° 54' 19" E along said Western right-of-way boundary of Florida East Coast Railway Co. to a point of curve; thence proceed Southeasterly 690.46 feet along said Western right-of-way boundary being the arc of a curve, concave to the Northeast, having a chord length of 690.02 feet and radius of 5573.23 feet; thence run 403.85 feet bearing S 58° 03' 39" W to a point on the Northerly boundary of Jordan Boulevard; thence run 424.47 feet bearing N 37° 05' 24" W along said Northerly boundary of Jordan Boulevard to a point of curve; thence run 699.19 feet along the arc of the curve of the Northern boundary of Jordan Boulevard, said curve being concave toward the South and having a chord length of 634.16 feet and a radius of 461.30 feet to a point of tangency; thence run 760.59 feet bearing S 56° 04' 03" W along the Northerly boundary of Jordan Boulevard to a point of curve; thence run 860.31 feet along the arc of curve of the Northern boundary of Jordan Boulevard, said curve being concave to the Northwest and having chord length of 846.46 feet and radius of 1380.55 feet to the point of tangency lying 52 feet distant Northerly by right angle measure from the East/West Southern boundary of said Section 6; thence run 2539.07 feet bearing N 88° 13' 40" W along the Northern boundary of Jordan Boulevard, being a line parallel to and 52 feet distant Northerly by right angle measure from the East/West Southern boundary of said Section 6 to the Point of Beginning.

LESS AND EXCEPT:

An odd shaped parcel of land lying in Sections 5 and 6, Township 29 South, Range 38 East, in Brevard County, Florida, more particularly described as:

From the Southeastern corner of Section 6 being also jointly the Southwestern corner of Section 5, the Northeastern corner of Section 7 and the Northwestern corner of Section 8, in Township 29 South, Range 38 East, Brevard County, Florida, run 52 feet Northeasterly bearing N 52° 54'

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36" E to a point on the Northeasterly boundary of Jordan Boulevard; thence run 394.40 feet Northwesterly bearing N 37° 05' 24" W along this Northeastern boundary of Jordan Boulevard to the Point of Beginning; thence continue 424.7 feet Northwesterly bearing N 37° 05' 24" W along this Northeasterly boundary of Jordan Boulevard to the point of curve of an arc concave to the South; thence continue Northwesterly 217.00 feet along said arc of said curve having a radius of 461.30 feet and chord length of 215.01 feet bearing N 50° 34' 04" W; thence run 447.30 feet Northerly bearing N 00° 57' 54" E to the point of intersection with the Southern boundary of Parcel 1 described in Official Records Book 201, Page 450, of the Public Records of Brevard County, Florida; thence run 414.40 feet Easterly bearing S 89° 02' 05" E along this last aforesaid Southern boundary being a line parallel to the East-West quarter line of said Section 6 and lying 1461.5 feet distant Southerly by right angle measure therefrom, to the point of intersection with the Western right-of-way boundary of Florida East Coast Railway Co.; thence run 91.19 feet Southeasterly bearing S 22° 54' 19" E along said Western right-of-way boundary of Florida East Coast Railway Co., to a point of curve of an arc concave to the Northeast; thence proceed Southeasterly 690.46 feet along said Western right-of-way boundary being the arc of a curve concave to the Northeast, having a chord length 690.02 feet and radius of 5573.23 feet; thence run Southwesterly 403.85 feet bearing S 58° 03' 39" W to the Point of Beginning.

AND:

All of those lands described in Official Records Book 5449, page 5147 of the Public Records of Brevard County, Florida, described as follows:

The Southwest 1/4 of the Northeast 1/4 of Section 35, Township 28 South, Range 37 East, Brevard County, Florida, EXCEPT the South 1/4 thereof.

ALSO KNOWN AS:

The Southwest 1/4 of the Northeast 1/4, Except the South 1/4 of the Southwest 1/4 of the Northeast 1/4 of Section 35, Township 35 [sic] South, Range 37 East, Brevard County, Florida Together with an easement for Ingress and Egress for the benefit of the owners of the Southwest 1/4 of the Northeast 1/4 of Section 35, Township 28 South, Range 37 East, Brevard County, Florida, EXCEPT the South 1/4 thereof. Said easement is intended to provide access to and from Briar Creek Boulevard a public road. Said easement is more particularly described as follows:

The West 60.00 feet of that portion of the West 1/2 of the Northwest 1/4 of the Northeast 1/4 of Section 35, Township 28 South, Range 37 East, Brevard County, Florida that lies South of the South right of way line for Briar Creek Road, as said right of way is described in Official Records Book 2807, Pages 2265 and 2266 of the Public Records of Brevard County, Florida.

AND:

All of those lands described in Official Records Book 4767, page 1942 of the Public Records of Brevard County, Florida, described as follows:

A parcel of land lying in Section 22, Township 25 South, Range 36 East, Brevard County, Florida, being more particularly described as follows:

Commence at the Northeast corner of Section 22, Township 25 South, Range 36 East, said Northeast corner being a 2 inch iron pipe; thence S 00° 19' 07" W, along the East line of said Section 22, a distance of 2663.25 feet to the East quarter corner of said Section 22, said quarter corner being a 4 inch X 4 inch concrete monument, labeled "LS 2351", thence departing said East Section line, run S 89° 32' 59" W, along the South line of the Northeast Quarter of said Section 22, a distance of 125.01 feet to the East line of property described in O. R. Book 3268,

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Page 3184 as "Parcel B" and the Point of Beginning; thence continue S 89° 32' 59" W, along said South line, a distance of 475.02 feet to the West line of property described in O. R. Book 3268, Page 3184 as "Parcel B"; thence departing said South line, run N 00° 20' 56" E, a distance of 6.80 feet to a point on the East-West Center of Section line; thence run S 89° 48' 03" E, along said East-West Center of Section line, a distance of 474.98 feet to said East line of property described in O. R. Book 3268, Page 3184 as "Parcel B"; thence departing said East-West Center of Section line, run S 00° 20' 56" W, along said East line, a distance of 1.42 feet to the Point of Beginning.

AND:

All of those lands described in Official Records Book 5147, page 1322 of the Public Records of Brevard County, Florida, described as follows:

The East 125 feet of the South 1/2 of Section 22, Township 25 South, Range 36 East, Brevard County, Florida, Lying North of Barnes Road (Blvd.).

AND:

All of those lands described in Official Records Book 5769, page 3185 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 3/4, Less the South 800 feet thereof, of Lot 5, Section 24, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

ALSO:

The West 1/2 of the North 200 feet of the South 3/4 of Lot 32, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 4338, page 1870 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 3/4, Less the South 800 feet of said North 3/4, of Lot 22, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right of way.

AND:

All of those lands described in Official Records Book 4390, page 2438 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 28, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4397, page 2972 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 21, in Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4435, page 3502 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 3/4, less the North 800 feet thereof, of Lot 32, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4437, page 3892 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 3/4, less the North 800 feet, of Lot 15, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4449, page 2122 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 21, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5076, page 3991 and in Official Records Book 5708, page 7580 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 6, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5163, page 705 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 3/4, less the South 800 feet of Lot 21, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

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All of those lands described in Official Records Book 5238, page 2919 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 23, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5694, page 1025 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 24, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5698, page 6043 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 24, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5698, page 6055 of the Public Records of Brevard County, Florida, described as follows:

Block 11 of Melbourne Manor Section "C", according to the plat thereof, as recorded in Plat Book 4, Page 25, of the resubdivision of Lot 9, Section 26, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

All of those lands described in Official Records Book 5710, page 1509 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 13, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5714, page 8847 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 1, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 35 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

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AND:

All of those lands described in Official Records Book 5714, page 8850 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 3/4, Less the South 800 feet, of Lot 1, in Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 35 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5735, page 9337 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 26, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5744, page 5545 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 18, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5744, page 5549 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the South 1/4 of Lot 19, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1 at Page 165, Brevard County, Florida, Less the South 35 feet and the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5749, page 6589 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 20, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5750, page 7817 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 3/4 of Lot 26, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

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Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5750, page 7820 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 3/4 of Lot 27, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5752, page 9956 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 3/4 of Lot 15, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5766, page 4642 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 3/4 of Lot 14, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5766, page 4649 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 12, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, LESS the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5800, page 1793 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the South 1/4 of Lot 21, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1 at Page 165, Brevard County, Florida, Less the South 35 feet and the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5808, page 7713 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 3/4, LESS the South 800 feet of said North 3/4, of Lot 20, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5892, page 627 of the Public Records of Brevard County, Florida, described as follows:

The West 230 feet of the North 1/4 of Lot 15, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1 at Page 165, Brevard County, Florida, Less the North 35 feet and the West 25 feet for road, utility and drainage right of way.

AND:

The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4, of Lot 29, Section 27, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 4363, page 3432 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 19, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at Page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4375, page 3568 of the Public Records of Brevard County, Florida, described as follows:

The North 1/4, less the East 230 feet and less the West 230 feet of Lot 16, Section 30, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the North 35 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4387, page 3047 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 28, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4387, page 3053 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 14, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1, at Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4390, page 3955 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 27, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4390, page 3965 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 3/4, less the South 800 feet, of Lot 17, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4390, page 3969 of the Public Records of Brevard County, Florida, described as follows:

The West 230 feet of the North 1/4 of Lot 13, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1, at page 166, Brevard County, Florida, less the North 35 feet and the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4390, page 3972 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the North 1/4 of Lot 25, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, page 166, Brevard County, Florida, less the North 35 feet and the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4394, page 102 of the Public Records of Brevard County, Florida, described as follows:

The South 1/4, less the East 230 feet and less the West 230 feet of Lot 23, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, page 166, Brevard County, Florida, less the South 35 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

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Revised 05/13

All of those lands described in Official Records Book 4397, page 2969 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 9, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4397, page 2978 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 29, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4402, page 2458 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 3/4, less the North 800 feet of Lot 15, Florida Indian River Land Co. Subdivision, Section 19, Township 29 South, Range 38 East, recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4404, page 1443 of the Public Records of Brevard County, Florida, described as follows:

The West 230 feet of the North 1/4 of Lot 28, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., according to the Plat thereof, as recorded in Plat Book 1, Page 166, Brevard County, Florida, less the North 50 feet and the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4404, page 1449 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 25, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, page 166, Brevard County, Florida, less the West 35 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4408, page 1089 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 1, Section 30, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4414, page 1625 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet, of the South 3/4 of Lot 30, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4415, page 2347 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet, of the South 3/4 of Lot 32, Section 19, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., Plat Book 1 at page 166, Brevard County, Florida, less the East 35 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 4435, page 2435 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 3/4 of Lot 15, Section 30, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5132, page 2958 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the North 1/4 of Lot 9, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the North 35 feet and the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5632, page 9008 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 3/4, Less the South 800 feet thereof, of Lot 8, Section 20, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet thereof for road, utility and drainage right of way.

AND:

The East 1/2 of the South 3/4, Less the North 800 feet thereof, of Lot 9, Section 20, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet thereof for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5694, page 1007 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet, of the South 3/4 of Lot 27, Section 20, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company, Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

ALSO:

The East 1/2 of the South 200 feet of the North 400 feet, of the South 3/4 of Lot 27, Section 20, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company, Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

AND:

All of those lands described in Official Records Book 5694, page 627 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 3/4, Less the South 800 feet, of Lot 4, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet thereof for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5694, page 833 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 3/4 of Lot 19, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5701, page 3358 of the Public Records of Brevard County, Florida, described as follows:

TWP-29 RG-38 SC-19 SB-00 BLK-84 LOT- E 230 FT OF S 1/4 OF LOT 20 OF PB 1 PG 166
EX S 35 FT & E 25 FT AKA TRACT 169

AND:

All of those lands described in Official Records Book 5711, page 5679 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 17, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1 Page 166, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

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AND:

All of those lands described in Official Records Book 5714, page 866 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 25, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet thereof for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5714, page 8853 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 9, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1 Page 166, Brevard County, Florida, Less the East 25 feet thereof for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5714, page 8858 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the South 1/4 Lot 19, Section 30, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1 Page 166, Brevard County, Florida, Less the South 35 feet and Less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5718, page 3360 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the North Quarter Lot 16, Florida Indian River Land Company Subdivision, Section 30, Township 29 South, Range 38 East, recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida, Less the North 35 feet and Less the East 35 feet thereof, for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5731, page 1740 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 4, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the West 25 feet thereof for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5744, page 5714 of the Public Records of Brevard County, Florida, described as follows:

The West 230 feet of the North 1/4 of Lot 28, Section 20, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company, Plat Book 1, Page 166, Brevard County, Florida, Less the North 50 feet and the West 25 feet thereof for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5749, page 6592 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 18, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet thereof for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5766, page 4653 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 20, Section 20, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations.

AND:

All of those lands described in Official Records Book 5808, page 7717 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 19, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet thereof for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5808, page 7719 of the Public Records of Brevard County, Florida, described as follows:

The North 1/4, Less the East 230 feet and Less the West 230 feet of Lot 14, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the North 35 feet thereof for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5834, page 1004 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 24, Section 29, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5834, page 998 of the Public Records of Brevard County, Florida, described as follows:

The North 200 feet of the South 400 feet of the North 3/4 of the East 1/2 of the East 1/2 of the Southeast 1/4 of the Southeast 1/4 of Section 20, Township 29 South, Range 38 East, Brevard County, Florida, Less and Except the East 35 feet thereof for road, utility and drainage right-of-way.

AND:

The North 200 feet of the South 600 feet of the North 3/4 of the East 1/2 of the East 1/2 of the Southeast 1/4 of the Southeast 1/4 of Section 20, Township 29 South, Range 38 East, Brevard County, Florida, Less and Except the East 35 feet thereof for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5059, page 3823 of the Public Records of Brevard County, Florida, described as follows:

Tract 202:

The West 1/2 of the North 3/4, Less the South 800 feet of Lot 4, Section 30, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5082, page 971 of the Public Records of Brevard County, Florida, described as follows:

Tract 201:

The West 1/2 of the South 3/4 less the North 800 feet of Lot 25, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the West 35 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5132, page 2843 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of Lot 10, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

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Revised 05/13

All of those lands described in Official Records Book 5162, page 752 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 3/4, less the North 800 feet of Lot 26, Section 23, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5162, page 830 of the Public Records of Brevard County, Florida, described as follows:

Tract 11:

The South 1/2 of the North 1/2, less the West 400 feet of Lot 17, Section 26, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the South 25 feet and the East 40 feet for road, utility and drainage right-of-way.

AND:

Tract 170:

The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 22, Section 23, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1 at Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5163, page 617 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the South 1/4 Lot 1, Section 35, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the South 35 feet and the East 35 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5171, page 3147 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 32, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 35 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5186, page 567 of the Public Records of Brevard County, Florida, described as follows:

The South 5/10 less the South 3/10 of the East 1/2 of Lot 12, Section 31, Township 29 South, Range 38 East, of the Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

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AND:

All of those lands described in Official Records Book 5202, page 3021 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10 of the East 1/2 of the East 1/2 of the Northeast 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, County of Brevard, State of Florida, United States of America.

AND:

The South 5/10, less the South 4/10 of the East 1/2 of the East 1/2 of the Northeast 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, County of Brevard, State of Florida, United States of America.

ALSO:

The North 4/10 of the West 1/2 of the East 1/2 of the Northwest 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, County of Brevard, State of Florida, United States of America.

AND:

All of those lands described in Official Records Book 5214, page 3520 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10, less the North 4/10 of the East 1/2 of Lot 14, Section 31, Township 29 South, Range 38 East of the Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

AND:

The South 5/10, less the South 4/10 of the East 1/2 of Lot 14, Section 31, Township 29 South, Range 38 East of the Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5220, page 3645 of the Public Records of Brevard County, Florida, described as follows:

Tract 22:

That portion of the South 200 feet of Lot 17 lying East of Interstate Highway 95 right-of-way, Section 22, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 35 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5256, page 1188 of the Public Records of Brevard County, Florida, described as follows:

The South 4/10, less the South 2/10 of the West 1/2 of Lot 12, Section 31, Township 29 South, Range 38 East, of the Florida Indian River Land Company subdivision as recorded in Plat Book 1, Page 166, Brevard County, Florida.

AND:

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All of those lands described in Official Records Book 5276, page 3350 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10, less the North 4/10 of the East 1/2 of Lot 14, Section 32, Township 29 South, Range 38 East, according to the Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5280, page 2933 of the Public Records of Brevard County, Florida, described as follows:

The South 3/10, less the South 2/10 of the West 1/2 of Lot 15, Section 36, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5310, page 3592 of the Public Records of Brevard County, Florida, described as follows:

The South 1/2 of the West 1/2 of Lot 10, Section 32, Township 29 South, Range 38 East, of the Florida Indian River Land Company subdivision as recorded in Plat Book 1, Page 166, of the Public Records of Brevard County, Florida, United States of America.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5331, page 1599 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10, less the North 4/10 of the West 1/2 of Lot 3, Section 36, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5347, page 1147 of the Public Records of Brevard County, Florida, described as follows:

Tract 220:

The East 230 feet of the South 1/4 Lot 23, Section 36, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1 Page 165, Brevard County, Florida, less the South 35 feet and the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5347, page 1151 of the Public Records of Brevard County, Florida, described as follows:

Tract 144:

The West 1/2 of the North 200 feet of the South 3/4 of Lot 12, Section 36, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way.

AND:

Tract 117-G:

The South 1/4, less the West 400 feet of Lot 21, Section 36, Township 29 South, Range 37 East, Plat of Indian River Land Company, Plat Book 1, Page 165, Brevard County, Florida, less the South 35 feet and the East 25 feet for road, utility, and drainage right-of-way.

AND:

Tract 115-G:

The East 1/2 of the North 200 feet of the South 3/4 of Lot 12, Section 36, Township 29 South, Range 37 East, plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way.

AND:

Tract 118-G:

The East 1/2 of the South 200 feet of the North 3/4 of Lot 21, Section 36, Township 29 South, Range 37 East, plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right-of-way.

AND:

Tract 142:

The West 200 feet of the North 1/4 of Lot 12, Section 36, Township 29 South, Range 37 East, plat of Florida Indian River Land Company, Plat Book 1, Page 165, Brevard County, Florida, less the North 35 feet and the West 25 feet for road, utility and drainage right-of-way.

AND:

Tract 143:

The East 200 feet of the West 400 feet of the North 1/4 of Lot 12, Section 36, Township 29 South, Range 37 East, plat of Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the North 35 feet for road, utility and drainage right-of-way.

Lots along Section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the survey plat.

AND:

All of those lands described in Official Records Book 5358, page 5107 of the Public Records of Brevard County, Florida, described as follows:

The South 2/10, less the South 1/10 of the West 1/2 of Lot 12, Section 32, Township 29 South, Range 38 East, according to the Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5395, page 3399 of the Public Records of Brevard County, Florida, described as follows:

The South 2/10 of the East 1/2 of Lot 13, Section 36, Township 29 South, Range 37 East of the Florida Indian River Land Company, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

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All of those lands described in Official Records Book 5439, page 8426 of the Public Records of Brevard County, Florida, described as follows:

The South 4/10, Less the South 3/10 of the West 1/2 of Lot 3, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5439, page 8655 of the Public Records of Brevard County, Florida, described as follows:

The North 3/10, Less the North 2/10 of the East 1/2 of Lot 15, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5502, page 293 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 14, Section 35, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5508, page 5428 of the Public Records of Brevard County, Florida, described as follows:

The North 2/10, Less the North 1/10 of the West 1/2 of the East 1/2 of the Northeast 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5514, page 3493 of the Public Records of Brevard County, Florida, described as follows:

The North 3/10, Less the North 2/10 of the East 1/2 of Lot 2, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

ALSO:

The South 4/10, Less the South 3/10 of the East 1/2 of Lot 14, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5523, page 4518 of the Public Records of Brevard County, Florida, described as follows:

The North 2/10 of the East 1/2 of Lot 3, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5549, page 2228 of the Public Records of Brevard County, Florida, described as follows:

The South 5/10 of the West 1/2 of Lot 16, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company Subdivision as recorded in Plat Book 1, Page 166 of the Public Records of Brevard County, Florida.

ALSO:

The South 3/10, Less the South 2/10 of the West 1/2 of Lot 3, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company Subdivision as recorded in Plat Book 1, Page 166 of the Public Records of Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5567, page 4745 of the Public Records of Brevard County, Florida, described as follows:

The South 1/4, less the East 230 feet and less the West 230 feet of Lot 6, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the South 50 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5567, page 4897 of the Public Records of Brevard County, Florida, described as follows:

Tract 328:

The West 1/2 of the South 3/4 less the North 800 feet of Lot 10, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1 at Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5573, page 3621 of the Public Records of Brevard County, Florida, described as follows:

The South 5/10, Less the South 4/10 of the West 1/2 of the East 1/2 of the Southeast 1/4 of the Northeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

AND:

All of those lands described in Official Records Book 5584, page 4057 of the Public Records of Brevard County, Florida, described as follows:

The North 3/10, Less the North 2/10 of the West 1/2 of Lot 1, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

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AND:

All of those lands described in Official Records Book 5584, page 4075 of the Public Records of Brevard County, Florida, described as follows:

The North 4/10, Less the North 3/10 of the West 1/2 of Lot 1, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5584, page 4083 of the Public Records of Brevard County, Florida, described as follows:

The North 2/10, Less the North 1/10 of the West 1/2 of Lot 1, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5584, page 4100 of the Public Records of Brevard County, Florida, described as follows:

The North 1/10 of the West 1/2 of Lot 1, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5589, page 5928 of the Public Records of Brevard County, Florida, described as follows:

The North 2/10 of the East 1/2 of Lot 8, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5594, page 185 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10, Less the North 4/10 of the West 1/2 of Lot 4, Section 31, Township 29 South, Range 38 East, of the Florida Indian River Land Company subdivision as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

ALSO:

The North 3/10, Less the North 2/10 of the East 1/2 of the West 1/2 of the Northeast 1/4 of the Northeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5601, page 1646 of the Public Records of Brevard County, Florida, described as follows:

The South 4/10, less the South 3/10 of the East 1/2 of Lot 14, Section 32, Township 29 South, Range 38 East, according to the Plat of Florida Indian River Land Co., Plat Book 1, Page 166 Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5626, page 7771 of the Public Records of Brevard County, Florida, described as follows:

The South 3/10, Less the South 2/10 of the East 1/2 of Lot 3, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165 Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5670, page 1738 of the Public Records of Brevard County, Florida, described as follows:

The South 4/10, Less the South 2/10 of the East 1/2 of the West 1/2 of the Northeast 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5694, page 1082 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 28, Section 30, Township 29 South, Range 38 East, plat of Florida Indian River Land Co., according to the plat thereof as recorded in Plat Book 1, Page 166 of the Public Records of Brevard County, Florida, less and except the East 25 feet for road, utility and drainage right-of-way.

AND:

All of those lands described in Official Records Book 5698, page 6048 of the Public Records of Brevard County, Florida, described as follows:

The North 4/10, Less the North 3/10 of the East 1/2 of Lot 16, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company Subdivision as recorded in Plat Book 1, Page 166 of the Public Records of Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5698, page 6051 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10, Less the North 2/10 And the South 5/10, Less the South 4/10 of the West 1/2 of Lot 12, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company Subdivision, Plat Book 1, Page 166 Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5698, page 6057 of the Public Records of Brevard County, Florida, described as follows:

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The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 15, Section 23, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5700, page 8737 of the Public Records of Brevard County, Florida, described as follows:

TWP-29 RG-37 SC-35 SB-00 BLK-835 LOT- E 1/2 OF S 200 FT OF N 3/4 OF LOT 4 PER PB 1 PG 165 EX E 25 FT AKA TRACT 81

AND:

All of those lands described in Official Records Book 5701, page 3399 of the Public Records of Brevard County, Florida, described as follows:

TWP-29 RG-38 SC-19 SB-00 BLK-343 LOT- S 1/4 OF LOT 24 OF PB 1 PG 166 EX E 230 FT W 230 FT & s 35 FT AKA TRACT 394

AND:

All of those lands described in Official Records Book 5701, page 3413 of the Public Records of Brevard County, Florida, described as follows:

TWP-29 RG-38 SC-30 SB-00 BLK-586 LOT- W 1/2 OF S 200 FT OF N 3/4 OF LOT 7 OF PB 1 PG 166 EX W 25 FT AKA TRACT 362

AND:

All of those lands described in Official Records Book 5703, page 8868 of the Public Records of Brevard County, Florida, described as follows:

Block 12, Less Lots 12 and 13 of Melbourne Manor Section "D", per Plat Book 4 at Page 26 of the resubdivision of Lot 29, Section 26, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Public Records of Brevard County, Florida.

AND:

All of those lands described in Official Records Book 5703, page 8980 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 24, Section 23, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 35 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5704, page 2928 of the Public Records of Brevard County, Florida, described as follows:

The North 1/10 of the East 1/2 of the West 1/2 of the Northwest 1/4 of the Northeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

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All of those lands described in Official Records Book 5704, page 2932 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 12, Section 30, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5704, page 2935 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 3/4 of Lot 8, Less the South 800 feet, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5704, page 2938 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 3/4 of Lot 28, Section 30, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5704, page 4056 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 400 feet of the North 3/4 of Lot 2, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5704, page 4168 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 24, Section 36, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 35 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5709, page 1393 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 3/4, less the South 800 feet of Lot 1, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 35 feet thereof, for road, utility and drainage right of way.

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Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5709, page 1612 of the Public Records of Brevard County, Florida, described as follows:

The South 2/10 of the East 1/2 of Lot 3, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

AND:

The North 4/10, Less the North 3/10 of the West 1/2 of Lot 3, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5711, page 5317 of the Public Records of Brevard County, Florida, described as follows:

The North 4/10 Less the North 3/10 of the West 1/2 of the West 1/2 of the Southwest 1/4 of the Northeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5711, page 5396 of the Public Records of Brevard County, Florida, described as follows:

The South 2/10 Less the South 1/10 of the West 1/2 of the West 1/2 of the Northwest 1/4 of the Northeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

AND:

The South 1/10 of the West 1/2 of the West 1/2 of the Northwest 1/4 of the Northeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5714, page 7032 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 3/4 of Lot 16, Section 35, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5714, page 8797 of the Public Records of Brevard County, Florida, described as follows:

The South 3/10, Less the South 2/10 of the West 1/2 of Lot 7, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5714, page 8876 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10, Less the North 4/10 of the East 1/2 of Lot 12, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5720, page 1890 of the Public Records of Brevard County, Florida, described as follows:

The South 1/4, Less the East 230 feet and Less the West 230 feet of Lot 23, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the South 35 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5722, page 1364 of the Public Records of Brevard County, Florida, described as follows:

The South 3/10, less the South 2/10, of the East 1/2 of the East 1/2 of the Northwest 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

AND:

All of those lands described in Official Records Book 5722, page 4056 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 5, Section 23, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5722, page 4064 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 25, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company Subdivision as recorded in Plat Book 1, Page 166 of the Public Records of Brevard County, Florida, LESS the West 35 feet for Road, Utility and Drainage Right-of-way.

AND:

The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 25, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company Subdivision as recorded in Plat Book 1, Page 166 of the Public Records of Brevard County, Florida, LESS the West 35 feet for Road, Utility and Drainage Right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5726, page 7810 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 3/4 of Lot 22, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company subdivision, Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5729, page 590 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 5, Section 24, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way.

ALSO:

The North 1/4, Less the East 230 feet and Less the West 230 feet, of Lot 13, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the North 35 feet thereof, for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5731, page 1746 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 19, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company subdivision, Plat Book 1, Page 166, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5734, page 9356 of the Public Records of Brevard County, Florida, described as follows:

The North 6/10, Less the North 4/10 of the West 1/2 of Lot 12, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5738, page 4328 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the South 1/4 of Lot 7, Section 24, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the South 35 feet and the East 25 feet thereof, for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5738, page 4332 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 3/4 of Lot 7, Section 24, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5738, page 4348 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 30, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5744, page 5554 of the Public Records of Brevard County, Florida, described as follows:

The North 2/10 of the East 1/2 of Lot 13, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company Subdivision, Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5744, page 5699 of the Public Records of Brevard County, Florida, described as follows:

The North 4/10 LESS the North 2/10 of the West 1/2 of the West 1/2 of the Northeast 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5746, page 2593 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 4, Section 24, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5746, page 2614 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 3/4 of Lot 23, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

ALSO:

The North 1/4, Less the East 230 feet and Less the West 230 feet of Lot 11, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the North 35 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5749, page 1331 of the Public Records of Brevard County, Florida, described as follows:

The North 2/10 of Lot 15, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5749, page 1340 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the North 1/4 of Lot 25, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the North 50 feet and the East 25 feet for road, utility and drainage right of way.

AND:

The North 1/4 of Lot 25, Less the East 230 feet and Less the West 230 feet and Less the North 50 feet thereof, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5752, page 9963 of the Public Records of Brevard County, Florida, described as follows:

The North 4/10, LESS the North 2/10 thereof, of the East 1/2 of Lot 8, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5752, page 9985 of the Public Records of Brevard County, Florida, described as follows:

The South 5/10, less the South 4/10 of the East 1/2 of the West 1/2 of the Southwest 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

AND:

All of those lands described in Official Records Book 5757, page 6866 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 1/2, LESS the North 600 feet of Lot 32 and the East 1/2 of the North 1/4, LESS the South 200 feet of Lot 17, Section 22, Township 29 South, Range 37 East, Plat of

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Amendment Number 10 to Lease Number 4263

Revised 05/13

Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 35 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5758, page 4437 of the Public Records of Brevard County, Florida, described as follows:

The East 230 feet of the South 1/4 of Lot 20, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the South 35 feet and the East 25 feet thereof, for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5772, page 4382 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10 Less the North 4/10 of the West 1/2 of Lot 13, Section 31, Township 29 South, Range 38 East of the Florida Indian River Land Company subdivision as recorded in Plat Book 1, Page 166, Public Records of Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5772, page 4385 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10, Less the North 4/10 of the East 1/2 of the East 1/2 of the Southwest 1/4 of the Northeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5782, page 5079 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 9, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5798, page 9893 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 10, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way.

ALSO:

The West 1/2 of the South 200 feet of the North 800 feet of the South 3/4 of Lot 10, Section 19, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way.

Exhibit "A"

Page 102 of 104

Amendment Number 10 to Lease Number 4263

Revised 05/13

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5798, page 9897 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 3/4 of Lot 1, Section 35, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, LESS the East 35 feet thereof, for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5823, page 2775 of the Public Records of Brevard County, Florida, described as follows:

The South 4/10, Less the South 3/10 of the East 1/2 of Lot 11, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5823, page 2777 of the Public Records of Brevard County, Florida, described as follows:

The South 5/10 Less the South 3/10 of the East 1/2 of the East 1/2 of the Southwest 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5832, page 8482 of the Public Records of Brevard County, Florida, described as follows:

The South 3/10, LESS the South 2/10 of the East 1/2 of Lot 14, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

AND:

The South 2/10, LESS the South 1/10 of the East 1/2 of Lot 14, Section 36, Township 29 South, Range 37 East, of the Florida Indian River Land Company Subdivision, Plat Book 1, Page 165, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5834, page 1000 of the Public Records of Brevard County, Florida, described as follows:

The West 230 feet of the South 1/4 of Lot 21, Section 23, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, LESS the South 35 feet and the West 25 feet for road, utility and drainage right-of-way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

Exhibit "A"

Page 103 of 104

Amendment Number 10 to Lease Number 4263

Revised 05/13

All of those lands described in Official Records Book 5834, page 9752 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the North 200 feet of the South 800 feet of the North 3/4 of Lot 5, Section 24, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the East 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5922, page 574 of the Public Records of Brevard County, Florida, described as follows:

The North 5/10 of the West 1/2 of Lot 6, Section 32, Township 29 South, Range 38 East, Plat of Florida Indian River Land Company subdivision, Plat Book 1, Page 166, Brevard County, Florida.

ALSO:

The North 1/10 of the West 1/2 of the West 1/2 of the Northwest 1/4 of the Southeast 1/4 of Section 6, Township 30 South, Range 38 East, Brevard County, Florida.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 5976, page 2451 of the Public Records of Brevard County, Florida, described as follows:

Tract 204:

The West 1/2 of the North 200 feet of the South 600 feet of the North 3/4 of Lot 24, Section 31, Township 29 South, Range 38 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 166, Brevard County, Florida, less the West 35 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 8340, page 519 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 200 feet of the North 3/4 of Lot 5, Section 24, Township 29 South, Range 37 East, plat of Florida Indian River Land Company, Plat Book 1, Page 165, Public Records of Brevard County, Florida, LESS the East 25 feet for road, utility and drainage right of way.

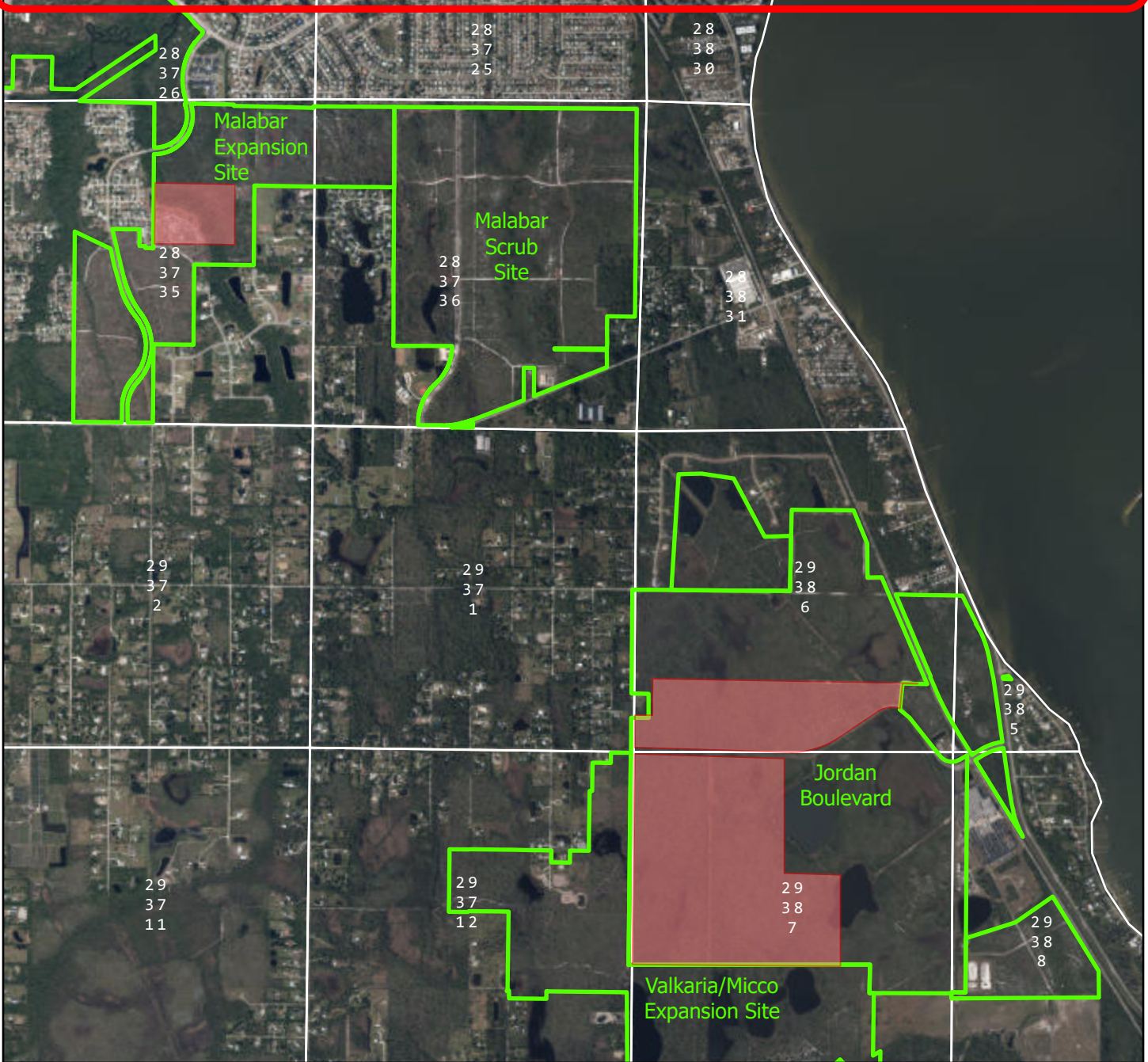
AND:

A portion of those lands described in Official Records Book 5714, page 6567 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 400 feet of the South 3/4 of Lot 28, Section 25, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right-of-way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on the plat.

BSM
BY SK

Date: 1.13.2020



- Subject Parcels
- FNAI Florida Forever Project Boundary

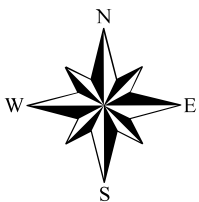
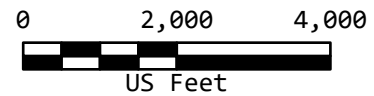


EXHIBIT C-1
BREVARD COASTAL SCRUB ECOSYSTEM
AMENDMENT TO LEASE 4263

Jordan Boulevard & Malabar Scrub Sites
Brevard County, Florida





- Subject Parcels
- FNAI Florida Forever Project Boundary

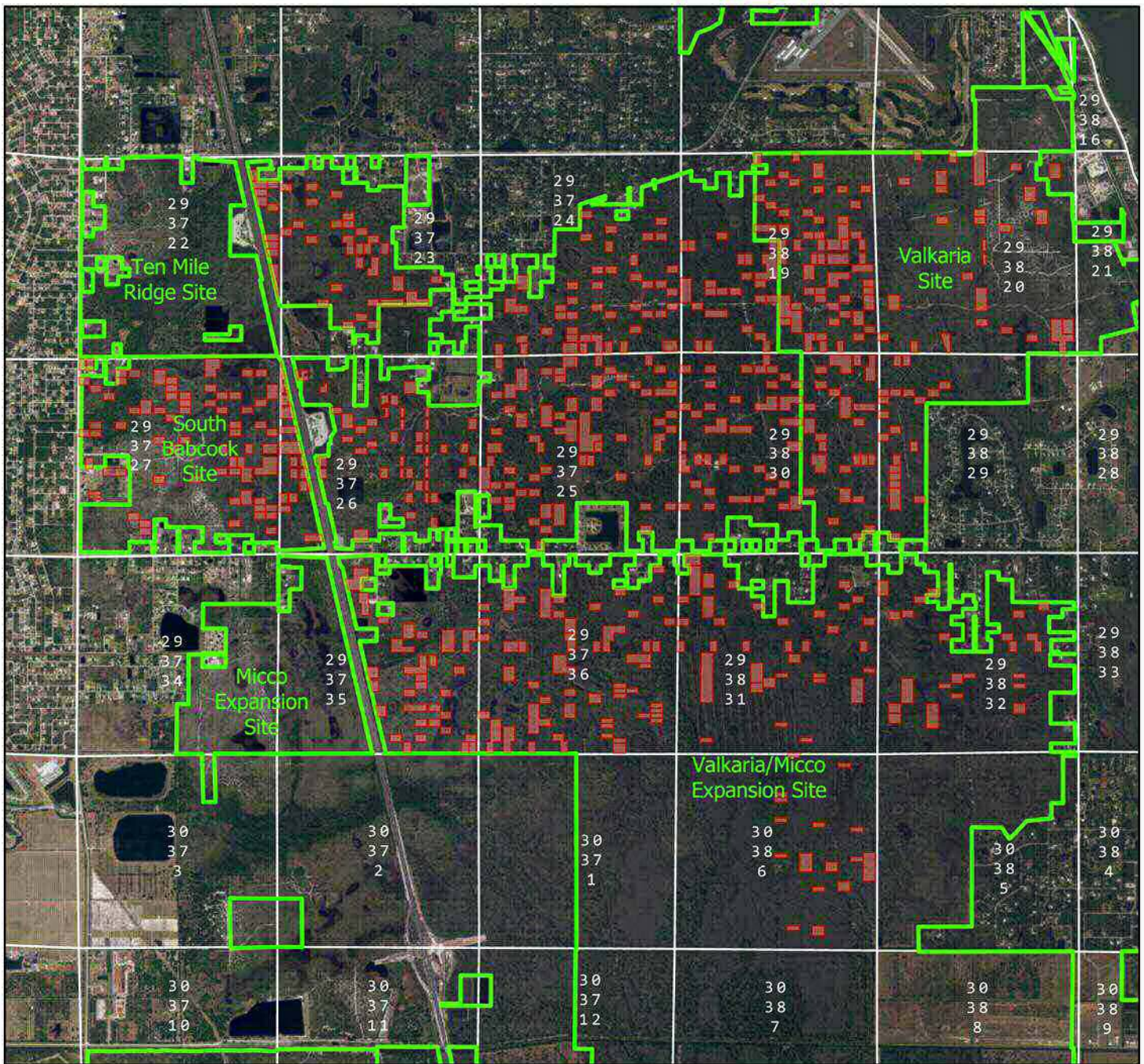
0 1,000 2,000
US Feet



EXHIBIT C-2
BREVARD COASTAL SCRUB ECOSYSTEM
AMENDMENT TO LEASE 4263

Rockledge Site
Brevard County, Florida





Subject Parcels

FNAI Florida Forever Project Boundary

0 3,000 6,000
US Feet



EXHIBIT C-3
BREVARD COASTAL SCRUB ECOSYSTEM
AMENDMENT TO LEASE 4263
South Babcock, Valkaria
& Valkaria/Micco Expansion Sites
Brevard County, Florida



This Partial Release of Lease was prepared by:
Christopher Crenshaw
Bureau of Public Land Administration
Division of State Lands
Department of Environmental Protection, MS 130
3900 Commonwealth Boulevard,
Tallahassee, Florida 32399-3000
AID# 41941

PROL1
[11.99 acres, +/-]

**BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE OF FLORIDA**

PARTIAL RELEASE OF LEASE NUMBER 4263

**STATE OF FLORIDA
COUNTY OF BREVARD**

The undersigned lessee on the ____ day of _____, 20 __, do(es) hereby quitclaim, release and surrender unto lessor all right, title and interest in and to the leasehold estate of the lands described in Exhibit "A" attached hereto, which are a portion of the lands leased under Lease Agreement Number **4263**, dated June 27, 2001, between the **BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA**, as LESSOR, and **BREVARD COUNTY, FLORIDA**, a political subdivision of the State of Florida, as LESSEE, effective the ____ day of _____, 20 __.

This space is intentionally left blank with signature page to follow.

IN WITNESS WHEREOF, the parties have caused this partial release of lease to be executed on the day and year first above written.

WITNESSES:

Original Signature

Print/Type Name of Witness

Original Signature

Print/Type Name of Witness

**BOARD OF TRUSTEES OF THE INTERNAL
IMPROVEMENT TRUST FUND OF THE STATE
OF FLORIDA**

(SEAL)

BY: _____

Brad Richardson, Chief, Bureau of Public Land Administration,
Division of State Lands, State of Florida Department of
Environmental Protection, as agent for and on behalf of the
Board of Trustees of the Internal Improvement Trust Fund
of the State of Florida

"LESSOR"

**STATE OF FLORIDA
COUNTY OF LEON**

The foregoing instrument was acknowledged before me by means of ___ physical presence or ___ online notarization this ____ day of _____, 20 ____, by Brad Richardson, Chief, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. He is personally known to me.

APPROVED SUBJECT TO PROPER EXECUTION:



DEP Attorney

07-20-2020

Date

Notary Public, State of Florida

Printed, Typed or Stamped Name

My Commission Expires: _____

Commission/Serial No. _____

WITNESSES:

**BREVARD COUNTY, FLORIDA,
a political subdivision of the State of Florida**

(SEAL)

By its Board of County Commissioners

Original Signature

Print/Type Name of Witness

BY: _____

Rita Pritchett

Chair

Original Signature

Print/Type Name of Witness

“LESSEE”

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of __ physical presence or __ online notarization this _____ day of _____, 20____, by Rita Pritchett, as Chair of the Board of County Commissioners, for and on behalf of Brevard County, Florida, a political subdivision of the State of Florida. He is personally known to me or has produced _____ as identification.

Notary Public, State of Florida

Approved for legal form and content
for Brevard County, Florida

Alex G. [Signature] 11/19/20

Printed, Typed or Stamped Name

My Commission Expires: _____

Commission/Serial No. _____

Exhibit A

All of those lands described in Official Records Book 4702, page 3692 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 1/2 of the North 1/2 of Lot 16, Section 34, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 25 feet for road, utility and drainage right of way. Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4729, page 1903 of the Public Records of Brevard County, Florida, described as follows:

The East 1/2 of the South 1/4 of Lot 14, Section 34, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the East 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines, disregarding reservations shown on plat.

AND:

All of those lands described in Official Records Book 4702, page 3679 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 600 feet of the South 3/4 of Lot 9, Section 35, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, less the West 35 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

A portion of those lands described in Official Records Book 5220, page 3922 of the Public Records of Brevard County, Florida, described as follows:

Section 35, Tract A148:

The West 230 feet of the South 1/4 of Lot 23, Section 35, Township 29 South, Range 37 East, according to the plat of the Florida Indian River Land Company Subdivision, Plat Book 1 at Page 165, Public Records of Brevard County, Florida, less the South 25 feet and the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on the plat.

AND:

All of those lands described in Official Records Book 5395, page 3303 of the Public Records of Brevard County, Florida, described as follows:

The West 1/2 of the South 200 feet of the North 3/4 of Lot 6, Section 35, Township 29 South, Range 37 East, Plat of Florida Indian River Land Co., Plat Book 1, Page 165, Brevard County, Florida, Less the West 25 feet for road, utility and drainage right of way.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

AND:

A portion of those lands described in Official Records Book 5310, page 3850 of the Public Records of Brevard County, Florida, described as follows:

The South 1/2 of the North 1/2 of Lot 26 and the South 1/2 of the North 1/2 of Lot 27, West of I- 95 right-of-way, Plat Book 1, Page 165, Brevard County, Florida, except the West 425 feet, the East 100 feet and the North 25 feet thereof, Section 35, Township 29 South, Range 37 East.

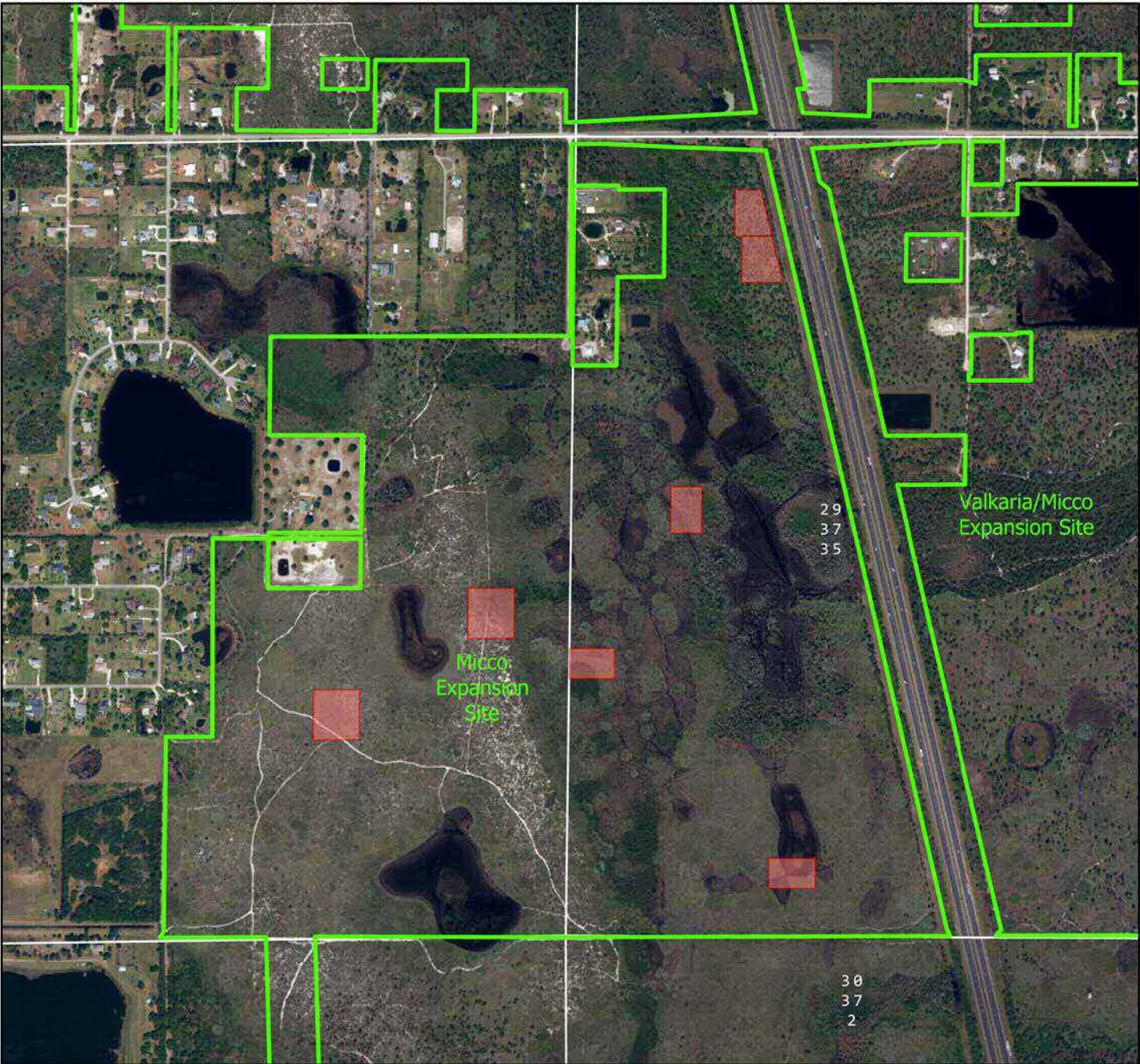
AND:

The North 1/2 of the South 1/2 of Lot 26 and the North 1/2 of the South 1/2 of Lot 27, West of I- 95 right-of-way, Plat Book 1, Page 165, Brevard County, Florida, except the West 475 feet, the East 100 feet and the South 25 feet thereof, Section 35, Township 29 South, Range 37 East.

Lots along section lines and half section lines are measured from section lines or half section lines disregarding reservations shown on plat.

BSM
BY SK
Date:

1.07.2020



 Subject Parcels
 FNAI Florida Forever Project Boundary

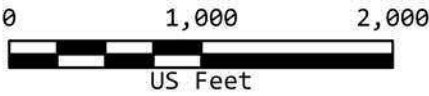


EXHIBIT A
BREVARD COASTAL SCRUB ECOSYSTEM
PARTIAL RELEASE OF LEASE 4263

Micco Expansion Site
Brevard County, Florida





Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

New Business - Miscellaneous

J.3.

2/9/2021

Subject:

Legislative Intent and Permission to Advertise an Ordinance Repealing Section 6-2, Brevard County Code of Ordinances

Fiscal Impact:

None

Dept/Office:

District 3

Requested Action:

Board discussion of and issuance of legislative intent and permission to advertise an ordinance repealing Section 6-2 of Brevard County Code of Ordinances

Summary Explanation and Background:

Section 6-2, instituted in its current form in 1979, restricts the possession of open containers in certain areas of unincorporated Brevard County.

Florida Statute, including Sec. 856.011, currently regulates similar behavior. There is no rational reason for Brevard County to be more restrictive on such activity.

Critically, this ordinance does not reach any dangerous behavior, such as drinking while intoxicated or acting in a violent or threatening manner while intoxicated. This ordinance deals only with the act of having access to an open container of an alcoholic beverage. In essence, this ordinance is a relic.

As such, it is proposed that Section 6-2 of Brevard County Code of Ordinances be repealed.

Clerk to the Board Instructions: